

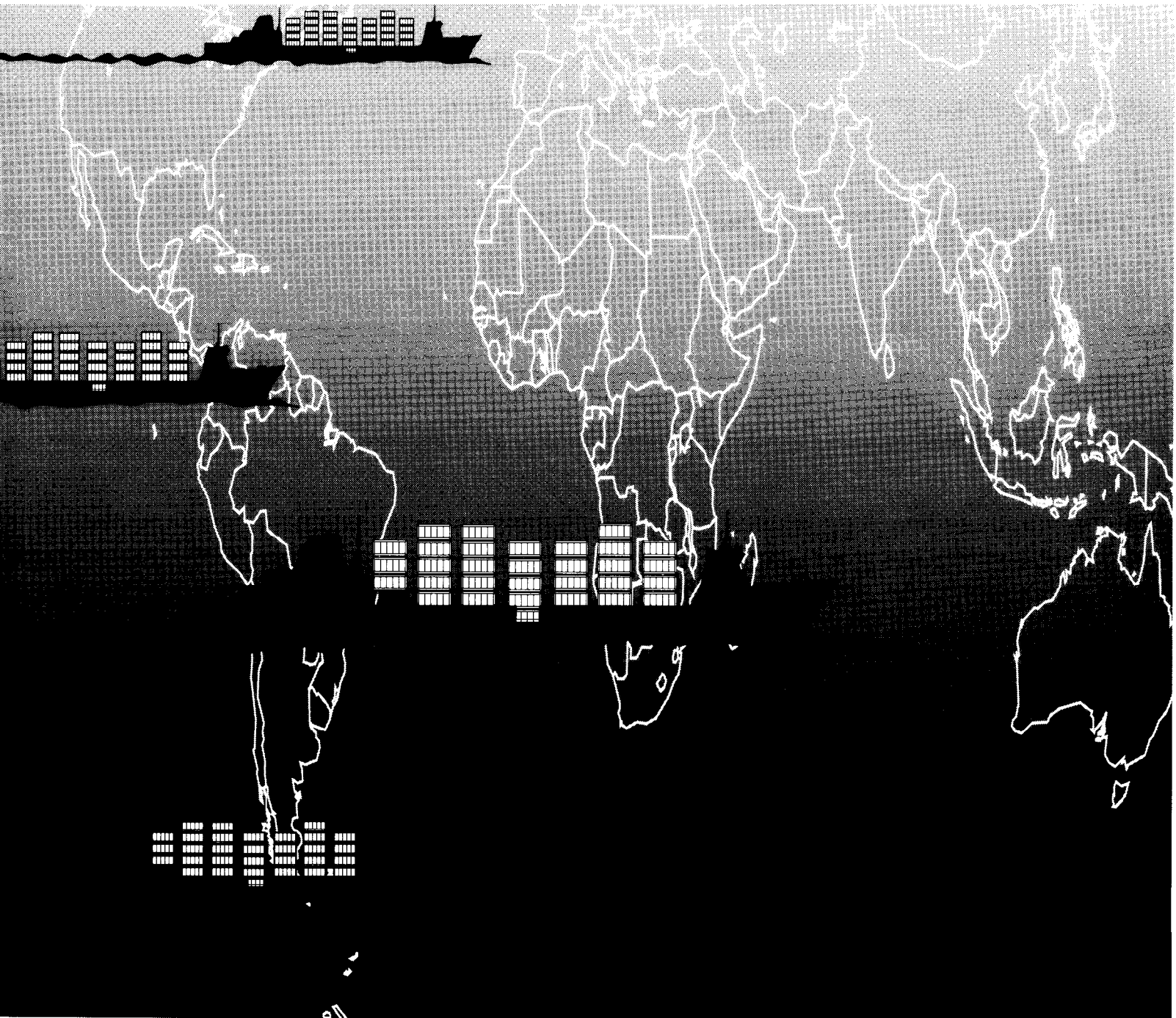


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Agricultural Exports by Cooperatives, 1990



Abstract

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Karen J. Spatz
Agricultural Cooperative Service

One hundred and sixteen agricultural cooperatives reported exports of \$4.1 billion in 1990. Cooperative share of U.S. agricultural exports was 6.2 percent. Grains and feeds exports by 18 cooperatives accounted for the largest dollar value, \$1.6 billion or 38.7 percent of total. Forty-one cooperatives exported fruits and fruit products, the largest number of cooperative exporters by commodity group. The largest market for cooperative exports was Southeast and East Asia with almost 21 percent of cooperative exports.

Key Words: Cooperatives, cooperative exports, agricultural exports.

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Preface

This report describes agricultural exports by cooperatives in 1990 in terms of the number of cooperative exporters, dollar value of cooperative exports by commodity and destination, method of export sales, and share of U.S. exports.

This study is conducted every 5 years by Agricultural Cooperative Service, USDA. Previous reports include *Agricultural Exports by Cooperatives, 1980* and *Agricultural Exports by Cooperatives, 1985*.

Definitions are consistent with those of the Bureau of the Census. Free on Board (f.o.b.) value includes all costs of delivering and loading goods on a stated carrier. Reported exports exclude shipments between the 50 States, Puerto Rico, and island possessions and shipments in-transit from one foreign country to another when documented as such by the U.S. Customs Service.

Data for this report were gathered from a 1 -page questionnaire. The initial mailing was followed by a second mailing, and telephone contact for each non-respondent.

Cooperatives were requested to provide calendar year 1990 f.o.b. dollar value of exports by commodity and destination, and percent exported by each method of sale. These methods include: 1) sold directly to foreign buyer by own export department or sales staff; 2) sold through domestic-based export commission agent (brokerage); 3) sold through foreign-based export commission agent (brokerage); 4) sold to domestic export management or trading company; or 5) other.

The questionnaire was mailed to a total of 198 cooperatives, identified from previous ACS surveys. One hundred seventy-nine cooperatives replied for a response rate of 90 percent. Of these, 110 reported exports in 1990.

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Agricultural Exports by Cooperatives, 1990

Karen J. Spatz
Agricultural Economist

Farmer-owned cooperatives have been significant players in the international marketplace since the 1970's. Competition in both domestic and foreign markets has increased over the years. U.S. and cooperative exports have not fully recovered following the boom years of the early 1980's, when U.S. agricultural exports peaked at \$43.3 billion in 1981 before dropping to a low of \$26.2 billion in 1986.¹ Cooperative exports also fluctuated in the 1980's, totaling \$6.4 billion in 1980 and decreasing to \$3.4 billion in 1985.²

Cooperatives export every major commodity from bulk grains and feeds to high-value branded products. Marketing cooperatives are the primary exporters but some supply cooperatives are active as well. Cooperatives export as part of their overall business strategy and to remain competitive. This study reports cooperative exports for 1990.

COOPERATIVE PARTICIPATION IN EXPORTING

In 1990, some 116 cooperatives headquartered in 32 States reported exports, compared with 87 cooperatives in 29 States in 1985. When evaluating

¹Foreign *Agricultural Trade of the United States, Calendar Year 2990 Supplement*, and *Foreign Agricultural Trade of the United States, Calendar Year 1985 Supplement*, United States Department of Agriculture, Economic Research Service.

²The survey methodology for 1980 cooperative export data differed to the extent that comparison with 1990 data are not valid. Survey results for 1980 cooperative export data are documented in *Agricultural Exports by Cooperatives, 1980*.

cooperative exports by State, it is important to keep in mind that a State where a cooperative is headquartered is not necessarily the State from which products originate or are exported. In some cases, cooperatives are regional with products originated and processed in more than one State. The top six States reporting cooperative exports were California, Washington, Florida, Oregon, Texas, and Michigan. California had the largest concentration of cooperative exporters, with 34. Washington was second, with 13 cooperatives, and Florida and Oregon tied for third, with 8 cooperatives each. Texas and Michigan each reported five cooperative exporters.

Cooperative participation in exporting has changed since 1985, with the number of cooperatives reporting exports in 1990 increasing from 87 to 116. Twenty-seven cooperatives that reported exports in 1985 did not export in 1990 or did not respond to the survey. The latter cooperatives may have gone out of business, changed to a noncooperative business, or merged, or else they simply did not export. The number of newly identified cooperative exporters in 1990 was 56 for a net gain of 29 exporters. This gain is largely due to an increase in cooperatives exporting high-value specialty products.

Dollar value of exports by cooperatives ranged from less than \$5,000 to more than \$250 million. The majority of cooperative exporters had sales of less than \$5 million each (table 1). Export sales from these cooperatives accounted for only 2.1 percent of total cooperative exports. More than 60 percent of cooperative exports were concentrated in five cooperatives, each reporting exports greater than \$250 million.

Export Intensity

Exports are an important part of a cooperative's marketing strategy. In some cases, exports are part of a long-term marketing plan to increase total sales and market share. Conversely, some cooperatives export only in years of excess production. One measure of the importance of exports to cooperative sales is export intensity or total exports divided by total sales. Total sales by commodity were not requested; therefore, total sales for each cooperative was used to determine export intensity. In order to evaluate export intensity, sales were classified by cooperative type as defined by Agricultural Cooperative Service. Exporting plays a minor role for some cooperatives such as dairy with 0.3 percent export intensity and farm supply with 1.7 percent (table 2). Whereas, exports by nut cooperatives accounted for more than half of total sales, 54.1 percent. The export intensity for total cooperative sales was 14.1 percent.

Method of Export Sale

Cooperatives export by different methods, including direct sales to foreign buyers by cooperative sales staff, through a domestic-based export commission agent (broker), a foreign-based export commission agent (broker), selling to a domestic export trading company, or other unspecified methods such as government contract. A cooperative might export by any of these methods depending upon the country and/or product. For example, timely movement of highly perishable items such as fresh produce might prove too costly for a small cooperative or one new to international sales. In this situation, the best method might be to sell to a domestic export trading company. Each method offers varying degrees of tradeoff between cost and control over the product.

Undifferentiated bulk products were exported primarily by sales to export trading companies (ETC). Dairy products, grains, and oilseeds exported by this method accounted for 86.3, 56.5, and 40.6 percent, respectively, of each group's total exports (table 3). Cotton was sold primarily through a domestic-based export agent, which in this case is a

cooperative. Fruits and vegetables were primarily exported by cooperatives' sales staff and the majority of nut exports were through foreign agents.

Export Values

Some 116 cooperatives reported export sales totaling \$4.1 billion in 1990 (table 4, fig. 1). Grains and feeds exports from 18 cooperatives accounted for the largest share, \$1.6 billion or 38.7 percent, followed by 5 cooperatives with exports of cotton valued at \$676 million and fruits and fruit products valued at \$634.7 million exported by 41 cooperatives. The fourth largest commodity export was animals and animal products, worth \$571 million.

The value of cooperative exports increased from \$3.4 billion in 1985 to \$4.1 billion in 1990 or 21.8 percent (tables 5-6). Similarly, U.S. agricultural exports increased from \$29.1 billion in 1985 to \$39.3 billion in 1990. Cooperative oilseeds and oilseed products exports declined by 41.9 percent from 5 years ago resulting from share of cooperative exports decreasing from 11.7 percent in 1985 to 5.6 percent in 1990 (fig. 2). The drop was less severe for grains and feeds and for nuts at 7.8 percent and 2.5 percent, respectively. In contrast, vegetables and vegetable products increased by 94 percent, fruits and fruit products increased by 68 percent, and cotton increased 63.7 percent.

Exports are reported for only two distinct time periods, 1985 and 1990. Therefore, it is not valid to assume trends for this analysis. A one-time large export shipment reflected in any commodity group in one of the chosen years could misrepresent export activity as a trend over the 5-year interval.

Cooperative Shares of U.S. Exports

Cooperatives accounted for 6.2 percent of total U.S. agricultural exports in 1990 (table 7, fig. 3). The largest cooperative share was for nuts, at 27 percent of U.S. nuts exported. Cooperative exports of fruits and fruit products amounted to 26 percent of U.S. fruits and fruit products, followed by cotton with 24 percent of U.S. exports. Cooperatives accounted for only 4.5 percent of U.S. grains and feeds exported. Export share did not include com-

modi ties cooperatives sold to an export management or trading company—one reason cooperative share of grains and feeds was low.

Though total value of cooperative exports increased, cooperative share of total U.S. exports declined from 11.7 percent to 6.2 percent from 1985 to 1990. However, because cooperative shares of U.S. exports for 1990 were calculated by a different methodology than for 1985, comparison between 1985 and 1990 export shares is not valid.

Destinations

Cooperative exports went to 105 countries in 1990. The primary destination was Southeast and East Asia, receiving \$863.6 million worth of cooperative exports (table 8, fig. 4). The primary products to this region were fruits and fruit products, at \$425.6 million, and grains and feeds, at \$217 million. Eastern Europe and the former Soviet Union were the next largest destination, with imports of \$631.2 million, followed by exports to Western Europe totaling \$499.7 million.

Southeast and East Asia remained the largest area destination, taking 22.8 percent of cooperative exports in 1985, then declining to 20.9 percent in 1990 (table 9, fig. 5). Western Europe was the second largest destination in 1985, receiving 13.8 percent of total exports, but decreasing to 12.1 percent in 1990. Eastern Europe was the second largest destination, accounting for 15.3 percent in 1990, up from 5.9 percent in 1985. Export share to Latin America declined from 8.7 percent to 3.1 percent. This was due largely to a decline in the Mexican share of cooperative exports, from 4.2 percent to 1.2 percent.

Destinations for almost 40 percent of cooperative exports were reported as unknown. This is largely due to the sale of bulk commodities such as grains and feeds, cotton, and oilseeds and oilseed products to export management companies or through agents.

COMMODITY REVIEWS

Animals and Animal Products

Cooperative exports of animals and animal products represent a small share of U.S. exports, 1.3 percent. Exports of meat, poultry, and products by four cooperatives, worth \$529 million, were the major portion of this group (table 10). This category includes fresh and processed pork, pork products such as ham, poultry and products, and egg products.

Live animals, frozen bovine semen, and hides from seven cooperatives accounted for \$29.5 million in exports. Eight cooperatives exported \$12.4 million worth of dairy products, including dry whey, lactose, nonfat dry milk, and all other dairy products.

Grains and Feeds

Grains and feeds were the largest commodity group for cooperative exporters in 1990, with 38.7 percent of total exports, or a total value of \$1.6 billion. The subgroup “other grains,” which includes barley, sorghum, and grain products, was the largest component of this group, with exports of \$772.8 million (table 11).

Wheat exports were second largest at \$390.8 million by five cooperatives. Four cooperatives exported \$228 million worth of rice and accounted for 17 percent of U.S. rice exports, the largest share in any U.S. grains and feeds subgroup. Corn exports represented the smallest share of U.S. exports in this subgroup, with exports of \$154 million from six cooperatives. Feeds and fodder exports, which includes alfalfa cubes, sugar beet pulp and pellets, prepared animal feed, and feed ingredients, were valued at \$55.7 million and accounted for 2.8 percent of U.S. exports of these products.

Oilseeds and Oilseed Products

Oilseeds and oilseed products from 10 cooperatives represented 5.6 percent of cooperative exports in 1990. Soybeans were the largest sub-

group, with exports valued at \$158 million (table 12). Exports of other oilseeds, including sunflowerseed, cottonseed, and peanuts, by four cooperatives accounted for 8.3 percent of U.S. exports of these commodities. Oilseed products such as oilseed cake, meal, and oils were exported by four cooperatives and valued at \$58.9 million.

Fruits and Fruit Products

The largest number of cooperatives, 41, exported fruits and fruit products valued at \$634.7 million in 1990. More than half exported fresh deciduous fruit valued at \$82.7 million (table 13). This subgroup includes pears, blueberries, strawberries, raspberries, blackberries, mangos, avocados, passion fruit, sugar apples, plums, cherries, persimmons, kiwifruit, grapes, peaches, and nectarines.

Exports of fresh citrus by six cooperatives were the largest in export dollar value at \$288.9 million, or 51 percent of U.S. total fresh citrus exports. Four cooperatives exported dried fruit valued at \$82.9 million, accounting for 26 percent of U.S. exports of dried fruit. Fruit juice exports valued at \$98.2 million by seven cooperatives resulted in a cooperative export share of 27.2 percent. Canned and frozen fruit and other processed fruit exports classified in the "other" subgroup were valued at \$81.9 million.

Vegetables and Vegetable Products

Vegetables and vegetable products was one of the smallest groups of cooperative exports in 1990, representing 1.8 percent of cooperative total exports. The value of exports was \$73.3 million, or 2.4 percent of U.S. exports (table 14).

The largest vegetable subgroup was pulses, which included dried beans, peas, and lentils. Exports of these products amounted to \$47.1 million, an 11.1 percent share of U.S. exports of pulses. Fresh and processed vegetables exports by 12 cooperatives were valued at \$26.1 million, less than 1 percent of the U.S. total for similar products.

Nuts, Cotton, and Other Products

Table 15 summarizes three commodity groups: nuts, cotton, and other products. Nut exports from four cooperatives were valued at \$271.9 million, a 34 percent share of U.S. exports of tree nuts. Cotton was the second largest dollar volume of cooperative export groups, at 16.4 percent of the total. Five cooperatives exported \$676.3 million worth of cotton, a 23.9 percent share of U.S. cotton exports.

The "other" group was made up of two groups, agricultural and agricultural supply products. Seventeen cooperatives exported other agricultural products valued at \$28.2 million. This category included field and garden seed, wild rice, lecithin, ornamental greens, flowers, molasses, honey, catfish, wine, coffee, and miscellaneous grocery products. Agricultural supply products exported by seven cooperatives were valued at \$46.5 million. These were mostly farm supplies such as fertilizers, ash, nitrate, potash, agricultural chemicals, and agricultural machinery and parts. Because these subgroups contained such a wide spectrum of products, valid shares of U.S. exports are difficult to estimate.

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Table I-Cooperative export concentration, 1990

Range	No. co-ops	Dollar value	Percent of value
Less than \$1 million	37	11,033,026	0.3
\$1 mil - \$4.9 million	31	75,378,457	1.8
\$5 mil - \$9.9 million	15	103,968,477	2.5
\$10 mil - \$19.9 million	9	120,709,635	2.9
\$20 mil - \$49.9 million	14	492,617,988	11.9
\$50 mil - \$249.9 million	5	809,181,076	19.6
\$250 million or more	5	2,522,286,200	61.0
Totals	116	4,135,174,859	100.0

**Table P-Export intensity by type
 of cooperative, 1990**

Type of cooperative	Export intensity' Percent
Cotton	45.3
Dairy	0.3
Fruit and vegetable	11.0
Grain and soybean	23.5
Nuts	54.1
Poultry	36.2
Dry beans	41.0
Rice	22.4
Misc.	10.3
Farm supply	1.7
Service	23.0
Totals	14.1

† Cooperative exports divided by cooperative sales.

Table 3-Method of sale, by commodity group, 1990

Commodity group	Sold directly to foreign buyer by sales staff	Sold through domestic-based export agent	Sold through foreign-based commission agent	Sold to domestic export trading company	Other
	Percent				
Animals & products ¹	11.5	2.0	0.2	86.3	0.0
Grains and feeds ²	23.6	1.8	15.2	56.5	3.0
Oilseeds & products ³	18.7	5.1	6.2	40.6	29.5
Cotton ⁴	3.3	87.1	8.5	1.2	0.0
Fruits & products	66.4	11.3	19.7	2.6	0.0
Vegetables & products	53.8	9.1	11.4	24.5	1.5
Nuts	4.2	0.0	91.7	4.1	0.0
Other products ⁵	62.2	13.8	21.8	2.2	0.0
Totals	24.8	17.6	17.3	37.4	2.8

¹ Excluding furskins, fats, oils, and greases.

² Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, gram preparation, grain not specified. Excludes **oilcake**.

³ Includes peanuts.

⁴ Includes cotton linters.

⁵ **Includes** honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, and fertilizer and chemicals.

Table 4—Value of agricultural exports by cooperatives, 1990

Commodity group	No. co-ops	Dollar value	Percent of total
Animals & products ¹	19	571,022,248	13.8
Grains & feeds ²	18	1,601,682,021	38.7
Oilseeds & products ³	10	231,565,363	5.6
Cotton ⁴	5	676,346,708	16.4
Fruits & products	41	634,673,655	15.3
Vegetables & products	17	73,262,230	1.8
Nuts	4	271,947,420	6.6
Other products ⁵	21	74,675,214	1.8
Totals	⁶ 116	4,135,174,859	100.0

¹ Excluding furskins, fats, oils, and greases,

² Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, grain preparation, grain not specified. Excludes oilcake.

³ Includes peanuts.

⁴ Includes cotton lintens.

⁵ Includes honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, and fertilizer and chemicals

⁶ Does not add because some cooperatives exported more than one commodity group.

Table 5—Value of exports by cooperatives and cooperative share of U.S. exports, by commodity group, 1985 and 1990

	co-ops		Value		Percent of U.S. exports ¹	
	1985	1990	1985	1990	1985	1990
	----- Number -----		----- \$1,000 -----		----- Percent -----	
Animals & products ²	14	19	27,934	571,022	0.9	1.3
Grains & feeds ³	15	18	1,736,860	1,601,682	14.9	4.5
Oilseeds & products ⁴	10	10	398,861	231,565	8.7	1.2
Cottons	5	5	413,172	676,347	25.0	23.9
Fruits & products	29	41	377,602	634,674	31.8	26.2
Vegetables & products	7	17	37,688	73,262	6.4	2.4
Nuts	3	4	279,011	271,947	40.8	26.7
Other products ⁵	14	21	124,820	74,675		
Totals	787	7116	3,395,948	4,135,175	11.7	86.2

— = not able to calculate.

¹ Percentage differs for 1985 and 1990. For 1990, cooperative exports sold direct or through agent divided by U.S. exports. In 1985, dollar values reported as total and method of sale is not distinguished.

² Excluding furskins, fats, oils, and greases,

³ Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, grain preparation, grain not specified. Excludes oilcake.

⁴ Includes peanuts,

⁵ Includes cotton lintens.

⁶ Includes honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, and fertilizer, chemicals, tobacco (1985 only).

⁷ Does not add because some cooperatives exported more than one commodity group.

⁸ Percentage based on U.S. agricultural exports for 1990 and 1985.

Table 6—Percent change in U.S. and cooperative exports, 1985-90

Commodity group	Change in value	
	U.S.	co-op
	Percent	
Animals & products ¹	+98.0	+19.4
Grains & feeds*	+23.5	-7.8
Oilseeds & products ³	+23.7	-41.9
Cotton ⁴	+69.4	+63.7
Fruits & products	+99.0	+68.1
Vegetables & products	+288.9	+94.4
Nuts	+42.8	-2.5
Other products ⁵		-40.2
Total agricultural products	+35.6	+21.8

-- = not able to calculate.

¹ Excluding furskins, fats, oils, and greases.

² Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, grain preparation, grain not specified. Excludes **oilcake**.

³ Includes peanuts.

⁴ Includes cotton linters.

⁵ Includes honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, fertilizer, and agricultural chemicals.

Table 7—Cooperative share of U.S. agricultural exports, 1990

Commodity group	U.S.	Co-op ¹	Co-op share ²
	----- \$1,000 -----		Percent
Animals & products ³	6,124,034	78,406	1.3
Grains & feeds ⁴	14,403,158	649,353	4.5
Oilseeds & products ⁵	5,682,428	69,245	1.2
Cotton ⁶	2,798,495	668,584	23.9
Fruits & products ⁷	2,360,104	618,118	26.2
Vegetables & products	2,302,199	54,436	2.4
Nuts	975,777	260,688	26.7
Other products ⁸		73,004	--
Totals ⁹	39,347,012	2,425,570	6.2

-- = not able to calculate.

¹ Cooperative exports do not include sales to domestic export management companies.

² Cooperative exports sold direct or through agent divided by U.S. exports.

³ Excluding furskins, fats, oils, and greases.

⁴ Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, grain preparation, grain not specified. Excludes **oilcake**.

⁵ Includes peanuts.

⁶ Includes cotton linters.

⁷ Includes fresh & processed citrus and deciduous fruit and fruit juices.

⁸ Includes honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, and fertilizer

⁹ U.S. totals include agricultural exports only. Cooperative total exports are agricultural exports only and are used to calculate total export share.

Table 8—Value of cooperative exports, by destination and commodity group, 1990

Destination	Animals & products ¹	Grains & feeds ²	Oilseeds & products ³	Cotton ⁴	Fruits & products	Vegetables & products	Nuts	Other ⁵	Total
	<i>\$1,000</i>								
Canada	3,678,864	20,201,673	14,266,797	0	27,266,381	3,780,282	na	3,930,196	84,821,585
Mexico	2,451,170	13,691,742	14,677,322	na	7,881,324	308,856	3,916,171	3,991,727	47,625,404
Central Americas	503,219	na	na	0	2,342,518	na	na	1,992,488	13,377,611
Caribbean ⁷	5,052,792	3,418,777	0	0	7,996,628	377,885	na	na	17,166,054
South Americas	1,750,196	19,100,433	0	na	17,094,117	4,810,628	2,030,052	2,929,665	48,330,307
Western Europe ⁹	2,809,461	118,431,290	47,902,861	42,426,186	94,510,216	8,121,663	152,264,773	33,196,127	499,660,777
Eastern Europe & USSR ¹⁰	na	na	na	na	na	na	na	0	631,196,614
South Asia ¹¹	0	na	0	0	na	na	na	0	17,712,909
Southeast & East Asia ¹²	19,731,385	217,095,281	na	44,475,295	425,674,568	14,547,790	na	26,299,210	863,604,122
West Asia ¹³	4,958,996	103,928,803	na	na	7,807,103	na	na	624,164	130,372,280
Africa ¹⁴	5,100,625	137,853,635	na	na	na	na	na	na	146,140,732
Oceania's	310,978	na	na	0	7,596,533	1,785,309	5,641,934	539,371	17,709,152
Unknown, unreported	50,922,694	815,346,918	90,687,767	583,459,880	36,191,585	37,295,040	na	1,061,428	1,617,457,312
Totals	571,022,248	1,601,682,021	231,565,363	676,346,708	634,673,655	73,262,230	271,947,420	74,675,214	4,135,174,859

na = fewer than three cooperatives.

¹ Excluding furskins, fats, oils, and greases.

² Includes wheat and products, sorghum, barley, corn, rice, feed and fodder, grain preparation, grain not specified. Excludes oilcake.

³ Includes peanuts.

⁴ Includes cotton linters.

⁵ Includes honey, wine, seed, coffee, wild rice, sugar beet molasses, miscellaneous grocery products, agricultural machinery and equipment, nursery products, and fertilizer.

⁶ Includes Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

⁷ Includes Bahamas, Barbados, Bermuda, Dominican Republic, French West Indies, Haiti, Jamaica, Leeward & Windward Islands, Netherlands Antilles, Trinidad and Tobago, n.e.c.

⁸ Includes Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

⁹ Includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, United Kingdom, Spain, Portugal, Austria, Iceland, Norway, Sweden, Switzerland, Malta, n.e.c.

¹⁰ Includes Czechoslovakia, Hungary, Poland, Romania, Yugoslavia, and Soviet Union.

¹¹ Includes Afghanistan, India, Pakistan, and Sri Lanka.

¹² Includes Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Thailand, Japan, China, Taiwan, Korea, and n.e.c.

¹³ Includes Bahrain, Cyprus, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and n.e.c.

¹⁴ Includes Algeria, Egypt, Morocco, Tunisia, Cameroon, Ghana, Ivory Coast, Nigeria, Senegal, Sierra Leone, Togo, Ethiopia, Somalia, Mozambique, South Africa, Zambia, Zimbabwe, and n.e.c.

¹⁵ Includes Australia, New Zealand, South Pacific Islands, French Pacific Islands, Trust Territory Pacific Islands, and n.e.c.

Table 9—Cooperative exports and percent of total cooperative exports, by destination, 1985 and 1990

Destination	1985		1990	
	<i>\$1,000</i>	<i>Percent</i>	<i>\$1,000</i>	<i>Percent</i>
Canada	61,052	1.8	84,822	2.1
Latin America	296,636	8.7	126,499	3.1
Mexico	143,389	4.2	47,625	1.2
Central America ¹	16,561	0.5	13,378	0.3
Caribbean*	10,317	0.3	17,166	0.4
South America ³	126,372	3.7	48,330	1.2
Europe	670,696	19.8	1,130,857	27.4
Western Europe ⁴	468,844	13.8	499,661	12.1
Eastern Europe & USSR ⁵	201,852	5.9	631,197	15.3
Asia	916,242	27.0	1,011,689	24.5
South Asia ⁶	19,320	0.6	17,713	0.4
South East & East Asia ⁷	775,256	22.8	863,604	20.9
West Asia ⁸	141,666	4.2	130,372	3.2
Africa⁹	167,788	4.9	146,141	3.5
Oceania¹⁰	10,577	0.3	17,709	0.4
Unknown/unreported	1,252,955	36.9	1,617,457	39.1
Total	3,395,948		4,135,175	

¹ Includes Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

² Includes Bahamas, Barbados, Bermuda, Dominican Republic, French West Indies, Haiti, Jamaica, Leeward & Windward Islands, Netherlands Antilles, Trinidad and Tobago, **n.e.c.**

³ Includes Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

⁴ Includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, United Kingdom, Spain, Portugal, Austria, Iceland, Norway, Sweden, Switzerland, Malta, **n.e.c.**

⁵ Includes Czechoslovakia, Hungary, Poland, Romania, Yugoslavia, and Soviet Union.

⁶ Includes Afghanistan, India, Pakistan, and Sri Lanka.

⁷ Includes Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Thailand, Japan, China, Taiwan, Korea, and **n.e.c.**

⁸ Includes Bahrain, Cyprus, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and **n.e.c.**

⁹ Includes Algeria, Egypt, Morocco, Tunisia, Cameroon, Ghana, Ivory Coast, Nigeria, Senegal, Sierra Leone, Togo, Ethiopia, Somalia, Mozambique, South Africa, Zambia, Zimbabwe, and **n.e.c.**

¹⁰ Includes Australia, New Zealand, South Pacific Islands, French Pacific Islands, Trust Territory Pacific Islands, and **n.e.c.**

Table 10—Animals and animal products, value of exports by cooperatives, 1990

Commodity	No. co-ops	Dollar value	Percent of U.S. exports ¹
Meats, poultry and products	4	529,077,560	1.3
Dairy products	8	12,432,112	3.5
Other ²	7	29,512,576	—
Totals	³ 19	571,022,248	1.3

— = not able to calculate.

¹ Cooperative exports sold direct or through agent divided by U.S. exports.

² Includes live animals, frozen bovine semen, wool, and hides.

³ Does not add because some cooperatives export from more than one commodity subgroup.

Table 11—Grains and feeds, value of exports by cooperatives, 1990

Commodity	No. coops	Dollar value	Percent of U.S. exports ¹
Wheat and products	5	390,769,973	4.4
Rice	4	228,094,401	17.0
Corn	6	154,371,024	0.6
Other grains*	5	772,772,712	—
Feeds and fodder ³	7	55,673,911	2.8
Totals	⁴ 18	1,601,682,021	4.5

— = not able to calculate.

¹ Cooperative exports sold direct or through agent divided by U.S. exports.

² Includes barley, sorghum, grain products, and grain products not specified.

³ Excludes **oilcake**. Includes alfalfa cubes, sugar beet pulp and pellets, prepared animal feed, and feed ingredients.

⁴ Does not add because some cooperatives had exports from more than one commodity subgroup.

Table 12—Oilseeds and oilseed products, value of exports by cooperatives, 1990

Commodity	No. co-ops	Dollar value	Percent of U.S. exports ¹
Soybeans	4	156,058,561	0.6
Other oilseeds ²	4	14,603,144	0.3
Other ³	4	58,903,658	—
Totals	⁴ 10	231,565,363	1.2

— = not able to calculate.

¹ Cooperative exports sold direct or through agent divided by U.S. exports.

² Includes sunflowerseed, cottonseeds, and peanuts.

³ **Oilseed** products including **oilseed** cake, **oilseed** meal, and oil.

⁴ **Does** not add because some cooperatives had exports from more than one commodity subgroup.

Table 13—Fruits and fruit products, value of exports by cooperatives, 1990

Commodity	No. co-ops	Dollar value	Percent of U.S. exports ¹
Fresh citrus ²	6	288,941,729	51.0
Fresh deciduous ³	22	82,739,740	7.9
Dried fruit ⁴	4	82,893,168	26.0
Fruit juice ⁵	7	98,169,242	27.2
Others	10	81,929,776	—
Totals	741	634,673,655	26.2

— = not able to calculate.

¹ Cooperative exports sold direct or through agent divided by U.S. exports.

² **Includes** oranges, grapefruits, lemons, and tangerines.

³ **Includes** pears, blueberries, strawberries, raspberries, blackberries, mangos, avocados, passion fruit, sugar apples, plums, cherries, persimmons, kiwifruit, grapes, peaches and nectarines.

⁴ **Includes** raisins, figs, prunes, and dried apples.

⁵ **Includes** citrus and noncitrus juices.

⁶ **includes** fruit and processed fruit not specified, canned and frozen fruit, and other processed fruit.

⁷ **Does** not add because some cooperatives had exports from more than one commodity subgroup.

Table M—Vegetables and vegetable products, value of exports by cooperatives, 1990

Commodity	No. co-ops	Dollar value	Percent of U.S. exports ¹
Vegetables, fresh and processed ²	12	26,136,717	0.8
Pulses³	7	47,125,513	11.1
Totals	417	73,262,230	32.4

¹ Cooperative exports sold direct or through agent divided by U.S. exports. Does not **include** hops.

² **Fresh** vegetables include potatoes, green beans, carambola, eggplant, **blackeye** peas, okra, sweet potatoes, rhubarb, radishes, celery, sweet corn, and other not specified. Processed vegetables include beets, green beans, sweet corn, rhubarb, tomatoes, peas, mushrooms, and other not specified.

³ **Includes** dried beans, peas, and lentils.

⁴ **Does** not add because some cooperatives had exports from more than one commodity subgroup.

Table 15—Nuts, cotton and other products, value of exports by cooperatives, 1990

Commodity	No. co-ops	Dollar value	Percent of U.S. exports ¹
Nuts²	4	271,947,420	34.0
Cotton³	5	676,346,708	23.9
Other agricultural products ⁴	17	28,190,505	—
Other products ⁵	7	46,484,709	—

— = not able to calculate.

¹ Cooperative exports sold direct or through agent divided by U.S. exports.

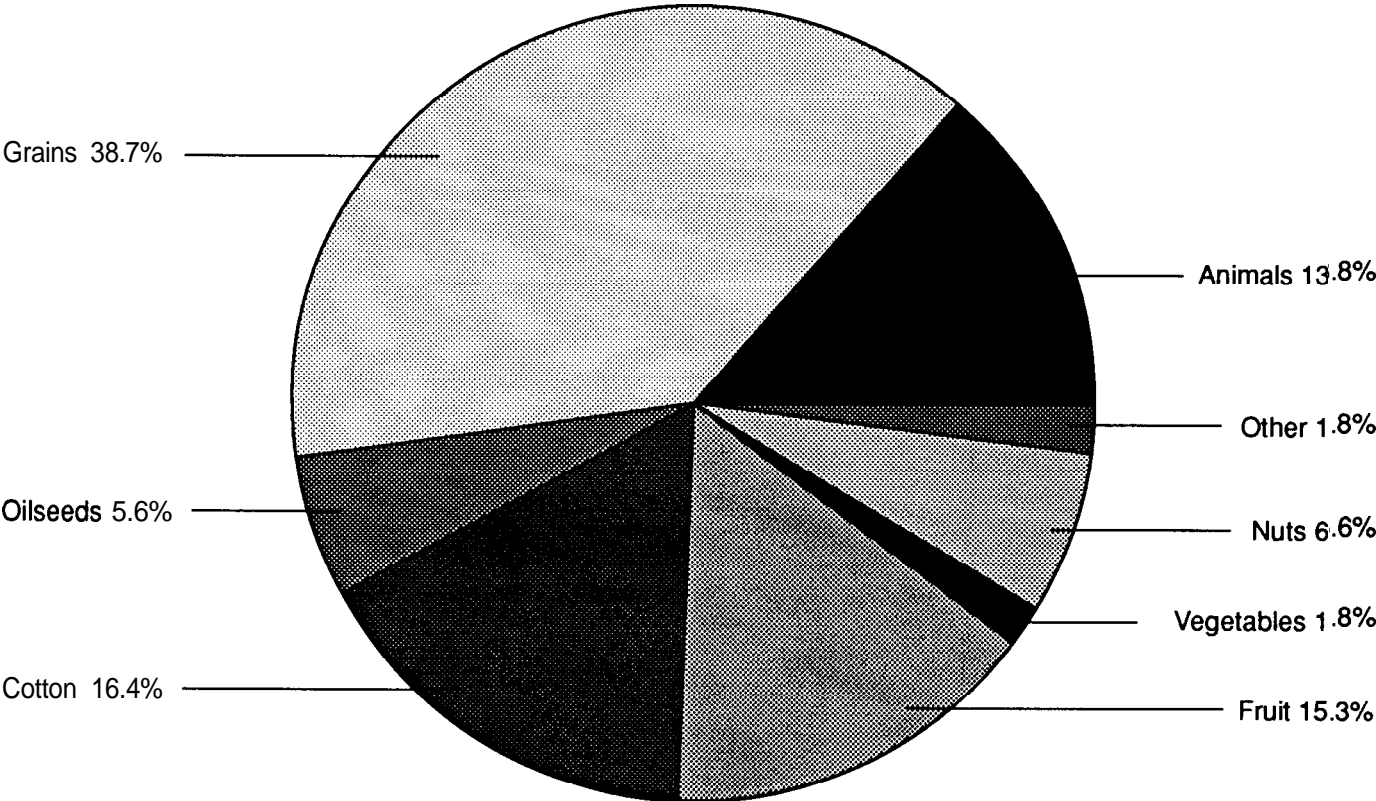
² **Includes** almonds, walnuts, hazelnuts. Does not include peanuts.

³ Includes linters.

⁴ Includes field and garden seed, wild rice, lecithin, ornamental greens, flowers, molasses, honey, catfish, wine, coffee, miscellaneous grocery products.

⁵ **Includes** fertilizers, ash, nitrate, potash, agricultural chemicals, agricultural machinery and parts.

Figure 1 – Cooperative Exports by Commodity Group, 1990¹



¹ Percent of total co-op exports

Figure 2 – Exports by Commodity Group as Percent of Total Cooperative Exports, 1985 and 1990

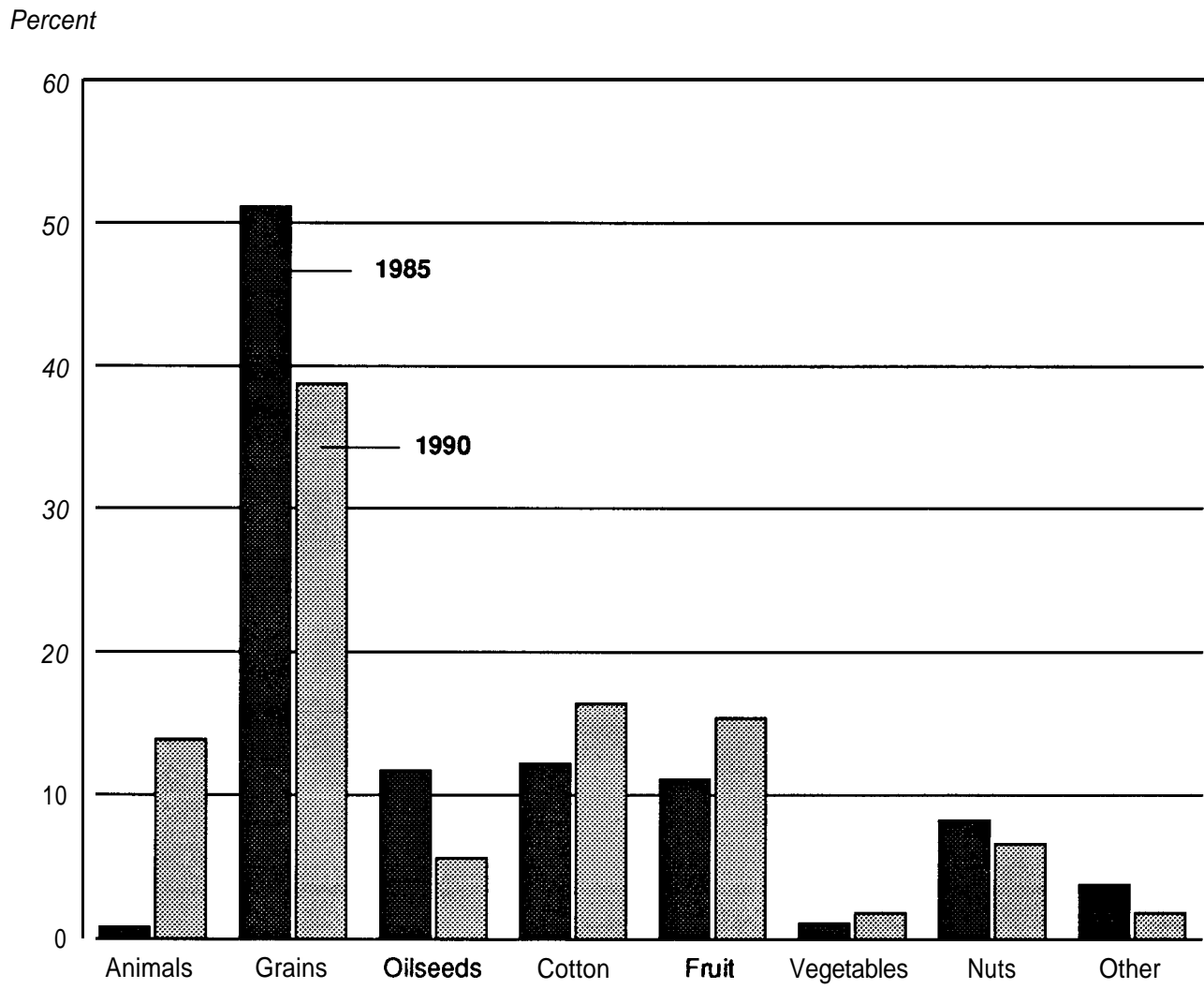
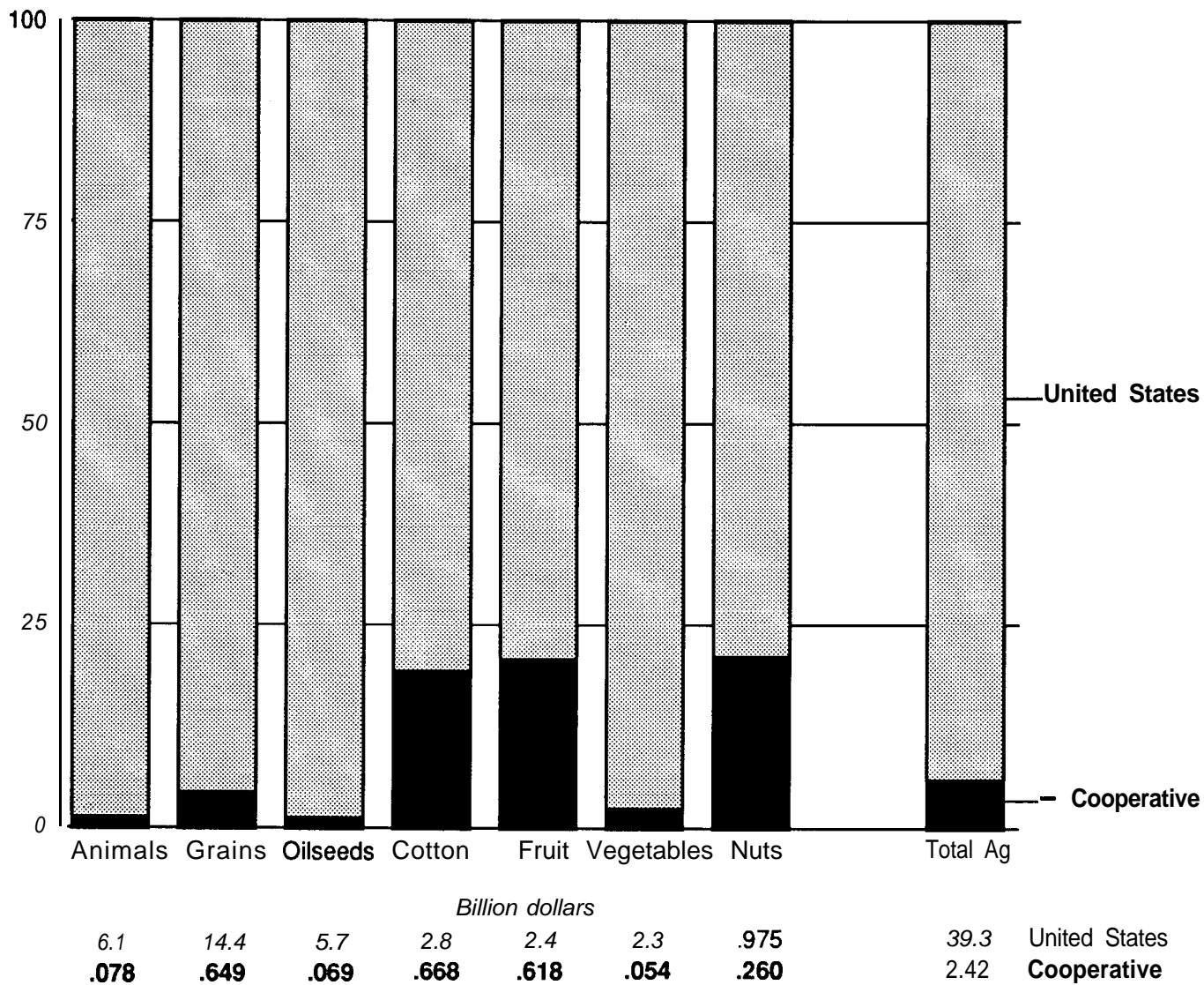


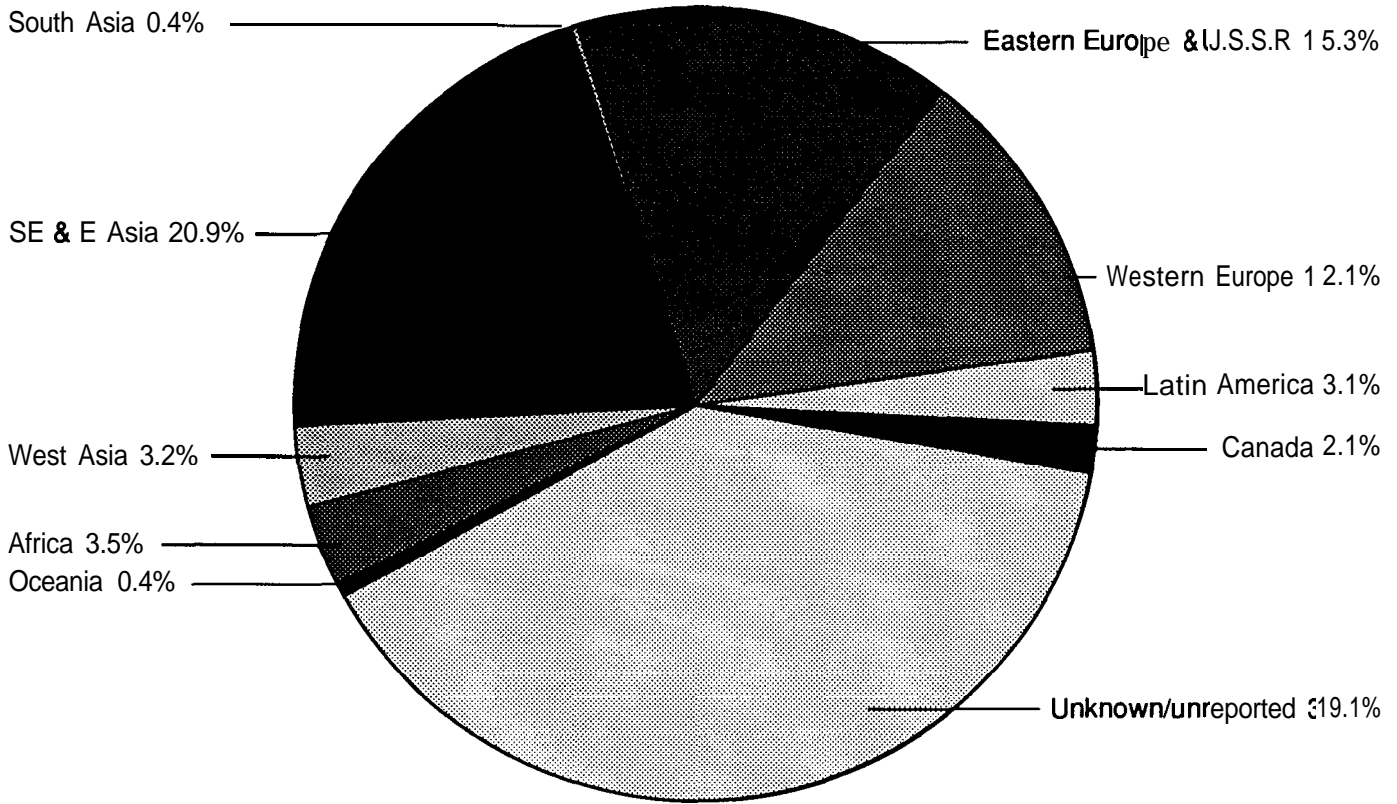
Figure 3 – Cooperative Share of U.S. Exports, 1990¹

Percent



¹ Cooperative exports do not include sales to export management companies

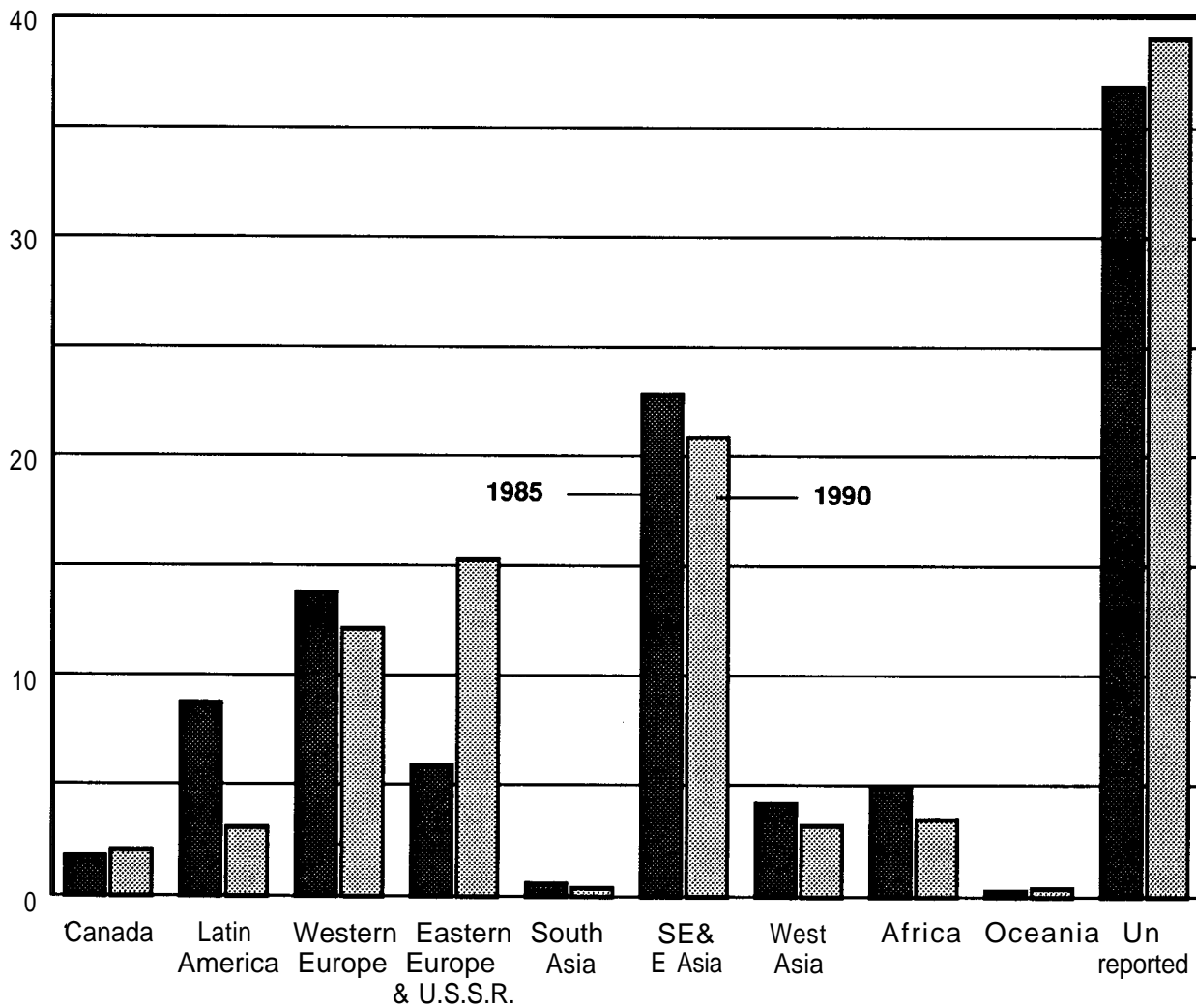
Figure 4 – Cooperative Exports by Destination, 1990¹



¹ Percent of total *co-op* exports

Figure 5 – Percent of Cooperative Exports by Destination, 1985 and 1990

Percent



**U.S. Department of Agriculture
Agricultural Cooperative Service**

P.O. Box 96576

Washington, D.C. 20090-6576

Agricultural Cooperative Service (ACS) 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 agency (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.

ACS publishes research and educational materials and issues *Farmer Cooperatives* magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, marital status, handicap, or national origin.