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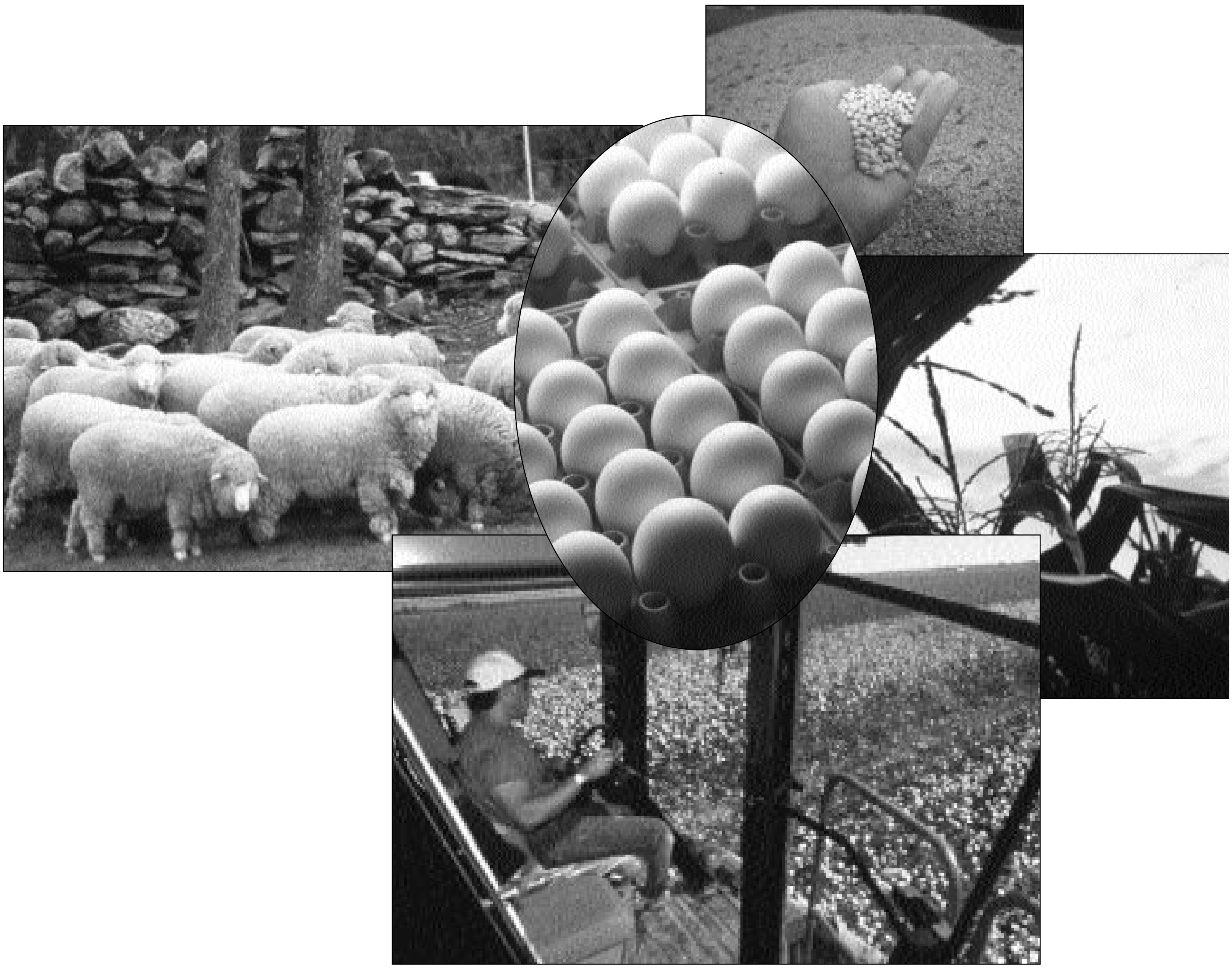
Farmer Cooperative Statistics, 1999



Abstract

A survey of U.S. farmer cooperatives ending their business year during calendar year 1999 showed a net income of $1.3 billion, down from $1.7 billion in 1998. Gross and net business volumes were down for the 3,466 cooperatives in the survey. Assets, liabilities, and net worth 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, employees, business size, sales volume, net income, assets, liabilities, and net worth are reported along with data on selected activities of other cooperative service organizations.

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

FARMER COOPERATIVE STATISTICS, 1999

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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 for calendar year 1999. Cooperatives are classified by principal product marketed and major function. Fishery cooperatives are included as miscellaneous marketing cooperatives. Both gross (includes inter-cooperative business) and net (excludes inter-cooperative business) dollar volumes are reported.

Statistics for 1999 are compiled on a national and State basis. State data are collected every other year and next will be published in 2001.

The information was collected from individual farmer and fishery cooperatives by a mail survey of all organizations identified by USDA's Rural Business-Cooperative Service (RBS) as a farmer or aquacultural cooperative. Information was requested for cooperatives' 1999 business year.

RBS conducts an annual census because of the need to make more accurate estimates for all cooperatives and to use current data on cooperatives for research, education, and technical assistance purposes. Information obtained from individual cooperatives is combined to maintain confidentiality.

Statistics for all cooperatives were derived by adding data estimated for nonrespondents to respondent data. Respondents to the 1999 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

Contents

Contents

Contents

Highlights

Both gross and net business volumes dropped and net income declined significantly according to the 1999 survey of marketing, farm supply, and related-service cooperatives by USDA's Rural Business-Cooperative Service (RBS). Although the number of cooperatives and memberships declined, total assets, total liabilities, and net worth increased. Number of full-time employees decreased. However, use of part-time and seasonal employees was up.

- Total gross business volume (includes inter-cooperative business) handled by cooperatives dropped 4.7 percent, from $121 billion in 1998 to $115.3 billion in 1999.

- Total net business (excludes inter-cooperative business) dropped 5.4 percent or $5.6 billion from $104.7 billion to $99.1 billion.

- Total net income of $1.3 billion was down 23.8 percent from the $1.7 billion reported for 1998. The 1999 net included inter-cooperative dividends and refunds of $383.5 million--down 33.1 percent from $573 million.

- The number of cooperatives declined 5.1 percent, from 3,651 to 3,466.

- Grain and farm supply cooperatives operated an estimated 5,330 branches in 1999, down from 5,617 in 1998.

- Cooperative memberships were 3,173,323, down 5.3 percent from 3,352,577 in 1998.

- Cooperatives employed 172,951 full-time and 102,473 part-time and seasonal employees in 1999. Numbers of full-time employees decreased 0.5 percent, while part-time and seasonal employees increased 11.6 percent.

- Gross value of farm products marketed by cooperatives in 1999 decreased 4.8 percent, from $84.5 billion to $80.5 billion. Net value of these farm products, after eliminating duplication from inter-cooperative business, was $72 billion, down 6.1 percent from $76.6 billion.

- Gross value of farm supplies handled by farmer cooperatives was down 6.3 percent, from $33 billion to $30.9 billion. After adjusting for inter-cooperative business, the decrease was 5.6 percent, from $24.6 billion to $23.2 billion.

- Receipts for services related to marketing farm products and handling farm supplies, plus other income, increased 12.4 percent, from $3.5 billion to $3.9 billion.

- Combined assets for all farmer cooperatives increased 2.4 percent, from $46.6 billion to $47.7 billion. Net assets, after eliminating inter-cooperative investments, was up 1.1 percent, from $41.9 billion to $42.3 billion. This included investments in CoBank.

- Total liabilities of $27.4 billion was up 3.1 percent from $26.6 billion.

- Net worth, or member and patron equity, rose 1.6 percent to nearly $20.3 billion from $20 billion. Member and patron equity financed 42.5 percent of total assets, down from 42.9 percent in 1998.

Highlights

HIGHLIGHTS CAPSULE

	1998	1999	Change
Number of cooperatives	3,651	3,466	-185
Memberships	3,352,577	3,173,323	-179,254
Gross business volume (mil. dol.)	120,961	115,291	-5,670
Net business volume (mil. dol.)	104,667	99,064	-5,603
Net income (mil. dol.)	1,742	1,328	-414
Total assets (mil. dol.)	46,560	47,682	1,122
Net worth (mil. dol.)	19,954	20,263	309
Full-time employees	173,791	172,951	-840
Part-time and seasonal employees	91,799	102,473	10,674
Leading States	1997	1999	
	Minnesota	Minnesota	
Number of cooperatives	368	305	-63
	Minnesota	Kentucky	
Memberships	296,058	231,862	N/A
	Iowa	Minnesota	
Net business volume (mil. dol.)	10,941	9,306	N/A

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Rural Business-Cooperative Service

I—Definition of a Farmer Cooperative

The Rural Business-Cooperative Service (RBS) in USDA's Rural Development mission area considers four major criteria in identifying an organization as a farmer cooperative: (1) membership is limited to persons producing agricultural and aquacultural products and to associations of such producers; (2) cooperative members are limited to one vote regardless of the amount of stock or membership capital owned, or the cooperative does not pay dividends on stock or membership capital in excess of 8 percent a year, or the legal rate in the State, whichever is higher; (3) business conducted with nonmembers may not exceed the value of business 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. W ool pools are included as marketing cooperatives. Livestock shipping associations and rice drying cooperatives, beginning with 1992 and 1993, respectively, are considered service cooperatives.

Many State lists include other types, such as production, credit, telephone, electric, and consumer cooperatives, as well as those that do not meet the RBS definition. Other reasons for possible differences in the number of cooperatives are that: (1) RBS may not learn of certain cooperatives operating in a State for a considerable period of time; (2) a cooperative may not have completed and returned an initial questionnaire, or (3) no notice is received that a cooperative discontinued operating.

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

Classification of Cooperatives

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

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

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

Service cooperatives provide specialized services related to the agricultural business operations of farmers, ranchers, or cooperatives, such as cotton ginning, trucking, storing, drying, and artificial insemination. Livestock shipping associations and rice drying cooperatives were reclassified from marketing to service in 1992 and 1993, respectively.

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

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

Organizational Membership Structures

Centralized

Of the 3,466 farmer cooperatives in 1999, 3,379 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 63 federated associations often operate at points quite distant from their headquarters. Federated cooperative members are usually local cooperatives, although some are interregional associations with regional cooperative members.

Mixed

A few cooperatives have both individual farmer-members and autonomous cooperative members, a combination of centralized and federated structures. They serve large geographic areas, with members in many States, and provide a variety of integrated services. RBS has identified 24 such cooperatives.

II—1999 STATISTICS

Cooperatives' net business volume was $99.1 billion in 1999, down from $104.7 billion in 1998; the second year in a row that business volume dropped. Net income of $1.3 billion was down from $1.7 billion in 1998, a drop of 23.8 percent. Net income, like business volume, also dropped for the second year. Numbers of cooperatives and memberships, at 3,466 and 3,173,323, respectively, were down. Combined assets, net worth and liabilities were all up.

Table 1—Number of cooperatives and memberships, by major business activity, 1999

Major business activity	Cooperatives	Memberships
	Number	
Beans and peas, dry edible	8	2,796
Cotton	15	43,754
Dairy	221	90,675
Fruits and vegetables	231	40,876
Grains and oilseeds [1]	896	657,921
Livestock	81	137,054
Nuts	18	43,749
Poultry [2]	15	29,190
Rice	17	11,799
Sugar [3]	48	15,703
Tobacco	25	170,026
Wool and mohair	84	15,440
Miscellaneous	90	23,856
Total marketing	1,749	1,282,839
Farm supply	1,313	1,731,377
Service	404	159,107
Total	3,466	3,173,323

[1] Cooperatives primarily handling grains and oilseeds, excluding cottonseed.

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

[3] Includes beets, sugarcane, honey, and related products.

Number of Cooperatives

The 1999 survey accounted for 3,466 marketing, farm supply, and related-service [1] cooperatives, compared with 3,651 in 1998. The net decrease of 185 associations (5.1 percent) largely reflects a continuing trend involving dissolution, merger, or acquisition. The largest decrease was in grain and oilseed (grain) cooperatives (68), followed by related-service (37) and farm supply (34) cooperatives.

Of the 3,466 cooperatives, 1,749 primarily marketed farm products, 1,313 primarily handled farm production supplies, and 404 provided services related to marketing or purchasing activities (table 1).

Marketing cooperatives decreased slightly, from 51 percent in 1998 to 50.5 percent of the total number of cooperatives in 1999, while farm supply cooperatives increased slightly, from 36.9 to 37.9 percent. Related-service cooperatives decreased slightly, from 12.1 to 11.7 percent.

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

Cooperative numbers by marketing and farm supply and service functions by State are shown in table 2. North Dakota is the leading State in marketing cooperatives (151), followed closely by Minnesota (143). Texas accounted for the largest number of farm supply and service cooperatives.

The 10 leading States in terms of number of cooperatives are shown in figure 1, which also shows the number of cooperatives by function in each State. For example, Minnesota had about an equal number of marketing and farm supply cooperatives, while the majority in Texas were service cooperatives, mainly cotton gins. South Dakota, the ninth 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 of formerly independent cooperatives are 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.

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

Figure 1— Number of Cooperatives by Function, Leading States, 1999

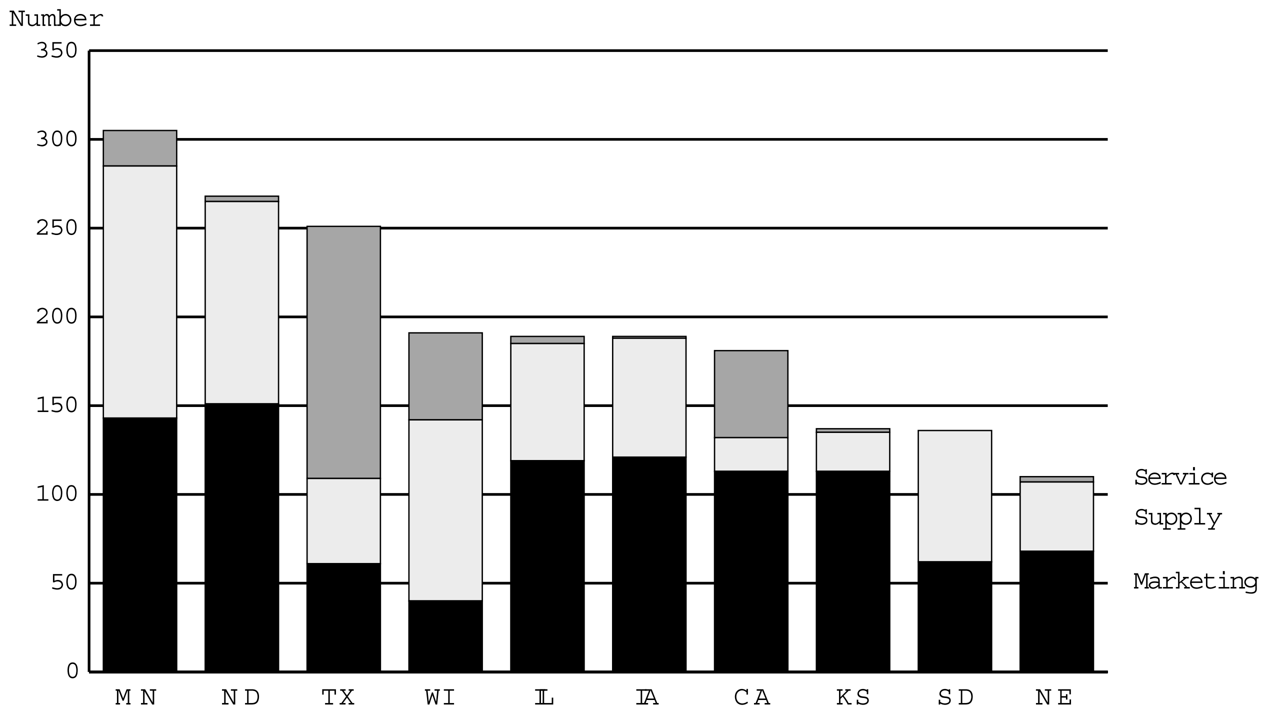


Table 2—Number of cooperatives[1], by major function and State, 1999 [2]

State	Major function: Marketing	Major function: Farm Supply and Service	Total
	Number		
Alabama	10	53	63
Arizona	5	4	9
Arkansas	11	42	53
California	113	68	181
Colorado	27	20	47
Florida	32	7	39
Georgia	8	8	16
Hawaii	21	7	28
Idaho	25	15	40
Illinois	119	70	189
Indiana	23	32	55
Iowa	121	68	189
Kansas	113	24	137
Kentucky	12	29	41
Louisiana	17	31	48
Maryland	4	17	21
Massachusetts	8	5	13
Michigan	34	28	62
Minnesota	143	162	305
Mississippi	18	58	76
Missouri	25	46	71
Montana	38	35	73
Nebraska	68	42	110
New Jersey	13	5	18
New Mexico	5	5	10
New York	82	16	98
North Carolina	19	7	26
North Dakota	151	117	268
Ohio	59	24	83
Oklahoma	45	49	94
Oregon	20	15	35
Pennsylvania	42	14	56
South Dakota	62	74	136
Tennessee	8	71	79
Texas	61	190	251
Utah	10	7	17
Virginia	21	38	59
Washington	50	34	84
West Virginia	14	13	27
Wisconsin	40	151	191
Wyoming	7	6	13
Other States [3]	45	10	55
United States	1,749	1,717	3,466

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

[2] Data covering operations of cooperatives whose fiscal years ended in 1999.

[3] Includes States with fewer than three cooperatives for any function. States with at least three cooperatives were: Alaska, 9; Connecticut, 4; Delaware, 3; Maine 24; South Carolina, 6; and Vermont, 5.

In 1999, grain and farm supply cooperatives operated an estimated 5,330 branches--2,163 and 3,167, respectively. There was a decrease of 136 branches for grain cooperatives and a decrease of 151 branches for farm supply cooperatives. Both grain and farm supply cooperatives averaged 2.4 branches per cooperative in 1999. In 1998, grain and farm supply cooperatives operated an estimated 5,617 branches.

Figure 2 shows that several of the largest cooperatives (mainly regional) had more branches than many smaller (local) cooperatives combined. The 51 largest grain cooperatives--5.7 percent of all grain cooperatives--accounted for 35.2 percent of the total number of branches operated by grain cooperatives. And the 94 largest farm supply cooperatives--7.2 percent of all farm supply cooperatives--had 1,663 branches, 52.5 percent of all farm supply branches.

Memberships

Memberships in marketing, farm supply, and related-service cooperatives totaled an estimated 3,173,323 in 1999, down 5.3 percent from 3,352,577 in 1998 (table 3).

By the cooperative's major business activity, 54.5 percent were memberships of farm supply cooperatives (figure 3) and 20.7 percent were of grain. Dairy cooperative memberships were only 2.9 percent of cooperatives' total memberships, but accounted for 26.2 percent of cooperatives' net business volume in 1999, up from 24.2 percent in 1998.

Among marketing cooperatives, memberships decreased in 1999 for every type except cotton.

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

Employees

Farmer cooperatives, like other businesses, employ full-time and, in most 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.

In 1999, farmer cooperatives employed an estimated 275,424 full-time, part-time and seasonal employees, up from 265,590 in 1998 (table 4) due to increased use of part-time employees. By type, marketing cooperatives had 192,920 employees (70 percent of

Figure 2— Branches of Grain and Farm Supply Cooperatives, by Size, 1999

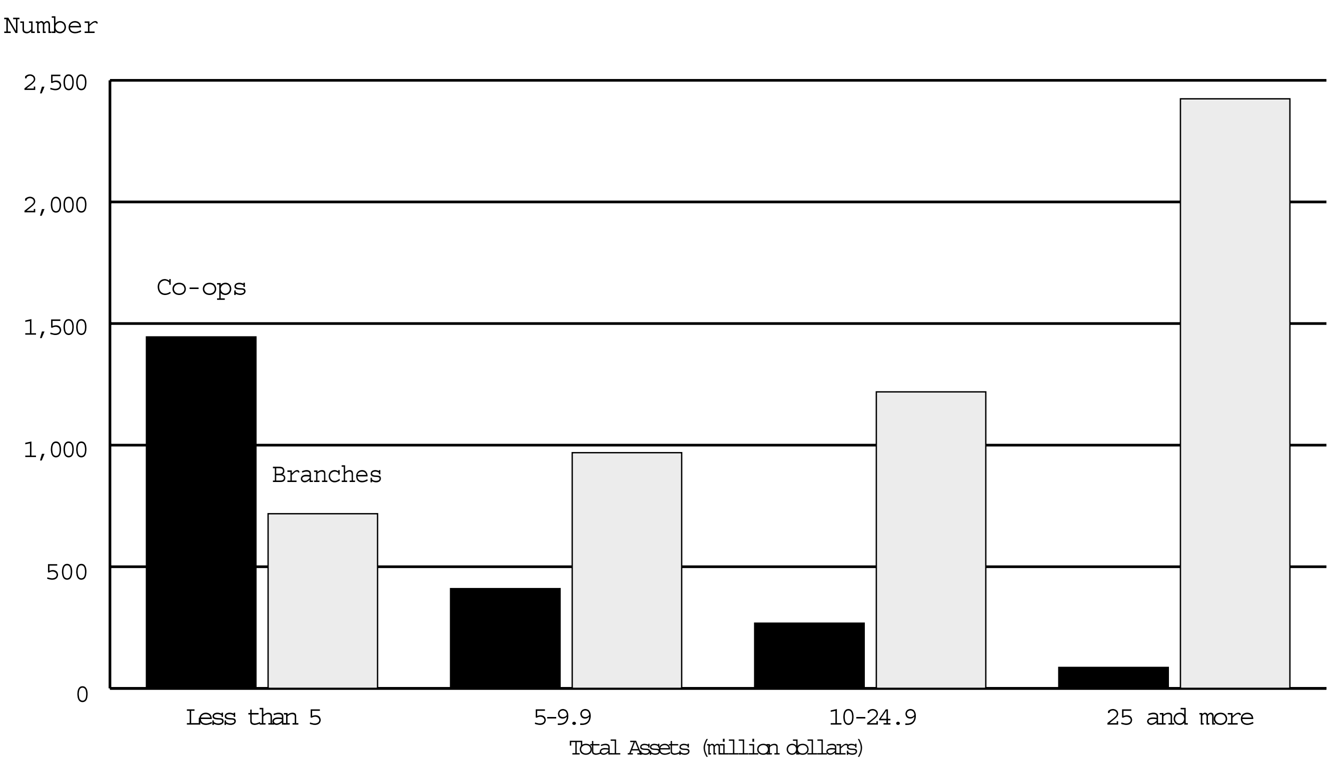


Table 3— Number of co-ops[1] and memberships[2], by major business activity and State,1999[3]

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

Continued

Table 3— Number of co-ops[1], and memberships[2], by major business activity and State,1999[3] (continued)

State	Hqts. in State	Memberships
LIVESTOCK		
Alabama	6	5,240
Hawaii	4	81
Idaho	3	4,355
Illinois	3	19,122
Indiana	3	2,081
Kentucky	4	868
Mississippi	4	4,225
Missouri	6	5,366
North Dakota	8	567
Ohio	4	7,425
Virginia	4	810
West Virginia	3	426
Wisconsin	5	60,617
Other States	24	25,871
United States	81	137,054
NUT		
California	7	6,764
Other States	11	36,985
United States	18	43,749
POULTRY[8]		
California	3	82
Utah	3	65
Other States	9	28,954
Foreign[5]	-	89
United States	15	29,190
RICE		
California	5	1,789
Louisiana	3	186
Texas	6	918
Other States	3	8,905
Foreign[5]	-	1
United States	17	11,799
SUGAR[9]		
Idaho	7	2,051
Louisiana	9	583
Michigan	7	2,117
Minnesota	3	2,467
Montana	3	517
Wyoming	4	455
Other States	15	7,511
Foreign[5]	-	2
United States	48	15,703

State	Hqts. in State	Memberships
TOBACCO[7]		
Kentucky	5	76,989
North Carolina	7	24,852
Tennessee	7	67,112
Virginia	3	739
Other States	3	334
United States	25	170,026
WOOL AND MOHAIR		
Idaho	4	159
Montana	19	861
North Dakota	4	412
Ohio	3	1,518
Pennsylvania	14	1,901
Utah	3	125
Virginia	8	590
West Virginia	10	899
Wyoming	3	183
Other States	16	8,710
Foreign[5]	-	82
United States	84	15,440
MISCELLANEOUS[10]		
Alaska	9	1,603
California	10	1,383
Florida	6	325
Georgia	3	80
Hawaii	6	562
Maine	15	924
Minnesota	5	11,069
Mississippi	3	186
North Dakota	6	2,322
Washington	5	707
Other States	22	4,695
United States	90	23,856
TOTAL MARKETING		
Alabama	10	14,498
Alaska	9	1,815
Arizona	5	2,191
Arkansas	11	12,460
California	113	34,903
Colorado	27	12,936
Florida	32	5,696
Georgia	8	23,931
Hawaii	21	1,300
Idaho	25	10,249
Illinois	119	116,926
Indiana	23	32,774
Iowa	121	99,245

Continued

Table 3— Number of co-ops[1] and memberships[2], by major business activity and State, 1999[3] (continued)

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

Continued

Table 3— Number of co-ops[1] and memberships[2], by major business activity and State, 1999 [3]

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

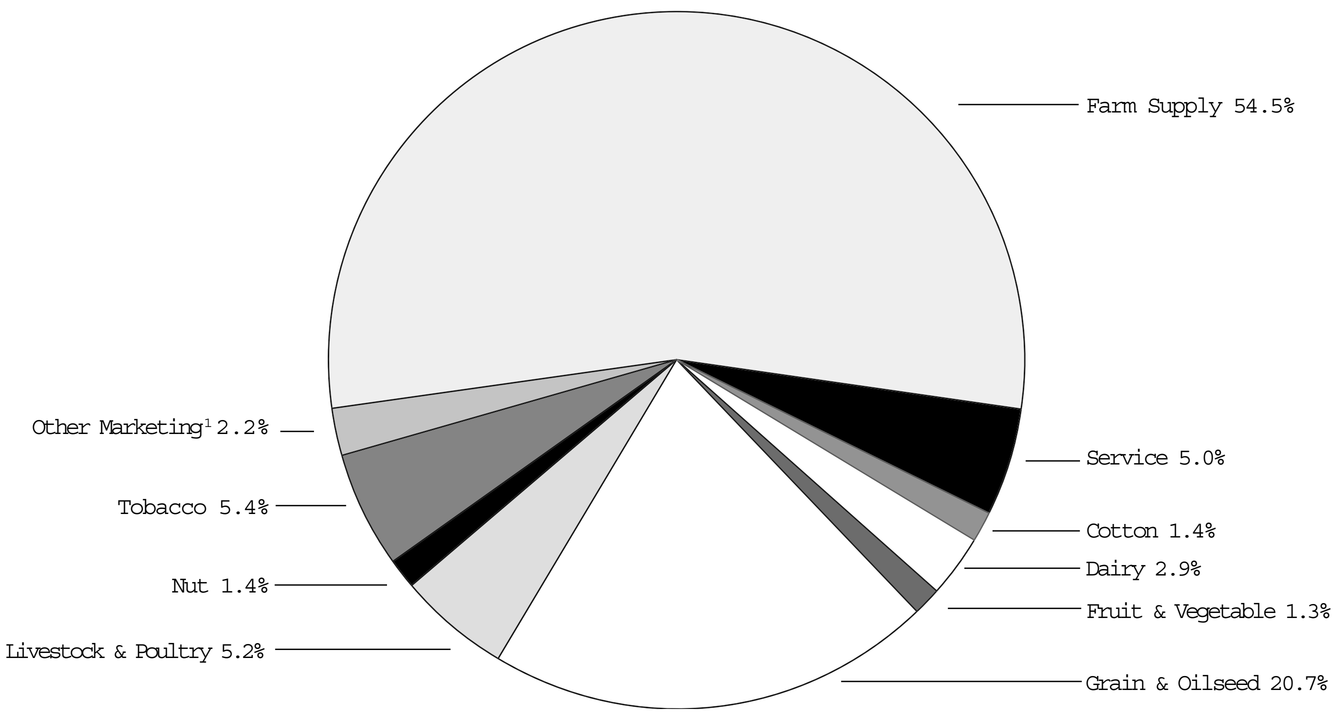
[1] Includes centralized and federated cooperatives and those with mixed organizational structures.
[2] Includes farmer-members (entitled to vote for directors), but not nonvoting patrons. (Duplication in these membership figures occurs because many farmers belong to more than one cooperative.) Totals may not add due to rounding.
[3] Data covering operations of cooperatives for fiscal years that ended in 1999. States listed are those with more than two cooperatives or where disclosure is not a problem.
[4] Cotton ginning cooperatives are included as service cooperatives.
[5] Includes memberships located in other countries.
[6] Excludes soybean meal and oil.
[7] Membership fluctuates annually and is affected by the extent to which producers participate in price stabilization programs.
[8] Includes eggs, turkeys, ratite, squab, and related products.
[9] Includes sugar, sugarcane, sugar beets, honey, maple syrup, molasses, and sorghum.
[10] Includes forest products, hay, hops, nursery stock, coffee, and other farm products not separately classified.
[11] Cooperatives providing services such as cotton ginning, livestock shipping, storing, grinding, drying, and artificial insemination.

Table 4— Full-time and part-time and seasonal employees of farmer cooperatives, by type of co-op, 1998-99

Principal product(s) marketed or major function	Full-time employees 1998	Full-time employees 1999	Part-time and seasonal [1] 1998	Part-time and seasonal [1] 1999
	Number			
Products marketed:				
Cotton	1,844	1,787	1,050	1,409
Dairy	27,056	24,598	925	1,875
Fruits & vegetables	23,734	23,329	34,321	48,004
Grains and oilseeds, excluding cottonseed	23,873	20,998	8,538	7,916
Livestock and poultry	28,031	32,690	13,776	2,666
Rice	2,655	2,600	231	1,443
Sugar	4,402	4,459	4,052	4,431
Other products [2]	8,474	8,525	2,173	6,190
Marketing	120,069	118,986	65,066	73,934
Farm supply	48,171	49,466	18,335	20,774
Service	5,551	4,499	8,398	7,765
Total	173,791	172,951	91,799	102,473

[1] Number of part-time and seasonal employees was estimated for all cooperatives based on the relationship of part-time and seasonal to full-time employees for the respondent cooperatives. Totals may not add due to rounding.
[2] Includes dry edible beans and peas, nuts, tobacco, wool, fishery, and miscellaneous marketing cooperatives.

Figure 3— Distribution of Memberships, by Type of Cooperative, 1999



Percent based on 3,173,323 total memberships.
[1] Includes dry bean and pea, wool and mohair, rice, sugar, fishery, and other miscellaneous marketing cooperatives.

Figure 4— Cooperative Memberships Grouped by Function and Gross Business Volume, 1999

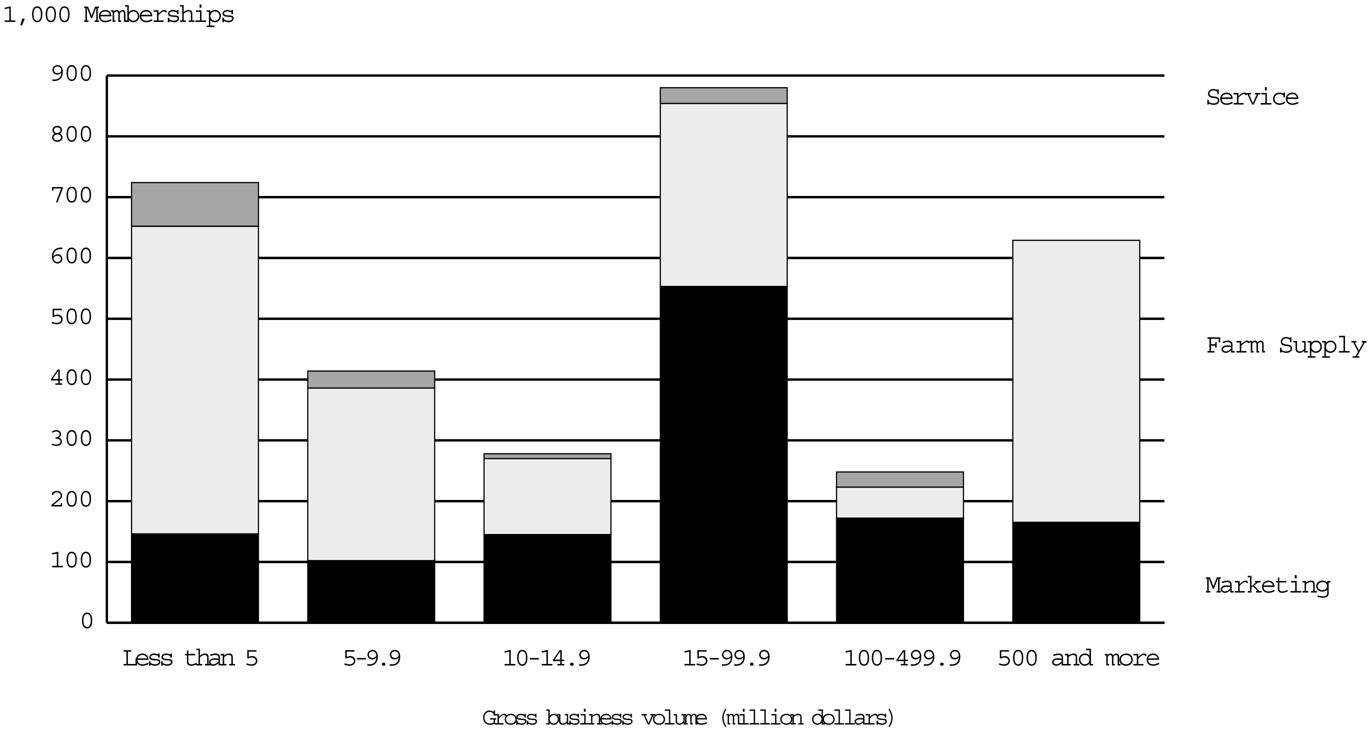
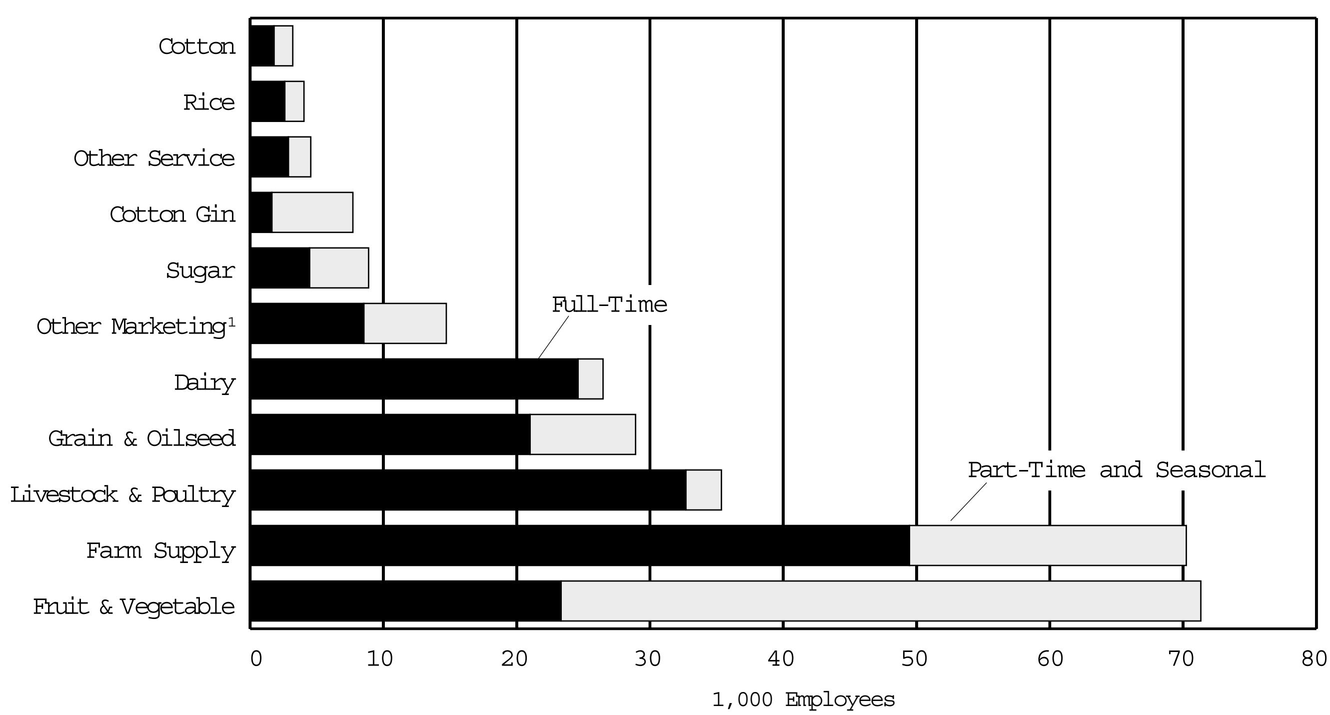


Figure 5— Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1999



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

total); farm supply cooperatives had 70,240 employees (25.5 percent); and related-service cooperatives had 12,264 employees (4.5 percent).

Among marketing cooperatives, those primarily handling fruits and vegetables had the most employees (71,333), followed by livestock and poultry (35,356) and grain and oilseed (28,914).

Figure 5 shows the number of full-time and part-time and seasonal employees by type of cooperative for 1999. Fruit and vegetable and farm supply cooperatives used the most employees and cotton cooperatives the fewest. Dairy cooperatives had the smallest proportion of total part-time and seasonal employees. Fruit and vegetable cooperatives, followed by cotton gin and sugar cooperatives, had the largest proportion of part-time and seasonal employees.

Full-time employees totaled 172,951 in 1999, down from 173,791 in 1998, or 0.5 percent. The number per association, however, was nearly 50, up from 48 in 1998, due to fewer cooperatives. The 1,749 marketing cooperatives employed 118,986 persons, down 0.9 percent from 1998. Livestock and poultry cooperatives, with 32,690, had the most full-time employees, while dairy cooperatives, with 24,598, ranked second. Together, they accounted for 48.1 percent of the full-time employees of marketing cooperatives.

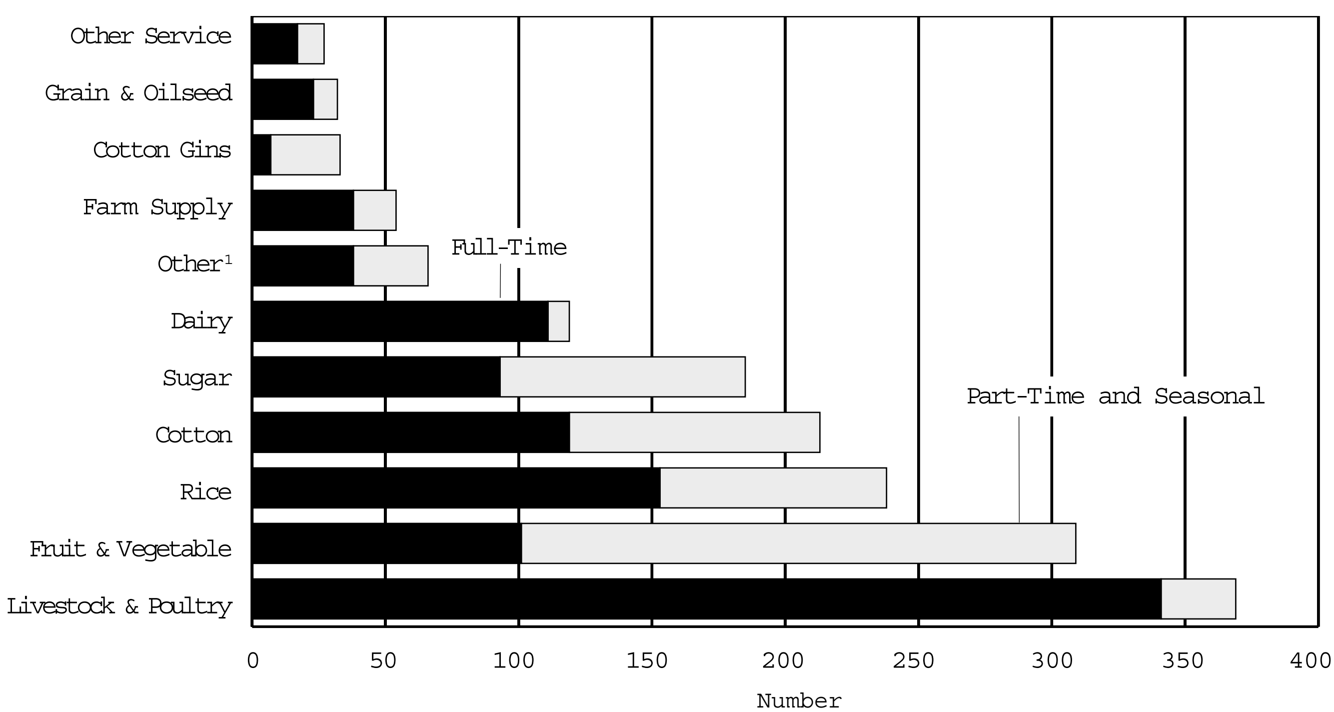
The 1,313 farm supply cooperatives hired 49,466 full-time employees, up 2.7 percent from 48,171 reported by 1,347 farm supply cooperatives for 1998. Full-time employees of the 404 related-service cooperatives totaled 4,499 in 1999, down from 5,551, or nearly 19 percent.

Cooperatives used 102,473 part-time and seasonal employees in 1999, up 10,674, or 11.6 percent, from 1998. Both marketing and farm supply cooperatives increased their use of part-time and seasonal employees.

In 1999, marketing cooperatives reported 73,934 part-time and seasonal employees, or 72.1 percent of the total. Number per cooperative averaged more than 42. Fruit and vegetable and grain cooperatives, with 55,920, accounted for 75.6 percent. Farm supply cooperatives had 20,774 part-time and seasonal employees, an average of 16.

Most types of marketing cooperatives operated with more employees than did farm supply cooperatives. For example, livestock and poultry cooperatives averaged more than 368 employees (figure 6).

Figure 6— Average Number of Full-Time and Part-Time and Seasonal Employees, by Type of Cooperative, 1999



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

Total Labor Expense

One of the largest expense items of any business is wages and benefits. Cooperatives are no exception. Hiring employees full-time or part-time and seasonally involves decisions on the number of employees and levels of salaries and wages. Other employee-related expenses include associated payroll taxes, health and life insurance, etc.

The average total labor expense per cooperative for those reporting in both 1998 and 1999 is shown in table 5. Average total labor expense (including director fees) is shown by type of cooperative and, in some cases, by asset group. This information can be used for comparing the average total labor expense of individual cooperatives of similar type and size. For those where no size grouping is shown, labor expense may not be a good barometer because of the mix of sizes included in the group.

Overall, total labor expense for the cooperatives reporting total wages and benefits both years was up 3.1 percent. Average total labor expense varied from 1998 to 1999 (table 5). The change ranged from a 15.6-percent decrease for rice cooperatives to an increase of 30.5 percent for miscellaneous marketing cooperatives. As expected, average total labor expense increased as size of cooperative increased, especially for dairy, fruit and vegetable and cotton gins. Average total labor expense for cooperatives involved in processing or manufacturing activities would be expected to be high.

Total Sales Per Dollar of Labor Expense

Labor productivity can be measured by examining the relationship between total sales and total labor expense. Table 6 shows total sales per dollar of total labor expense by type and size of cooperative, where applicable.

Total sales per dollar of total labor expense is relatively high for cooperatives involved in bargaining (dairy) or operating auctions (tobacco and livestock). In these situations, total labor requirements are low and sales are high. Surveyed cooperatives reported on the value of the product for which they bargained or which they auctioned off

Dairy cooperatives with assets of $500,000 to $1 million accounted for the highest sales per dollar of labor expense, $166.20 (table 6). Other service cooperatives with assets in the same range had the lowest sales per dollar of labor expense, $2.48.

Total sales per dollar of labor expense varied less as cooperative size increased for grain and oilseed and farm supply cooperatives than it did for dairy and fruit and vegetable cooperatives. Dairy cooperatives ranged from $23.53 to $166.20; fruit and vegetable cooperatives from $7.77 to $49.20; grain and oilseed cooperatives from $19.25 to $30.24; and farm supply cooperatives ranged from $8.54 to $12.04.

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

Business Size

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

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

In 1999, 77.4 percent of all farmer cooperatives reported a business volume of less than $15 million. However, they accounted for only 10.2 percent of the total gross dollar volume, up slightly from 9.9 percent in 1998 (table 7 and figure 7). Only 2.2 percent of farmer cooperatives reported a business volume of at least $200 million, but they accounted for 64.7 percent of the total sales, up from 63.1 percent in 1998. Cooperatives with a business volume in the range of $15 million to $200 million in 1999 accounted for a smaller share of all cooperatives' total gross dollar volume. In 1999, they accounted for 25.1 percent compared with 27.2 percent in 1998.

Business Volume

Total gross business volume of the 3,466 marketing, farm supply, and related-service cooperatives for 1999 was $115.3 billion (table 8), down 4.7 percent from $121 billion in 1998. Cooperatives' gross business volume peaked at $128.1 billion in 1996.

Total net business volume of farmer cooperatives in 1999 was $99.1 billion -- $72 billion from farm products marketed, $23.2 billion from farm supply sales, and $3.9 billion from services performed and from other income sources. The total net figure, excluding inter-cooperative business, was down from $104.7 billion in 1998. Cooperatives' net business volume reached a high of $106.7 billion in 1997. However, adjusting for price change, net business volume actual-

Table 5—Average total labor expense for cooperatives reporting, by selected type and size, 1998-99

Type of co-op and asset group (Mil. Dol.)	Average total labor expense[1] 1998	1999	Change
	$1,000		Percent
Dry bean and pea	2,274.1	2,392.5	5.2
Cotton	5,469.9	4,783.2	-12.6
Dairy	3,594.4	3,809.5	6.0
Less than 0.5	28.7	29.4	2.2
0.5 - .99	117.8	117.1	-0.6
1.0 - 2.49	180.6	186.0	3.0
2.5 - 24.99	1,087.1	1,163.5	7.0
25.0 and more	18,898.6	20,021.9	5.9
Fruit and vegetable	5,177.0	5,390.3	4.1
Less than 0.5	94.1	100.4	6.7
0.5 - .99	279.5	272.9	-2.4
1.0 - 2.49	783.7	873.0	11.4
2.5 - 24.99	2,207.3	2,077.8	-5.9
25.0 and more	18,509.1	19,541.6	5.6
Fruit and vegetable	5,177.0	5,390.3	4.1
Fresh only	1,866.5	1,899.4	1.8
Processed only	23,840.7	25,108.2	5.3
Fresh and processed	6,375.8	6,617.8	3.8
Grain and oilseed	872.0	897.1	2.9
Less than 0.5	114.4	115.0	0.5
1.0 - 2.49	218.6	227.2	3.9
2.5 - 24.99	899.2	936.1	4.1
25.0 and more	4,571.9	4,529.6	-0.9
Livestock	1,124.0	1,197.2	6.5
Nut	12,873.6	14,495.3	12.6
Poultry	85,246.7	99,479.5	16.7
Rice	6,416.3	5,412.5	-15.6
Sugar	28,697.8	30,336.9	5.7
Tobacco	159.4	164.3	3.1
Fishery	2,516.1	2,533.2	0.7
Miscellaneous marketing	886.7	1,157.2	30.5
Farm supply	1,569.2	1,628.5	3.8
Less than 0.5	77.5	76.3	-1.6
0.5 - .99	176.9	181.2	2.4
1.0 - 2.49	336.0	344.5	2.6
2.5 - 24.99	1,333.5	1,376.0	3.2
25.0 and more	24,615.2	25,763.5	4.7
Cotton gin	429.1	420.1	-2.1
Less than 0.5	126.2	110.8	-12.2
0.5 - .99	204.4	182.5	-10.7
1.0 - 2.49	348.0	337.5	-3.0
2.5 and more	815.2	819.5	0.5
Service	1,697.6	1,708.9	0.7
Less than 2.5	616.6	686.1	11.3
2.5 and more	1,494.3	1,520.2	1.7

[1] Includes wages and salaries, payroll taxes, employee benefits, and director fees.

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

Type of co-op and asset group	Sales per $1 labor expense[1]	Type of co-op and asset group	Sales per $1 labor expense[1]
Million Dollars	Dollars	Million Dollars	Dollars
Dry bean and pea	14.70	Livestock	58.91
Cotton	40.35	Nut	8.76
		Poultry	6.59
Dairy	28.83	Rice	12.20
Less than 0.5	125.42	Sugar	9.17
0.5 - .99	166.20	Tobacco	38.28
1.0 - 2.49	66.65	Wool	16.24
2.5 - 24.99	76.67	Fishery	8.05
25.0 and more	23.53	Misc. Marketing	5.15
Fruit and vegetable	9.54	Farm supply	9.86
Less than 0.5	49.20	Less than 0.5	12.04
0.5 - .99	31.85	0.5 - .99	8.54
1.0 - 2.49	32.87	1.0 - 2.49	10.19
2.5 - 24.99	11.81	2.5 - 24.99	9.76
25.0 and more	7.77	25.0 and more	9.92
Fruit and vegetable	9.54	Cotton gin	7.60
Fresh only	13.37	Less than 0.5	4.05
Processed only	7.68	0.5 - .99	6.06
Fresh and processed	8.37	1.0 - 2.49	8.15
		2.5 and more	7.71
Grain and oilseed	20.56		
Less than 0.5	30.24	Other service	2.85
0.5 - .99	19.25	Less than 0.5	2.99
1.0 - 2.49	26.28	0.5 - .99	2.48
2.5 - 24.99	20.11	1.0 - 2.49	2.62
25.0 and more	20.84	2.5 and more	2.88

[1] Labor expense includes wages and salaries, payroll taxes, employee benefits, and director fees. Sales includes receipts from marketings, farm supplies, and services, plus other income. Values considered not to be representative of each group were not included.

ly increased 4 percent,[2] due to both lower commodity prices and lower prices paid for production items in 1999.

Gross dollar volume of farm products marketed by cooperatives decreased 4.8 percent, from $84.5 billion in 1998 to $80.5 billion in 1999, due mainly to a 14.2-percent decrease in grain and oilseed marketings. The net volume of farm products marketed was $72 billion, or 72.7 percent of the total net volume of all cooperatives, down 6.1 percent from $76.6 billion in 1998.

Figure 8 illustrates the leading products marketed by cooperatives based on net marketing business volume. Dairy (milk and milk products) led with 36.1 percent, followed by grains and oilseeds (excluding cottonseed) with 23.8 percent, and fruits and vegetables with 12.9 percent. The proportions of milk and milk products and fruit and vegetables were up compared with 1998, because of a significant drop in cooperatives' grain business volume in 1999.

Gross volume of all farm supplies handled by cooperatives was $30.9 billion, down 6.3 percent from $33 billion in 1998. Net farm supply volume of nearly

[2] Deflated 1999 cooperative business volume was $103 billion, up 4 percent from the actual $99.1 billion in 1999. The $103 billion was derived by deflating farm products marketed by the index of prices received for all farm products and farm supplies (inputs) and service income by the index of prices paid by farmers for all production items adjusted for 1998 = 100.

Table 7— Farmer cooperatives and memberships, by gross business volume, 1999[1]

Volume group (mil. dol.)	Cooperatives		Dollar volume		Memberships[3]	
	Number	Percent of total	Gross[2] (mil. dol.)	Percent of total	Number (1,000)	Percent of total
Less than $5.0	1,719	49.6	3,345	2.9	724	22.8
5 - 9.9	657	19.0	4,666	4.0	414	13.1
10 - 14.9	306	8.8	3,748	3.3	277	8.7
15 - 24.9	281	8.1	5,415	4.7	257	8.1
25 - 49.9	262	7.5	9,178	8.0	341	10.8
50 - 99.9	129	3.7	8,878	7.7	282	8.9
100 - 199.9	37	1.1	5,429	4.7	64	2.0
200 - 499.9	38	1.1	11,460	9.9	185	5.8
500 - 999.9	20	0.6	13,211	11.5	133	4.2
1,000 and more	17	0.5	49,962	43.3	496	15.6
Total[4]	3,466	100.0	115,291	100.0	3,173	100.0

[1] Business volume includes revenues from marketing plus the value of products bargained for or handled on a commission basis, supply sales, service receipts, and other income.
[2] Includes intercooperative business volume.
[3] 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.
[4] Totals may not add due to rounding.

Figure 7— Distribution of Farmer Cooperatives and Gross Business Volume, by Size, 1999

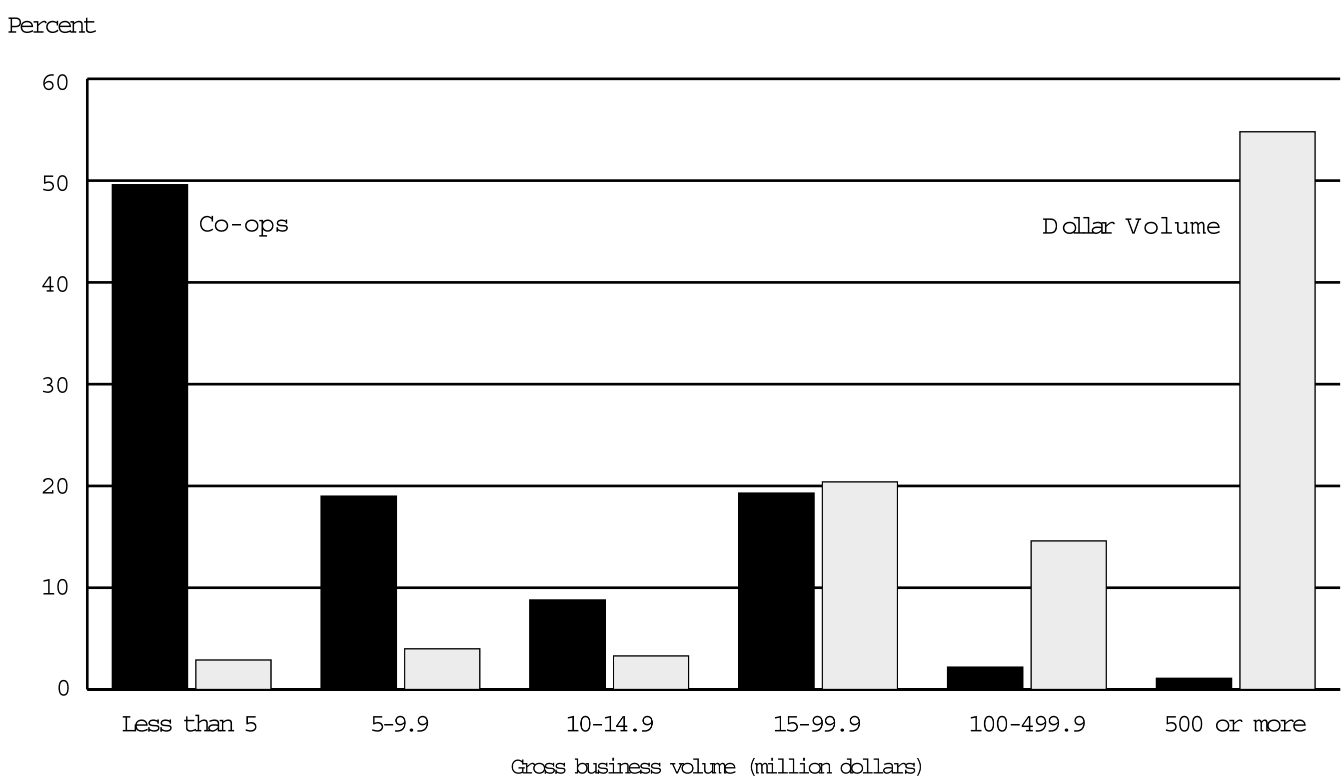


Table 8— Cooperatives' gross and net business volumes by commodity, 1999 [1]

Commodity	Gross volume		Net volume	
	Million dollars	Percent	Million dollars	Percent
Products marketed:				
Beans and peas (dry edible)	174.9	0.2	174.9	0.2
Cotton	2,175.1	1.9	2,083.4	2.1
Dairy	28,461.1	24.7	25,999.1	26.3
Fruits and vegetables	10,103.2	8.8	9,285.6	9.4
Grains and oilseeds, excluding cottonseed	21,748.9	18.9	17,113.1	17.3
Livestock	7,371.1	6.4	7,318.9	7.4
Nuts	899.1	0.8	899.1	0.9
Poultry [3]	2,225.9	1.9	2,225.9	2.3
Rice	911.7	0.8	911.7	0.9
Sugar	2,691.4	2.3	2,540.0	2.6
Tobacco	278.4	0.2	278.4	0.3
Wool and mohair	9.1	([2])	6.4	([2])
Miscellaneous [4]	3,456.3	3.0	3,145.5	3.2
Total farm products	80,506.3	69.8	71,981.9	72.7
Supplies purchased:				
Crop protectants	3,756.5	3.3	3,018.3	3.1
Feed	6,383.8	5.5	4,725.6	4.8
Fertilizer	7,251.8	6.3	4,758.6	4.8
Petroleum	8,142.3	7.1	6,259.8	6.3
Seed	1,072.0	0.9	752.1	0.8
Other supplies [5]	4,272.8	3.7	3,662.9	3.7
Total farm supplies	30,879.2	26.8	23,177.3	23.4
Services provided:				
Trucking, cotton ginning, storage, grinding, locker plants, misc. [6]	3,905.1	3.4	3,905.1	3.9
Total business	115,290.6	100.0	99,064.3	100.0

[1] Gross includes and net excludes inter-cooperative business. Totals may not add due to rounding.
[2] Less than 0.05 percent.
[3] Includes eggs, turkeys, ratite, squab, and related products.
[4] Includes coffee, fish, forest products, hay, hops, seed marketed for growers, nursery stock, other farm products not separately classified, and sales of farm products not received directly from member-patrons. Also includes manufactured food products and resale items marketed by cooperatives.
[5] Includes building materials, containers and packaging supplies, farm machinery and equipment, meats and groceries, automotive supplies, hardware, chicks, and other supplies not separately classified.
[6] Charges for services related to marketing or purchasing not included in the volume reported for those activities, plus other income.

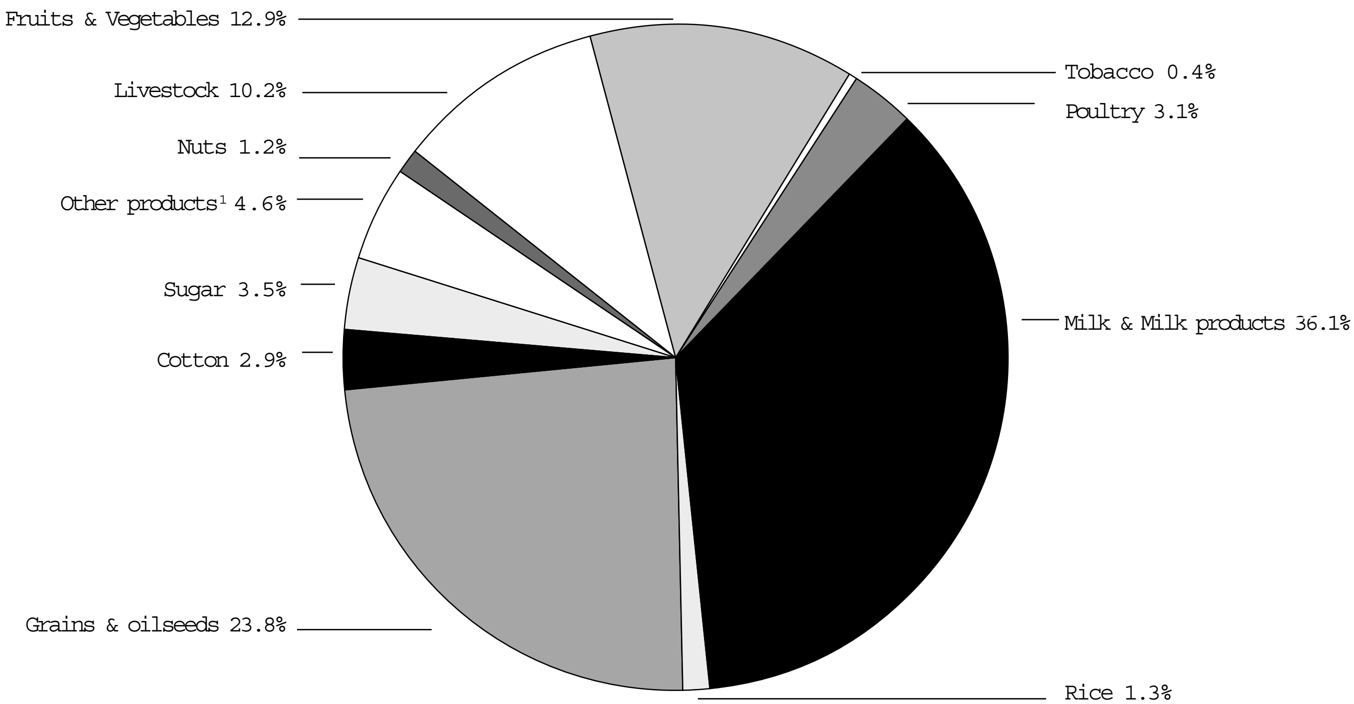
$23.2 billion, down 5.6 percent from $24.6 billion, accounted for 23.4 percent of the total net business volume.

The leading farm production supplies handled by cooperatives in terms of net business volume were petroleum, 27 percent; fertilizer, 20.5; and feed, 20.4 percent (figure 9). While sales of "other" supplies and seed were up in 1999, feed, fertilizer, petroleum and crop protectants were down.

Receipts for services provided by marketing, farm supply, and related-service cooperatives, plus other income, were up 12.4 percent to $3.9 billion. Service receipts and other income represented 3.9 percent of total net business volume.

Table 9 shows gross and net business volume by State. Sales were allocated to the States in which the product marketed was originated and the farm supplies were sold. Minnesota was the leading State in total gross and net business volume, with $11.5 billion and $9.3 billion, respectively. Iowa was second in gross business ($9.7 billion) and third in net business volume ($7.9 billion). Wisconsin ranked second in net business volume ($8 billion).

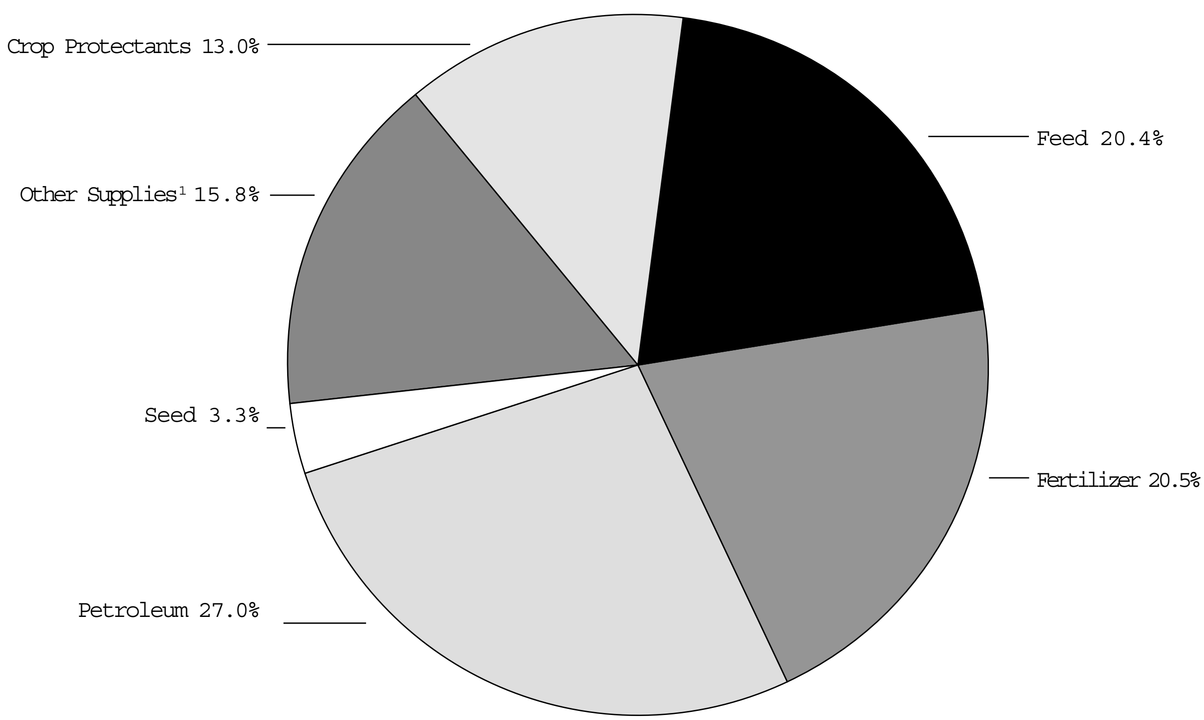
Figure 8– Relative Importance of Farm Products Marketed by Cooperatives, 1999



Percentage based on a total net marketing business volume of $72 billion.

[1] Includes dry beans and peas, wool and mohair, fish, and other miscellaneous marketings.

Figure 9– Relative Importance of Farm Supplies Handled by Cooperatives, 1999



Percentage based on a net farm supply business volume of $23.2 billion.

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

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2]

State	Business volume Gross	Net
	1,000 dollars	
PRODUCTS MARKETED:		
BEANS AND PEAS, DRY EDIBLE		
California	28,880	28,880
North Dakota	34,220	34,220
Other States	111,811	111,811
United States	174,910	174,910
COTTON		
California	338,669	301,339
Mississippi	344,347	335,916
Texas	643,255	603,575
Other States	848,669	842,516
Foreign [3]	164	90
United States	2,175,104	2,083,436
DAIRY		
California	2,391,308	2,227,535
Illinois	1,556,857	1,332,245
Iowa	1,479,705	1,339,633
Massachusetts	61,851	59,296
Minnesota	3,538,065	3,077,872
New Mexico	445,266	445,261
New York	1,919,806	1,595,244
North Dakota	299,275	269,538
Ohio	171,496	167,011
Oregon	368,274	365,447
Pennsylvania	417,285	384,182
Texas	778,184	778,134
Virginia	384,041	351,796
Wisconsin	6,016,152	5,375,842
Other States	8,550,276	8,155,556
Foreign [3]	83,300	74,554
United States	28,461,141	25,999,144
FRUITS AND VEGETABLES		
Arizona	329,596	269,241
Arkansas	902	902
California	3,474,530	3,148,643
Colorado	20,239	20,239
Florida	1,166,016	1,061,925
Hawaii	12,626	12,626
FRUITS AND VEGETABLES (Continued)		
Idaho	325,974	325,974
Maine	7,608	7,608
Massachusetts	504,928	504,928
Michigan	754,320	608,765
Minnesota	1,680	1,680
New Jersey	192,405	192,405
New York	596,669	492,360
North Carolina	31,567	30,411
North Dakota	13,280	13,280
Ohio	5,797	5,797
Oregon	441,857	437,449
Pennsylvania	360,796	345,989
Texas	49,526	49,526
Washington	1,069,619	1,052,079
Other States	679,937	640,424
Foreign [3]	63,306	63,306
United States	10,103,179	9,285,557
GRAINS AND OILSEEDS, EXCLUDING COTTONSEED		
California	17,886	17,886
Colorado	245,902	219,298
Idaho	74,986	49,333
Illinois	1,937,955	1,796,586
Indiana	540,602	520,887
Iowa	3,246,310	2,706,494
Kansas	2,428,666	1,863,224
Michigan	93,916	87,265
Minnesota	3,028,311	2,162,165
Mississippi	99,614	97,834
Missouri	900,105	539,806
Montana	294,975	175,777
Nebraska	2,382,799	1,796,787
North Dakota	1,531,751	1,163,718
Ohio	793,111	770,065
Oklahoma	472,981	330,938
South Dakota	1,156,173	953,379
Texas	689,855	436,886
Washington	487,736	430,194
Other States	1,113,111	880,156
Foreign [3]	212,139	114,372
United States	21,748,886	17,113,050

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

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

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

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

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

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

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

State	Business volume Gross	Business volume Net
	1,000 dollars	
FERTILIZER (continued)		
Wisconsin	284,719	193,122
Wyoming	26,225	21,814
Other States	156,703	140,832
Foreign [3]	363,930	61,392
United States	7,251,827	4,758,603
PETROLEUM		
Alabama	5,394	4,665
Arkansas	64,938	57,075
California	6,049	4,851
Colorado	240,186	179,988
Florida	6,965	6,790
Georgia	55,256	43,603
Idaho	112,241	95,430
Illinois	508,820	417,297
Indiana	373,357	279,410
Iowa	734,837	522,885
Kansas	899,544	321,019
Kentucky	134,477	85,481
Louisiana	9,364	8,544
Maryland	56,698	51,487
Massachusetts	11,675	11,675
Michigan	91,825	80,083
Minnesota	712,220	543,442
Mississippi	18,336	16,303
Missouri	429,060	391,454
Montana	207,832	179,308
Nebraska	471,912	376,582
New Jersey	26,389	26,389
New York	186,910	182,510
North Dakota	336,612	288,090
Ohio	110,336	97,568
Oklahoma	150,965	109,539
Oregon	168,271	151,795
Pennsylvania	168,729	166,927
South Dakota	273,185	239,992
Tennessee	137,210	98,379
Texas	146,197	102,218
Utah	57,289	47,187
Virginia	166,058	144,544
Washington	203,649	179,684
West Virginia	6,378	6,378

State	Business volume Gross	Business volume Net
	1,000 dollars	
PETROLEUM (continued)		
Wisconsin	551,439	484,625
Wyoming	114,149	104,007
Other States	95,742	91,813
Foreign [3]	91,774	60,790
United States	8,142,266	6,259,807
SEED		
Alabama	66,868	15,143
Arkansas	28,446	28,253
California	17,792	17,792
Colorado	4,090	4,089
Florida	19,855	15,910
Georgia	6,367	5,856
Idaho	20,703	6,181
Illinois	111,449	67,215
Indiana	35,995	26,032
Iowa	103,810	62,304
Kansas	14,401	14,401
Kentucky	30,616	28,830
Louisiana	9,498	9,370
Maryland	9,878	9,240
Massachusetts	1,100	1,100
Michigan	9,404	9,404
Minnesota	64,306	48,170
Mississippi	18,776	18,521
Missouri	91,694	35,630
Montana	10,006	6,779
Nebraska	20,752	15,912
New Jersey	2,121	2,121
New York	17,128	17,128
North Dakota	33,565	28,723
Ohio	29,330	29,330
Oklahoma	4,777	4,777
Oregon	12,014	12,014
Pennsylvania	14,339	14,339
South Dakota	26,959	21,796
Tennessee	68,588	37,777
Texas	16,577	16,577
Utah	3,201	3,144
Virginia	26,501	25,097
Washington	25,636	24,023
West Virginia	4,267	4,011

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

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

Continued

Table 9— Cooperatives' business volume[1], by commodity and State, 1999[2] (continued)

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

See footnotes next page

Table 9.

[1] Data covering operations of cooperatives whose business years ended in calendar 1999. Includes independent local cooperatives, federations, centralized regionals, and those with mixed organizational structures. Products marketed were allocated to the States in which they were originated and farm supply sales were allocated to the States in which they were sold; service volume and other income were allocated to the States of origin when services related to farm products marketed or to the State of destination when related to farm supplies sold.

[2] Gross business volume includes sales between cooperatives while net business volume excludes such sales. States listed had more than two cooperatives handling the commodity or farm supply or where disclosure was not a problem. Totals may not add due to rounding.

[3] Includes value of farm products imported, farm supplies exported, services related to imported farm products or exported farm supplies, sales to domestic military installations, or sales of farm products not received directly from member-patrons.

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

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

[6] Includes building supplies, containers and packaging supplies, farm machinery and equipment, animal health products, automotive supplies, food, hardware, chicks, and other supplies not separately classified.

[7] Income from services related to marketing and purchasing activities not included in the volumes reported for these activities.

In 1999, Iowa was the leading State in both gross and net sales of farm supplies, with $3.3 billion and $2.3 billion, respectively. Minnesota was second.

Net Income

Total net income (adjusted for losses and before taxes) for all cooperatives in 1999 was $1.3 billion, including inter-cooperative dividends and refunds (table 10). Cooperatives operating strictly on a pooling basis were excluded. Net income was down 23.8 percent from the $1.7 billion in 1998. Patronage refunds received from other cooperatives, including CoBank, totaled $383.5 million, down 33.1 percent from $573 million in 1998.

Marketing cooperatives' total net income of $871.1 million was down 14.4 percent from the $1,017.5 million generated in 1998. The drop in net income was mainly due to decreased net income by dairy and grain cooperatives. However, grain and dairy cooperatives together, accounted for most (69 percent) of marketing cooperatives' net income and 45.3 percent of total net income (figure 10).

Total net income of farm supply cooperatives was $352.5 million in 1999, down 39.1 percent from $578.8 million in 1998. They accounted for 26.5 percent of cooperatives' total net income in 1999, compared with 33.2 percent in 1998. Income from their own operations, excluding patronage refunds from other cooperatives and CoBank, was $183 million, down 39.3 percent from $301.6 million in 1998.

Farmer cooperatives' net income from own operations in 1999 totaled $944.5 million, down 19.2 percent from $1,169.3 million. Nearly 28.9 percent, or $383.5 million, of total net income ($1,328.1 million) was generated by other cooperatives and CoBank, down 33.1 percent from $573 in 1998. The proportion generated by other cooperatives in 1998 was 32.9 percent. Marketing cooperatives' net income from other cooperatives, including CoBank, totaled $184.2 million and accounted for 21.1 percent of their total, down from $269.3 million and 26.5 percent in 1998. Grain cooperatives' net income from other cooperatives totaled $125.9 million, or 38.8 percent of their total, down from $200.1 million, or 45.3 percent in 1998.

Income before adjusting for losses was $1,612.2 million. Losses totaled $284.1 million in 1999, down from $379.9 million in 1998. Number of cooperatives with losses was down significantly,from 601 to 522. The decrease in losses for 1999 was mainly due to decreased losses by livestock and poultry cooperatives, from $148.2 million in 1998 to $9.9 million in 1999.

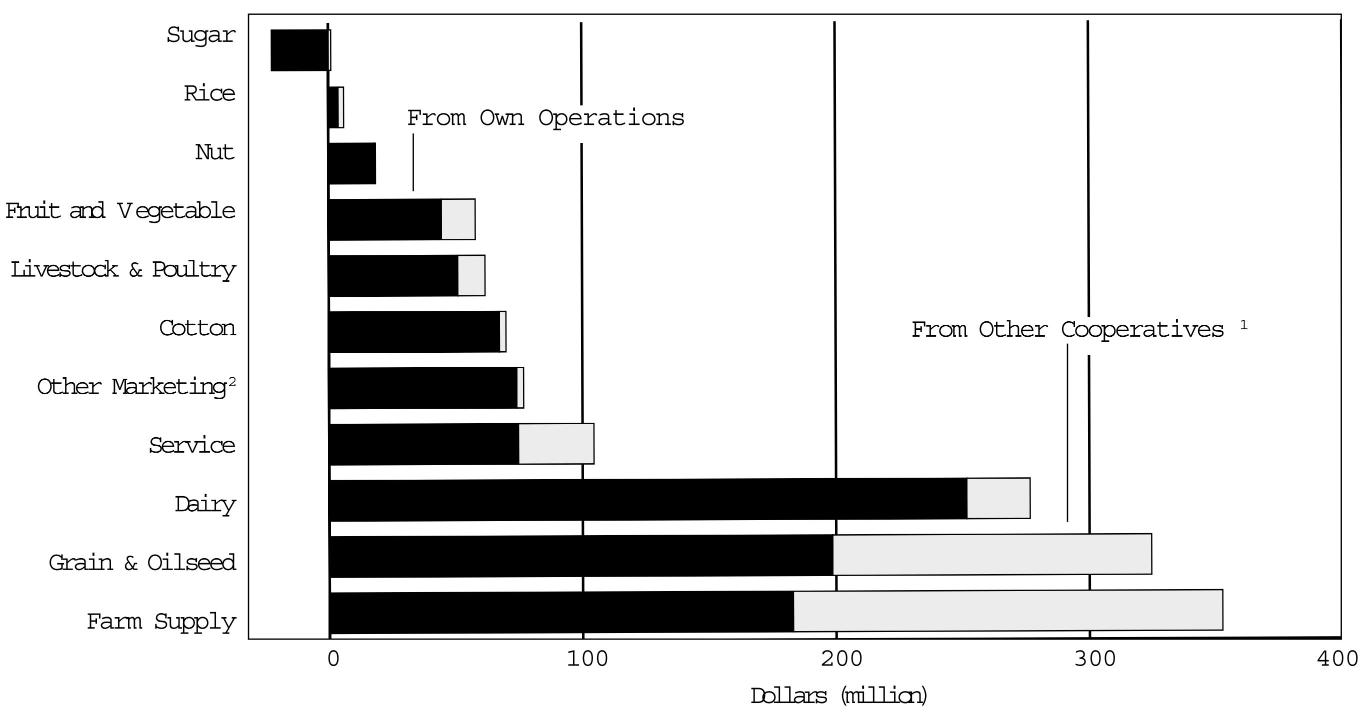
Marketing cooperative losses totaled $153.6 million in 1999, compared with $337.7 million in 1998. Related-service cooperative losses totaled $6.4 million, compared with $20.6 million. Losses among farm supply cooperatives were up significantly,from $21.3 million in 1998 to $124.1 million in 1999.

Table 10— Farmer cooperatives' net income, 1999

Principal product(s) marketed and major function	Co-ops[1]	Total net income	Income from own operations	Income from other co-ops[2]
	Number	Million dollars		
Products marketed:				
Cotton	15	69.9	67.3	2.6
Dairy	221	276.6	251.6	25.0
Fruits & vegetables	231	57.9	44.5	13.4
Grains and oilseeds, excluding cottonseed	896	324.5	198.6	125.9
Livestock and poultry	96	61.7	50.9	10.8
Rice	17	6.1	3.9	2.2
Sugar	48	-21.1	-22.1	1.0
Other products[3]	225	95.4	92.2	3.2
Total marketing	1,749	871.1	686.9	184.2
Total farm supply	1,313	352.5	183.0	169.5
Total related-service	404	104.5	74.7	29.8
Combined total[4]	3,466	1,328.1	944.5	383.5

[1] Includes number of cooperatives operating on a strictly pooling basis, but not their pool proceeds.
[2] Includes patronage refunds from CoBank.
[3] Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.
[4] Totals may not add due to rounding.

Figure 10— Net Income or Loss by Type of Cooperative, 1999



[1] Includes dividends and patronage refunds from other farmer cooperatives, and CoBank.
[2] Includes dry bean and pea, nut, tobacco, wool and mohair, fishery, and other miscellaneous marketing cooperatives.

Table 11– Combined balance sheet data for farmer cooperatives, 1999[1]

Principal product(s) marketed and major function	Co-ops	Total assets	Total liabilities	Net worth
	Number	Million dollars		
Products marketed:				
Cotton	15	909.7	519.7	390.0
Dairy	221	7,771.9	4,815.6	2,956.3
Fruits & vegetables	231	6,067.8	4,288.4	1,779.4
Grains and oilseeds, excluding cottonseed	896	7,015.5	3,543.1	3,472.4
Livestock and poultry	96	4,688.5	3,220.7	1,467.8
Rice	17	554.7	300.2	254.5
Sugar	48	2,224.8	1,321.4	903.4
Other products [2]	225	3,101.8	1,504.7	1,597.1
Total marketing	1,749	32,334.7	19,513.9	12,820.9
Total farm supply	1,313	14,435.7	7,532.4	6,903.3
Total related-service	404	911.3	372.1	539.2
Combined total	3,466	47,681.7	27,418.3	20,263.4

[1] Totals may not add due to rounding.

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

Balance Sheet

Combined assets for all farmer cooperatives totaled nearly $47.7 billion in 1999, up 2.4 percent from $46.6 billion in 1998 (table 11). The increase in total assets was partly due to a 14.4-percent increase in investments in other cooperatives, from $4.7 billion in 1998 to $5.4 billion in 1999. Total assets of cooperatives, excluding inter-cooperative investments, was up 1.1 percent to $42.3 billion, compared with $41.9 billion in 1998.

Total liabilities was $27.4 billion, up 3.1 percent from $26.6 billion in 1998. Net worth, or member and patron equity, was $20.3 billion, up 1.6 percent from $20 billion in 1998. The proportion of total assets financed by member and patron equity decreased slightly, from 42.9 percent to 42.5 percent.

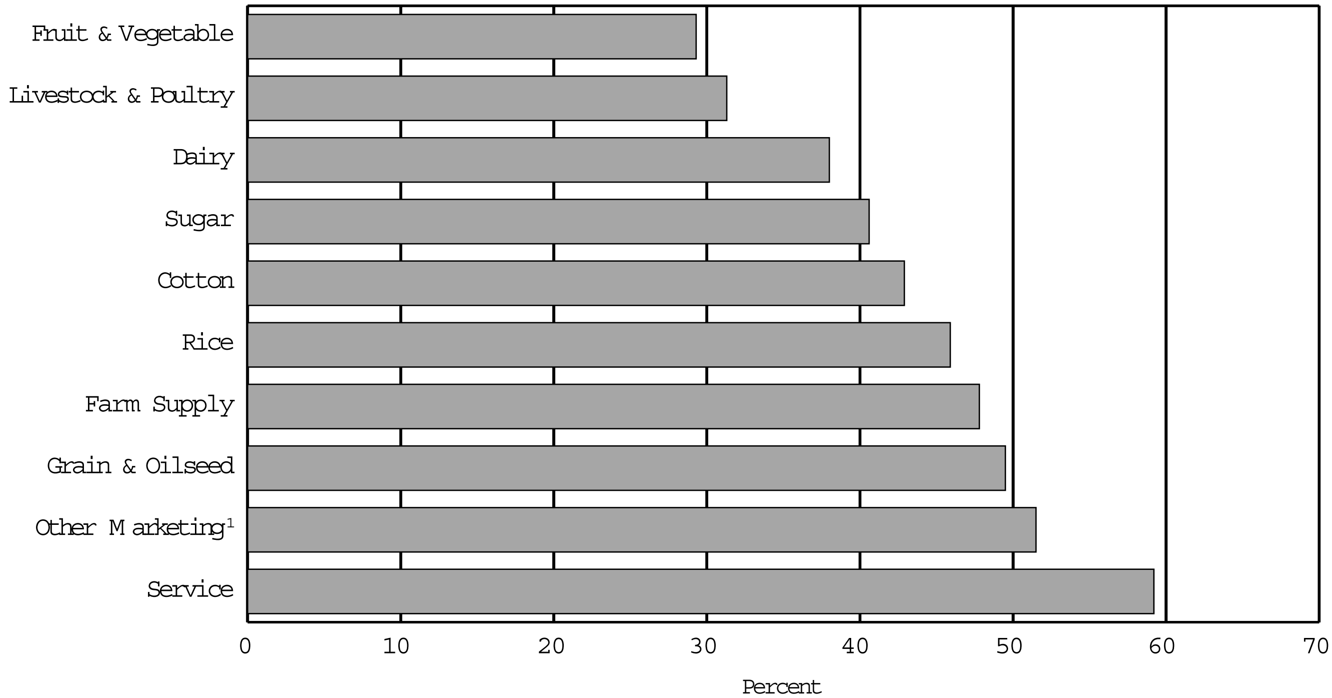
Net worth, or member and patron equity, for all marketing cooperatives totaled $12.8 billion, up 1.3 percent from 1998. Marketing cooperatives accounted for 63.3 percent of farmer cooperatives' combined net worth, down slightly from 63.4 percent in 1998. The net worth figure for farm supply cooperatives was 34.1 percent of the total, up from 33.9 percent. For marketing cooperatives, the highest percentage of total assets represented by net worth shown in figure 11 (51.5 percent) was for those marketing primarily "other" products. The lowest, 29.3 percent, was for cooperatives marketing primarily fruits and vegetables. Marketing and farm supply cooperatives had 39.7 percent and 47.8 percent, respectively, of their assets financed by net worth.

Of the $47.7 billion in total assets, marketing cooperatives accounted for $32.3 billion, up slightly (.9 percent) from 1998. Cooperatives primarily handling grains and oilseeds (excluding cottonseed) had total assets of $7 billion in 1999, down 12.7 percent from $8 billion in 1998. Among the marketing cooperatives, those with primarily grain also maintained the largest proportion of their assets as investments in other cooperatives in both 1999 (16.4 percent) and 1998 (15.5 percent). Dairy cooperatives had 15 percent of their assets invested in other cooperatives, up from 9.6 percent in 1998 (table 12).

Assets of marketing cooperatives, excluding investments in other cooperatives and CoBank, totaled $29.2 billion, down 1.0 percent from $29.5 billion in 1998.

Farm supply cooperatives had total assets of $14.4 billion, compared with $13.7 billion in 1998, up 5.7 percent. Excluding inter-cooperative investments, total assets was up 5.9 percent, from $11.7 billion in 1998 to $12.3 billion.

Figure 11— Percentage of Cooperatives' Assets Financed by Net Worth, by Type of Cooperative, 1999



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

Table 12— Combined assets for farmer cooperatives, 1999[1]

Principal product(s) marketed and major function	Co-ops[2]	Assets of own operations	Investments in other co-ops[3]	Total assets	Investments in other co-ops as percent of total
	Number	Million dollars			Percent
Products marketed:					
Cotton	15	881.8	27.9	909.7	3.1
Dairy	221	6,606.6	1,165.4	7,771.9	15.0
Fruits & vegetables	231	5,861.0	206.8	6,067.8	3.4
Grains and oilseeds, excluding cottonseed	896	5,865.4	1,150.1	7,015.5	16.4
Livestock and poultry	96	4,201.8	486.7	4,688.5	10.4
Rice	17	538.1	16.6	554.7	3.0
Sugar	48	2,181.6	43.2	2,224.8	1.9
Other products[4]	225	3,029.0	72.8	3,101.8	2.3
Total farm products	1,749	29,165.4	3,169.3	32,334.7	9.8
Total farm supplies	1,313	12,343.7	2,092.0	14,435.7	14.5
Total selected services	404	821.0	90.3	911.3	9.9
Combined total	3,466	42,330.1	5,351.6	47,681.7	11.2

[1] Totals may not add due to rounding.
[2] Many cooperatives have multiproduct and multifunctional operations. Most are classified according to predominant commodity or function, as indicated by business volume.
[3] Also includes investments in CoBank.
[4] Includes dry edible beans and peas, nuts, tobacco, wool, and miscellaneous products.

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 can't solve problems, they can serve as guidelines for planning 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 indicate 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 shows 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) best measures a cooperative's ability to meet short-run obligations.

Table 13 presents the values of these ratios for the cooperatives reporting to RBS. Extreme high and low values were excluded so those used would be more representative of the cooperatives reporting. Ratios are also shown by selected asset category for those cooperatives where sufficient information was available. These ratios offer cooperative leaders a general barometer to use in comparing their operations with others of the same type (and/or size).

The return on assets (net income/assets) varied considerably. It was negative for sugar, small cotton gins, small farm supply cooperatives, the smaller fruit and vegetable cooperatives, and livestock cooperatives with assets in the range of $2.5 million to $25 million. The ratio was highest (17.2) for the largest group of cotton ginning cooperatives. For dairy, the ratio was highest for those cooperatives with assets of $25 million to $99.9 million, similar to what was reported in 1998. Among grain cooperatives, the largest return (although small) came from the largest cooperatives.

The net worth-to-assets ratio ranged from a low of 25.1 percent for the largest fruit and vegetable cooperatives to a high of 99.4 percent for the 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 6.9 percent for mid-sized livestock cooperatives to a high of 16.2 percent for the largest cotton ginning cooperatives. Few cooperatives generated a return on sales above 3 percent (only 11 of the 50 groups shown in table 13).

The sales-to-assets ratio ranged from a high of 52.9 for the small dairy (bargaining) cooperatives to a low of 0.4 for the tobacco cooperatives. Among dairy, fruit and vegetable, grain, and cotton ginning cooperatives, the ratio tended to decrease as cooperative size increased. Generally, this reflects the large investment in processing or manufacturing equipment typical of the larger dairy and fruit and vegetable cooperatives. The sales-to-assets ratios for farm supply cooperatives varied little with cooperative size. Most of these cooperatives are less involved in manufacturing or processing than the larger marketing cooperatives.

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

The current ratio (current assets/current liabilities) ranged from a low of 1.1 for fruit and vegetable cooperatives with assets of $25 million to $99.9 million and sugar cooperatives, to 17.6 for tobacco cooperatives. Smaller cooperatives' current liabilities are generally low, but become larger in relation to current assets as business grows.

Crop Protectant Operations of Local Cooperatives

To conduct a special study of the crop protectant operations of local farm supply and marketing cooperatives, specific questions regarding the handling of crop protectants were included in the questionnaires. More than 380 local farm supply and marketing cooperatives provided information about their crop protectant sales, source, competition, type of competition, and services. These cooperatives represented 43 percent of all locals that sold crop protectants.

In 1999, crop protectant sales of respondents totaled $830 million, or nearly 37 percent of all locals' crop protectant sales. The information gathered was compared with crop protectant sales data for the past nine years and to the results of a similar 1996 fertilizer study.

Questionnaires were mailed to local cooperatives with crop protectant sales in excess of $0.5 million. Most were larger cooperatives, for which crop protectant sales averaged $2.2 million, farm supply sales averaged $10.6 million, and marketing sales averaged

Table 13— Selected financial ratios for cooperatives, 1999[1]

Type of co-op and asset group (mil. dol.)	Return on assets[2]	Net worth to assets[3]	Return on sales[4]	Sales to assets[5]	Current ratio[6]
	Percent			Number	
Cotton	7.8	42.6	2.8	2.8	1.5
Less than $25	11.5	30.5	4.6	2.5	1.2
$25 and more	7.4	43.6	2.7	2.8	1.5
Dairy[7]	3.6	38.7	1.0	3.8	1.3
Less than $.99	1.1	58.8	0.02	52.9	1.5
$1.0 - $2.49	7.3	47.5	0.6	11.6	1.3
$2.5 - $24.99	5.2	38.3	0.5	11.2	1.2
$25.0 - $99.99	7.6	38.3	1.3	5.8	1.2
$100.0 and more	3.1	38.7	0.9	3.3	1.3
Fruit and vegetable	2.7	26.2	1.6	1.7	1.4
Less than $0.5	-0.6	69.4	-0.02	28.1	2.8
$0.5 - $.99	-3.4	84.9	-0.1	25.4	4.1
$1.0 - $2.49	-2.7	54.3	-0.9	3.2	1.6
$2.5 - $24.99	10.4	36.1	3.7	2.8	1.2
$25.0 - $99.99	0.9	26.8	0.5	1.7	1.1
$100.0 and more	2.5	25.1	1.6	1.6	1.5
Grain and oilseed[8]	4.6	49.1	1.9	2.4	1.3
Less than $.99	4.4	72.3	1.0	4.3	2.4
$1.0 - $2.49	3.7	68.2	1.1	3.4	2.0
$2.5 - $24.99	4.6	51.7	1.8	2.6	1.3
$25.0 and more	4.7	43.0	2.2	2.1	1.2
Livestock[7]	0.4	29.4	0.1	3.5	1.3
Less than $2.49	1.7	68.6	0.1	23.3	3.1
$2.5 - $24.99	-11.3	29.9	-6.9	1.6	1.2
$25.0 and more	0.5	29.4	0.2	3.5	1.3
Nut	2.9	42.5	1.6	1.8	1.9
Poultry	3.9	35.3	1.3	3.1	1.4
Rice	1.1	48.9	0.4	2.4	1.5
Sugar	-1.2	41.8	-1.2	1.0	1.1
Tobacco	5.7	99.4	14.3	0.4	17.6
Misc. marketing	2.7	53.2	1.5	1.9	1.6
Fishery	0.4	48.3	0.2	2.7	1.4
Farm supply	2.0	45.6	1.1	1.8	1.4
Less than $0.5	-5	77.4	-2	2.3	3.2
$0.5 - $.99	3.0	71.3	1.5	2.0	2.3
$1.0 - $2.49	5.2	71.4	2.5	2.1	2.3
$2.5 - $24.99	4.9	59.9	2.6	1.9	1.5
$25.0 - $99.99	4.4	46.2	2.0	2.2	1.3
$100.0 - $499.99	5.2	46.9	3.3	1.6	1.4
$500.0 and more	0.1	39.1	0.1	1.7	1.3
Artificial insemination	6.3	62.4	2.1	3.0	1.8

Continued

Table 13— Selected financial ratios for cooperatives, 1999[1] (continued)

Type of co-op and asset group (mil. dol.)	Return on assets[2]	Net worth to assets[3]	Return on sales[4]	Sales to assets[5]	Current ratio[6]
	---------- Percent ----------			----- Number -----	
Cotton gins	15.6	65.1	12.6	1.2	1.5
Less than $0.5	-1.6	40.4	-1.1	1.4	1.3
$0.5 - $.99	8.9	59.0	5.0	1.8	1.8
$1.0 - $2.49	13.0	71.3	8.0	1.6	2.0
$2.5 and more	17.2	63.9	16.2	1.1	1.4
Other service[9]	6.2	48.5	7.3	0.9	1.3
Less than $.99	1.8	73.6	1.2	1.6	1.3
$1.0 - $2.49	12.4	50.1	10.9	1.1	1.6
$2.5 and more	5.6	47.1	7.1	0.8	1.3

[1] 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. Extreme values not representative of the group were excluded.
[2] Includes net income before any income taxes are deducted. Calculated by dividing net income by total assets. Usually referred to as the return on assets.
[3] Net worth, or member equity, is the book value of the assets owned by members. The ratio was calculated by dividing total net worth by total assets.
[4] Total sales includes service receipts, other income, and patronage refunds received from other cooperatives, and CoBank. The return on sales was found by dividing net income by total sales.
[5] Calculated by dividing total sales by total assets.
[6] The current ratio was derived by dividing current assets by current liabilities. These data were taken from annual reports where provided.
[7] Includes bargaining cooperatives.
[8] Excludes cottonseed.
[9] Includes cooperatives providing primarily services related to storage, transportation, livestock shipping, and rice drying.

$11.1 million in 1999. Crop protectant sales growth was fairly steady, increasing almost 11 percent per year from 1991 to 1999.

An analysis of local cooperative crop protectant operations showed the following:

- Herbicides comprised 81 percent of all crop protectant sales, insecticides 14 percent, fungicides 3 percent, and all other 2 percent.
- Most locals purchased their crop protectants from regional cooperatives. Regionals provided nearly 68 percent of herbicides and insecticides, and almost 50 percent of fungicides and all other crop protectants sold by locals.
- Investor-owned crop protectant suppliers were the primary competitors. Other cooperatives were a close second. Price was, most often, the major competitive factor.
- More than 95 percent of the cooperatives provided crop protectant applications, 93 percent crop/agronomy specialists, 83 percent soil testing for organic matter, and 76 percent crop protectant records. Services offered varied by cooperative size. Larger cooperatives with higher sales volumes offered services most often.
- Cooperatives embraced technology--global positioning system (GPS) and global information system (GIS)--in applying crop protectants. Sixty-eight percent offered field mapping using this technology. GPS and GIS were also used for record keeping by cooperatives with 48 percent of the crop protectant volume and by those with 57 percent of the application equipment.

III—COOPERATIVE TRENDS, 1990-99

Although the number of cooperatives decreased during the past decade, their business volume increased, until recent years. Cooperatives continue to adjust to the changing economic environment through dissolution, merger, consolidation, acquisition, and the sale of assets. In some cases, farmers organized new-generation cooperatives and formed joint ventures and alliances to become involved in value-added activities.

In 1990, the net business volume of 4,663 cooperatives totaled $77.3 billion. A decade later, net business volume, generated by 3,466 cooperatives, was $99.1 billion.

Number of Cooperatives

The total number of marketing, farm supply, and related-service cooperatives declined from 4,663 in 1990 to 3,466 in 1999 (table 14 and figure 12).

Table 14— Number of farmer cooperatives, 1990–99

Period[1]	Marketing	Farm supply	Service	Total
		Number		
1990	2,519	1,717	427	4,663
1991	2,384	1,689	421	4,494
1992	2,218	1,618	479	4,315
1993	2,214	1,547	483	4,244
1994	2,173	1,496	505	4,174
1995	2,074	1,458	474	4,006
1996	2,012	1,403	469	3,884
1997	1,941	1,386	464	3,791
1998	1,863	1,347	441	3,651
1999	1,749	1,313	404	3,466

[1] Prior to 1990, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998.

Marketing cooperatives declined from 2,519 to 1,749 and farm supply cooperatives from 1,717 to 1,313. Number of service cooperatives decreased from 427 to 404.

From 1990 through 1999, 1,861 cooperatives (about 186 per year), were removed from RBS' list of farmer cooperatives. Of those, 44.6 percent were dissolved, 32.2 percent merged or consolidated, 13.9 percent were acquired by other cooperatives or investor-owned firms, and the remaining 9.2 percent were removed for other reasons (figure 13).

Even while cooperatives were disappearing from RBS' list, newly formed ones or ones not previously on the list were added. From 1990 through 1999, 528 cooperatives, (about 53 per year) were added. Only 8 cooperatives were added during 1999, the smallest increase since the information was recorded.

Grain and Farm Supply Branches

In 1995, 2,548 grain and farm supply cooperatives had an estimated 5,101 branches, 2,172 owned by grain cooperatives and 2,929 by farm supply cooperatives. In 1999, grain and farm supply cooperative numbers had dropped to 2,209, but branches had increased to 5,330 (table 15 and figure 14).

Figure 12— Farmer Cooperatives in the United States, 1990-99

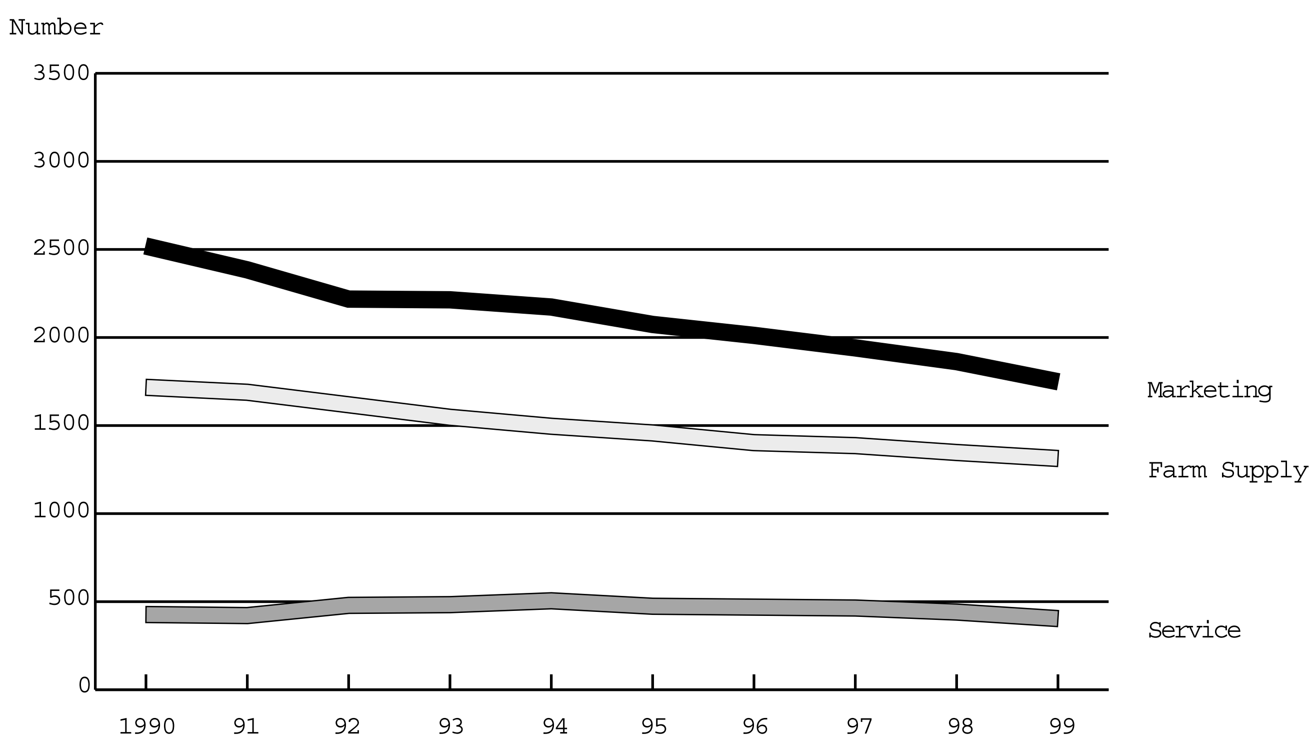
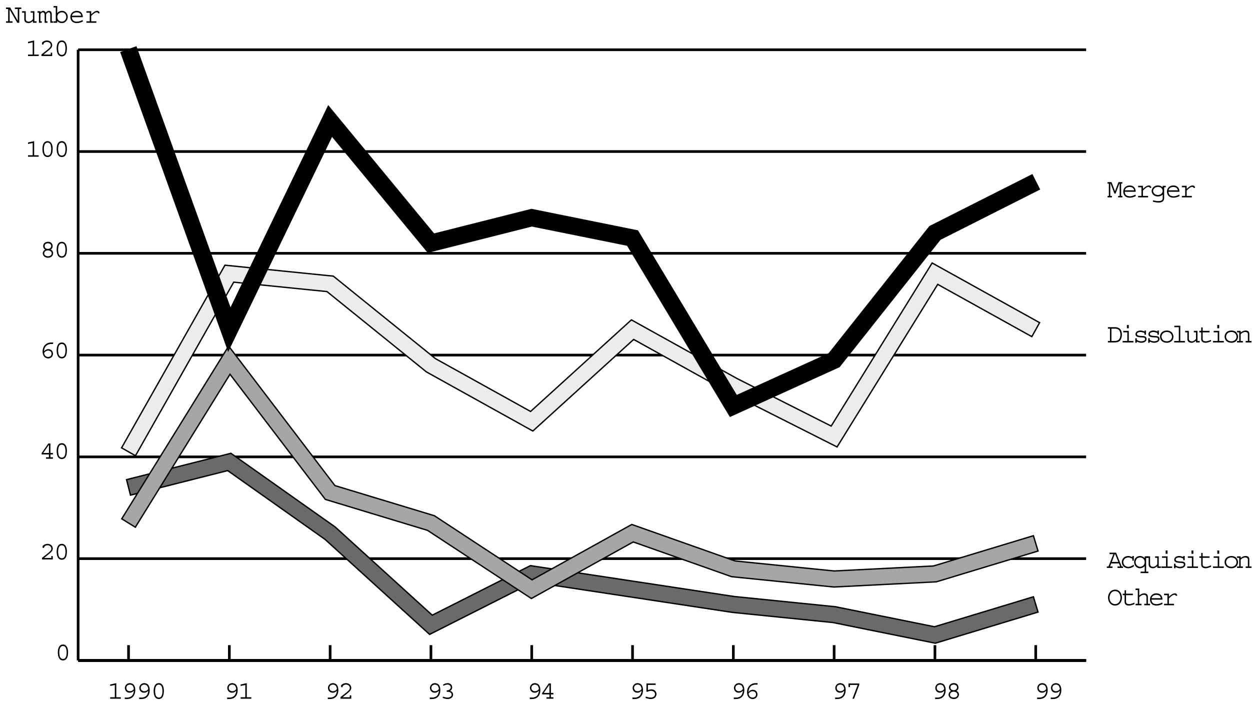


Figure 13— Cooperatives Removed from RBS' List, 1990-99



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

Table 15— Estimated number of branches operated by grain and farm supply cooperatives, 1995-99

	Asset Group (million dollars)				
Year	Less than 5	5 - 9.9	10 - 24.9	25 or more	Total
			Grain Cooperatives		
1995	658	223	174	35	1,090
1996	618	229	176	43	1,066
1997	616	196	155	47	1,014
1998	550	216	150	48	964
1999	512	187	147	50	896
			Branches		
1995	399	440	756	577	2,172
1996	387	505	743	691	2,326
1997	364	463	717	706	2,250
1998	292	517	774	716	2,299
1999	295	422	685	761	2,163
			Farm Supply Cooperatives		
1995	1,134	211	97	16	1,458
1996	1,064	213	109	17	1,403
1997	1,022	232	109	23	1,386
1998	928	277	112	30	1,347
1999	933	223	121	36	1,313
			Branches		
1995	571	502	460	1,396	2,929
1996	542	523	526	1,438	3,029
1997	481	579	576	1,576	3,183
1998	528	548	570	1,672	3,318
1999	423	547	534	1,663	3,167

Average number of branches per cooperative was 2 in 1995 and 2.4 in 1999. Larger cooperatives accounted for most of the branches, particularly among the farm supply cooperatives. Of those with assets of $25 million or more in 1999, 36 farm supply cooperatives had an estimated 1,663 branches and 50 grain cooperatives had 761 branches.

Memberships

Memberships in farmer cooperatives dropped from 4.1 million in 1990 to 3.2 million in 1999 (table 16 and figure 15). The long-term decline, in large part, reflects the decreasing number of farms and farmers in the United States. Many farmers are members of more than one cooperative and each membership is counted. Consequently, number of memberships exceeds the number of farmers. Duplication in membership cannot be eliminated with current reporting methods.

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

Table 16— Memberships in marketing, farm supply, and related-service cooperatives, 1990-99

Period [1]	Marketing	Farm supply	Service	Total
		1,000		
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	1,743	183	3,424
1998	1,398	1,774	181	3,353
1999	1,283	1,731	159	3,173

[1] Prior to 1990, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998.

Figure 14— Grain and Farm Supply Cooperatives and Branches, 1992-99

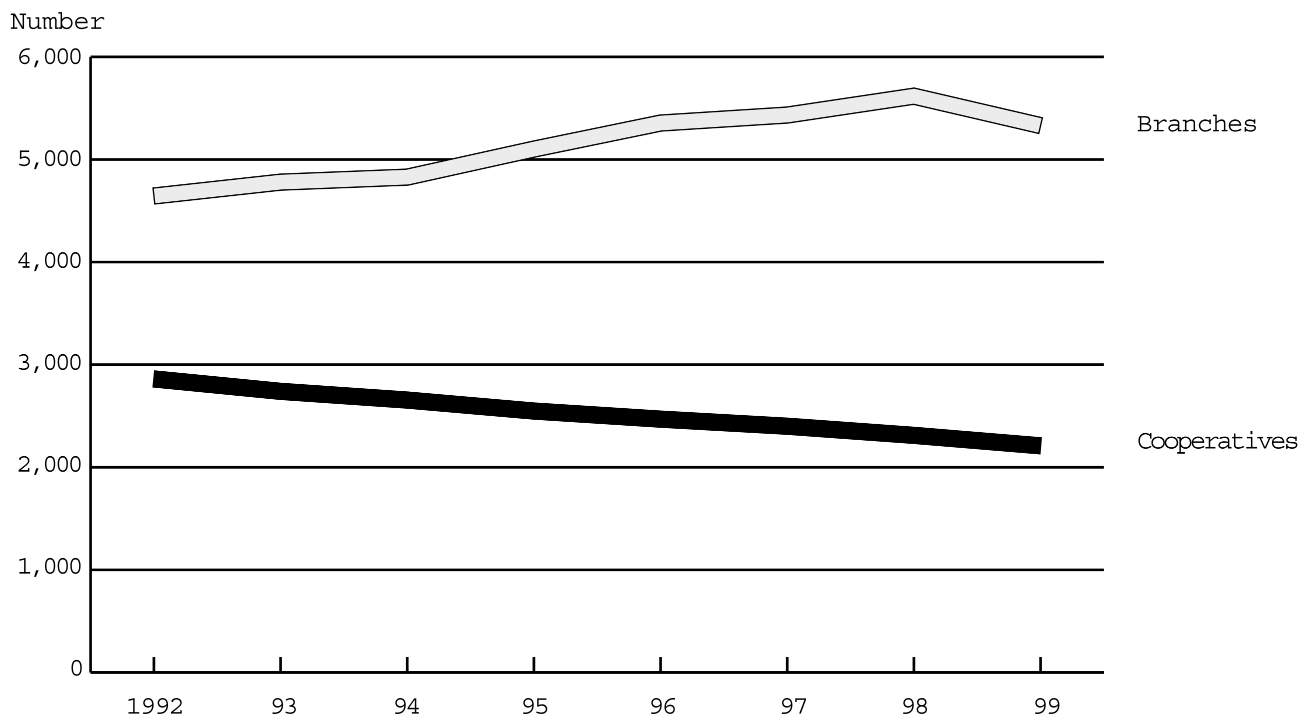
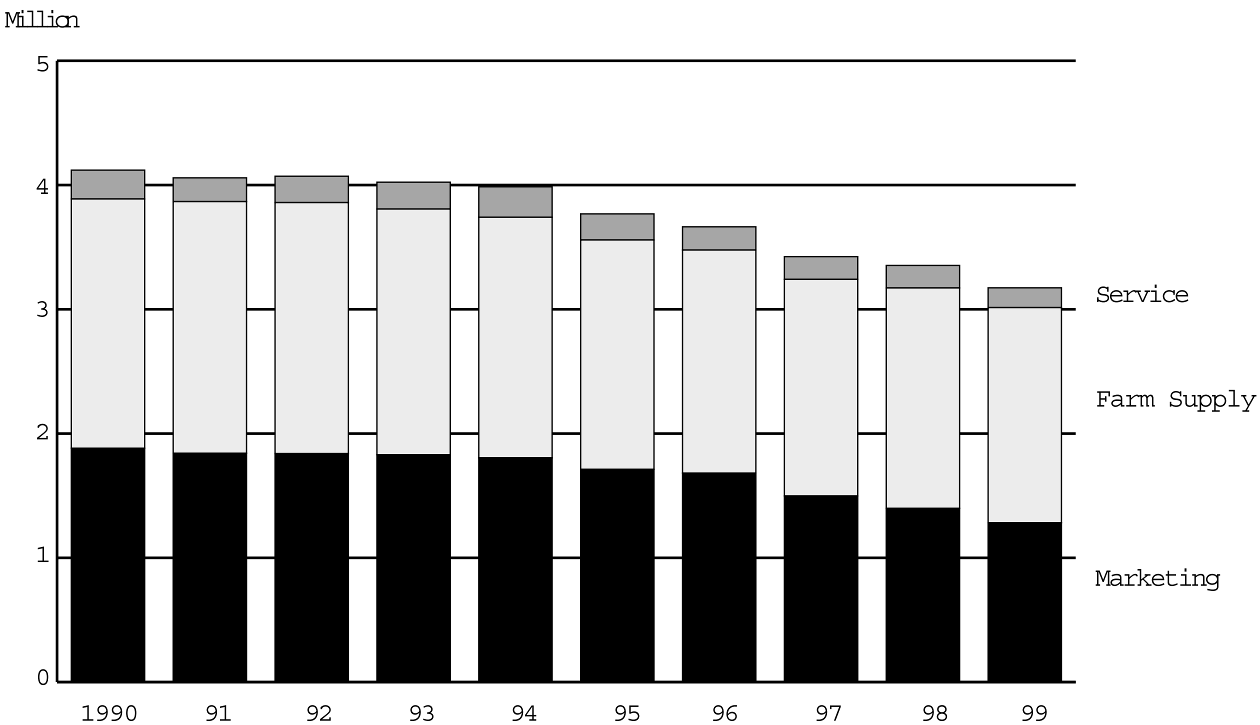


Figure 15— Cooperative Memberships by Function, 1990-99



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

During the past decade, memberships in related-service and marketing cooperatives decreased at more than twice the rate of memberships in farm supply cooperatives. Memberships in marketing cooperatives dropped 599,297, or 31.8 percent, while memberships in farm supply cooperatives decreased 274,160, or 13.7 percent.

Employees

Farmer cooperatives had an estimated 172,951 full-time employees in 1999, down from 173,791 in 1998 (table 17). Employees appeared to peak in 1995, at 175,399. Marketing and related-service cooperatives decreased their use of full-time employees during 1995-99. Farm supply cooperatives, however, increased their use.

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

Business Volume

Net cooperative business, unadjusted for price change, increased from $77.3 billion in 1990 to $99.1 billion in 1999 (table 18). When adjusted[3], net business totaled $101.9 billion in 1999 (figure 16). Consequently, the difference between actual and real net business volume in 1999 was $2.8 billion. The real net business volume was above the actual value in 1999 due to low prices received for farm products. Prices received for all farm commodities dropped nearly 5 percent, while prices paid for production items decreased .9 percent from 1998-99.

Marketing sales of four major commodity groups--dairy; grains and oilseeds, excluding cottonseed; fruits and vegetables; and livestock--decreased

[3] Marketing sales was deflated by the index of producer prices received for "all farm products" (1990 = 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 (1990 = 100).

Table 17– Cooperatives’ number of full-time employees, 1995-99

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

slightly as a proportion of marketing sales, from 83.1 percent in 1990 to 83 percent in 1999. In 1990 and a decade later, net volume (among commodity groups) was highest for dairy. In terms of net volume, dairy was $26 billion ($20.7 billion in 1990) and grains and oilseeds $17.1 billion in 1999. In 1996 and 1997, grains and oilseeds led commodity groups, due to high grain prices (figure 17).

Milk and milk product sales showed the strongest absolute dollar growth during 1990-99. Prior to 1997, grain and oilseed sales surged, but subsequently dropped, because of sharply declining prices.

In the farm supply group, petroleum, feed, and fertilizer were especially important. They accounted for 70.5 percent of cooperatives' total farm supply sales in 1990 and 67.9 percent in 1999. The drop reflected increased sales of crop protectants and "other." In 1990, they accounted for 26.2 percent of farm supply sales versus 28.8 percent in 1999.

Cooperatives’ sales of petroleum, feed, fertilizer, and crop protectants grew steadily until 1998. Seed sales remained fairly stable (figure 18). In 1998 and 1999, feed and fertilizer sales dropped, due mainly to lower prices.

Net marketing of farm products totaled $57.8 billion in 1990 and increased annually, except in 1991 and 1997-99. In 1999, net business volume of farm products marketed dropped from $76.6 billion in 1998 to $72 billion (table 19). Aggregate farm supply sales increased every year, from $17.1 billion in 1990 to $25.2 billion in 1997, but then dropped in 1998 and 1999 to $24.6 billion and $23.2 billion, respectively. Service receipts (includes other income and revenue) increased from $2.3 billion in 1990 to $3.9 billion in 1999, the highest on record.

Gross business volume was $92.7 billion in 1990 and $115.3 billion in 1999, down from $121 billion in 1998 and a record high of $128.1 billion in 1996. The 1996 record increase in business volume ($15.9 billion) was due mainly to higher prices for grains and oilseeds.

Net Income

Starting with $1.44 billion in 1990, total net income fluctuated and finally set a record at $2.36 billion in 1995. It dipped in 1996, climbed back in 1997, but then dropped significantly in both 1998 and 1999 to $1.33 billion in 1999 (table 20 and figure 19). Low prices and margins associated with overproduction in agriculture were major factors.

Net income from own operations and other cooperatives varied over time. Both reflected better economic times in agriculture in the mid-1990s compared with conditions in the late 1980s, early 1990s, and the late 1990s. In 1990, refunds from other cooperatives totaled $378 million, or 26.3 percent of total net

Table 18– Cooperatives' net business volume, 1990 and 1999[1]

Function	Net Business Volume 1990	1999
	Million dollars	
Products marketed:		
Beans and peas (dry edible)	213.1	174.9
Cotton	2,087.5	2,083.4
Dairy	20,719.1	25,999.1
Fruits and vegetables	8,241.4	9,285.6
Grains and oilseeds [2]	14,259.2	17,113.1
Livestock	4,861.4	7,318.9
Nuts	800.8	899.1
Poultry	1,130.4	2,225.9
Rice	733.1	911.7
Sugar	2,124.4	2,540.0
Tobacco	597.0	278.4
Wool and mohair	19.8	6.4
Other products [3]	2,043.4	3,145.5
Total farm products	57,830.6	71,981.9
Supplies purchased:		
Crop protectants.	1,767.9	3,018.3
Feed.	4,102.9	4,725.6
Fertilizer	3,230.4	4,758.6
Petroleum	4,715.2	6,259.8
Seed	562.0	752.1
Other supplies	2,710.2	3,662.9
Total farm supplies	17,088.4	23,177.3
Services provided:		
Services provided:		
Trucking, cotton ginning, storage, grinding, locker plants, misc.	2,347.3	3,905.1
Total business	77,266.4	99,064.3

[1] Excludes inter-cooperative business volume. Totals may not add due to rounding.
[2] Excludes cottonseed. Cottonseed sales were included with cotton. Cottonseed meal and oil sales were included with feed and other products, respectively.
[3] Includes value of processed oilseeds.

income. In 1999, refunds totaled $383.5 million, or 28.9 percent of total net income. CoBank refunds were also included.

Balance Sheet

Cooperatives' total assets grew by $17.7 billion, from $30 billion in 1990 to $47.7 billion in 1999 (table 21 and figure 20), reflecting added investments in their own operations and investments in other cooperatives. In 1990, nearly $3.1 billion (10.3 percent of total assets) was invested in other cooperatives, including CoBank. In 1999, these investments were $5.4 billion, up $2.3 billion from 1990, or 11.2 percent of total assets.

Cooperatives' total liabilities also grew, from $16.6 billion in 1990 (55.2 percent) to $27.4 billion, up $10.8 billion in 10 years.

Total liabilities financed 57.5 percent of total assets in 1999. The strength of a balance sheet depends on the proportion of total assets financed by net worth or equity capital. In 1990, cooperatives' net worth totaled $13.4 billion and financed 44.8 percent of total assets. By 1999, total net worth had reached nearly $20.3 billion, and financed 42.5 percent. During the decade, the proportion of net worth used to finance total assets reached a high of 44.9 percent in 1991 and a low of 40.8 percent in 1996. Most would say farmer cooperatives, overall, have a strong balance sheet.

IV—OTHER SERVICE COOPERATIVES

In 1999, other service cooperatives, ones other than those directly related to marketing and purchasing, included farm credit system cooperatives, rural electric cooperatives, rural credit unions, and dairy herd improvement associations.

Farm Credit System

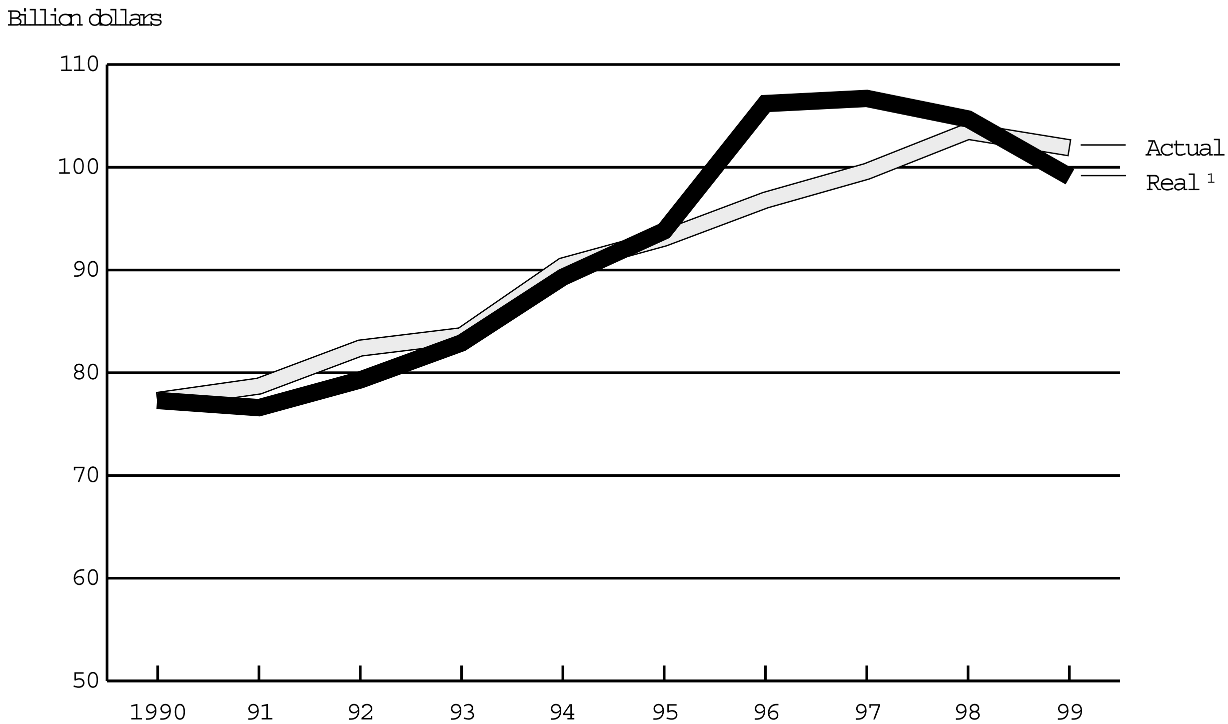
The Farm Credit System (FCS) is a nationwide network of financial cooperatives that lend to agriculture and rural America. FCS provides credit and related services to farmers, ranchers, producers and harvesters of aquatic products, rural homeowners, certain farm-related businesses, agricultural and aquatic cooperatives, rural utilities, and to certain foreign or domestic entities in connection with international transactions.

By 1999, FCS was represented by 18 Federal Land Bank Associations (FLBAs), 50 Federal Land Credit Associations (FLCAs), 60 Production Credit Associations (PCAs), and 50 Agricultural Credit Associations (ACAs) (table 22).

The combined assets of FCS for 1999 totaled $88.7 billion--up 5.4 percent from $84.1 billion in 1998 (table 23). Net worth was $13.3 billion, up 6.4 percent from 1998, and net income was $1.23 billion, down from $1.25 billion, or 1.4 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.

Figure 16— Cooperatives' Net Business Volume, 1990-99



[1] Actual sales were adjusted for price change based on 1990 = 100.

Figure 17— Cooperatives' Net Sales of Selected Commodities, 1990-99

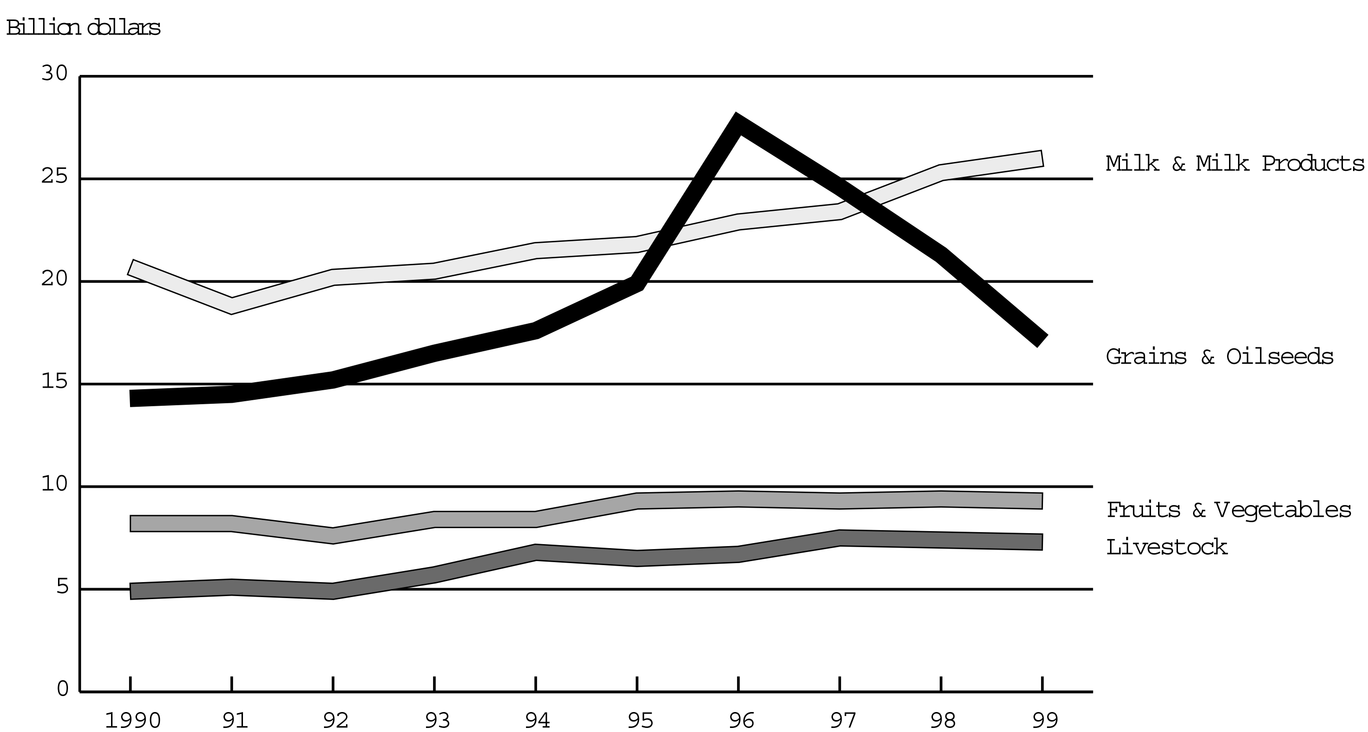
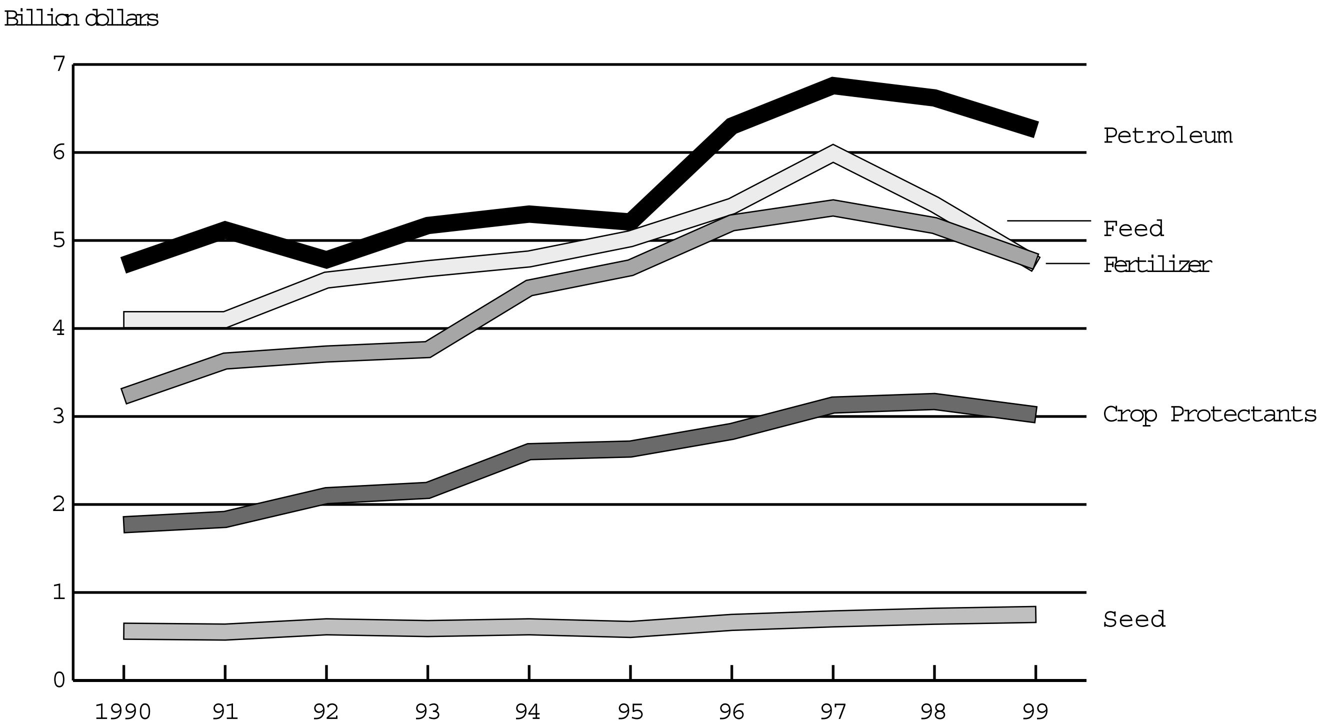


Figure 18— Cooperatives' Net Sales of Selected Farm Supplies, 1990-99



Of the 50 FLCAs operating on Oct. 1, 1999, 18 were in the FCB of Wichita and 17 in the AgriBank, FCB, District. 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 60 PCAs, 17 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 50 ACAs operating on Oct. 1, 1999, 32 of them were in AgFirst, FCB, territory and 8 in the AgriBank, FCB, district.

The FCBs provide loans and support services to FLBAs, ACAs, FLCAs, and PCAs within their districts.

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

The combined assets of CoBank increased from $22.1 billion in 1998 to $24.1 billion in 1999. Net worth totaled nearly $1.7 billion. As of Dec. 31, 1999, CoBank had net loans of $18.4 billion and net income of $121 million, down from $145 million in 1998 (table 24).

Rural Electric Cooperatives

Rural electric cooperatives increased in number to 672 from 662 in 1998. Consumer members, however, decreased to 10.5 million from 10.8 million, but revenue increased to $23.7 billion (table 25) from $14.2 billion in 1998. Texas had the most associations, with 44 (6.6 percent of the total), while Georgia had the most consumer members, with 1,069 (10.2 percent), and the largest revenue, $2,744 million (11.6 percent).

Rural Credit Unions

The 595 rural credit unions reported 3.9 million members and savings of more than $18 billion, a decrease from 653 credit unions, 4.4 million members, and savings of $19.9 billion in 1998. Wisconsin, with

Table 19—Cooperatives' gross and net business volumes, 1990-99[1]

Period [2]	Gross volume: Farm products	Gross volume: Farm supplies	Gross volume: Services [3]	Gross volume: Total	Net volume: Farm products	Net volume: Farm supplies	Net volume: Services [3]	Net volume: Total
				Billion dollars				
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	128.1	79.4	23.7	3.1	106.2
1997	85.9	37.1	3.6	126.7	77.8	25.2	3.6	106.7
1998	84.5	33.0	3.5	121.0	76.6	24.6	3.5	104.7
1999	80.5	30.9	3.9	115.3	72.0	23.2	3.9	99.1
				Percent				
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
1998	69.9	27.2	2.9	100	73.2	23.5	3.3	100
1999	69.8	26.8	3.4	100	72.7	23.4	3.9	100

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

[2] Prior to 1990, see Cooperative Historical Statistics, CIR 1, Section 26, USDA, Revised April 1998. Data for prior years are not entirely comparable due to revisions in statistical procedures.

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

65, had the most associations, or 10.9 percent of the total, while California had the most members and credit union savings with 902,000 and $5.2 billion, respectively. California, Wisconsin, and Michigan accounted for more than 1.9 million memberships (48.6 percent of the total), and more than $9 billion in savings, or 50.1 percent of the total (table 26).

Dairy Herd Improvement Associations

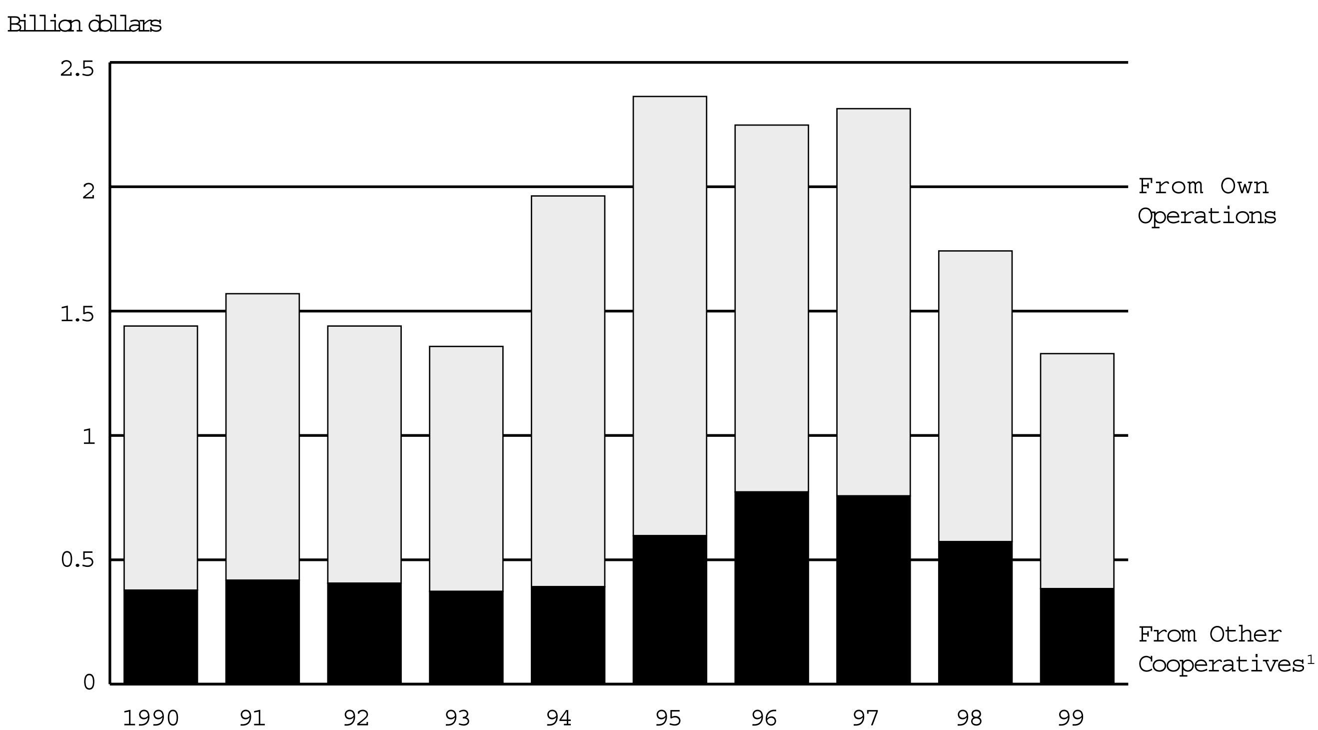
Dairy Herd Improvement Associations (DHIA) had 33,539 memberships in 1999 (table 27), down from 34,820 in 1998. The DHIAs tested nearly 4.3 million cows in 1999, up from 4.2 million in 1998. Wisconsin (8,512), Pennsylvania (4,730), Minnesota (3,792), and New York (2,940), combined, accounted for 59.6 percent of total members, the same as in 1998. About 872,700 (20.4 percent) of the cows tested were in California, up from 19.7 percent.

Table 20— Net income of farmer cooperatives, 1990–99[1]

Year	From own operations	From other cooperatives[2]	Total
		Million dollars	
1990	1,062	378	1,440
1991	1,152	418	1,570
1992	1,034	406	1,440
1993	985	373	1,358
1994	1,571	392	1,963
1995	1,766	597	2,363
1996	1,475	773	2,248
1997	1,557	757	2,314
1998	1,169	573	1,742
1999	944	384	1,328

[1] Totals may not add due to rounding. Excludes income from cooperative pooling operations.
[2] Dividends and patronage refunds received from other marketing, farm supply, and related-service cooperatives, CoBank, and Banks for Cooperatives, where applicable.

Figure 19— Cooperatives' Net Income, 1990-99



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

Table 21– Combined balance sheet data for farmer cooperatives, 1990–99

Year	Assets from own operations	Investments in other co-ops [1]	Total assets	Total liabilities	Net worth
			Million dollars		
1990	26,948	3,076	30,024	16,575	13,449
1991	27,887	3,381	31,268	17,227	14,040
1992	28,967	3,027	31,994	17,780	14,213
1993	30,484	2,962	33,446	18,634	14,812
1994	32,784	3,176	35,960	20,339	15,621
1995	37,046	3,228	40,274	23,643	16,631
1996	39,011	3,577	42,588	25,195	17,392
1997	39,922	4,074	43,996	25,459	18,537
1998	41,884	4,676	46,560	26,606	19,954
1999	42,330	5,352	47,682	27,418	20,264
			Percent of total assets		
1990	89.8	10.2	100	55.2	44.8
1991	89.2	10.8	100	55.1	44.9
1992	90.5	9.5	100	55.6	44.4
1993	91.1	8.9	100	55.7	44.3
1994	91.2	8.8	100	56.6	43.4
1995	92.0	8.0	100	58.7	41.3
1996	91.6	8.4	100	59.2	40.8
1997	90.7	9.3	100	57.9	42.1
1998	90.0	10.0	100	57.1	42.9
1999	88.8	11.2	100	57.5	42.5

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

Figure 20– Cooperatives' Net Worth and Liabilities, 1990-99

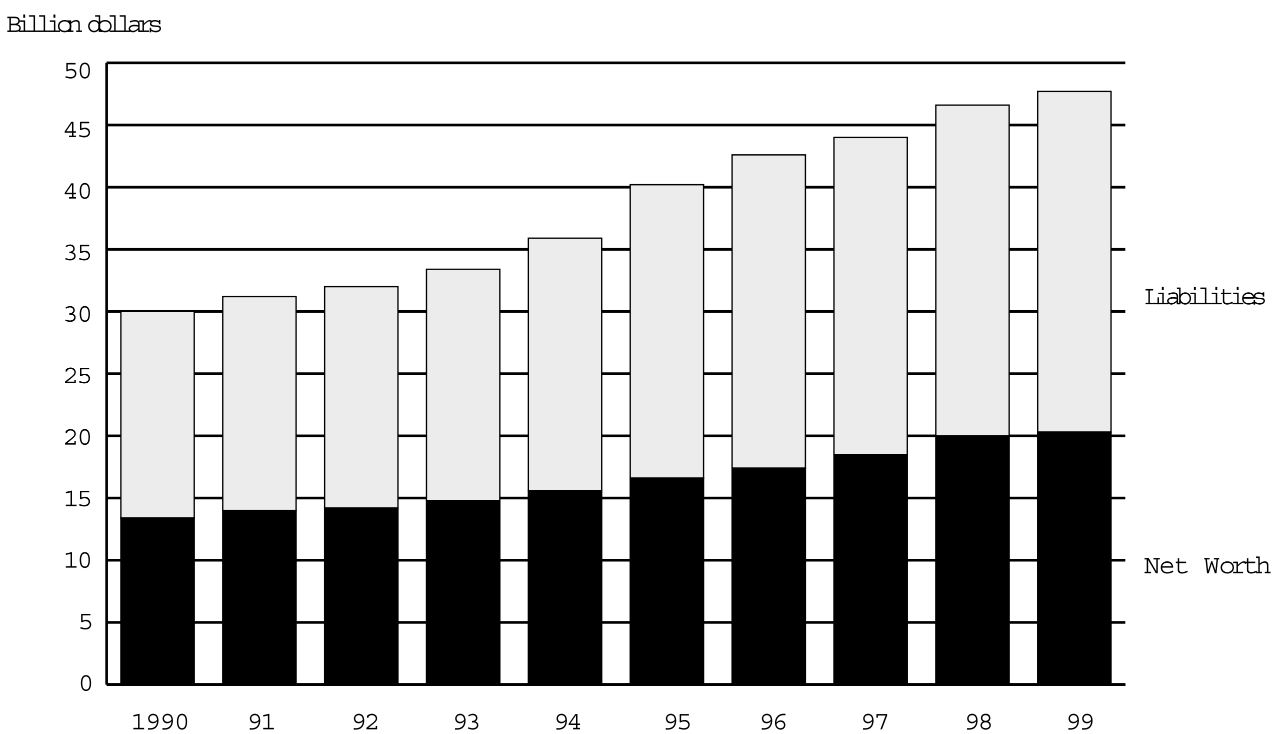


Table 22— Farm Credit Association Structure, Oct. 1, 1999[1]

District or bank affiliation	FLBA	PCA	ACA	FLCA
	Number			
CoBank, ACB [2]	-	-	4	-
AgFirst FCB	-	1	32	-
AgriBank, FCB	-	17	8	17
FCB of Wichita	4	18	-	18
FCB of Texas	14	13	-	3
Western FCB[3]	-	10	5	11
AgAmerica, FCB	-	1	1	1
Total	18	60	50	50

- = No bank affiliation.

[1] FLBA = Federal Land Bank Association, PCA = Production Credit Association, ACA = Agricultural Credit Association, FLCA = Federal Land Credit Association.

[2] The St. Paul Bank for Cooperatives merged with CoBank, effective July 1, 1999.

[3] 1 ACS Parent - Designates ACS that has PCA & FLCA Subsidaries

Source: Farm Credit Administration, Accountability Report FY 1999, McLean, VA, p. 32.

Table 23— Farm Credit System's combined assets, net worth, and net income, 1995–99[1]

Year	Assets	Net worth	Net income
	Million dollars		
1995	71,438	9,864	1,165
1996	74,917	10,729	1,201
1997	78,144	11,694	1,267
1998	84,139	12,522	1,251
1999	88,692	13,319	1,233

[1] Farm Credit System, Annual Information Statement, 1999, Federal Farm Credit Banks, Funding Corporation, Jersey City, NJ., Feb. 24, 2000, p. 3.

Table 24— Combined assets, net worth, net loans, and net income of CoBank, ACB, 1995–99[1]

Year	Assets	Net worth	Net loans	Net income
	Million dollars			
1995	21,268	1,429	17,553	167
1996	20,771	1,504	16,871	145
1997	21,207	1,600	16,821	164
1998	22,104	1,671	17,513	145
1999	24,089	1,665	18,398	121

[1] As of December 31 of each year. Effective July 1, 1999, CoBank, ACB, and the former St. Paul Bank for Cooperatives merged through an exchange of stock. Source: CoBank, ACB, Creating Customer Value in the 21st Century, 1999 Annual Report, Englewood, CO.

Table 25– Number, participation, and level of activity of rural electric[1] cooperatives, by State, Dec. 31, 1999[2]

State	Cooperatives	Members	Revenue	State	Cooperatives	Members	Revenue
	Number	1,000	Mil. dol.		Number	1,000	Mil. dol.
Alabama	19	395	813	Montana	23	98	128
Alaska	9	77	177	Nebraska	3	9	111
Arizona	6	125	320	New Mexico	17	181	376
Arkansas	16	291	972	New York	4	16	14
California	3	15	21	North Dakota	23	118	883
Colorado	18	293	822	Ohio	21	291	553
Florida	11	436	1,092	Oklahoma	20	271	491
Georgia	38	1,069	2,744	Oregon	8	53	79
Idaho	4	30	36	Pennsylvania	11	177	188
Illinois	8	53	135	South Carolina	21	528	1,275
Indiana	22	253	625	South Dakota	32	126	248
Iowa	31	136	395	Tennessee	21	822	1,162
Kansas	28	152	341	Texas	44	602	1,303
Kentucky	26	666	1,479	Virginia	12	365	546
Louisiana	11	293	772	Washington	5	32	49
Maine	3	14	13	Wisconsin	17	133	293
Michigan	6	101	81	Wyoming	9	58	119
Minnesota	37	394	828	Other States [3]	9	918	1,822
Mississippi	15	405	896				
Missouri	41	480	1,473	United States	672	10,466	23,662

[1] Source: Rural Utilities Service, USDA.
[2] Totals may not add due to rounding.
[3] Includes States with fewer than three cooperatives - Delaware, Maryland, Nevada, New Jersey, North Carolina, Utah, Vermont, and West Virginia.

Table 26– Number, participation, and level of activity of rural credit unions[1], by State, Dec. 31, 1999[2]

State	Cooperatives	Members	Savings	State	Cooperatives	Members	Savings
	Number	1,000	Mil. dol.		Number	1,000	Mil. dol.
Alabama	10	25	89	New Jersey	6	12	20
Arizona	4	18	51	New Mexico	3	48	188
Arkansas	3	8	32	New York	27	164	775
California	52	902	5,211	North Carolina	13	30	65
Colorado	14	22	80	North Dakota	29	100	602
Florida	14	108	420	Ohio	12	39	70
Georgia	10	35	97	Oklahoma	4	7	30
Hawaii	17	105	627	Oregon	9	63	239
Idaho	9	17	50	Pennsylvania	19	32	85
Illinois	11	65	284	Rhode Island	3	69	590
Indiana	16	50	411	South Carolina	3	9	58
Iowa	7	7	20	South Dakota	7	11	33
Kansas	16	75	236	Tennessee	8	15	38
Kentucky	7	31	85	Texas	32	105	375
Louisiana	8	16	43	Utah	9	15	47
Maine	8	20	83	Vermont	3	21	55
Maryland	5	59	284	Virginia	6	50	177
Massachusetts	4	16	64	Washington	13	157	719
Michigan	24	391	1,290	West Virginia	3	4	10
Minnesota	35	213	1,042	Wisconsin	65	616	2,525
Mississippi	4	14	38	Other States[3]	7	31	121
Missouri	6	20	62				
Montana	10	54	208				
Nebraska	15	20	95				
Nevada	5	45	291	United States	595	3,931	18,016

[1] Source: Credit Union National Association, Inc. (Includes federally chartered and State-chartered credit unions.)
[2] Totals may not add due to rounding.
[3] Includes States with fewer than three cooperatives–Alaska, Connecticut, Delaware, New Hampshire, and Wyoming.

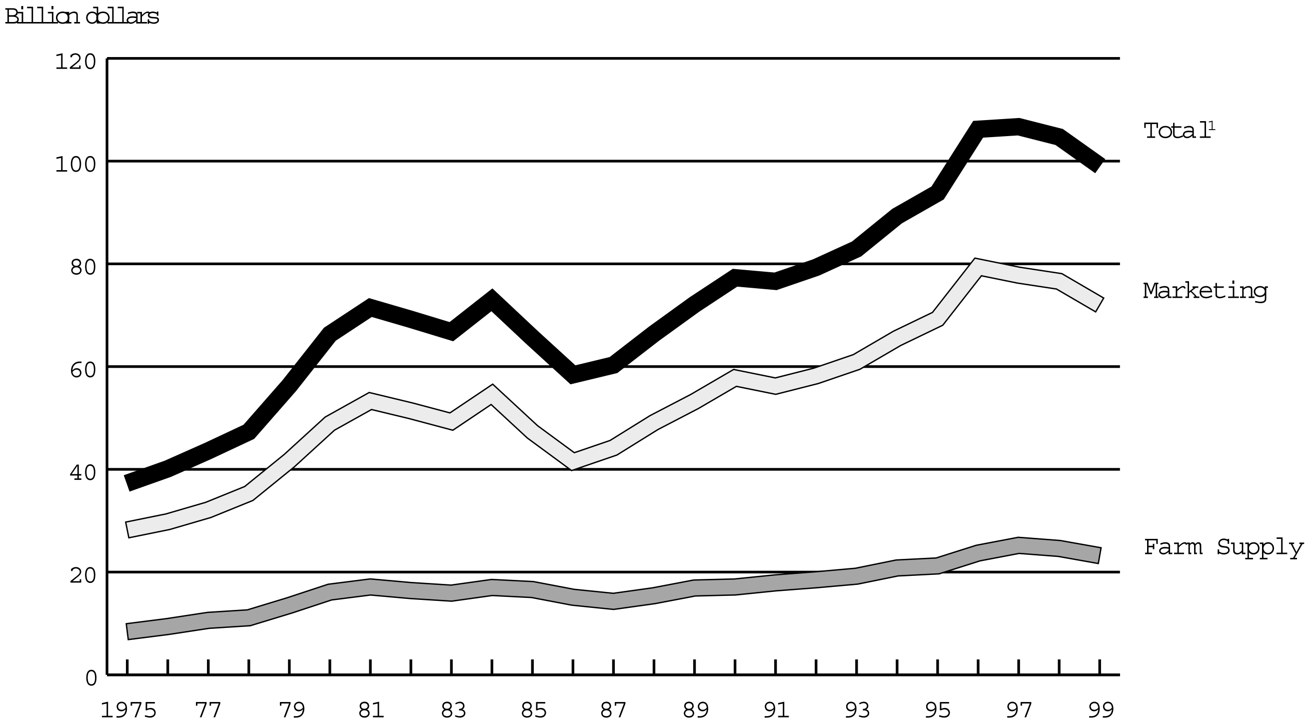
Table 27– Number, participation, and level of activity of dairy herd improvement associations,[1] by State, Dec. 31, 1999[2]

State	Members (herds)	Cows tested	State	Members (herds)	Cows tested
	Number	1,000		Number	1,000
Alabama	64	11.1	Nebraska	284	34.5
Arizona	61	79.1	Nevada	21	10.2
Arkansas	85	8.2	New Hampshire	114	10.9
California	1,128	872.7	New Jersey	91	7.8
Colorado	85	40.1	New Mexico	26	38.1
Connecticut	125	14.2	New York	2,940	331.6
Delaware	31	4.1	North Carolina	252	41.5
Florida	113	69.0	North Dakota	94	8.3
Georgia	238	59.2	Ohio	1,199	106.6
Hawaii	5	2.5	Oklahoma	142	19.2
Idaho	235	83.7	Oregon	289	51.5
Illinois	697	57.6	Pennsylvania	4,730	327.0
Indiana	553	46.3	Rhode Island	7	5
Iowa	1,421	115.2	South Carolina	88	16.8
Kansas	343	38.9	South Dakota	305	31.1
Kentucky	329	27.8	Tennessee	276	34.3
Louisiana	148	20.5	Texas	331	133.7
Maine	169	15.6	Utah	250	47.6
Maryland	439	39.8	Vermont	565	56.8
Massachusetts	132	11.6	Virginia	553	71.6
Michigan	1,060	148.8	Washington	276	75.2
Minnesota	3,792	307.4	West Virginia	69	7.7
Mississippi	81	12.5	Wisconsin	8,512	641.0
Missouri	557	49.7	Wyoming	9	1.6
Montana	58	7.5	United States [3]	33,539	4,287.1

[1] Source: Agricultural Research Service, USDA. Totals may not add due to rounding.
[2] Totals may not add due to rounding.
[3] Fewer than 500.
[4] Includes Alaska, Puerto Rico, and Virgin Islands with 167 members and 39,345 cows tested.

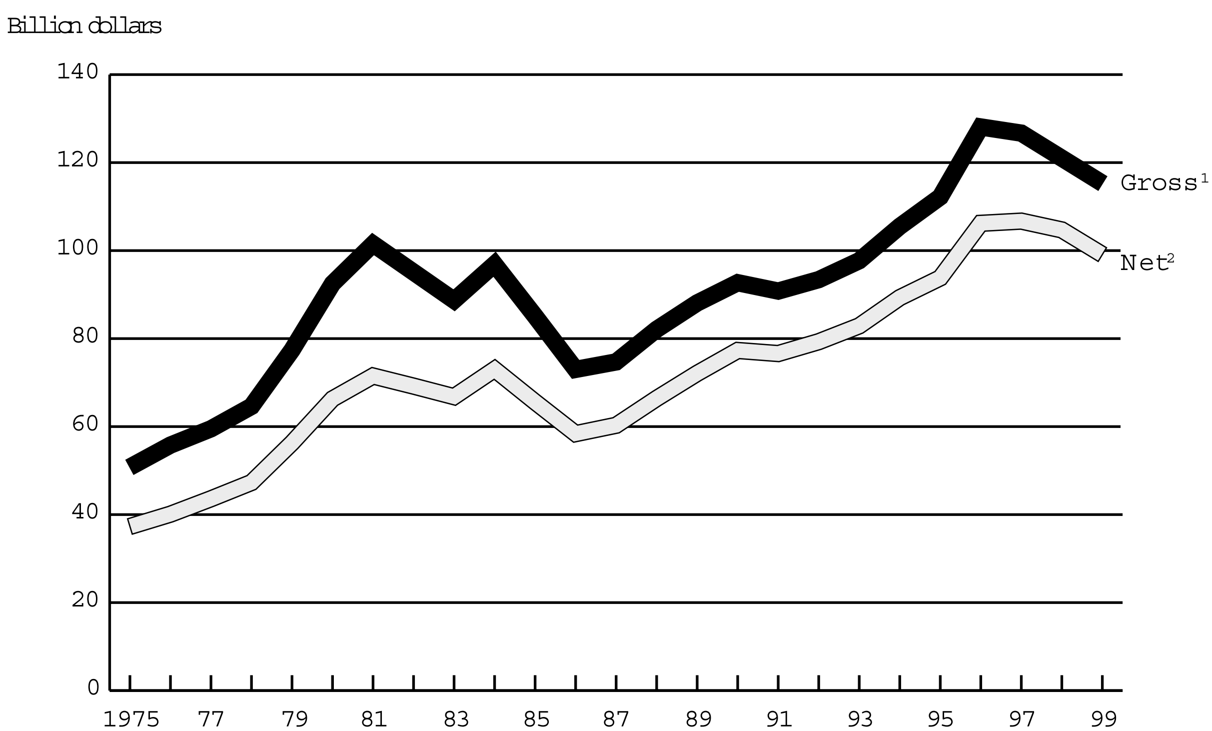
Appendix Figures

Appendix Figure 1— Cooperatives' Net Business Volume, 1975-99



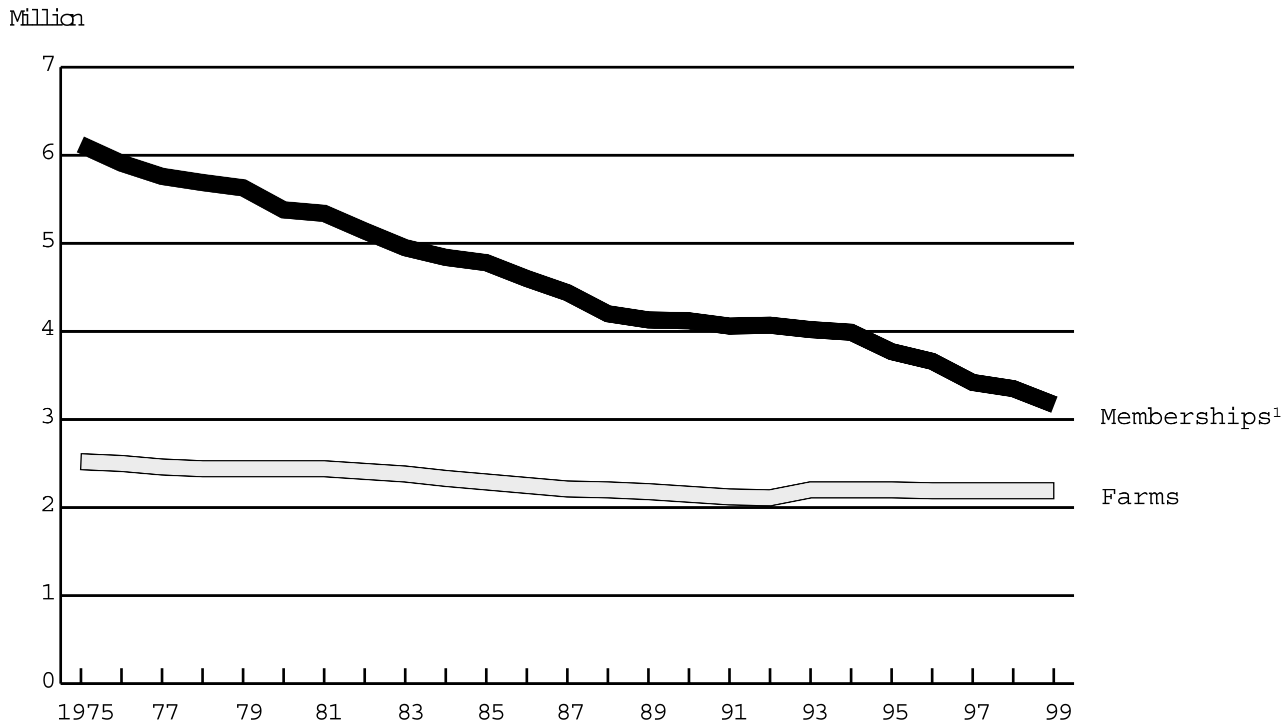
[1] Total includes value of related services and other income.

Appendix Figure 2— Cooperatives' Gross and Net Business Volumes, 1975-99



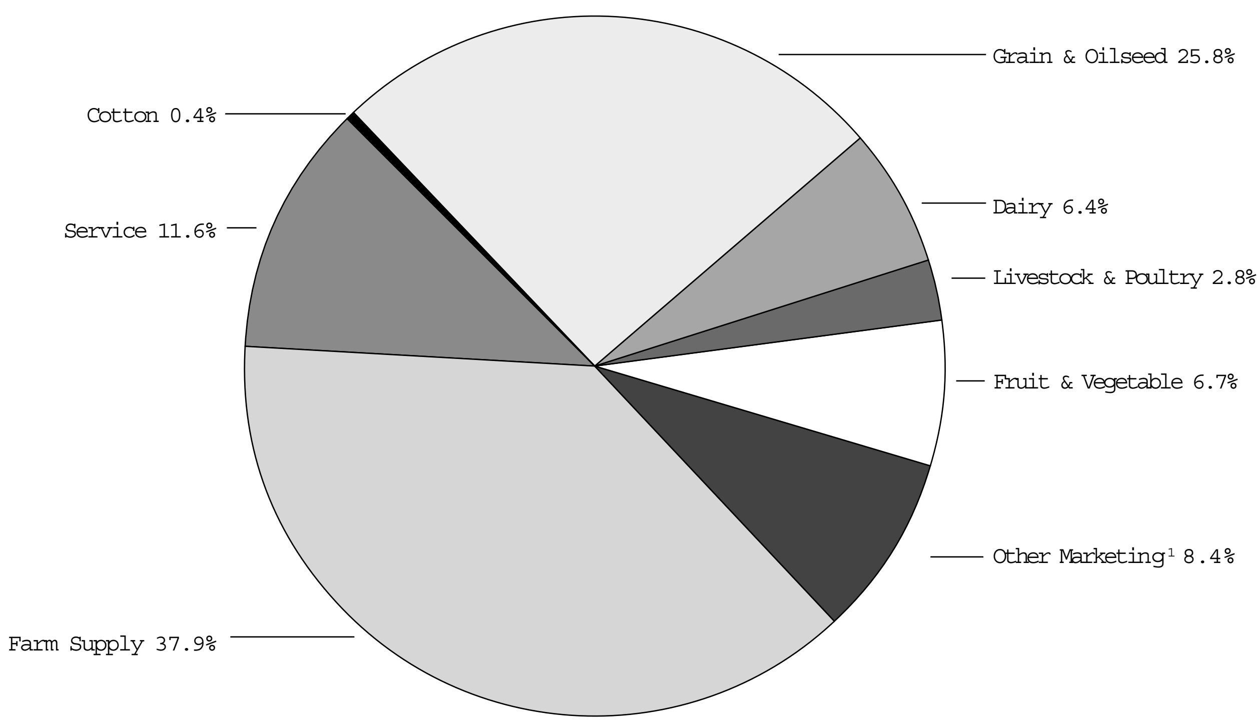
[1] Includes inter-cooperative business. [2] Excludes inter-cooperative business.

Appendix Figure 3– U.S. Farms and Farmer Cooperative Memberships, 1975-99



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

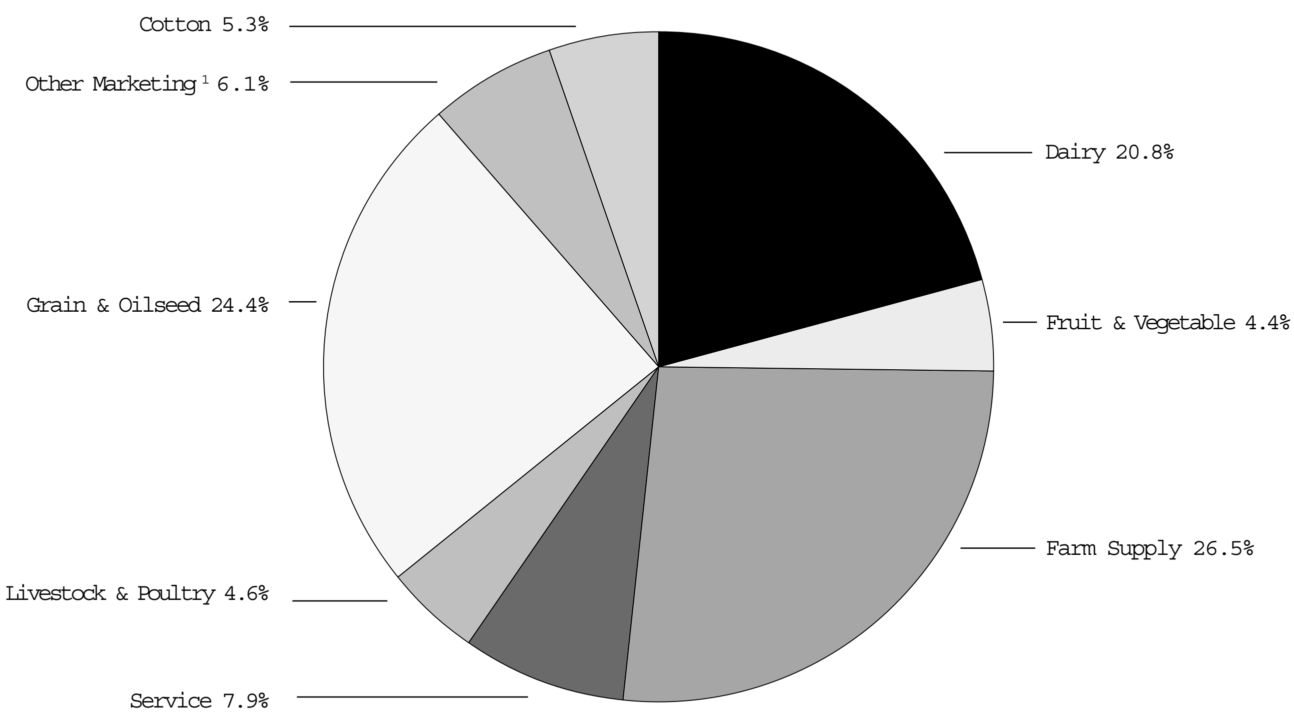
Appendix Figure 4– Distribution of Farmer Cooperatives, by Type, 1999



Percentage based on 3,466 cooperatives.

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

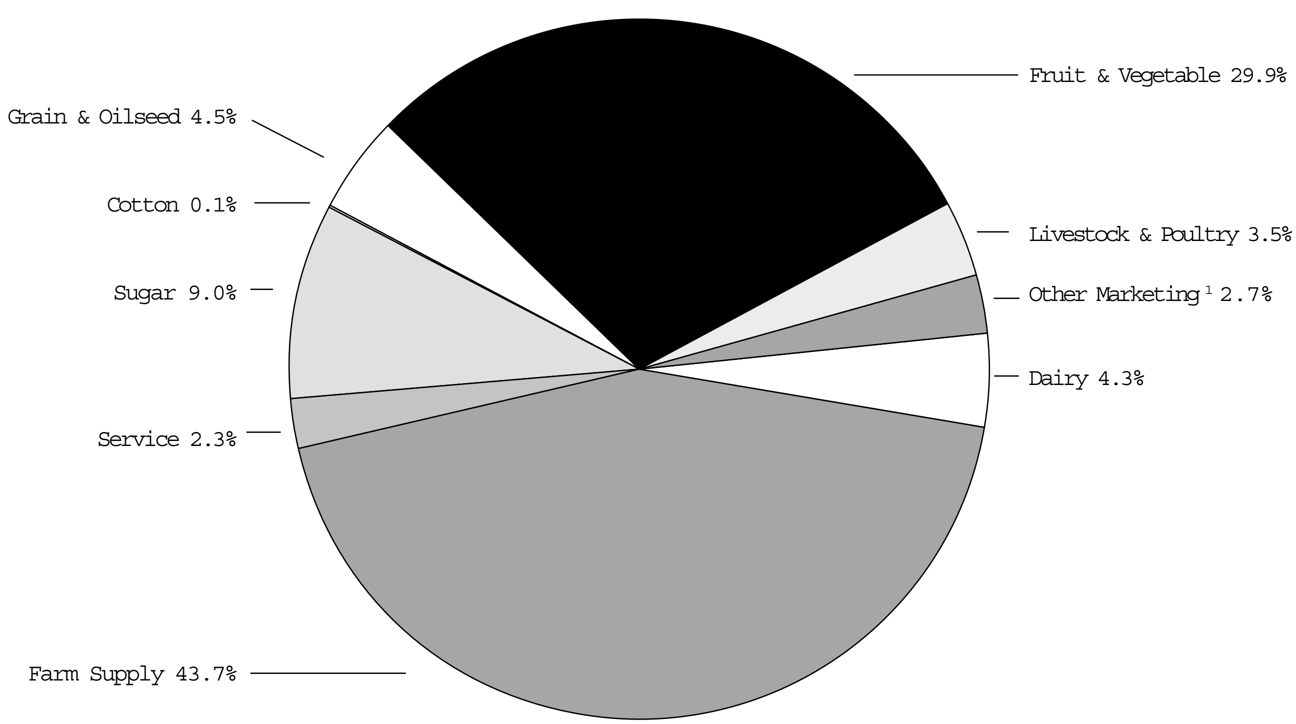
Appendix Figure 5— Distribution of Total Net Income, by Type of Cooperative, 1999



Percentage based on net income of $1.3 billion.

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

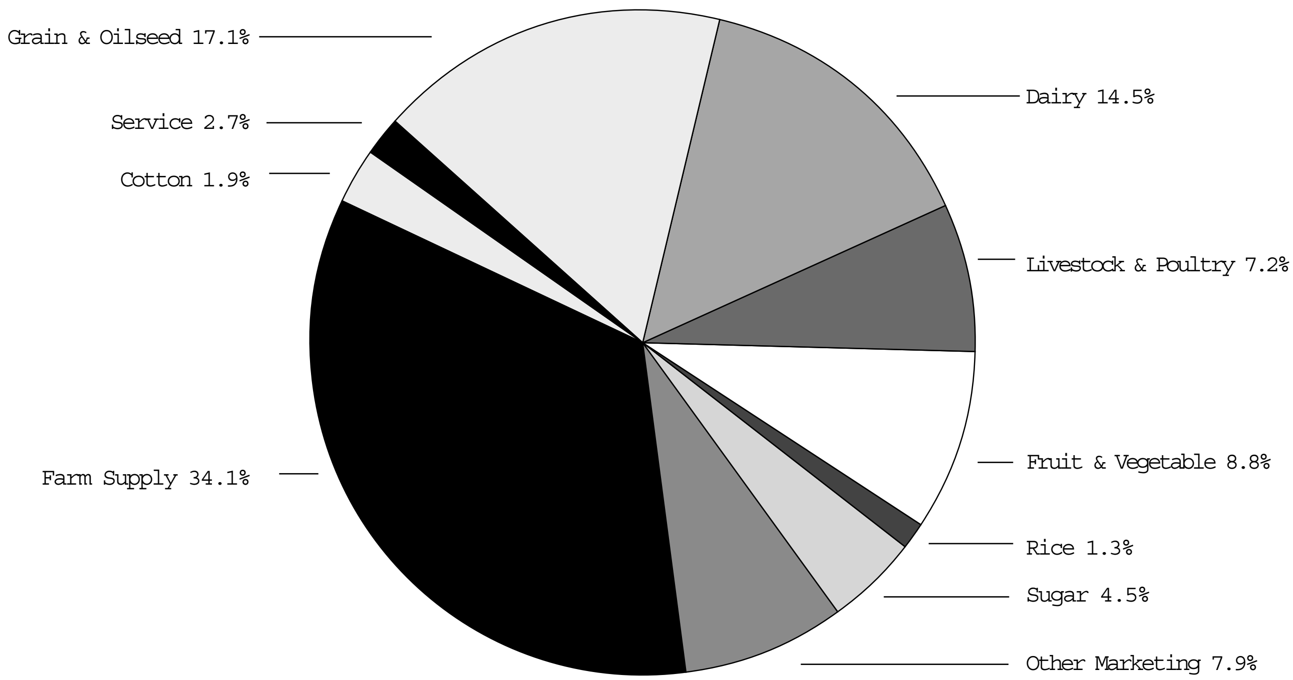
Appendix Figure 6— Distribution of Total Losses, by Type of Cooperative, 1999



Percentage based on losses of $284.1 million.

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

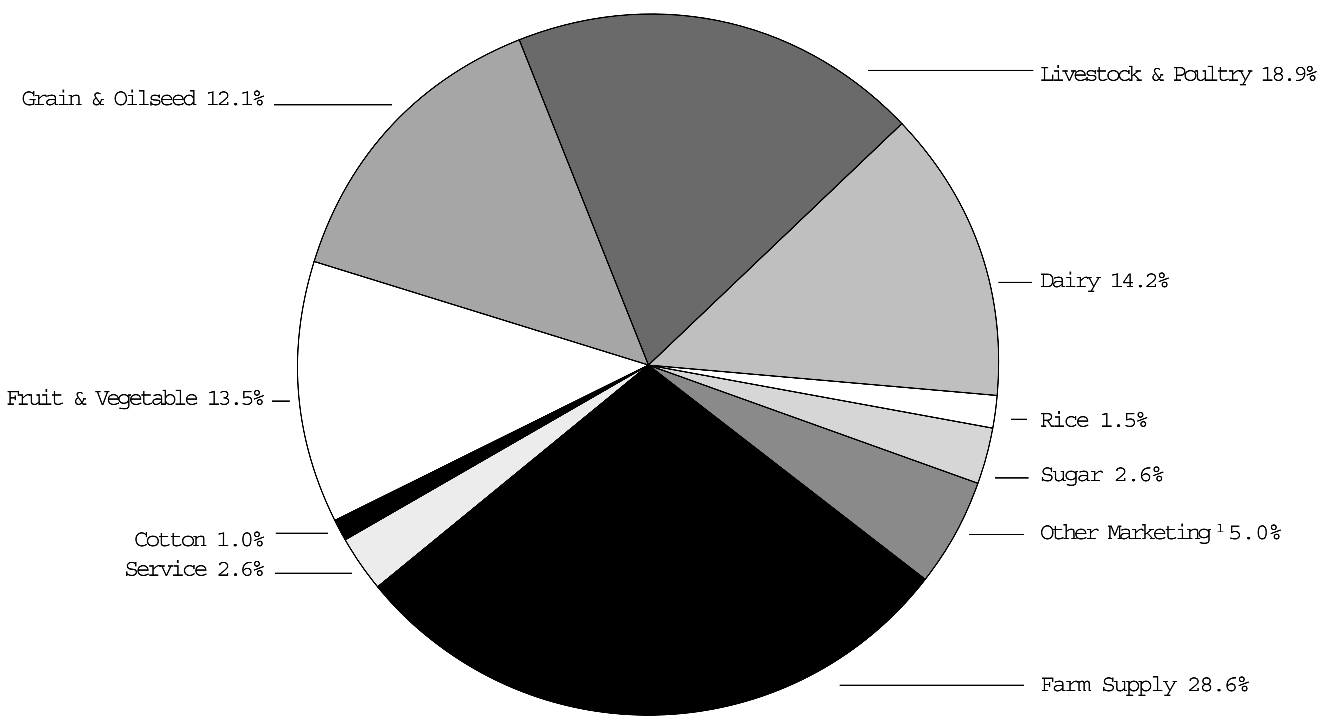
Appendix Figure 7— Distribution of Total Net Worth, by Type of Cooperative, 1999



Percentage based on total net worth of $20.3 billion.

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

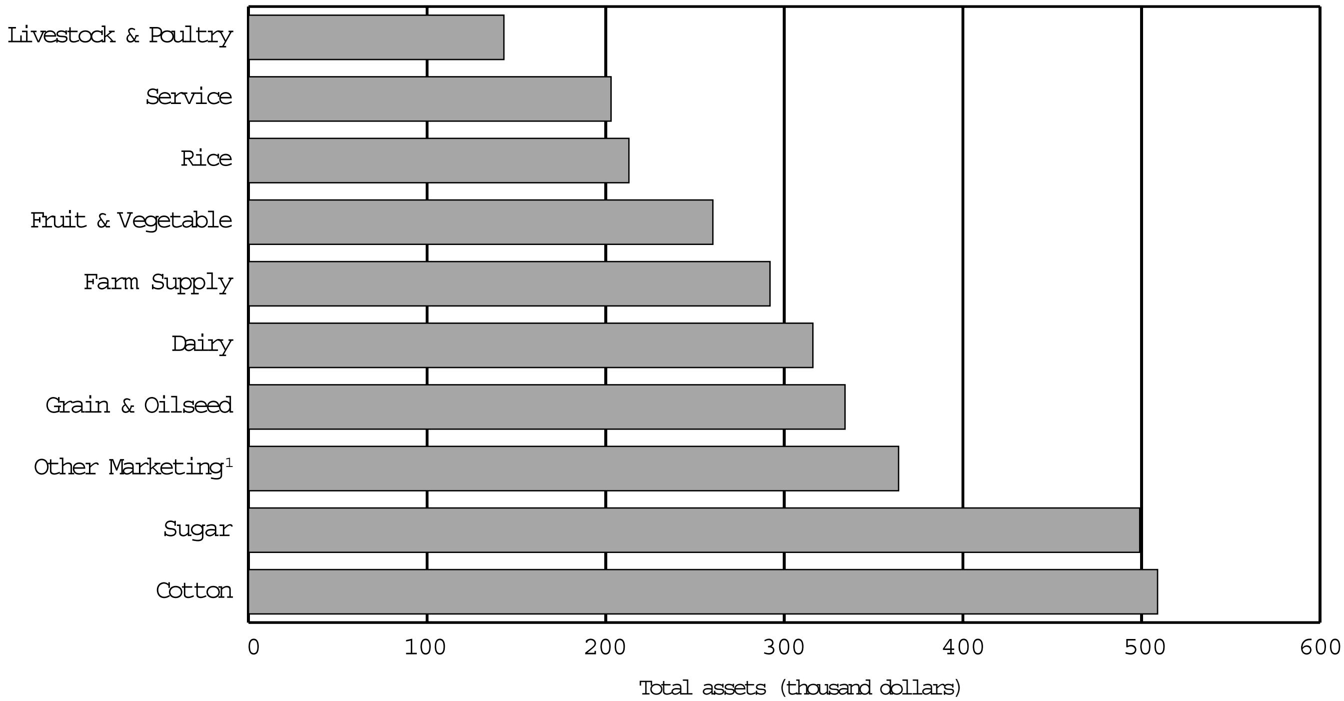
Appendix Figure 8— Distribution of Total Full-Time Employees, by Type of Cooperative, 1999



Percentage based on 172,951 full-time employees.

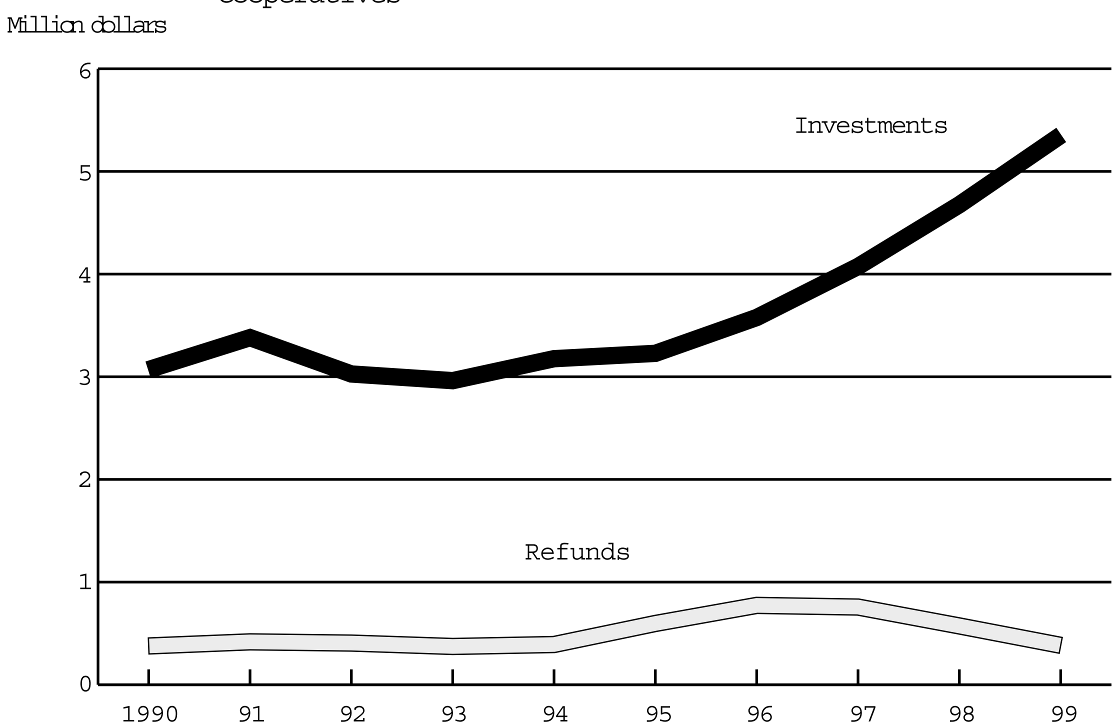
[1] Includes dry bean and pea, nut, wool and mohair, tobacco, fishery, and other miscellaneous marketing cooperatives.

Appendix Figure 9— Assets Per Full-Time Employee, by Type of Cooperative, 1999



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

Appendix Figure 10— Cooperatives' Investments in and Patronage Refunds Received from Other Cooperatives[1]



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

U.S. Department of Agriculture

Rural Business–Cooperative Service

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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.