

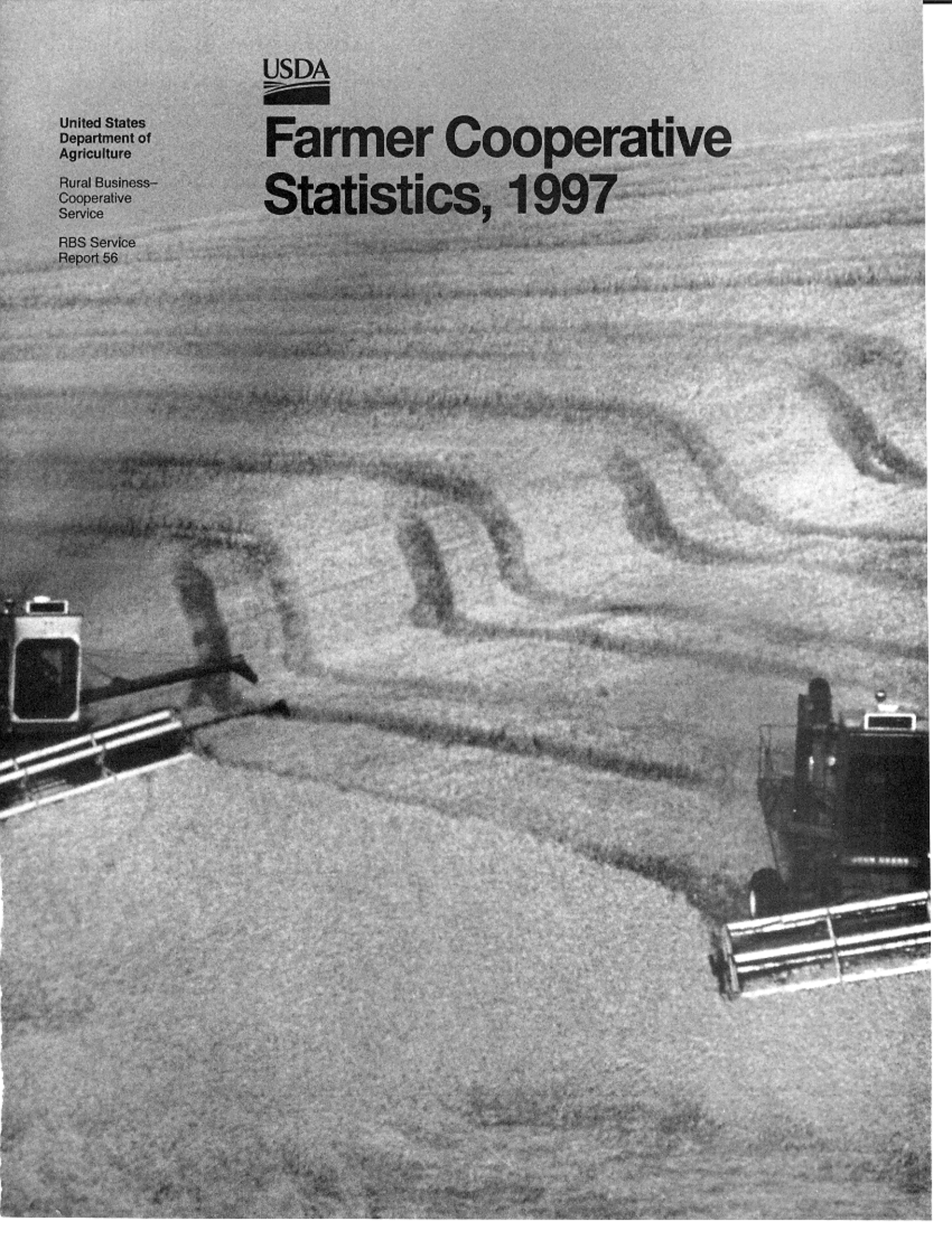


United States  
Department of  
Agriculture

Rural Business-  
Cooperative  
Service

RBS Service  
Report 56

# Farmer Cooperative Statistics, 1997



## Abstract

A survey of all U.S. farmer cooperatives ending their business year during calendar year 1997 showed a net income of \$2.31 billion, up from \$2.25 billion in 1996 and near the record high of \$2.36 billion in 1995. Gross and net business volumes were near-record highs for the 3,791 cooperatives in the survey. Assets, liabilities, and net worth also were up. Business volume by commodity handled is reported for all cooperatives and by State. Number of cooperatives, cooperative memberships, and number of employees 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, 1997

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

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

RBS Service Report 56

December 1998

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. Many people use these statistics for research, technical assistance, education, planning, and public policy. Acquiring, analyzing, and disseminating farmer cooperative statistics is authorized by the Cooperative Marketing Act of 1926.

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

Statistics for 1997 are compiled both on a State and national basis. State data on cooperative business volume and memberships are collected every other year.

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. Information was requested for their 1997 business year.

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

Statistics for all cooperatives were derived by adding data estimated for nonrespondents to respondent data. Responses to the 1997 survey accounted for 91 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 and effort taken to provide information and the timeliness with which it is furnished are greatly appreciated.

# Contents

HIGHLIGHTS .....	·
I-DEFINITION OF A FARMER COOPERATIVE .....	1
Classification of Cooperatives .....	1
Organizational Membership Structures .....	2
II-1997 STATISTICS .....	·
Number of Cooperatives .....	3
Memberships .....	·
Employees.. .....	·
<b>Business Size</b> .....	13
<b>Business Volume</b> .....	13
<b>Net Income</b> .....	23
<b>Balance Sheet</b> .....	23
Selected Financial Ratios .....	26
III-COOPERATIVE TRENDS, 1988-97 .....	28
Number of Cooperatives .....	28
Memberships .....	30
Employees .....	33
<b>Business Volume</b> .....	33
<b>Net Income</b> .....	35
<b>Balance Sheet</b> .....	37
IV-OTHER SERVICE COOPERATIVES .....	37
<b>Farm Credit</b> System .....	37
Rural Telephone Cooperatives .....	39
Rural Electric Cooperatives .....	40
Rural Credit Unions .....	40
Dairy Herd Improvement Associations .....	40
TABLES	
Table 1-Number of cooperatives and memberships, by major business activity, 1997 .....	2
Table 2-Number of co-ops and memberships by major business activity <b>and State, 1997</b> .....	·
Table 3— <b>Full-time</b> and part-time and seasonal employees of farmer cooperatives, by type of co-op, 1996-97 .....	10
Table 4-Farmer cooperatives and memberships, by gross business volume, 1997 .....	12
Table 5— <b>Cooperatives'</b> gross and net business volumes by commodity, 1997 .....	13
Table 6— <b>Cooperatives'</b> business volume by commodity and State, 1997 .....	16
Table 7-Cooperatives' net income, 1997 .....	24
Table 8-Combined balance sheet data for farmer cooperatives, 1997 .....	25
Table 9-Combined assets of farmer cooperatives, 1997 .....	26
Table 10-Selected financial ratios of cooperatives, 1997 .....	27
Table 11-Number of farmer cooperatives, 1988-97 .....	28
Table 12— <b>Estimated</b> number of branches operated by grain and farm supply cooperatives, 1992-97 .....	30
Table 13— <b>Memberships</b> in marketing, farm supply, and service <b>cooperatives</b> , 1988-97 .....	30
Table 14— <b>Cooperatives'</b> use of full-time employees, 1994-97 .....	32
Table 15— <b>Cooperatives'</b> net business volume, 1988 and 1997 .....	33
Table 16— <b>Cooperatives'</b> gross and net business volumes, 1988-97 .....	35
Table 17— <b>Net</b> income of farmer cooperatives, 1988-97 .....	35
Table 18— <b>Combined</b> balance sheet data of farmer cooperatives, 1988-97 .....	37
Table 19-Farm Credit Association structure, Jan. 1, 1998 .....	38
Table 20— <b>Farm Credit</b> System's combined assets, net worth, and net income, 1993-97 .....	38

# Contents

Table 21— <b>Farm Credit Banks'</b> combined assets, net worth, net loans, and net income, 1993-97 .....	38
Table 22— <b>Combined</b> assets, net worth, net loans, and net income of St. Paul Bank for Cooperatives and <b>CoBank</b> , ACB, 1993-97 .....	39
Table 23—Number, participation, and level of activity of rural telephone co-ops, by State, Dec. 31, 1997 .....	39
Table 24—Number, participation, and level of activity of rural electric co-ops, by State, Dec. 31, 1997 .....	40
Table 25— <b>Number</b> , participation, and level of activity of rural credit unions, by State, Dec. 31, 1997 .....	41
Table 26— <b>Number</b> , participation, and level of activity of dairy herd improvement associations by State, Dec. 31, 1997 .....	42

## FIGURES

Figure 1—Number of Cooperatives by Function, Leading States, 1997 .....	3
Figure 2—Branches of Grain and Farm Supply Cooperatives by Size, 1997 .....	8
Figure 3—Distribution of Memberships by Type of Cooperative, 1997 .....	9
Figure 4—Cooperative Memberships by Function, Leading States, 1997 .....	9
Figure 5— <b>Full-Time</b> and Part-Time and Seasonal Employees, by Type of Cooperative, 1997 .....	11
Figure 6— <b>Average</b> Number of Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1997 .....	11
Figure 7—Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 1997 ..	12
Figure 8— <b>Relative</b> Importance of Farm Products Marketed by Cooperatives, 1997 .....	14
Figure 9—Relative Importance of Farm Supplies Handled by Cooperatives, 1997 .....	15
Figure 10—Cooperatives' Net Business Volume, Leading States, 1997 .....	15
Figure 11—Net Income or Loss by Cooperative Type, 1997 .....	24
Figure 12—Percentage of Cooperatives' Assets Financed by Net Worth, by Cooperative Type, 1997 .....	25
Figure 13— <b>Farmer</b> Cooperatives in the United States, 1988-97 .....	29
Figure 14—Cooperatives Removed from <b>RBS'</b> List, 1986-97 .....	29
Figure 15— <b>Grain</b> and Farm Supply Cooperatives and Branches, 1992-97 .....	31
Figure 16— <b>Cooperative</b> Memberships by Function, 1986-97 .....	31
Figure 17— <b>Cooperatives'</b> Net Business Volume, 1988-97 .....	32
Figure 18—Cooperatives' Net Sales of Selected Commodities, 1988-97 .....	34
Figure 19— <b>Cooperatives'</b> Net Sales of Selected Farm Supplies, 1986-97 .....	34
Figure 20— <b>Cooperatives'</b> Net Income, 1988-97 .....	36
Figure 21— <b>Cooperatives'</b> Net Worth and Liabilities, 1988-97 .....	36

## APPENDIX FIGURES

Appendix Figure 1—Cooperatives' Net Business Volume, 1973-97 .....	43
Appendix Figure 2— <b>Cooperatives'</b> Gross and Net Business Volumes, 1973-97 .....	43
Appendix Figure 3—U.S. Farms and Farmer Cooperative Memberships, 1973-97 .....	44
Appendix Figure 4—Distribution of Farmer Cooperatives by Type, 1997 .....	44
Appendix Figure 5— <b>Distribution</b> of Net Income by Type of Cooperative, 1997 .....	45
Appendix Figure 6— <b>Distribution</b> of Losses by Type of Cooperative, 1997 .....	45
Appendix Figure 7—Distribution of Net Worth by Type of Cooperative, 1997 .....	46
Appendix Figure 8—Distribution of Full-Time Employees by Type of Cooperative, 1997 .....	46
Appendix Figure 9—Assets Per Full-Time Employee by Type of Cooperative, 1997 .....	47
Appendix Figure 10— <b>Cooperatives'</b> Investments in Other Cooperatives, 1966-97 .....	47

## Highlights

The 1997 survey of marketing, farm supply, and related-service cooperatives showed a near-record-high net income and a net business volume equal to the record high set in 1996, but a decrease in number of cooperatives, memberships, and full-time employees.

- Total net income of \$2.31 billion was up 3 percent from the \$2.25 billion reported in 1996. The 1997 net included intercooperative dividends and refunds of \$685.2 million-down 3.8 percent from \$711.9 million.
- Total gross business volume (including intercooperative business) handled by cooperatives dropped 1.3 percent, from a record \$128.1 billion in 1996 to \$126.5 billion.
- Total net business, excluding intercooperative business, remained about the same in 1996 and 1997 at \$106 billion.
- The number of cooperatives declined 2.4 percent, from 3,884 to 3,791.
- Grain and farm supply cooperatives operated an estimated 5,433 branches in 1997, up from 5,355 in 1996.
- Cooperative memberships were **3,238,808**, a decrease of 11.6 percent from **3,663,584** in 1996.
- Cooperatives employed 172,199 full-time and 115,038 part-time employees in 1997. Numbers of full-time employees decreased 1.5 percent, while part-time employees increased 4.6 percent.
- Gross value of farm products marketed by cooperatives in 1997 decreased 5 percent, from \$90.3 billion to \$85.8 billion. Net value of these farm products, after eliminating duplication from intercooperative business, was \$77.6 billion, down 2.2 percent from \$79.4 billion.
- Gross value of farm supplies handled by farmer cooperatives was up 6.8 percent, from \$34.7 billion to \$37.1 billion. After adjusting for intercooperative business, the increase was 6.5 percent, from \$23.7 billion to \$25.2 billion.
- Receipts for services related to marketing farm products and handling farm supplies, plus other income, increased 17.6 percent to \$3.6 billion.
- Combined assets for all farmer cooperatives increased 3.3 percent to \$44 billion. Net assets, after eliminating intercooperative investments, were up 2.3 percent, from \$39.2 billion to \$40.1 billion.
- Total liabilities of \$25.5 billion were up 1 percent from \$25.2 billion.
- Net worth, or member and patron equity, rose 6.6 percent to \$18.5 billion. Member and patron equity financed 42.1 percent of total assets, up from 40.8 percent in 1996.
- Leading States in number of cooperatives were Minnesota, North Dakota, Texas, and Iowa. They accounted for 1,160, or 30.6 percent, of the 3,791 farmer cooperatives.
- Minnesota, Illinois, Iowa, and Wisconsin led all States in number of memberships, with 894,706, or 27.6 percent, of total memberships.
- Leading States in gross business volume were Iowa, Minnesota, California, and Wisconsin, with \$41.8 billion, or 33 percent, of cooperatives' gross business volume of \$126.5 billion, up from 32.6 percent in 1995.
- Iowa, Minnesota, California, and Wisconsin were the leading States in net business volume, with nearly \$36.4 billion, 34.2 percent of the total, up from 33.1 percent.

---

**HIGHLIGHTS CAPSULE**

	<i>1996</i>	<i>1997</i>	<i>Change</i>
Number of cooperatives	3,884	3,791	-93
Memberships	3,663,584	3,238,808	-424,776
Gross business volume (mil. dol.)	128,098	126,476	-1,622
Net business volume (mil. dol.)	106,182	106,474	292
Net income (mil. dol.)	2,248	2,314	66
Total assets (mil. dol.)	42,588	43,996	1,408
Net worth (mil. dol.)	17,392	18,537	1,145
Full-time employees	174,795	172,199	-2,596
Part-time employees	110,001	115,038	5,037
Leading States	1995	1997	
	Minnesota	Minnesota	
Number of cooperatives	389	368	-21
	Minnesota	Minnesota	
Memberships	329,241	296,058	-33,183
	California	Iowa	
Net business volume (mil. dol.)	8,891	10,941	N/A

---

# Farmer Cooperative Statistics, 1997

Ralph M. Richardson, Celestine C. Adams,  
Katherine C. DeVille, Jacqueline E. Penn,  
and Charles A. Kraenzle <sup>1</sup>

---

## 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 regardless of the amount of stock or membership capital owned, or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year, or the legal rate in the State, whichever is higher; (3) business conducted with non-members may not exceed the value of business done with members; and (4) the cooperative operates for the mutual interest of members by providing member benefits on the basis of patronage.

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

Many State lists include other types, such as production, credit, telephone, electric, and consumer cooperatives, as well as those that do not meet RBS definition. Other reasons for possible differences in the number of cooperatives are that: (1) RBS may not

learn of certain cooperatives operating in a State for a considerable period of time; (2) a cooperative may not have completed and returned an initial questionnaire; or (3) no notice is received that a cooperative discontinued operating.

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

## Classification of Cooperatives

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

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

*Farm supply* cooperatives derive most of their business volume from the sale of farm production supplies. These cooperatives handle a wide variety of supplies, 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, added in 1993, previously were listed with rice marketing cooperatives.

Many cooperatives handle multiple commodities and provide both marketing and farm supply services, as well as the facilities and equipment used to perform

---

<sup>1</sup> Ralph M. Richardson and Celestine C. Adams, agricultural statisticians; Katherine C. DeVille and Jacqueline E. Penn, statistical assistants; and Charles A. Kraenzle, director.



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 3,791 farmer cooperatives in 1997, 3,682 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 or State milk marketing order hearings.

### Federated

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

The 67 federated associations often operate at points quite distant from their headquarters. Federated cooperative members are usually local cooperatives although some are interregional associations whose members are regional cooperatives.

### Mixed

A small number of 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. RBS has identified 42 such cooperatives.

## II-1997 Statistics

Cooperatives' net business volume was \$106.5 billion in 1997, tying the record high set in 1996. Net income of \$2.31 billion was up 3 percent from the \$2.25 billion reported in 1996 and near the record high \$2.36 billion in 1995. Number of cooperatives and memberships, at 3,791 and 3,238,808, respectively, was down. Combined assets, net worth and liabilities were all up.

Table 1— Number of cooperatives and memberships, by major business activity, 1997

Major business activity	Cooperatives	Memberships
Beans and peas, dry edible	7	2,859
Cotton	16	42,671
Dairy	236	104,878
Fruits and vegetables	259	43,975
Grains and oilseeds <sup>1</sup>	1,014	745,009
Livestock	88	236,011
Nuts	17	41,655
<b>Poultry</b> <sup>2</sup>	20	34,293
Rice	18	13,969
Sugar <sup>3</sup>	51	13,825
Tobacco	26	172,947
Wool and mohair	88	16,744
Miscellaneous	101	28,996
<b>Total marketing</b>	1,941	<b>1,497,832</b>
<b>Farm supply</b>	1,386	<b>1,557,871</b>
<b>Service</b>	464	183,105
<b>Total</b>	<b>3,791</b>	<b>3,238,808</b>

<sup>1</sup> Excludes cottonseed. Cottonseed sales were included with cotton. Cottonseed meal and oil were included with feed and miscellaneous, respectively.

<sup>2</sup> Includes eggs, turkeys, ratite, squab, and related products.

<sup>3</sup> Includes beets, sugarcane, honey, and related products.

## Number of Cooperatives

The 1997 survey accounted for 3,791 marketing, farm supply, and related-service<sup>2</sup> cooperatives, compared with 3,884 in 1996. The net decrease of 93 associations (2.4 percent) largely reflects a continuing trend involving dissolution, merger, or acquisition. The largest decrease from 1996-97 was in grain and oilseed (grain) cooperatives (52), followed by farm supply (17). Poultry cooperatives increased by four and sugar cooperatives by two.

Of the 3,791 cooperatives, 1,941 primarily marketed farm products, 1,386 handled primarily farm production supplies, and 464 provided services related to marketing or purchasing activities (table 1).

Marketing cooperatives decreased slightly, from 51.8 percent in 1996 to 51.2 percent of the total number of cooperatives in 1997, while farm supply and related-service cooperatives increased slightly, from 36.1 to 36.6 percent and 12.1 to 12.2 percent, respectively.

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

<sup>2</sup> 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.

oilseeds could be higher due to market supply and demand conditions.

Cooperative numbers by major function and State are shown in table 2. The leading States were Minnesota (368), North Dakota (297), Texas (272), and Iowa (223). These four States accounted for 1,160 cooperatives, or 30.6 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, while the majority in Texas were service cooperatives, mainly cotton gins. Wisconsin, the fifth leading State, had the largest percentage of farm supply cooperatives.

## Grain and Farm Supply Branches

Many cooperatives operate branch facilities to better serve their members. Most are owned. 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.

In 1997, grain and farm supply cooperatives operated an estimated 5,433 branches-2,250 and 3,183, respectively. This was a decrease of 76 branches

Figure 1— Number of Cooperatives by Function, Leading States, 1997

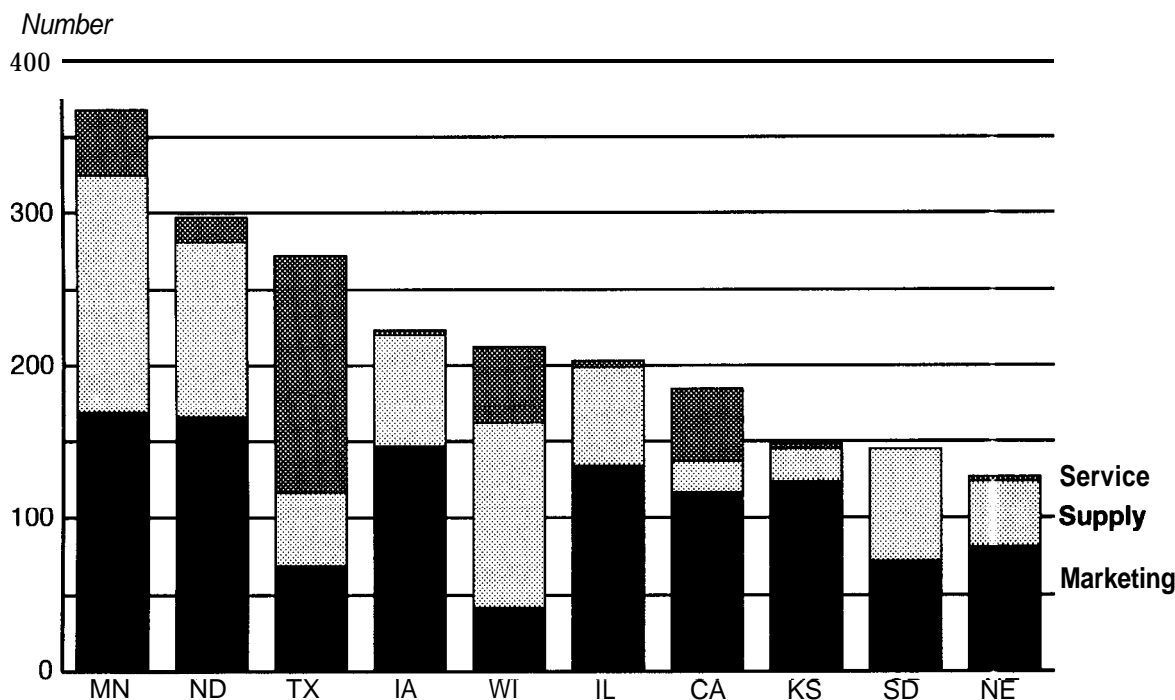


Table 2— Number <sup>1</sup> of co-ops and memberships <sup>2</sup> by major business activity and State, 1997 <sup>3</sup>

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
BEANS AND PEAS, DRY EDIBLE			FRUITS AND <b>VEGETABLES</b> <sup>5</sup> (Continued)		
California	3	762	Massachusetts	4	487
Other States	<u>4</u>	<u>2,097</u>	Michigan	16	3,457
United States	7	2,859	Minnesota	3	290
COTTON <sup>4</sup>			Mississippi	4	257
California	3	2,187	New Jersey	10	893
Mississippi	3	2,911	New York	9	935
Texas	4	24,908	North Carolina	4	115
Other States	6	12,538	North Dakota	3	179
Foreign <sup>6</sup>	—	127	Ohio	5	460
United States	16	42,671	Oregon	12	1,437
DAIRY			Pennsylvania	6	585
California	10	1,774	Texas	5	339
Illinois	4	2,406	Washington	21	5,026
Iowa	8	5,015	Other States	22	4,328
Massachusetts	3	243	Foreign <sup>6</sup>	—	<u>104</u>
Michigan	3	3,993	United States	259	43,975
Minnesota	45	17,348	GRAINS AND <b>OILSEEDS</b> EXCLUDING COTTONSEED <sup>7</sup>		
Missouri	3	3,839	Arkansas	3	1,259
New York	63	5,763	Colorado	16	8,830
North Dakota	5	1,137	Idaho	5	1,275
Ohio	7	3,942	Illinois	123	101,555
Oregon	3	803	Indiana	22	31,638
Pennsylvania	21	6,438	Iowa	133	94,930
Texas	5	1,908	Kansas	124	115,005
Virginia	4	1,142	Michigan	6	2,801
Wisconsin	31	29,375	Minnesota	107	69,543
Other States	21	<u>19,752</u>	Mississippi	6	2,558
United States	236	104,878	Missouri	21	23,255
FRUITS AND VEGETABLES <sup>5</sup>			Montana	13	9,411
Arizona	4	699	Nebraska	73	69,596
Arkansas	5	384	North Dakota	133	61,197
California	71	20,439	Ohio	42	31,422
Colorado	9	455	Oklahoma	41	29,487
Florida	27	2,022	Oregon	3	3,630
Georgia	4	112	South Dakota	70	51,320
Hawaii	<b>10</b>	430	Texas	38	18,773
Maine	5	542	Washington	25	10,110
			Other States	10	3,903
			Foreign <sup>6</sup>	—	<u>3,511</u>
			United States	<b>1,014</b>	745,009

Continued

Table 2— Number <sup>1</sup> of co-ops and memberships<sup>2</sup> by major business activity and State, 1997<sup>3</sup> (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
<b>LIVESTOCK <sup>5</sup></b>			<b>TOBACCO <sup>8</sup></b>		
Alabama	6	5,240	Kentucky	5	78,135
Hawaii	4	10,341	North Carolina	8	24,908
Idaho	3	4,832	Tennessee	7	67,582
Illinois	3	40,993	Virginia	3	1,374
Indiana	3	2,301	Other States	3	948
Kentucky	4	671	United States	26	172,947
Michigan	4	34,969	<b>WOOL AND MOHAIR</b>		
Mississippi	6	5,112	Idaho	5	1,825
Missouri	7	4,805	Montana	20	872
North Dakota	8	9,548	North Dakota	5	433
Ohio	4	14,483	Ohio	3	1,722
Virginia	5	1,311	Pennsylvania	16	1,616
West Virginia	3	485	Utah	4	420
Wisconsin	5	3,782	Virginia	8	568
Other States	23	96,905	Wyoming	4	185
Foreign <sup>6</sup>		233	Other States	23	9,007
United States	88	236,011	Foreign <sup>6</sup>		96
<b>NUT <sup>8</sup></b>			United States	<b>88</b>	16,744
California	5	6,771	<b>MISCELLANEOUS <sup>11</sup></b>		
Other States	12	34,884	Alaska	9	7,469
United States	17	41,655	California	11	952
<b>POULTRY <sup>9</sup></b>			Florida	6	315
California	3	83	Georgia	3	295
Utah	3	108	Hawaii	7	806
Other States	14	33,724	Maine	15	918
Foreign <sup>6</sup>		378	Michigan	3	128
United States	20	34,293	Minnesota	6	1,932
<b>RICE <sup>5</sup></b>			Mississippi	3	184
California	5	1,978	North Dakota	7	5,440
Louisiana	3	208	Oregon	3	333
Texas	6	1,100	Washington	5	749
Other States	4	10,682	Other States	23	9,790
Foreign <sup>6</sup>		1	United States	101	28,996
United States	18	13,969	<b>TOTAL MARKETING</b>		
<b>SUGAR <sup>10</sup></b>			Alabama	10	14,517
Idaho	7	2,306	Alaska	9	7,675
Louisiana	9	529	Arizona	5	2,569
Michigan	8	2,797	Arkansas	14	14,205
Minnesota	3	2,225	California	117	37,853
Montana	3	540	Colorado	28	13,331
Wyoming	4	586	Florida	38	6,076
Other States	17	4,840	Georgia	12	22,128
Foreign <sup>6</sup>		2	Hawaii	25	11,874
United States	51	13,825	Idaho	24	13,114
			Illinois	134	145,509
			Indiana	26	37,048

Continued

Table 2— **Number <sup>1</sup> of co-ops and memberships <sup>2</sup> by major business activity and State, 1995<sup>7</sup>** <sup>3</sup>(continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
TOTAL MARKETING (Continued)			FARM SUPPLY (Continued)		
Iowa	147	111,475	Kentucky	28	<b>49,694</b>
Kansas	124	118,592	Louisiana	21	<b>8,899</b>
Kentucky	13	82,228	Maryland	13	34,916
Louisiana	18	3,070	Massachusetts	4	3,563
Maine	22	1,850	Michigan	27	18,095
Maryland	3	1,102	Minnesota	156	121,795
Massachusetts	<b>10</b>	1,069	Mississippi	37	89,728
Michigan	41	50,042	Missouri	43	122,522
Minnesota	169	147,838	Montana	39	16,798
Mississippi	23	12,867	Nebraska	43	33,924
Missouri	31	32,930	New York	11	33,488
Montana	40	12,197	North Carolina	3	45,346
Nebraska	81	75,151	North Dakota	115	48,872
New Jersey	15	2,860	Ohio	23	14,243
New Mexico	4	6,549	Oklahoma	32	25,921
New York	79	9,283	Oregon	13	12,675
North Carolina	20	26,869	Pennsylvania	7	31,458
North Dakota	166	80,077	South Dakota	73	50,544
Ohio	65	53,715	Tennessee	70	70,565
Oklahoma	45	42,392	Texas	48	38,031
Oregon	25	9,064	Utah	8	5,642
Pennsylvania	46	8,776	Virginia	38	61,487
South Carolina	4	3,327	Washington	31	10,534
South Dakota	72	59,951	West Virginia	14	24,603
<i>Tennessee</i>	8	68,950	Wisconsin	120	115,699
Texas	69	53,677	Wyoming	6	3,454
Utah	12	3,934	Other States	13	88,520
Vermont	5	1,641	Foreign <sup>6</sup>	—	<u>582</u>
Virginia	23	27,453	United States	1,386	<b>1,557,871</b>
Washington	56	17,487			
West Virginia	6	1,533	SERVICE <sup>12</sup>		
Wisconsin	42	35,617	Alabama	5	177
Wyoming	8	1,236	Arizona	4	788
Other States	7	2,679	Arkansas	6	1,047
Foreign <sup>6</sup>	—	<u>4,452</u>	California	48	3,904
United States	1,941	<b>1,497,832</b>	Hawaii	5	116
			Illinois	4	73
FARM SUPPLY			Iowa	3	1,728
Alabama	48	39,097	Kansas	3	105
Arkansas	40	47,990	Louisiana	11	1,587
California	20	14,958	Michigan	5	5,643
Colorado	22	20,317	Minnesota	43	26,425
Florida	6	8,952	Mississippi	23	7,342
Georgia	7	2,596	Nebraska	3	472
Idaho	16	9,965	New Mexico	4	1,386
Illinois	65	87,647	New York	6	7,598
Indiana	32	53,766	North Carolina	6	120
Iowa	73	74,655	North Dakota	16	496
Kansas	21	16,310	Ohio	7	7,264
			Oklahoma	24	7,118

Continued

Table 2— Number <sup>1</sup> of co-ops and memberships <sup>2</sup> by major business activity and State, 1997 <sup>3</sup> (continued)

State	Hqts. in State	Memberships	State	Hqts. in State	Memberships
SERVICE <sup>12</sup> (Continued)			TOTAL (Continued)		
Pennsylvania	7	13,144	Ohio	95	75,222
Texas	155	37,123	Oklahoma	101	75,431
Washington	4	2,970	Oregon	40	21,747
Wisconsin	50	26,245	Pennsylvania	60	53,378
Other States	22	<u>31,962</u>	South Carolina	6	3,745
United States	464	183,105	South Dakota	145	110,927
			Tennessee	79	141,185
TOTAL			Texas	272	128,831
Alabama	63	53,791	Utah	21	<b>11,550</b>
Alaska	9	7,675	Vermont	5	6,340
Arizona	<b>10</b>	46,757	Virginia	63	93,068
Arkansas	60	63,242	Washington	91	30,991
California	185	56,715	West Virginia	20	26,202
Colorado	51	33,648	Wisconsin	212	177,561
Connecticut	4	3,174	Wyoming	14	4,690
Delaware	3	25,978	Other States	5	2,793
Florida	46	27,124	Foreign <sup>6</sup>	-	<u>5,034</u>
Georgia	21	25,059	United States	3,791	<b>3,238,808</b>
Hawaii	32	13,397			
Idaho	41	23,079			
Illinois	203	233,229			
Indiana	60	90,915			
Iowa	223	187,858			
Kansas	148	135,007			
Kentucky	42	136,427			
Louisiana	50	13,556			
Maine	24	9,214			
Maryland	18	36,624			
Massachusetts	14	5,050			
Michigan	73	73,780			
Minnesota	368	296,058			
Mississippi	83	109,937			
Missouri	75	156,093			
Montana	79	28,995			
Nebraska	127	109,547			
New Jersey	19	7,724			
New Mexico	9	8,311			
New York	96	50,369			
North Carolina	29	72,335			
North Dakota	297	129,445			

<sup>1</sup> Includes centralized and federated cooperatives and those with mixed organizational structures.

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

<sup>3</sup> Data covering operations of cooperatives for fiscal years that ended in 1997. States listed are those with more than two cooperatives or where disclosure is not a problem.

<sup>4</sup> Cotton ginning cooperatives in previous reports were included in this classification but reclassified as service cooperatives in 1989.

<sup>5</sup> 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.

<sup>6</sup> Includes foreign memberships.

<sup>7</sup> Excludes soybean meal and oil.

<sup>8</sup> Membership fluctuates annually depending upon producer participation in price stabilization programs.

<sup>9</sup> Includes eggs, turkeys, ratite, squab, and related products.

<sup>10</sup> Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.

<sup>11</sup> Includes forest products, hay, hops, nursery stock, coffee, and other farm products not separately classified.

<sup>12</sup> Cooperatives providing services related to marketing or purchasing activities. Major services provided are cotton ginning, trucking, storing, grinding, drying, and artificial insemination.

for grain cooperatives and an increase of 154 branches for farm supply cooperatives. Some of the change in number may have resulted from reclassifying grain or farm supply cooperatives. Both grain and farm supply cooperatives averaged more than two branches per cooperative in 1997. In 1996, grain and farm supply cooperatives operated an estimated 5,355 branches.

Figure 2 shows that several of the largest (mainly regional) cooperatives had more branches than many smaller (local) cooperatives combined. The 47 largest grain cooperatives-4.6 percent of all grain cooperatives-accounted for 31.4 percent of the total number of branches operated by grain cooperatives.

## Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled 3,238,808 in 1997, down 11.6 percent from 3,663,584 in 1996 (table 1).

By the cooperative's major business activity, 48.1 percent were memberships of farm supply cooperatives (figure 3), 23 percent of grain, and 18.3 percent of live-stock, tobacco, and service. Dairy cooperative memberships were only 3.2 percent of cooperatives' total memberships, but accounted for nearly 22 percent of cooperatives' net business volume in 1997, the same as in 1996.

Among marketing cooperatives, memberships

decreased in 1997 for every type except miscellaneous marketing, sugar, and cotton cooperatives-all increases.

The number of memberships by State is shown in table 2. Minnesota again led, with 296,058 memberships, followed by Illinois, Iowa, and Wisconsin. Figure 4 shows the 10 leading States. Among them, Texas, Minnesota, and Wisconsin had the largest number of memberships in related-service cooperatives. Minnesota and Illinois had the most memberships in marketing cooperatives. The 10 States accounted for 53.2 percent of the total memberships in 1997, down from 53.5 percent in 1995.

Memberships in cooperatives by farmers, ranchers, and fishermen was larger in the smaller cooperatives than in larger ones. The largest cooperatives (\$500 million and more) are all regional and interregional cooperatives. Their members are either local or regional cooperatives.

## Employees

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

Figure 2— Branches of Grain and Farm Supply Cooperatives by Size, 1997

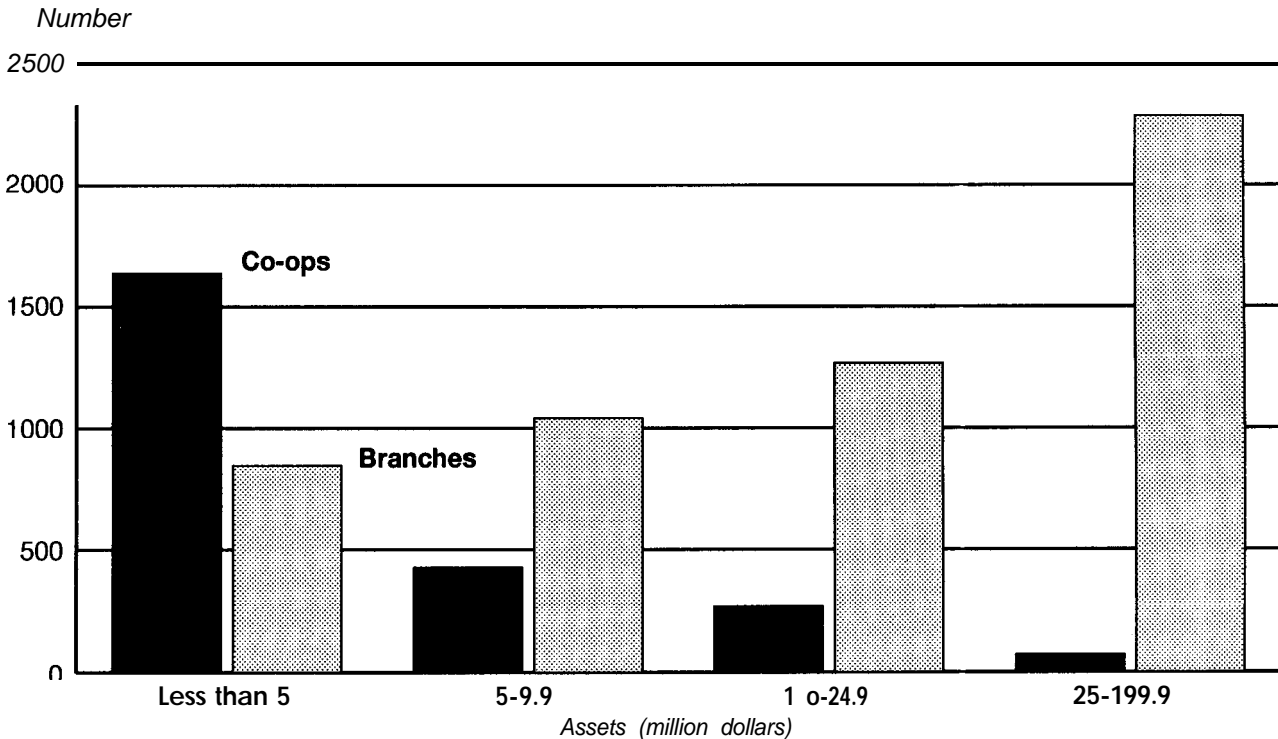
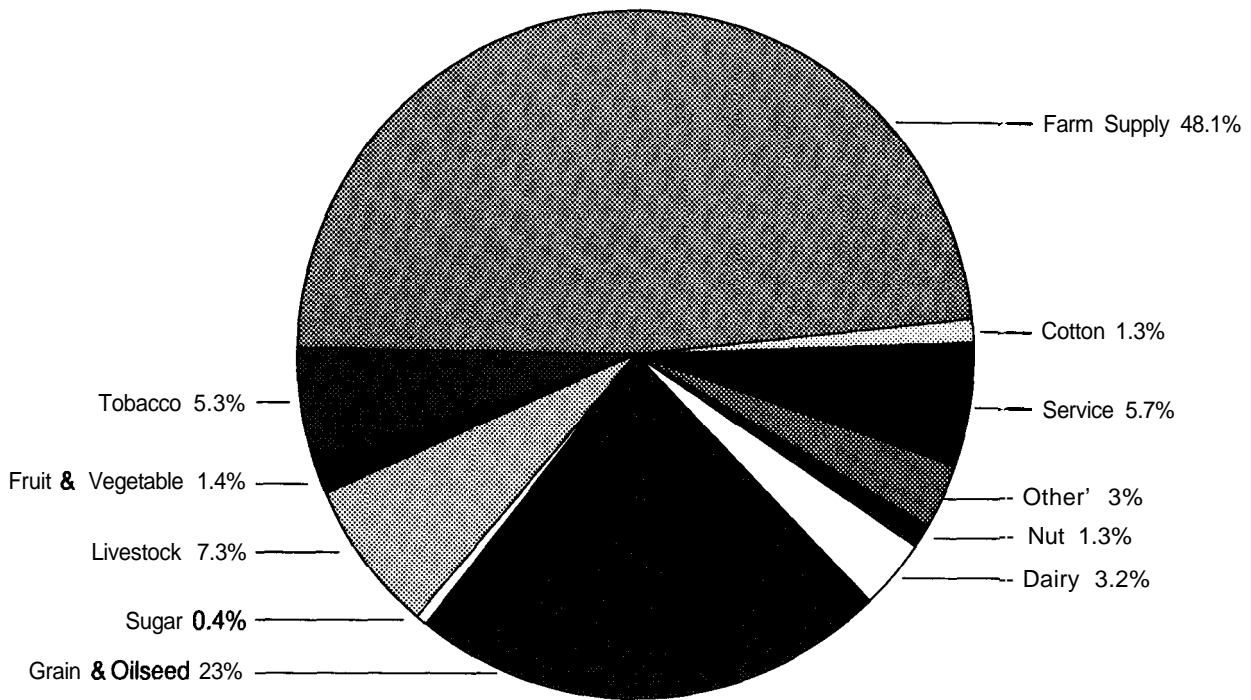


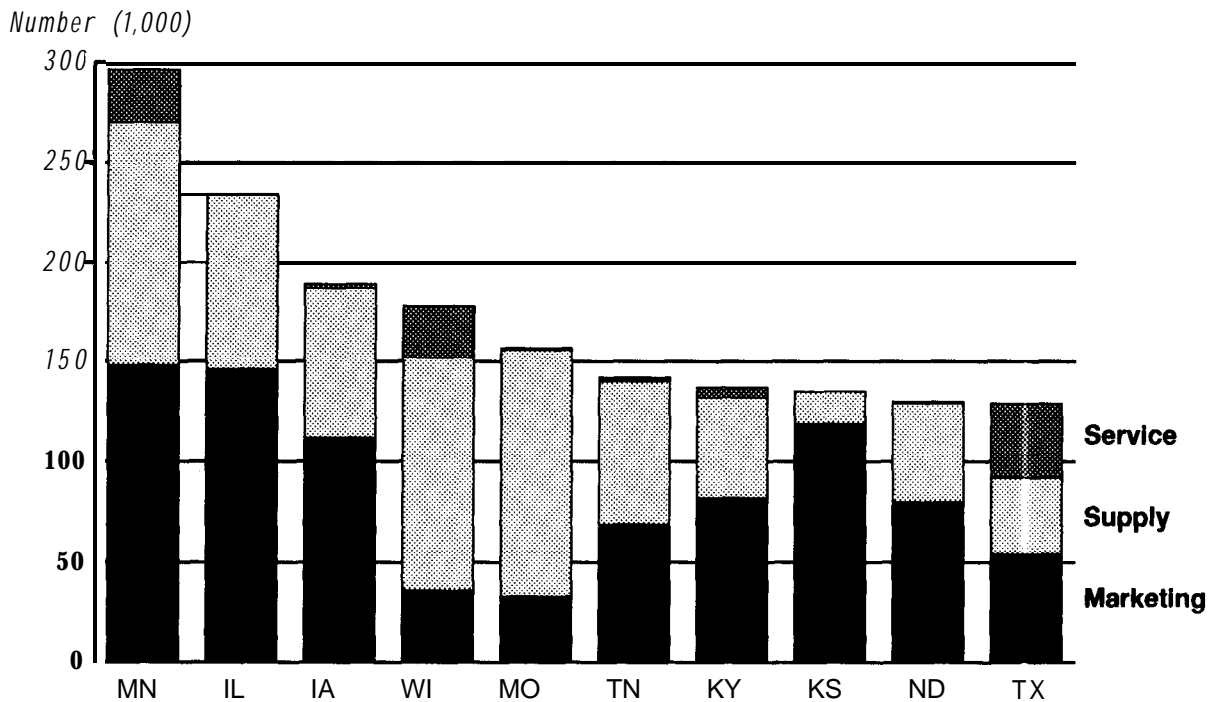
Figure 3— Distribution of Memberships by Type of Cooperative, 1997



Percent based on 3,238,808 memberships.

<sup>1</sup> Includes dry bean and pea, wool and mohair, rice, sugar, and miscellaneous marketing cooperatives.

Figure 4— Cooperative Memberships by Function, Leading States, 1997





In 1997, farmer cooperatives employed an estimated 287,237 full-time, part-time, and seasonal employees, up from 284,796 employees in 1996 (table 3). By type, marketing cooperatives had 203,023 employees, or 70.7 percent; farm supply cooperatives had 67,726 employees, or 23.6 percent; and related-service cooperatives had 16,488 employees, or 5.7 percent of the total.

Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (60,515), followed by livestock and poultry cooperatives (47,246) and grain and oilseed (33,006).

Figure 5 shows the number of full-time and part-time and seasonal employees by type of cooperative for 1997. Farm supply cooperatives used the most employees and cotton cooperatives the least. Rice cooperatives had the smallest proportion of part-time and seasonal employees. Related-service, followed by fruit and vegetable, cooperatives had the largest proportion of part-time and seasonal employees.

Full-time employees totaled 172,199 in 1997, down from 174,795 in 1996, or 1.5 percent. The number of full-time employees per association, however, was 45 in both years because cooperative numbers declined. The 1,941 marketing cooperatives employed

118,479 persons, down 4.1 percent from 1996. Dairy cooperatives, with 28,323, had the most full-time employees, while livestock and poultry cooperatives, with 26,399, ranked second. Together, they accounted for 46.2 percent of the full-time employees of marketing cooperatives.

The 1,386 farm supply cooperatives employed 47,870 persons on a full-time basis, up 5.1 percent from the 45,566 reported for 1996. They averaged 35 full-time employees in 1997. Full-time employees of the 464 related-service cooperatives totaled 5,850 in 1997, up from 5,704 or 2.6 percent.

Cooperatives used 115,038 part-time and seasonal employees in 1997, up 5,037, or 4.6 percent, from 1996. Cooperatives marketing other products and fruits and vegetables were mainly responsible for the increase.

In 1997, marketing cooperatives reported 84,544 part-time and seasonal employees, or 73.5 percent of the total. Fruit and vegetable and livestock and poultry cooperatives accounted for 69 percent of them with 58,515. Farm supply cooperatives averaged 14 part-time and seasonal employees. The more labor-intensive fruit and vegetable cooperatives averaged more than 145 such employees (figure 6).

Table 3— Full-time and part-time and seasonal employees of farmer cooperatives, by type of co-op, 1996-97

Principal product(s) marketed or major function	Full-time employees		Part-time and seasonal <sup>1</sup>	
	1996	1997	1996	1997
	<i>Number</i>			
<b>Products marketed:</b>				
Cotton	1,787	1,995	588	649
Dairy	27,621	28,323	3,452	3,168
Fruits & vegetables	26,456	22,847	34,536	37,668
Grains and oilseeds excluding cottonseed	25,981	23,538	8,777	9,468
Livestock and poultry	28,453	26,399	22,480	20,847
Rice	2,636	2,713	986	278
Sugar	3,482	3,473	4,059	4,225
Other products <sup>2</sup>	7,109	9,191	4,565	8,241
Marketing	123,525	118,479	79,442	84,544
Farm supply	45,566	47,870	17,844	19,856
Service	5,704	5,850	12,716	10,638
Total	174,795	172,199	110,001	115,038

<sup>1</sup> Number of part-time employees was estimated for all cooperatives based on the relationship of part-time to full-time employees for the respondent cooperatives.

<sup>2</sup> Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Figure 5— Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1997

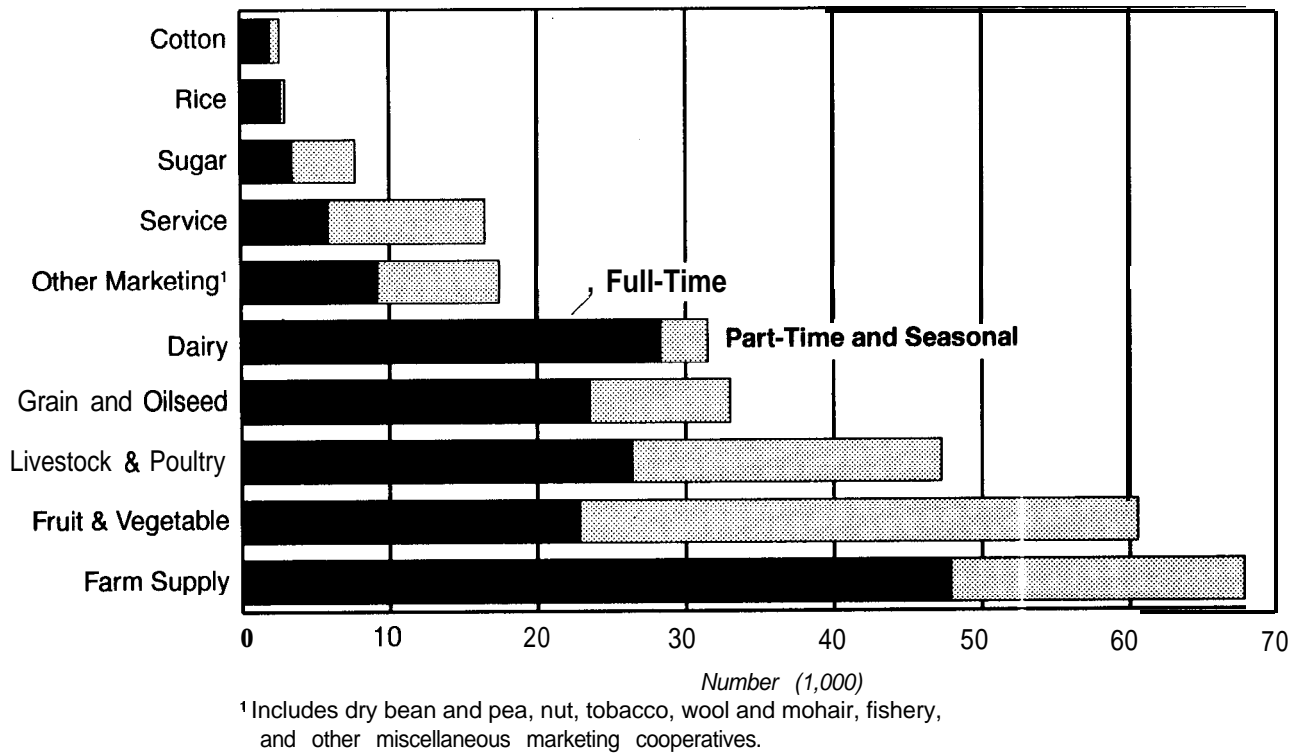


Figure 6— Average Number of Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1997

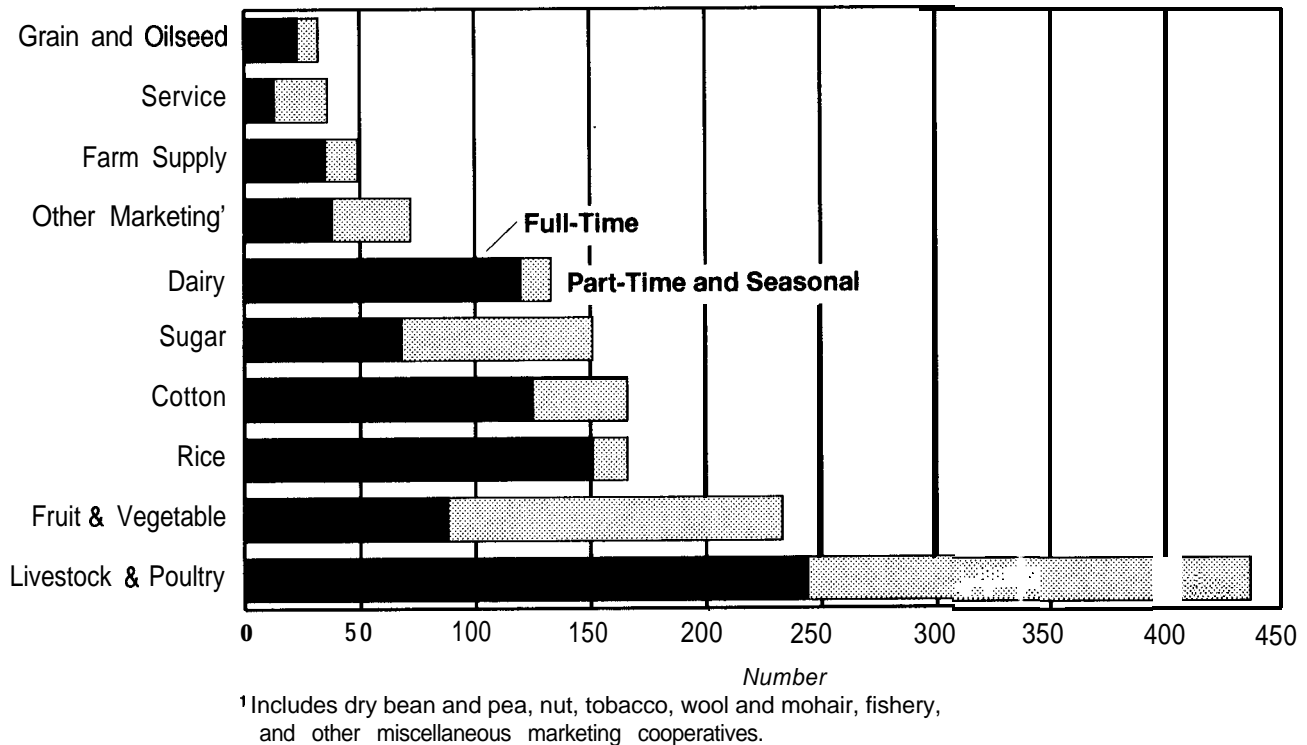


Figure 7— Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 1997

Percent of total

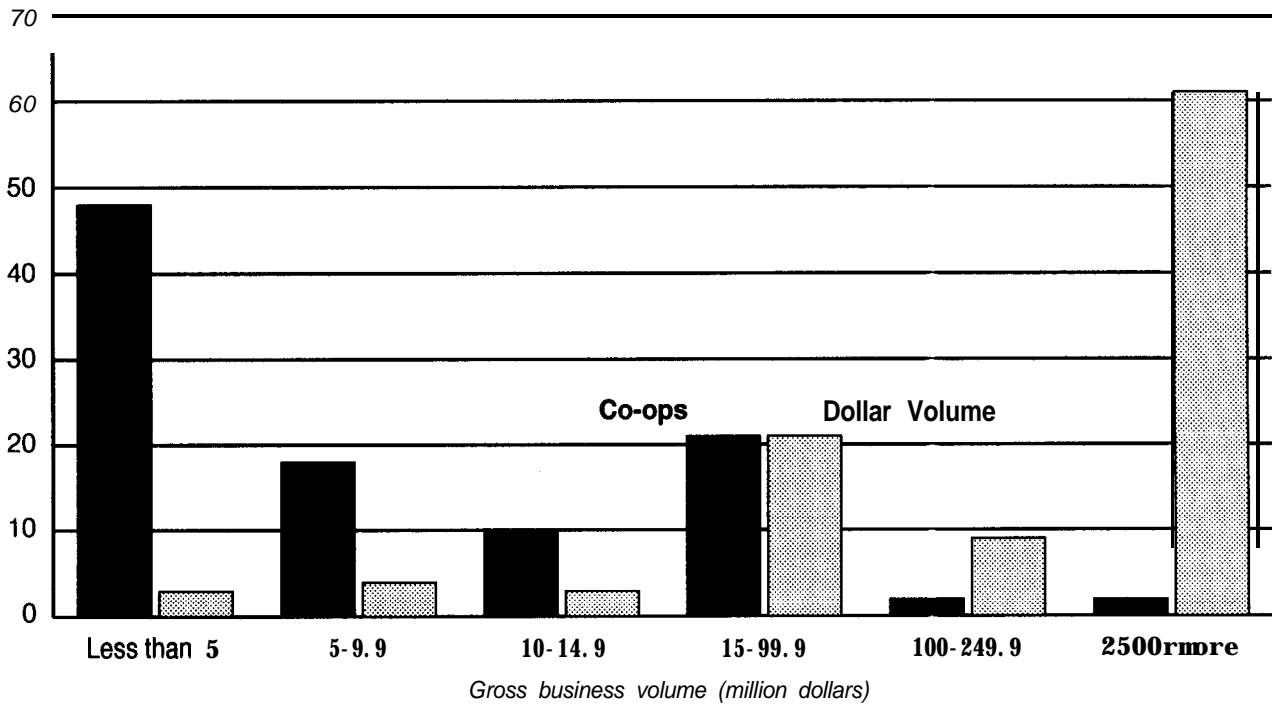


Table 4— Farmer cooperatives and memberships, by gross business volume, 1997 <sup>1</sup>

Volume group (mil. dol.)	Cooperatives		Dollar volume		Memberships <sup>3</sup>	
	Number	Percent of total	Gross <sup>2</sup> (mil. dol.)	Percent of total	Number (1,000)	Percent of total
Less than 5.0	1,807	47.7	3,388	2.7	576	17.8
5 - 9.9	687	18.1	4,882	3.8	407	12.6
10 - 14.9	357	9.5	4,347	3.4	258	8.0
15 - 24.9	343	9.0	6,642	5.3	351	10.8
25 - 49.9	315	8.3	10,783	8.5	402	12.4
50 - 99.9	135	3.6	8,970	7.1	263	8.1
100 - 199.9	62	1.6	8,303	6.6	107	3.3
200 - 249.9	12	0.3	2,635	2.1	17	.5
250 - 499.9	35	0.9	12,496	9.9	265	8.2
500 - 999.9	19	0.5	13,429	10.6	182	5.6
1,000 and more	19	0.5	50,602	40.0	412	12.7
Total <sup>4</sup>	3,791	100.0	126,476	100.0	3,239	100.0

<sup>1</sup> 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.

<sup>2</sup> Includes intercooperative business volume. Total may not add due to rounding.

<sup>3</sup> Includes number of farmers, ranchers, and fishermen eligible to vote for directors. Does not include memberships held by other cooperatives, such as local cooperative memberships in regional cooperatives.

<sup>4</sup> Total may not add due to rounding.

## Business Size

Farmer cooperatives, measured by annual gross business volume, increased in size. Most most remain small and serve local areas. Several are actively seeking regional, national, and even international markets to increase business volume.

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

In 1997, 75.3 percent of all farmer cooperatives reported a business volume of less than \$15 million. However, they accounted for only 9.9 percent of the total gross dollar volume (table 4 and figure 7). Only 1.9 percent of farmer cooperatives reported a business vol-

ume of at least \$250 million, but they accounted for 60.5 percent of the total sales, up from 59.3 percent in 1996.

## Business Volume

Total gross business volume of the 3,791 marketing, farm supply, and related-service cooperatives for 1997 was \$126.5 billion (table 5), down 1.3 percent from the record \$128.1 billion in 1996.

Total net business volume of farmer cooperatives in 1997 was \$106.5 billion, \$77.6 billion for farm products marketed, \$25.2 billion for farm supplies purchased, and \$3.6 billion for services performed and from other income. The total net figure (the difference between gross and net business volumes), which excludes intercooperative business, equaled the \$106.2

Table 5— Cooperatives' gross and net business volumes by commodity, 1997<sup>1</sup>

Commodity	Gross volume		Net volume	
	Million dollars	Percent	Million dollars	Percent
<b>Products marketed:</b>				
Beans and peas (dry edible)	189.0	0.1	189.0	0.2
Cotton	3,074.3	2.4	3,003.9	2.8
Dairy	26,278.0	20.8	23,374.1	22.0
Fruits and vegetables	9,837.1	7.8	9,268.2	8.7
Grains and oilseeds excluding cottonseed	28,782.7	22.8	24,639.2	23.1
Livestock	7,483.5	5.9	7,460.3	7.0
Nuts	880.3	.7	880.3	.8
Poultry <sup>3</sup>	2,118.0	1.7	2,118.0	2.0
Rice	931.5	0.7	930.2	0.9
Sugar	2,231.8	1.8	2,087.3	2.0
Tobacco	592.9	0.5	597.9	0.6
Wool and mohair	18.9	( <sup>2</sup> )	11.3	( <sup>2</sup> )
Miscellaneous <sup>4</sup>	3,335.0	2.6	3,091.7	2.9
Total farm products	85,753.1	67.8	77,646.2	72.9
<b>Supplies purchased:</b>				
Crop protectants	4,350.8	3.4	3,125.5	2.9
Feed	8,147.1	6.4	5,988.0	5.6
Fertilizer	8,861.3	7.0	5,371.0	5.0
Petroleum	10,592.0	8.4	6,756.1	6.4
Seed	925.4	0.7	707.4	0.7
Other supplies <sup>5</sup>	4,199.1	3.3	3,237.1	3.0
Total farm supplies	37,075.7	29.3	25,180.6	23.7
<b>Services provided:</b>				
Trucking, cotton ginning, storage, grinding, locker plants, misc. <sup>6</sup>	3,647.3	2.9	3,647.3	3.4
Total business	126,476.2	100.0	106,474.2	100.0

<sup>1</sup> Gross includes and net excludes intercooperative business. **Totals** may not add due to rounding.

<sup>2</sup> Less than 0.05 percent.

<sup>3</sup> Includes eggs, turkeys, **ratite**, squab, and related products.

<sup>4</sup> 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.

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

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

billion record set in 1996. However, adjusting for price change, net business volume actually increased 3 percent<sup>3</sup>, due largely to lower commodity prices in 1997, especially for food and feed grains.

Gross volume of farm products marketed by cooperatives decreased 5 percent, from \$90.3 billion in 1996 to \$85.8 billion in 1997, due mainly to a 15.1-percent decrease in grain and oilseed marketings. The net volume of farm products marketed was \$77.6 billion, or 72.9 percent of the total net volume of all cooperatives, down 2.2 percent from \$79.4 billion in 1996.

Figure 8 illustrates the leading products marketed by cooperatives based on net marketing business volume. Grains and oilseeds (excluding cottonseed) led with 31.7 percent, followed by dairy (milk and milk products) with 30.1 percent, and fruits and vegetables with 11.9 percent.

Gross volume of all farm supplies handled by cooperatives was \$37.1 billion, up 6.8 percent from \$34.7 billion in 1996. Net farm supply volume of nearly

\$25.2 billion, up 6.5 percent from \$23.7 billion, accounted for 23.7 percent of the total net business volume.

The leading supplies handled by cooperatives in terms of net farm supply business volume were petroleum, 26.8 percent; feed, 23.8 percent; and fertilizer, 21.3 percent (figure 9). Sales of all farm supply categories were up in 1997, except for "other" supplies, which was down 1.3 percent.

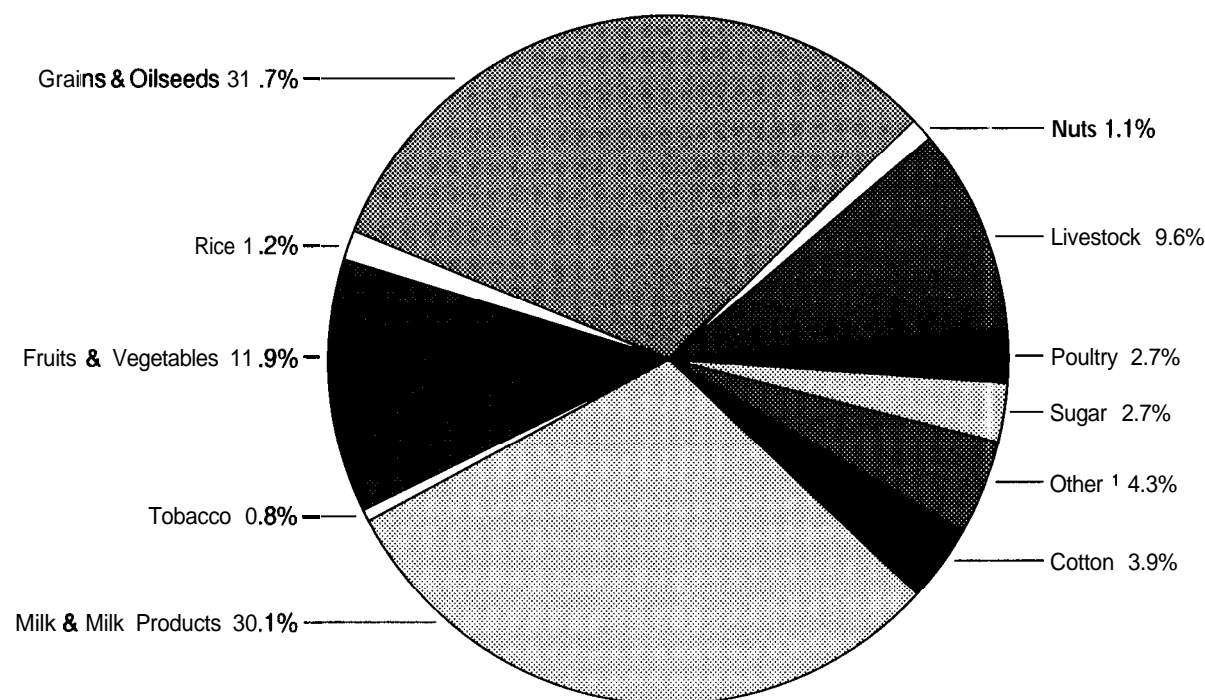
Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus other income, amounted to \$3.6 billion, up 17.6 percent. Service receipts and other income represented 3.4 percent of total net business volume.

Table 6 shows gross and net business volume by State. Sales were allocated to the States in which the product marketed was originated and the farm inputs were sold. Iowa was the leading State in total gross and net business volume, with \$12.6 billion and \$10.9 billion, respectively. Minnesota was second, with \$11.9 billion in gross business and \$9.8 billion in net business volume. In 1995, California led all States in net business volume with nearly \$8.9 billion.

In 1997, Iowa was also the leading State in net sales of farm supplies, both gross and net, with \$4 billion and \$2.7 billion, respectively. Figure 10 shows the

<sup>3</sup> Deflated 1997 cooperative business volume was \$109.4 billion, up 3 percent from the actual \$106.2 billion in 1996. The \$109.4 billion was derived by deflating farm products marketed by indices of prices received for all farm products and farm supplies (inputs) and service income by the index of prices paid by farmers for production items.

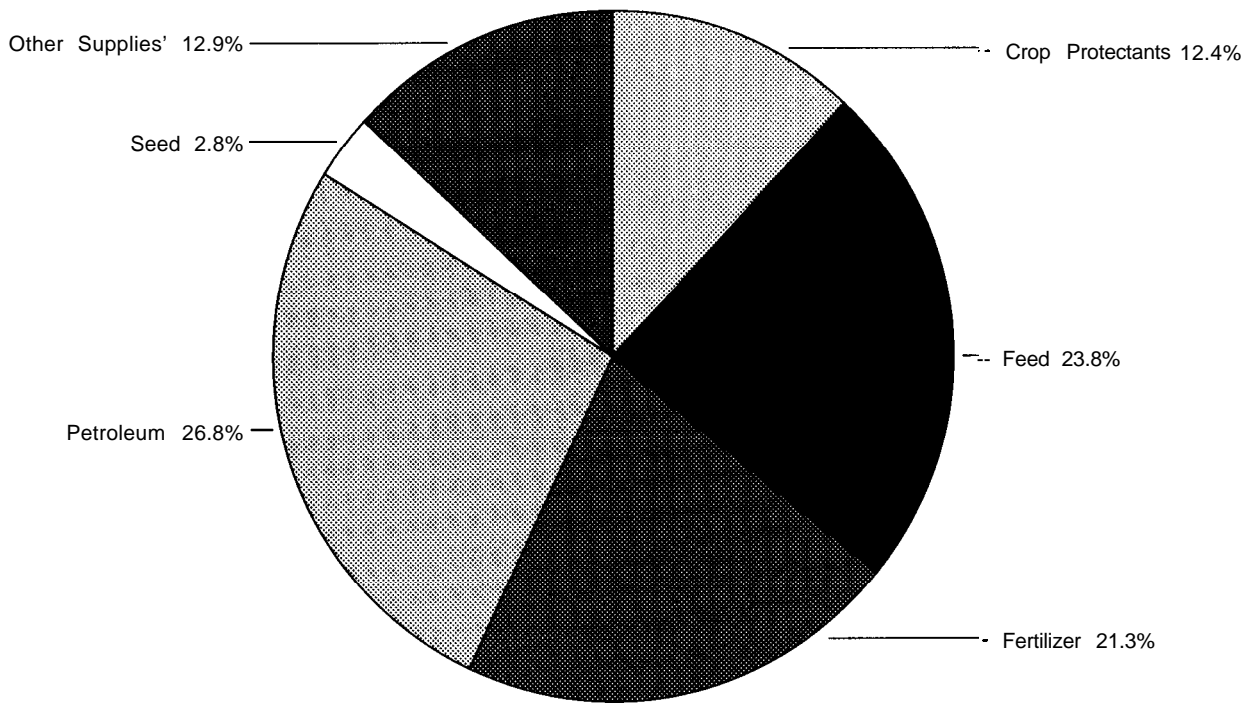
Figure 8— Relative Importance of Farm Products Marketed by Cooperatives, 1997



Percent based on a net marketing business volume of \$77.6 billion.

<sup>1</sup> Includes dry beans and peas, wool and mohair, fish, and miscellaneous marketings.

Figure 9— Relative Importance of Farm Supplies Handled by Cooperatives, 1997



Percent based on a net farm supply business volume of \$25.2 billion.

\* Includes building materials: tires, batteries and accessories; equipment; animal health products; pet food; semen; hardware; food; clothing; etc.

Figure 10- Cooperatives' Net Business Volume, Leading States, 1997

Billion dollars

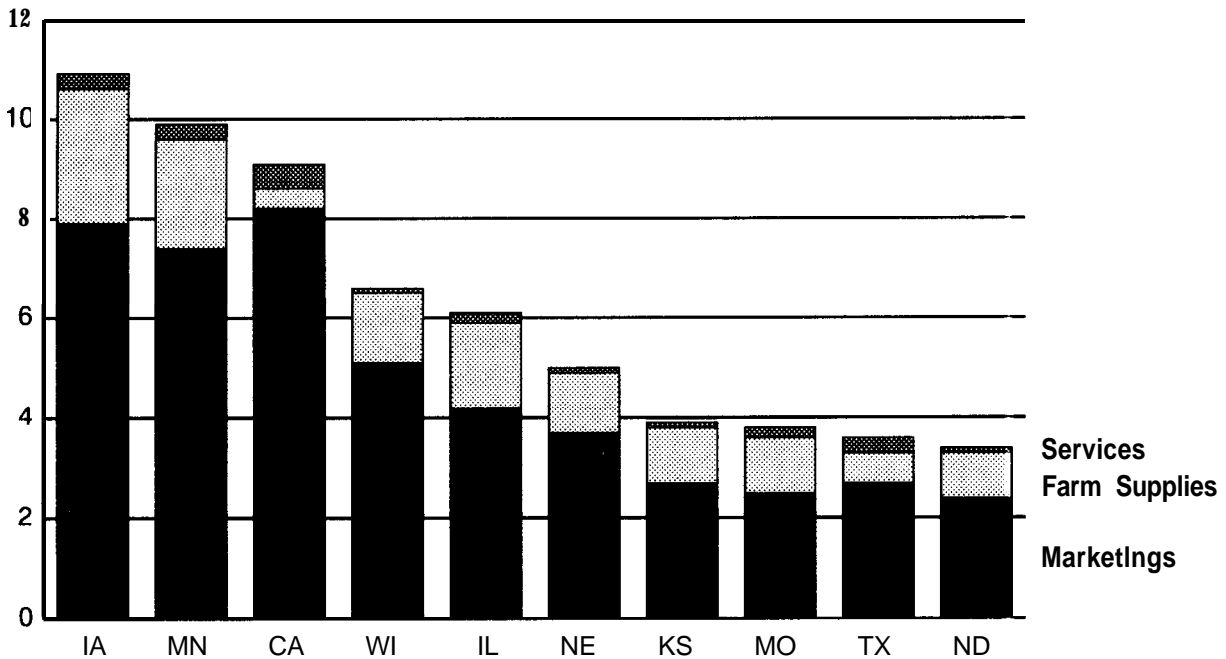


Table 6—Cooperatives' business volume<sup>1</sup> by commodity and State, 1997<sup>2</sup>

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	1,000 dollars			1,000 dollars	
<b>PRODUCTS MARKETED:</b>			<b>FRUITS AND VEGETABLES (Continued)</b>		
<b>BEANS AND PEAS, DRY EDIBLE</b>			Massachusetts	530,847	530,847
California	<b>89,081</b>	89,081	Michigan	594,750	483,638
Other States	<u>99,910</u>	<u>99,910</u>	Minnesota	3,522	3,522
United States	188,991	188,991	Mississippi	11,926	11,478
			New Jersey	204,968	204,968
			New York	310,519	285,781
<b>CO-I-TON</b>			North Carolina	29,270	27,751
California	862,564	607,335	North Dakota	10,887	10,887
Mississippi	384,484	371,889	Ohio	6,241	6,241
Texas	940,528	939,974	Oregon	795,955	794,784
Other States	<u>1,086,781</u>	<u>1,084,688</u>	Pennsylvania	334,682	324,706
United States	<b>3,074,337</b>	<b>3,003,886</b>	Texas	49,879	16,394
			Washington	867,920	862,568
			Other States	930,553	917,304
			Foreign <sup>3</sup>	- 15,091	<u>15,091</u>
			United States	9837,141	<b>9,268,189</b>
<b>DAIRY</b>					
California	<b>3,107,394</b>	<b>2,945,132</b>	<b>GRAINS AND OILSEEDS EXCLUDING COTTONSEED</b>		
Illinois	<b>1,195,595</b>	975,839	Arkansas	<b>296,682</b>	258,326
Iowa	<b>1,164,679</b>	<b>1,026,053</b>	Colorado	282,053	268,666
Massachusetts	58,125	55,772	Idaho	42,165	42,071
Michigan	705,268	686,999	Illinois	2679,085	<b>2,516,121</b>
Minnesota	<b>2,700,430</b>	<b>2,281,830</b>	Indiana	732,323	712,298
Missouri	<b>1,136,673</b>	967,669	Iowa	<b>4,808,129</b>	<b>4,647,143</b>
New York	<b>1,648,294</b>	<b>1,171,679</b>	Kansas	<b>2,055,805</b>	<b>1,857,357</b>
North Dakota	194,963	163,812	Michigan	<i>136,923</i>	130,162
Ohio	981,016	930,480	Minnesota	<b>4,279,883</b>	<b>3,446,416</b>
Oregon	303,227	258,790	Mississippi	152,100	150,267
<b>Pennsylvania</b>	<b>1,170,426</b>	976,137	Missouri	978,608	811,773
Texas	902,972	851,742	Montana	392,483	262,009
Virginia	121,115	112,589	Nebraska	<b>2,369,748</b>	<b>2,156,557</b>
Wisconsin	<b>4,438,688</b>	<b>3,982,844</b>	North Dakota	<b>1,978,376</b>	<b>1,635,018</b>
Other States	<u>6,449,093</u>	<u>5,986,703</u>	Ohio	867,857	842,806
United States	<b>26,277,957</b>	<b>23,374,069</b>	Oklahoma	314,118	289,403
			Oregon	557,137	395,410
<b>FRUITS AND VEGETABLES</b>			South Dakota	<b>1,489,032</b>	<b>1,250,125</b>
Arizona	152,410	133,225	Texas	<b>1,224,510</b>	697,949
Arkansas	1,337	1,337	Washington	753,804	655,433
California	<b>3,673,516</b>	<b>3,367,469</b>	Other States	<b>1,008,756</b>	843,188
Colorado	18,056	18,056	Foreign <sup>3</sup>	<u>1,383,168</u>	<u>770,665</u>
Florida	<b>1,228,521</b>	<b>1,190,207</b>	United States	<b>28,782,746</b>	<b>24,639,161</b>
Georgia	16,701	12,344			
Hawaii	24,190	24,190			
Maine	25,400	25,400			

Continued

Table 6— Cooperatives' business volume <sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
<i>1,000 dollars</i>			<i>1,000 dollars</i>		
<b>LIVESTOCK</b>			<b>SUGAR</b>		
Alabama	61,039	61,039	Idaho	423,762	303,805
Hawaii	23,172	23,172	Louisiana	293,726	293,726
Idaho	66,304	66,304	Michigan	31,740	31,740
Illinois	628,659	627,249	Minnesota	633,023	633,023
Indiana	277,997	277,869	Montana	61,700	61,700
Kentucky	77,629	77,629	Wyoming	19,625	19,625
Michigan	397,759	397,759	Other States	762,940	738,370
Mississippi	86,523	86,523	Foreign <sup>3</sup>	5,294	5,294
Missouri	551,673	551,673	United States	<b>2,231,810</b>	<b>2,087,283</b>
North Dakota	123,308	120,214			
Ohio	314,034	314,034	<b>TOBACCO</b>		
Virginia	27,956	27,956	Kentucky	286,023	286,023
West Virginia	2,402	2,402	North Carolina	231,176	231,176
Wisconsin	448,197	444,975	Tennessee	68,695	68,695
Other States	<b>4,305,890</b>	<b>4,290,556</b>	Virginia	3,406	3,406
Foreign <sup>3</sup>	90,995	90,995	Other States	3,575	3,575
United States	<b>7,483,538</b>	<b>7,460,349</b>	United States	592,876	592,876
<b>NUTS</b>			<b>WOOL AND MOHAIR</b>		
California	694,469	694,469	Idaho	50	50
Other States	185,807	185,807	Montana	680	680
United States	880,276	880,276	North Dakota	60	60
<b>POULTRY <sup>4</sup></b>			Ohio	8,429	804
California	36,334	36,334	Pennsylvania	220	220
Utah	134,246	134,246	Utah	1,776	1,776
Other States	<b>1,947,438</b>	<b>1,947,438</b>	Virginia	85	85
United States	<b>2,118,017</b>	<b>2,118,017</b>	Wyoming	563	563
<b>RICE</b>			Other States	6,772	6,772
California	228,822	227,488	Foreign	297	297
Louisiana	18,115	18,115	United States	18,931	11,306
Texas	57,046	57,046	<b>MISCELLANEOUS MARKETING<sup>0</sup></b>		
Other States	<b>627,505</b>	<b>627,505</b>	Alaska	11,583	11,583
United States	931,487	930,154	California	46,862	46,862
			Florida	39,469	39,469
			Georgia	7,253	7,253
			Hawaii	30,430	30,430
			Maine	33,286	33,286
			Michigan	73,720	73,720
			Minnesota	767,117	645,972

Continued



Table 6— Cooperatives' business volume <sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	<i>7,000 dollars</i>			<i>1,000 dollars</i>	
<b>MISCELLANEOUS MARKETING<sup>1</sup>(Continued)</b>			<b>TOTAL FARM PRODUCTS MARKETED (Continued)</b>		
Mississippi	144,061	143,437	Tennessee	180,388	177,321
North Dakota	100,785	100,785	Texas	<b>3,349,485</b>	<b>2,735,390</b>
Oregon	101,860	101,860	Utah	466,043	454,676
Washington	149,787	149,787	Vermont	356,839	324,532
Other States	<b>1,716,949</b>	<b>1,595,347</b>	Virginia	223,407	207,334
Foreign <sup>3</sup>	<u>111,870</u>	<u>111,870</u>	Washington	2694,166	<b>2,724,088</b>
United States	<b>3,335,031</b>	<b>3,091,660</b>	West Virginia	80,015	75,315
			Wisconsin	5583,838	<b>5,085,983</b>
			Wyoming	36,558	36,452
<b>TOTAL FARM PRODUCTS MARKETED</b>			Other States	377,552	308,267
Alabama	820,882	817,312	Foreign <sup>3</sup>	1606,715	<u>994,212</u>
Alaska	11,583	11,583	United States	<b>85,753,138</b>	<b>77,646,216</b>
Arizona	705,295	665,186			
Arkansas	<b>1,424,071</b>	<b>1,376,465</b>	<b>FARM SUPPLIES PROVIDED:</b>		
California	<b>8,709,783</b>	<b>8,184,912</b>	<b>CROPPROTECTANTS</b>		
Colorado	576,596	559,816	Alabama	46,546	45,146
Florida	<b>2,184,453</b>	<b>2,138,103</b>	Arkansas	185,726	93,832
Georgia	<b>1,064,144</b>	<b>1,047,963</b>	California	36,945	26,644
Hawaii	100,080	100,080	Colorado	41,214	29,068
Idaho	<b>1,097,314</b>	972,364	Florida	17,743	15,138
Illinois	<b>4,558,569</b>	<b>4,171,689</b>	Georgia	147,832	144,807
Indiana	<b>1,534,292</b>	<b>1,450,553</b>	Idaho	36,551	17,468
Iowa	<b>8,296,195</b>	<b>7,949,780</b>	Illinois	563,760	308,900
Kansas	<b>2,987,577</b>	<b>2,748,145</b>	Indiana	264,648	175,371
Kentucky	655,674	644,407	Iowa	589,118	442,091
Louisiana	701,620	621,869	Kansas	128,587	105,675
Maine	109,676	108,270	Kentucky	57,850	49,668
Maryland	243,747	218,023	Louisiana	61,324	28,434
Massachusetts	596,489	594,136	Maryland	18,847	16,785
Michigan	<b>1,990,801</b>	<b>1,854,659</b>	Massachusetts	2,448	2,448
Minnesota	<b>8,732,932</b>	<b>7,351,470</b>	Michigan	38,006	26,905
Mississippi	851,757	836,278	Minnesota	412,151	339,159
Missouri	<b>2,799,992</b>	<b>2,463,685</b>	Mississippi	39,065	38,505
Montana	527,995	397,511	Missouri	119,168	89,936
Nebraska	<b>4,005,238</b>	<b>3,730,378</b>	Montana	51,750	33,404
New Jersey	256,916	250,928	Nebraska	230,430	179,219
New Mexico	562,203	550,215	New York	38,958	36,076
New York	<b>2,312,397</b>	<b>1,811,043</b>	North Carolina	48,455	31,187
North Carolina	615,232	596,992	North Dakota	178,660	140,063
North Dakota	<b>2,760,878</b>	<b>2,383,274</b>	Ohio	101,787	89,950
Ohio	<b>2,405,401</b>	<b>2,292,388</b>	Oklahoma	28,768	17,808
Oklahoma	738,379	702,335	Oregon	49,122	35,178
Oregon	<b>1,837,384</b>	<b>1,618,486</b>	Pennsylvania	32,577	32,577
Pennsylvania	<b>1,605,305</b>	<b>1,401,041</b>	South Dakota	183,596	145,805
South Carolina	208,984	208,416			
South Dakota	<b>2,008,297</b>	<b>1,692,889</b>			

Continued

Table 6— Cooperatives' business volume <sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
<i>1,000 dollars</i>			<i>1,000 dollars</i>		
<b>CROP PROTECTANTS (Continued)</b>			<b>FEED (Continued)</b>		
Tennessee	121,576	<b>63,593</b>	Virginia	126,285	112,767
Texas	72,520	61,396	Washington	115,187	39,378
Utah	17,115	6,815	West Virginia	23,354	20,292
Virginia	27,983	23,849	Wisconsin	503,268	325,145
Washington	57,496	39,351	Wyoming	6,743	6,743
West Virginia	3,536	3,162	Other States	352,867	304,629
Wisconsin	185,899	134,394	Foreign <sup>3</sup>	193,883	104,385
Wyoming	12,998	2,943	United States	8,147,076	5,987,963
Other States	62,632	50,741			
Foreign <sup>3</sup>	37,433	1,989			
United States	<b>4,350,820</b>	<b>3,125,481</b>	<b>FERTILIZER</b>		
			Alabama	140,551	97,491
<b>FEED</b>			Arkansas	226,377	115,427
Alabama	338,793	315,798	California	137,921	116,222
Arkansas	158,530	92,611	Colorado	129,841	87,280
California	187,196	126,481	Florida	121,903	40,698
Colorado	72,726	51,488	Georgia	123,844	119,788
Florida	128,822	126,750	Idaho	63,479	30,265
Georgia	458,719	456,231	Illinois	923,191	465,614
Idaho	41,137	15,256	Indiana	581,176	294,916
Illinois	359,625	265,816	Iowa	965,166	630,753
Indiana	370,372	165,264	Kansas	401,188	<b>300,441</b>
Iowa	<b>1,154,985</b>	796,087	Kentucky	115,867	101,826
Kansas	276,163	201,158	Louisiana	57,725	28,130
Kentucky	58,440	49,681	Maryland	30,097	26,865
Louisiana	59,495	36,196	Massachusetts	3,906	3,906
Maryland	44,966	40,815	Michigan	66,579	40,663
Massachusetts	20,830	20,830	Minnesota	742,113	455,242
Michigan	63,111	57,524	Mississippi	60,176	58,824
Minnesota	761,391	544,895	Missouri	359,335	258,577
Mississippi	55,658	44,760	Montana	139,104	76,387
Missouri	299,859	205,005	Nebraska	493,719	337,351
Montana	15,559	15,326	New York	55,256	55,256
Nebraska	268,865	174,314	North Carolina	64,028	53,976
New York	141,070	133,055	North Dakota	447,229	266,509
North Carolina	125,152	110,381	Ohio	193,072	130,025
North Dakota	69,785	56,579	Oklahoma	152,297	97,109
Ohio	144,594	144,217	Oregon	82,853	55,591
Oklahoma	113,456	81,950	Pennsylvania	51,059	51,059
Oregon	118,597	26,758	South Dakota	294,118	187,741
Pennsylvania	123,139	122,613	Tennessee	243,241	111,736
South Dakota	256,153	208,874	Texas	261,030	163,351
Tennessee	212,035	116,438	Utah	50,156	28,457
Texas	230,737	177,780	Virginia	75,620	68,443
Utah	95,528	93,694	Washington	70,275	49,647
			West Virginia	8,766	7,867

Continued

Table 6— Cooperatives' business volume <sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	<b>1,000 dollars</b>			<b>1,000 dollars</b>	
FERTILIZER (continued)			PETROLEUM (continued)		
Wisconsin	345,208	204,306	Wisconsin	<b>544,859</b>	462,117
Wyoming	27,012	5,313	Wyoming	115,456	70,425
Other States	115,513	90,104	Other States	142,604	141,695
Foreign <sup>3</sup>	<u>441,353</u>	<u>57,844</u>	Foreign <sup>3</sup>	<u>159,628</u>	<u>60,098</u>
United States	<b>8,861,348</b>	<b>5,371,001</b>	United States	<b>10,591,991</b>	<b>6,756,086</b>
PETROLEUM			SEED		
Alabama	40,951	4,865	Alabama	32,394	20,878
Arkansas	203,445	96,019	Arkansas	43,703	26,839
California	6,525	6,525	California	22,195	22,195
Colorado	359,301	195,946	Colorado	2,540	2,540
Florida	11,778	9,734	Florida	6,302	5,650
Georgia	81,302	15,802	Georgia	15,592	15,433
Idaho	147,369	85,963	Idaho	16,787	9,497
Illinois	677,455	478,585	Illinois	80,013	49,319
Indiana	517,681	298,128	Indiana	48,825	24,130
Iowa	<b>1,018,391</b>	644,873	Iowa	67,446	45,695
Kansas	<b>1,246,265</b>	393,733	Kansas	11,371	11,371
Kentucky	<b>190,514</b>	115,747	Kentucky	28,322	25,363
Louisiana	23,793	12,729	Louisiana	21,296	10,172
Maryland	73,838	66,808	Maryland	10,584	9,431
Massachusetts	15,964	15,964	Massachusetts	1,339	1,339
Michigan	149,385	72,226	Michigan	10,165	9,951
Minnesota	649,378	553,430	Minnesota	53,603	45,510
Mississippi	20,348	19,171	Mississippi	18,708	18,655
Missouri	598,669	456,450	Missouri	57,319	27,945
Montana	195,483	146,099	Montana	7,189	5,621
Nebraska	652,116	413,551	Nebraska	12,807	10,251
New York	245,760	244,944	New York	23,328	23,328
North Carolina	20,714	17,753	North Carolina	14,668	12,363
North Dakota	357,469	275,332	North Dakota	35,156	32,755
Ohio	143,449	119,272	Ohio	26,245	26,245
Oklahoma	306,110	131,932	Oklahoma	4,200	4,200
Oregon	170,484	121,359	Oregon	11,508	11,470
Pennsylvania	225,325	224,828	Pennsylvania	17,520	17,520
South Dakota	358,376	254,895	South Dakota	17,815	14,932
Tennessee	171,580	73,270	Tennessee	66,640	39,971
Texas	233,786	134,318	Texas	19,079	19,026
Utah	83,524	19,389	Utah	3,072	3,072
Virginia	229,668	144,610	Virginia	25,757	23,260
Washington	180,282	136,616	Washington	24,248	23,252
West Virginia	22,966	20,885	West Virginia	4,032	3,648

Continued

Table 6— Cooperatives' business volume<sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
	<i>1,000 dollars</i>			<i>1,000 dollars</i>	
<b>SEED</b> (Continued)			<b>MISCELLANEOUS SUPPLIES<sup>8</sup></b> (Continued)		
Wisconsin	38,583	28,478	Wisconsin	<b>244,176</b>	228,306
Wyoming	752	733	Wyoming	39,896	37,643
Other States	20,425	19,962	Other States	168,112	139,319
Foreign <sup>3</sup>	<b>3,835</b>	349	Foreign <sup>3</sup>	<b>57,806</b>	12,766
United States	925,384	702,351	United States	<b>4,199,141</b>	<b>3,237,745</b>
<b>MISCELLANEOUS SUPPLIES<sup>8</sup></b>			<b>TOTAL FARM SUPPLIES</b>		
Alabama	177,796	78,006	Alabama	777,030	562,184
Arkansas	133,948	92,393	Arkansas	951,729	517,121
California	125,649	96,002	California	516,431	394,068
Colorado	59,185	45,900	Colorado	664,808	412,221
Florida	102,041	59,157	Florida	388,589	257,128
Georgia	90,330	69,199	Georgia	917,619	821,261
Idaho	47,014	39,178	Idaho	352,337	197,628
Illinois	144,296	86,622	Illinois	<b>2,748,339</b>	<b>1,654,856</b>
Indiana	69,488	53,202	Indiana	<b>1,852,190</b>	<b>1,011,011</b>
Iowa	228,635	165,002	Iowa	<b>4,023,742</b>	<b>2,724,501</b>
Kansas	127,735	93,563	Kansas	<b>2,191,310</b>	<b>1,105,942</b>
Kentucky	73,472	61,590	Kentucky	524,467	403,875
Louisiana	47,297	33,846	Louisiana	270,930	149,507
Maryland	37,771	33,930	Maryland	216,103	194,635
Massachusetts	9,877	9,877	Massachusetts	54,364	54,364
Michigan	107,729	93,698	Michigan	434,975	300,967
Minnesota	269,417	220,755	Minnesota	<b>2,888,053</b>	<b>2,158,991</b>
Mississippi	60,783	60,783	Mississippi	254,737	240,698
Missouri	99,029	59,329	Missouri	<b>1,533,379</b>	<b>1,097,241</b>
Montana	64,558	59,404	Montana	473,643	336,242
Nebraska	115,054	95,068	Nebraska	<b>1,772,992</b>	<b>1,209,755</b>
New York	161,401	139,200	New York	665,772	631,857
North Carolina	48,801	36,697	North Carolina	321,818	262,356
North Dakota	107,468	98,070	North Dakota	1,195,766	869,309
Ohio	105,967	87,222	Ohio	715,115	596,930
Oklahoma	45,369	32,198	Oklahoma	650,201	365,199
Oregon	141,584	136,818	Oregon	574,149	387,174
Pennsylvania	107,723	107,558	Pennsylvania	557,344	556,156
South Dakota	90,354	77,517	South Dakota	<b>1,200,412</b>	889,764
Tennessee	206,677	111,438	Tennessee	<b>1,021,748</b>	516,447
Texas	102,734	82,174	Texas	919,886	638,045
Utah	48,096	41,981	Utah	297,492	193,408
Virginia	172,187	136,895	Virginia	657,499	509,823
Washington	127,128	95,932	Washington	574,617	384,177
West Virginia	32,559	29,509			

Continued

Table 6— Cooperatives' business volume <sup>1</sup> by commodity and State, 1997<sup>2</sup> (continued)

State	Business volume		State	Business volume	
	Gross	Net		Gross	Net
<i>1,000 dollars</i>			<i>1,000 dollars</i>		
TOTAL FARM SUPPLIES (Continued)			TOTAL: (Continued)		
West Virginia	95,213	85,364	Hawaii	130,603	114,572
Wisconsin	<b>1,861,993</b>	<b>1,382,745</b>	Idaho	<b>1,460,338</b>	<b>1,180,679</b>
Wyoming	202,858	123,799	Illinois	<b>7,514,170</b>	<b>6,033,807</b>
Other States	862,152	746,450	Indiana	<b>3,464,785</b>	<b>2,539,867</b>
Foreign <sup>3</sup>	<u>893,937</u>	<u>237,431</u>	Iowa	<b>12,586,592</b>	<b>10,940,936</b>
United States	<b>37,075,740</b>	<b>25,180,628</b>	Kansas	<b>5,294,385</b>	<b>3,969,584</b>
			Kentucky	<b>1,210,076</b>	<b>1,078,217</b>
			Louisiana	992,690	791,516
SERVICES PROVIDED: <sup>1</sup>			Maine	<b>218,117</b>	216,711
Alabama	23,784	23,784	Maryland	463,990	416,798
Arizona	26,320	26,320	Massachusetts	657,492	655,138
Arkansas	<b>89,100</b>	<b>89,100</b>	Michigan	<b>2,499,303</b>	<b>2,229,153</b>
California	529,691	529,691	Minnesota	<b>11,881,299</b>	<b>9,770,774</b>
Hawaii	8,354	8,354	Mississippi	<b>1,203,917</b>	<b>1,174,399</b>
Illinois	207,262	207,262	Missouri	<b>4,490,879</b>	<b>3,718,435</b>
Iowa	266,655	266,655	Montana	1,010,645	742,759
Kansas	<b>115,498</b>	<b>115,498</b>	Nebraska	<b>5,914,790</b>	<b>5,076,693</b>
Louisiana	20,141	20,141	New Jersey	356,512	345,035
Michigan	73,527	73,527	New Mexico	621,939	608,117
Minnesota	260,313	260,313	New York	<b>3,130,745</b>	<b>2,595,476</b>
Mississippi	97,423	97,423	North Carolina	963,015	885,314
Nebraska	136,561	136,561	North Dakota	<b>4,005,248</b>	3,301,186
New Mexico	6,015	6,015	Ohio	<b>3,229,342</b>	<b>2,998,144</b>
New York	152,576	152,576	Oklahoma	<b>1,424,333</b>	<b>1,103,286</b>
North Carolina	25,966	25,966	Oregon	<b>2,457,569</b>	<b>2,051,697</b>
North Dakota	48,603	48,603	Pennsylvania	<b>2,188,827</b>	<b>1,983,374</b>
Ohio	108,826	108,826	South Carolina	387,962	377,563
Oklahoma	35,753	35,753	South Dakota	<b>3,451,889</b>	<b>2,825,833</b>
Pennsylvania	26,177	26,177	Tennessee	<b>1,230,059</b>	721,691
Texas	295,661	295,661	Texas	<b>4,565,032</b>	<b>3,669,096</b>
Washington	162,380	162,380	Utah	806,244	690,794
Wisconsin	80,522	80,522	Vermont	429,234	396,927
Other States	<u>850,227</u>	<u>850,227</u>	Virginia	905,881	742,131
United States	<b>3,647,334</b>	<b>3,647,334</b>	Washington	<b>3,631,163</b>	<b>3,270,645</b>
			West Virginia	176,530	161,980
TOTAL:			Wisconsin	<b>7,526,352</b>	<b>6,549,250</b>
Alabama	<b>1,621,696</b>	1403,279	Wyoming	241,654	162,489
Alaska	124,698	64,651	Other States	173,738	162,559
Arizona	786,643	737,821	Foreign <sup>3</sup>	<u><b>2,500,652</b></u>	<u><b>1,231,643</b></u>
Arkansas	<b>2,464,900</b>	<b>1,982,686</b>	U.S.	<b>126,476,212</b>	<b>106,474,177</b>
California	<b>9,755,905</b>	<b>9,108,671</b>			
Colorado	<b>1,273,093</b>	<b>1,003,727</b>			
Connecticut	266,727	205,367			
Delaware	108,920	98,417			
Florida	<b>2,663,194</b>	<b>2,485,382</b>			
Georgia	<b>2,012,445</b>	<b>1,899,906</b>			

See footnotes next page

- <sup>1</sup> Data covering operations of cooperatives whose business years ended during calendar 1997. Includes independent local cooperatives, federations, centralized regional cooperatives, and cooperatives with mixed organizational structures. The volume of products marketed was 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 was 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.
- <sup>2</sup> Gross business volume includes sales between cooperatives while net business volume excludes sales. States listed had more than two cooperatives handling the commodity or farm supply or where disclosure was not a problem. Totals may not add due to rounding.
- <sup>3</sup> 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.
- <sup>4</sup> Includes eggs, turkeys, ratite, squab, and related products.
- <sup>5</sup> Includes forest products, hay, hops, nursery stock, fish, coffee, seed marketed for growers, and other farm products not separately classified. Also includes manufactured food products and resale items marketed by cooperatives.
- <sup>6</sup> 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.
- <sup>7</sup> Income from services related to marketing and purchasing activities but not included in the volumes reported for these activities.

10 leading States in terms of co-op net business volume, which accounted for 58.4 percent of total net business volume in 1997, compared with 57.8 percent in 1995.

## Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 1997 was \$2.31 billion, including intercooperative dividends and refunds (table 7). Cooperatives operating strictly on a pooling basis were excluded. Net income was up 3 percent from the \$2.25 billion in 1996 and near the 1995 record of \$2.36 billion. Patronage refunds received from other cooperatives reached \$685.2 million, down 3.8 percent from a record of \$711.9 million in 1996.

Marketing cooperatives' net income of \$1,313.3 million was up 11.2 percent from the \$1,181 million generated in 1996. Grains and oilseeds (18.9 percent), milk and milk products (16 percent), fruits and vegetables (8.2 percent), and livestock and poultry (8.3 percent) together accounted for most (90.4 percent) of marketing cooperatives' net income and a majority (51.3 percent) of total net income (figure 11).

Farm supply cooperatives accounted for 36.1 percent of cooperatives' total net income in 1997, compared with 41.9 percent in 1996. Income from their own operations was \$500.2 million, down 18.3 percent from \$612.4 million in 1996. However, refunds from other cooperatives were up 1.6 percent, to \$334.3 million in 1997 from \$329 million in 1996.

Farmer cooperatives' net income from own operations in 1997 totaled \$1,629.2 million, up 6.1 percent from \$1,535.6 million. Nearly 29.6 percent, or \$685.2 million, of total net income was generated by other cooperatives, down 31.7 percent from \$711.9 million in 1996. Marketing cooperatives' net income from other

cooperatives totaled \$317.2 million and accounted for 24.2 percent of their total. Grain cooperatives' net income from other cooperatives totaled \$212.2 million or 48.6 percent of their total.

Income before adjusting for losses was \$2,477.2 million. Losses by an estimated 506 cooperatives totaled \$162.8 million in 1997, down from \$187.8 million in 1996. Number of cooperatives with losses was also lower, 506 versus 530.

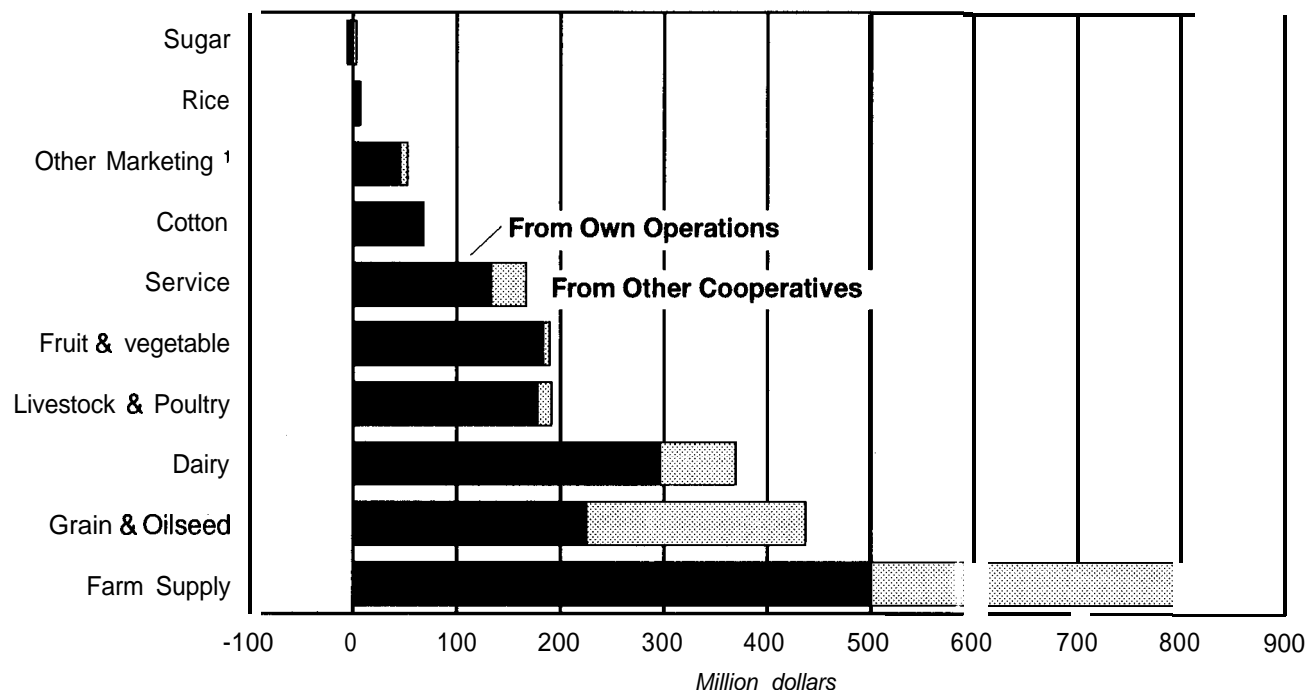
## Balance Sheet

Combined assets for all farmer cooperatives totaled nearly \$44 billion in 1997, up 3.3 percent from \$42.6 billion in 1996 (table 8). Assets of cooperatives, excluding intercooperative investments, were up 2.3 percent to \$40.1 billion, compared with \$39.2 billion in 1996.

Total liabilities were \$25.5 billion, up only 1 percent from \$25.2 billion in 1997. Net worth, or member and patron equity, was \$18.5 billion, up 6.6 percent from \$17.4 billion in 1996. The proportion of total assets financed by member and patron equity increased from 40.8 percent to 42.1 percent.

Net worth, or member and patron equity, for all marketing cooperatives totaled \$11.8 billion, up 6.4 percent from 1996. Marketing cooperatives accounted for 63.5 percent of farmer cooperatives' combined net worth, down slightly from 63.6 percent in 1996. The net worth figure for farm supply cooperatives was 33.5 percent of the total, up from 33.3 percent. For marketing cooperatives, the highest percentage of total assets represented by net worth shown in figure 12 (46.8 percent) was for those primarily marketing "other" products. The lowest, 28.1 percent, was for cooperatives primarily marketing sugar and sugar products.

Figure 1- Net Income or Loss by Cooperative Type, 1997



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

Table 7— Cooperatives' net income, 1997 <sup>1</sup>

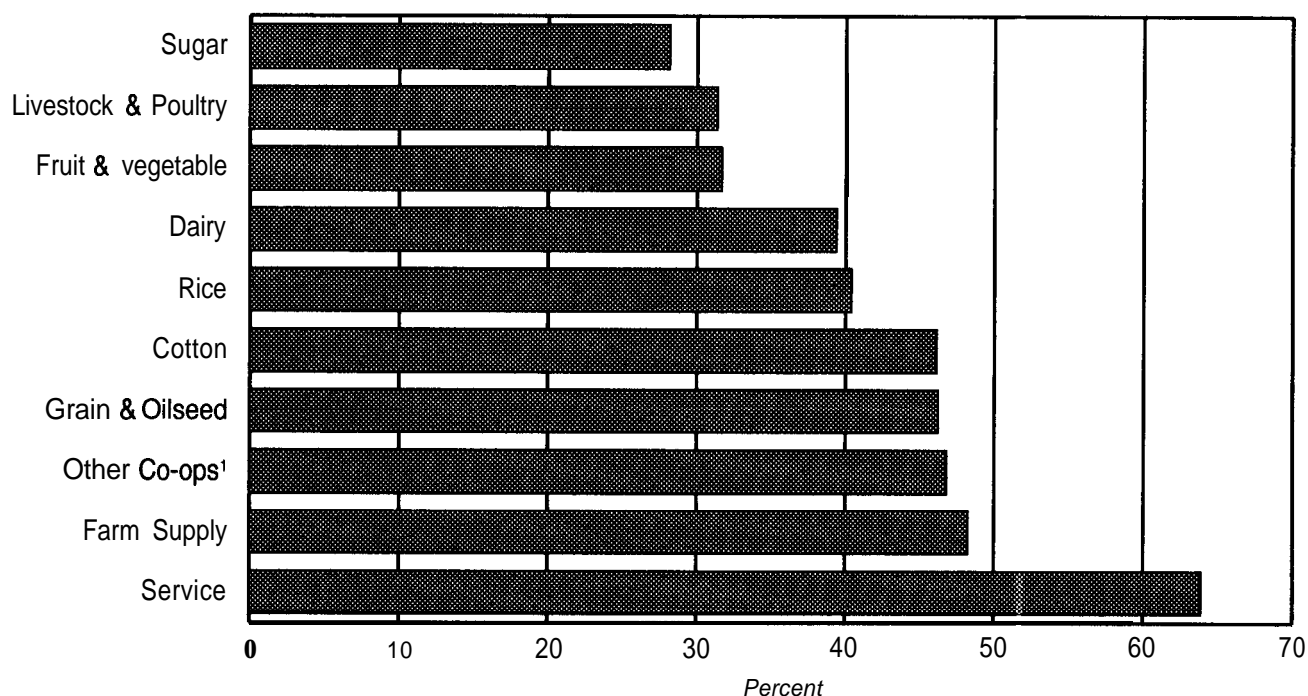
Principal product(s) marketed and major function	co-ops	Total net income	Income from own operations	Income from other co-ops <sup>2</sup>
	<i>Number</i>	<i>Million dollars</i>		
<b>Products marketed:</b>				
Cotton	16	67.7	66.7	1.0
Dairy	236	369.7	296.4	73.2
Fruits & vegetables	259	189.7	183.2	6.4
Grains and oilseeds excluding cottonseed	1,014	437.0	224.8	212.2
Livestock and poultry	108	191.4	177.8	13.6
Rice	18	7.3	7.3	—
Sugar	51	-2.0	-5.4	3.4
Other products <sup>3</sup>	239	52.5	45.2	7.3
<b>Total marketing</b>	<b>1,941</b>	<b>1,313.3</b>	<b>996.1</b>	<b>317.2</b>
<b>Total farm supply</b>	<b>1,386</b>	<b>834.6</b>	<b>500.2</b>	<b>334.3</b>
<b>Total related-service</b>	<b>464</b>	<b>166.5</b>	<b>132.9</b>	<b>33.7</b>
<b>Combined total</b>	<b>3,791</b>	<b>2,314.4</b>	<b>1,629.2</b>	<b>685.2</b>

<sup>1</sup> Number of cooperatives includes those operating on a pooling rather than a net margin basis. Totals may not add due to rounding.

<sup>2</sup> Excludes patronage refunds from CoBank and Bank for Cooperatives.

<sup>3</sup> Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Figure 12— Percentage of Cooperatives' Assets Financed by Net Worth, by Cooperative Type, 1997



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

Table 8— Combined balance sheet data for farmer cooperatives, 1997 <sup>1</sup>

Principal product(s) marketed and major function	Co-ops	Total assets	Total liabilities	Net worth
	<i>Number</i>	<i>Million dollars</i>		
<b>Products marketed:</b>				
Cotton	16	831.5	448.0	383.5
Dairy	236	<b>6,244.9</b>	<b>3,784.4</b>	<b>2,460.5</b>
Fruits & vegetables	259	<b>5,183.5</b>	<b>3,542.3</b>	<b>1,641.2</b>
<b>Grains and oilseeds</b>				
excluding cottonseed	1,014	<b>7,994.8</b>	<b>4,299.2</b>	<b>3,695.6</b>
Livestock and poultry	108	<b>4,390.3</b>	<b>3,013.4</b>	<b>1,376.9</b>
Rice	18	603.6	359.7	243.9
Sugar	51	<b>2,005.3</b>	1,441.0	564.3
Other products*	239	<b>3,003.2</b>	<b>1,597.3</b>	<b>1,405.9</b>
Total marketing	1,941	<b>30,257.1</b>	<b>18,485.3</b>	<b>11,771.8</b>
Total farm supply	1,386	<b>12,867.3</b>	<b>6,658.8</b>	<b>6,208.5</b>
Total related-service	464	<b>871.7</b>	<b>314.9</b>	<b>556.8</b>
Combined total	3,791	<b>43,996.1</b>	25,459.0	<b>18,537.1</b>

<sup>1</sup> Totals may not add due to rounding.

<sup>2</sup> Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.



Marketing and farm supply cooperatives had 38.9 percent and 48.3 percent, respectively, of their assets financed by net worth.

Of the \$44 billion in total assets, marketing cooperatives accounted for \$30.3 billion, up 1.2 percent from 1996. Cooperatives primarily handling grains and oilseeds (excluding cottonseed) had total assets of \$9.4 billion in 1996 and \$8 billion in 1997, down 15.4 percent. Among the marketing cooperatives, those with primarily grain also maintained the largest proportion of their assets as investments in other cooperatives in both 1997 (13 percent) and 1996 (11.4 percent). Dairy cooperatives had 8.8 percent of their assets invested in other cooperatives (table 9).

Assets of marketing cooperatives, excluding investments in other cooperatives, were \$28.3 billion, up 0.7 percent from 1996.

Farm supply cooperatives had total assets of \$12.9 billion, compared with \$11.8 billion in 1996, up 8.6 percent. Excluding intercooperative investments, assets were up 6.7 percent from 1996 to \$11 billion in 1997

### Selected Financial Ratios

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

Financial ratios can indicate problem areas. While they cannot be used to solve problems, they can serve as guidelines 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. Ratio interpretation is largely subjective.

Five financial ratios were selected to give some indication of cooperative performance or financial condition—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 gives a clue to a cooperative's ability to meet long-term financial obligations. The total sales-to-asset ratio (asset turnover ratio) indicates how efficiently a cooperative is using its assets. The current ratio (current assets divided by current liabilities) probably best measures a cooperative's ability to meet short-run obligations.

Table 10 lists the values of these ratios for the cooperatives reporting to RBS. Extreme values (highs and lows) were excluded so that the ratios would be more representative of the cooperatives reporting. Ratios are also shown by selected asset category for the predominant types (dairy, fruit and vegetable, grain, and farm supply). These ratios offer cooperative leaders a general barometer to use in comparing their oper-

Table 9— Combined assets of farmer cooperatives, 1997<sup>1</sup>

Principal product(s) marketed and major function	co-ops	Assets of own operations	investments in other co-ops	Total assets	Investments in other co-ops as percent of total
	<i>Number</i>	<i>----- Million dollars -----</i>			<i>Percent</i>
<b>Products marketed:</b>					
Cotton	16	<b>828.4</b>	<b>3.1</b>	<b>831.5</b>	<b>0.4</b>
Dairy	236	<b>5,696.3</b>	<b>548.6</b>	<b>6,244.9</b>	<b>8.8</b>
Fruits & vegetables	259	<b>5,105.0</b>	<b>78.5</b>	<b>5,183.5</b>	<b>1.5</b>
Grains and oilseeds excluding cottonseed	1,014	<b>6,954.9</b>	<b>1,039.9</b>	<b>7,994.8</b>	13.0
Livestock and poultry	108	<b>4,133.6</b>	256.7	<b>4,390.3</b>	<b>5.8</b>
Rice	18	603.6	( <sup>2</sup> )	603.6	( <sup>2</sup> )
Sugar	51	<b>1,992.8</b>	12.5	<b>2,005.3</b>	<b>.6</b>
Other products <sup>3</sup>	239	<b>2,981.6</b>	21.6	<b>3,003.2</b>	<b>.7</b>
Total farm products	1,941	<b>28,296.1</b>	1,961.0	<b>30,257.1</b>	6.5
Total farm supplies	1,386	<b>11,033.0</b>	<b>1,834.2</b>	<b>12,867.3</b>	<b>14.3</b>
Total selected services	<b>464</b>	<b>780.6</b>	<b>91.0</b>	<b>871.7</b>	10.4
Combined total	3,791	<b>40,109.8</b>	<b>3,886.3</b>	<b>43,996.1</b>	8.8

<sup>1</sup> Totals may not add due to rounding.

<sup>2</sup> Less than \$5,000 or .05 percent.

<sup>3</sup> Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

Table 10- Selected financial ratios of cooperatives, 1997 <sup>1</sup>

Type of co-op and asset group (mil. dol.)	Return on assets <sup>2</sup>	Net worth to assets <sup>3</sup>	Return on sales <sup>4</sup>	Sales to assets <sup>4</sup>	Current ratio <sup>5</sup>
	----- Percent -----			----- Number -----	
<b>Dry</b> beans and peas	<b>3.6</b>	<b>36.9</b>	<b>1.5</b>	<b>2.4</b>	<b>1.3</b>
Cotton	<b>8.3</b>	<b>46.7</b>	<b>2.2</b>	<b>3.7</b>	<b>1.6</b>
Dairy	<b>7.4</b>	<b>40.2</b>	<b>1.6</b>	<b>4.7</b>	<b>1.3</b>
<b>\$0.5<sup>6</sup></b>			<sup>(7)</sup>	<b>32.0</b>	<b>1.6</b>
\$0.5 - <b>\$99</b>	<b>5.9</b>	<b>74.3</b>	<b>1.1</b>	<b>5.2</b>	<b>3.1</b>
\$1.0 - \$2.49	<b>6.7</b>	<b>47.1</b>	<b>1.0</b>	<b>7.0</b>	<b>1.4</b>
\$2.5 - \$24.99	<b>11.0</b>	<b>49.0</b>	<b>1.2</b>	<b>9.1</b>	<b>1.3</b>
\$25.0 - \$99.99	<b>6.7</b>	<b>41.4</b>	<b>1.4</b>	<b>4.7</b>	<b>1.3</b>
\$100.0 and more	<b>7.1</b>	<b>40.0</b>	<b>1.8</b>	<b>3.8</b>	<b>1.3</b>
Fruit and vegetable	<b>3.6</b>	<b>31.6</b>	<b>1.9</b>	<b>1.9</b>	<b>1.4</b>
Less than \$0.5	<b>-.9</b>	<b>51.2</b>	<b>-.1</b>	<b>6.9</b>	<b>1.4</b>
\$0.5 - <b>\$99</b>	<b>1.6</b>	<b>42.0</b>	<b>.5</b>	<b>3.0</b>	<b>1.4</b>
\$1.0 - \$2.49	<b>2.5</b>	<b>55.7</b>	<b>.5</b>	<b>4.9</b>	<b>1.8</b>
\$2.5 - \$24.99	<b>10.2</b>	<b>39.5</b>	<b>3.2</b>	<b>3.2</b>	<b>1.1</b>
\$25.0 - \$99.99	<b>3.4</b>	<b>33.6</b>	<b>1.9</b>	<b>1.8</b>	<b>1.2</b>
\$100.0 - \$499.99	<b>2.9</b>	<b>32.6</b>	<b>1.4</b>	<b>2.1</b>	<b>1.3</b>
\$500.0 and more	<b>3.3</b>	<b>28.8</b>	<b>2.2</b>	<b>1.5</b>	<b>1.6</b>
Grain and <b>oilseed<sup>8</sup></b>	<b>5.6</b>	<b>46.1</b>	<b>1.4</b>	<b>3.9</b>	<b>1.3</b>
Less than <b>\$0.5</b>	<b>-14.9</b>	<b>48.3</b>	<b>-3.7</b>	<b>4.0</b>	<b>2.0</b>
<b>\$0.5 - \$99</b>	<b>-1.2</b>	<b>75.2</b>	<b>-.3</b>	<b>4.3</b>	<b>2.7</b>
<b>\$1.0 - \$2.49</b>	<b>4.1</b>	<b>63.5</b>	<b>1.0</b>	<b>4.2</b>	<b>1.8</b>
<b>\$2.5 - \$24.99</b>	<b>5.7</b>	<b>51.4</b>	<b>1.7</b>	<b>3.4</b>	<b>1.3</b>
<b>\$25.0 - \$99.99</b>	<b>5.1</b>	<b>37.5</b>	<b>1.8</b>	<b>2.9</b>	<b>1.2</b>
<b>\$100.0 and more</b>	<b>6.0</b>	<b>38.1</b>	<b>0.9</b>	<b>6.5</b>	<b>1.2</b>
Livestock	<b>5.4</b>	<b>29.7</b>	<b>1.3</b>	<b>4.1</b>	<b>1.2</b>
Nut	<b>2.2</b>	<b>42.7</b>	<b>1.0</b>	<b>2.2</b>	<b>2.0</b>
Poultry	<b>1.7</b>	<b>31.6</b>	<b>.6</b>	<b>2.9</b>	<b>1.5</b>
Rice	<b>1.3</b>	<b>41.3</b>	<b>.6</b>	<b>2.3</b>	<b>1.3</b>
Sugar	<b>-.2</b>	<b>28.0</b>	<b>-.2</b>	<b>.9</b>	<b>1.1</b>
Tobacco	<b>10.6</b>	<b>85.8</b>	<b>.8</b>	<b>13.4</b>	<b>5.8</b>
Misc. marketing	<b>.6</b>	<b>40.6</b>	<b>.2</b>	<b>2.2</b>	<b>.7</b>
Fishery	<b>-15.5</b>	<b>34.2</b>	<b>-5.1</b>	<b>3.0</b>	<b>1.1</b>
Farm supply	<b>6.4</b>	<b>46.6</b>	<b>3.3</b>	<b>2.0</b>	<b>1.5</b>
Less than \$0.5	<b>2.0</b>	<b>73.3</b>	<b>.5</b>	<b>3.8</b>	<b>2.8</b>
\$0.5 - <b>\$99</b>	<b>4.3</b>	<b>68.8</b>	<b>1.8</b>	<b>2.4</b>	<b>2.0</b>
\$1.0 - \$2.49	<b>5.9</b>	<b>68.5</b>	<b>2.7</b>	<b>2.2</b>	<b>2.0</b>
\$2.5 - \$24.99	<b>7.3</b>	<b>58.1</b>	<b>3.2</b>	<b>2.3</b>	<b>1.5</b>
\$25.0 - \$99.99	<b>5.0</b>	<b>41.4</b>	<b>2.3</b>	<b>2.2</b>	<b>1.4</b>
\$100.0 - \$499.99	<b>3.8</b>	<b>41.5</b>	<b>1.6</b>	<b>2.4</b>	<b>1.3</b>
\$500.0 and more	<b>7.2</b>	<b>40.2</b>	<b>4.7</b>	<b>1.5</b>	<b>1.4</b>
Service	<b>8.8</b>	<b>68.6</b>	<b>7.4</b>	<b>1.2</b>	<b>2.2</b>
<b>Cotton gins</b>	<b>27.8</b>	<b>63.0</b>	<b>19.2</b>	<b>1.4</b>	<b>1.5</b>

<sup>1</sup> Based on cooperatives reporting. Excludes strictly pooling cooperatives. Ratios were calculated by summing the individual items and dividing. The same cooperatives were included in each group to calculate all five ratios. Outliers (extreme values) not representative of the group were excluded.

<sup>2</sup> Includes net income before any income taxes are deducted. Calculated by dividing net income by total assets. Usually referred to as the return on assets.

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

<sup>4</sup> Total sales includes service receipts, other income, and patronage refunds received from other cooperatives and CoBank and Banks for Cooperatives. The return on sales was found by dividing net income by total sales.

<sup>5</sup> The current ratio was derived by dividing current assets by current liabilities. These data were taken from annual reports where provided.

<sup>6</sup> Includes bargaining cooperatives.

<sup>7</sup> Less than .05 percent.

<sup>8</sup> Excludes cottonseed.

ations with others of the same type (and/or size).

The return on assets (net income/assets) varied considerably. It was negative for fishery and small grain cooperatives with losses. The ratio was highest for cotton ginning cooperatives. By size group, the largest return on assets was shown by cooperatives with assets in the range of \$2.5 million to \$24.9 million. This was true for dairy, fruit and vegetable, and farm supply cooperatives.

The net worth-to-assets ratio ranged from a low of 28 percent for sugar cooperatives to a high of 85.8 percent for tobacco cooperatives. Generally, as cooperatives become larger and/or do more processing, a declining percentage of their assets is financed by members, resulting in a lower net worth-to-assets ratio.

The return on sales (net income/total sales) ranged from a negative 5.1 percent for fishery cooperatives to a high of 19.2 percent for cotton ginning cooperatives. The return on sales is generally below 2 percent (table 10).

The sales-to-assets ratio ranged from a high of 32 for the small dairy cooperatives to a low of 0.9 for sugar cooperatives. Among dairy, fruit and vegetable, and grain cooperatives, the ratio tended to decrease as size of 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 the cooperative. Most of these cooperatives are less involved in manufacturing or processing than 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 a low of 0.7 for miscellaneous marketing cooperatives to 5.8 for the tobacco cooperatives. Tobacco cooperatives' current assets are generally high because of tobacco inventories. Current ratios tended to be higher for the medium- and smaller-sized cooperatives than for the larger ones.

### III-Cooperative Trends, 1988-97

Although the number of cooperatives has decreased during the past decade, their business volume has increased. Cooperatives continue to adjust to the changing economic environment through dissolu-

tion, merger, consolidation, acquisition, and the sale of assets. In some cases, farmers have organized new generation cooperatives to become involved in value-added activities. In 1988, the net business volume of 4,937 cooperatives totaled \$66.4 billion. A decade later, net business volume generated by 3,791 cooperatives was \$106.5 billion.

### Number of Cooperatives

The total number of marketing, farm supply, and related-service cooperatives declined from 4,937 in 1988 to 3,791 in 1997 (table 11 and figure 13).

Marketing cooperatives declined from 2,988 to 1,941 and farm supply cooperatives from 1,836 to 1,386. Number of service cooperatives, however, increased from 113 to 464, due primarily to reclassifying cotton ginning cooperatives, livestock shipping associations, and rice driers from marketing to service.

From 1988 through 1997, 1,804 cooperatives, or about 180 per year, were removed from RBS' list of farmer cooperatives. Of those, 40.2 percent were dissolved, 30.1 percent resulted from merger or consolidation, 16.1 percent were acquired by other cooperatives or investor-owned firms, and the remaining 13.6 percent were removed for other reasons (figure 14).

Even while some cooperatives are disappearing from RBS' list, new ones or ones not previously on the list are added. From 1988 through 1997, 486 cooperatives, or an average of nearly 49 per year, were added to the list.

### Grain and Farm Supply Branches

USDA began reporting number of branch locations operated by grain and farm supply cooperatives

Table 11— Number of farmer cooperatives, 1988-97

Period <sup>1</sup>	Marketing	Farm supply	Service	Total
	Number			
<b>1988</b>	<b>2,988</b>	1,836	113	4,937
<b>1989</b>	2,550	1,803	446	4,799
<b>1990</b>	2,519	1,717	427	4,663
<b>1991</b>	2,384	1,689	421	4,494
<b>1992</b>	2,218	1,618	479	4,315
<b>1993</b>	2,214	1,547	483	4,244
<b>1994</b>	2,173	1,496	505	4,174
<b>1995</b>	2,074	1,458	474	4,006
<b>1996</b>	2,012	1,403	469	3,884
<b>1997</b>	1,941	1,386	464	3,791

<sup>1</sup> For years before 1988, see Cooperative Historical *Statistics, CIR* 1, Section 26, USDA, Revised April 1998. Cotton ginning cooperatives, livestock shipping associations, and rice drying cooperatives were reclassified from marketing to service in 1989, 1992, and 1993, respectively.

Figure 13— Farmer Cooperatives in the United States, 1988-97

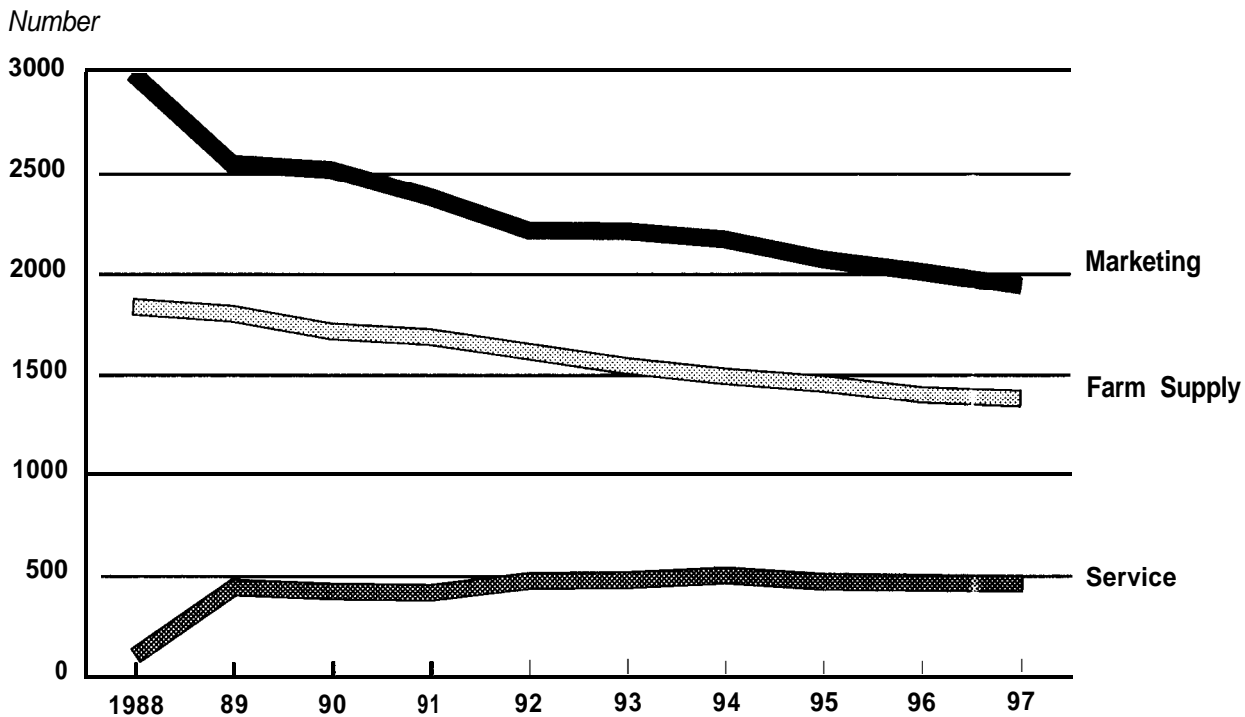
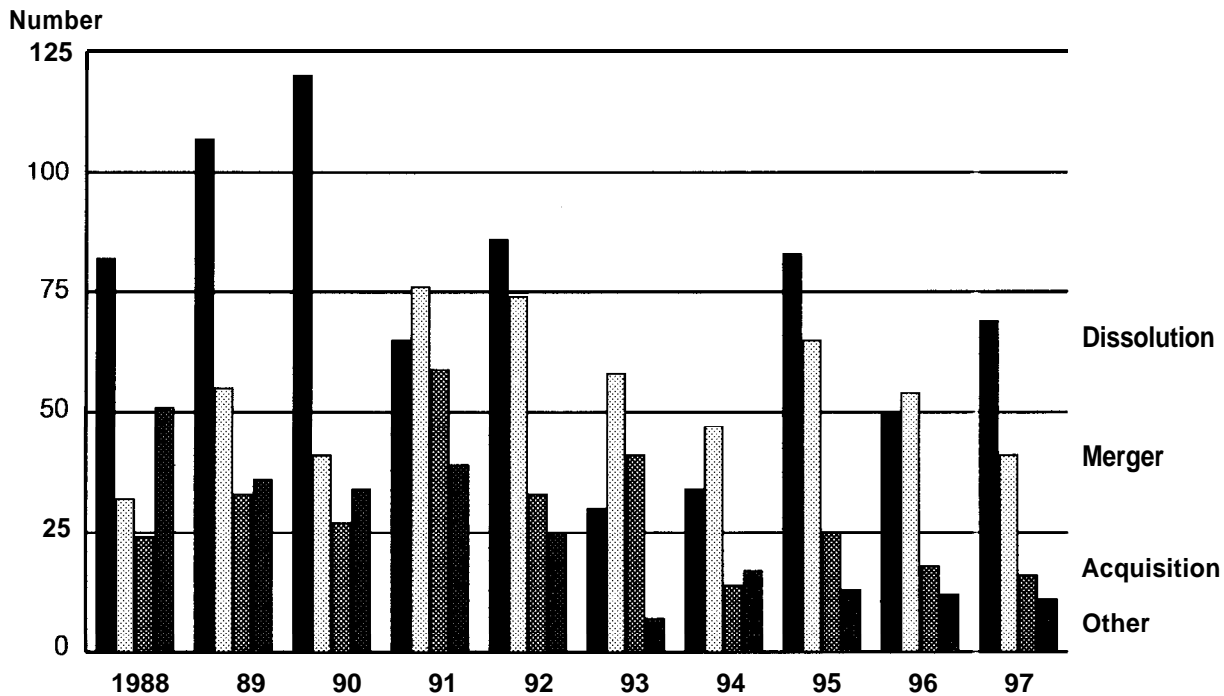


Figure 14— Cooperatives Removed from RBS' List, 1988-97



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

in 1992. That year, 2,861 grain and farm supply cooperatives had an estimated 4,644 branches, 1,618 owned by grain cooperatives and 2,777 by farm supply cooperatives. In 1997, number of grain and farm supply cooperatives had dropped to 2,400, but number of branches had increased to 5,433.

The trends in number of grain and farm supply cooperatives and branches during this six-year period is shown in table 12 and figure 15. Average number of branches per cooperative was 1.6 in 1992 compared with 2.3 in 1997. Table 12 shows the larger cooperatives accounted for the most branches, particularly among the farm supply cooperatives. For cooperatives with assets of \$25 million or more in 1997, 23 farm supply cooperatives had an estimated 1,576 branches and 47 grain cooperatives had 706 branches.

## Memberships

Memberships in farmer cooperatives, 4.2 million in 1988, dropped to 3.2 million in 1997 (table 13 and figure 16). The long-term decline, in part, reflects the decreasing number of farms and farmers in the United

Table 13— Memberships in marketing, farm supply, and service cooperatives, 1988-97

Period <sup>1</sup>	Marketing	Farm supply	Service	Total
	1,000			
1988	1,912	2,142	141	4,196
1989	1,856	2,035	243	4,134
1990	1,882	2,006	232	4,119
1991	1,842	2,025	191	4,059
1992	1,839	2,020	212	4,072
1993	1,830	1,977	216	4,023
1994	1,805	1,936	245	3,986
1995	1,712	1,846	210	3,767
1996	1,682	1,795	187	3,664
1997	1,498	1,558	183	3,239

<sup>1</sup> For years before 1988, see *Cooperative Historical Statistics*, CIR 1, Section 28, USDA, Revised April 1998. Cotton ginning cooperatives, livestock shipping associations, and rice driers were reclassified from marketing to service in 1989, 1992 and 1993, respectively.

Table 12— Estimated number of branches operated by grain and farm supply cooperatives, 1992-97

Year	Asset Group (million dollars)				Total
	Less than 5	5 - 9.9	10 - 24.9	25 or more	
	<i>Number of Grain Cooperatives</i>				
1992	902	211	114	16	1,243
1993	808	233	131	21	1,193
1994	772	226	138	24	1,159
1995	658	223	174	35	1,090
1996	618	229	176	43	1,066
1997	616	196	155	47	1,014
	<i>Number of Branches</i>				
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	2,326
1997	364	463	717	706	2,250
	<i>Number of Farm Supply Cooperatives</i>				
1992	1,381	176	45	16	1,618
1993	1,286	183	64	14	1,547
1994	1,203	199	76	19	1,496
1995	1,134	211	97	16	1,458
1996	1,064	213	109	17	1,403
1997	1,022	232	109	23	1,386
	<i>Number of Branches</i>				
1992	724	482	208	1,363	2,777
1993	642	455	297	1,320	2,714
1994	610	468	344	1,335	2,787
1995	571	502	460	1,396	2,929
1996	542	523	526	1,438	3,029
1997	481	579	576	1,576	3,183

Figure 15— Grain and Farm Supply Cooperatives and Branches, 1992-97

Thousand

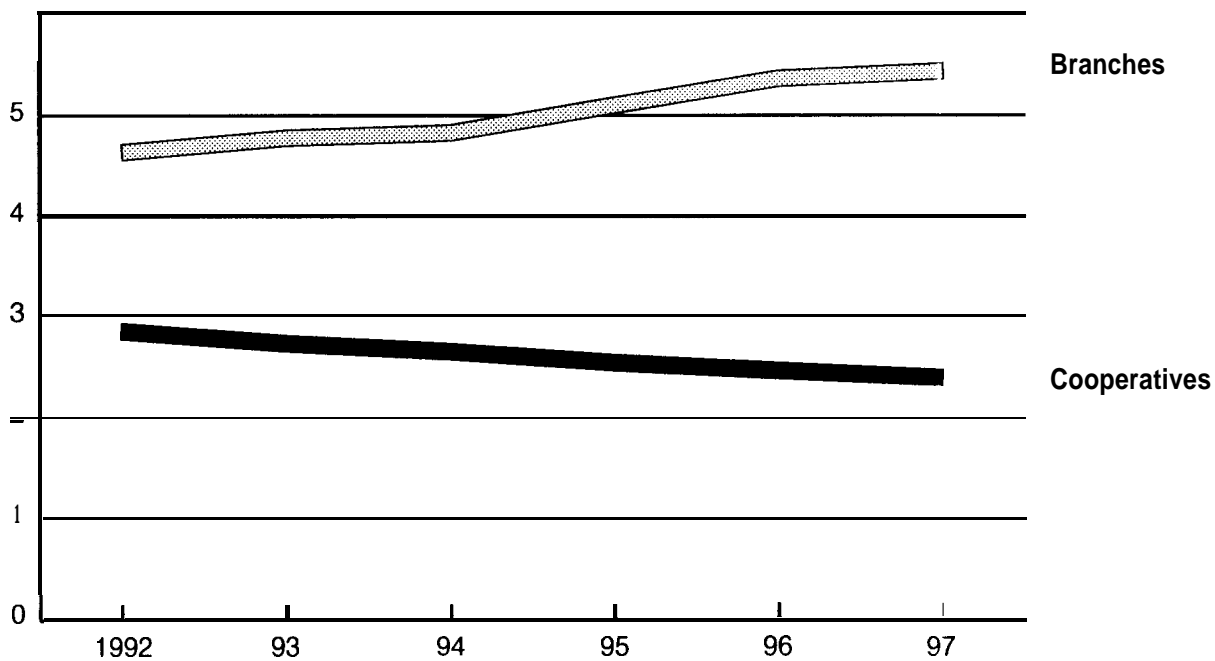
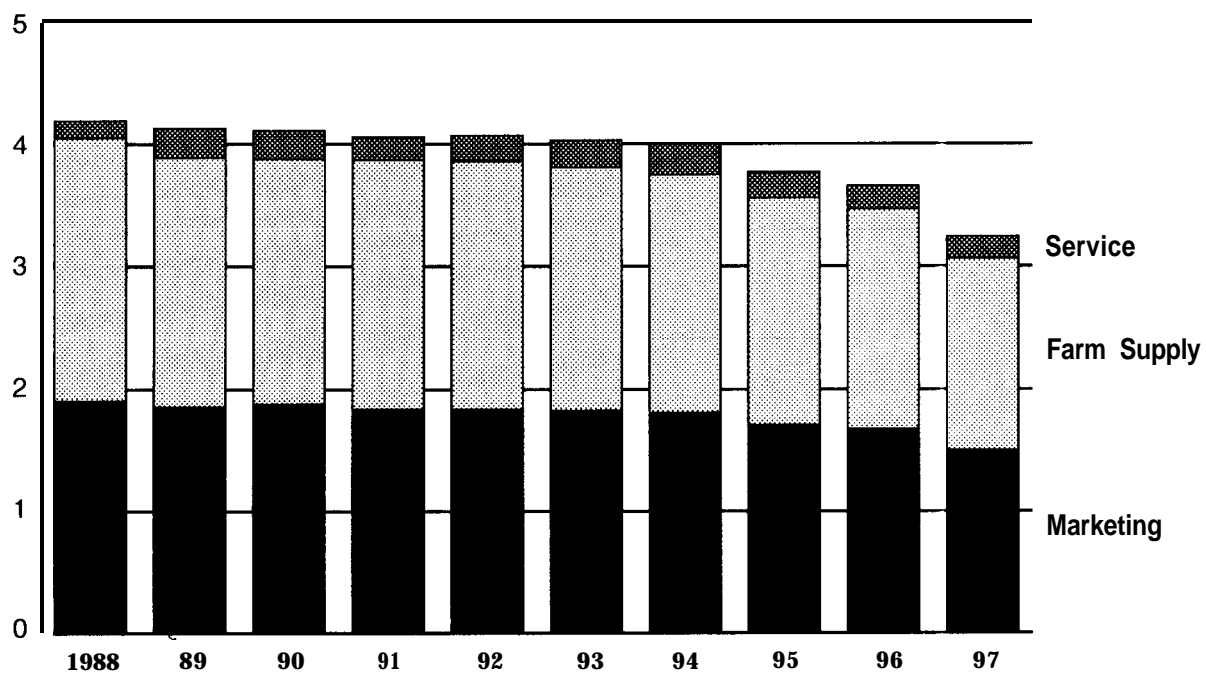


Figure 16— Cooperatives Memberships by Function, 1988-97

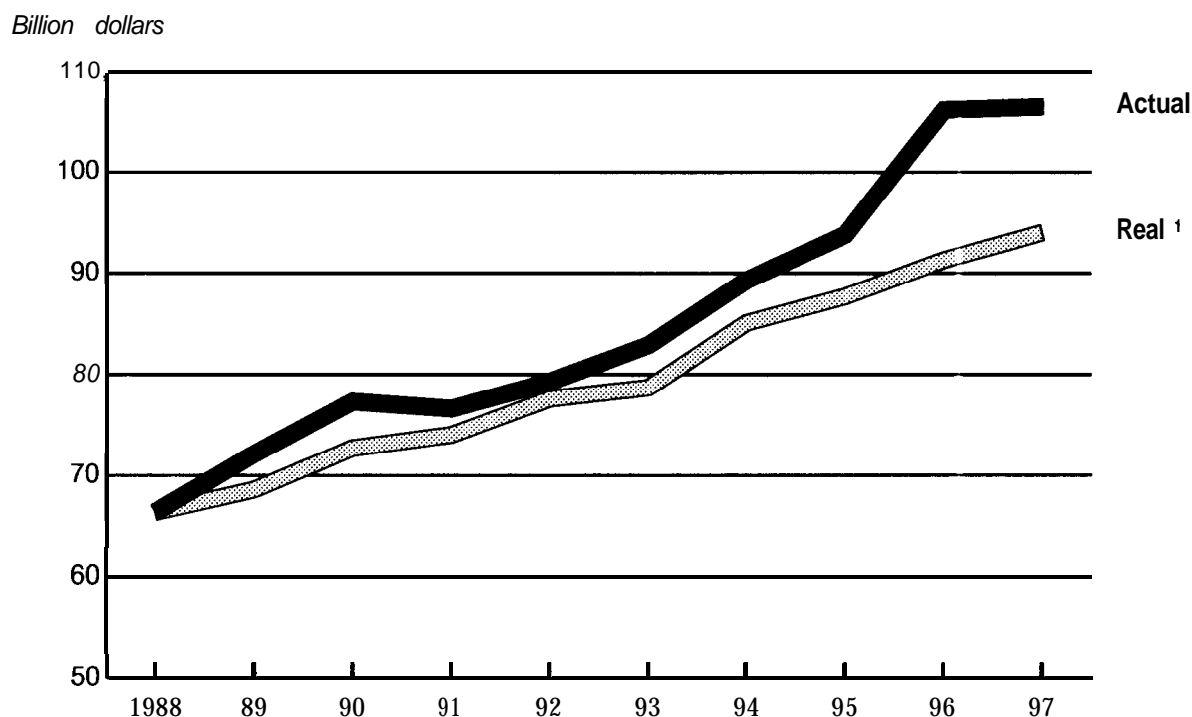
Million



States. Many farmers are members of more than one cooperative and each membership is counted. Consequently, number of memberships exceeds the number of farmers. Total membership duplication cannot be eliminated with current reporting methods.

Member classification depends on the type of cooperative used and may not be related to the member's product(s) marketed or supplies purchased. For example, a member may use a cooperative to market only one of the farm products handled by the coopera-

Figure 17— Cooperatives' Net Business Volume, 1988-97



<sup>1</sup> Actual sales were adjusted for price change based on 1988 = 100.

Table 14— Cooperatives' use of full-time employees, 1994-97

Commodity	Full-time Employees			
	1994	1995	1996	1997
	<i>Number</i>			
Cotton	2,105	2,136	1,787	1,995
Dairy	31,261	29,828	27,621	28,323
Fruits & vegetables	21,201	24,944	26,456	22,847
Grains & oilseeds	24,759	24,811	25,981	23,538
Livestock, & poultry	26,408	28,635	28,453	26,399
Rice	2,796	2,785	2,636	2,713
Sugar	3,264	3,422	3,482	3,473
Other products	<u>5,795</u>	<u>7,590</u>	<u>7,109</u>	<u>9,191</u>
Marketing	117,589	124,151	123,525	118,479
Farm supply	50,524	45,302	45,566	47,870
<b>Service</b>	<u>6,906</u>	<u>5,946</u>	<u>5,704</u>	<u>5,850</u>
Total	175,019	175,399	174,795	172,199

tive, or a member may use a cooperative classified in the marketing group to purchase one or more production items. A member's business with the cooperative, therefore, may not be in the group that represents the cooperative's major business volume (the criterion for classifying cooperatives in this report). The membership, however, will be included arbitrarily in that classification.

## Employees

Farmer cooperatives had an estimated 172,199 full-time employees in 1997, the smallest number in the past four years. The largest number, 175,399, was reported in 1995 (table 14). It appears that the number of full-time employees may be declining for marketing cooperatives and increasing for farm supply cooperatives.

From 1994 to 1997, marketing cooperative employees totaled 124,151 in 1995 but decreased to 118,479 in 1997. Overall, total number of full-time employees decreased 2,820 from 1994 to 1997. The major change during this period was the significant increase in number of full-time employees by the miscellaneous marketing cooperatives, from 5,795 in 1994 to 9,191 in 1997.

## Business Volume

Net cooperative business, unadjusted for price change, increased from \$66.4 billion in 1988 to \$106.5 billion in 1997 (table 15). Adjusted for price change, net cooperative business totaled \$94 billion in 1997 (figure 17). Consequently, the difference between actual and real net business volume in 1997 was \$12.5 billion.

Four major commodity groups—dairy; grains and oilseeds, excluding cottonseed; fruits and vegetables; and livestock—increased slightly from 82.3 percent of all marketing sales in 1988 to 83.4 percent in 1997. In 1988, dairy net volume was the largest commodity group (\$17.8 billion), followed by grains and oilseeds (\$12.6 billion). But in 1997, grains and oilseeds was the leading commodity group, with \$24.6 billion in net business volume, with the dairy group second with \$23.4 billion.

Trends in cooperatives' sales of these major commodity groups for 1988-97 are shown in figure 18. Grains and oilseeds sales show the strongest upward trend during this period.

In the farm supply group, petroleum, feed, and fertilizer were especially important. They accounted for 72.6 percent of cooperatives' total farm supply sales in 1988 and 71.9 percent in 1997. The slight drop reflected increased sales of crop protectants. In 1988, they accounted for 8.7 percent of farm supply sales versus 12.4 percent in 1997.

During 1988-97, cooperative sales of petroleum, feed, fertilizer, and crop protectants trended upward, while seed sales remained fairly stable (figure 19).

Net marketing of farm products totaled \$49.1 billion in 1988 and increased every year except in 1991

Table 15— Cooperatives' net business volume, 1988 and 1997<sup>1</sup>

Function	Net Volume	
	1988	1997
	<i>Million dollars</i>	
<b>Products marketed:</b>		
Products marketed:		
Beans and peas (dry edible)	142.1	189.0
Cotton	1,876.4	3,003.9
Dairy	17,792.7	23,374.1
Fruits and vegetables	6,604.0	9,268.2
Grains and oilseeds <sup>2</sup>	12,628.5	24,639.2
Livestock	3,338.5	7,460.3
Nuts	793.9	880.3
Poultry	1,027.8	2,118.0
Rice	787.5	930.2
Sugar	1,871.5	2,087.3
Tobacco	747.7	592.9
Wool and mohair	24.9	11.3
Other products	1,431.3	<sup>3</sup> 3,091.7
Total farm products	49,066.9	77,646.2
<b>Supplies purchased:</b>		
Crop protectants	1,339.2	3,125.5
Feed	3,807.0	5,988.0
Fertilizer	2,976.8	5,371.0
Petroleum	4,416.1	6,756.1
Seed	540.0	702.4
Other supplies	2,345.3	3,237.7
Total farm supplies	15,424.4	25,180.6
<b>Services provided:</b>		
Trucking, cotton ginning, storage, grinding, locker plants, misc	1,939.1	3,647.3
<b>Total business</b>	<b>66,430.4</b>	<b>106,474.2</b>

<sup>4</sup> Marketing sales was deflated by the index of producer prices received for "all farm products" (1996 = 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 (1996 = 100).

<sup>1</sup> Excludes intercooperative business volume. Totals may not add due to rounding.

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

<sup>3</sup> Includes value of processed oilseeds.



Figure 18— Cooperatives' Net Sales of Selected Commodities, 1988-97

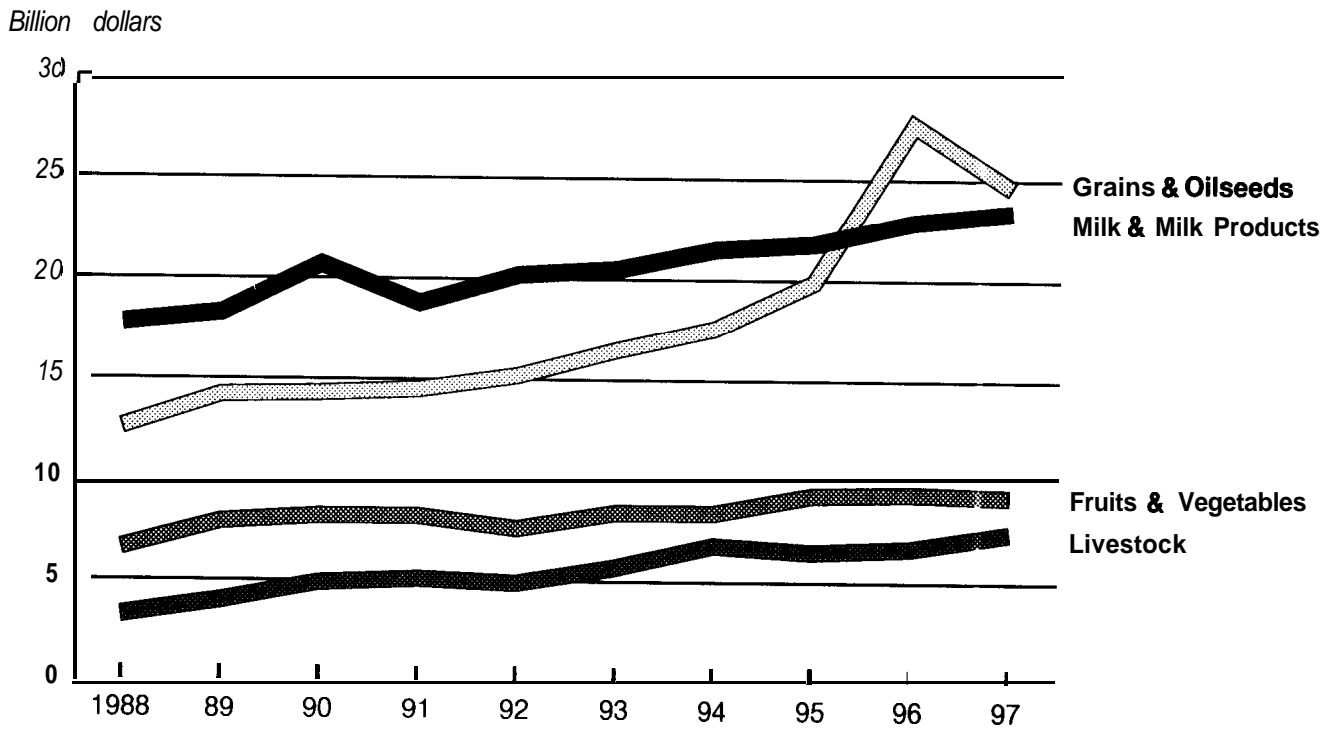
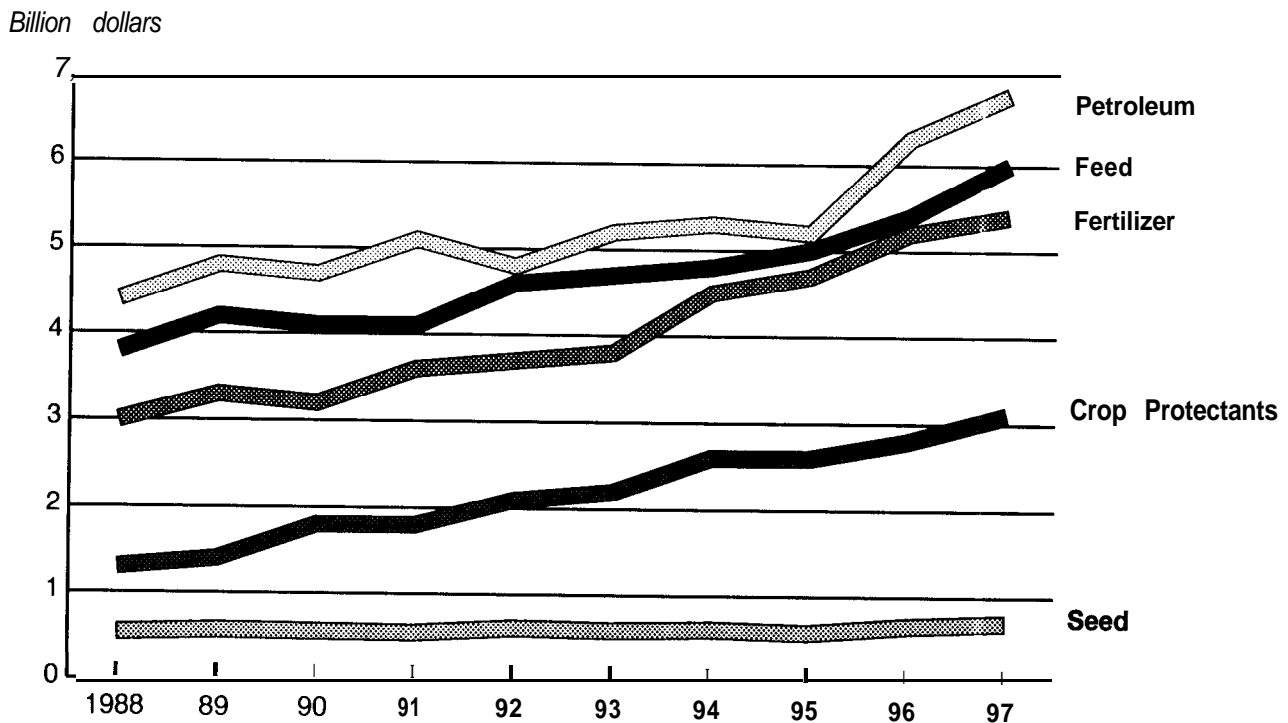


Figure 19— Cooperatives' Net Sales of Selected Farm Supplies, 1988-97



and 1997. In 1997, net business volume of farm products marketed decreased from the 1996 record of \$79.4 billion (table 16). Aggregate farm supply sales increased every year, from \$15.4 billion in 1988 to \$25.2 billion in 1997. Service receipts increased from \$1.9 billion in 1988 to \$3.6 billion in 1997. Beginning in 1990, service receipts were expanded to include other income and revenue.

Gross business volume was \$82.1 billion in 1988 and reached a record \$128.1 billion in 1996 before dropping to \$126.5 billion in 1997. The biggest year-to-year increase in business volume (\$15.9 billion) was in 1996 due mainly to higher prices for grains and oilseeds.

### Net Income

Since the 1998 level of \$1.68 billion, net income has been fluctuating and finally set a record at \$2.36 billion in 1995. After a decline in 1996, net income rose again, to \$2.31 billion in 1997 (table 17 and figure 20).

Net income from own operations and other cooperatives varied, but reflected better economic times in

Table 17— Net income of farmer co-ops, 1988-1997 <sup>1</sup>

Year	From own operations	From other cooperatives <sup>2</sup>	Total
Million dollars			
1988	<b>1,532</b>	148	1,680
1989	<b>1,543</b>	<b>308</b>	<b>1,851</b>
1990	1,110	<b>330</b>	1,440
1991	<b>1,189</b>	<b>381</b>	1,570
1992	1,084	356	1,440
1993	1,041	<b>318</b>	<b>1,358</b>
1994	1,628	335	1,963
1995	<b>1,820</b>	544	2,363
1996	1,536	712	2,248
1997	1,629	685	2,314

<sup>1</sup> Totals may not add due to rounding. Excludes income from cooperative pooling operations.

<sup>2</sup> Dividends and patronage refunds received from other marketing, farm supply, and related-service cooperatives.

Table 16— Cooperatives' gross and net business volumes, 1988-1997 <sup>1</sup>

Period <sup>2</sup>	Gross volume				Net volume			
	Farm products	Farm supplies	Services <sup>3</sup>	Total	Farm products	Farm supplies	Services <sup>3</sup>	Total
<i>Billion dollars</i>								
1988	56.2	24.0	1.9	82.1	49.1	15.4	1.9	66.4
1989	60.3	25.8	2.0	<b>88.1</b>	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	69.3	21.2	3.3	93.8
1996	90.3	34.7	3.1	<b>128.1</b>	79.4	23.7	3.1	106.2
1997	85.8	37.1	3.6	126.5	77.6	25.2	3.6	106.5
<i>Percent</i>								
1988	<b>68.4</b>	<b>29.2</b>	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	2.8	100	73.4	23.3	3.3	100
1995	69.5	27.6	2.9	100	73.9	22.6	3.5	100
1996	70.5	27.1	2.4	100	74.8	22.3	2.9	100
1997	67.8	29.3	2.9	100	72.9	23.7	3.4	100

<sup>1</sup> Gross includes and net excludes intercooperative business. Totals may not add due to rounding.

<sup>2</sup> For years prior to 1988, see *Cooperative Historical Statistics*, CIR 1, Section 26, USDA, Revised April 1998. Data for prior years are not entirely comparable due to revisions in statistical procedures.

<sup>3</sup> 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.

Figure 20— Cooperatives' Net Income, 1988-97

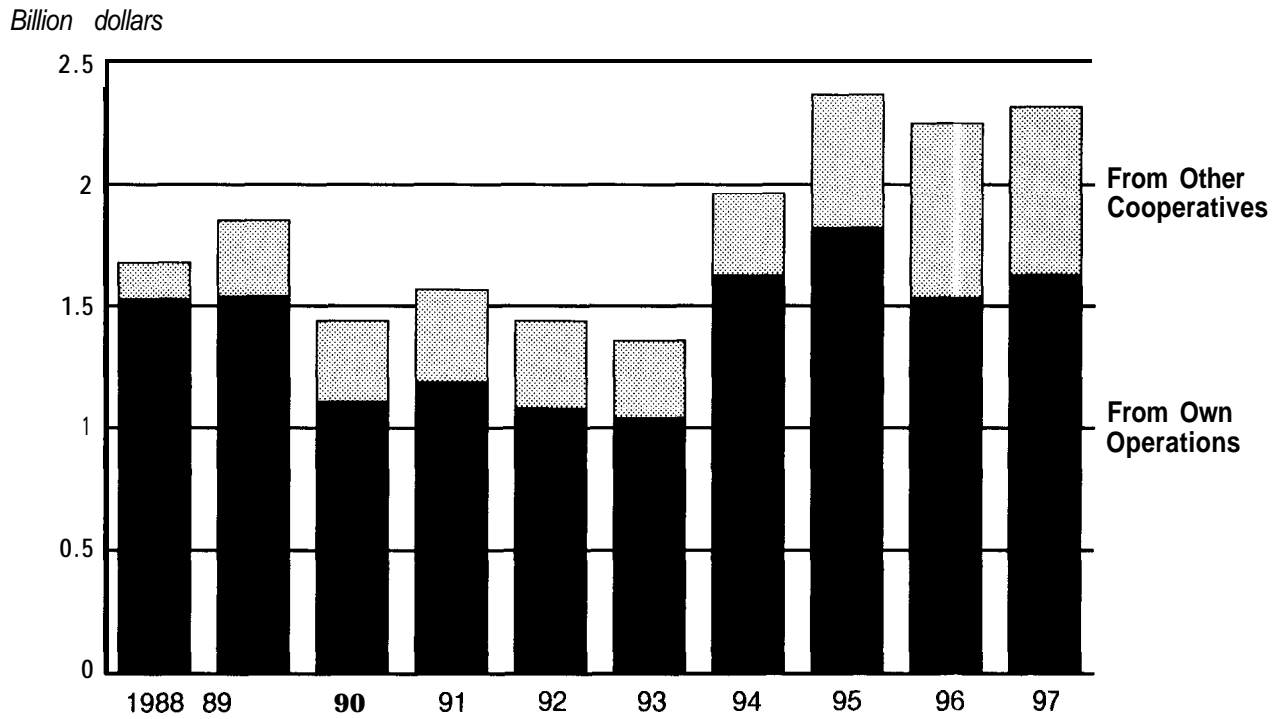
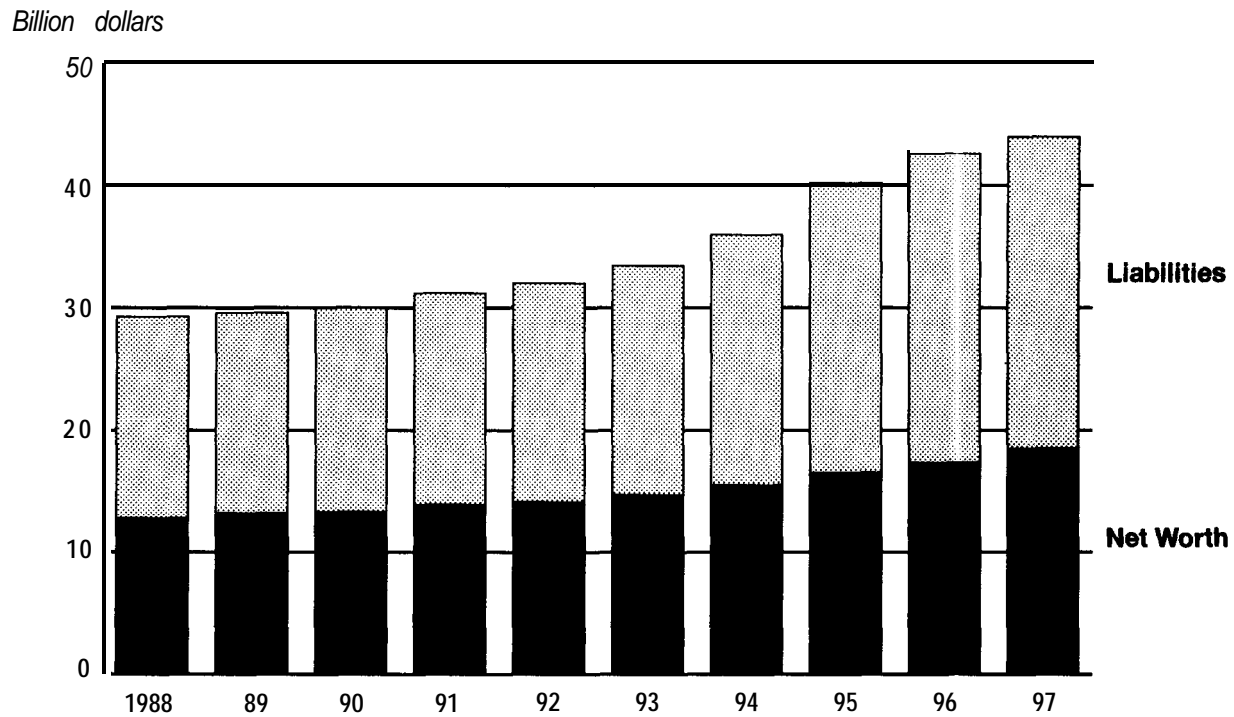


Figure 21— Cooperatives' Net Worth and Liabilities, 1988-97



agriculture in the late 1990s compared with the economic conditions in the late 1980s and early 1990s. In 1988, refunds from other cooperatives totaled \$148 million, or 8.8 percent of total net income. It reached a high of 31.7 percent in 1996 before slipping to 29.6 percent of total net income, or \$685 million, in 1997.

### Balance Sheet

From 1988 through 1993, farmer cooperatives financed 43.8 percent to 44.3 percent of their assets through member and patron equity. After a 1996 decline to 40.8 percent, the figure rose to 42.1 percent in 1997 (table 18 and figure 21). This increase, the first one since 1991, should help to strengthen cooperatives' financial position.

Investments in other cooperatives as a percentage of total assets was 9.4 percent in 1988, increased to 9.6 percent in 1990, but varied in succeeding years before reaching 8.8 percent in 1997. In dollar terms, the amount was \$2.8 billion in 1988 and nearly \$3.9 billion in 1997.

## IV-Other Service Cooperatives

Other types of service cooperatives were operating in 1997 besides those directly related to marketing and purchasing.

### 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.

FCS opened 1998 by representing 48 Federal Land Bank Associations (FLBAs); 31 Federal Land Credit Associations (FLCAs); 64 Production Credit Associations (PCAs); 1 Agricultural Credit Bank

Table 18— Combined balance sheet data of farmer cooperatives, 1988–97

Year	Assets from own operations	Investments in other co-ops	Total assets	Total liabilities	Net worth
<i>Million dollars</i>					
1988	26,524	2,762	29,286	16,461	12,825
1989	27,078	2,571	29,649	16,337	13,313
1990	27,155	2,869	30,024	16,575	13,449
1991	28,766	2,501	31,268	17,227	14,040
1992	29,572	2,422	31,994	17,780	14,213
1993	30,844	2,602	33,446	18,634	14,812
1994	33,304	2,656	35,960	20,339	15,621
1995	37,314	2,960	40,274	23,643	16,631
1996	39,193	3,395	42,588	25,195	17,392
1997	40,110	3,886	43,996	25,459	18,537
<i>Percent of total assets</i>					
1988	90.6	9.4	100	56.2	43.8
1989	91.3	8.7	100	55.1	44.9
1990	90.4	9.6	100	55.2	44.8
1991	92.0	8.0	100	55.1	44.9
1992	92.4	7.6	100	55.6	44.4
1993	92.2	7.8	100	55.7	44.3
1994	92.6	7.4	100	56.6	43.4
1995	92.6	7.4	100	58.7	41.3
1996	92.0	8.0	100	59.2	40.8
1997	91.2	8.8	100	57.9	42.1

(ACB), (CoBank, ACB); 60 Agricultural Credit Associations (ACAs); 6 Farm Credit Banks (FCBs); and 1 Bank for Cooperatives (BC) (table 19).

The combined assets of FCS for 1997 totaled \$78.1 billion-up 4.3 percent from \$74.9 billion in 1996 (table 20). Net worth was nearly \$11.7 billion, up 9 percent from 1996, and net income was \$1.3 billion, up 5.5 percent.

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 Jan. 1, 1998, 19 were in AgriBank, 11 in Western, and one in Ag America 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 and livestock purchases, and farm buildings and other capital improvements. Of the 64 PCAs, 18 were located in the AgriBank, FCB, district and 18 in the FCB of Wichita territory

ACAs resulted from the merger of FLBAs or FLCAs with PCAs. ACAs offer both long- and short-term loans. Of the 60 ACAs operating on Jan. 1, 1998, 39 of them were in AgFirst, FCB, territory and 11 in the AgriBank, FCB, district.

The FCBs provide loan funds and support services to FLBAs, ACAs, FLCAs, and PCAs within their districts. Combined assets of the six FCBs, one ACB, and one BC totaled \$71.1 billion in 1997, up from \$68.6 billion in 1996 (table 21). Net worth in 1997 was \$6.1 billion and net loans totaled \$58.5 billion. Net income grew from \$622 million in 1996 to \$692 million in 1997.

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. It also finances U.S. agricultural exports and imports.

Table 20— **Farm Credit System's combined assets, net worth, and net income, 1993–97**<sup>1</sup>

Year	Assets	Net worth	Net income
Million dollars			
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
1997	78,144	11,694	1,267

<sup>1</sup> *Farm Credit System, Annual Information Statements, 1997*  
Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ., Feb., 1998. p.p. 3.

Table 21— **Farm Credit Banks' combined assets, net worth, net loans, and net income, 1993-97**<sup>1</sup>

Year	Assets	Net worth	Net loans	Net income
Million dollars				
1993	60,508	5,348	50,327	605
1994	61,305	5,377	50,763	468
1995	65,754	5,629	54,525	555
1996	68,550	5,798	56,571	622
1997	71,122	6,069	58,502	692

<sup>1</sup> As of December 31 of each year. 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, 1997*, McLean, VA, p. 41.

Table 19— **Farm Credit Association structure, Jan. 1, 1998**<sup>1</sup>

District or bank affiliation	FLBA	PCA	ACA	FLCA	ACB	FCB	BC
<i>Number</i>							
CoBank, ACB <sup>2</sup>			4		1		
AgFirst FCB		1	39			1	
AgriBank, FCB		18	11	19		1	
FCB of Wichita	22	18				1	
FCB of Texas	26	16				1	
Western FCB		10	5	11		1	
AgAmerica, FCB		1	1	1		1	
St. Paul BC							1
Total	48	64	60	31	1	6	1

= No bank affiliation.

<sup>1</sup> FLBA = Federal Land Bank Association; PCA = Production Credit Association; ACA = Agricultural Credit Association; FLCA = Federal Land Credit Association; ACB = Agricultural Credit Bank; FCB = Farm Credit Bank; and BC = Bank for Cooperatives

<sup>2</sup> CoBank, ACB serves cooperatives nationwide and ACAs in the former Springfield District.

Source: Farm Credit Administration, *Report on the Financial Condition and Performance of the Farm Credit System, 1997* McLean, VA, p. 34.

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 also finances U.S. agricultural exports and provides international banking services for farmer cooperatives.

The combined assets of the St. Paul Bank and CoBank increased from \$20.8 billion in 1996 to \$21.3 billion in 1997. Net worth totaled \$1.7 billion. As of Dec. 31, 1997, the two banks had net loans of \$16.8 billion and net income of \$176 million (table 22).

Table 22— **Combined assets, net worth, net loans, and net income of St. Paul Bank for Cooperatives and CoBank, ACB, 1993-97** <sup>1</sup>

Year	Assets	Net worth	Net loans	Net income
<i>Million dollars</i>				
1993	18,533	1,358	14,729	181
1994	18,225	1,355	14,954	142
1995	21,326	1,488	17,553	175
1996	20,837	1,571	16,871	156
1997	21,282	1,674	16,821	176

<sup>1</sup> As of December 31 of each year. Source: CoBank, ACB, *CoBank 1997 Annual Report Financial Information: Rural America's Cooperative Bank*, Englewood, CO, and St. Paul Bank, *1997 Annual Report*, St. Paul, MN.

### Rural Telephone Cooperatives

As of Dec. 31, 1997, the Nation had 229 rural telephone cooperatives borrowing from the Rural Electrification Administration (REA), with revenues of \$1,264 million and 1,476,000 subscriber members. Iowa had the most cooperatives, 32, or 14 percent of the total. South Carolina accounted for the most subscriber members (11.7 percent) of any State (table 23). Texas led all States in revenue, with \$134 million, or 10.6 percent of the total.

Table 23— **Number, participation, and level of activity of rural telephone<sup>1</sup>co-ops by State, Dec. 31, 1997<sup>2</sup>**

State	Cooperatives	Members (subscribers)	Revenue	State	Cooperatives	Members (subscribers)	Revenue
	<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>		<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>
Alabama	3	26	19	Nevada			
Alaska	7	63	71	New Hampshire			
Arizona	1	4	7	New Jersey			
Arkansas	2	9	9	New Mexico	5	21	53
California	-	-		New York		-	
Colorado	5	9	9	North Carolina	9	146	81
Delaware				North Dakota	10	59	58
Florida				Ohio	5	5	4
Georgia	4	34	23	Oklahoma	1	10	15
Idaho	2	10	7	Oregon	7	37	29
Illinois	7	24	23	Pennsylvania			
Indiana	8	36	27	South Carolina	6	172	109
Iowa	32	65	60	South Dakota	12	46	44
Kansas	10	63	78	Tennessee	7	143	88
Kentucky	8	100	68	Texas	18	117	134
Louisiana				Utah	2	8	10
Maine		-		Vermont			
Maryland				Virginia	5	19	13
Michigan				Washington			
Minnesota	19	81	60	West Virginia	2	4	4
Mississippi				Wisconsin	11	45	33
Missouri	8	50	49	Wyoming	1	1	2
Montana	7	57	68				
Nebraska	5	10	8	United States	229	1,476	1,264

- = None reported in the State.

<sup>1</sup> Source: Rural Utilities Service, USDA.

<sup>2</sup> Totals may not add due to rounding.

## Rural Electric Cooperatives

The Nation's 744 rural electric cooperatives had 11.1 million consumer members and revenue of \$23.4 billion (table 24). Texas led all States, with 49 associations, or 6.6 percent of the total, while Georgia led with the most consumer members, 1,049, or 9.5 percent, and largest revenue, \$2,465 million, or 10.5 percent of the total.

## Rural Credit Unions

The 633 rural credit unions reported nearly 4 million members and savings of \$15.9 billion. Wisconsin led all States in number of associations, with 68, or 10.7 percent of the total, while California led in number of members, with 997,000, or 25.2 percent of the total.

California also led all States in credit union savings, with \$4.8 billion, or 30.1 percent, of the \$15.9 billion (table 25), up from \$4.2 billion, or 27.6 percent in 1996.

## Dairy Herd Improvement Associations

Dairy Herd Improvement Associations (DHIA) had 38,920 memberships in 1997 (table 26), down from 41,277 in 1996. The DHIA's tested 4.45 million cows in 1997, down from 4.52 million in 1996. Wisconsin (10,634), Pennsylvania (5,026), Minnesota (4,638), and New York (3,055) combined accounted for 60 percent of total members, up slightly from 58.2 percent in 1996. About 862,400, or 19.4 percent, of the cows tested were in California, up from 18.7 percent.

Table 24— Number, participation, and level of activity of rural electric <sup>1</sup>co-ops by State, Dec. 31, 1997 <sup>2</sup>

State	Cooperatives	Members (subscribers)	Revenue	State	Cooperatives	Members (subscribers)	Revenue
	<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>		<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>
Alabama	22	433	783	Nevada	1	5	27
Alaska	11	80	221	New Hampshire	1	69	96
Arizona	5	119	209	New Jersey	1	11	13
Arkansas	18	386	994	New Mexico	17	172	383
California	3	15	21	New York	4	15	13
Colorado	21	317	857	North Carolina	25	666	1,465
Delaware	1	54	59	North Dakota	23	115	869
Florida	14	578	1,246	Ohio	22	282	335
Georgia	39	1,049	2,465	Oklahoma	24	316	538
Idaho	6	45	57	Oregon	9	62	85
Illinois	17	138	248	Pennsylvania	12	190	207
Indiana	27	288	612	South Carolina	22	538	1,156
Iowa	36	143	384	South Dakota	31	122	220
Kansas	31	154	418	Tennessee	21	778	1,019
Kentucky	28	631	1,580	Texas	49	614	1,345
Louisiana	11	279	766	Utah	1	7	9
Maine	3	14	15	Vermont	1	9	8
Maryland	2	151	251	Virginia	12	344	502
Michigan	10	198	153	Washington	6	33	47
Minnesota	38	344	772	West Virginia	1	6	5
Mississippi	19	456	929	Wisconsin	20	149	327
Missouri	44	529	1,397	Wyoming	10	56	122
Montana	23	94	131				
Nebraska	2	8	17	United States	744	11,063	23,378

<sup>1</sup> Source: Rural Utilities Service, USDA.

<sup>2</sup> Totals may not add due to rounding.

Table 25-- **Number, participation, and level of activity of rural credit unions <sup>1</sup>**  
**by State, Dec. 31, 1997<sup>2</sup>**

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>		<i>Number</i>	<i>1,000</i>	<i>Mil. dol.</i>
Alabama	10	22	75	Montana	11	54	189
Alaska	1	20	89	Nebraska	16	14	40
Arizona	4	16	40	Nevada	6	49	284
Arkansas	3	7	23	New Hampshire	2	<b>1</b>	<b>1</b>
California	58	997	4,792	New Jersey	6	12	19
Colorado	15	20	72	New Mexico	3	37	151
Connecticut	1	<b>1</b>	1	New York	29	168	676
Delaware	1	3	9	North Carolina	14	33	74
Florida	15	97	376	North Dakota	32	100	532
Georgia	11	33	82	Ohio	12	39	60
Hawaii	17	<b>97</b>	554	Oklahoma	5	8	35
Idaho	9	15	38	Oregon	10	79	296
Illinois	<b>11</b>	60	231	Pennsylvania	21	32	72
Indiana	17	68	488	Rhode Island	3	59	476
Iowa	7	8	19	South Carolina	3	8	50
Kansas	17	77	223	South Dakota	8	11	27
Kentucky	7	31	75	Tennessee	8	14	35
Louisiana	9	15	38	Texas	34	111	354
Maine	10	24	88	Utah	9	14	42
Maryland	5	54	237	Vermont	3	18	44
Massachusetts	5	<b>10</b>	21	Virginia	6	44	144
Michigan	26	401	1,155	Washington	15	151	654
Minnesota	35	201	776	West Virginia	3	4	9
Mississippi	4	12	33	Wisconsin	68	583	2,075
Missouri	6	18	52	Wyoming	2	2	5
				United States	633	<b>3,953</b>	<b>15,929</b>

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

<sup>2</sup> Totals may not add due to rounding.



Table 26— **Number, participation, and level of activity of dairy herd improvement associations <sup>1</sup> by State, Dec. 31, 1997 <sup>2</sup>**

State	Members (herds)	cows tested	State	Members (herds)	cows tested
	<i>Number</i>	<i>1,000</i>		<i>Number</i>	<i>1,000</i>
Alabama	80	13.2	Montana	67	7.9
Alaska	2	( <sup>3</sup> )	Nebraska	310	33.1
Arizona	61	67.4	Nevada	23	9.7
Arkansas	93	9.0	New Hampshire	122	10.6
California	1,224	862.4	New Jersey	102	8.6
Colorado	104	40.6	New Mexico	30	34.6
Connecticut	130	15.2	New York	3,055	320.7
Delaware	33	4.5	North Carolina	279	44.8
Florida	120	62.7	North Dakota	99	8.3
Georgia	241	56.7	Ohio	1,513	118.0
Hawaii	7	2.9	Oklahoma	157	18.5
Idaho	413	101.6	Oregon	283	51.7
Illinois	803	61.4	Pennsylvania	5,026	332.1
Indiana	608	49.4	Rhode Island	7	.5
Iowa	1,647	117.0	South Carolina	95	18.4
Kansas	403	37.5	South Dakota	364	30.6
Kentucky	332	28.1	Tennessee	326	39.1
Louisiana	160	20.9	Texas	420	187.7
Maine	176	15.3	Utah	300	52.2
Maryland	494	42.4	Vermont	587	56.2
Massachusetts	145	11.9	Virginia	583	74.4
Michigan	1,317	140.2	Washington	362	91.0
Minnesota	4,638	320.1	West Virginia	83	8.5
Mississippi	96	15.9	Wisconsin	10,634	701.0
Missouri	583	48.7	Wyoming	5	1.1
				-	-
			United States <sup>4</sup>	38,920	4,446.5

<sup>1</sup> Source: Agricultural Research Service, USDA.

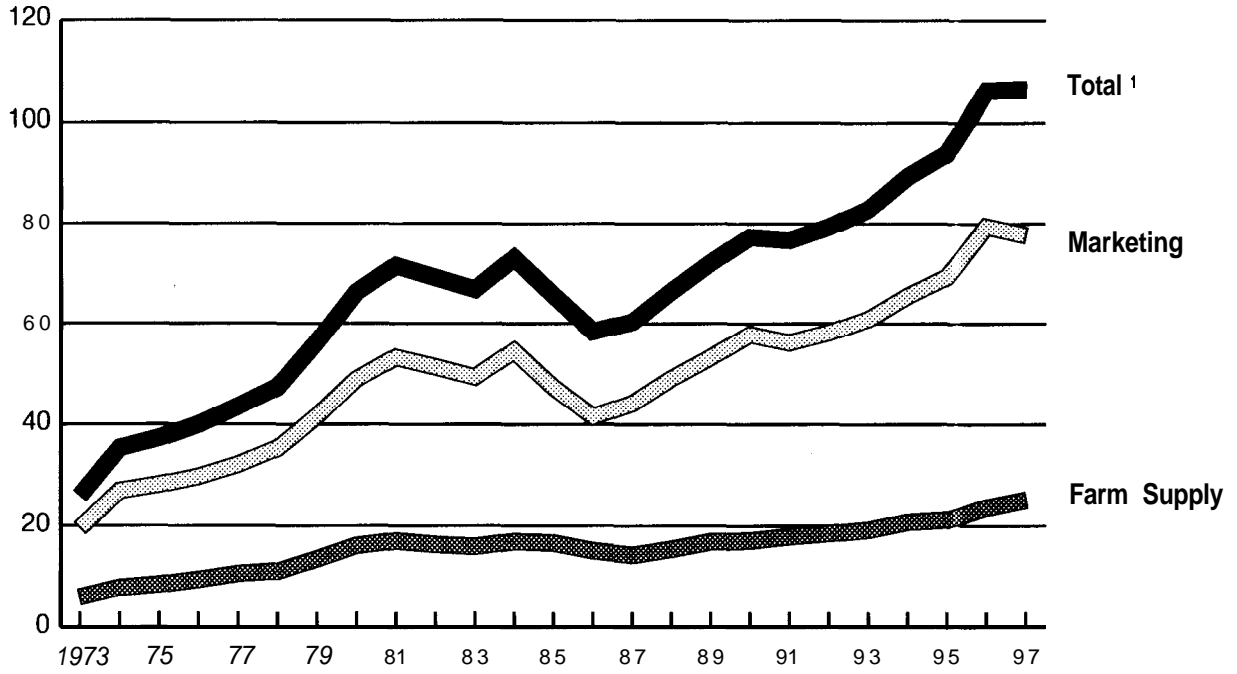
<sup>2</sup> Totals may not add due to rounding.

<sup>3</sup> Fewer than 500.

<sup>4</sup> Includes Puerto Rico and the Virgin Islands with 178 members and 42,344 cows tested.

Appendix Figure 1- **Cooperatives' Net Business Volume, 1973-97**

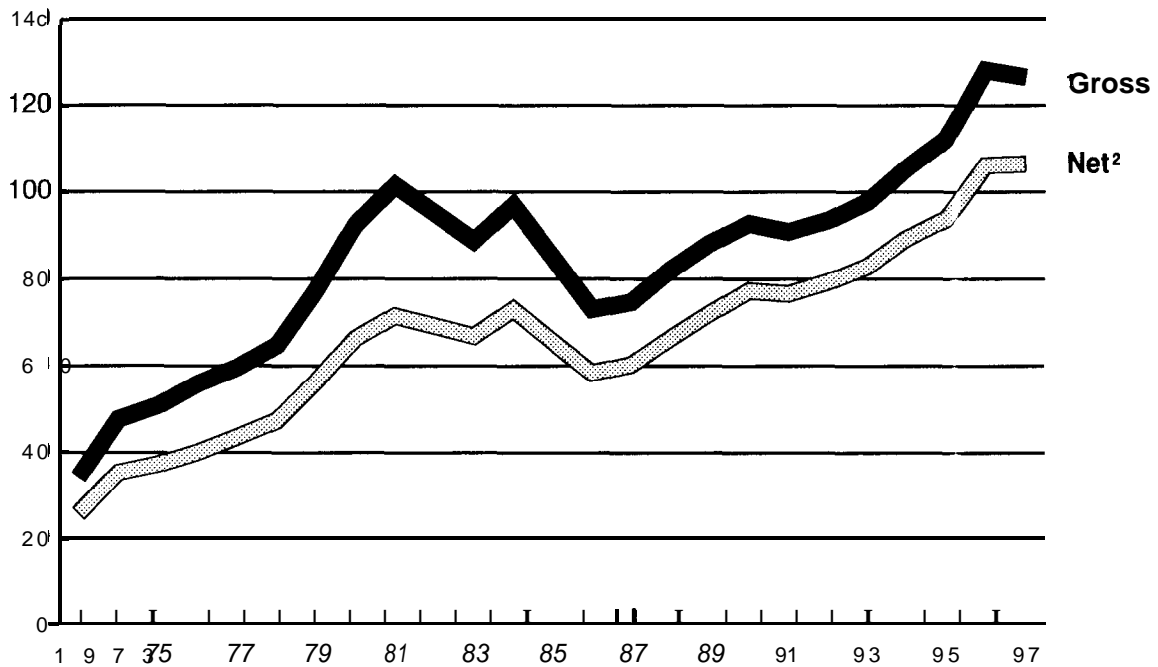
Billion dollars



<sup>1</sup> Total includes value of related services and other income.

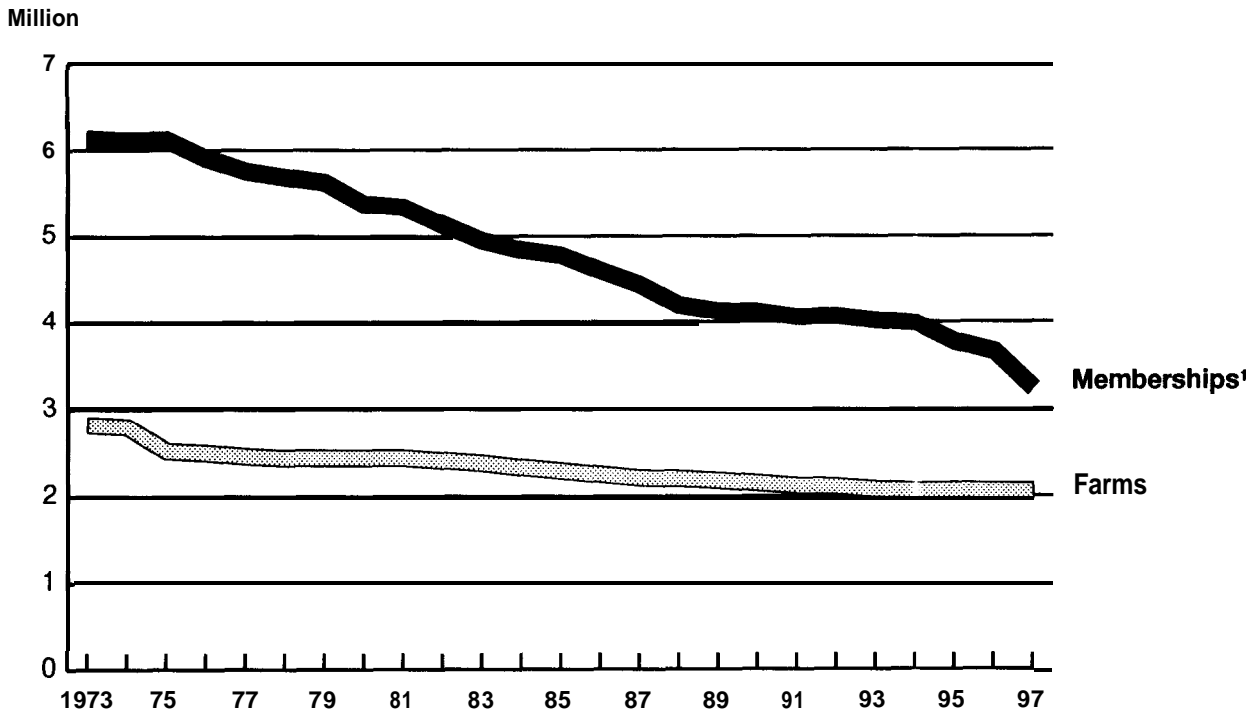
Appendix Figure 2— **Cooperatives' Gross and Net Business Volumes, 1973-97**

Billion dollars



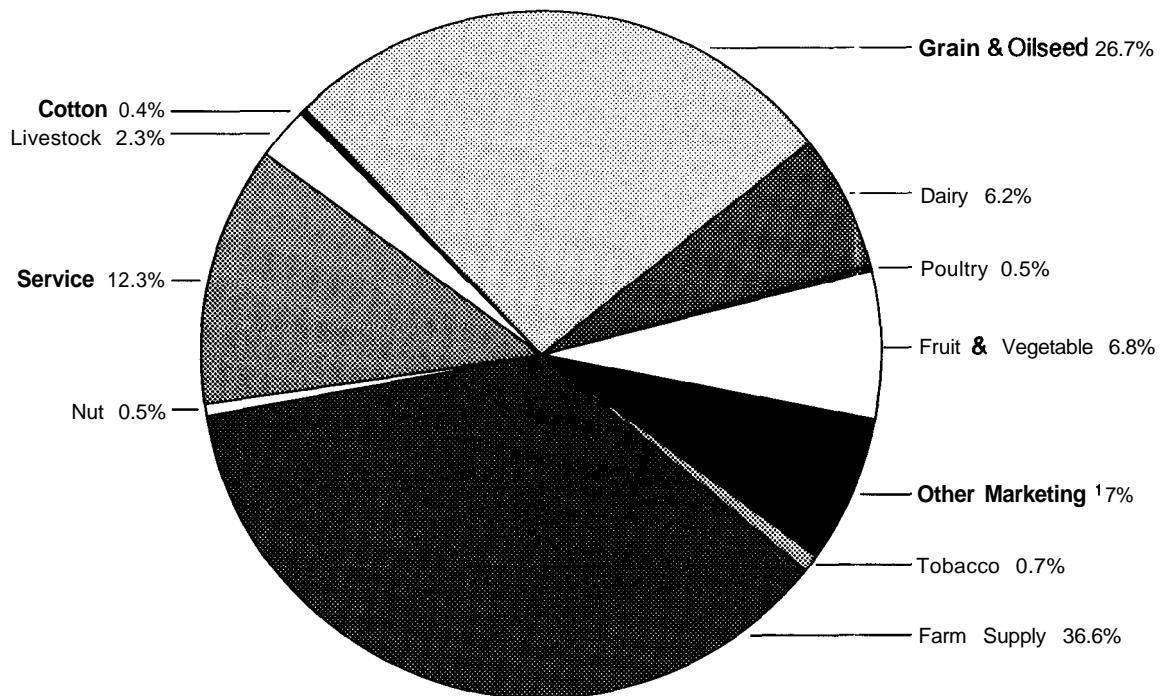
<sup>2</sup> includes intercooperative business.

Appendix Figure 3— U.S. Farms and Farmer Cooperative Memberships, 1973-97



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

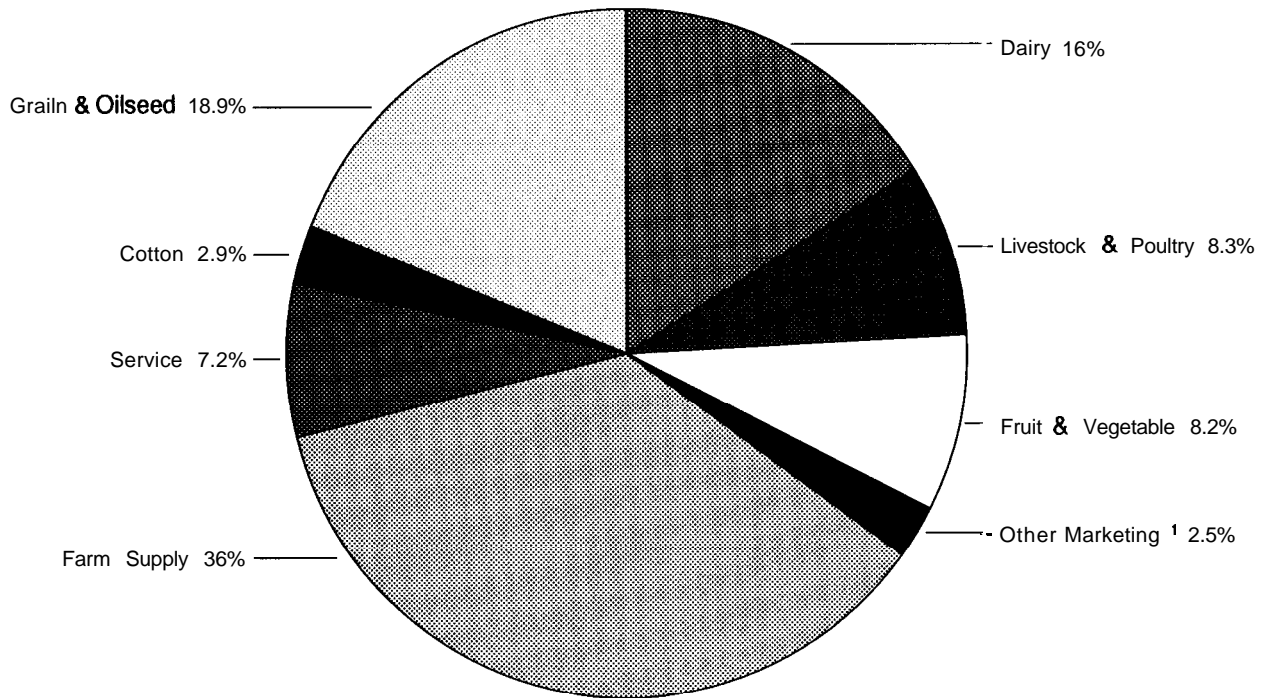
Appendix Figure 4— Distribution of Farmer Cooperatives by Type, 1997



Percent based on 3,791 cooperatives.

<sup>1</sup> Includes dry bean and pea, wool and mohair, rice, sugar, and miscellaneous marketing cooperatives.

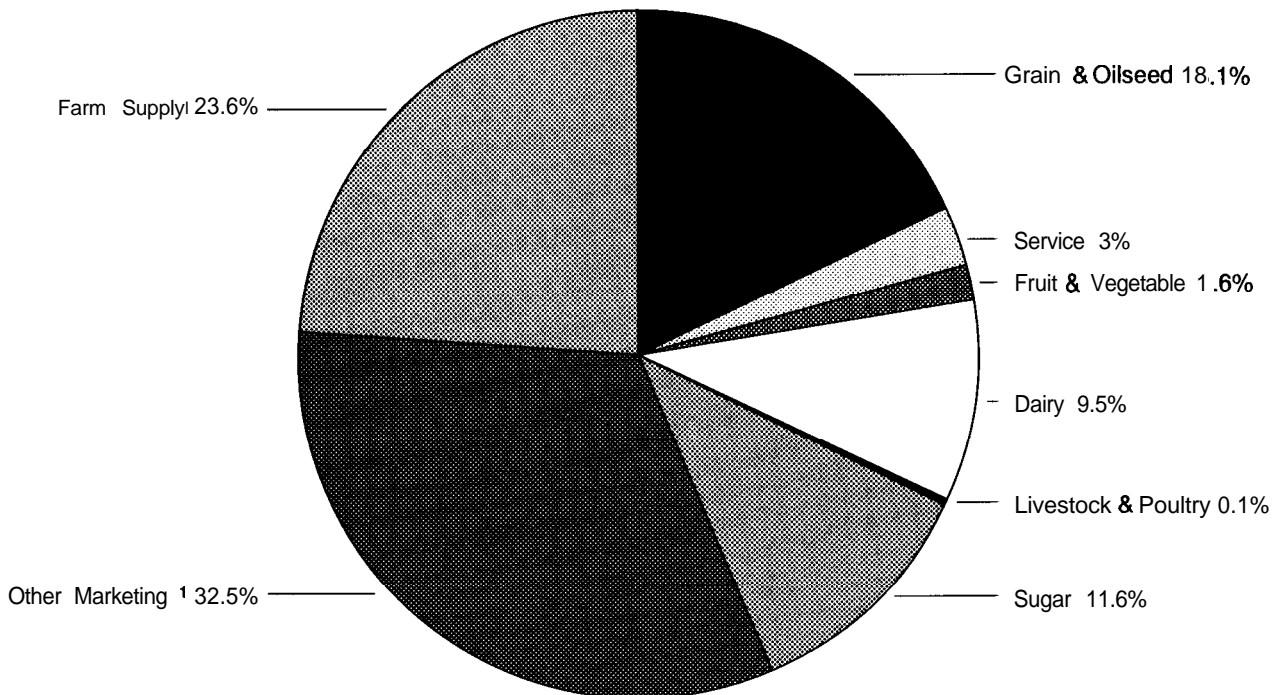
Appendix Figure 5— **Distribution of Net Income by Type of Cooperative, 1997**



Percent based on net income of \$2.31 billion.

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

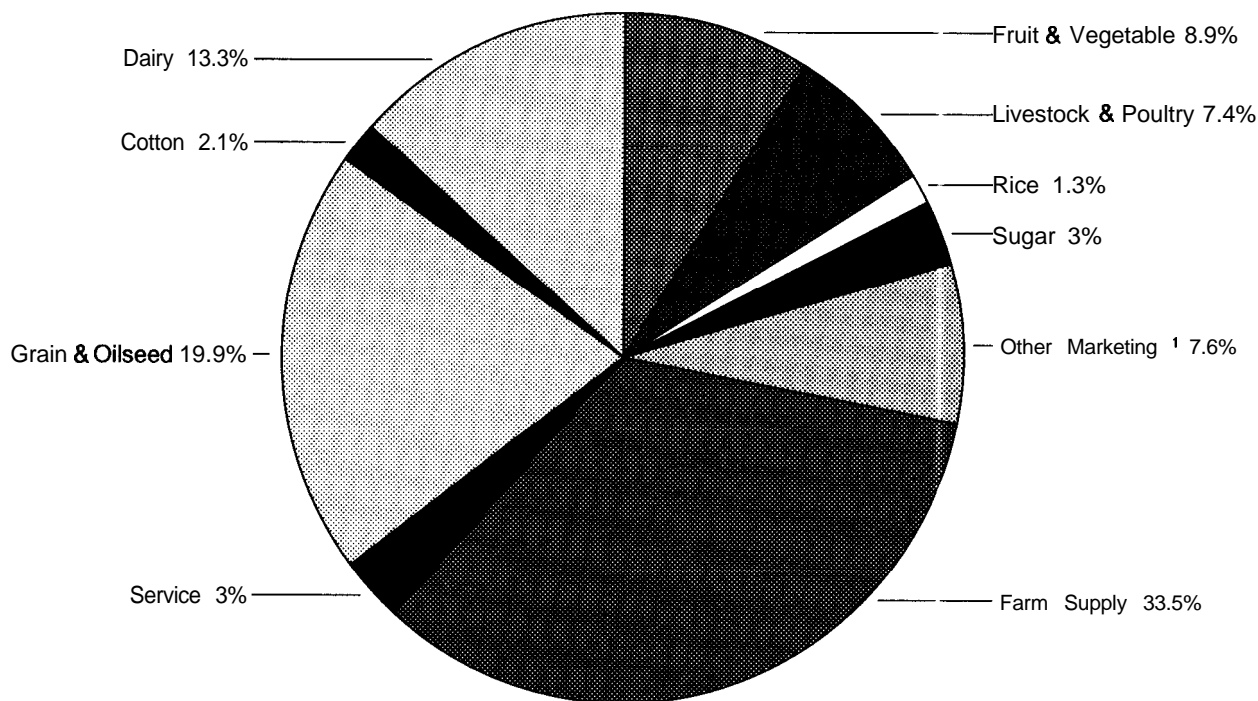
Appendix Figure 6— **Distribution of Losses by Type of Cooperative, 1997**



Percent based on losses of \$163 million.

<sup>1</sup> Includes dry bean and pea, nut, wool and mohair, tobacco, rice, fishery, and other miscellaneous marketing cooperatives.

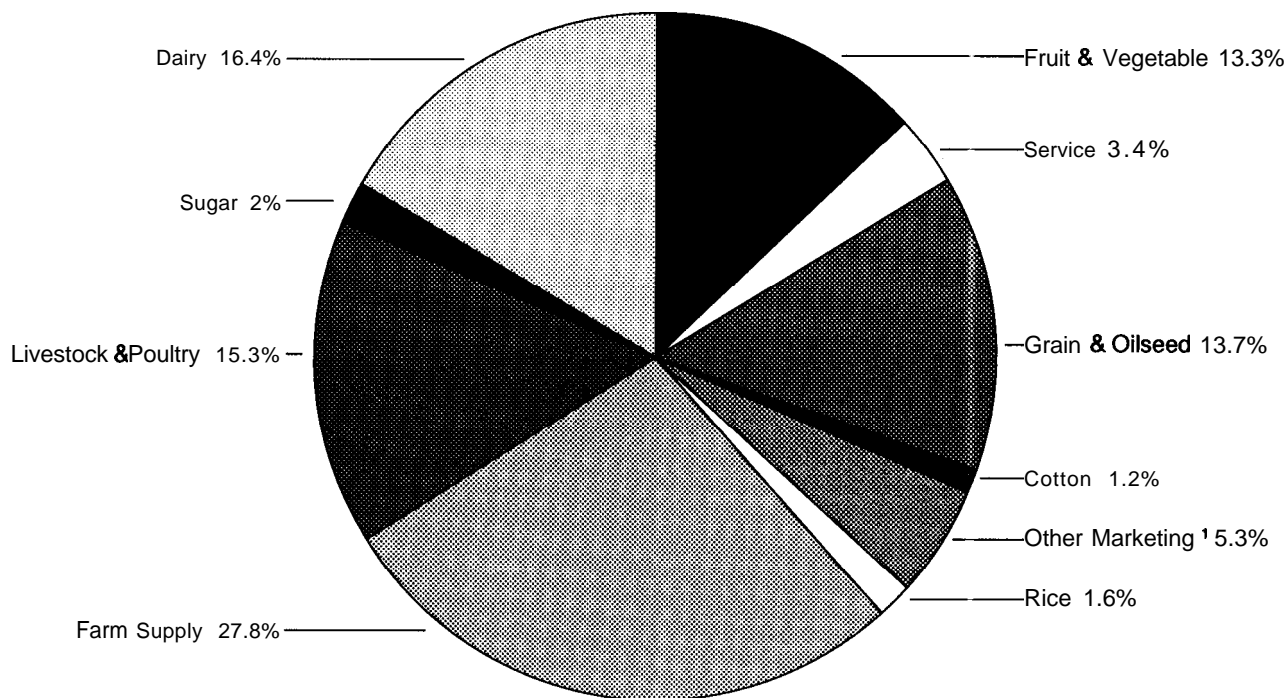
Appendix Figure 7— **Distribution of Net Worth by Type of Cooperative, 1997**



Percent based on net worth of \$18.5 billion.

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

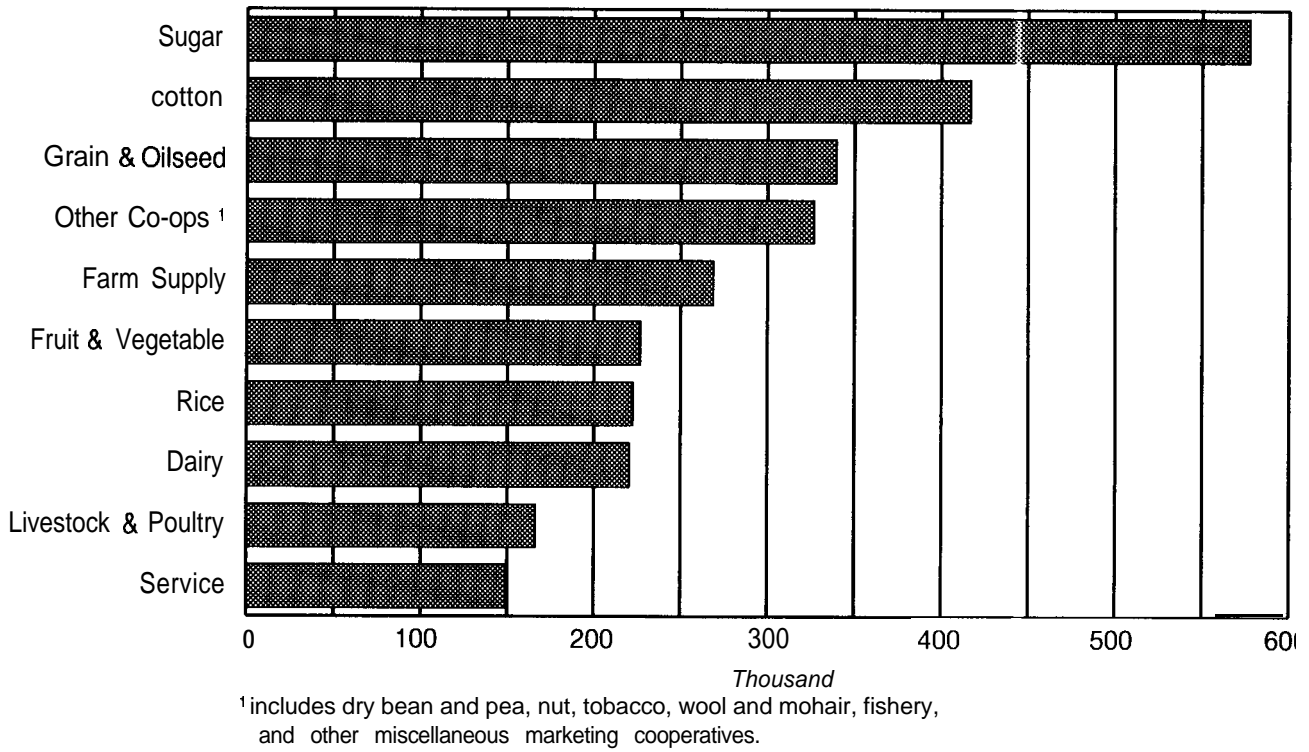
Appendix Figure 8— **Distribution of Full-Time Employees by Type of Cooperative, 1997**



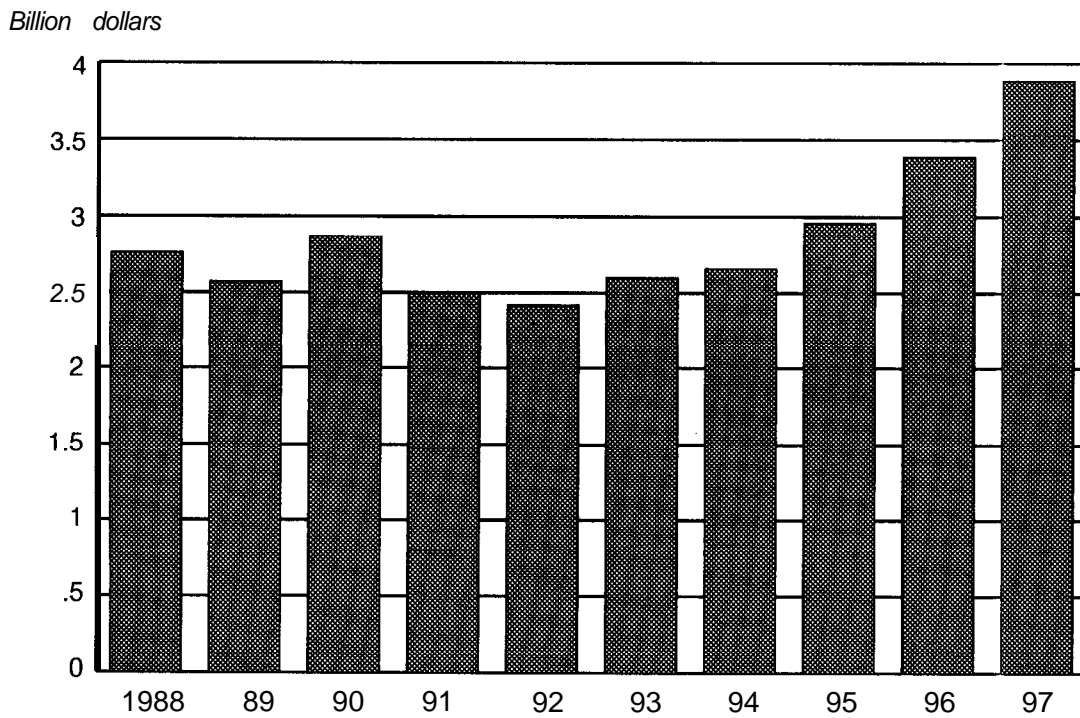
Percent based on 174,795 full-time employees.

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

Appendix Figure 9— **Assets Per Full-Time Employee by Type of Cooperative, 1997**



Appendix Figure 10— **Cooperatives' Investments in Other Cooperatives, 1988-97**



---

## U.S. Department of Agriculture

### Rural Business-Cooperative Service

Stop 3250

Washington, D.C. 20250-3250

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.

---

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, **Whitten** Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

---