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**COOPERATIVES IN THE
FRUIT AND VEGETABLE INDUSTRY**

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**Farmer Cooperative Service
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Farmer Cooperative Service
U. S. Department of Agriculture
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Farmer Cooperative Service conducts research; advises directly with cooperative leaders and others; promotes cooperative organization and development through other Federal and State agencies; and publishes results of its research, issues News for Farmer Cooperatives, and other educational material.

This work is aimed (1) to help farmers get better prices for their products and reduce operating expenses, (2) to help rural and small-town residents use cooperatives to develop rural resources, (3) to help these cooperatives expand their services and operate more efficiently, and (4) to help all Americans understand the work of these cooperatives.

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Preface

This report covers the development, growth, and present status of fruit and vegetable cooperatives that market, process, and bargain. It summarizes information on number, size, and type of associations; number of member-patrons; commodities handled; marketing functions and other services performed; and operating methods.

The data upon which this report is based came from a study of fruit and vegetable cooperatives made by Farmer Cooperative Service (FCS) in 1965, supplemented by information in the files of the Cooperative Appraisal Division of FCS.

The National Commission on Food Marketing contracted with FCS in 1965 to prepare a comprehensive report on cooperative phases of the fruit and vegetable study. Much of the information submitted by FCS was subsequently incorporated in Chapters 5, 10, and 11 of technical study No. 4, Organization and Competition in the Fruit and Vegetable Industry, published in June 1966. These chapters covered, respectively, The Role of Cooperatives in Marketing Fresh Fruit and Vegetable Products, The Role of Cooperatives in Processing Fresh Fruits and Vegetables, and Fruit and Vegetable Bargaining Cooperatives in the United States. The Food Commission granted permission for use of excerpts directly from these chapters. This report represents a less detailed portrayal of the role of cooperatives in marketing fruits and vegetables than that presented by the National Commission on Food Marketing.

HIGHLIGHTS

Many agricultural leaders are aware of the need for more aggressive cooperative expansion in marketing and processing. These leaders are focusing attention on the possibilities of increasing marketing efficiency through integrating and consolidating the operations of fruit and vegetable cooperatives. Trends and current status of these associations are presented in this report.

Some noted changes in the characteristics and trends of fruit and vegetable cooperatives that market, process, and bargain since the early 1950's are:

Marketing.--1. The numbers of fresh fruit and vegetable marketing associations and memberships declined (30 percent and 52 percent, respectively) between 1952 and 1964. Volume of business, however, increased from \$370 million to \$522 million.

2. The number of fruit and vegetable marketing associations also engaged in purchasing and production service activities increased from 135 in 1952 to 158 in 1964. There is a trend toward providing member-growers with more supplies, services and technical advice in order to compete more effectively in today's agriculture.

3. Purchases of fresh fruits and vegetables by large-volume buyers in recent years has shifted from large city terminal markets to country shipping points, and to buying on a rigid specification basis. These large-volume buyers often buy several carloads of one variety of a product of a given grade.

4. Fourteen fresh fruit and vegetable marketing associations merged or consolidated with other associations between 1957 and 1965, as indicated by a special FCS survey in 1965. Eleven of these were citrus associations, 10 of them in California and one in Florida.

5. Pooling is the most popular grower payment method used by fresh fruit and vegetable cooperatives. The individual account method ranks second.

6. The general pattern is for fruit and vegetable cooperatives to sell members' products as an integral part of their operations. Cooperatives sell most of their fresh fruits and vegetables directly to chain stores rather than through brokers or other agents.

Processing.--1. Many processing cooperatives started as marketing associations for fresh fruits and vegetables. Some farm supply cooperatives have also started processing fruits and vegetables, mainly to provide grower-members with an outlet for their products.

2. A 10 percent decline between 1952 and 1964 in number of fruit and vegetable processing cooperatives was accompanied by a 16 percent decline in memberships.

3. The annual business volume of \$172 million for 65 processing associations in 1952 compares with \$476 million for 59 associations in 1964. In

1964 cooperatives processed about 21 percent of the total U. S. fruit and vegetable pack. In the cooperative pack about 72 percent was canned or bottled, 18 percent frozen, and 10 percent dried.

The Pacific Coast States processed about 52 percent of the cooperative pack. Processing cooperatives are concentrated in the Pacific, Mid Atlantic and South Atlantic regions. Cooperatives are relatively less important in processing vegetables than fruits.

4. Forty-nine of 56 processing associations responding to the 1965 survey use marketing contracts between members and associations. Out of the 49 associations 34 required members to market all of their products through the cooperatives. Seventy-eight percent of 56 associations reporting use the pooling method of payment to growers.

5. Food brokers play an important role in marketing fruits and vegetables processed by cooperatives. Of 1964-65 sales, 59 percent moved through brokers. That year 45 percent of total cooperative sales went to chainstores. Of this amount, 60 percent moved through brokers and 40 percent directly from the cooperatives.

Bargaining.--1. Between 1919 and 1964, 108 fruit and vegetable bargaining associations were organized. Seventy of them were still active in 1964. The main objective of these associations was to obtain, through bargaining, the highest return consistent with current and prospective economic conditions.

2. Over the 1954-64 period, bargaining associations were formed for five new vegetable and six new fruit crops. Bargaining efforts for two vegetables (beets and cabbage) were discontinued during this period.

3. To negotiate effectively, a bargaining association must control a substantial volume of product and also be able to command recognition from processors. In the 1964-65 marketing year, bargaining associations negotiated for about \$52 million worth of fruits and \$68 million worth of vegetables.

COOPERATIVES IN THE FRUIT AND VEGETABLE INDUSTRY

by Charles H. Meyer
Crops Division
Cooperative Marketing and Farm Supplies Program

Fruit and vegetable marketing cooperatives were first organized in the United States in the 1860's. Their real strength, however, did not begin until the 1890's. In 1895 the Southern California Fruit Exchange was organized. After 1900 fruit growers in the Pacific Northwest and Florida also organized marketing associations.

Large scale processing by cooperatives began in California about 1910, with dried prunes, peaches, and apricots. Cooperative canning in volume did not materialize until the early 1930's. Many processing associations were initially fresh marketing organizations. They continued in the fresh field but began to provide their grower members with a more complete marketing program. Also, some farm supply cooperatives processed fruits and vegetables, primarily to provide members with market outlets for their products.

FRESH FRUIT AND VEGETABLE MARKETING COOPERATIVES

Numbers of fruit and vegetable associations continued to grow. A comprehensive survey by the U. S. Department of Agriculture in 1915 showed 871 associations marketing these products. By 1950, the number of fruit and vegetable marketing cooperatives--including processing cooperatives, a few bargaining associations, and more than 40 sugar beet associations--had declined to 829. Over the 15-year period, 1950 to 1964, the number of associations has shown a steady decline.

Growth and Development

The first fruit and vegetable cooperatives were marketing associations. In numbers of associations, memberships, and dollar volume, cooperatives marketing primarily fresh products are still the most important. Although the main function of these associations is to market fresh products, a few of them manufacture and market processed products as a minor part of their total business.

Most fresh fruit and vegetable marketing cooperatives perform a wide range of services for their members. The cooperatives center marketing activities upon grading, packing, shipping, and selling members' produce. However, there are variations from this typical situation. The most notable separates the functions involved in assembly and product preparation from that of selling. Some cooperatives concentrate on preparation--for market and employ sales agents. Some cooperatives have formed federations to perform the sales function.

Trend in Number

The trend in the number of associations is best illustrated by the data for 1952 and 1964, and the associations beginning and discontinuing

operations during this period. The total number of associations marketing fresh fruits and vegetables from the 48 contiguous States declined from 595 in 1952 to 416 in 1964, a decrease of 30 percent (table 1). (Eight Hawaiian associations are excluded because of incomplete records for the entire 1952-64 period.)

Between 1952 and 1964, 298 of the 595 fresh marketing cooperatives operating in 1952 discontinued operations (exits). At the same time, 119 new associations (entries) began and continued operations until 1964. An undetermined number of associations were not included in this study that began and discontinued operations during the period. Fresh marketing cooperatives operating in both 1952 and 1964 numbered 297.

Changes in the number of cooperatives marketing particular product groups were not indicative of the trend for all associations in the 1952-64 period. For example, the number of cooperatives handling fresh fruits declined 38 percent while those handling fresh vegetables declined 11 percent. The decline in number of fruit associations was heaviest among citrus fruit cooperatives; their numbers fell from 205 to 107, a decline of 48 percent. Number of apple associations increased from 48 to 51. Cooperatives handling other fruits declined 38 percent.

The number of cooperatives handling fresh vegetables would have shown a net increase had it not been for the decline of 39 percent in the number of potato associations from 1952 to 1964. Cooperatives marketing all other vegetables increased from 103 in 1952 to 106 in 1964. The number of associations handling a mixed line of fruits and vegetables declined over the 12-year period.

Discontinuances (exits) of cooperatives in this period were at a relatively high rate for all commodity groups. For associations handling vegetables other than potatoes, exits represented 59 percent of the number of associations operating in 1952. The 29 exits of potato cooperatives accounted for 54 percent of those operating in 1952. The 106 exits of citrus associations amounted to 52 percent of those in business in 1952.

Entries, or cooperative business starts, represented a substantial share of the firms operating in 1964. Cooperatives beginning operations during the 12-year period accounted for 29 percent of the number of apple associations operating in 1964, 24 percent of potato associations, 18 percent of those handling fruits other than apples or citrus, and 7 percent of the cooperative citrus associations.

In line with the national trend of decreasing numbers of fruit and vegetable marketing associations, numbers decreased in all geographic regions except New England. Here the number of associations was the same in 1964 as in 1952 (figure 1, appendix table 1.) Relative change - a decline of 50 percent - was greatest in the West North Central and East South Central regions.

Table 1.--Number of cooperatives marketing primarily fresh fruits and vegetables in 1952 and 1964, and the number of exits and entries over the intervening period, by major product group 1/

Major product marketed	Number of cooperatives <u>2/</u>				
	Operating in 1952	Exits 1953-63	Entries 1953-63	Operating in 1964	Operating in both 1952 and 1964
Apples	48	12	15	51	36
Citrus	205	106	8	107	99
Other fruits	<u>162</u>	<u>80</u>	<u>18</u>	<u>100</u>	<u>82</u>
Total fruits	415	198	41	258	217
Potatoes	54	29	8	33	25
Other Vegetables	<u>103</u>	<u>61</u>	<u>64</u>	<u>106</u>	<u>42</u>
Total vegetables	157	90	72	139	67
Mixed fruits and vegetables	<u>23</u>	<u>10</u>	<u>6</u>	<u>19</u>	<u>13</u>
Total fruits and vegetables	595	298	119	416	297

1/ Exits: Cooperatives discontinuing operations between 1952 and 1964.
 Entries: Cooperatives beginning operations between 1952 and 1964.

2/ Does not include 10 federated associations in 1952 and 7 associations in 1964, whose local members were the primary sources of business volume. These federated associations were distributed as follows:
 Operating in 1952 - 2 apple, 4 citrus, 2 other fruit and 2 potatoes
 Exits 1953-63 - 1 apple, 1 citrus, 1 other fruit, and 1 potato.
 Entries 1953-63 - 1 apple
 Operating in 1964 - 2 apple, 3 citrus, 1 other fruit, and 1 potato.

The most important areas for cooperative marketing of fresh fruits and vegetables were the Pacific and South Atlantic regions. These areas accounted for 61 percent of all fresh marketing associations in 1952 and 62 percent in 1964. The Pacific States alone accounted for about 45 percent of the 1952 total, and 43 percent in 1964. Within the two geographic regions, California and Florida were the most important States. Together they accounted for 47 percent of all fruit and vegetable cooperatives in 1952 and 44 percent in 1964.

Examination of major fresh product groups handled by Pacific and South Atlantic Cooperatives shows that the number of fruit organizations declined and the number of vegetable associations increased (table 2). Of the fruit associations, those marketing citrus showed a substantial decline. The number of potato and other vegetable associations for the period were 26 percent above the 1952 level in the Pacific region and 3 percent in the South Atlantic region.

Trend in Size

Changes in the size of fresh fruit and vegetable associations are depicted by taking the average number of memberships and average dollar volume of business in 1952 and 1964. Averages based on 595 associations in 1952 and 416 in 1964, are, however, more likely to show changes in the level of cooperative business rather than changes in the size of associations.

Memberships.--Number of members as well as number of cooperatives declined between 1952 and 1964. The 595 fresh fruit and vegetable marketing cooperatives operating in 1952 had a total membership of 85,560. This compares with 416 associations in 1964, with memberships totaling 41,463.

Considering major product groups, with the exception of citrus, a downward trend in average memberships is indicated (appendix table 2). The average number of members for fruit marketing associations declined from 126 in 1952 to 103 in 1964. For associations marketing vegetables, average memberships decreased from 156 to 80 per association. The relative changes from 1952 to 1964 for the major fruit and vegetable groups appear in figure 3.

The citrus group was the only one to show an increase in average memberships. Many citrus associations, particularly those in Florida, offer growers a complete grove caretaking, harvesting, and marketing service. This may explain their ability to attract new members. No similar services are offered on such a broad scale by any other specialized group of fruit or vegetable marketing associations.

Volume.--Total dollar volume of business done by fruit and vegetable marketing associations increased 41 percent during the 1952-64 period. The 595 associations operating in 1952 had a volume totaling \$370 million. Total business volume increased to \$522 million in 1964.

FIG. 1.--FRESH FRUIT AND VEGETABLE MARKETING COOPERATIVES, 1952 AND 1964

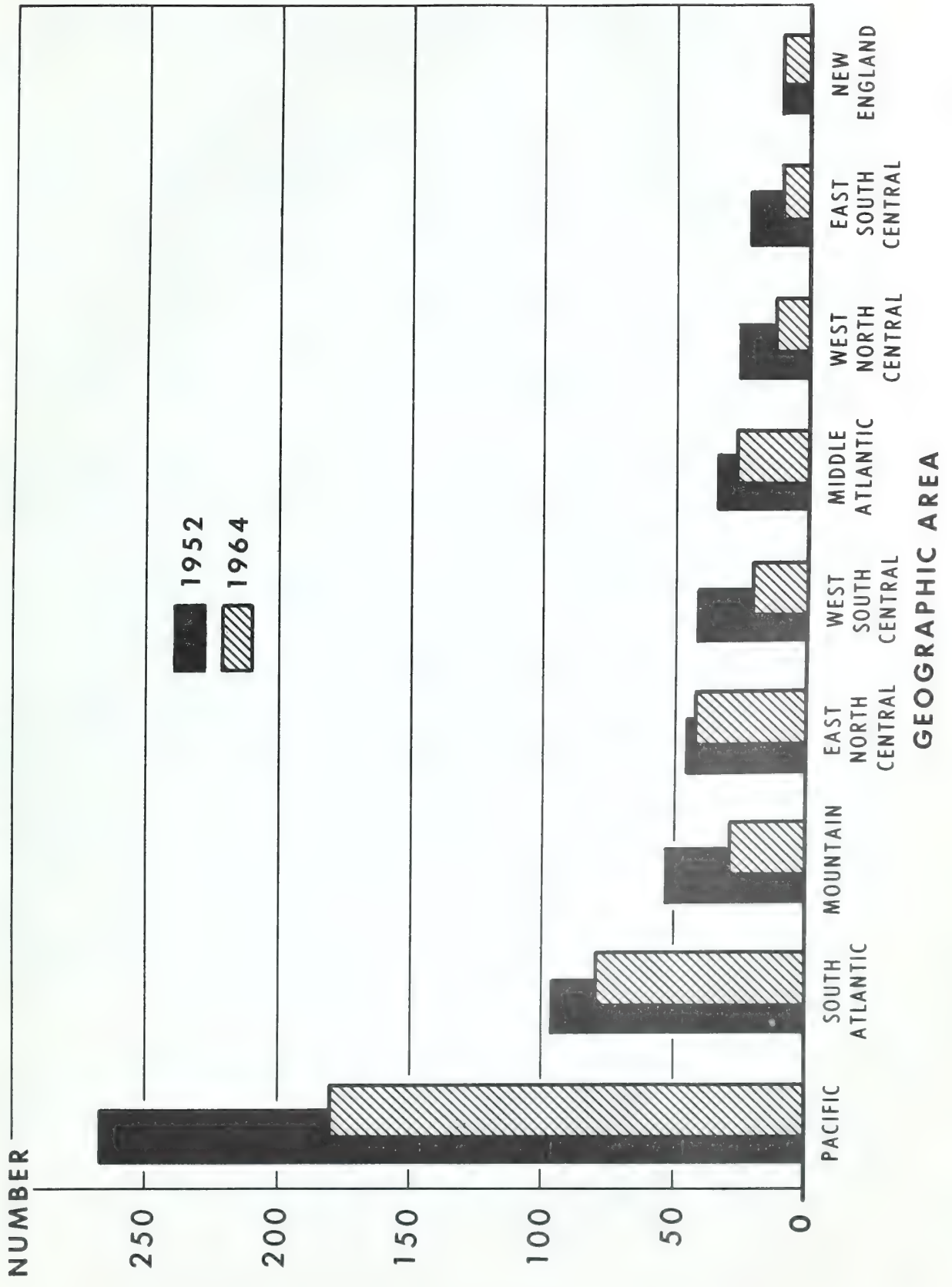


Table 2.--Cooperatives in two geographic regions marketing primarily fresh fruits and vegetables, by major product groups, 1952 and 1964

Major product marketed	Pacific Coast			South Atlantic		
	Number of cooperatives			Number of cooperatives		
	1952	1964	Change	1952	1964	Change
	<u>Number</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Number</u>	<u>Percent</u>
Apples	37	32	- 14	4	6	+ 50
Citrus	147	68	- 54	46	32	- 30
Other fruits	<u>62</u>	<u>53</u>	<u>- 15</u>	<u>10</u>	<u>7</u>	<u>- 30</u>
Total fruits	246	153	- 38	60	45	- 25
Potatoes	--	1	--	7	4	- 43
Other vegetables	<u>19</u>	<u>23</u>	<u>+ 21</u>	<u>25</u>	<u>29</u>	<u>+ 16</u>
Total vegetables	19	24	+ 26	32	33	+ 3
Mixed fruits and vegetables	<u>2</u>	<u>3</u>	<u>+ 50</u>	<u>4</u>	<u>2</u>	<u>- 50</u>
Total fruits and vegetables	<u>1/267</u>	<u>2/180</u>	<u>+ 33</u>	<u>3/96</u>	80	- 17

1/ Does not include 5 federated associations.

2/ Does not include 4 federated associations.

3/ Does not include one federated association.

In addition, 5 of the 10 federated associations not included in these totals had \$16 million in net business volume for 1952 after deducting for intercooperative business. On a net basis, two of seven federated associations had \$11 million in net business volume for 1964. ^{1/} With these amounts added in, the total cooperative fruit and vegetable volume rose from \$386 million in 1952 to \$533 million in 1964 -- a 38 percent increase.

The number of fresh fruit and vegetable cooperatives, classified by dollar volume of business in 1952 and 1964, provides an indication of business trends for these associations. Of all cooperatives operating in 1952, 123 associations, or 21 percent, had a volume of \$1 million or more. In 1964, 153 associations, or 37 percent, had a volume of \$1 million or more. The trend toward larger size was also evident for fresh fruit and vegetable cooperatives that operated continuously over the 1952-64 period. The proportion of cooperatives in the \$1 million class or over increased from 30 percent in 1952 to 42 percent in 1964.

Figure 4 and appendix table 3 show the average dollar volume of business of all cooperatives marketing fresh fruits and vegetables in the various geographic regions of the United States in 1952 and 1964. In 1952 the New England region ranked first in average business volume, South Atlantic region second, Pacific Coast region third, and the Middle Atlantic region fourth. By 1964 only the fourth-ranked Middle Atlantic region held its earlier position. The South Atlantic region ranked first, the Pacific Coast second, and New England third.

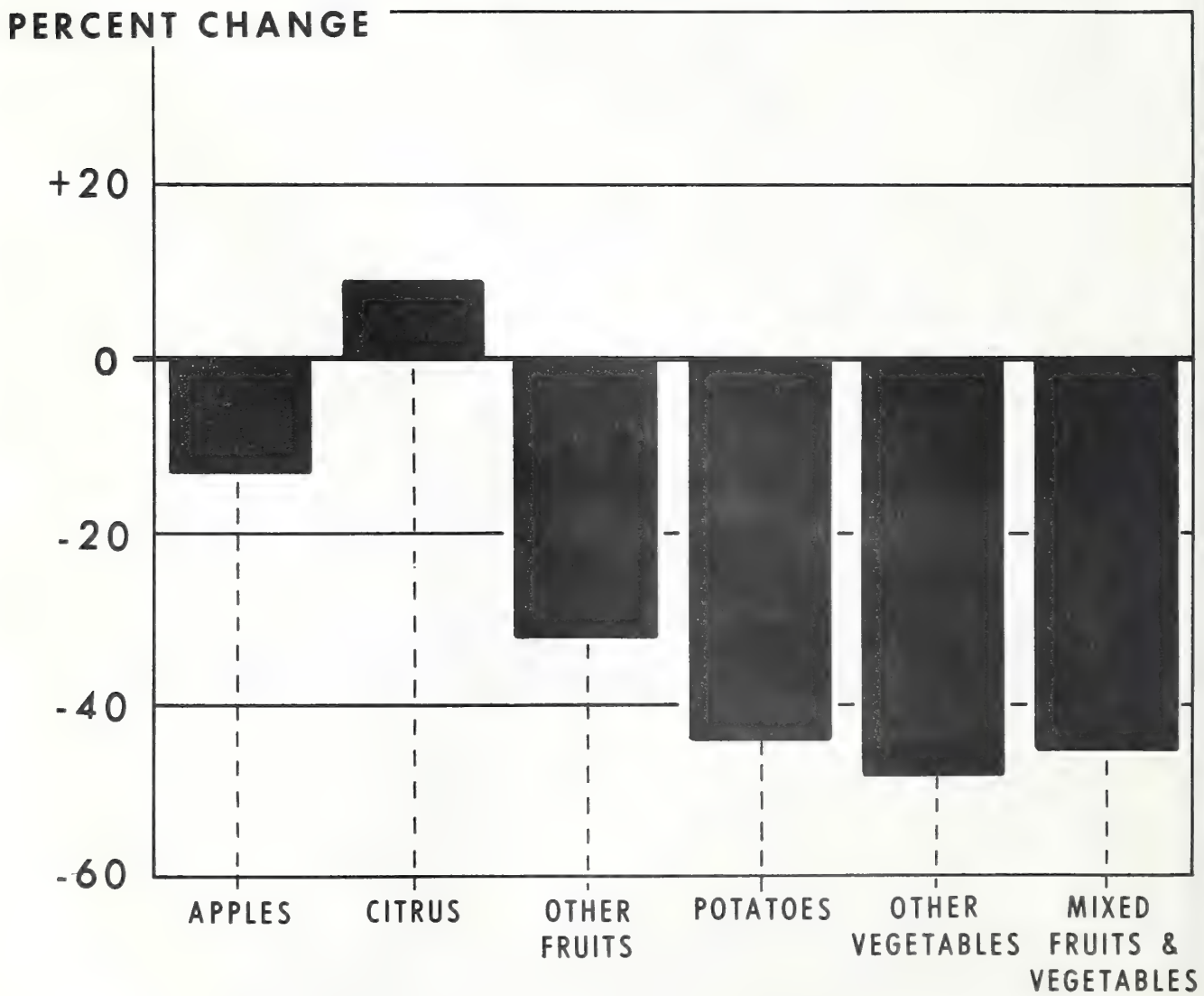
Figure 5 and appendix table 4 show the average dollar volume of business of cooperatives marketing specified major product groups for 1952 and 1964. The average volume of business for associations operating in 1964 increased over 1952 for every major product group.

Member-Volume Ratios.--The two principle measures of cooperative size--number of memberships and dollar volume of business--moved in opposite directions for fresh fruit and vegetable associations over the 1952-64 period. Average memberships were down and average volume was up.

Both measures considered together for 1952 and 1964 show shifting concentration patterns (table 3). In 1952 cooperatives with an annual business volume of less than \$500,000 accounted for 61 percent of all cooperatives, and nearly half had memberships numbering 26 to 100. In

^{1/} Since federated cooperatives are made up of individual cooperatives, such organizations must necessarily be excluded from consideration when product values are involved to avoid double counting. However, the number of federated associations indicated for 1952 and 1964 performed marketing services for individuals not members of another cooperative or for private firms. The respective amounts for 1952 and 1964 refer to the product values involved in these marketing services.

FIG. 2.-- MEMBERSHIP CHANGES IN MAJOR FRESH FRUIT AND VEGETABLE COOPERATIVES FROM 1952-1964



1964, the largest concentration was again the 26 to 100 membership size, but this concentration was in the volume of business category of \$500,000 or more. The less-than-26 membership class in 1964 included a larger percentage of the associations than in 1952. The middle, or 26 to 100 membership grouping, had about the same in the two years.

The trend toward cooperatives handling larger volumes of business while comprised of fewer members closely parallels the basic trend in the organization of fruit and vegetable production in the United States. Fruit and vegetable farms, particularly those in the major producing areas of the Pacific and South Atlantic States, are becoming larger, and it is in these regions that cooperative marketing firms are found in largest numbers.

Data presented earlier indicates that the increase in volume of business and the decline in memberships is not peculiar to the above states. Decline in memberships per association is occurring in all geographic regions and to an extent suggests the increasing concentration of fresh fruit and vegetable production in the hands of fewer and larger producers throughout the country.

Trend in Operating Methods

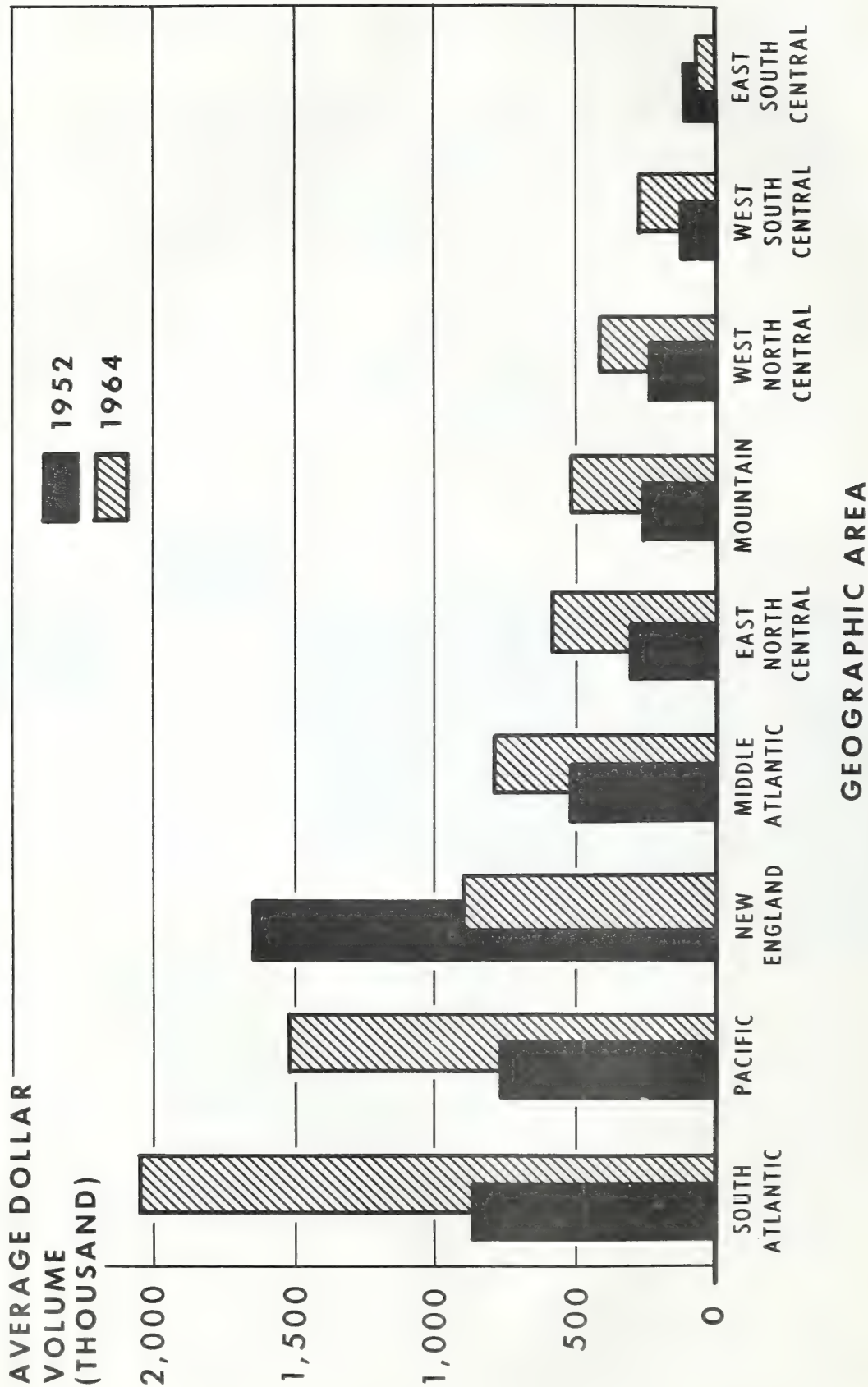
The operating methods of fruit and vegetable marketing associations are subject to change from time to time. They were organized to meet grower needs and these varied from one area to another and from one product to another. A common thread, however, binds fruit and vegetable associations together regardless of area served or products handled. Marketing efficiency is the aim of all associations. In order to survive, they must respond to changes in the economic environment in which they operate.

Fruit and vegetable marketing cooperatives perform a wide range of services for members. As indicated earlier, these services center on assembling, preparing for market, shipping and selling members' crops. The tendency in recent years has been for cooperatives to expand these services.

Services Performed. -- Since the early 1950's fresh fruit and vegetable marketing associations have expanded at an increasing rate into the field of farm supplies and production services such as fertilizing, spraying and hauling. Twenty-three percent of all associations purchased supplies and performed service activities in 1952, and 38 percent in 1964. The number of associations engaged in purchasing and service activities was greater in 1964 than in 1952 for all major commodity groups (figure 6 and appendix table 5).

Fruit and vegetable marketing associations purchasing supplies numbered 322 in 1952, and 250 in 1964 (appendix table 6). This represents a decline of 22 percent.

FIG. 3.--AVERAGE VOLUME OF BUSINESS OF FRESH FRUIT AND VEGETABLE MARKETING COOPERATIVES, 1952 AND 1964



**Fig. 4.--AVERAGE DOLLAR VOLUME, BY COMMODITIES,
FOR FRESH FRUIT AND VEGETABLE
COOPERATIVES, 1952 AND 1964**

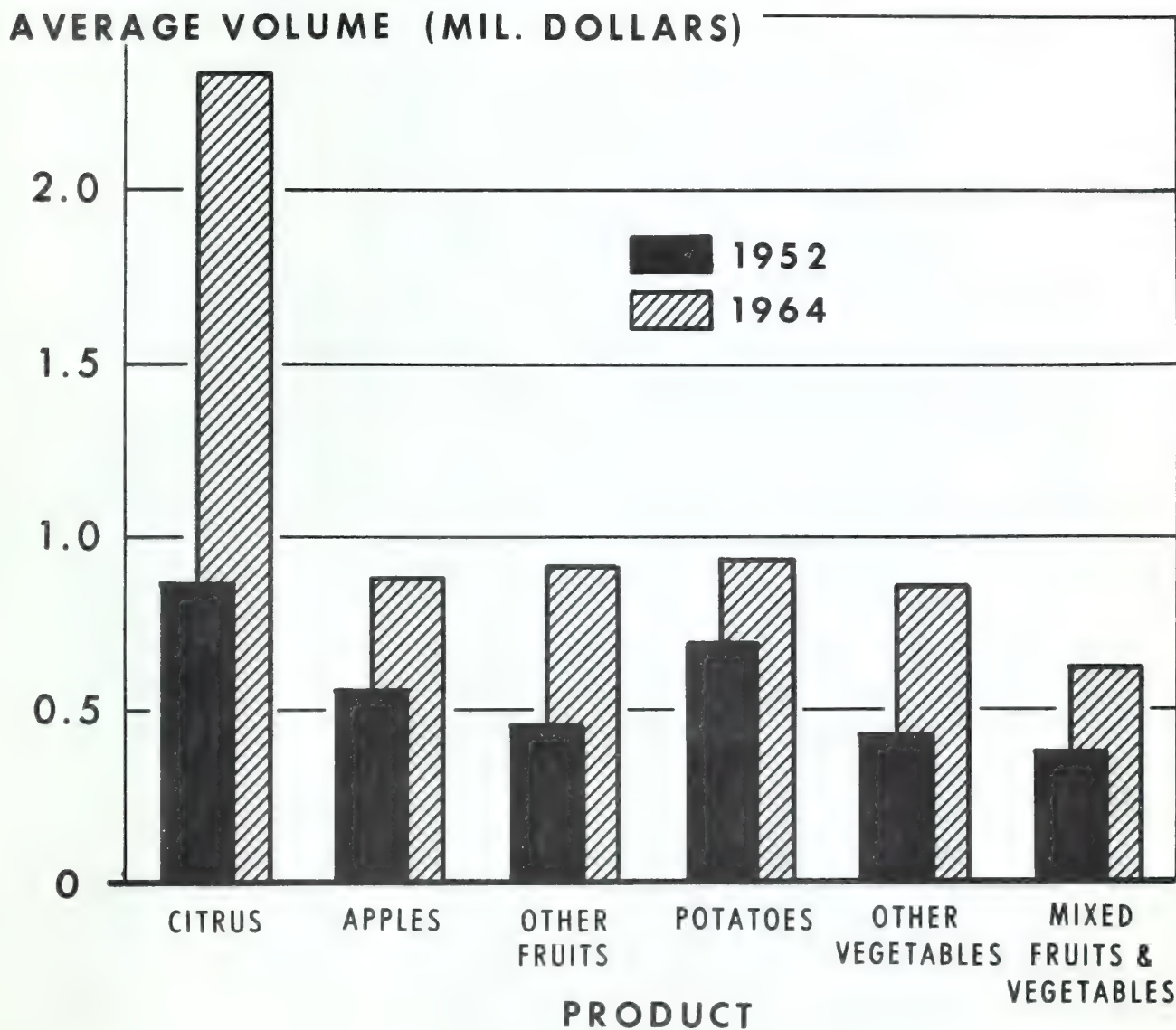


Table 3.--Cooperatives marketing fresh fruits and vegetables, by membership and dollar volume of business, 1952 and 1964

Year ^{1/}	Business volume	Cooperatives with memberships of				Total
		Less than 26	26 to 100	Over 100		
	\$ 1,000	Percent	Percent	Percent	Percent	
1952	Less than 500	17	27	17	61	
	500 and above	<u>5</u>	<u>17</u>	<u>17</u>	<u>39</u>	
	Total	22	44	34	100	
1964	Less than 500	19	19	7	45	
	500 and above	<u>13</u>	<u>24</u>	<u>18</u>	<u>55</u>	
	Total	32	43	25	100	

^{1/} Includes 595 associations in 1952, and 416 in 1964.

However, the dollar volume of purchasing by cooperatives increased 34 percent over the 12-year period (appendix table 7). Average dollar volume of purchases by apple associations increased 54 percent from 1952 to 1964, and that of citrus associations by 85 percent. Declines in the amount of purchasing were experienced only by those cooperatives handling vegetables not specifically classified and those handling mixed fruits and vegetables.

The total number of fruit and vegetable marketing cooperatives purchasing, marketing, and performing related service activities increased from 135 in 1952 to 158 in 1964, or 17 percent (appendix table 8). The number of apple associations increased 38 percent over the 12-year period. The number of citrus cooperatives, however, declined from 38 to 24--a 37 percent decrease. The number of associations marketing other fruits, and engaged in purchasing and marketing and related service activities increased from 31 to 34. The number of potato associations increased from 20 to 21. Associations marketing vegetables other than potatoes increased from 15 to 36 or 140 percent.

Marketing Improvements

Fruit and vegetable growers have as much interest in improving their marketing operations as they have in improving crop production. Many associations have been formed because improvements in crop production required them to find new market outlets.

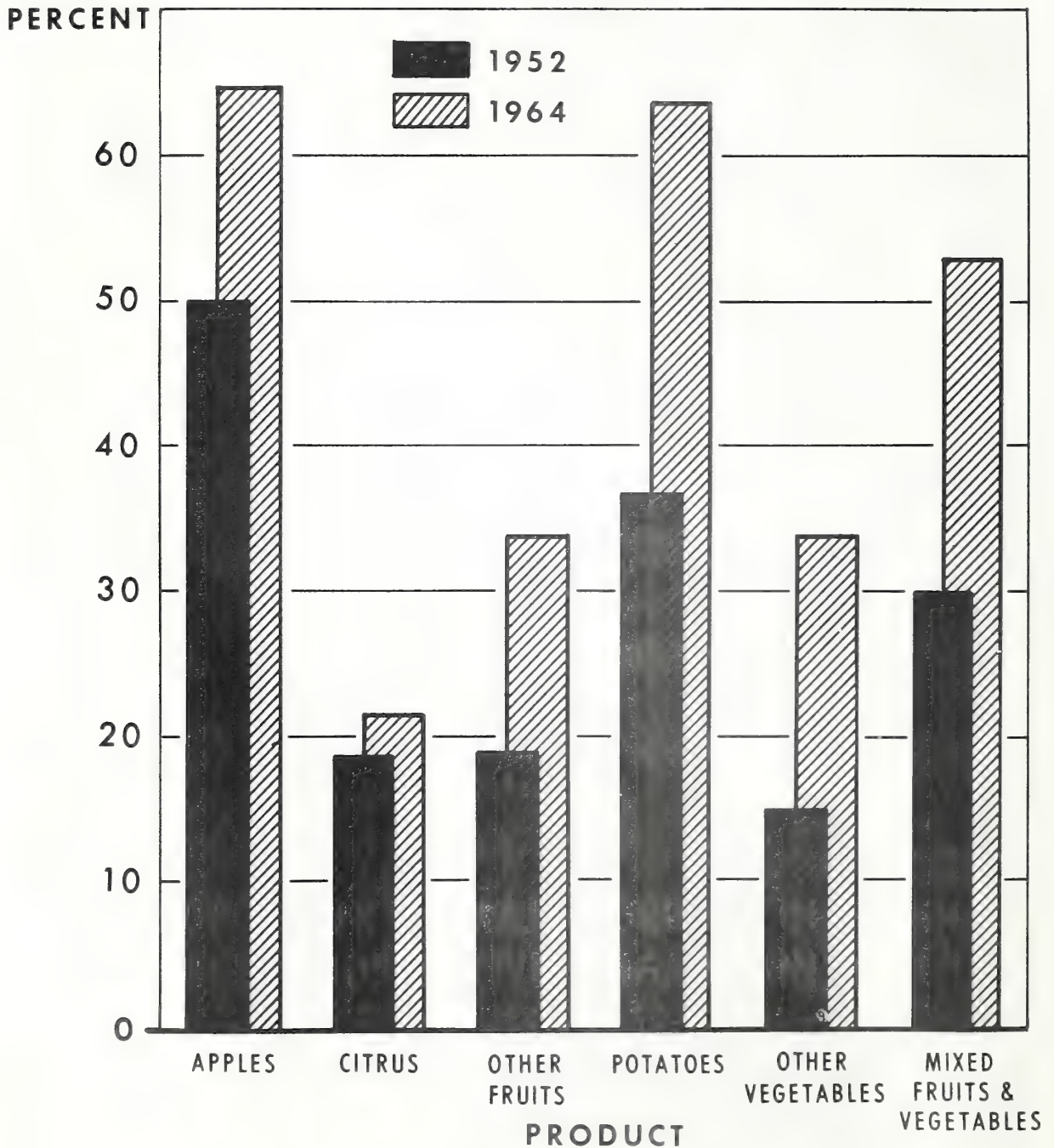
Federations.--Many federations of marketing associations resulted from a continuing need to improve marketing opportunities. Growers whose local associations had made much progress in improving marketing conditions could see opportunities to find new markets, better market representation, and related marketing services by joining with other cooperatives marketing the same products.

These needs and opportunities were behind the formation of some of the large fruit marketing federations located in California, Washington, and Florida, that have been operating for 50 years or more. Several State federations of local potato associations were formed over 50 years ago, too, but only one of these is active today.

Most federations, state and national, were organized when one or more of several conditions needed special attention, including representation on transportation problems and sales representation in distant markets. The emphasis in earlier years was on sales in terminal markets. The federation system satisfied the need of growers in the Pacific States, and in other regions far removed from important eastern terminal markets. The system solved many marketing problems.

With the rise of large volume food retailing, produce buyers moved from the terminal markets to shipping points. These large-volume buyers buy on a rigid specification basis. They frequently have multiple carlot

FIG. 5.--PROPORTION OF MAJOR GROUPS OF FRESH FRUIT AND VEGETABLE COOPERATIVES ENGAGED IN PURCHASING AND SERVICE ACTIVITIES, 1952 AND 1964



requirements for a single variety of a given grade. Direct sales with these requirements are now standard marketing transactions that have largely replaced terminal market sales as a major market outlet.

Federated marketing associations appear to be handicapped somewhat by a lack of control over the decisions that come in the early stages of marketing such as the varieties to be picked and harvest dates. A centralized association is better able to control these decisions for an orderly marketing program.

Mergers. --Farmer Cooperative Service records show 15 fresh fruit and vegetable marketing cooperatives were discontinued through merger, (including consolidations and acquisitions) since 1957, the earliest year of record. Eleven of these 15 merged associations were in California; the other three were in Florida, Missouri, and Washington; eleven of the 15 mergers were citrus associations, 10 in California and one in Florida. No pattern of merger activity was evident over the 10-year period.

Some mergers of California citrus associations resulted because some citrus acreage was transformed into suburban home sites. Decreasing grower patronage brought strong economic pressure on some of these organizations to consolidate their facilities and seek more efficient marketing operations. Some California associations have been involved in two or more mergers as production patterns shifted. The accompanying tabulation shows the discontinuances of fresh fruit and vegetable associations because of mergers.

<u>Year</u>	<u>Number</u>
1957	2
1958	3
1959	1
1960	-
1961	3
1962	1
1963	2
1964	2
1965	<u>1</u>
TOTAL	15

The objectives of most mergers, consolidations and acquisitions are: (1) Increase operating efficiencies (reduce marketing costs), and (2) develop better marketing programs.

Current Status

FCS made a special survey in 1965 of cooperatives marketing fruits and vegetables in the United States. This covered the 1964-65 marketing year. Included were 279 fresh marketing cooperatives, 56 processing, and 70 bargaining associations. The purpose of the survey was to provide cooperatives and others with more complete information and data on current activities and relative importance of fruit and vegetable cooperatives.

Relative Importance

Nationally, the extent to which cooperatives are involved in fresh fruit and vegetable marketing operations varies considerably--both among products and between regions of the country in which specific products are grown.

Fruits.--Cooperatives played a prominent role in marketing fresh citrus fruit in 1964-65 (appendix table 9). They accounted for 56 percent of the fresh orange sales of the Nation. Florida and California are the principal suppliers of this fruit, and there is a substantial difference in the degree of cooperative endeavor in the two States. Cooperatives marketed over three-fourths of the California crop but less than one-third of Florida orange production. Orange growers in Texas made only limited use of cooperatives, marketing only 7 percent of this volume through such associations. Marketing cooperatives in 1964-65 handled about a third of the fresh grapefruit production. Cooperatives were of much less relative importance for this crop than for oranges in California. In Florida, the principal grapefruit producing State, cooperatives moved about a third of the grapefruit crop to market.

Apples are produced in substantial quantities in several regions of the U.S., with major production concentrated in the Pacific Northwest. In this region, cooperatives handled 47 percent of the crop. Cooperatives marketed comparatively minor shares of the apple crop in other regions.

About 60 percent of the reported United States sales of fresh pears passed through the hands of pear marketing cooperatives. As in the case of apples, a large part of the cooperative sales were centered in the Pacific region, with California the major supplier.

Cherries are largely produced in the Pacific States and much of the cooperative marketing activity is similarly located there.

Cooperatives are of minor importance in marketing fresh peaches--both nationally and in all the regions where they are grown for the fresh market.

Vegetables.--In general, cooperatives are less important as first marketing firms for major vegetable crops than for important fruit crops. This is true both in terms of the share of the national and regional supplies of vegetable crops handled by marketing cooperatives (appendix table 10).

Cooperatives serve growers in all the important white potato producing states. Only in the South Atlantic region, however, do cooperatives handle a substantial share of the crop. These associations provide a wide range of services such as grading, packing, storing, and selling. Cooperatives replying to the survey reported handling about 10 percent

of the potatoes sold for all purposes in 1964-65. In New England cooperative marketings represented 13 percent of the potato crop. In Idaho, Colorado, and other Mountain States, grower associations marketed about 8 percent of the total potato production during 1964-65.

A comparatively large percentage of the 1964-65 United States celery crop moved to market through cooperatives. About 72 percent of celery produced in Florida (South Atlantic States) and about half of the Michigan celery crop (East North Central) was marketed by cooperatives. Although the Pacific region, primarily in California, produces more than half the U.S. celery supply, cooperatives handled only 10 percent of production in that region.

Cooperatives handled only 7 percent of the tomatoes produced for fresh market in 1964-65. They were of little importance in marketing this crop except in the East North Central region -- a minor producing area. Cooperatives were also of little national importance in marketing lettuce and watermelons.

Most cooperatives that specialize in marketing vegetables handle them only for the fresh market. Although some specialize in one commodity, most handle a number of vegetables, and some market a complete line of products.

Operating Methods

Most of the fresh fruit and vegetable associations surveyed in 1964-65 used two basic payment methods in accounting to members for produce sold.

One method was to segregate commodities by quality, size, or other differentiating characteristics recognized by the market and return to growers an average or pool price received for the various lots.

The most commonly used pooling method for fresh fruits and vegetables was that of grading the product, placing each grade in a separate pool, and paying producers the average price received for products in each pool. Growers received payments usually on the basis of actual returns for each grade less the pro rata expenses, or on a fixed differential basis less operating expenses.

Under the other plan, the association sold each member's products as a separate lot. Growers received receipts from the sale, less deductions the association made to cover its service charges. This method is known as selling on individual account.

The advantages of pooling usually outweigh the disadvantages. Pooling (1) spreads marketing risks -- of price changes, of proper market selection, and others that complicate merchandising the product; (2) enables management to plan an effective merchandising program; (3) gives management greater flexibility in placing and in timing shipments to

market; and (4) permits management to explore and develop new markets, something the individual cannot do on his own.

Grading is important to successful pooling. If grading is not sufficiently fine to pay the producer according to the market value of his product, he may be reluctant to participate in the pool.

The individual account method has some definite advantages. It enables the grower of top grade produce to get any premium price his particular lot brings. This method appeals to producers of top quality produce. It permits the grower to sell at a time of his choosing, but this makes it difficult for the association to market in an orderly manner. Under this method the product cannot be stored in the association's name.

Two other methods--outright cash purchases from growers and growers being paid directly by buyers--are little used by fruit and vegetable cooperatives.

The outright purchase method involves two separate price negotiations. One takes place between the association and the grower at the time the product is delivered. The other is between the association and the buyer when the association makes a sale. The price received by the grower is usually based on the country shipping point price, while the price received by the association is based on the terminal market or f.o.b. selling price. Any annual net margins above operating costs resulting from differences between the cooperative's purchasing and selling prices are allocated to members on a patronage basis at the close of the association's fiscal year.

Under the grower-to-buyer method the cooperative arranges or approves the general terms of the sale. However, the grower and the buyer establish the specific conditions of the sale. For example, the association may negotiate the selling price but the grower and buyer arrange the delivery schedule. Payment under this method goes directly to the grower rather than through the cooperative.

Figure 7 and appendix table 11 show the grower-member payment methods used by 339 fresh fruit and vegetable cooperatives in 1965.

Among producers of important fresh fruits, citrus and apple growers preferred the pooling method (table 4). Most apple cooperatives using the pooling method were located in the Pacific States, mainly Washington. However, Central States and Eastern apple growers preferred to have their apples marketed by the individual account method. Payment methods used by associations in the important potato regions of New England and the Mountain States were about equally divided between pooling and handling for the individual account of growers.

Sales Methods

Selling members' products is the most important function of marketing cooperatives. The general pattern is for cooperatives to undertake this activity as an integral part of their operations rather than delegate the authority to others.

Only 75 of 287 cooperatives from which information was obtained regarding 1964-65 sales operations were associated by contract or membership with other organizations for purposes of selling members fresh fruits and vegetables (table 5). Most associations using other firms for selling purposes moved 90 percent or more of their products through firms acting as their sales agents.

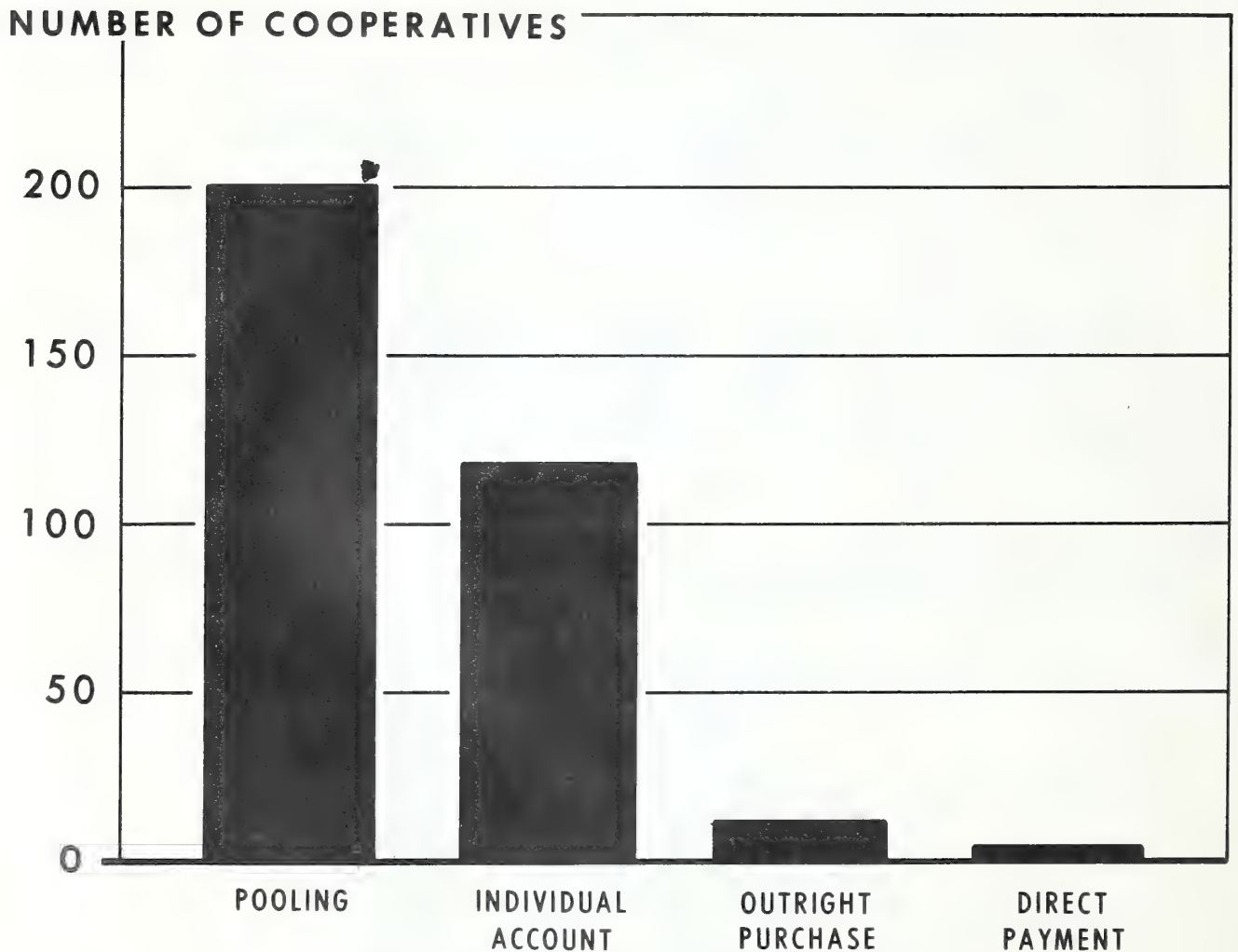
Direct selling was the predominant method employed by cooperatives in moving products into distributive channels while use of brokers ranked second (figure 8). Most of the 107 organizations reporting more than 75 percent direct sales of fresh fruits and vegetables actually had 100 percent direct sales. This was also true of the 40 associations selling 75 to 100 percent through brokers. Most of these 40 associations relied entirely on brokers to perform title transfer functions (appendix table 12).

Fifty-one associations reported sales of produce on a consignment basis, probably in terminal markets. This method is sometimes used by associations to dispose of off-quality fruits and vegetables or of incremental quantities that cannot be sold advantageously by other means. Few cooperatives utilized auction markets to an appreciable extent in their selling operations.

The percentage distribution of total dollar sales of fresh fruits and vegetables sold by 211 associations to chain stores in 1964-65 is shown in the accompanying tabulation.

<u>Percentage of total dollar sales</u>	<u>Number of associations</u>
0- 5	45
5-14	24
15-24	21
25-34	27
35-44	10
45-54	18
55-64	20
65-74	15
75-84	19
85-94	8
95 and over	<u>4</u>
TOTAL	211

**FIG. 6.--GROWER PAYMENT METHODS USED BY
339 FRESH FRUIT AND VEGETABLE MARKETING
COOPERATIVES, 1964-65 ***



* SOME COOPERATIVES USED MORE THAN ONE PAYMENT METHOD.

Table 4.--Grower-member payment methods used by cooperatives for specified fruits and vegetables, 1964-65

Commodity	Pooling	Individual account	Outright purchase	Direct payment to buyer
Fruits				
Oranges	20	3		
Grapefruit	9	2		
Apples	37	19	1	1
Peaches	3	5		2
Cherries	4	3		1
Pears	6			
Vegetables				
Potatoes	23	21	1	
Tomatoes	11	9	1	3
Lettuce	1	7		
Celery	4	3		
Watermelon	1	4	1	1
TOTAL	119	76	4	8

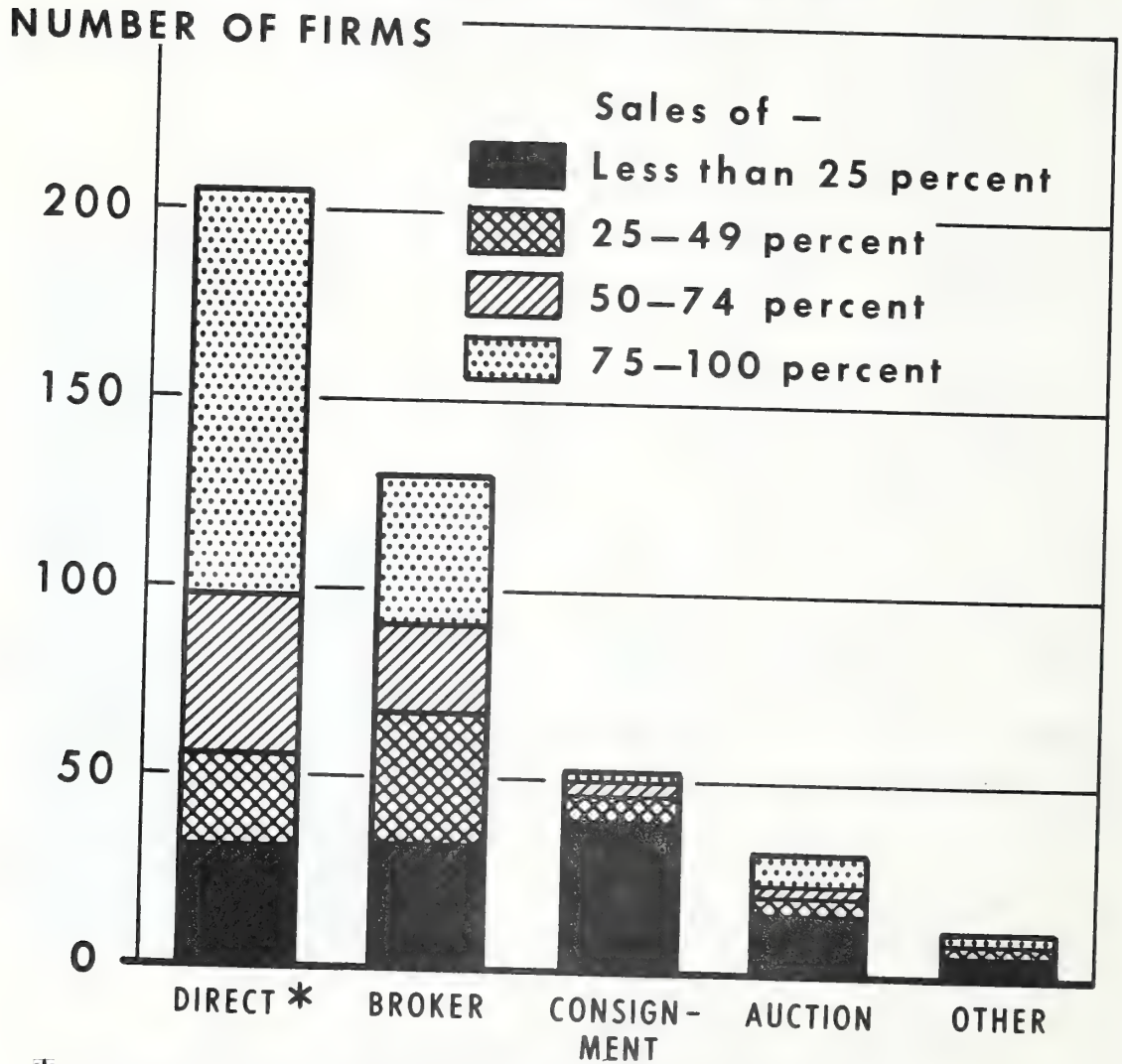
Table 5.--Affiliation of fresh fruit and vegetable cooperatives with other organizations, for purposes of selling, 1964-65 ^{1/}

Percentage sold by other firms ^{2/}	Fruits	Vegetables	Total
Percent	Number	Number	Number
Under 20	1	-	1
20-39	2	2	4
40-59	-	-	-
60-79	1	-	1
80 and over	51	18	69
TOTAL	55	20	75

^{1/} Of 287 associations reporting, 212 had no affiliations with other organizations.

^{2/} Includes other associations, brokers, wholesalers or other merchandisers of fresh fruits and vegetables.

**FIG. 7.--SELLING METHODS USED BY
FRESH FRUIT AND VEGETABLE
COOPERATIVES, 1964-65**



* SALES MADE TO BUYERS WITHOUT THE SERVICES OF INTERMEDIARY AGENTS.

No sales were made to chain stores by 42 of the 45 associations with less than 5 percent sales of fresh products. Only 4 of the 211 associations sold 95 percent or more of their fresh sales to chain stores. Most fresh products were sold directly to chain stores, rather than through brokers or other intermediaries.

PROCESSED FRUIT AND VEGETABLE COOPERATIVES

Cooperative processing on a large scale began with dried fruits shortly after 1910. Drying extended the marketing season for these fruits. Cooperative canning developed rapidly after 1930--about 88 cooperative canneries were operating in 1939. The canning industry expanded greatly during World War II. On the other hand, the frozen food industry was set back by the war years because of scarcity of materials needed for freezing facilities.

Growth and Development

Many processing cooperatives started as marketing organizations for fresh products. Some continued in the fresh field, serving grower members with an integrated marketing program. Some farm supply cooperatives also did processing, primarily to provide grower members with market outlets for their fruits and vegetables. Because processing was not their major function, farm supply cooperatives were excluded from this study.

Trend in Number

Between 1952 and 1964, the total number of fruit and vegetable processing associations decreased from 65 to 59 (appendix table 13). The number of canning and drying associations declined over this 12-year period, but the number of freezer cooperatives, including producers of frozen orange juice concentrate, increased from 6 to 7. Over the period, 17 of the associations operating in 1952 went out of business (exits), and 11 associations began operations (entries). In total, 48 processing cooperatives operated in both 1952 and 1964.

Geographically fruit and vegetable processing associations were concentrated in 3 regions (table 6). In 1964, the Pacific States ranked first with 26 associations, followed by the Middle Atlantic region with 11, and the South Atlantic with 9 associations.

States with 5 or more processing associations in 1964 included California with 13, Oregon with 11, New York with 7, and Florida with 5. In 1952 the list included Oregon (13), California (12), New York (7), and Michigan (6). Of the 48 processing associations operating in both 1952 and 1964, the Pacific States of Oregon, with 11, and California, with 10, were the most important. In the Pacific region canning and drying accounted for the same number of associations, 15 each, in 1952. In 1964, canning cooperatives numbered 16 and drying 14; only 3 associations had freezing operations in 1964 (appendix table 14).

Table 6.--Total number of cooperatives primarily processing fruits and vegetables, by geographic regions, 1952 and 1964

Geographic regions	1952	1964	Change
	<u>Number</u>	<u>Number</u>	<u>Number</u>
New England	4	3	- 1
Middle Atlantic	12	11	- 1
East North Central	10	6	- 4
West North Central	3	2	- 1
South Atlantic	8	9	+ 1
East South Central	-	-	--
West South Central	1	-	- 1
Mountain	2	2	0
Pacific ^{1/}	<u>25</u>	<u>26</u>	<u>+ 1</u>
TOTAL ^{2/}	65	59	- 6

^{1/} Two federated associations in Oregon not included.

^{2/} Excluding Alaska and Hawaii

Trend in Size

Size of organization can be measured in terms of average number of memberships and average dollar volume of business. The trend in size of organization for the 1952-64 period is best measured by the data for the 48 continuously operating associations. Average number of memberships and total volume of business for all cooperatives operating in these years emphasizes trends in the level of cooperative business, which may be affected by exits and entries.

Memberships.--The 61 processing cooperatives operating in 1952 had 26,049 memberships; in 1964, 55 associations had 21,838 memberships. A 10 percent decline in number of cooperatives was accompanied by a 16 percent decline in memberships. No significant changes occurred in the distribution of cooperative processors by number of memberships between 1952 and 1964 (table 7). In both years, 38 percent of the associations had between 101 and 500 memberships, and 56 percent or more had over 101 memberships.

A 7 percent decline in average number of memberships was registered for all fruit and vegetable processing cooperatives; canning, drying, or freezing (table 8). Drying cooperatives had the largest number of members and experienced a smaller increase in average memberships. Over the 12-year period, average number of memberships in freezing associations declined from 870 to 115 (87 percent).

Membership trends on a geographic basis appear in figure 9. The more important producing areas are the Pacific, Middle Atlantic, and East North Central States where over 70 percent of the associations are located. In these areas, average number of memberships for all operating associations was down in 1964 as compared with 1952. Because of urban development and farm mergers, memberships went down by 38 percent in East North Central States, 11 percent in Middle Atlantic States, and 13 percent in Pacific States (appendix table 15).

Volume.--The 65 processing cooperatives operating in 1952 had \$171.6 million in annual business volume. This compares with a \$476.3 million volume in 1964. Unlike number of associations and number of memberships, which declined over this period, the total volume of business increased by 178 percent.

The volume of processing cooperatives in 1952 ranged from less than \$100,000 upward to \$30 million (appendix table 16). In 1964, the range extended beyond \$30 million. Well over half (56 percent) of the processing cooperatives in 1952 had less than \$1 million annual volume. In 1964, only 32 percent were below \$1 million and 10 percent exceeded \$30 million a year.

Table 7.--Distribution of cooperatives primarily processing fruits and vegetables, by number of memberships, 1952 and 1964

Number of memberships	Cooperatives			
	1952		1964	
	Number	Percent	Number	Percent
Less than 100	27	44	23	42
101-500	23	38	21	38
500 and over	11	18	11	20
TOTAL	<u>1/61</u>	100	<u>1/55</u>	100

1/ Does not include two federated associations in Oregon and four in Florida.

Table 8.--Average number of memberships of fruit and vegetable processing associations, by major activity, 1952 and 1964

Process	Average memberships <u>1/</u>		
	Operating in	Operating in	Change
	1952	1964	
	Number	Number	Percent
Canning	287	269	- 6
Drying	958	1,018	+ 6
Freezing	<u>870</u>	<u>115</u>	- 87
TOTAL	<u>427</u>	<u>397</u>	- 7

1/ Based on 65 associations in 1952, and 59 in 1964.

Table 9.--Average dollar volume of all cooperatives primarily processing fruits and vegetables, by major processing activity, 1952 and 1964

Processing activity:	: 65 cooperatives	: 59 cooperatives	Increase
	: operating in	: operating in	
	: 1952	: 1964	
	: \$1,000	: \$1,000	: Percent
Canning	1,848	7,406	301
Drying	4,067	8,180	101
Freezing	6,361	11,920	87
All processing	2,640	8,073	206

Table 10.--Distribution of cooperatives primarily processing fruits and vegetables, by memberships and dollar volume of business, 1952 and 1964

Business volume in dollars	: Cooperatives with memberships of 1/			
	: Less than	: 51 to	: Over	: Total
	: 51	: 500	: 500	:
	: Percent	: Percent	: Percent	: Percent
1952				
Less than 500,000	23	15	2	40
500,000 - 10 million	8	36	11	55
Over 10 million	--	--	5	5
TOTAL	31	51	18	100
1964				
Less than 500,000	20	7	2	29
500,000 - 10 million	11	36	4	51
Over 10 million	--	6	14	20
TOTAL	31	49	20	100

1/ Does not include 2 federated associations in Oregon and 4 in Florida.

The average dollar volume of business for all cooperative processors increased from \$2.6 million in 1952 to almost \$8.1 million in 1964, a three-fold increase (table 9). In both years cooperative freezers had the highest average volume of business and canners the smallest.

Substantial gains in volume are apparent for the three types of processing associations. The canning cooperatives operating in 1964 had an average volume of business 4 times greater than the 1952 average. Dollar volume for drying associations more than doubled over the 12-year period.

Member-volume Ratios.--Average number of memberships of processing associations were decreasing at the same time average business volume was increasing. Although these two key measures of cooperative size moved in opposite directions, decreases in memberships were moderate while increases in volume of business were substantial, especially when compared with cooperatives primarily marketing fresh fruits and vegetables.

Membership-business volume relationships indicated a slight membership increase, between 1952 and 1964 (table 10).

The changes in volume of business were apparent in every membership category. Although the middle membership and volume groupings showed the same percentage of associations (36 percent) in both years, the distribution moved to the upper volume categories. The increase from 5 percent in 1952 to 20 percent in 1964 for the total of all cooperatives in the over \$10,000,000 category was a significant change.

Processing Improvements

As indicated earlier processing cooperative mergers were not recorded by FCS until 1957. Processing association records showed 18 mergers with other cooperatives since 1957 (appendix table 17). Eight of these involved canning cooperatives, and 10 drying associations.

Eight of the 10 drying cooperatives that merged in 1960-61 performed only services. All eight merged into Sunsweet Dryers of San Jose, California. This merger sought to take advantage of improved and more efficient drying techniques. The 10 drying associations were located in California, the center of drying operations.

Four of the eight merged canning associations were located in California, two in Oregon, and one each in Michigan and Washington. Most of the eight mergers involved cooperatives of regional or national prominence. For instance the Turlock Cooperative Growers merger (actually a consolidation) with Tri-Valley Packing Association, both of San Francisco, California, brought together two well-established processing cooperatives. The organization now known as Tri-Valley Growers, San Francisco, California, processes 14 different products, in 5 canning plants, with annual sales of over \$60 million.

Since this merger, Tri-Valley Growers has been able, with California Cannery and Growers of San Francisco, California, another large processing cooperative, to jointly build and operate a large can-making facility.

Current Status

A total of 56 associations processing fruits, vegetables, or both, in 48 States responded to the 1965 special survey. This included 32 fruit processing associations, 9 vegetable associations, and 15 handling both fruits and vegetables (appendix table 18). The 56 associations represent at least 80 percent of the canned and frozen packs handled by cooperatives and almost 100 percent of the dried packs.

The reported fruit and vegetable packs of the associations represented about 21 percent of the total 1964 U. S. pack (appendix table 19). About 72 percent of the pack was canned or bottled, 18 percent frozen, and the remaining 10 percent dried. By comparison, the total U. S. pack in 1964 was composed of 74 percent canned or bottled products, 22 percent frozen, and 4 percent dried.

Cooperatives in California, Washington, and Oregon processed about 52 percent of the total cooperative pack reported in the 1965 survey.

The survey showed that cooperatives produced about 31 percent of the processed deciduous fruits and juices in the U. S. in 1964 (table 11). In addition, cooperatives processed most of the cranberry pack in 1964, as in previous years.

The geographic distribution of the processed deciduous fruits handled by respondent cooperatives shows that they processed 60 percent in the Pacific region, 23 percent in the Middle Atlantic region, and 14 percent in New England, with the balance in the South Atlantic and Mountain regions.

Frozen deciduous fruits, berries, and juices packed by cooperatives covered by the survey approximated 18 percent of the total U. S. pack. Cooperatives handled about 16 percent of the frozen apple products, 22 percent of the frozen cherries, and 9 percent of the frozen berries. Cooperatives were also important in the frozen grape juice concentrate industry. Freezing and marketing associations were principally located in New York, Pennsylvania, Michigan, and the Pacific Coast States.

Florida played a prominent role in the processing of citrus fruits. Five of six cooperatives in Florida reported canned and frozen citrus packs representing about 42 percent of the State's total output. The frozen juice concentrate and canned citrus products handled by Florida cooperatives were about equally important in their relationship to the total Florida packs. Practically all the U.S. supply of frozen orange juice concentrate was produced in Florida, at the time of this study.

Table 11.--Canned deciduous fruit and juice pack reported by cooperatives, and total U.S. pack, 1964

Canned fruits and juices	Packed by cooperatives <u>1/</u>	Total U. S. pack <u>2/</u>	Percent of U. S. total pack
	<u>1,000 pounds</u>		<u>Percent</u>
Apples, (Sauce & juice)	336,256	1,092,400	31
Cherries	40,397	198,900	20
Peaches	350,158	1,643,600	21
Pears	157,212	494,600	32
Grape juice	105,151	146,900	72
All other <u>3/</u>	816,267	2,176,100	38
TOTAL	1,805,441	5,752,500	31

1/ Special survey of farmer cooperatives handling fruits, vegetables and nuts, Farmer Cooperative Service, USDA.

2/ Principally National Canner data converted to pounds by Economic Research Service, USDA.

3/ Includes apricots, cranberry sauce, figs, fruit cocktail, fruit salad, mixed fruits, olives, pineapple, and plums.

Cooperatives were relatively less important in processing vegetables than fruits. They handled about 9 percent of the total U. S. pack of canned vegetables and vegetable juices in 1964 (table 12). The cooperatives' canned green and wax bean pack was the most significant. The two dominating areas were the Pacific and Middle Atlantic regions. Output of these areas represented 58 and 29 percent, respectively, of the 1964 packs.

Although the 1964 cooperative frozen vegetable pack was only 9 percent of the U. S. total, cooperatives accounted for a much larger share of several major items. For example, cooperatives processed approximately 21 percent of the U. S. frozen corn pack. Likewise, cooperatives' frozen packs of green and wax beans and green peas were 18 and 14 percent, respectively, of U.S. totals.

The Pacific region accounted for 77 percent of the frozen vegetable pack handled by cooperatives. A breakdown by packs by regions indicates that 76 percent of the green and wax beans, 82 percent of the corn, and 87 percent of the green peas processed by cooperatives came from the Pacific region.

Operating Methods

Fruit and vegetable processing cooperatives generally employ marketing contracts with their members. The contract is an agreement between the association and a member stipulating the rights, duties, and obligations of each party in marketing a member's products through the association. The basic purpose of the contract is to assure the association a definite volume of the member's business, with provisions for deducting operating and other costs.

The management of 49 of 56 processing cooperatives responding to the 1965 survey stated they had marketing contracts with members (appendix table 20). Contracts of 34 associations required members to market all of their products through the cooperative. Thirty-two of those reporting handled only processed fruits or fruit juices, with 28 operating through market contracts with their members. Fourteen of 15 cooperatives marketing both fruits and vegetables had contracts, as did 7 of the 9 reporting cooperatives processing only vegetables.

Cooperatives in the Pacific region--dominant in cooperative fruit and vegetable processing--reported 27 of 28 firms using marketing agreements. Twenty-one of these required that all members' production be marketed through the association.

Method of Payment

The 56 reporting cooperatives used four basic methods of payments to growers (appendix table 21). The pooling method was used by 78 percent of the firms, 14 percent employed the individual account method,

Table 12.--Canned and frozen vegetable and juice packs reported by cooperatives, and total U. S. packs, 1964

Commodity	Packed by cooperatives	Total U.S. pack	Percent of U.S. total pack
	<u>1,000 pounds</u>		<u>Percent</u>
Canned			
Green and wax beans	172,685	874,900	20
Corn	63,480	923,800	7
Peas	44,026	739,100	6
Tomatoes, juice, and products	262,108	3,678,100	7
White potatoes	2,060	70,500	3
All others ^{1/}	<u>102,184</u>	<u>815,300</u>	<u>13</u>
TOTAL	646,543	7,101,700	9
Frozen			
Green and waxed beans	32,123	175,300	18
Corn	37,116	172,900	21
Peas	45,795	336,900	14
White potatoes	91,391	1,117,900	8
All others ^{1/}	<u>38,152</u>	<u>836,200</u>	<u>5</u>
TOTAL	244,577	2,639,200	9

^{1/} Includes asparagus, lima beans, carrots, pumpkin and squash, spinach, leafy greens, mixed vegetables, and miscellaneous vegetables.

6 percent used the outright purchase plan, and the remaining 2 percent were direct sales from growers to buyers.

Cooperatives employing the pooling method used either a multiple pooling system or a single pool. In multiple pooling, each type or quality of product handled by the cooperative is pooled separately. Grower returns are based on the average prices received for similar products. The single pool method treats all produce as a single lot. Patron returns are prorated on the basis of overall returns to the total commercial value of all products marketed in a stated period, such as a fiscal year. For example, if sales proceeds were 106 percent of local commercial market value of all products handled, each grower-member would receive 106 percent of the commercial market value of his deliveries, less processing charges.

In the Pacific region, 89 percent of the responding cooperatives used the pooling method.

Cooperatives using the individual account method of payment essentially act as agents for grower-members. The procedure is to negotiate the sale, collect the receipts, deduct costs, and return the balance to the grower-member with an itemized account of the transaction.

Only 14 percent of processing cooperatives used this method.

When a cooperative purchases members' products outright, it allocates to members on a patronage basis any net margins realized at the close of the year. In a direct sale from grower to buyer, the general terms of the sale are either arranged or subject to final approval by the cooperative.

Very few associations used the latter two payment methods.

Brokers play a major role in marketing cooperatively processed fruits and vegetables. This sales dominance of brokers prevailed in all geographic regions except the South Atlantic and Mountain regions, where the direct sales method was more significant.

Approximately 59 percent of reporting associations' sales of processed fruits and vegetables was handled by food brokers, 40 percent was sold directly to buyers, with the remaining one percent sold on consignment (appendix table 22).

Chainstores were important buyers of products processed by cooperatives, accounting for 45 percent of total reported sales for the 1964-65 season (appendix table 23). ^{2/} Of this amount, 60 percent was sold through brokers and 40 percent directly by the cooperatives.

^{2/} A chainstore is a corporate, voluntary, or cooperative organization of 11 or more stores.

Information obtained from the 56 reporting cooperatives on their labeling practices revealed that 53 percent of the total pack was sold under the cooperative's own label, 22 percent under chainstore labels, 23 percent under labels of other buyers, and 2 percent unlabeled (appendix table 24).

BARGAINING COOPERATIVES

The objective of the bargaining cooperative is to obtain the highest return consistent with current and prospective economic conditions and the long-run welfare of grower-members. Because of characteristics of the commodity and the market situation, bargaining associations concentrate on negotiating for the price and other terms of trade involved in the sale of the raw products to processors.

Membership in a bargaining cooperative is voluntary, and a common requirement for membership is that members be bonafide agricultural producers. The cooperative nearly always has a membership agreement which requires members to market through the cooperative all the crops they produce for processing that are bargained for by the association.

The capital requirements of a bargaining association are usually very small since the chief need is for operating expenses.

Growth and Development

Wholesale and retail fruit and vegetable firms have become larger and fewer in number. Growers have found that group action is one way to relate themselves to the changing market conditions. The cooperative approach offers growers a means for gaining bargaining power where conditions of imperfect competition exist.

Trend in Numbers

The first fruit and vegetable bargaining association was organized in 1919. Between 1919 and 1964, 108 bargaining associations were organized. Of this total, 70 were still active at the end of 1964. This included five citrus association participating plans and 23 state affiliates of the American Agricultural Marketing Association. ^{3/} Available records showed that 38 associations had gone out of business by merger or by other discontinuances.

Relatively few fruit and vegetable bargaining associations were organized before World War II. Since the war, and especially during the past 10 years, the number of associations increased markedly. Of the total number

^{3/} Incorporated as an affiliate of the American Farm Bureau in 1960, the AAMA has coordinated the development of state marketing-bargaining associations by State Farm Bureau.

Table 13.--Memberships of fruit and vegetable bargaining associations and farm value of crops negotiated, by geographic regions, 1954 and 1964

Region	Membership		Farm value	
	1954	1964	1954	1964
	Number	Number	\$1,000	\$1,000
Middle Atlantic	1,702	1,736	1,960	12,272
South Atlantic	--	570	--	5,000
Central	5,419	4,717	2,355	18,041
Mountain	5,000	2,375	1,900	7,094
Pacific Coast	4,524	6,961	29,064	77,471
TOTAL	16,645	16,359	35,279	119,878

Table 14.--Volume of business of negotiating cooperatives and participation plans, 1964-65

Type of activity	Fruits	Vegetables	Total
\$ 1,000			
Negotiating	51,900	68,000	119,900
Cooperative participation plans	73,000	--	73,000
TOTAL	124,900	68,000	192,900

Coast States increased more than \$48 million. An estimated \$5 million of crops were negotiated in the South Atlantic region in 1964, whereas no bargaining activity was recorded in that region 10 years earlier. In the Central region the increase in the farm value exceeded \$15 million between 1954 and 1964.

In 1954, all fruit bargaining associations were organized and operating on a one-commodity basis, and much of the subsequent growth in association numbers reflected a continued growth in specialization (appendix table 27). Only 2 of 24 fruit associations bargained for more than a single product in 1964. Half of the six vegetable associations operating in 1954 dealt in more than one product, but much of the recent growth in vegetable activity shows a tendency toward specialization. Although there was a net gain of 14 associations for vegetable crops over the 10-year period, the number organized along multiproduct lines increased by only 5 associations.

In 1964, fruit bargaining cooperatives negotiated for 9 crops, the most important of these, apples and berries (appendix table 28). In 1954 no associations dealt in these two crops. For vegetables, the largest number of associations operating in 1964 were for tomatoes, beans, peas, and asparagus. With the exception of peas, these were also among the products reflecting the greatest increase in association numbers between 1954 and 1964. Over the 10-year period, bargaining associations were formed for five new vegetable and six new fruit crops. Bargaining efforts for two crops, beets and cabbage, were discontinued over this period.

Current Status

The number of members and number of fruit and vegetable bargaining associations engaged in specified activities in 1964-65 are shown in appendix table 29. Of 70 bargaining associations operating in 1964, 43 actively negotiated market terms for their members. Twelve associations were primarily engaged in collecting market information, while 10 engaged in little or no operational activities. Almost 15,000 members, or about 85 percent of all bargaining association memberships, belonged to negotiating associations that year.

The value of fruits negotiated by associations in that year was about \$52 million, while the 20 negotiating vegetable associations represented a farm value of \$68 million (table 14). Thus, the total negotiating effort entailed approximately \$120 million farm product value, the proportion attributed to fruits and vegetables being 43 and 57 percent, respectively. Adding the value of business represented by participation plans in the citrus industry increases the total value to about \$193 million.

While the absolute amount involved in cooperative bargaining may appear impressive the share under cooperative control is rather small. Data

of associations organized since 1919, 85 were established between 1955 and 1964, and 33 went out of business. A total of three associations were organized and operating in 1939, 15 by the end of 1949, and 45 by 1959.

Comparison by commodity groups shows that of 42 fruit bargaining associations organized in the 1919-64 period, 35 were organized after 1954. Of the total, 28 were active at the end of 1964, and 14 had discontinued operations (appendix table 25).

At least 61 vegetable bargaining associations were organized between 1919 and 1964. This is 45 percent greater than the total fruit bargaining associations organized over this 45-year period. The first surge in expansion of vegetable associations occurred in the 1940-49 period, when 11 associations were organized. In the 1955-64 period 46 were formed while 19 went out of business. The major growth in numbers of both fruit and vegetable associations has occurred in recent years.

Trend in Scope and Operations

Because of their minor importance, no systematic recording of data regarding bargaining associations operations was done until 1954. Hence, a detailed examination of their growth and development is limited to the 1954-64 period.

A total of 17 bargaining associations were operating in 1954. Of these, 9 negotiated the sale of fruits or vegetables to processor markets (appendix table 26). Ten of the 17 associations were in the Pacific region, and 4 of the 9 negotiating associations were also in that region.

Association numbers increased between 1954 and 1964 in all geographic regions and the level of association activity showed substantial change.

Twenty-two of the 24 organized bargaining groups in the Pacific region were negotiating cooperatives. American Agricultural Marketing Association activity in the Midwest was responsible, in part, for the increase of 15 in the number of bargaining associations in the Central States. By 1964, the cooperatives negotiating markets for growers in this region numbered 10 out of a total of 18.

Bargaining association memberships and farm value of products, by geographic regions appears in table 13. All fruit and vegetable bargaining associations (negotiating, non-negotiating, and organized but not active) reported more than 16,000 members in both 1954 and 1964. Substantial membership increases occurred in the South Atlantic and Pacific Coast regions, but these were offset by decreases of memberships in the Central and Mountain regions. The farm value of commodities negotiated by bargaining associations increased over the 1954-64 period in each geographic region. The value of crops negotiated in the Pacific

for the total cash farm value of all processed fruits and vegetables is not available. The USDA estimated farm value of processed vegetables alone, however, amounted to \$344.7 million in 1964. Vegetables accounted for 52.6 percent of the total tonnage of processed fruits and vegetables produced that year.

Table 15 shows memberships of fruit and vegetable bargaining associations for different categories in 1964-65. Twenty-seven of 43 negotiating associations in 1964 reported 100 to 500 grower-members. Five associations, those in the smallest category, had fewer than 50 members. Only seven associations had more than 500 members. There was no appreciable difference between fruit and vegetable associations with respect to the distribution among membership size groups.

As a rule, bargaining associations operate on a small scale in comparison to the size of processors with whom they deal. Distribution of associations by value of the bargained product in 1964 shows a concentration in the \$1 to \$2.5 million class (table 16). In 1964, less than one-third of the total was larger than this most common size group.

In order to negotiate effectively, a bargaining association must control a substantial volume of product and also be able to command recognition from large-scale buyers.

There are a few cases where bargaining groups control a large percentage of a product in a given geographic region. While these are exceptions, the amount of bargained product under association control usually ranges between 40 and 60 percent of the total. For products grown in several geographic regions, the share of the national supply under association control may be smaller.

Table 15.--Memberships of fruit and vegetable bargaining associations, by size groups, 1964-65

Number of members	:	Fruits	:	Vegetables	:	Total
		<u>Number of associations</u>				
Less than 100		5		4		9
100-249		7		6		13
250-499		8		6		14
500-999		1		3		4
1,000 and over		2		1		3

Contributing further to the problem of cooperative bargaining is the lack of production control. Characteristically the associations negotiate contract terms and price on behalf of grower-members and leave

specific arrangements regarding acreage, product specifications, and the like to be settled between the individual grower and the processor. Processors can contract with any producer for whatever amount of raw product they desire; the individual producer has an equal degree of latitude.

Table 16.--Dollar volume of fruit and vegetable bargaining association operations, 1964-65

Farm value	Fruits	Vegetables	Total
<u>\$1,000</u>	<u>Number of Associations</u>		
Less than 1,000	6	5	11
1,000-2,499	13	7	20
2,500-4,999	2	3	5
5,000-9,999	2	4	6
10,000-19,999	1	-	1
20,000 and over	-	1	1

The major limitations of bargaining associations have their origin in the individualistic nature of farmers and their reluctance to forego the necessary decision-making freedom required to gain the full measure of bargaining power possible through cooperative action.

The voluntary nature of bargaining cooperatives appears to be the major impediment to their widespread use by fruit and vegetable producer groups. Producer representation for only a fraction of the total crop bargained gives rise to inadequate control over volume. The fact that production is not subject to control is a further contributing factor.

Even in instances where grower groups might achieve such control, they usually lack the unanimity to do so.

APPENDIX

Appendix table 1.--Cooperatives marketing primarily fresh fruits and vegetables, by geographic regions, 1952 and 1964

Geographic region	1952	1964	Change
	<u>Number</u>	<u>Number</u>	<u>Percent</u>
New England	10	10	0
Middle Atlantic	34	28	-18
East North Central	45	43	- 4
West North Central	26	13	-50
South Atlantic	96	80	-17
East South Central	22	11	-50
West South Central	42	22	-48
Mountain	53	29	-45
Pacific	267	180	-33
Total or average	<u>1/ 595</u>	<u>2/ 416</u>	-30

1/ Does not include 10 federated associations distributed as follows:
East North Central 2, South Atlantic 1, West South Central 1,
Mountain 1, and Pacific 5.

2/ Does not include 7 federated associations distributed as follows:
East North Central 1, South Atlantic 1, Mountain and Pacific 4.

Appendix table 2.--Average number of members in cooperatives marketing primarily fresh fruits and vegetables, by major product marketed, 1952 and 1964

Major product	1952	1964	Percent Change
All Cooperatives			
Apples	52	45	-13
Citrus	99	108	+ 9
Other fruits	184	126	-32
Average, all fruits	126	103	-18
Potatoes	202	114	-44
Other vegetables	132	69	-48
Average, all vegetables	156	80	-49
Mixed fruits and vegetables	376	206	-45
Average, all fruits and vegetables	144	100	-31

Appendix table 3.--Average dollar volume of business of cooperatives marketing primarily fresh fruits and vegetables, by geographic region, 1952 and 1964

Geographic region	Dollar volume ^{1/}			Change
	Co-ops	Co-ops	Percent	
	operating	operating		
in 1952	in 1964			
	\$1,000	\$1,000		
New England	1,649	907	- 45	
Middle Atlantic	520	793	+ 52	
East North Central	337	589	+ 75	
West North Central	242	422	+ 74	
South Atlantic	888	2,050	+131	
East South Central	111	83	- 25	
West South Central	138	285	+107	
Mountain	264	516	+ 95	
Pacific	776	1,519	+ 96	
Average	622	1,254	+102	

^{1/} Averages based on number of cooperatives shown in appendix table 1.

Appendix table 4.--Average dollar volume of business of all cooperatives marketing primarily fresh fruits and vegetables, by major product groups, 1952 and 1964

Major product	Average dollar volume ^{1/}			Change
	Co-ops	Co-ops	Percent	
	operating	operating		
in 1952	in 1964			
	\$1,000	\$1,000		
Apples	549	887	+ 62	
Citrus	873	2,360	+170	
Other fruits	454	909	+100	
Average, all fruits	672	1,506	+124	
Potatoes	698	933	+ 34	
Other vegetables,	433	853	+ 95	
Average, all vege-				
tables	527	873	+ 66	
Mixed fruits and vege-				
tables	377	612	+ 62	
Average, all fruits				
and vegetables	622	<u>1/1,254</u>	+102	

^{1/} Averages based on number of cooperatives shown in appendix table 1.

Appendix table 5.--Number of fresh fruit and vegetable marketing associations engaged in both purchasing and service activities, by major product groups, 1952 and 1964

Major product	: All cooperatives 1/ :		Change
	: 1952	: 1964	
	<u>Number</u>		<u>Percent</u>
Apples	24	33	+ 38
Citrus	39	24	- 38
Other fruits	<u>31</u>	<u>34</u>	+ 10
Total, all fruit	94	91	- 3
Potatoes	20	21	+ 5
Other vegetables	<u>16</u>	<u>36</u>	+125
Total, all vegetables	36	57	+ 58
Mixed fruits and vegetables	<u>7</u>	<u>10</u>	+ 43
Total, all fruits and vegetables	137	158	+ 15

1/ 595 associations in 1952, and 416 in 1964.

Appendix table 6.--Fresh fruit and vegetable marketing cooperatives engaged in purchasing activities, by major product groups, 1952 and 1964.

Major product	: Co-ops		: Co-ops		Change
	: operating	: operating	: operating	: Change	
	: in 1952	: in 1964	: in 1964	:	:
	<u>Number</u>		<u>Number</u>		<u>Percent</u>
Apples	37		43		+ 16
Citrus	106		47		- 56
Other fruits	<u>82</u>		<u>62</u>		- 24
Total or average fruits	225		152		- 32
Potatoes	34		28		- 18
Other vegetables	<u>49</u>		<u>54</u>		+ 10
Total or average vegetables	83		82		- 1
Mixed fruits and vegetables	<u>14</u>		<u>16</u>		+ 14
Total or average fruits and vegetables	322		250		- 22

Appendix table 7.--Average dollar volume of purchasing of all cooperatives engaged primarily in the marketing of fresh fruits and vegetables, by major product groups, 1952 and 1964

Major product	Dollar volume		
	Co-ops operating in 1952	Co-ops operating in 1964	Change
	<u>\$1,000</u>	<u>\$1,000</u>	<u>Percent</u>
Apples	100	154	+54
Citrus	72	133	+85
Other fruits	104	118	+13
Average, all fruits	88	133	+51
Potatoes	236	325	+38
Other vegetables	87	84	- 4
Average, all vegetables	148	166	+12
Mixed fruits and vegetables	145	112	-23
Average, all fruits and vegetables	106	142	+34

Appendix table 8.--Fresh fruit and vegetable marketing cooperatives engaged in both purchasing and service activities, by major product groups, 1952 and 1964

Major product	Co-ops	Co-ops	Change
	operating	operating	
	in 1952	in 1964	
	<u>Number</u>	<u>Number</u>	<u>Percent</u>
Apples	24	33	+33
Citrus	38	24	-37
Other fruits	31	34	+10
Total or average fruits	93	91	- 2
Potatoes	20	21	+ 5
Other vegetables	15	36	+140
Total or average vegetables	35	57	+63
Mixed fruits and vegetables	7	10	+43
Total or average fruits and vegetables	135	158	+17

Appendix table 9.--Proportion of U. S. and regional fresh sales of specified fruits marketed by cooperatives, 1964-65

Region	Percentage of total marketed					
	Oranges	Grape- fruit	Apples	Peaches	Cherries	Pears
	Percent					
New England	-	-	11	-	-	-
Middle Atlantic	-	-	14	4	11	4
East North Central	-	-	6	2	-	-
West North Central	-	-	-	-	-	-
South Atlantic	30	33	4	11	-	-
East South Central	-	-	-	-	-	-
West South Central	7	14	-	1	-	-
Mountain	-	-	4	-	11	7
Pacific	77	48	47	11	25	65
Average	56	34	21	7	19	59

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U. S. Department of Agriculture, 1965.

Appendix table 10.--Proportion of U.S. and regional fresh sales of specified vegetables marketed by cooperatives, 1964-65

Region	Percentage of total marketed				
	Potatoes <u>1/</u>	Tomatoes	Lettuce	Celery	Watermelons
	Percent				
New England	13	-	-	-	-
Middle Atlantic	9	2	5	-	-
East North Central	10	29	43	50	-
West North Central	12	-	-	-	12
South Atlantic	32	6	2	72	6
East South Central	-	6	-	-	1
West South Central	1	14	-	-	-
Mountain	8	-	1	-	-
Pacific	5	6	8	10	1
Average	10	7	6	32	4

1/ Consists of potatoes for all purposes including food, seed, processing, and livestock feed.

Appendix table 11.--Grower-member payment methods used by 339 fruit and vegetable marketing cooperatives, by geographic region, 1964-65

Geographic region	Method of payment					Total
	Pooling	Individual account	Outright purchase	Direct payment		
New England	7	7	3	1		18
Middle Atlantic	18	23	5	1		47
East North Central	17	16	5	-		38
West North Central	5	6	2	-		13
South Atlantic	41	35	2	1		79
East South Central	2	2	-	1		5
West South Central	5	-	1	3		9
Mountain	13	17	3	-		33
Pacific	91	28	2	2		123
Total	199	134	23	9		1/365

1/ Some cooperatives used more than one payment method.

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U. S. Department of Agriculture, 1965.

Appendix table 12.--Methods used by 226 fresh fruit and vegetable cooperatives for sales handled independently, 1964-65

Method of sale	Proportion of total farm sales				Total 1/
	Less than 25 percent	25-49 percent	50-74 percent	75-100 percent	
	Number of cooperatives				
Direct 2/	31	24	42	107	204
Broker	32	35	22	40	129
Consignment	38	7	3	3	51
Auction	15	4	3	10	31
Other 3/	6	2	-	3	11

1/ Some cooperatives use 2 or more sales methods.

2/ Sales made to buyers without the services of intermediary agents.

3/ Sales made to Federal and State governments and sold under contract.

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 13.--Associations primarily processing fruits and vegetables in 1952 and 1964, and the number of exits and entries over the intervening period, by major activity

Process	Number of associations				
	Operating in 1952	Exits ^{1/} 1953-63	Entries ^{1/} 1953-63	Operating in 1964	Operating in 1952 and 1964
Canning ^{2/}	48	14	8	42	34
Drying ^{3/}	11	2	1	10	9
Freezing ^{2/ 4/}	6	1	2	7	5
TOTAL	65	17	11	59	48

^{1/} Cooperatives that both started and ceased operations during the period are not included.

^{2/} Cooperative processors of Florida frozen orange juice are classified as freezers.

^{3/} Does not include a federated association with a gross business volume of \$10,000, but no net volume in 1956, and a gross and net volume of less than \$8,000 in 1964.

^{4/} Does not include 2 federated sales associations with net volume of \$2,900,000 in 1952, and no net volume in 1964.

Appendix table 14.--Cooperatives in the Pacific Coast States processing primarily fruits and vegetables, by major processing activity, 1952 and 1964

Process	Number of cooperatives ^{1/}		
	1952	1964	Change
Canning	15	16	+ 1
Drying	15	14	- 1
Freezing	2	3	+ 1
Total or average	32	33	+ 1

^{1/} Of the associations shown, 22 operated over the entire period including 14 canners, 7 driers, and 1 freezer.

Appendix table 15.--Average number of members in all cooperatives primarily processing fruits and vegetables, by geographic regions, 1952 and 1964

Geographic region	Cooperatives operating in 1952	Cooperatives operating in 1964	Change
	Number	Number	Percent
New England	642	688	↑ 7
Middle Atlantic	417	373	- 11
East North Central	214	133	- 38
West North Central	127	213	↑ 68
South Atlantic	50	21	- 58
East South Central	--	--	--
West South Central	100	--	--
Mountain	830	856	↑ 3
Pacific	560	486	- 13
Average	427	397	- 7

Appendix table 16.--Distribution of cooperatives primarily processing fruits and vegetables by dollar volume of business, 1952 and 1964

Volume of business (\$1,000)	1952		1964	
	Number of cooperatives	Percent of cooperatives	Number of cooperatives	Percent of cooperatives
All cooperatives				
Less than 1,000	36	56	19	32
1,000-4,999	17	26	21	36
5,000-9,999	8	12	5	8
10,000-29,999	4	6	8	14
30,000 and over	-	-	6	10
TOTAL	<u>1/ 65</u>	<u>100</u>	<u>1/ 59</u>	<u>100</u>

1/ Does not include 2 federated associations in Oregon.

Appendix table 17.--Fruit and vegetable processing cooperatives discontinued because of merger, consolidation, or acquisition, 1957 through the third quarter of 1965

Year	Canning	Drying	Total
	<u>Number</u>	<u>Number</u>	<u>Number</u>
1957	-	-	-
1958	1	-	1
1959	-	-	-
1960	-	2	2
1961	1	6	7
1962	1	-	1
1963	1	-	1
1964	-	-	-
1965	<u>4</u>	<u>2</u>	<u>6</u>
TOTAL	8	10	18

Appendix table 18.--Cooperatives processing fruits and vegetables, or both, by geographic region, 1964-65

Geographic region	Fruits	Vegetables	Fruits and vegetables	Total
	<u>Number of cooperatives</u>			
New England	1	-	-	1
Middle Atlantic	5	2	5	12
East North Central	3	1	1	5
West North Central	-	1	-	1
South Atlantic	6	1	-	7
East and West South Central (no returns)				
Mountain	-	1	1	2
Pacific	<u>17</u>	<u>3</u>	<u>8</u>	<u>28</u>
TOTAL	32	9	15	56

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 19.--Cooperatives processing fruits and vegetables by class of product and total U. S. pack, 1964-65

Geographic region	: Pack : reported by : cooperatives <u>1/</u> <u>1,000 pounds</u>	: Processed form		
		: Canned : or bottled	: Frozen :	: Dried :
New England	246,377	100	--	--
Middle Atlantic	699,296	87	13	--
East North Central	155,266	78	22	--
West North Central	2,927	100	--	--
South Atlantic	742,881	48	44	8
East and West South Central (no returns)				
Mountain	47,039	12	73	15
Pacific	2,134,804	72	12	16
TOTAL or average <u>2/</u>	<u>4,028,590</u>	72	18	10
	<u>U. S. pack</u>			
TOTAL <u>2/</u>	<u>18,782,800</u>	74	22	4

1/ Data from special survey of fruit and vegetable cooperatives, conducted by Farmer Cooperative Service, U. S. Department of Agriculture, 1965.

2/ National Canners Association, National Association of Frozen Food Packers and Crop Reporting Board data converted to pounds by Economic Research Service, U.S.D.A.

Appendix table 20.--Market contract situation for cooperatives processing fruits and vegetables, 1964-65

Geographic region	: Market contracts		: Does contract require marketing	
	: with members		: of total production through co-op?	
	: Yes	: No	: Yes	: No
<u>Number of cooperatives</u>				
New England	1	--	1	--
Middle Atlantic	8	4	4	4
East North Central	3	2	1	2
West North Central	1	--	1	--
South Atlantic	7	--	5	2
East and West South Central (no returns)				
Mountain	2	--	1	1
Pacific	<u>27</u>	<u>1</u>	<u>21</u>	<u>6</u>
TOTAL	49	7	34	15

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965

Appendix table 21.--Primary grower payment methods used by 56 fruit and vegetable processing cooperatives, 1964-65

Geographic region	Method of payment to growers			
	Pool	Individual account	Outright purchase	Direct from buyer to grower
Percent				
New England	100	--	--	--
Middle Atlantic	71	21	--	8
East North Central	40	10	50	--
West North Central	--	100	--	--
South Atlantic	86	--	14	--
East and West South Central (no returns)				
Mountain	67	33	--	--
Pacific	89	11	--	--
Average	78	14	6	2

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 22.--Method of sales employed by fruit and vegetable processing cooperatives, 1964-65

Geographic region	Reported sales \$1,000	Method of sale		
		Direct	Broker	Consignment
		Percent		
New England	38,023	3	97	--
Middle Atlantic	112,052	17	83	--
East North Central	16,124	22	78	--
West North Central	355	--	100	--
South Atlantic	93,408	69	28	3
East and West South Central (no returns)				
Mountain	8,208	55	45	--
Pacific	351,190	44	56	1/
Total or average	619,360	40	59	1

1/ Less than 1 percent.

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 23.--Sales to chainstores by fruit and vegetable processing cooperatives, by geographic regions, 1964-65

Geographic region	Sales to chains		
	Total	Direct Percent	Brokers
New England	60	--	100
Middle Atlantic	46	26	74
East North Central	45	4	96
West North Central	90	--	100
South Atlantic	44	75	25
East and West South Central (no returns)			
Mountain	11	60	40
Pacific	45	42	58
Average	45	40	60

Source: Special survey of fruit and vegetable cooperatives conducted by the Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 24.--Sales under various types of labels by 56 fruit and vegetable processing cooperatives by geographic regions, 1964-65

Geographic region	Owner of label			
	Cooperatives	Chain stores	Other buyers	sold unlabeled
	Percent			
New England	98	1	1	--
Middle Atlantic	52	23	25	1/
East North Central	38	43	17	2
West North Central	--	100	--	--
South Atlantic	61	29	29	1
East and West South Central (no returns)				
Mountain	84	15	1	--
Pacific	52	21	24	3
Average	53	22	23	2

1/ Less than 1 percent.

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

Appendix table 25.--Fruit and vegetable bargaining associations organized, discontinued, and operating, United States, 1910-64

Period	Fruit associations			Vegetable associations		
	Organized	Discontinued	Net	Organized	Discontinued	Net
			Number			
1910-19	--	--	--	1	--	1
1920-29	1	--	1	--	--	1
1930-39	--	--	1	1	--	2
1940-49	1	--	2	11	1	12
1950-54	5	--	7	2	4	10
1955-59	23	4	26	11	4	17
1960-64	<u>12</u>	<u>10</u>	28	<u>35</u>	<u>15</u>	37
Total or net	42	14	28	61	24	37

Appendix table 26.--Total numbers of fruit and vegetable bargaining cooperatives, by geographic regions, 1954 and 1964

Geographic region	Organized cooperatives		Negotiating cooperatives	
	1954	1964	1954	1964
Middle Atlantic	3	6	2	4
South Atlantic	--	6	--	3
Central States	3	18	2	10
Mountain States	1	11	1	4
Pacific Coast	<u>10</u>	<u>24</u>	<u>4</u>	<u>22</u>
TOTAL	17	65	9	<u>1/ 43</u>

^{1/} The total negotiating cooperatives in 1964 included two fruit bargaining federations which coordinated the activities of their representative bargaining groups but did not negotiate themselves. Also included were 3 vegetable bargaining cooperatives, one of which bargained for its 10 district canning crops associations, and the other 2 which acted only as coordinators.

Appendix table 27.--Commodities negotiated for by fruit and vegetable bargaining cooperatives, United States, 1954 and 1964

	Fruit co-ops		Vegetable co-ops		Total	
	1954	1964	1954	1964	1954	1964
1	3	22	3	12	6	34
2	--	1	--	<u>1/</u> 4	--	5
3	--	1	1	3	1	4
4	--	--	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>
TOTAL	3	24	6	20	9	44

1/ One bargaining association negotiates for strawberries, beans, and broccoli.

Appendix table 28.--Commodities negotiated for by bargaining cooperatives, United States, 1954 and 1964

Fruits	1954		1964		Vegetables	1954		1964	
Peaches	1		2		Tomatoes	3		7	
Figs	1		1		Peas	4		5	
Pears	1		3		Sweet corn	3		1	
Apples			7		Beans	1		7	
Berries			5		Asparagus	1		4	
Cherries			1		Beets	1			
Grapes			3		Cabbage	1			
Prunes			1		Potatoes			3	
Apricots			1		Cucumbers			3	
					Broccoli			2	
					Celery			1	
					Horseradish			1	

Appendix table 29.--Bargaining associations engaged in specified activities and number of members, by type of products, United States, 1964-65

Activity	:	:	:
	:	:	:
	Fruits	Vegetable	Total
	:	:	:
	<u>Number of associations</u>		
Negotiating	23	20	43
Collecting market information only	2	10	12
Organized but not bargaining	<u>3</u>	<u>7</u>	<u>10</u>
Subtotal	28	37	65
Cooperative participation plans	<u>5</u>	<u>--</u>	<u>5</u>
TOTAL	33	37	70
	<u>Number of members</u>		
Negotiating	8,018	6,961	14,979
Collecting market information only	<u>830</u>	<u>550</u>	<u>1,380</u>
Subtotal	8,848	7,511	16,359
Cooperative participation plans	<u>1,401</u>	<u>--</u>	<u>1,401</u>
TOTAL	10,249	7,511	17,760

Source: Special survey of fruit and vegetable cooperatives conducted by Farmer Cooperative Service, U.S. Department of Agriculture, 1965.

