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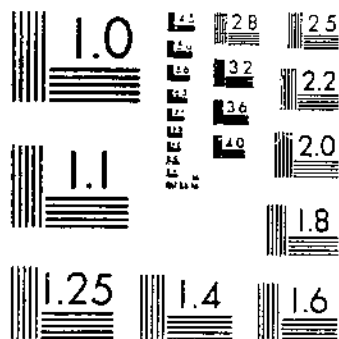
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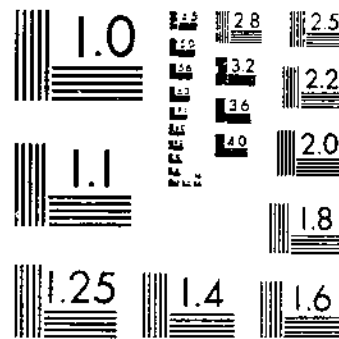
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AGRICULTURAL COOPERATIVE ASSOCIATIONS, MARKETING, AND PURCHASING, 1925
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UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

AGRICULTURAL COOPERATIVE ASSOCIATIONS, MARKETING AND PURCHASING, 1925

By R. H. ELSWORTH,¹ Associate Marketing Economist, Division of Cooperative Marketing, Bureau of Agricultural Economics

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INTRODUCTION

There are many thousands of agricultural associations. They are of many kinds, formed for a hundred different purposes, and functioning in a wide variety of ways. Roughly they can be grouped as educational organizations, improvement associations, and cooperative business enterprises.

No attempt has been made to determine the amount of cooperation in the various enterprises. Farmers' organizations which appear to have cooperative features and farmer-owned or farmer-controlled associations which may or may not be cooperative have been included in this study.

In the first of these groups are the organizations which are engaged chiefly in educational work or in carrying out programs for the betterment of the farmers' social or economic conditions, or both. This group includes such national organizations as the National Grange of the Patrons of Husbandry, the National Farmers' Educational and Cooperative Union of America, the American Farm Bureau Federation, the National Board of Farm Organizations, and hundreds of others formed on practically a country-wide basis. The group also includes many interstate and State associations of a

¹ Credit is due to W. H. Baker, Grace Wanstall, Louise E. Bowdler, Ruth Payne, Mary H. Buckley, and Blanche E. Montgomery for assistance in the compilation of the statistical material.

similar character. They serve the farmer by collecting and disseminating information, by presenting ideals, and by working for the adoption of legislation and administrative regulations favorable to the residents of the agricultural regions.

A second large group of organizations includes those which the farmer has evolved to aid him in producing better crops and animals. This group includes the many seed-improvement associations and organizations for the exchange of information regarding cultural practices for crops. It also includes the many associations for improving the various strains of animals and for keeping registration records. The group further embraces the cow-testing associations, associations for the ownership of bulls, and the calf and pig clubs.

The largest of the groups is that containing the associations which the farmer has set up to assist him in handling his business transactions. This group includes more than 10,000 cooperative marketing associations, about 1,000 collective purchasing associations, about 2,000 mutual-insurance companies of various kinds, and a large group of associations that furnish on a cooperative basis telephone service, electric current for light and power, water for irrigation purposes, and transportation at cost.

It is estimated that there are about 69,000 agricultural associations of all kinds in the United States. Approximately 5,000 of these are classed as educational associations, 6,000 are associations engaged in production activities, and about 58,000 are business associations. Nearly four-fifths of the associations in this group are corporations for operating rural telephone lines. Available data relative to the number of associations in the different groups of this tentative classification have been compiled from various sources and are presented herewith.

AGRICULTURAL ASSOCIATIONS

Educational associations (including agricultural, horticultural, and livestock societies, fairs, and exhibits).....	2 5, 000
Production associations (including agricultural colonies, land-improvement associations, associations owning and operating farm machinery, crop-improvement associations, and animal-improvement associations).....	2 6, 000
Crop improvement—	
Seed certification.....	2 30
Animal improvement—	
Livestock registration.....	3 51
Cow testing.....	3 738
Bull ownership.....	3 248
Stallion ownership.....	2 500
Calf clubs.....	3 1, 841
Pig clubs.....	3 2, 231
Business associations.....	2 58, 000
Credit—	
National farm-loan associations.....	3 4, 665
Agricultural-credit corporations and livestock-loan companies.....	3 400
Mutual insurance—	
Fire.....	4 1, 950
Wind and hail.....	4 70
Livestock.....	4 25
Automobile.....	3 4
Public utilities—	
Rural telephone and water, light, power, and transportation.....	4 40, 000
Marketing and purchasing.....	3 10, 803

² Estimated.
³ December, 1925.

⁴ Estimate based on 1917 telephone census.
⁵ December, 1925.

The associations for the cooperative marketing of farm products and for the cooperative purchase of farm supplies and farm home necessities have been made the subject of several special studies by the United States Department of Agriculture. In 1917 a bulletin embodying the results of a survey made for the years 1912 to 1915 was published under the title "Cooperative Purchasing and Marketing Organizations Among Farmers in the United States" (8).⁵ Seven years later the department issued a bulletin entitled, "Development and Present Status of Farmers' Cooperative Business Organizations" (8).⁶ The latter publication contained statistical material collected for the years 1921, 1922, 1923, and 1924. This bulletin, the third in the series, includes data collected from marketing and purchasing associations in continental United States for the year 1925. Although the publication deals largely with farmers' associations engaged in cooperative marketing or purchasing, the more significant facts in connection with the rapidly developing agricultural-credit system, the very extensive mutual-insurance movement, and the widespread cooperative rural-telephone movement are noted (p. 66).

SCOPE OF STUDY

Marketing and purchasing associations, as the term is used in this study, includes all organized groups of farmers that are engaged collectively in selling farm products, in purchasing farm supplies, or in performing any of the marketing functions, such as assembling, grading, packing, storing, transporting, selling, etc. The data presented and the conclusions drawn are based on information received from the associations listed by the United States Department of Agriculture. As reports were obtained from more than 10,800 active associations and for approximately 1,500 associations which have ceased to function, it is believed that the material is sufficiently representative to present a fairly accurate picture of the status of collective marketing and purchasing by farmers in the United States at the close of 1925.

This is a study of associations, not a study of plants. Many associations operate at more than one point. For instance, a grain marketing company may own elevators at a number of different places, a milk marketing association may have receiving stations at a hundred country points, a fruit marketing association may have packing houses scattered over a producing region, or a farmers' association handling general merchandise may operate stores in several villages. The unit in this study is the association. Every association, whether large or small, and whether it performs many or few functions, counts as one. In those cases where large-scale associations are handling single products for entire producing regions, separate tables have been prepared in order that the facts may be set forth adequately.

For the purposes of study, the statistical material collected has been grouped according to the States in which the principal offices of the associations are located. No attempt has been made to allot to the various States their exact share of the total membership or

* Reference is made by number (italic) to "Literature cited," p. 97.

⁵ Department bulletins 547, Cooperative Purchasing and Marketing Organizations Among Farmers in the United States, and 1302, Development and Present Status of Farmers' Cooperative Business Organizations, are out of print.

total volume of business. For this reason some States have been credited with more cooperative activity than justly belongs to them, and the showings made by other States are not so favorable as the facts, were they available, would probably justify.

The records of but few associations permit of separate estimates for the amount of business handled for those who are members from a legal standpoint and for those who are only patrons or participants in the business. In some associations, including most of the livestock shipping associations, all persons who use the facilities of the association are considered members. They are generally spoken of as shippers. In most of the recently formed large-scale associations, membership is dependent upon the signing of marketing agreements or contracts. Many creameries are capital-stock organizations with only a few shareholders who are the members of the associations, but these creameries serve many patrons who enjoy the same benefits as the shareholders in regard to the handling of products, and are generally included by the associations when the number of members is reported. A similar situation exists in connection with a large number of the associations that operate farmers' elevators and in connection with some of the other enterprises. Several of the wool pools receive fleeces from all producers who wish to be included in the cooperative selling program. These participants are called shippers or consignors. In several of the large-scale associations, less than one-half of the legal members are actually using the services made available to them through their associations. In this study, however, all those participating in the activities of a farmers' association have been counted. The membership figures, therefore, include shareholders, contract members, shippers, consignors, and patrons.

The figures indicating the volume of business of the different commodity groups include more than transactions in the commodities indicated by the various headings. Many of the associations are handling several lines of products and are also buying farm supplies for their members. All these various activities are included in the figures indicating the amount of business transacted.

Local studies have been undertaken which have yielded valuable results in Minnesota, Iowa, New York, Pennsylvania, Idaho, Washington, Michigan, Missouri, and North Dakota. Where it has been possible for the local investigator to visit personally a large number of the associations included in his study, the value of these studies has been greatly enhanced. It is likely that in States where but little attention has been given to cooperation in the past, existing agencies, or agencies to be created, will undertake detailed studies in their respective States in the near future.

EARLY COOPERATIVE ASSOCIATIONS

By the middle of the nineteenth century, American farmers had begun to demonstrate the wisdom of acting collectively in the making of butter and cheese. At least as early as 1851 a cooperative association was organized in Oneida County, N. Y., for operating a cheese factory. In 1856 a cooperative creamery was established in Orange County, N. Y., and an association which was formed in Montgomery County in 1863 for operating a cooperative cheese factory is still functioning.

Cooperative grain marketing developed in the Mississippi Valley States in the late sixties (14, p. 236). A farmers' elevator was established at Blairstown, Iowa, in 1867 or 1868. By 1874 there were 28 farmers' cooperative elevators in Iowa. All of these had ceased to function by 1884, but two years later a new start was made in the cooperative marketing of grain in that State. By 1900 there were 14 active farmer-controlled grain elevators in Iowa.

A cooperative association for serving fruit and vegetable growers was organized at Hammonton, N. J., in 1867 and is reported to have been active for 21 years.

In the early years of the last century, farmers acted collectively in driving livestock to market, but formal associations did not appear until about 1876 or 1877 when a group of Tennessee farmers formed

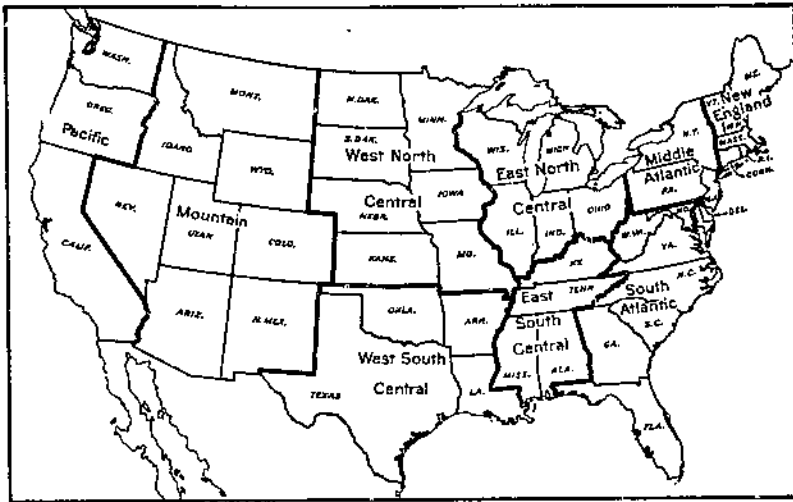


FIG. 1.—STATES AND GEOGRAPHIC DIVISIONS OF UNITED STATES

The 48 States have been grouped into 9 geographic divisions, and many of the data in this bulletin are given both by States and geographic divisions.

a club for marketing lambs. Nebraska and Kansas farmers in the vicinity of Superior, Nebr., formed a livestock shipping association in 1883, an enterprise that is still functioning.

Wool producers near Greencastle, Ind., formed the Putnam County Wool Growers' Association in 1885. Although this organization has been but little more than a general understanding, it has continued year after year.

During the reconstruction period following the Civil War the Patrons of Husbandry, or Grange, was formed. Although its original object was to serve farmers as a fraternal, social, and educational institution, its early leaders soon discovered that the growth of the order was most rapid when attention was given to economic problems. A large number of cooperative grange stores were established, especially in the States now comprising the north-central group. (Fig. 1.) Some of these stores have continued until recently.

Granges established in Alabama, Georgia, Mississippi, and Louisiana undertook to assist in the marketing of cotton by the appointment of established firms as sales agents to handle cotton on commission.

The Mississippi Grange had a representative in London. This cotton movement was short lived. The oldest of the existing cotton associations was formed in 1889 to operate a warehouse for storing cotton. The oldest of the present large-scale cotton marketing associations dates its existence from 1921.

The egg circle represents probably the first efforts at the cooperative marketing of poultry products. This form of business enterprise is so informal that there are few records regarding the time or place of its origin. The first of the present group of egg marketing associations was organized in California about 1913.

Federated action by associations in marketing the poultry products delivered by members of the various associations is of recent origin. Five Pacific coast egg marketing associations in 1922 set up an organization, the Pacific Egg Producers' Cooperative (Inc.), to handle on the New York City market the surplus stock of the associations.

The present cooperative egg and poultry marketing activity in Missouri dates from 1915, the first of the now active poultry associations in Minnesota was formed in 1923, and the present egg marketing movement in Ohio is not yet three years old.

Associations for the cooperative marketing of nuts have been operating in California since 1889. The California Walnut Growers' Association, the coordinating body and sales agency for 42 local units, was formed in 1912.

The dates of organization for some of the kinds of associations now functioning are: Honey marketing, 1899; hay, 1908; seeds, 1913; maple products, 1921; rice, 1921; broomcorn, 1923.

GROWTH OF THE COOPERATIVE MOVEMENT

The development of agricultural cooperation in America has been a series of waves. These have not been of equal magnitude, nor have they been evenly spaced through the years. As each wave broke it lost its momentum. Furthermore, the waves did not reach the crest in all parts of the country at the same time. Besides the big waves, there were minor local waves and cross waves produced by various commodity-group developments.

Despite the backwash from the waves, there has been a material gain throughout the years in the number of active cooperatives, in the number of individuals participating in cooperative enterprises, and in the volume of sales and purchases made on a cooperative basis.

Data regarding year of organization have been collected and tabulated for nearly 12,000 associations. Of this number, approximately 1,500 associations have, for one reason or another, ceased to function. By assuming that the 12,000 associations, for which information is available, constitute a fair sample of the 20,000 associations which it is estimated have been formed in the United States, it is possible to make a rough sketch of the probable development of organized cooperative marketing and purchasing in the United States.

For the period 1860 to 1890 but few more than 100 records are available, although it is not improbable that 500 or 600 different enterprises were started, most of which functioned for only a short time. Of the 10,803 associations listed by the Department of Agriculture in 1925, 102 were organized prior to 1890. Since 1890 the number of active associations has increased year by year. Beginning

about 1905 there was a noticeable increase in the number of associations formed each year. Marked increases occurred in 1912 and 1919. The outstanding year in the formation of cooperative associations was

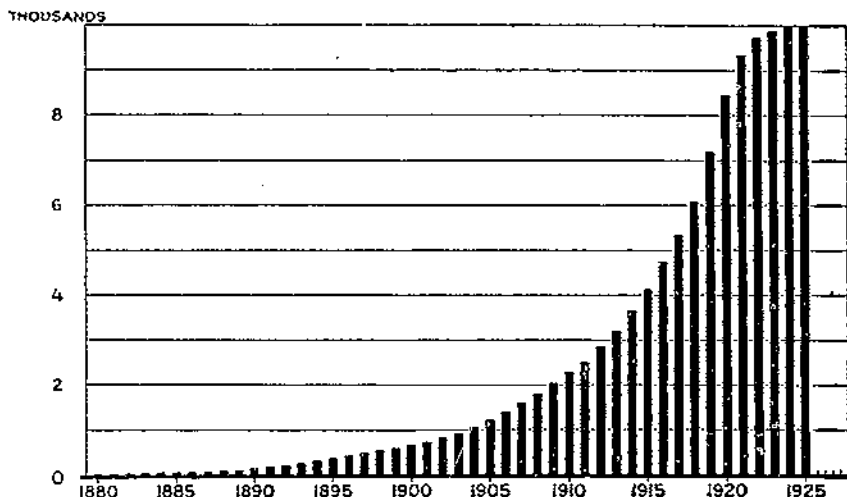


FIG. 2.—ACTIVE MARKETING AND PURCHASING ASSOCIATIONS, 1880 TO 1925

Nearly 11,000 reports to the Department of Agriculture make possible this chart showing the probable development of the agricultural cooperative movement. The data for the years since 1910 are much more complete than those for the years preceding 1910.

1920 (fig. 2), when nearly 1,400 new enterprises were launched. Each year since 1920 fewer associations have been started.

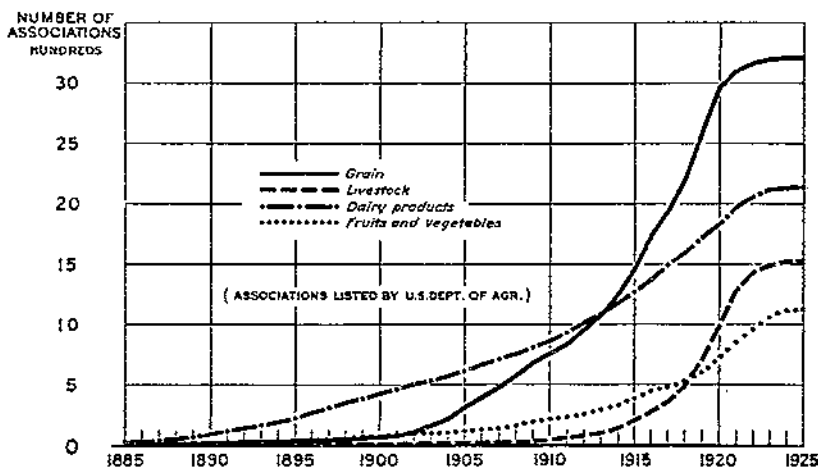


FIG. 3.—MARKETING AND PURCHASING ASSOCIATIONS, 1885 TO 1925

The records of 7,977 associations giving information in regard to year of organization indicate that grain marketing associations began to increase rapidly in number about 1902. The increase continued until about 1921. Livestock shipping associations increased numerically during the years 1915 to 1922. The period of rapid increase for fruit and vegetable associations was from 1919 to 1921.

One-third of the associations active in 1925 were formed prior to 1915, slightly more than one-third were formed during the five years, 1915 to 1919, inclusive, and nearly one-third during the six years,

1920 to 1925, inclusive. This would indicate that about two-thirds of our present cooperative structure has been erected since the beginning of 1915. (Fig. 2; appendix, Table 3.)

The growth in the number of cooperatives has varied greatly for the different commodity groups. The increase in number of associations that market dairy products has been fairly uniform. Beginning with 1912 the increase in grain marketing associations was marked. Most of the livestock shipping associations have come into existence since 1917. (Fig. 3.)

A tabulation of the number of cooperative associations formed in a number of the leading States since 1910 reveals several interesting facts. Cooperative intensity, as measured by the number of associations formed per year, reached its maximum in North Dakota, Nebraska, Minnesota, and Wisconsin from one to two years earlier than in the other States that had large numbers of cooperatives. In each State there were local conditions affecting the launching of cooperatives, but it is probable that the causes for decrease in the number of new associations varied. Peak years in forming cooperatives, for a number of the States, were as follows: 1916, North Dakota; 1918, Nebraska; 1919, Minnesota and Wisconsin; 1920, Iowa, Ohio, Illinois, Missouri, Michigan, and California; 1921, New York and Pennsylvania.

GROUPING OF ASSOCIATIONS

Existing associations may be grouped in several different ways. The most common and the most practical grouping for statistical studies is that based on commodities handled.

The cooperative associations concerned with the handling and marketing of cotton, including the large-scale cotton marketing associations, the cooperative gins, cotton warehouses operated by growers, and producer-owned and producer-controlled cottonseed-oil and cottonseed-meal mills, are all included in the cotton group.

The dairy products group includes associations operating cheese factories, creameries, fluid-milk plants, cream pools, plants for condensing milk and for making ice cream, associations for distributing milk at wholesale and retail, and associations for bargaining as to prices at which milk is to be sold.

The fruits and vegetables group includes associations for assembling and shipping products, for operating grading and packing houses, canneries, and drying plants, for distributing and selling, and for conducting sales agencies in terminal markets.

Among the associations included under grain are those operating farmers' elevators, large-scale wheat pools, and terminal-market sales agencies, and the associations handling rice and dry beans.

The livestock group includes local shipping associations, county-wide livestock-marketing associations and terminal-market sales agencies.

Under poultry products are grouped egg circles, egg and poultry shipping associations, associations operating candling and packing houses, and associations engaged in merchandising poultry products in the consuming markets.

In the tobacco group are the associations operating local receiving stations and warehouses, and the big centralized associations serving entire producing regions.

The wool group includes associations assembling and shipping wool, associations receiving, grading, storing, and selling wool, state-wide

pools, and associations selling wool that is received on consignment from local and State associations.

Under miscellaneous selling have been grouped the associations handling farm products not included in the above-named commodity groups, and under purchasing have been grouped such associations as are engaged principally in the collective buying of farm and household supplies and the operation of farmers' cooperative stores.

Great difficulty has been experienced in allocating to the various groups the organizations engaged in handling more than one line of farm products. Not a few of the associations that operate farmers' elevators ship livestock, and some collect and ship cream. Many of the associations that are engaged principally in operating creameries also collect and ship eggs and poultry, and ship livestock. Some of the milk marketing associations make butter, cheese, condensed milk, and ice cream. There are associations which conduct cooperative stores, handle grain, ship livestock, and operate coal or lumber yards, or both. At least one association that handles grain on a large scale is operating a large creamery and doing a big collective-buying business for its members. So far as possible the various associations have been grouped according to the lines of business which seem to be the most important.

In addition to being grouped according to commodities handled, associations may be roughly classified as to their organic structure and the functions they perform. For instance, there are independent local associations which are autonomous organizations serving farmers in a limited area. There are local units of federations, the activities of these units being coordinated through the central association which generally performs the selling function while the units attend to the assembling, grading, packing, loading, and shipping functions. Then there are large-scale centralized associations. These are similar to the independent locals except that they operate over large areas such as a producing region or a State. Furthermore, the large-scale association stresses the selling function, often developing far-reaching campaigns for merchandising the products of its members. There are many variations and combinations of the three types.

Associations have been created to conduct on a cooperative basis sales agencies in the terminal markets. As a rule these agencies receive products from associations and from individual producers. The products are sold, a service charge is deducted, and returns are made. At the close of the year, after all the expenses of operation have been met, such surplus as may remain is returned on a patronage basis to those who used the agency.

Another type of organization is the price-bargaining association. Such an association serves its members by entering into negotiations with the probable buyers of the products for the purpose of determining price. Considerable quantities of milk, canning crops, and sugar beets are marketed through the aid of associations of this type. It will be noted that the association itself does not physically handle the products. It only assists in determining the price at which they are to be sold.

A recent development in cooperative marketing has been the formation by some of the larger of the associations of subsidiary organizations. These subsidiaries have been set up to perform definite functions, such as warehousing, processing, or selling. In a few

instances a single association has created four and five subsidiaries either for performing the same function at different points or for performing different functions. Many of the existing subsidiaries are capital-stock companies. Control of subsidiaries is usually maintained by the parent organization through the holding of common stock. Frequently nonvoting preferred stock is sold to anyone who wishes to purchase. In this study no special consideration has been given to subsidiaries, the business transacted by such organizations being included in that of the parent associations.

Another grouping of associations which might be made is one based solely on functions performed. Some associations only assemble and ship farm products; others assemble, grade, pack, and ship; still others confine their activities to processing or storing. Another group performs only the financing function. A few associations specialize upon furnishing sales and merchandising services. A few perform all the marketing functions.

The principal grouping used in this study is that based on commodities handled.

ASSOCIATIONS AND BUSINESS IN 1913

One of the early enumerations of farmers' marketing and purchasing associations in the United States was made by the Department of Agriculture as of 1913 (8, p. 14-25). It was based on returned questionnaires covering that year. It is a certainty that not all the associations which were active at that time reported, but the statistical data are probably comparable, State with State.

Reports to the number of 3,099 were received. These gave as the total business transacted for the year \$310,313,295. (Appendix, Table 1.) The average amount of business per association was \$100,133. Over 70 per cent of the associations reporting were in the 12 North Central States. (Fig. 1.) Sixty-one per cent of the business reported for the year was transacted by associations in the same States. The three Pacific States, with 7 per cent of the associations reporting, were credited with 16 per cent of the business transacted. Only 7.2 per cent of the associations were in the South Central States, and these associations handled only 6.2 per cent of the total business.

The number of associations and the amount of business transacted with the percentages for each group, as shown by the reports included in the 1913 survey, are given in Table 1.

TABLE 1.—Associations and cooperative business by geographic divisions, 1913
[Associations listed by United States Department of Agriculture]

Geographic division	Associations			Business		
	Number	Per cent of total	Cumulative per cent	Amount	Per cent of total	Cumulative per cent
West North Central.....	1,584	51.1	51.1	\$139,819,333	45.1	45.1
East North Central.....	841	20.7	71.8	51,024,499	16.5	61.6
Pacific.....	222	7.2	79.0	51,804,210	16.7	78.3
West South Central.....	136	4.4	83.4	9,550,464	3.1	81.4
South Atlantic.....	128	4.1	87.5	17,789,598	5.7	87.1
Middle Atlantic.....	112	3.7	91.2	15,220,033	4.9	92.0
Mountain.....	108	3.5	94.7	9,062,872	2.9	94.9
East South Central.....	86	2.8	97.5	9,417,804	3.0	97.9
New England.....	79	2.5	100.0	6,561,442	2.1	100.0
Total.....	3,099	100.0		310,313,295	100.0	

Cooperative creameries, cheese factories, and cooperative grain elevators made up largely the associations in the North Central States. One-half of the associations in the Pacific coast group were engaged in marketing fruits or vegetables or both. More than one-half of the associations in the West South Central States had been organized to handle fruits and vegetables. Over one-fourth of the associations in this group were handling cotton. These are believed to have been largely engaged in the cooperative ginning of cotton. Nearly one-fourth of the organizations in the South Atlantic States were in Florida and were engaged in marketing citrus fruits. (Appendix, Table 1.)

Of the total number of associations included in the 1913 survey, 38 per cent were engaged in marketing dairy products, 31 per cent in marketing grain, and 15 per cent in marketing fruits and vegetables. About 40 per cent of the business reported was transacted by the associations handling grain, 22 per cent by the fruit and vegetable shipping associations, and nearly as much by the creameries and cheese factories making up the dairy group. (Table 2.)

The number of associations in the various commodity groups and the amount of business transacted as measured in dollars by the associations in the different groups were as shown in Table 2.

TABLE 2.—Associations and cooperative business by commodity groups, 1913

[Associations listed by United States Department of Agriculture]

Commodity group	Associations			Business		
	Number	Per cent of total	Cumulative per cent	Amount	Per cent of total	Cumulative per cent
Dairy products.....	1,187	38.3	38.3	\$39,701,105	19.2	19.2
Grain.....	960	31.0	69.3	130,555,221	42.1	61.3
Fruits and vegetables.....	456	14.7	84.0	69,921,351	22.5	83.8
Cotton.....	70	2.5	86.5	15,097,544	4.9	88.7
Livestock.....	44	1.4	87.9	4,824,539	1.6	90.3
Tobacco.....	18	.6	88.5	2,555,420	.8	91.1
Stores.....	111	3.6	92.1	5,928,117	1.9	93.0
All others.....	244	7.9	100.0	21,730,668	7.6	100.0
Total.....	3,099	100.0		310,313,295	100.0	

The associations handling dairy products and grain were largely located in the North Central States. The fruit and vegetable associations were largely in the Pacific Coast States, in Colorado, Arkansas, Missouri, New York, and Florida. About one-third of all the cotton associations were in Texas and nearly one-fifth were in Georgia. Ten of the eighteen tobacco associations were in Kentucky, and seven were in Ohio. The farmers' cooperative stores were largely located in Kansas, Wisconsin, Minnesota, and North Carolina. (Appendix, Table 1.)

ASSOCIATIONS, MEMBERSHIP, AND BUSINESS IN 1915

A nation-wide survey as of 1915 (8, p. 12-13) was made by the Department of Agriculture soon after the creation of a special bureau to study marketing problems. Reports were obtained from 5,424 active associations engaged in cooperative marketing and purchasing.

Undoubtedly there was a larger number of organizations functioning at this time, but the reports secured are sufficiently representative to give a picture of the distribution of the associations, the membership and the volume of business transacted, in the various State and commodity groups.

As in 1913, by far the larger part of the cooperative activity was in the 12 States making up the North Central group. (Table 3 and fig. 4.)

TABLE 3.—Number of associations and percentages of total number, by geographic divisions, leading States, and commodity groups, 1915

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISIONS			
	Number of associations	Per cent of total	Cumulative per cent
West North Central.....	2,577	47.5	47.5
East North Central.....	973	17.9	65.4
Pacific.....	416	7.7	73.1
South Atlantic.....	329	6.1	79.2
West South Central.....	315	5.8	85.0
Mountain.....	232	4.3	89.3
East South Central.....	215	3.9	93.2
Middle Atlantic.....	210	3.9	97.1
New England.....	157	2.9	100.0
Total.....	5,424	100.0	

LEADING STATES			
	Number of associations	Per cent of total	Cumulative per cent
Minnesota.....	990	18.1	18.1
Iowa.....	505	9.3	27.4
Wisconsin.....	402	7.4	34.8
North Dakota.....	313	5.8	40.6
Nebraska.....	282	5.2	45.8
Illinois.....	263	4.8	50.6
Kansas.....	246	4.5	55.1
California.....	197	3.6	58.7
South Dakota.....	178	3.3	62.0
Texas.....	134	2.5	64.5
Washington.....	134	2.5	67.0
Michigan.....	127	2.3	69.3
New York.....	124	2.3	71.6
All others.....	1,539	28.4	100.0
Total.....	5,424	100.0	

COMMODITY GROUPS			
	Number of associations	Per cent of total	Cumulative per cent
Dairy products.....	1,708	31.5	31.5
Grain.....	1,637	30.2	61.7
Fruits and vegetables.....	871	16.0	77.7
Merchandise (farmers' stores).....	275	5.1	82.8
Cotton.....	213	3.9	86.7
Livestock.....	96	1.8	88.5
Tobacco.....	43	.8	89.3
All others.....	581	10.7	100.0
Total.....	5,424	100.0	

The leading States in number of associations were Minnesota, Iowa, Wisconsin, North Dakota, Nebraska, Illinois, and Kansas.

Approximately two-thirds of the associations in Minnesota and three-fourths of the associations in Wisconsin were engaged in operating creameries and cheese factories. North Dakota had more

farmers' elevators than any other State in 1915. Minnesota, however, was a close second, and Iowa and Illinois were in third and fourth places, respectively. (Appendix, Table 2.)

In 1915 the associations engaged in marketing dairy products were the most numerous. The associations handling grain were second in numerical importance, and those handling fruits and vegetables were in third place. (Table 3.)

The fruit and vegetable associations were more generally distributed over the entire country, but they were especially numerous along the Pacific coast, in Arkansas, and in Florida. Most of the cotton associations were in Texas and Georgia. The stores were distributed throughout the States. (Appendix, Table 2.)

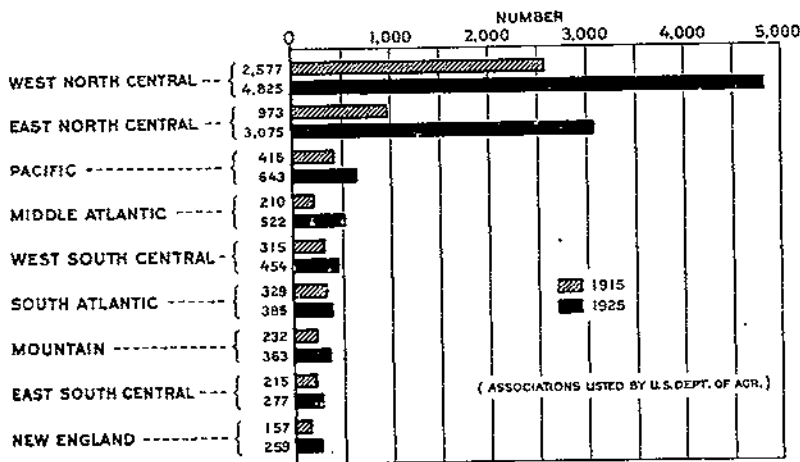


FIG. 4.—MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

There was a gain in the number of associations listed during the 10 years 1915 to 1925, in each of the 9 geographic divisions. The numerical gains were nearly equal in the West and East North Central groups.

MEMBERSHIP DISTRIBUTION

The estimated membership for 1915 for the 5,424 associations was 651,186. This estimate was determined by multiplying the average membership for the associations in each State that reported number of members by the total number of associations listed for each State and adding the products.

Minnesota led all the States in number of members; Iowa was second in point of numbers; Pennsylvania, third; and Wisconsin, fourth. (Table 4.)

The estimated membership for the several commodity groups is shown in Table 4.

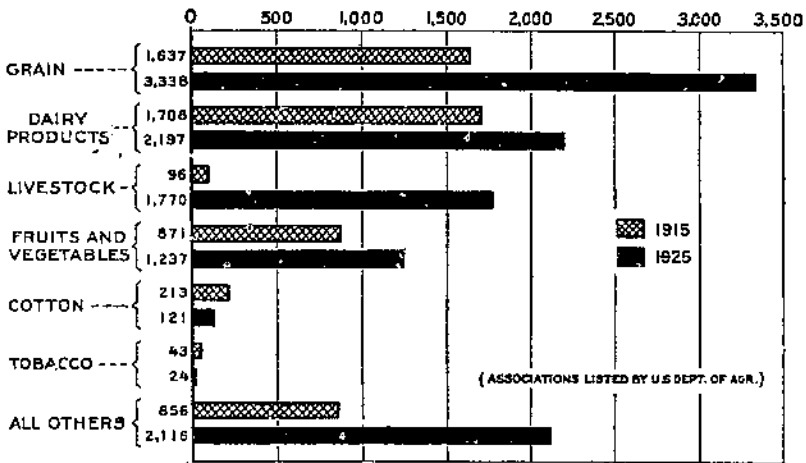


FIG. 5.—MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

Associations engaged in marketing dairy products were most numerous in 1915, and associations engaged in marketing grain were most numerous in 1925. Most of the livestock shipping associations have been formed since 1915. The decrease in the number of cotton and tobacco marketing associations is due to the new type of association for handling these products.

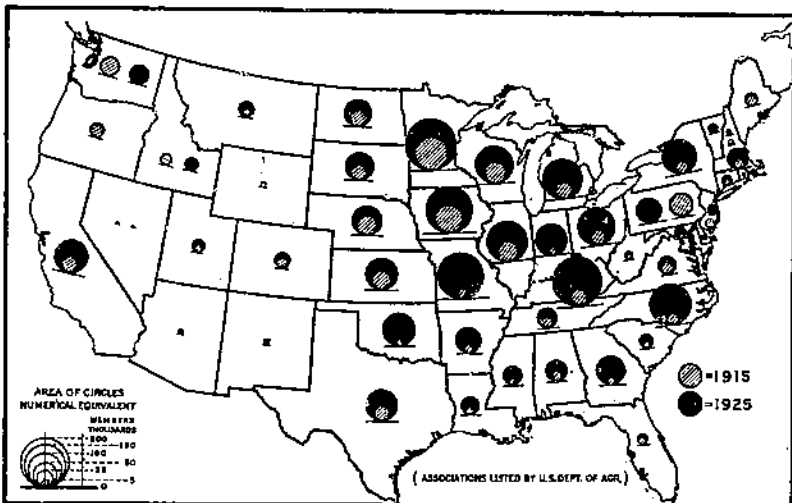


FIG. 6.—MEMBERSHIP OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

Among the States in which there were large membership increases during the 10 years ending in 1925 were Missouri, Kentucky, North Carolina, New York, Ohio, Michigan, Wisconsin, Illinois, Iowa, Minnesota, and Oklahoma.

TABLE 4.—*Estimated membership and percentage of total membership, by geographic divisions, leading States, and commodity groups, 1915*

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISIONS

	Number of associations listed	Estimated membership		
		Number of members	Per cent	Cumulative per cent
West North Central.....	2, 577	254, 425	30.1	39.1
East North Central.....	973	107, 331	16.5	55.6
Pacific.....	416	65, 950	10.1	65.7
Middle Atlantic.....	210	63, 971	9.8	75.5
South Atlantic.....	329	37, 097	5.7	81.2
East South Central.....	215	35, 834	5.5	86.7
Mountain.....	232	34, 731	5.4	92.1
West South Central.....	315	30, 793	4.7	96.8
New England.....	157	21, 054	3.2	100.0
Total.....	5, 424	651, 186	100.0	

LEADING STATES

Minnesota.....	980	90, 392	13.9	13.9
Iowa.....	565	59, 151	9.1	23.0
Pennsylvania.....	66	46, 106	7.1	30.1
Wisconsin.....	402	35, 380	5.4	35.5
Washington.....	134	32, 734	5.0	40.5
Illinois.....	263	31, 077	4.8	45.3
Nebraska.....	292	29, 366	4.5	49.8
Kansas.....	246	28, 875	4.4	54.2
North Dakota.....	313	22, 453	3.5	57.7
California.....	197	22, 375	3.4	61.1
Michigan.....	127	21, 182	3.3	64.4
Kentucky.....	66	19, 460	3.0	67.4
South Dakota.....	178	17, 451	2.7	70.1
Texas.....	134	17, 242	2.6	72.7
All others.....	1, 531	177, 962	27.3	100.0
Total.....	5, 424	651, 186	100.0	

COMMODITY GROUPS

Grain.....	1, 637	166, 828	25.6	25.6
Dairy products.....	1, 708	140, 567	21.6	47.2
Fruits and vegetables.....	871	109, 916	16.9	64.1
Merchandise (farmers' stores).....	275	59, 503	9.1	73.2
Cotton.....	213	18, 464	2.8	76.0
Tobacco.....	43	17, 849	2.7	78.7
Livestock.....	96	13, 438	2.1	80.8
All others.....	581	124, 681	19.2	100.0
Total.....	5, 424	651, 186	100.0	

VOLUME OF BUSINESS

A careful estimate places the volume of business transacted by the 5,424 associations listed in 1915 at \$635,838,684. This was an average of \$117,227 per association and an average of \$976 per member.

The States with the largest amounts of business credited to them were California, Iowa, Minnesota, New York, and North Dakota. (Table 5.)

The estimated amounts of business transacted by the several commodity groups ranged from about \$1,500,000 for the cotton associations to nearly \$290,000,000 for the associations marketing grain.

TABLE 5.—*Estimated business and percentage of total business by geographic divisions, leading States, and commodity groups, 1915*

[Associations listed by United States Department of Agriculture]

GEOGRAPHIC DIVISIONS

	Number of associations listed	Estimated business ¹		
		Amount of business	Per cent	Cumulative per cent
West North Central.....	2,577	\$286,535,800	45.1	45.1
Pacific.....	416	150,511,000	23.7	68.8
East North Central.....	973	90,114,999	14.2	83.0
Middle Atlantic.....	210	56,098,000	8.8	91.8
Mountain.....	232	20,486,000	3.2	95.0
South Atlantic.....	329	10,269,000	1.6	96.6
West South Central.....	315	7,684,000	1.2	97.8
East South Central.....	215	7,170,000	1.1	98.9
New England.....	157	6,974,000	1.1	100.0
Total.....	5,424	635,839,000	100.0	

LEADING STATES

California.....	107	\$121,789,000	19.1	19.1
Iowa.....	505	106,758,000	16.8	35.9
Minnesota.....	980	58,968,000	9.2	45.1
New York.....	124	51,745,000	8.1	53.2
North Dakota.....	313	47,200,000	7.4	60.6
Wisconsin.....	402	37,831,000	5.9	66.5
Kansas.....	246	32,850,000	5.2	71.7
Illinois.....	263	32,679,000	5.1	76.8
South Dakota.....	178	23,817,000	3.7	80.5
Washington.....	134	18,968,000	3.0	83.5
Nebraska.....	282	15,539,000	2.4	85.9
Michigan.....	127	10,542,000	1.6	87.5
All others.....	1,673	76,993,000	12.5	100.0
Total.....	5,424	635,839,000	100.0	

COMMODITY GROUPS

Grain.....	1,637	\$289,669,000	45.6	45.6
Fruits and vegetables.....	871	201,543,000	31.7	77.3
Dairy products.....	1,708	89,062,000	14.0	91.3
Merchandise (farmers' stores).....	275	11,677,000	1.8	93.1
Tobacco.....	43	6,450,000	1.0	94.1
Livestock.....	96	5,624,000	.9	95.0
Cotton.....	213	1,502,000	.2	95.2
All others.....	581	30,292,000	4.8	100.0
Total.....	5,424	635,839,000	100.0	

¹ Based on reports for 534 associations as follows: Grain, 180 associations; fruits and vegetables, 58; dairy products, 176; farmers' stores, 38; tobacco, 2; livestock, 10; cotton, 18; all others, 52. The estimates for cotton, livestock, and stores are undoubtedly too low.

CHANGES BETWEEN 1915 AND 1925

During the 10 years from 1915 to 1925 there was a phenomenal development in several phases of the cooperative movement. The number of associations listed by the department practically doubled (Table 6 and figs. 4 and 5), the membership in these associations increased by 315 per cent (Table 6 and figs. 6, 7, and 8), and the amount of business handled in 1925 was 277 per cent greater than in 1915 (Table 6 and figs. 9, 10, and 11).

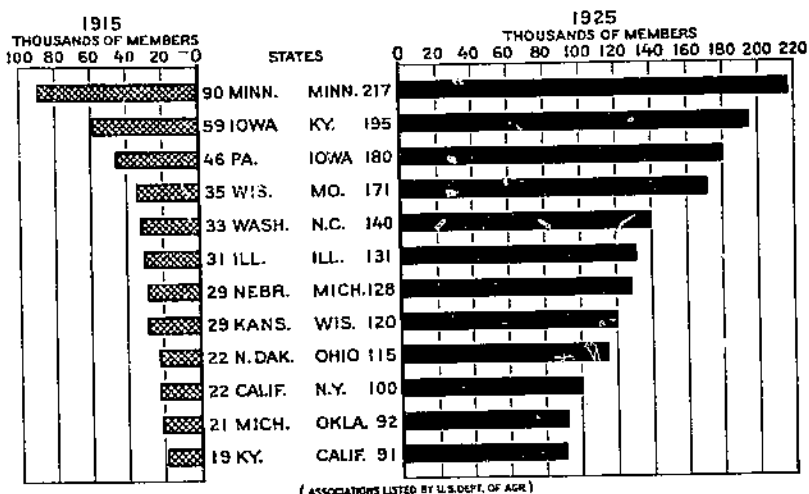


FIG. 7.—ESTIMATED MEMBERSHIP OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

During the 10 years from 1915 to 1925 Minnesota held the lead for the largest cooperative membership. Iowa dropped from second place in 1915 to third place in 1925, and Kentucky advanced from twelfth place in 1915 to second place in 1925.

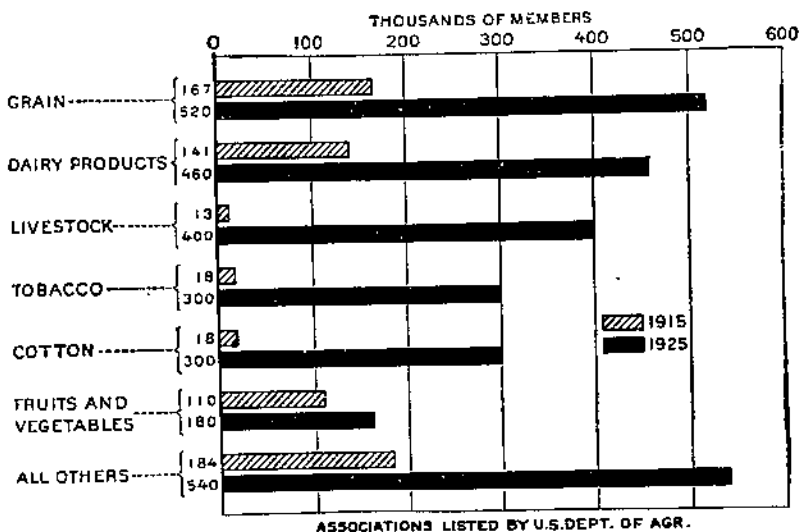


FIG. 8.—ESTIMATED MEMBERSHIP OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

The gain in membership of livestock shipping associations for the 10 years 1915 to 1925 was greater than for any of the other commodity groups of associations. The "All others" group included the associations marketing poultry, eggs, wool, and miscellaneous farm products.

TABLE 6.—Percentage gains in number of associations, estimated membership, and estimated amount of business, by geographic divisions from 1915 to 1925

[Associations listed by United States Department of Agriculture]

Geographic division	Percentage gains in—		
	Number of associations	Number of members	Amount of business
New England.....	65	256	1,121
Middle Atlantic.....	149	150	173
East North Central.....	216	430	526
West North Central.....	87	234	192
South Atlantic.....	17	655	1,383
East South Central.....	29	723	1,536
West South Central.....	44	712	1,574
Mountain.....	56	116	246
Pacific.....	55	112	98
United States.....	90	315	277

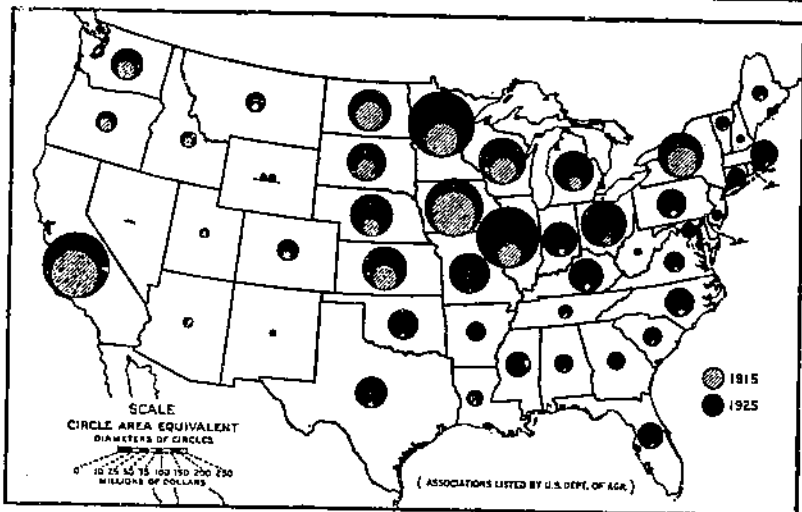


FIG. 9.—ESTIMATED BUSINESS OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

The largest percentage gain in volume of business, as measured in dollars, for the 10 years 1915 to 1925, was made by the associations in Missouri. Big increases are shown in the associations in Illinois, Minnesota, Ohio, and Michigan.

The largest gain in number of associations was made in the five East North Central States and the second largest gain by the three Middle Atlantic States. (Fig. 1; Appendix, Table 7.)

The largest gain in estimated membership took place in the four East South Central States and the second largest gain in the four West South Central States. (Table 6.) These membership gains were due almost entirely to the formation of large-scale tobacco associations in Kentucky and large-scale cotton associations in Tennessee, Alabama, Mississippi, Arkansas, Oklahoma, Louisiana, and Texas.

Large percentage gains in amount of business handled in 1925 as compared with 1915 are credited to the West South Central, the East South Central, the South Atlantic, and the New England States. (Table 6, fig. 9.) The smallest gain for the 10-year period was in the three Pacific Coast States; however, the amount of business handled by the cooperatives in these States nearly doubled during the 10 years.

Minnesota, Iowa, Illinois, Wisconsin, California, and Michigan were among the 12 leading States in both 1915 and 1925, as measured by—(1) number of associations, (2) estimated membership, and (3) estimated business transacted. Kansas, North Dakota, Nebraska, and New York ranked so high in several of the groupings that they belong among the leading States for the 10-year period. The cooperatives in the 10 States above named constituted 63 per cent of all the active cooperatives for the 10-year period. The memberships included 49 per cent of the total membership of all cooperatives for the 10 years, and the associations within these States transacted more than 60 per cent of the total cooperative business for the period.

The percentage gains in these States for the 10 years were not so large as for some of the other States, yet the gains were sufficient to keep each State in the group of leading States. (Table 7.)

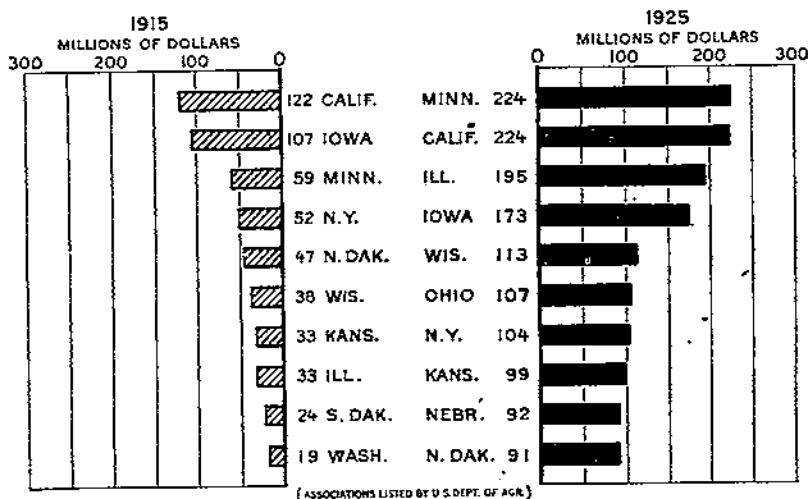


FIG. 10.—ESTIMATED BUSINESS OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

California associations led in volume of business in 1915 and Minnesota associations led in 1925, with California in second place. Iowa was in second place in 1915 and in fourth place in 1925. Illinois moved up from eighth place in 1915 to third place in 1925.

TABLE 7.—Percentage gains in number of associations, estimated membership, and estimated amount of business, by leading States, 1915 to 1926

[Associations listed by United States Department of Agriculture]

State	Percentage gains in—		
	Number of associations	Estimated membership	Estimated amount of business
Minnesota	41	141	280
Iowa	117	204	62
Illinois	213	322	467
Wisconsin	172	239	199
California	78	308	84
Kansas	80	187	201
North Dakota	47	169	93
Nebraska	73	152	492
Michigan	243	508	680
New York	131	850	101

In each of seven States the number of associations reporting to the department increased by more than 200 per cent. The States were Missouri, Indiana, West Virginia, Michigan, Pennsylvania, and Illinois. Six States lost in number of associations during the 10-year period. These States were Louisiana, Kentucky, Maryland, Georgia, North Carolina, and South Carolina.

Membership increases of 1,000 per cent or more occurred in Ohio, Missouri, Oklahoma, Georgia, Indiana, North Carolina, and Mississippi. Reports from six States indicate fewer members in 1925 than in 1915. These States were Washington, Delaware, New Jersey, Idaho, Nevada, and Rhode Island. (Fig. 6.)

In all of the 48 States except Nevada the 1925 business transactions, as measured in dollars, were greater than the amount of business handled in 1915. The States in which particularly large percentage gains occurred were Missouri, Mississippi, Georgia, Maryland, Florida, New Hampshire, Connecticut, and Texas. (Figs. 9 and 10.)

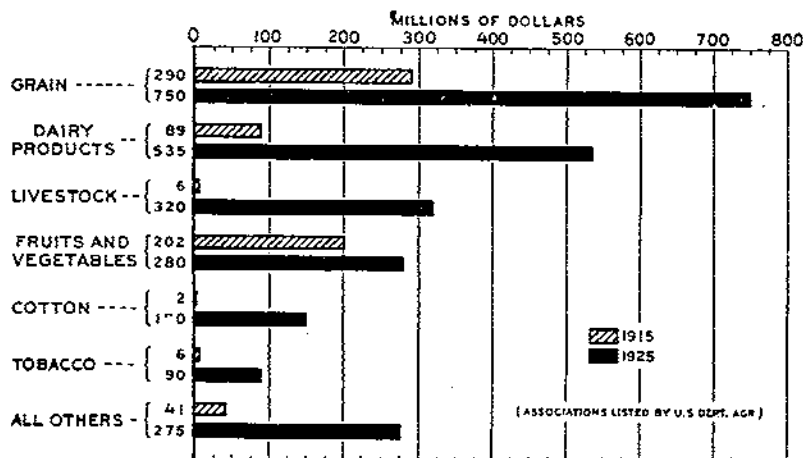


FIG. 11.—ESTIMATED BUSINESS OF MARKETING AND PURCHASING ASSOCIATIONS, 1915 AND 1925

There has been a marked increase in the volume of business transacted for all the commodity groups. The increase for the grain marketing associations and for the associations marketing dairy products amounted to more than \$100,000,000 each.

TABLE 8.—Percentage gains in number of associations, estimated membership, and estimated amount of business by commodity groups, 1915 to 1925

[Associations listed by the United States Department of Agriculture]

Commodity group	Percentage gains in—		
	Number of associations	Number of members	Amount of business
Grain.....	104	212	150
Dairy products.....	29	227	501
Fruits and vegetables.....	42	64	39
Cotton.....	143	(?)	(?)
Tobacco.....	144	(?)	(?)
All others.....	147	193	555
All groups.....	90	315	277

¹ Decrease.

² Figures for 1915 and 1925 not comparable.

The percentage gains for several of the commodity groups were unusually large. (Table 8.) This was chiefly due to the setting up in the cotton and tobacco producing regions of state-wide or region-wide centralized associations. This new type of organization largely displaced the independent local associations that had been functioning in a small way. In consequence there were fewer cotton and tobacco associations in 1925 than in 1915, but these fewer associations reported a very much larger membership than did the associations that were active in 1915, and they transacted annually a volume of business that was many times that reported by the independent local associations functioning in 1915. (Figs. 5, 8, and 11; appendix, Table 7.)

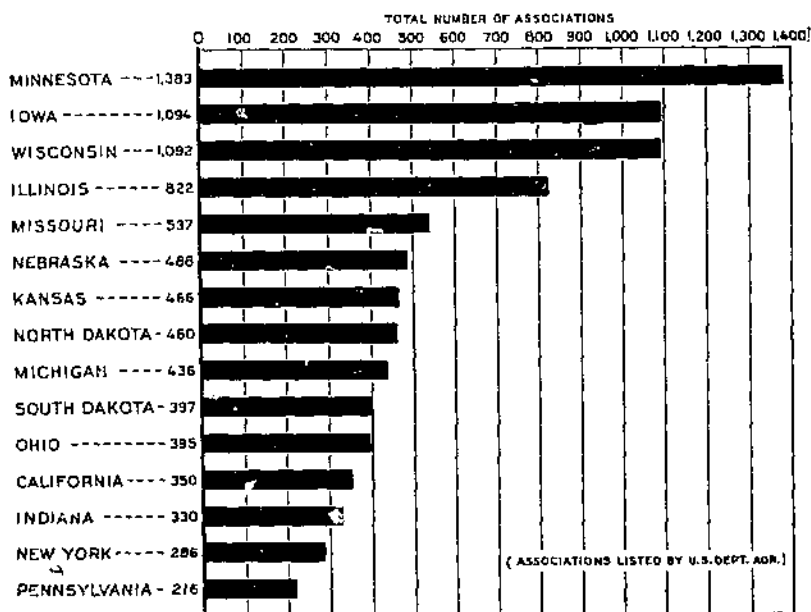


FIG. 12.—MARKETING AND PURCHASING ASSOCIATIONS, 1925

More than one-half of the associations listed by the Department of Agriculture in 1925 were located in six States—Minnesota, Iowa, Wisconsin, Illinois, Missouri, and Nebraska.

MARKETING AND PURCHASING ASSOCIATIONS IN 1925
NUMBER OF ASSOCIATIONS

At the close of 1925 there were listed by the Department of Agriculture, 10,803 farmers' marketing and purchasing associations which were largely cooperative. These associations were located principally in the 12 North Central States, 73 per cent of all the associations being in these States. Nearly 6 per cent of all the associations were credited to the States of California, Washington, and Oregon, and less than 5 per cent to the Middle Atlantic group consisting of New York, Pennsylvania, and New Jersey. (Table 9.)

Of the 48 States, Minnesota leads in number of associations, having 12.8 per cent of the total number. Iowa, Wisconsin, Illinois, Missouri, Nebraska, and Kansas follow in the order named. (Table 9 and fig. 12.)

TABLE 9.—Number of associations and percentages of total number, by geographic divisions, leading States, and commodity groups, 1925¹

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISIONS

	Number of associations	Per cent of total	Cumulative per cent
West North Central.....	4,825	44.7	44.7
East North Central.....	3,075	28.5	73.2
Pacific.....	613	5.9	79.1
Middle Atlantic.....	522	4.8	83.9
West South Central.....	454	4.2	88.1
South Atlantic.....	385	3.6	91.7
Mountain.....	361	3.3	95.0
East South Central.....	277	2.6	97.6
New England.....	259	2.4	100.0
Total.....	10,803	100.0	

LEADING STATES

	Number of associations	Per cent of total	Cumulative per cent
Minnesota.....	1,383	12.8	12.8
Iowa.....	1,091	10.1	22.9
Wisconsin.....	1,092	10.1	33.0
Illinois.....	822	7.6	40.6
Missouri.....	537	5.0	45.6
Nebraska.....	498	4.6	50.1
Kansas.....	466	4.3	54.4
North Dakota.....	460	4.3	58.7
Michigan.....	436	4.0	62.7
South Dakota.....	397	3.7	66.4
Ohio.....	395	3.7	70.1
California.....	350	3.2	73.3
All others.....	2,583	23.7	100.0
Total.....	10,803	100.0	

COMMODITY GROUPS

	Number of associations	Per cent of total	Cumulative per cent
Grain.....	3,338	30.9	30.9
Dairy products.....	2,197	20.3	51.2
Livestock.....	1,770	16.4	67.6
Fruits and vegetables.....	1,237	11.4	79.0
Cotton.....	121	1.1	80.1
Wool.....	91	.8	80.9
Poultry products.....	71	.7	81.6
Nuts.....	39	.4	82.0
Tobacco.....	24	.2	82.2
Miscellaneous selling.....	698	6.5	88.7
Miscellaneous buying.....	1,217	11.3	100.0
Total.....	10,803	100.0	

¹ For statistics based on State studies, see appendix, p. 68.

Nearly one-third of all the active associations were engaged in performing one or more of the functions in connection with the marketing of grain, about one-fifth of the total number were engaged in handling dairy products, and nearly one-sixth shipped livestock. The associations handling cotton, tobacco, wool, poultry products, and nuts were not important from a strictly numerical standpoint, the entire group making up less than 4 per cent of the total number of associations.

Wisconsin was the leading State in regard to number of associations handling dairy products, and Minnesota was second. Illinois was credited with the most grain marketing associations. Iowa had the second largest number and Kansas the third. Iowa led in live-

stock, Minnesota was second, and Illinois third. California had more than twice as many fruit and vegetable associations as any other State. Florida was credited with more associations than New York, and New York with more than Arkansas. (Fig. 13 and appendix, Table 4.)

Among the active organizations in 1925 were about 200 which rank as large-scale associations. All of these served the producers of large

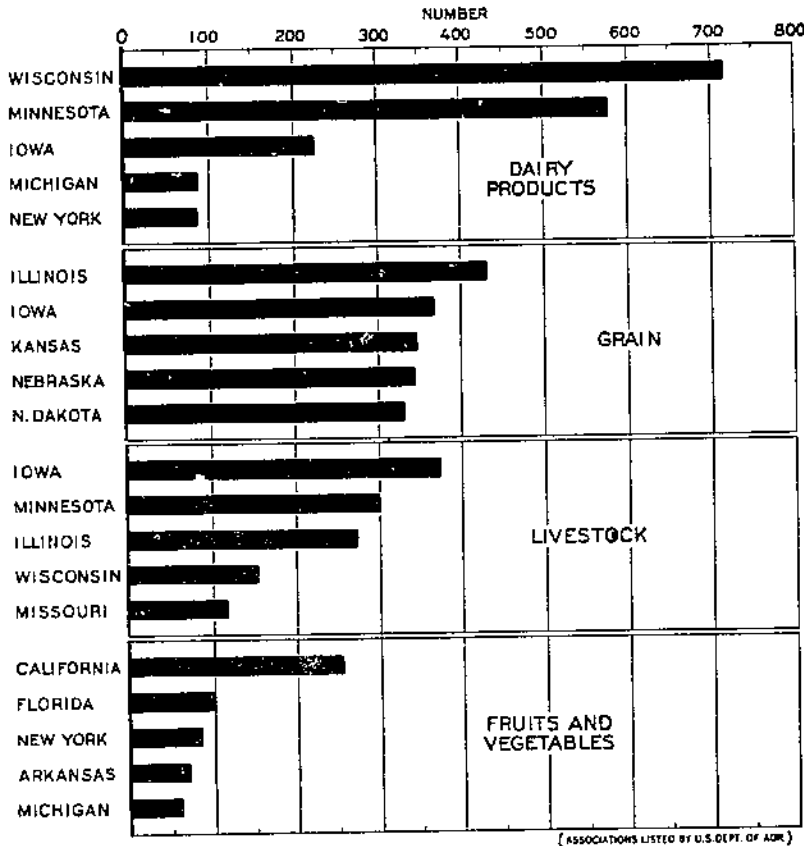


FIG. 13.—MARKETING AND PURCHASING ASSOCIATIONS, 1925

Wisconsin was the leading State in 1925 as regards cooperative marketing of dairy products; Illinois led in number of organizations marketing grain; Iowa was first in livestock shipping associations; and California led in fruit and vegetable associations.

areas and most of the associations performed more of the marketing functions than are generally attempted by local associations serving the producers of only a single community or shipping point. About 50 of these large organizations were federations of local units. Most of the federations were serving groups of producers with fruits, vegetables, or dairy products to be marketed. These federations were located principally in California, Florida, New York, and Minnesota. (Fig. 15.)

There were also 74 large-scale centralized associations at the close of 1925. (Fig. 16.) Of these 15 were engaged in marketing cotton; 15, grain; 7, tobacco; 4, dairy products; 8, fruits and vege-

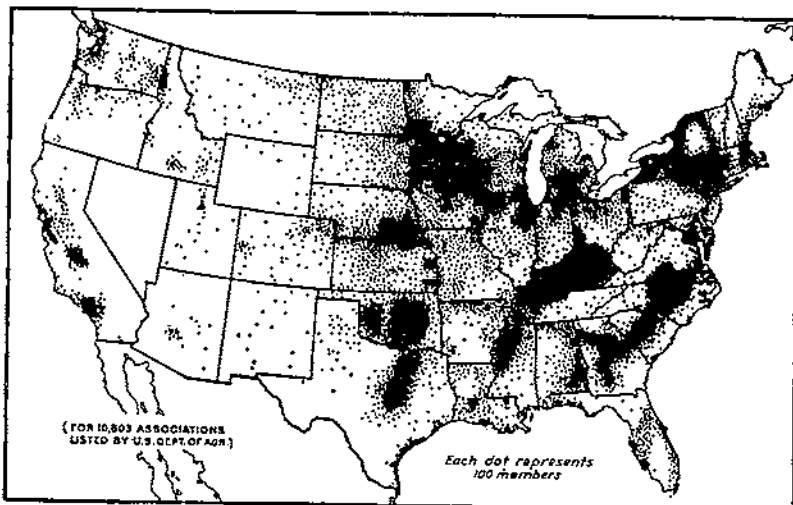


FIG. 14.—MEMBERSHIP IN MARKETING AND PURCHASING ASSOCIATIONS, 1925

In the dairy regions, the grain-producing regions, the tobacco-producing regions, and the Cotton Belt the number of farmers selling and buying cooperatively was large in 1925.

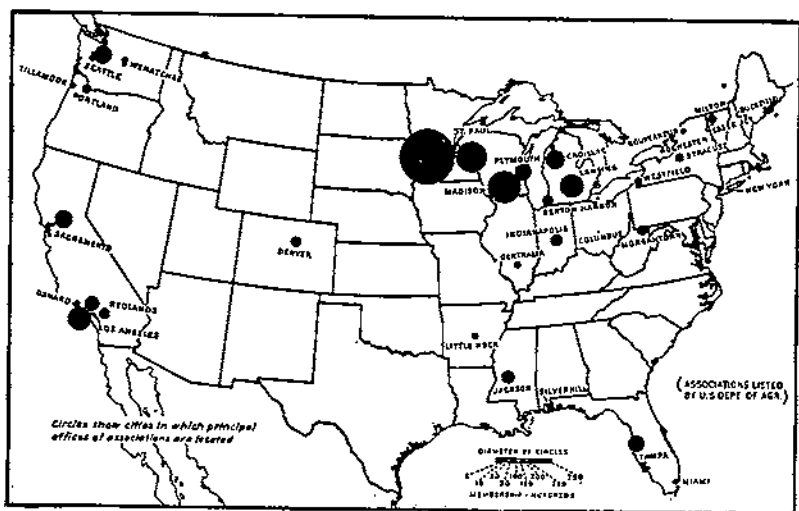


FIG. 15.—MEMBERSHIP OF FEDERATIONS OF MARKETING ASSOCIATIONS, 1925

There were groups of federations along the Pacific coast, in Minnesota, Wisconsin, Michigan, and New York in the Northern States, and in Florida. About one-half of these federations have been formed since 1920.

tables; 8, wool; 4, nuts; 10, poultry products; 1, broomcorn; 1, cane sirup; and 1, seeds.

Sales agencies have been established in about 25 of the terminal markets for the purpose of furnishing sales service on a cooperative

basis to farmers' associations and individual producers. The sales agencies for selling livestock are the most numerous. In 1925 there were 26 such agencies functioning in 20 markets. Among the other

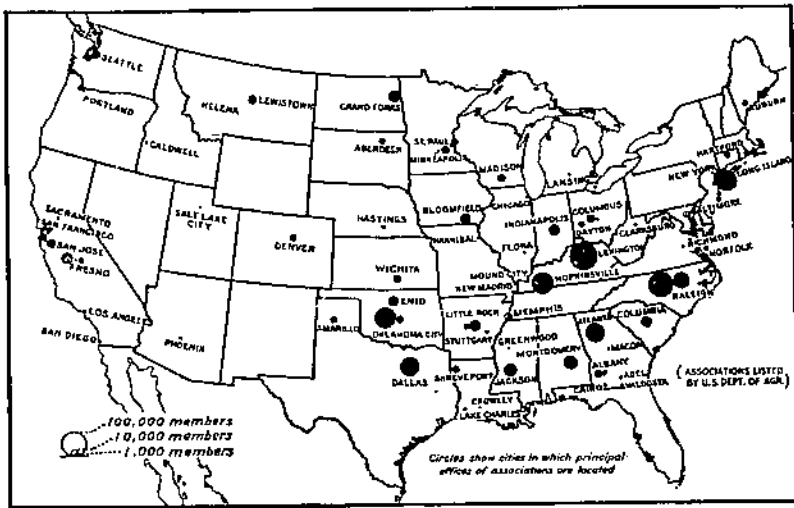


FIG. 16.—MEMBERSHIP OF CENTRALIZED MARKETING ASSOCIATIONS, 1925

Large-scale centralized marketing associations have been formed largely among the cotton, rice, and tobacco growers in the Southern States.

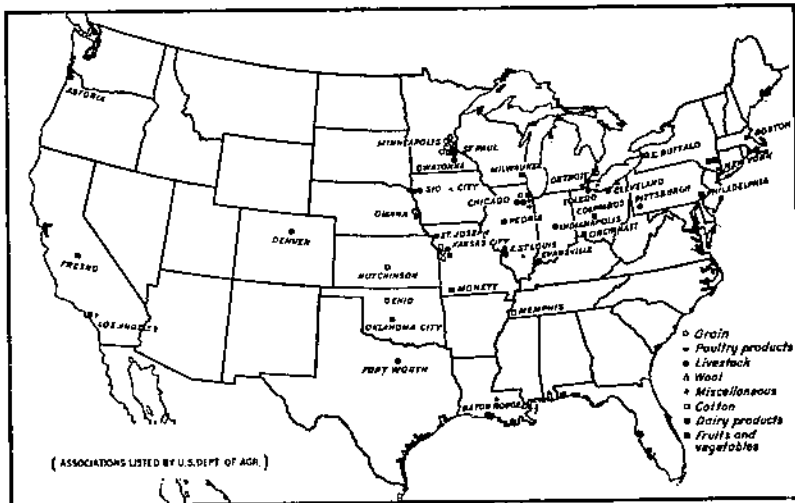


FIG. 17.—FARMER-OWNED AND CONTROLLED COOPERATIVE SALES AGENCIES, 1925

Farmer-owned and farmer-controlled sales agencies were operating in about 30 terminal markets in 1925. These received farm products which were marketed at the approximate cost of rendering the service, on a commission basis.

products marketed in this way are grain, poultry and eggs, wool, fruits and vegetables, and dairy products. (Fig. 17.) Some of the larger sales agencies have staffs of trained salesmen which are moved

into different sections of the country to assist local associations in obtaining wide distribution for the products of their members and in availing themselves of trained and experienced salesmen.

ESTIMATED MEMBERSHIP

It is estimated that the total membership of the 10,803 associations listed by the department at the close of 1925 was 2,700,000. This figure is considerably larger than that representing the total number of farmers served by cooperatives, as many farmers belong to two associations, some to three, and a few to four. Prior to 1920 many general-purpose associations were formed. These undertook to serve their members in different ways, such as by marketing grain, dairy products, fruits and vegetables, shipping livestock, and buying supplies of fertilizers, feeds, fencing, fuel, etc. Since 1920 the tendency seems to have been to form associations for the purpose of handling but a single commodity or a few commodities that pass through practically the same channels of trade on the way to the consumer. Separate organizations are frequently formed for marketing dairy products, poultry and eggs, wool, grain, grapes, apples, peaches, dried fruits and vegetables and separate organizations are sometimes formed to specialize in the collective buying of farm requisites.

A recent survey gave 1,800,000 as the number of farmers served through cooperatives in 1925.

More than one-half of the total cooperative membership in 1925 was in the associations in the 12 North Central States. Slightly over 20 per cent of the total membership was in the 8 South Central States. The associations in the South Atlantic group, including Delaware and Florida, were credited with 10.4 per cent of the membership and the 3 Pacific Coast States with 5.2 per cent. (Table 10 and fig. 6.)

TABLE 10.—*Estimated membership and percentage of total membership, by geographic divisions, leading States, and commodity groups, 1925*

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISIONS

	Number of associations listed	Estimated membership ¹		
		Number of members	Per cent	Cumulative per cent
West North Central.....	4,825	850,000	31.5	31.5
East North Central.....	3,075	575,000	21.3	52.8
East South Central.....	277	295,000	10.9	63.7
South Atlantic.....	385	280,000	10.4	74.1
West South Central.....	451	250,000	9.2	83.3
Middle Atlantic.....	522	160,000	5.9	89.2
Pacific.....	643	140,000	5.2	94.4
New England.....	250	75,000	2.8	97.2
Mountain.....	303	75,000	2.8	100.0
Total.....	10,803	2,700,000	100.0	

¹ Includes shareholders, contract members, patrons, shippers, and consignors for the 10,803 associations listed. As many producers are members of several associations the number of producers engaged in cooperative marketing and purchasing is considerably less than 2,700,000. Furthermore, not all the producers who are included are delivering products to the associations of which they are members.

TABLE 10.—Estimated membership and percentage of total membership, by geographic divisions, leading States, and commodity groups, 1925—Continued

LEADING STATES

	Number of associations listed	Estimated membership		
		Number of members	Per cent	Cumulative per cent
Minnesota.....	1,383	217,400	8.1	8.1
Kentucky.....	56	194,700	7.2	15.3
Iowa.....	1,094	179,800	6.7	22.0
Missouri.....	537	170,600	6.3	28.3
North Carolina.....	50	139,000	5.2	33.5
Illinois.....	822	131,000	4.8	38.3
Michigan.....	436	128,300	4.7	43.0
Wisconsin.....	1,062	120,100	4.4	47.4
Ohio.....	305	115,300	4.3	51.7
New York.....	286	100,000	3.7	55.4
Oklahoma.....	143	92,200	3.4	58.8
California.....	350	91,200	3.4	62.2
All others.....	4,189	1,019,500	37.8	100.0
Total.....	10,803	2,760,000	100.0	

COMMODITY GROUPS

Grain.....	3,338	520,000	19.3	19.3
Dairy products.....	2,197	469,000	17.0	36.3
Livestock.....	1,770	400,000	14.8	51.1
Cotton.....	121	300,000	11.1	62.2
Tobacco.....	24	300,000	11.1	73.3
Miscellaneous buying.....	1,217	247,000	9.1	82.4
Fruits and vegetables.....	1,237	180,000	6.7	89.1
Miscellaneous selling.....	608	173,000	6.4	95.5
Wool.....	91	50,000	1.9	97.4
Poultry products.....	71	50,000	1.9	99.3
Nuts.....	39	20,000	.7	100.0
Total.....	10,803	2,760,000	100.0	

The associations with headquarters in Minnesota reported a larger number of members than the associations in any other State. Kentucky ranked next to Minnesota in total number of members. Iowa followed Kentucky, and Missouri followed Iowa. It should be noted that a large number of the members of one of the Kentucky associations are residents of neighboring States, and many members of one of the Ohio associations are residents of Kentucky. The States following Missouri in the order of their numerical importance were North Carolina, Illinois, Michigan, Wisconsin, Ohio, New York, Oklahoma, and California. (Table 10, fig. 7, and appendix, Table 5.)

Of the associations in the various commodity groups, those marketing grain had the largest membership, nearly one-fifth of the total estimated membership being credited to them. The membership of the organizations handling dairy products formed 17 per cent of the total, and the membership of the livestock shipping associations formed nearly 15 per cent of the total. The percentages for the other groups were cotton, 11.1 per cent; tobacco, 11.1 per cent; miscellaneous buying, 9.1 per cent; fruits and vegetables, 6.7 per cent; miscellaneous selling, 6.4 per cent; wool, 1.9 per cent; poultry products, 1.9 per cent; and nuts, 0.7 per cent. (Table 10 and fig. 8.)

Thirty-five federations, with 1,907 units, reported a total membership of 210,325 at the close of 1925. The fruit-and-vegetable

group consisted of 22 federations with 852 local units and 55,110 members. The seven federations in the dairy group reported for 846 units with 112,625 members. Reports were also received from a federation of 17 egg and poultry marketing units, with 22,000 members, a federation of 87 country elevators, with 12,200 members, a federation of 42 associations handling walnuts, with 4,500 members, and from a federation of 37 sheep growers' cooperative associations, with 1,675 members. The relative numerical strength of the several federations is indicated graphically by Figure 15.

The 74 large-scale associations of the centralized type which were functioning at the close of 1925 reported a total membership of 879,190. The number of independent associations in the various groups and the total membership for each group was as follows: Cotton, 15 associations, 291,557 members; tobacco, 7 associations¹ 298,456; grain (including rice), 15 associations, 100,538 members; fruit and vegetable, 8 associations, 36,750 members; dairy products, 4 associations, 78,280 members; wool, 8 associations, 31,002 members; nuts, 4 associations, 17,756 members; poultry and poultry products, 10 associations, 15,064 members; and 3 associations handling other products, with 9,787 members.

ESTIMATED BUSINESS

In round figures, the 10,803 associations listed by the department transacted business in 1925 to the amount of \$2,400,000,000. By far the greater part of this amount represented sales of farm products. Perhaps one-tenth represented purchases of farm supplies. Seventy per cent of the total business was handled by the cooperatives in 15 States that make up the North Central and the Pacific coast groups. The remaining 30 per cent of the cooperative business was handled by the associations scattered through 33 States. (Table 11; appendix, Table 6.)

The largest volume of business credited to any State was \$223,980,000 for the 1,383 associations listed for Minnesota. California ranked second to Minnesota and had a total estimated business of \$223,960,000 for the 350 associations. Illinois was third in importance, Iowa held fourth place, and Wisconsin and Ohio fifth and sixth places, respectively. New York and Kansas were seventh and eighth in importance. These eight States transacted 51 per cent of the total cooperative business. (Table 11 and fig. 10.)

¹ Two of the tobacco associations did not receive tobacco of the 1925 crop and have since gone out of business.

TABLE 11.—Estimated business and percentage of total business by geographic divisions, leading States, and commodity groups, 1925

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISIONS

	Number of associations listed	Estimated business		
		Amount of business	Per cent	Cumulative per cent
		<i>Thousands</i>		
West North Central.....	4,826	\$836,630	34.9	34.9
East North Central.....	3,075	538,270	23.3	58.2
Pacific.....	643	207,675	12.4	70.6
Middle Atlantic.....	522	153,080	6.4	77.0
South Atlantic.....	385	152,325	6.3	83.3
West South Central.....	454	128,630	5.4	88.7
East South Central.....	277	117,270	4.9	93.6
New England.....	259	85,170	3.5	97.1
Mountain.....	363	70,950	2.9	100.0
Total.....	10,803	2,400,000	100.0	

LEADING STATES

Minnesota.....	1,393	223,680	9.4	9.4
California.....	350	223,870	9.3	18.7
Illinois.....	822	105,210	8.2	26.9
Iowa.....	1,004	172,710	7.2	34.1
Wisconsin.....	1,092	113,080	4.7	38.8
Ohio.....	395	107,340	4.5	43.3
New York.....	286	103,760	4.3	47.6
Kansas.....	466	99,160	4.1	51.7
Nebraska.....	488	91,930	3.8	55.5
North Dakota.....	460	91,280	3.8	59.3
Missouri.....	537	83,490	3.5	62.8
Michigan.....	436	82,300	3.4	66.2
All others.....	2,904	811,900	33.8	100.0
Total.....	10,803	2,400,000	100.0	

COMMODITY GROUPS

Grain.....	3,338	750,000	31.2	31.2
Dairy products.....	2,197	535,000	22.3	53.5
Livestock.....	1,770	320,000	13.3	66.8
Fruits and vegetables.....	1,237	280,000	11.7	78.5
Cotton.....	121	150,000	6.2	84.7
Miscellaneous buying.....	1,217	135,000	5.6	90.3
Tobacco.....	24	90,000	3.8	94.1
Miscellaneous selling.....	608	74,000	3.1	97.2
Poultry products.....	71	40,000	1.7	98.9
Nuts.....	39	16,000	.7	99.6
Wool.....	91	10,000	.4	100.0
Total.....	10,803	2,400,000	100.0	

The 3,338 grain marketing associations handled nearly one-third of the total business, the dairy associations more than one-fifth, and the livestock shipping associations more than one-eighth. The business transactions for the year for the associations handling cotton, tobacco, wool, poultry products, and nuts were much smaller than the transactions for the groups first mentioned. (Fig. 11.)

ORGANIZATION CHARACTERISTICS

Data collected in 1924 and 1925 from more than one-half of the associations listed by the department give information regarding legal status, capitalization, payment of dividends, handling of products of nonmembers, and use of formal marketing agreements or contracts. The detailed figures by geographic divisions and leading

States are found in appendix, Tables 8 to 10. These tables show that 83 per cent of the associations reporting were incorporated, 69 per cent were organized with capital stock, 55 per cent were paying dividends on capital stock, 61 per cent were making patronage refunds, 86 per cent were handling products for nonmembers, and 16 per cent used marketing contracts. The percentages varied greatly for the various States (appendix, Table 9) and for the different commodities handled (appendix, Table 10).

During the early days of the cooperative movement in the United States a great many of the cooperative enterprises, if not a majority, were informal, unincorporated organizations. Most of them were, from a legal point of view, partnerships. These unincorporated associations did not enjoy the advantages arising from having a definite legal status and limited liability for members. Those enterprises that required considerable capital for plants and equipment, were often organized as capital-stock companies, but a large number of associations were little more than informal efforts at collective activity. This was particularly true of the many groups of producers brought together for assembling and shipping their products to commission houses in the terminal markets. There were many informal efforts at assembling and shipping livestock, fruits and vegetables, poultry and eggs, and wool, and many informal groups for buying collectively fertilizers, seeds, spray materials, feeds, binder twine, fencing, building materials, and fuel. Because of the ease with which unincorporated associations were formed and disintegrated, as there was or was not something to be done collectively, it is difficult to determine the number of active associations at any particular time or even the total number of separate groups which have been active at one time or another.

Since the extension specialists in the agricultural colleges and the State departments of markets have been giving attention to the activities of cooperative enterprises there has been a marked tendency toward the formation of incorporated associations, hence, the large percentage of functioning associations which are incorporated. In seven of the States more than 90 per cent of the active associations are incorporated. These States with the percentage for each are: California, 96 per cent; Oregon, 95 per cent; Nebraska, 93 per cent; Michigan, 93 per cent; New York, 93 per cent; Washington, 91 per cent; Kansas, 91 per cent. (Appendix, Table 9.)

All of the tobacco marketing associations that furnished information were incorporated. Of the associations handling grain, 99 per cent was incorporated, and the percentages for some of the other groups were as follows: Nuts, 94 per cent; cotton, 93 per cent; dairy products, 90 per cent; fruits and vegetables, 78 per cent; poultry and eggs, 73 per cent; wool, 62 per cent. (Appendix, Table 10.)

Until about 10 years ago, most groups of producers who undertook to operate cooperative enterprises which required a considerable amount of capital, organized with capital stock. During recent years many large associations have been formed without capital stock, the required capital being obtained by deductions from returns from the sale of members' products rather than from the sale of shares of stock. In these noncapital-stock companies the deductions are often represented by certificates of indebtedness or by credits upon the association books.

Data compiled in 1925 indicate that approximately 70 per cent of the then active associations were capital-stock enterprises and that these enterprises were transacting about 63 per cent of the total cooperative business.

The percentage of associations in the various States organized with capital stock varied greatly. In Kansas, 92 per cent of the associations reporting had share capital; in Nebraska, 91 per cent; Wisconsin, 80 per cent; Ohio, 80 per cent; Minnesota, 75 per cent; Iowa, 64 per cent; Michigan, 55 per cent; California, 52 per cent; New York, 33 per cent. (Appendix, Table 9.)

Nearly all (98 per cent) of the farmers' elevators were organized with capital stock. The percentages for the other commodity groups were dairy products, 85 per cent; fruits and vegetables, 39 per cent; poultry and eggs, 35 per cent; livestock, 16 per cent; and wool, less than 10 per cent. (Appendix, Table 10.)

Slightly over one-half of the fruit and vegetable marketing associations in California reported capital stock in 1925, whereas but 10 per cent of such associations in Indiana were so organized. In New York State 18 per cent of the fruit and vegetable associations had capital stock outstanding.

Practices regarding the formation of livestock shipping associations vary greatly. Less than 2 per cent of the shipping associations in Illinois report having capital stock, whereas 63 per cent of those reporting from Ohio had shares of stock outstanding. The percentages for a few of the leading States in the shipment of livestock were: Michigan, 31 per cent; Indiana, 22 per cent; Iowa, 20 per cent; Wisconsin, 20 per cent; Minnesota, 10 per cent; Missouri, 5.5 per cent; South Dakota, 4.7 per cent. (Appendix, Table 10.)

Fifty-five per cent of all the associations were paying dividends on capital stock. An examination of the reports of several hundred associations indicated that capital stock dividends ranged from 3 to 15 per cent. About 33 per cent of the associations were paying 6 per cent; about 30 per cent were paying 8 per cent, and 8 per cent were paying 10 per cent, or more. A relatively small number were paying more than 10 per cent.

Some associations follow the practice of making no larger deduction for expenses than is necessary to keep the enterprise functioning. Others deduct more at the time of settlement with producers than is needed and then later, usually at the close of the season, pay what is generally called a patronage refund or dividend. More than 5,500, out of the 9,191 associations reporting upon this subject in the 1925 survey, made patronage refunds. (Appendix, Table 8.) The percentage of associations for the United States as a whole making patronage refunds was 60.8 per cent. The percentages for some of the leading cooperative States were: California, 83 per cent; Kansas, 79 per cent; South Dakota, 75 per cent; North Dakota, 74 per cent; Missouri, 71 per cent; Nebraska, 71 per cent; Michigan, 65 per cent; New York, 63 per cent; Illinois, 36 per cent. (Appendix, Table 9.)

Most of the farmers' cooperative marketing associations serve non-members as well as members. In many cases a few progressive producers have started associations, the services of which have been available to an entire community. Not infrequently cooperative enterprises have been established by a few men, which, once established, have served entire communities and have served all producers

on the same basis. This practice is so common that all patrons have been considered members, although as a matter of fact the legal members may be only the few shareholders who furnished the capital and started the business.

About 86 per cent of the associations reporting for 1925 were serving patrons in addition to their legal members. Reports from 4,600 associations that served both members and nonmembers indicated that 638,202 individuals were being served, whereas reports from 696 associations serving only members indicated a total membership of 792,550. This would seem to indicate that less than 50 per cent of the total membership was in associations serving nonmembers. It should be remembered that most of the large-scale cotton, tobacco, and wheat marketing organizations formed during the last few years handle only the products of those bound to them by membership agreements. In addition, many of the associations are limited by the laws under which they are formed to do business with or for their members only.

The percentages of associations in some of the leading cooperative States serving nonmembers as well as members are as follows: North Dakota, 97 per cent; Kansas, 96 per cent; Nebraska, 96 per cent; Ohio, 95 per cent; Minnesota, 94 per cent; Missouri, 93 per cent; Wisconsin, 89 per cent; Michigan, 86 per cent; Illinois, 83 per cent; Iowa, 82 per cent; New York, 58 per cent; California, 41 per cent. (Appendix, Table 9.)

Ninety-eight per cent of the grain-marketing associations served nonmembers, as did also 92 per cent of those marketing dairy products, 39 per cent of those marketing fruits and vegetables, and 66 per cent of those marketing livestock. (Appendix, Table 10.)

But 966 associations out of 5,892 reporting in 1925 used marketing contracts or agreements. This figure would seem to indicate that about 16 per cent of the associations had adopted a contract defining exactly the responsibilities of the member to his association. (Appendix, Table 9.)

In California 74 per cent of the associations used written contracts; in New York, 55 per cent. The percentages for some of the other States were: Washington, 53 per cent; Oregon, 37 per cent; Michigan, 21 per cent; Missouri, 18 per cent; Iowa, 8 per cent; Minnesota, 5 per cent; Wisconsin, 4 per cent.

Over one-half of the associations marketing poultry and eggs, fruits and vegetables, nuts, wool, and tobacco used marketing contracts. The percentages for some of these associations were poultry and eggs, 76 per cent; fruits and vegetables, 67 per cent; wool, 54 per cent. Less than 9 per cent of the livestock shipping associations used contracts, less than 8 per cent of the associations marketing dairy products, and less than 4 per cent of those marketing grain. (Appendix, Table 10.)

It should be noted that a few large-scale associations that market dairy products and grain and that use marketing contracts have within their organizations large percentages of the total number of producers marketing these products cooperatively. Reports from 69 large-scale associations using marketing contracts indicate that these organizations have about 28 per cent of the total estimated membership for all the cooperatives in the United States

COTTON AND COTTON-PRODUCTS ASSOCIATION¹

Cooperative cotton marketing changed in character between 1915 and 1925. In the 1915 survey reports were included from 213 organizations that handled cotton and were classified as cotton marketing associations. It appears from the records that these associations were rather small enterprises, their average membership being 86. Some of the associations were engaged in selling cotton, some in operating warehouses, some in operating oil mills, but a majority of the associations were engaged in the cooperative ginning of cotton. Most of the organizations included in the 1915 study have disappeared from the list of active cooperatives.

Of the 121 cotton associations listed in 1925, nearly 58 per cent have been formed since 1915 and the larger and more active of these since 1920.

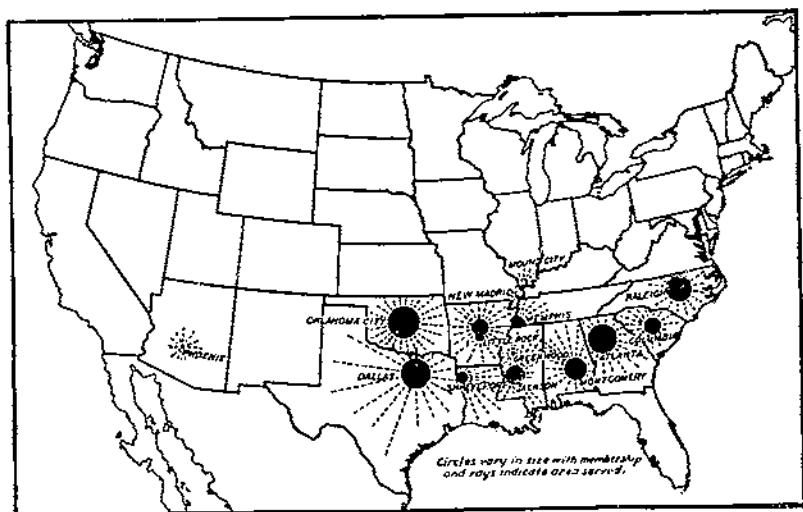


Fig. 18.—COOPERATIVE COTTON MARKETING ASSOCIATIONS, 1925

Fifteen large-scale cotton associations located in the Southern States serve the greater part of the cotton producing area. Most of these associations aim to cover a State.

The 121 associations listed by the department in 1925 included 15 large-scale associations engaged in marketing cotton, approximately 50 cooperative cotton gins, and about 50 small associations performing miscellaneous functions. (Fig. 18.)

The first of the large-scale cotton-marketing associations came into existence in 1921. Since that year more than 4,600,000 bales of cotton, not including the 1926 crop, have been handled by 15 associations with about 300,000 members under contract, only part of whom, however, have delivered cotton. (Table 12 and fig. 19.)

¹ Publications dealing with the cooperative marketing of cotton have been issued by the Division of Cooperative Marketing of the United States Department of Agriculture. Among these are, Department Bulletin No. 1392, Cooperative Marketing of Cotton, 1925 (5); Department Circular No. 397, Farmers' Cooperative Business Study, the Staple Cotton Cooperative Association, 1926 (15).

TABLE 12.—Cotton marketed by centralized associations and value, 1921 to 1926

[Data from reports to United States Department of Agriculture]

Association	Year or- gan- ized	1921-22		1922-23		1923-24	
		Bales	Value	Bales	Value	Bales	Value
Alabama Farm Bureau Cotton Association.....	1922			57,407	\$8,222,000	65,316	\$9,641,300
Arizona Pima Cotton Growers.....	1921	10,700	\$1,789,912	10,249	1,368,578	7,948	1,352,772
Arkansas Cotton Growers' Cooperative Association.....	1922			16,137	1,862,407	37,807	5,430,960
Arkansas Farmers Union Cotton Growers' Association.....	1921	387	35,880	62,896	8,613,217		
Georgia Cotton Growers' Cooperative Association.....	1922			3,547	506,918	3,341	404,843
Illinois Cotton Growers' Cooperative Association.....	1924			53,942	7,400,408	70,812	10,375,562
Louisiana Farm Bureau Cotton Growers' Cooperative Association.....	1923					29,885	4,311,887
Staple Cotton Cooperative Association.....	1921	156,026	20,209,304	168,021	24,943,174	107,432	17,410,097
Mississippi Farm Bureau Cotton Association.....	1923					33,856	5,026,818
Missouri Cotton Growers' Cooperative Association.....	1923					3,768	496,082
North Carolina Cotton Growers' Cooperative Association.....	1922			135,912	18,285,636	130,853	18,376,243
Oklahoma Cotton Growers' Association.....	1921	91,311	8,375,140	65,868	8,545,853	118,743	16,383,226
South Carolina Cotton Growers' Cooperative Association.....	1922			124,001	17,380,453	121,223	18,066,516
Tennessee Cotton Growers' Association.....	1923					15,318	2,220,669
Texas Farm Bureau Cotton Association.....	1921	93,802	9,002,335	77,706	11,176,085	182,321	28,566,361
Total.....		352,226	30,502,661	763,086	107,391,339	928,562	138,459,435

Association	1924-25		1925-26		Total	
	Bales	Value	Bales	Value	Bales	Value
Alabama Farm Bureau Cotton Association.....	79,366	\$9,690,517	106,591	\$9,500,000	308,680	\$37,053,037
Arizona Pima Cotton Growers.....	9,748	1,333,463	16,457	2,212,602	55,162	8,037,327
Arkansas Cotton Growers' Cooperative Association.....	40,381	5,193,209	113,516	8,028,888	260,717	28,724,690
Arkansas Farmers Union Cotton Growers' Association.....	3,840	403,560	9,760	579,701	20,861	2,110,908
Georgia Cotton Growers' Cooperative Association.....	105,861	12,167,132	113,597	10,284,692	344,212	40,323,194
Illinois Cotton Growers' Cooperative Association.....	108	11,000	840	75,000	948	86,000
Louisiana Farm Bureau Cotton Growers Cooperative Association.....	20,537	3,287,788	51,186	4,515,680	107,608	12,115,655
Staple Cotton Cooperative Association.....	124,612	17,792,580	262,808	27,255,004	818,910	107,700,240
Mississippi Farm Bureau Cotton Association.....	44,188	5,206,882	42,551	3,915,000	120,504	14,148,700
Missouri Cotton Growers' Cooperative Association.....	2,051	254,624	12,318	930,273	18,677	1,686,679
North Carolina Cotton Growers' Cooperative Association.....	116,472	17,154,608	161,168	14,471,404	544,305	68,287,981
Oklahoma Cotton Growers' Association.....	141,440	17,182,291	206,318	17,934,520	623,680	68,421,043
South Carolina Cotton Growers' Cooperative Association.....	99,334	11,632,799	97,775	9,239,139	410,333	56,318,907
Tennessee Cotton Growers' Association.....	18,241	2,215,818	33,063	2,909,000	66,622	7,230,487
Texas Farm Bureau Cotton Association.....	284,322	35,078,407	244,320	23,812,190	882,471	108,835,078
Total.....	1,096,417	130,594,807	1,472,348	136,159,793	4,613,239	561,168,035

1 Including cotton of the 1921-22 crop.

2 Including 40,000 bales of the 1921-22 crop handled separately.

3 Exclusive of long-staple cotton.

4 Basis, Galveston.

5 Auditor's report Aug. 31, 1926.

Thirteen of the State cotton associations have formed a federation under the name of American Cotton Growers' Exchange. This central organization serves as a clearing house between the different State associations and furnishes various services such as economic information, accounting, and foreign sales to the unit members.

From 5.2 to 9.3 per cent of all the cotton ginned, since the development of the large-scale marketing associations, has been marketed through cooperative agencies. The percentages for the several seasons are as follows: 1921-22, 5.3 per cent; 1922-23, 7.4 per cent; 1923-24, 8.9 per cent; 1924-25, 8.0 per cent; 1925-26, 9.1 per cent.

In some of the seasons in some of the States less than 1 per cent has been marketed cooperatively, while 23.4 per cent of the total Mississippi crop was delivered to the two large cotton cooperatives in that State during the 1923-24 season. The percentages for the various States for the five seasons are given in Table 13.

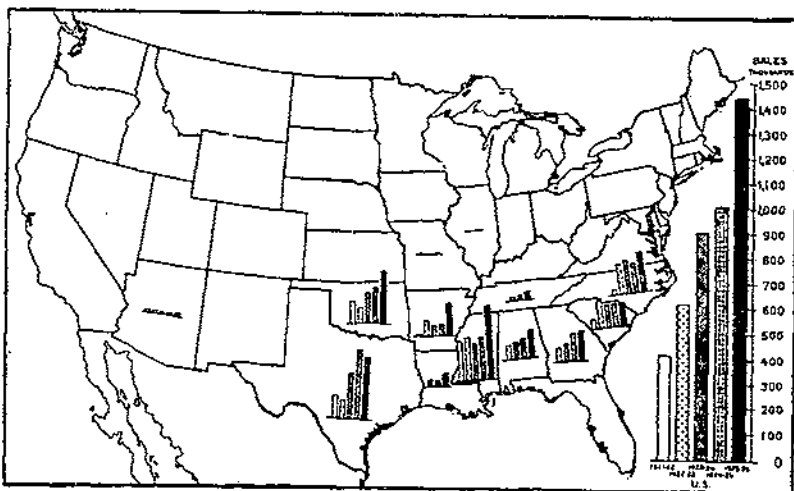


FIG. 19.—COTTON HANDLED BY CENTRALIZED MARKETING ASSOCIATIONS, CROPS OF 1921 TO 1926

The quantity of cotton marketed cooperatively has increased from about 400,000 bales of the 1921 crop to approximately 1,400,000 bales of the 1925 crop.

TABLE 13.—Percentage of cotton marketed by large-scale cooperative associations in specified States by seasons, 1921 to 1927¹

State	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Alabama		7.0	11.1	8.1	7.9	7.2
Arizona	23.8	21.8	10.2	0.0	13.8	10.2
Arkansas	.8	6.6	6.0	4.0	7.7	4.2
Georgia		7.5	12.0	10.6	9.8	5.8
Louisiana			8.1	5.4	5.0	6.8
Mississippi	19.2	17.0	23.4	15.4	15.3	14.5
Missouri			2.9	1.1	4.1	2.5
North Carolina	2.6	13.6	12.8	14.1	14.6	9.6
Oklahoma	10.6	10.5	18.1	9.4	12.2	10.0
South Carolina	5.3	21.7	12.5	12.3	11.0	6.9
Tennessee			6.8	5.2	6.4	3.3
Texas	4.3	2.4	4.2	5.7	5.9	3.4
United States	5.3	7.4	8.9	8.0	9.1	6.7

¹ Based on total production as reported in U. S. DEPARTMENT OF AGRICULTURE STATISTICS, U. S. Dept. Agr. Yearbook 1929: 923, Table 243. 1927.

Reports from the 44 cotton gins indicate an average membership in 1925 of 115. Fifty-seven per cent of the gins active in 1925 were organized prior to 1920.

The miscellaneous associations were largely engaged in operating warehouses or in holding title to such plants.

DAIRY PRODUCTS ASSOCIATIONS

The cooperative marketing of dairy products was one of the first forms of cooperative marketing to be developed extensively. (Appendix, Table 3.) The increase in number of associations has been fairly uniform from year to year, except since 1922. (Figs. 3 and 20.)

From 1915 to 1925 the number of dairy marketing associations listed by the department increased 29 per cent, the number of members belonging to such associations increased 227 per cent, and the amount of business handled by cooperative dairy marketing

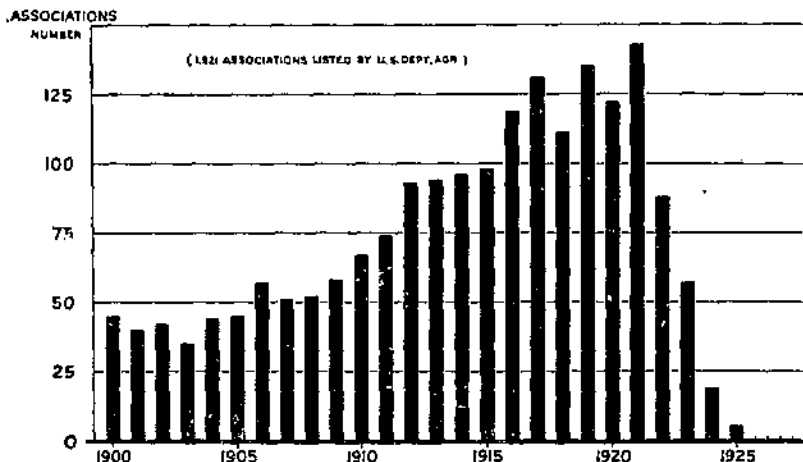


FIG. 20.—DAIRY MARKETING ASSOCIATIONS REPORTING YEARS OF ORGANIZATION, 1900 TO 1925

There are seven groups of two years each, in which fewer dairy marketing associations were organized in the second year than in the first. The peak year for the formation of dairy marketing associations was 1921.

associations increased 501 per cent. (Table 8.) Minnesota was credited with the largest number of dairy marketing associations in 1915, Wisconsin was in second place, and Iowa in third place. The order for 1925 was Wisconsin, Minnesota, and Iowa. (Appendix, Table 11.) Minnesota associations ranked first in number of members in 1915, with Wisconsin, Iowa, and Michigan associations following in the order named. In 1925 New York led in membership, with Minnesota, Wisconsin, and Pennsylvania following. (Fig. 21 and appendix, Table 11.)

Wisconsin was the leading State as regards amount of business in 1915, and Minnesota, Iowa, and Michigan were in second, third, and fourth places. By 1925 Minnesota had moved into first place, New York was in second, Wisconsin in third, and California in fourth. (Fig. 22, appendix, Table 11.)

The changes in the relative positions of the States was largely due to the development of associations for the cooperative marketing

of fluid milk. The increase in number of cooperative creameries and cheese factories from 1915 to 1925 was not marked. It is not improbable that the point of saturation in regard to the number of

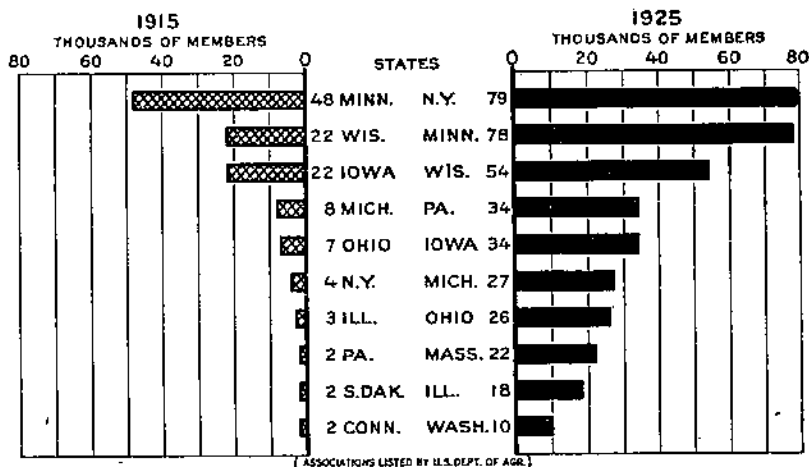


FIG. 21.—ESTIMATED MEMBERSHIP OF ASSOCIATIONS MARKETING DAIRY PRODUCTS, 1915 AND 1925

The cooperatives marketing dairy products in Minnesota in 1915 had more than twice as many members as the dairy cooperatives of any other State. In 1925 the New York dairy marketing cooperatives had the largest number of members. This was principally because of the development of a large milk marketing association to serve New York City.

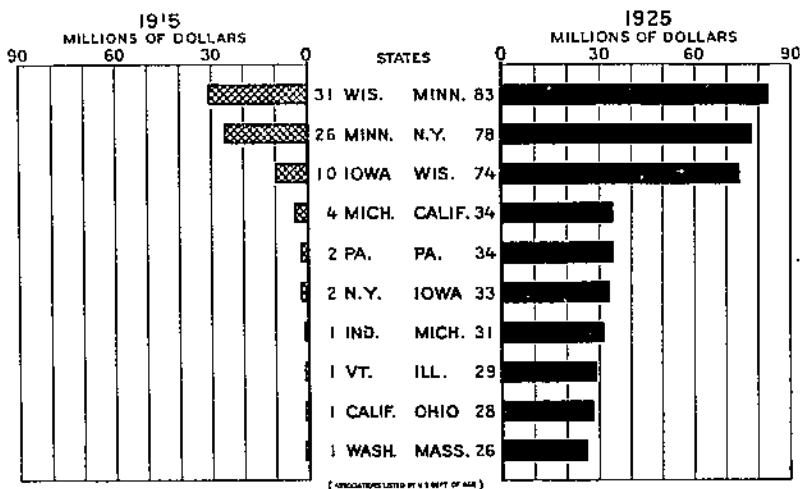


FIG. 22.—BUSINESS OF ASSOCIATIONS MARKETING DAIRY PRODUCTS, 1915 AND 1925

Wisconsin dairy cooperatives were first in 1915 in the amount of business transacted, and the Minnesota cooperatives were in second place. In 1925 Minnesota cooperatives were in first place, those in New York second place, and Wisconsin cooperatives in third place.

cooperative creameries and cheese factories was reached in some of the States about 1915, but many individual enterprises have shown an increase in the number of members served and in the volume of business handled.

Approximately 2,200 associations engaged in the marketing of dairy products were listed by the department in 1925. In round figures these associations were serving 460,000 members and were handling a business which, measured in dollars, amounted to \$535,000,000. (Appendix, Table 11.) The cooperative creamery associations were the most numerous and the cheese factories second in numerical importance. (Table 14.)

About 45 per cent of the total estimated membership was credited to the creameries and 50 per cent to the milk marketing associations. More than 40 per cent of the total business was credited to the creameries and about 53 per cent to the milk marketing associations. (Table 14.)

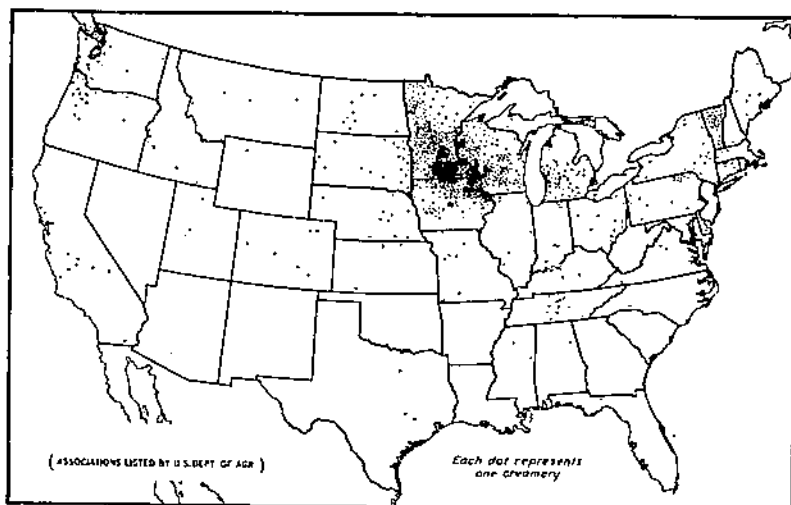


FIG. 23.—COOPERATIVE CREAMERIES, 1925

Most of the cooperative associations in 1925 engaged in the making of butter were located in Minnesota, Iowa, and Wisconsin. There was a sprinkling of creameries in Michigan, Vermont, and New York.

TABLE 14.—Number of associations marketing dairy products, estimated membership, and estimated business, by kinds, 1925

[Associations listed by United States Department of Agriculture]

Kind of enterprise	Associations		Estimated membership		Estimated business	
	Number	Per cent	Number	Per cent	Dollars	Per cent
Creameries.....	1,400	63.7	206,000	44.8	222,000,000	41.6
Cheese factories.....	600	27.3	22,000	4.8	25,000,000	4.7
Milk distributing associations.....	140	6.4	115,000	25.0	160,000,000	29.9
Milk bargaining associations.....	40	1.8	116,000	25.2	125,000,000	23.4
Miscellaneous associations.....	17	.8	1,000	.2	3,000,000	.5
Total.....	2,197	100.0	460,000	100.0	535,000,000	100.0

The cooperative creameries active in 1925 were located largely in southeastern Minnesota, northeastern Iowa, and western Wisconsin. There was also a sprinkling of creameries in northern Vermont and western Michigan. There were from 1 to 50 creameries in 38 other States. (Fig. 23.) Nearly 500 creameries in Minnesota and Wis-

consin formed the Land O'Lakes Creameries (Inc.), in 1921, which is an agency for distributing, selling, and merchandising the products of the individual plants.

Most of the cheese factories were in four States—Wisconsin, New York, Minnesota, and Oregon. (Fig. 24.) More than 200 of the associations in Wisconsin and Minnesota are federated under the name of Wisconsin Cheese Producers' Federation, a sales agency. Twenty-six associations in New York State are units of the St. Lawrence County Cheese Producers, and 23 associations in Oregon compose the Tillamook County Creamery Association.

Most of the milk marketing associations are in the territory east of the Missouri River and north of the Ohio and Potomac Rivers. The associations engaged in distributing milk are operating in both

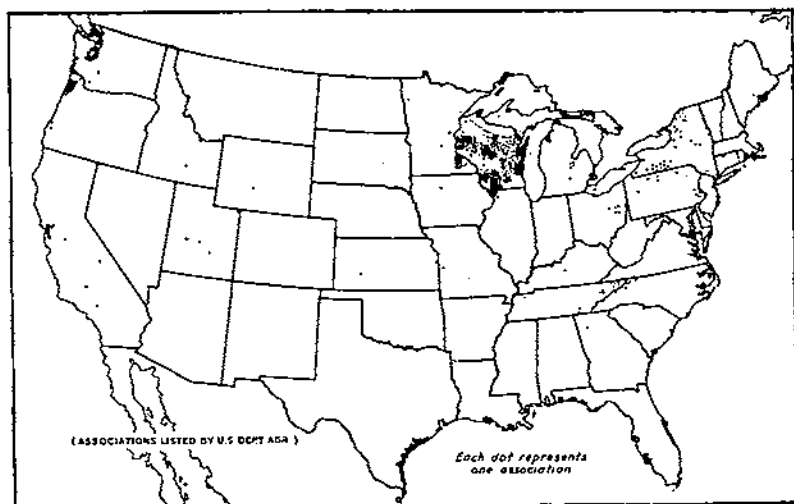


FIG. 24.—COOPERATIVE CHEESE FACTORIES, 1925

Nearly all the active cooperative cheese factories in 1925 were located in Wisconsin. There were about 20 factories in northwestern Oregon, about 35 factories in New York State, and about 15 in the mountains along the North Carolina-Tennessee boundary.

large and medium sized cities, for example, Boston, Worcester, Pittsfield, New York, Syracuse, Grand Rapids, Cincinnati, St. Paul, and Los Angeles. The associations engaged in bargaining as to milk prices are largely in the metropolitan centers, for example, Boston, New York, Philadelphia, Baltimore, Washington, Pittsburgh, Columbus, Detroit, Chicago, Milwaukee, St. Louis, and Des Moines. (Fig. 25.)

Statistics compiled in 1922 and 1925 for creameries and cheese factories clearly indicate that these associations are increasing in size as business units. In 1922 but 29 per cent of the associations reporting were transacting business amounting to more than \$100,000, whereas in 1925, 43 per cent of the associations were handling business amounting to more than \$100,000 a year. Less than 2 per cent of the associations reported business of more than \$500,000 in 1922, and in 1925, more than 4 per cent of all the associations had sales exceeding that amount.

The average amount of business per association for 176 creameries and cheese factories reporting for 1915 was \$46,914 (8, p. 24), and the average for 1,629 reporting in 1925 was \$126,240, an increase of 160 per cent.

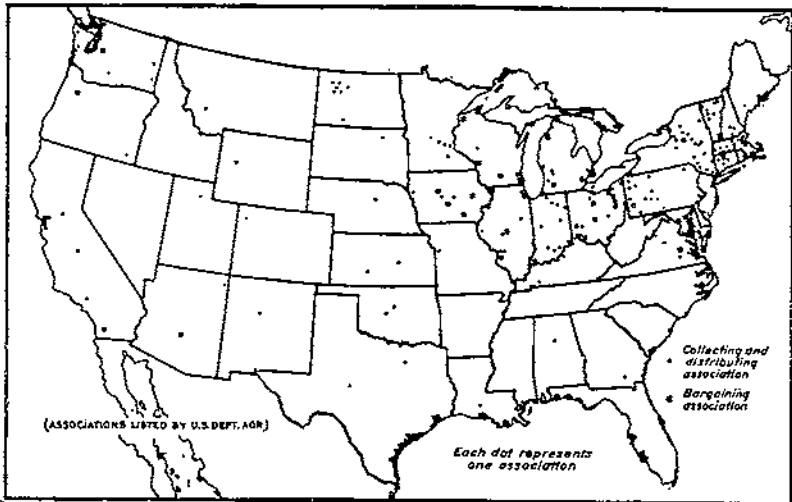


FIG. 25.—COOPERATIVE MILK MARKETING ASSOCIATIONS, 1925

Two types of associations are engaged in the marketing of fluid milk. In one case the association receives the milk and distributes it at wholesale or retail, or both, and in the other case the association bargains as to the price at which the milk will be sold.

FRUIT AND VEGETABLE ASSOCIATIONS ⁹

Considerable cooperative history has been made by the associations engaged in marketing fruits and vegetables. The highly perishable nature of the products and the great distances between the densely populated consuming centers and many of the producing regions have necessitated the development of mass methods of marketing. Existing fruit and vegetable associations are widely distributed, they are of many different types, and perform the various marketing functions in many different ways. The pressing needs of the citrus fruit growers of California furnished the stimulus for the creation of the federation, whereby competing local units were welded into a single marketing agency. Nearly two-thirds of the existing federations are the creation of cooperatively minded fruit and vegetable growers. The fruit and vegetable associations have contributed much to the development of the present methods for the merchandising of farm products. These organizations were among the first to use advertising in its various forms for stimulating demand.

The oldest of the fruit and vegetable associations reporting to the department was formed in 1878. Two of the existing associations were formed in 1886, two in 1887, and one in 1890. Sixty-two of

⁹ Publications dealing with the cooperative marketing of fruits and vegetables have been issued by the U. S. Department of Agriculture. Among them are Department Bulletin No. 1169, Sales Methods and Policies of a Growers' National Marketing Agency (1923) (7); No. 1237, Organization and Development of a Cooperative Citrus-Fruit Marketing Agency (1924) (10); No. 1261, Operating Methods and Expense of Cooperative Citrus-Fruit Marketing Agencies (1924) (11); No. 1414, Management Problems of Cooperative Associations Marketing Fruits and Vegetables (1926) (9).

the associations reporting in 1925 were organized prior to 1900. Since that year more than 1,000 associations have been formed. By 1915, 334 of the now active associations were functioning. The large increase in number of associations occurred during the years 1919 and 1923. (Fig. 26 and appendix, Table 3.)

Forty-two of the forty-eight States were credited with associations for the cooperative marketing of fruits or vegetables or both in 1915, and 45 States were so credited in 1925. In most of the States in the latter year there were five or more associations. The increase in the number of associations from 1915 to 1925 was 42 per cent. The leading States in 1915 were California, Arkansas, Florida, Washington, and Oregon, in the order named; and the leading States in 1925 were California, Florida, New York, Arkansas, and Michigan. (Appendix, Table 12.)

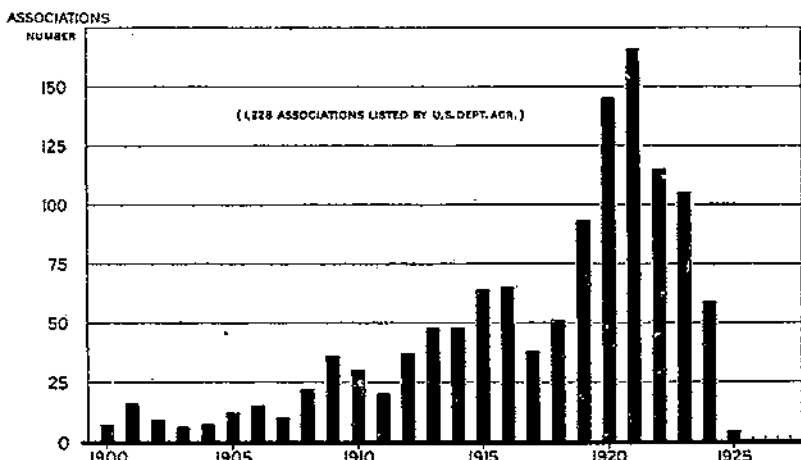


FIG. 26.—FRUIT AND VEGETABLE MARKETING ASSOCIATIONS REPORTING YEARS OF ORGANIZATIONS, 1900 TO 1925

Reports from 1,228 associations handling fruits and vegetables indicate that more than one-half of the associations were formed during the years 1912 to 1923, inclusive.

It is estimated that the 871 fruit and vegetable associations listed by the department in 1915 had a total membership of 109,916. (Appendix, Table 2.) The 1,237 associations reporting for 1925 are credited with 180,000 members. (Appendix, Table 12.) This is an increase of about 64 per cent for the 10 years from 1915 to 1925. The largest increase in membership occurred in California. The 124 California associations reporting in 1915 were credited with 15,748 members, and the 255 associations reporting for 1925 were credited with 59,950 members. Washington, Texas, New Jersey, and 10 other States had fewer members in fruit and vegetable cooperatives in 1925 than in 1915. The States with the largest memberships in 1925 were California, Utah, Florida, Virginia, New York, Michigan, and Colorado. (Fig. 27 and appendix, Table 12.)

The average number of members per association for 778 organizations reporting in 1915 was 124 (8, p. 27) and the average for the associations included in the 1925 study was 146. Nearly 65 per cent of all the fruit and vegetable associations have fewer than 100 mem-

bers each and 86 per cent fewer than 200 members each. Twenty-nine associations had more than 500 members each and 6 associations more than 1,000 members each. (Table 15.)

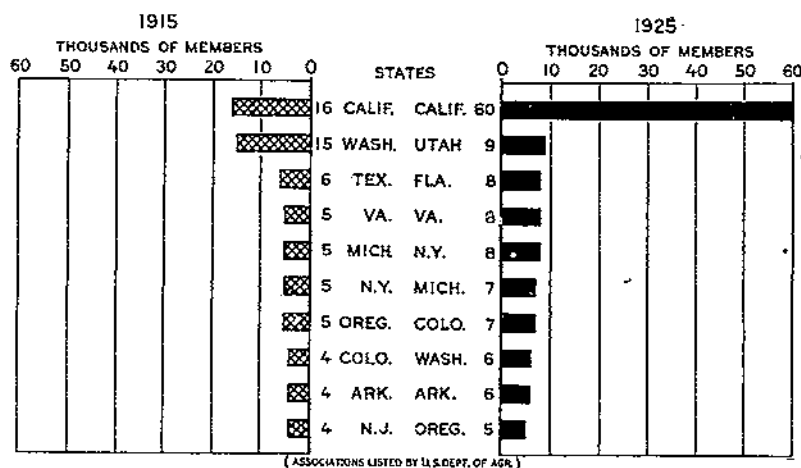


FIG. 27.—ESTIMATED MEMBERSHIP OF ASSOCIATIONS MARKETING FRUITS AND VEGETABLES, 1915 AND 1925

The fruit and vegetable associations in California led us to number of members in both 1915 and 1925. Virginia was in fourth place in both years and Arkansas in ninth place.

TABLE 15.—Membership distribution of associations marketing fruits and vegetables (independent local associations and units of federations), 1925

[Associations listed by the United States Department of Agriculture]

Membership group	Associations		
	Number	Per cent	Cumulative per cent
1 to 100.....	489	64.6	64.6
101 to 200.....	166	21.9	86.5
201 to 300.....	48	6.4	92.9
301 to 400.....	12	1.6	94.5
401 to 500.....	13	1.7	96.2
501 to 1,000.....	23	3.0	99.2
Over 1,000.....	6	.8	100.0
Total.....	757	100.0	

It is estimated that the business transactions of the fruit and vegetable cooperatives amounted to \$201,500,000 in 1915 and to \$280,000,000 in 1925. This is an increase of about 39 per cent. The average amount of business per association was estimated to be \$161,458 (8, p. 27) in 1915 and \$226,354 in 1925.

More than one-half of the associations that reported in 1925 did not handle business to the amount of \$100,000. Sixty-eight associations handled more than \$500,000 each. (Table 16.)

TABLE 16.—Distribution of associations marketing fruits and vegetables (independent associations and units of federations) according to amount of business, 1925

(Associations listed by the United States Department of Agriculture)

Group	Associations		
	Number	Per cent	Cumulative per cent
\$1,000 to \$100,000.....	307	53.2	53.2
\$101,000 to \$200,000.....	90	15.9	68.8
\$201,000 to \$300,000.....	64	11.1	79.9
\$301,000 to \$400,000.....	31	5.4	85.3
\$401,000 to \$500,000.....	17	2.9	88.2
Over \$500,000.....	68	11.8	100.0
Total.....	577	100.0	

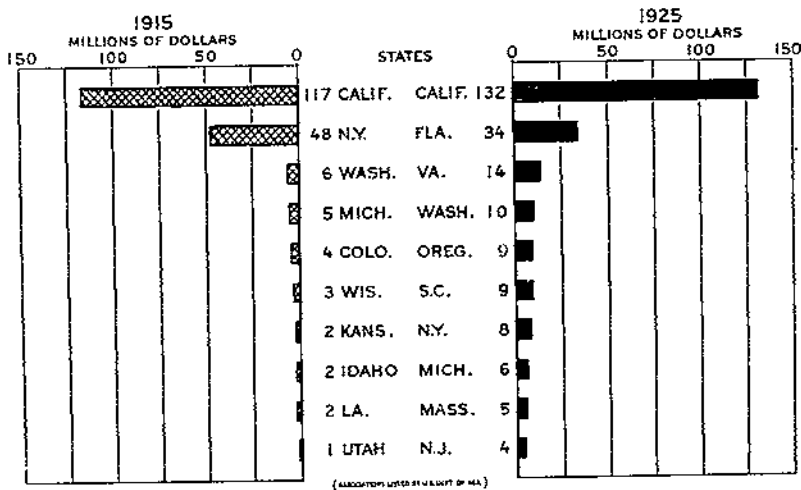


FIG. 28.—BUSINESS OF ASSOCIATIONS MARKETING FRUITS AND VEGETABLES, 1915 AND 1925

The business transactions of the California fruit and vegetable associations for the entire period 1915 to 1926 were much larger than those of associations in any five of the other States.

In respect to the amount of cooperative fruit and vegetable business handled, California was the leading State in 1915 and in 1925. In both years California was far ahead of its nearest rival. (Fig. 28.) New York was second in importance in 1915, and Florida was in second place in 1925. All the other States combined handled but 41 per cent of the total business in the latter year. (Appendix, Table 12.)

In 1925 there were 22 active federations representing 852 member units with nearly 60,000 members. The largest of these was the California Fruit Growers Exchange, Los Angeles, with 204 units and 12,000 members. This was also the oldest of the federations, as it was formed in 1895. Some of the other large federations were California Fruit Exchange, 129 units, 7,000 members; Florida Citrus Exchange, 98 units, 6,000 members; Michigan Potato Growers' Exchange, 72 units, 7,800 members; Mutual Orange Distributors, 33 units, 2,500 members; Western New York Fruit Growers' Cooperative Packing Association, 25 units, 425 members. (Fig. 15.)

In most of the federations the local units attend to the assembling of the products, the grading, packing, and loading for shipment, and the federation, or overhead organization, looks after advertising, sales collections, claims, and legislative matters. Several of the federations have been instrumental in developing subsidiary companies for supplying the units of the federation with packing-house supplies and supplying the growers of the units with fertilizers, spray materials, farm and orchard implements, etc. This is especially true for the large federations that serve the associations in the citrus fruit producing regions.

GRAIN ASSOCIATIONS ¹⁰

Three types of farmers' associations for the cooperative marketing of grain have been developed. These are, the farmers' elevator,¹¹

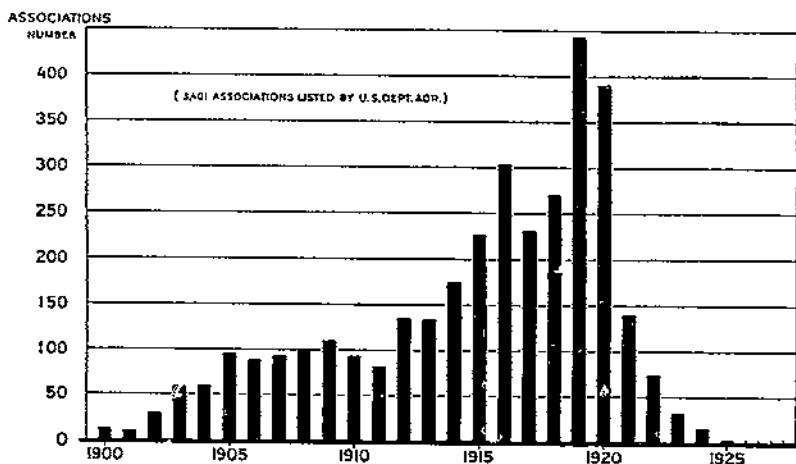


FIG. 29.—GRAIN MARKETING ASSOCIATIONS REPORTING YEARS OF ORGANIZATION, 1900 TO 1925

The big years in the formation of farmers' grain elevators were the six years 1915 to 1920, inclusive. In 1919 more than 400 enterprises out of 3,401 listed by the United States Department of Agriculture were launched.

the state-wide or regional pool, and the producer-controlled cooperative sales agency. Each type has been evolved in response to an apparent need, and each is going through a process of evolution in adjusting itself to the performance of rather definite marketing services.

The oldest of the farmers' elevators reporting to the department dates its existence from 1886. Three other active associations have given 1887 as the year of their formation, and two others have given 1888. By 1890, 10 of the existing associations were functioning; by 1900, 68 associations were operating; and by 1910, 757 were active. The big increase in number of associations occurred during the six years from 1915 to 1920, when 1,713 of the associations now active were organized. (Figs. 3 and 29 and appendix, Table 3.)

¹⁰ Publications dealing with the cooperative marketing of grain have been issued by the U. S. Department of Agriculture. Among these is Department Bulletin No. 937, Cooperative Grain marketing (1921) (17).

¹¹ In the Pacific Coast States grain is handled in sacks rather than in bulk, and the warehouse takes the place of the grain elevator.

Farmers' elevators listed by the department, exceeding 3,300 in number, are located in parts of Ohio, Indiana, Illinois, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, and Kansas. (Fig. 30.) There are a few cooperative warehouses in eastern Washington which receive and market grain.

The average number of members per association increased from 102 in 1915 to about 156 in 1925. The total estimated membership increased from 166,828 in 1915 to 520,000 in 1925. There were increases in practically all the States in the North Central group. The leading States for farmers' elevators in 1925, measured by membership, were, in order of their relative importance, Kansas, Minnesota, Illinois, Iowa, North Dakota, Nebraska, Indiana, South Dakota, Ohio, and Oklahoma. (Fig. 31 and appendix, Table 13.)

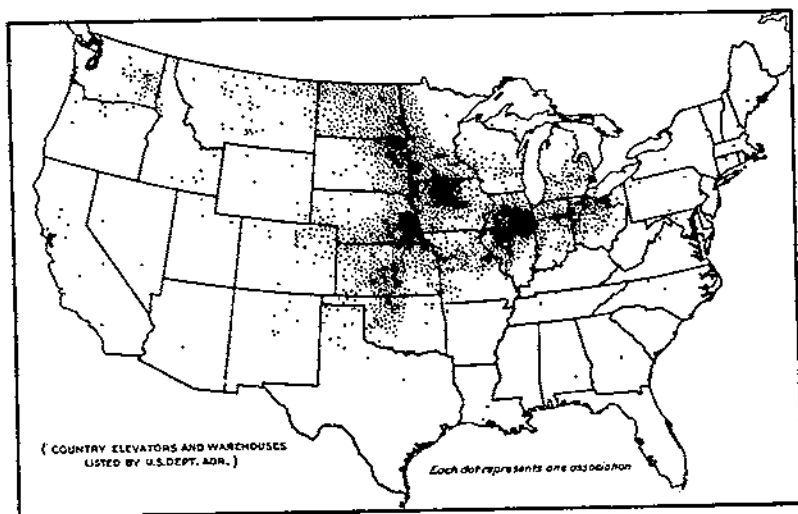


FIG. 30.—FARMERS' ASSOCIATIONS HANDLING GRAIN, 1925

The associations engaged in the cooperative marketing of grain are located largely in Illinois, Iowa, Nebraska, South Dakota, North Dakota, Minnesota, Ohio, Indiana, Michigan, Missouri, Kansas, and Oklahoma.

Volume of business of the grain marketing associations increased greatly during the 10 years from 1915 to 1925. The increases for some of the States was several hundred per cent. (Fig. 32.)

Since the beginning of 1920, 16 wheat pools have been organized and 9 of these were active in 1925. The first of the wheat pools was formed in Washington in 1920. It covered the greater part of the wheat-producing section of the State. Each of its 3,000 members agreed to deliver to the association all the grain produced by him for sale, and the association agreed to market this grain and to return to the members the average selling prices for the grades delivered, less marketing expenses. The association did not attempt to handle the grain physically, but only to control it for marketing purposes and because of its control of a large volume, to be able to obtain more favorable prices. The Washington Wheat Growers' Association operated three seasons and sold approximately 12,300,000 bushels of grain. The second of the wheat associations was formed in Idaho,

also in 1920. In 1921 the Oregon, Montana, Oklahoma, and Kansas associations were started; in 1922, associations were set up in Arizona, California, Colorado, Nebraska, North Dakota, and Texas. The

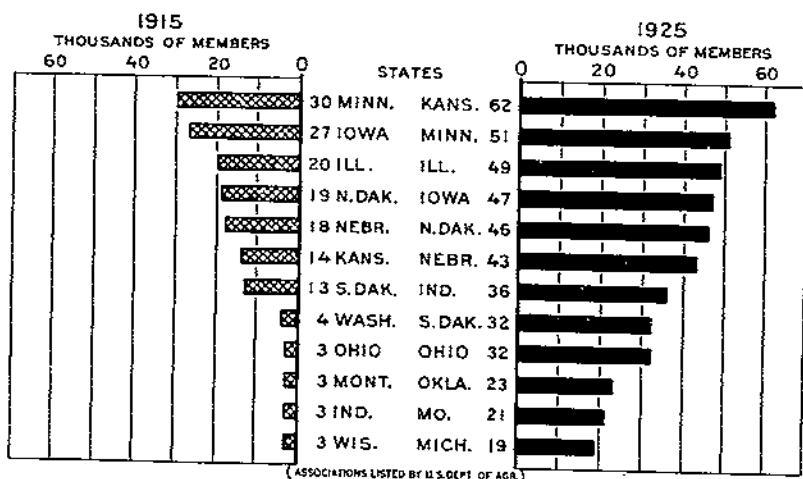


FIG. 31.—ESTIMATED MEMBERSHIP OF GRAIN MARKETING ASSOCIATIONS, 1915 AND 1925

Considerable shifting occurred in the ranking of the States from 1915 to 1925 as regards leadership in membership of associations engaged in the cooperative marketing of grain.

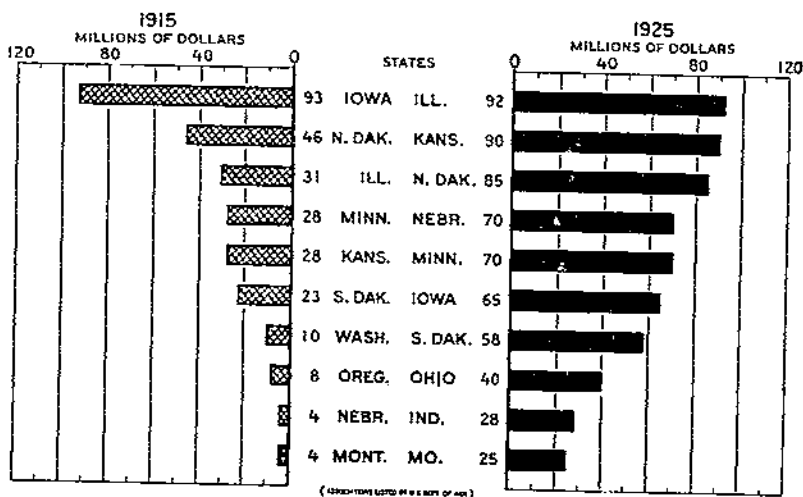


FIG. 32.—BUSINESS OF ASSOCIATIONS MARKETING GRAIN, 1915 AND 1925

Cooperative grain marketing associations in Iowa handled a smaller volume of business in 1925 than 1915. Iowa was in first place in 1915 and Illinois in 1925.

South Dakota and Minnesota associations began functioning in 1923 and the Indiana association, which is now the Central States Soft Wheat Growers' Association, began operating in 1924. (Table 17 and fig. 33.)

During the five seasons that wheat associations have been active, approximately 105,000,000 bushels of grain have been marketed by the several associations. The number of associations active and the amount of grain marketed the various years are indicated in Table 17.

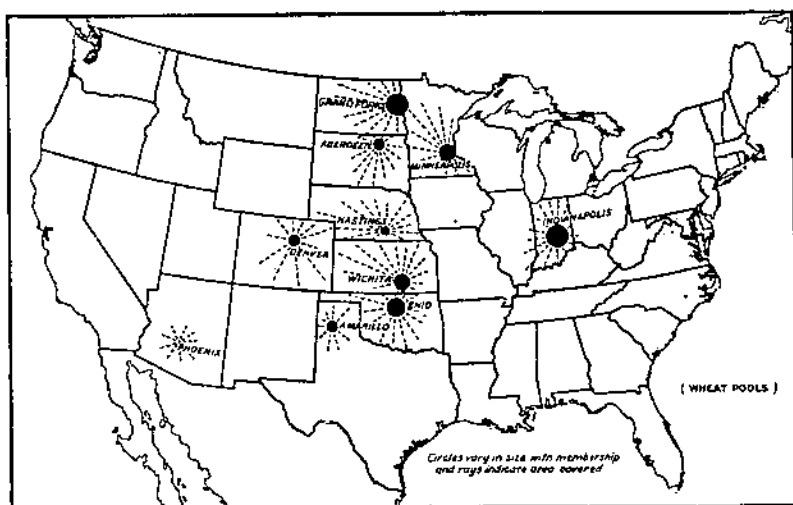


FIG. 33.—COOPERATIVE GRAIN MARKETING ASSOCIATION WHEAT POOLS, 1925

Nine state-wide, or large-scale grain marketing associations were functioning in 1925. Six of the associations were in the States reaching from Texas to North Dakota.

TABLE 17.—Wheat marketed by centralized associations, and value,¹ 1921 to 1926

Association	Year of organization	1921-22		1922-23	
		Bushels	Value	Bushels	Value
Arizona Grain Growers Association.....	1922				
California Farm Bureau Exchange.....	1922			1,295,571	
Colorado Wheat Growers Association.....	1932			90,000	\$103,431
Idaho Wheat Growers Association.....	1920	1,270,991		424,060	
		917,370			
Central States Soft Wheat Growers ²	1924			2,335,751	\$2,012,792
Kansas Wheat Growers Association.....	1921				
Kansas Cooperative Wheat Marketing Association.....	1924				
Minnesota Wheat Growers Cooperative Marketing Association.....	1923				
Montana Wheat Growers Association.....	1921			6,048,000	
Nebraska Wheat Growers Association.....	1922			300,800	464,436
North Dakota Wheat Growers Association.....	1922			2,081,763	3,320,000
Oklahoma Wheat Growers Association.....	1921			2,961,074	3,541,484
Oregon Cooperative Grain Growers.....	1921	3,727,037		2,375,000	
South Dakota Wheat Growers Association.....	1923				
Texas Wheat Growers Association.....	1922			218,520	
Washington Wheat Growers Association.....	1920	5,458,463		2,750,000	
Total.....		11,374,370		21,870,539	9,382,143

¹ As reported by associations.

² Including 1,270,991 bushels for 10 northern counties of Idaho, marketed through Washington Wheat Growers Association, and 917,379 bushels for southern counties marketed as a separate pool.

³ Formerly Indiana Wheat Growers Association.

⁴ Net sales value.

TABLE 17.—Wheat marketed by centralized associations, and value, 1921 to 1926—
Continued

Association	1923-24		1924-25		1925-26	
	Bushels	Value	Bushels	Value	Bushels	Value
California Farm Bureau Exchange	2,344,588		(¹)	(¹)	(¹)	(¹)
Colorado Wheat Growers Association	1,301,666	\$1,223,069	1,191,500	\$1,060,006	584,478	\$915,650
Idaho Wheat Growers Association	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Central States Soft Wheat Growers ²			1,524,250		3,157,952	5,224,535
Kansas Wheat Growers Association	2,052,800	\$1,772,317	6,138,112	\$7,623,772	2,031,758	\$3,415,027
Kansas Cooperative Wheat Marketing Association						
Minnesota Wheat Growers Cooperative Marketing Association	513,002		1,713,136		1,341,953	2,084,304
Montana Wheat Growers Association	4,390,000		1,551,059		(¹)	(¹)
Nebraska Wheat Growers Association	550,000	523,584	1,202,556	1,592,310	662,421	1,040,220
North Dakota Wheat Growers Association	2,100,000	2,380,000	3,828,214	6,300,000	3,202,500	4,815,000
Oklahoma Wheat Growers Association	4,560,787	5,206,545	6,281,067	7,770,109	2,800,075	4,650,000
Oregon Cooperative Grain Growers	3,500,000		(¹)	(¹)	(¹)	(¹)
South Dakota Wheat Growers Association	534,227	568,301	2,948,475	3,108,408	2,100,006	2,945,940
Texas Wheat Growers Association	1,210,480		2,429,208	3,147,400	341,818	\$475,509
Washington Wheat Growers Association	1,086,496		(¹)	(¹)	(¹)	(¹)
Total	27,144,055	11,679,690	27,907,577	31,298,704	16,823,560	25,565,094

¹ Out of business.² Net payments to members.

The nine associations which were active in the 1925-26 season were located in the six States extending southward from North Dakota, and in Colorado, Minnesota, and Indiana. (Fig. 33.) The present tendency among the large-scale wheat pools is to spread out and undertake to serve members in adjoining States. The North Dakota association is soliciting members in Montana, and the Central States association with headquarters at Indianapolis is receiving members who are residents of Ohio and Illinois and is considering the advisability of serving Missouri wheat growers.

The large-scale grain marketing associations sometimes utilize the facilities of the farmers' elevators in receiving and forwarding grain to market. Several of the associations have arranged to control facilities for the actual handling of grain delivered by their members. The North Dakota association has acquired 17 country elevators, the Central States association has obtained control of a large terminal elevator in Indianapolis, and the Kansas, Oklahoma, Nebraska, and Colorado associations have united in creating a subsidiary company to serve as their sales agency and to control needed elevator facilities.

Numerous attempts have been made to establish cooperative sales agencies. Among the organizations which have been created and have functioned for periods of varying lengths are: The Equity Cooperative Exchange, St. Paul; Southwest Wheat Growers' Associated, Enid, Okla.; the U. S. Grain Growers (Inc.), Chicago; United

States Grain Growers' Co., Minneapolis; Farmers' Terminal Elevator Co., Sioux City, Iowa; American Wheat Growers, Associated, Minneapolis; Grain Marketing Co., Chicago.

Among the farmer-owned-and-controlled sales agencies now functioning, with dates of organization, are the following: Farmers' Union Jobbing Association, Kansas City, 1914; Farmers' Cooperative Commission Co., Hutchinson, Kans., 1915; Equity Union Grain Co., Kansas City, 1916; Farmers' Elevator Commission Co., Minneapolis, 1919; National Grain Commission Co., Omaha, 1919; National Farmers' Elevator Grain Co., Cooperative, Chicago, 1925. In addition to these, which sell grain on commission for cooperative elevators and others, there are several sales agencies which serve only certain of the wheat pools. The market privileges of the old American Wheat Growers' Associated, were purchased by the South Dakota Wheat Growers' Association, which continues the existence of the former sales agency for the purpose of marketing the grain delivered by its members. Late in 1925 the Southwest Cooperative Wheat Growers' Association was organized as a sales agency for the Kansas, Nebraska, Colorado, and Oklahoma wheat associations. This sales agency controls marketing facilities including terminal elevators at Kansas City, Mo., and Leavenworth, Kans.

The total estimated business for all grain marketing associations in 1925 was \$750,000,000. This figure includes the business transacted by the farmers' elevators, including those handling dry beans, the active wheat pools, the large-scale rice marketing associations, and that part of the business of the sales agencies operating in the terminal grain markets which is not a duplication of the business reported by the country elevators and the pools. In each of seven States the cooperative grain marketing activities in 1925 amounted to \$50,000,000 or more. (Appendix, Table 13.) Reports from Iowa indicate about \$28,000,000 less business in 1925 than in 1915. This appears to be because of a smaller volume of business per association. The leading States in 1925, measured by amount of business reported, were Illinois, Kansas, North Dakota, Nebraska, Minnesota, Iowa, and South Dakota. (Fig. 32.)

LIVESTOCK ASSOCIATIONS ¹¹

Cooperative livestock marketing, as practiced to-day, is of fairly recent development. It is known that during the early years of the last century farmers often joined together to drive cattle to the eastern markets. As early as 1876 Tennessee farmers were acting collectively in the shipping of lambs. The oldest of the existing associations for the shipment of livestock is the Farmers' Shipping Association of Superior, Nebr., formed by Nebraska and Kansas farmers in 1883. By 1900, 6 of the now active associations were operating, and by 1913, 99 associations were functioning. Since 1913, livestock shipping associations have increased in number rapidly. (Fig. 3.) In 1920 about 1,000 associations were operating, and by 1925, 1,770 associations were listed by the department. The

¹¹ Publications dealing with the marketing of livestock have been issued by the Division of Cooperative Marketing of the U. S. Department of Agriculture. Among these is Farmers' Bulletin No. 1502, Cooperative Livestock Shipping Associations (1920) (17).

greatest part of the increase occurred during the five years 1918 to 1922, inclusive. More than 1,000 of the 1,770 existing organizations were formed during the five-year period. (Fig. 34.)

The associations reporting to the department in 1925 were largely located in Iowa, Minnesota, Illinois, Wisconsin, Missouri, South Dakota, Indiana, Michigan, and Ohio. There were only a few associations in the Western and Southern States and practically none in the North Atlantic States. (Fig. 35.) Ninety-five per cent of all the shipping associations were in the 12 North Central States. (Appendix, Table 14.)

It is estimated that the 1,770 associations reporting in 1925 were serving 400,000 shippers and that 96 per cent of the total membership was in the North Central States. Missouri led all the States as to number of producers served by cooperative livestock shipping associations. Iowa was in second place, Minnesota in third, and Illinois in fourth place. (Appendix, Table 14.)

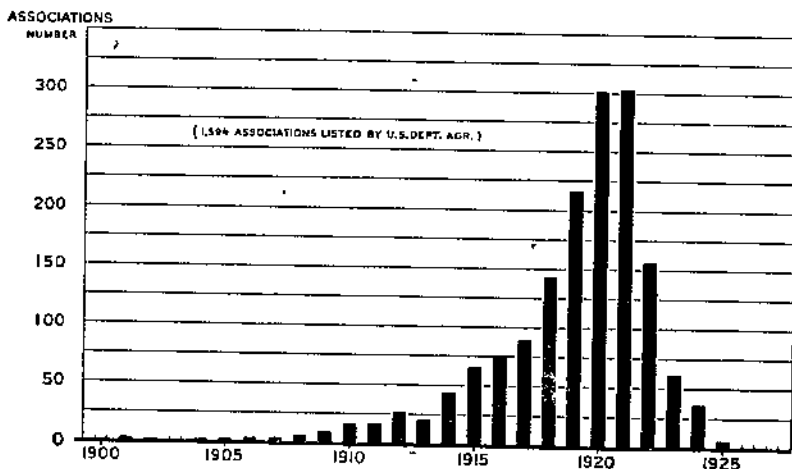


FIG. 34.—LIVESTOCK SHIPPING ASSOCIATIONS REPORTING YEARS OF ORGANIZATION 1900 TO 1925

The years 1919, 1920, and 1921 witnessed the formation of more than 800 livestock shipping associations, or about one-half of the 1,594 associations for which year-of-organization data are available.

Livestock shipped in 1925 by the various associations was valued at \$320,000,000. This is an average business per association of \$180,000 and an average business per member of \$800. The leading States from the standpoint of business transacted were, Illinois, Iowa, Minnesota, Ohio, and Indiana. Ninety-two per cent of the total business by cooperative shipping associations in 1925 was transacted by the organizations in the 12 North Central States. (Appendix, Table 14.) These figures for membership and volume of business do not include the farmer-controlled sales agencies in the terminal livestock markets.

Early in the history of cooperative livestock marketing, an attempt was made to operate upon the terminal markets. In March, 1889 (*13*, p. 222) the American Livestock Commission Co. was incorporated to operate upon the Chicago market. It was organized with 1,000 shares of \$100 each. Among the shareholders were the State Alliances

of Kansas, Nebraska, Missouri, and the Kansas State Grange. It began business in May, 1889, and by the close of November of that year had \$45,000 for division among shareholders and patrons. Sub-

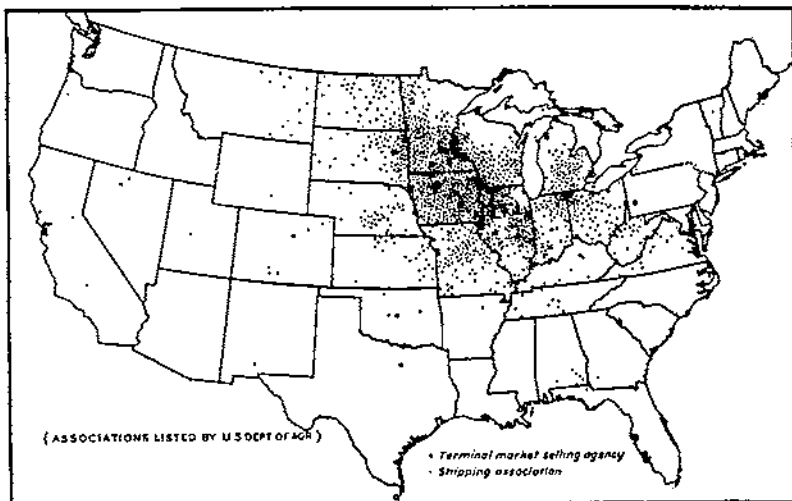


FIG. 35.—FARMERS' ASSOCIATIONS HANDLING LIVESTOCK, 1925

Three States, Iowa, Minnesota, and Illinois, contain a large portion of the active livestock shipping associations. Other States in which there are many such associations are Wisconsin, Indiana, and Missouri.

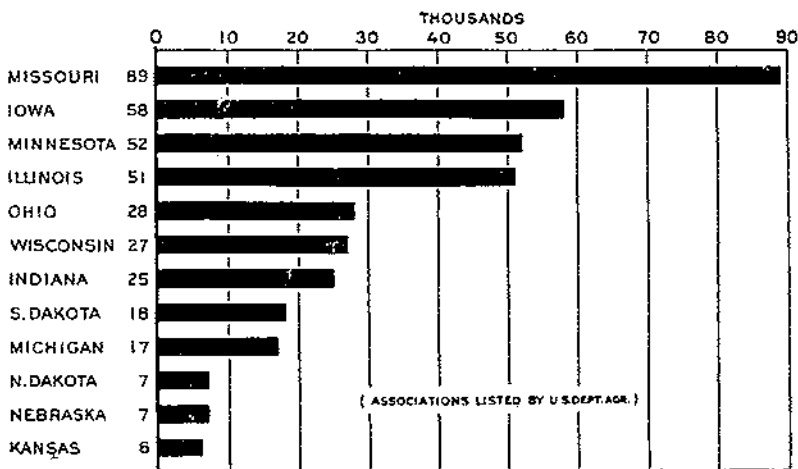


FIG. 36.—ESTIMATED MEMBERSHIP OF LIVESTOCK SHIPPING ASSOCIATIONS, 1925

During the last few years many Missouri farmers have forwarded their livestock to market through shipping associations. In consequence this State leads all the States in respect to membership in livestock marketing associations.

sequently the company was expelled from the Chicago yards by the livestock exchange, which succeeded in obtaining court action on the allegation that the association was a dangerous trust. The cooperative was forced to discontinue business.

The oldest of the now existing cooperative sales agencies on the terminal markets is the organization at Omaha, which was formed under Nebraska Farmers' Union leadership in April, 1917. Later in the same year a second agency for selling livestock on commission was set up under the same auspices at St. Joseph, Mo. The following year commission agencies were established by State Farmers' Unions at Sioux City, Iowa, and Kansas City, Mo. In 1919 an agency was set up at Denver, and in 1921 agencies were established at the East St. Louis and South St. Paul markets. Ten commission agencies were established in 1922, eight in 1923, and one each in 1924, and 1925. (Table 18.)

Eight of the sales agencies operating in 1925 were formed under Farmers' Union leadership and 14 under the auspices of the National Livestock Producers' Association, an organization formed at Chicago in 1921 for the purpose of developing cooperative facilities for marketing livestock on the terminal markets. Five of the sales agencies functioning in 1925 were operating as independent enterprises. Two of these were located at South St. Paul and one each at Milwaukee, Detroit, and Kansas City.

More than 10,700,000 animals were handled by these cooperative enterprises in 1925 and the sales and purchases by the agencies for the year amounted to nearly \$28,000,000. (Fig. 37.)

Data covering the years 1917 to 1925 have been compiled and are given in Table 18.

TABLE 18.—Number of animals handled and sales, by terminal-market livestock sales agencies, 1917 to 1925

Organization	Market	Began operating	Number of animals handled									
			1917	1918	1919	1920	1921	1922	1923	1924	1925	
Producers Cooperative Commission Association.	Buffalo.....	Nov. 1, 1922							101,837	553,321	600,598	485,234
Farmers' Union Livestock Commission Association.	Chicago.....	Mar. 6, 1922							(1)	425,247	516,769	467,886
Chicago Producers Commission Association	do.....	June 19, 1922							255,125	1,156,954	1,395,198	1,123,566
Producers Cooperative Commission Association.	Cincinnati.....	Feb. 10, 1925										165,671
Do.....	Cleveland.....	May 15, 1923								252,607	464,200	338,671
Farmers' Union Livestock Commission Association.	Denver.....	July 15, 1919			12,116	46,069	53,508	78,892		115,328	245,701	315,065
Michigan Livestock Exchange	Detroit.....	May 1, 1922							227,840	376,356	418,800	337,019
Farmers' Livestock Commission Co.	East St. Louis.....	Nov. 16, 1921						(1)	(1)	1,042,755	1,138,292	837,700
Producers Livestock Commission Association.	do.....	Jan. 2, 1922							481,450	846,214	1,036,555	877,645
Evansville Producers Commission Association.	Evansville.....	Sept. 1, 1923								32,275	92,391	91,128
Cattle Raisers & Producers Commission Co.	Fort Worth.....	Nov. 1, 1922							(1)	180,367	176,929	174,419
Producers Commission Association.	Indianapolis.....	May 15, 1922							348,200	909,030	902,533	706,745
Farmers' Union Livestock Commission	Kansas City.....	Oct. —, 1918		(1)	(1)	(1)	(1)	(1)		(1)	625,031	396,424
United Livestock Shippers Association	do.....	June 25, 1923								58,134	39,826	(1)
Producers Commission Association	do.....	Mar. 5, 1923								207,250	257,559	185,633
Equity Cooperative Livestock Sales Association.	Milwaukee.....	Mar. 20, 1922							68,113	155,529	366,867	156,579
Producers Commission Association.	Oklahoma City.....	July 2, 1923								18,981	26,835	12,711
Farmers' Union Livestock Commission	Omaha.....	Apr. 4, 1917	99,900	267,000	335,745	394,838	458,867	436,738	430,738	624,333	748,162	596,060
Peoria Producers Commission Association.	Peoria.....	June 25, 1922							41,080	144,250	187,884	182,176
Producers Cooperative Commission Association.	Pittsburgh.....	Oct. 8, 1923								69,091	305,964	209,143
Farmers' Union Livestock Commission.	St. Joseph.....	Aug. 1, 1917	(1)	(1)	172,573	203,875	327,941	558,511		843,102	792,830	586,390
Central Cooperative Commission Association.	South St. Paul.....	Aug. 8, 1921					295,912	990,330	1,409,481	1,420,030	1,367,977	
Farmers' Union Livestock Commission	do.....	May 15, 1922						90,822		306,565	278,484	223,852
Peoples Cooperative Sales Agency (Inc.)	do.....	Jan. 14, 1923								(1)	121,170	161,573
Farmers' Union Livestock Commission ¹	do.....	Aug. 1, 1918								365,167	586,367	550,615
Producers Commission Association ²	Sioux City.....	Mar. 17, 1924		11,724	94,440	96,880	132,071	223,107			142,330	218,098
Do.....	do.....	May 3, 1923								35,405	(1)	(1)
Do.....	Sioux Falls.....											
Total.....			99,900	278,724	614,874	751,668	1,268,359	3,941,124	10,028,062	12,581,046	10,768,899	

¹ Figures not available.

² Out of business Aug. 1, 1925.

³ From June 8 to November, 1923, business conducted under the name Farmers' Union and Producers Livestock Commission.

⁴ Closed Mar. 15, 1924.

TABLE 18.—Number of animals handled and sales, by terminal-market livestock sales agencies, 1917 to 1925—Continued

Organization	Sales								
	1917	1918	1919	1920	1921	1922	1923	1924	1925
Producers Cooperative Commission Association						\$1,730,530	\$9,206,944	\$10,019,529	\$10,678,831
Farmers' Union Livestock Commission Association						(1)	8,733,624	11,159,296	13,472,161
Chicago Producers Commission Association						0,383,313	23,170,258	27,994,783	31,905,866
Producers Cooperative Commission Association									4,152,940
Do									7,235,481
Farmers' Union Livestock Commission Association			\$442,334	\$1,526,620	\$1,355,065		3,842,718	7,693,662	
Michigan Livestock Exchange						1,708,389	1,686,919	3,218,945	4,848,750
Farmers' Livestock Commission Co.						70,000	8,000,000	8,000,000	7,153,000
Producers Livestock Commission Association					685,640	11,063,277	16,674,477	19,625,205	20,687,379
Evansville Producers Commission Association						9,625,850	14,256,701	15,977,387	21,846,682
Cattle Raisers & Producers Commission Co.							463,075	1,492,648	2,804,965
Producers Commission Association						513,334	4,045,147	3,599,693	3,879,108
Farmers' Union Livestock Commission		(1)	(1)	(1)		7,422,081	15,748,151	16,864,593	19,119,870
United Livestock Shippers Association					2,884,904	5,340,572	8,079,258	11,092,946	10,759,739
Producers Commission Association							783,018	683,921	(2)
Equity Cooperative Livestock Sales Association							4,495,960	5,273,487	6,197,326
Producers Commission Association						1,159,818	2,287,245	2,416,837	2,928,723
Farmers' Union Livestock Commission							318,771	524,692	360,401
Peoria Producers Commission Association	\$3,870,000	\$11,890,060	15,425,346	15,020,130	11,106,341	11,202,576	13,505,526	15,261,338	17,087,402
Producers Cooperative Commission Association							800,898	3,436,074	5,016,432
Farmers' Union Livestock Commission	2,000,000	2,125,203	7,184,244	6,759,110	6,176,559	11,804,663	1,024,962	4,866,068	4,500,037
Central Cooperative Commission Association							15,410,814	15,033,564	16,128,167
Farmers' Union Livestock Commission					4,887,293	21,756,804	24,723,051	25,225,478	34,346,912
Peoples Cooperative Sales Agency (Inc.)						1,422,973	3,565,045	4,759,577	6,819,578
Farmers' Union Livestock Commission							926,318	2,130,303	4,350,892
Producers Commission Association		387,445	4,138,702	3,572,929	2,940,769	4,326,219	7,016,640	12,073,923	16,619,209
Do								3,260,216	6,474,003
Total	5,870,000	14,402,648	27,190,686	26,878,789	30,036,720	96,331,297	191,671,041	234,684,160	279,463,854

¹ Figures not available.

² Out of business Aug. 1, 1925.

³ Estimated.

⁴ From June 8, to November, 1923, business conducted under the name Farmers' Union and Producers Livestock Commission.

⁵ Closed Mar. 15, 1924.

Figures have also been compiled to indicate the percentage of the number of animals handled at the various markets which are sold by the cooperative agencies. These figures are given in Table 19.

TABLE 19.—Percentage of animals handled by cooperative agencies, by markets, 1923, 1924, and 1925

Market	Agencies	Percentage of animals handled by cooperative agencies ¹		
		1923	1924	1925
	Number	Per cent	Per cent	Per cent
Buffalo.....	1	17.9	17.8	17.4
Chicago.....	3	8.0	9.4	10.0
Cincinnati.....	1			9.0
Cleveland.....	1	18.4	32.5	33.9
Denver.....	1	3.9	7.6	9.2
Detroit.....	1	34.1	24.0	30.4
East St. Louis.....	2	27.9	33.7	31.1
Evansville.....	1	10.7	39.6	45.5
Fort Worth.....	1	8.6	8.2	8.7
Indianapolis.....	1	25.8	25.5	25.0
Kansas City.....	2	3.1	11.4	8.9
Milwaukee.....	1	14.0	15.3	14.3
Oklahoma City.....	1	2.1	3.7	1.8
Omaha.....	1	5.3	8.6	8.0
Peoria.....	1	23.5	20.2	23.7
Pittsburgh.....	1	4.4	20.4	18.7
St. Joseph.....	1	20.5	19.6	16.6
South St. Paul.....	3	31.4	32.8	30.1
St. Louis.....	2	9.2	14.9	16.5
St. Paul.....	1	6.0		

¹ Based on number of animals received at various markets.
² Based on number of animals sold, because of large feeding-in-transit business.

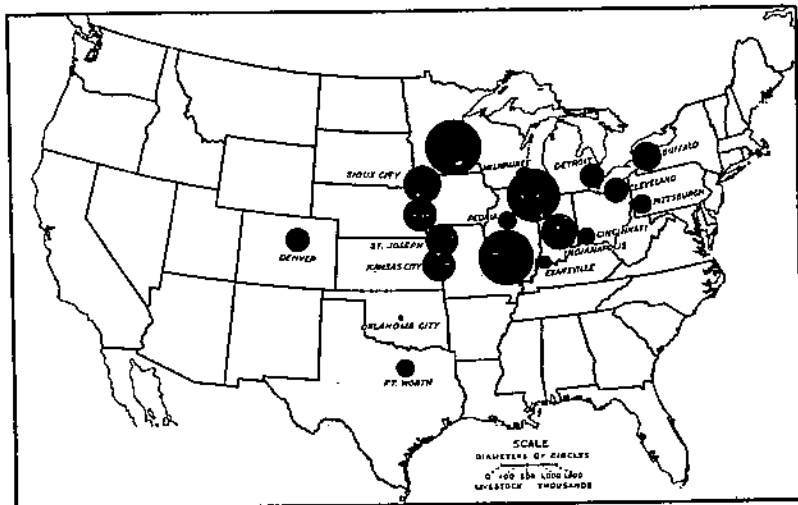


FIG. 37.—LIVESTOCK HANDLED BY FARMER-CONTROLLED SELLING AGENCIES, 1925

Three terminal markets handled large quantities of livestock in 1925. These were East St. Louis, Chicago, and South St. Paul. There were two cooperative sales agencies at both East St. Louis and Chicago, and three agencies at South St. Paul.

The location of the various markets at which there are cooperative agencies and the relative amount of cooperative business at each for 1925 is shown by Figure 37.

Data compiled by the Chicago office of the Bureau of Agricultural Economics indicate that about 21 per cent of the animals received at the Union Stock Yards are from cooperative shipping associations. About 33 per cent of the hogs, 6 per cent of the cattle, and 5 per cent of the sheep represent cooperative shipments. (Table 20.)

TABLE 20.—Percentage of livestock received at Union Stock Yards, Chicago, from cooperative shipping associations, 1923, 1924, and 1925

Year	Cattle	Hogs	Sheep	All live-stock
	Per cent	Per cent	Per cent	Per cent
1923	5.1	28.2	4.6	18.2
1924	6.1	32.8	4.3	20.9
1925	6.9	33.6	5.2	21.6

NUT ASSOCIATIONS

Including 3 associations that handle peanuts, 39 organizations engaged in the cooperative marketing of nuts were listed by the department in 1925. These included the California Walnut Growers' Association, Los Angeles, and a majority of its local units; an independent association in California handling walnuts; the Oregon Walnut Exchange Cooperative, Dundee, and its units; two associations marketing almonds; and three associations handling pecans. These associations were credited in 1925 with an estimated membership of 20,000, and with transacting business during that year to the amount of \$16,000,000.

Thirty of the associations listed were located in California, three in Oregon, three in Georgia, and one each in Tennessee, Texas, and Virginia. The oldest of the organizations was one of the independent associations marketing walnuts, which was established in 1889. The second oldest association was established in 1894 and the third oldest in 1895. Six of the existing organizations were functioning in 1900, and eighteen in 1915. Only 6 of the 39 associations have been formed since the close of 1920. (Appendix, Table 3.) The data compiled for 1925 indicate that 94 per cent of the nut marketing associations were incorporated, that 25 per cent were organized with capital stock, and 93 per cent made patronage refunds. But one of the associations reported handling business for nonmembers. (Appendix, Table 10.)

Most of the associations listed were units of the California Walnut Growers' Association, a federation formed in 1912. These units, of which there were 42 in 1925, had a total membership of 4,500. More than 48,000,000 pounds of walnuts of the 1925 crop were delivered to the units of the exchange for marketing. This quantity was slightly over 83 per cent of the total California crop. The percentage of the total crop handled by the exchange has been steadily increasing since 1912, when it was about 52 per cent. Sales by the exchange in 1925 amounted to approximately \$12,000,000.

The California Almond Growers' Exchange is another of the California associations. This was formed in 1910, and in 1925 reported having 3,426 members. The exchange handles about 72 per cent of the almond production of the State. Its annual output

ranges from 9,000,000 to approximately 14,000,000 pounds, and annual sales are in the neighborhood of \$2,000,000.

The associations for the marketing of pecans are in Georgia and Texas and the associations for handling peanuts, in Virginia, Georgia, and Tennessee. The National Pecan Growers' Exchange, Albany, Ga., serves about 600 members and markets over a million pounds of pecans a year.

POULTRY AND EGG ASSOCIATIONS ¹³

About 79 groups of farmers were engaged in marketing eggs or poultry, or both, at the close of 1925. The associations were located in 27 States, had a total membership of more than 50,000, and were handling an annual volume of business of approximately \$40,000,000.

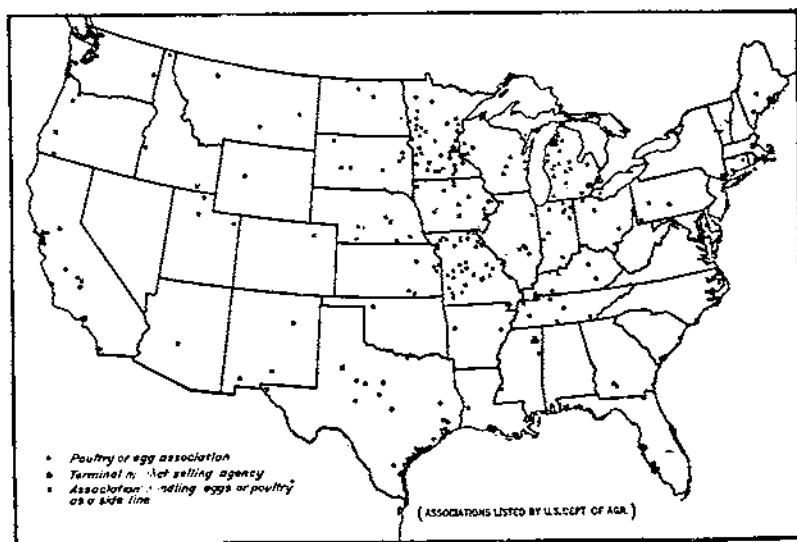


FIG. 38.—EGG AND POULTRY MARKETING ASSOCIATIONS, 1925

Eggs and poultry were handled cooperatively in nearly all the States in 1925. In about 20 of the States there were associations specially engaged in the marketing of these products.

One of the oldest of the associations listed by the department was formed at Tulare, Calif., in 1913. Another of the early associations was organized in Iowa in 1914. Eleven associations had been formed before 1920, and forty-eight associations have been organized since the beginning of 1920. Twelve associations were formed in 1923, and fourteen in 1924. (Appendix, Table 3.)

The associations in the Pacific Coast States serve members who make a business of operating large poultry ranches, whereas the associations in Minnesota, Missouri, Ohio, and most of the other States, serve members who have farm flocks, their principal activity being the raising of crops or livestock. Two associations in New York City, one in Detroit, and one in St. Paul, in 1925, were sales

¹³ This section is based largely on a special study made subsequent to the preparation of the tables appearing in the appendix of this publication. The data collected were issued as a preliminary report, entitled "Cooperative Marketing of Poultry Products, 1920-1926" (4).

agencies operating on the city markets. A New Hampshire association maintained a sales agency in Boston in 1924 and 1925. An association on Long Island serves 100 members engaged principally in raising ducks for the New York City market. Two associations reporting from Idaho function as cooperative turkey marketing enterprises.

Nearly one-third of the total membership of the associations reporting was in Missouri organizations, and more than one-fifth was in the associations in Minnesota.

Membership data taken from a special study made subsequent to appendix, Table 5, are given in Table 21.

TABLE 21.—Membership data for associations marketing poultry and eggs, by States, 1925¹

[Associations listed by the United States Department of Agriculture]

State	Associa- tions re- porting	Membership ²		Average member- ship per associa- tion
		Number	Per cent	
Missouri.....	11	18,871	35.0	1,715
Minnesota.....	15	17,123	31.7	1,141
Washington.....	4	5,111	9.5	1,278
California.....	6	4,997	9.2	833
Ohio.....	1	1,800	3.3	1,800
Texas.....	3	1,348	2.5	447
Utah.....	1	950	1.8	950
Oregon.....	2	971	1.8	485
All others.....	10	2,803	5.2	280
Total.....	53	53,073	100.0	
Average.....				1,018

¹ Data from a special study made in 1925, issued in multigraphed form as a preliminary report, entitled "Cooperative Marketing of Poultry Products, 1920-1926." (4).

² Including shareholders and patrons.

³ Including reports received subsequent to the tabulation of the tables in the appendix.

The smallest association reporting had but 12 members; the largest had 5,000. The average number of members (including shareholders and patrons) per association for the associations reporting was 1,018. The averages for several of the States were Ohio, 1,800 members; Missouri, 1,715; Washington, 1,278; Minnesota, 1,141; California, 833. (Table 21.)

Eleven associations each had fewer than 100 members; 20, fewer than 500 members; 35, fewer than 1,000 members; and 18 associations, more than 1,000 members each. About 73 per cent of the total membership was included in the 18 associations with more than 1,000 members each.

Fifty associations reported marketing 2,593,251 cases of eggs in 1925. Six California associations handled 39 per cent of the eggs; 12 Missouri associations, 22 per cent; and 4 Washington associations, 21 per cent. (Table 22.)

TABLE 22.—Quantity of eggs handled, by States, 1925
 [Associations listed by the United States Department of Agriculture]

State	Associa- tions re- porting	Quantity of eggs handled	Percent- age of total	Average per asso- ciation
	Number	Cases	Per cent	Cases
California.....	6	1,004,440	38.7	167,407
Missouri.....	12	564,548	21.8	47,046
Washington.....	4	512,546	20.9	135,637
Minnesota.....	14	159,831	6.2	11,416
Oregon.....	2	137,881	5.3	68,991
Utah.....	1	105,066	4.1	105,066
All others.....	11	78,839	3.0	7,167
Total.....	50	2,563,251	100.0	
Average.....				51,865

The smallest volume of business reported by any association for 1925 was the 585 cases of eggs, the total reported by a Minnesota organization. The largest volume was 782,070 cases, reported by one of the California associations. Seven associations handled fewer than 1,000 cases each during the year; 22 associations fewer than 10,000 cases; and 41 associations, fewer than 50,000 cases. Two associations handled over 500,000 cases each. These two associations handled 50 per cent of all the eggs; four other associations handled 19 per cent; and the remaining 30 per cent was handled by 44 associations.

The number of cases of eggs per member handled by the associations in 1925 varied from less than 1 case to 357 cases. This latter figure, which is for one of the California associations, is at the rate of almost 1 case per day per member. The averages for the leading States are California, 201 cases per member; Oregon, 142 cases; Connecticut, 125 cases; Utah, 110 cases; Washington, 106 cases; Missouri, 28 cases; Minnesota, 10 cases.

Twelve associations receiving from 1 case to 10 cases per member handled but 5 per cent of the total volume for 1925, while one association receiving 357 cases per member handled 30 per cent of the entire volume. Eight associations receiving over 100 cases per member for the year handled 63 per cent of all the eggs marketed cooperatively by the associations reporting. This would seem to indicate that the delivery of a large number of cases of eggs per member is a more important factor in determining the total volume of cooperative business than a large membership.

Figures compiled for 33 associations for which data are available for both 1924 and 1925 indicate that these associations handled 22 per cent more eggs in the latter year than in the former.

The sales value of the eggs handled by the 33 associations in 1925 was 32 per cent higher than for those handled by the same associations in 1924. The average value for 2,033,890 cases handled in 1924 was \$9.60 a case, and the average value for eggs marketed in 1925 was \$10.34 a case.

Several sales agencies located in terminal markets were operating during the greater part of 1925. The largest of these agencies was the Pacific Egg Producers' Cooperative (Inc.), operating in the New York City and neighboring markets. It handles the eastern shipments made by three of the Pacific coast organizations. In 1925 it sold 630,166 cases of eggs, as compared with 236,000 cases in 1924.

The Atlantic Coast Poultry Producers' Association, which serves its members in New Jersey, New York, Pennsylvania, Maryland,

and other eastern States on the New York City market, handled 41,580 cases of eggs in 1925, as compared with 70,000 cases in 1924.

Over 10,000 cases of eggs forwarded by Minnesota creameries in 1925 were marketed by the Land O'Lakes Creameries (Inc.).

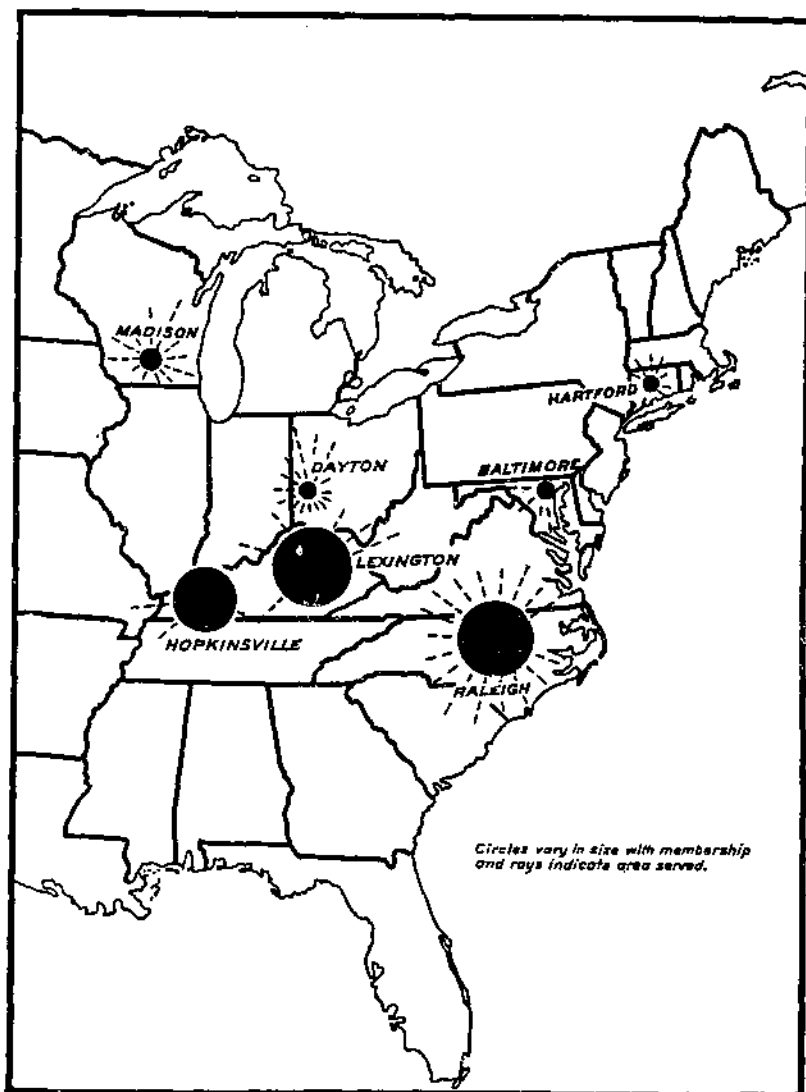


FIG. 39.—COOPERATIVE TOBACCO MARKETING ASSOCIATIONS, 1925

The seven large-scale tobacco marketing associations which were operating in 1925 served 298,000 growers in 13 States.

Lake Region Cooperative Egg and Poultry Exchange, which is the overhead selling organization for 17 local units, reports marketing 160,894 cases of eggs during the year, as compared with 21,964 cases for the preceding year.

In Los Angeles the Challenge Cream and Butter Association sold 66,815 cases of eggs in 1925, as compared with 73,508 cases in 1924. Part of these eggs were from associations listed above and part from associations handling eggs only incidentally.

Thirty-five of the associations making special reports for 1925 handled live poultry, and 16 handled dressed poultry. A total of 12,328,057 pounds of live poultry was marketed by 31 of the associations. The leading States and the quantities reported were as follows: Missouri, 9,871,543 pounds; Minnesota, 1,827,131 pounds; Wisconsin, 208,735 pounds.

The 16 associations that handle dressed poultry reported the marketing of 4,090,510 pounds in 1925. More than 90 per cent of the total was reported by 5 of the associations operating under the leadership of the Missouri Farmers' Association.

Twenty-one associations handling live poultry and reporting for both 1924 and 1925 handled 2 per cent less in the latter year than in the former, and six associations handling dressed poultry for both years reported the marketing of 24 per cent more poultry in 1925 than in 1924.

TOBACCO ASSOCIATIONS

Tobacco was being handled in 1925 by 24 cooperative associations located in 12 States. These organizations had a total estimated membership of 300,000 and were transacting business estimated at \$90,000,000. Among the organizations was the largest cooperative marketing association in the United States in regard to number of members; it reported a membership of more than 108,000. A second association active in 1925 had nearly 100,000 members and a third, more than 70,000. Seven of the 24 organizations reported 298,000 members (fig. 39); the other 17 organizations were enterprises engaged largely in marketing tobacco in a small way or in operating warehouses for the storage of tobacco.

The year in which the seven large-scale tobacco marketing associations were organized, the number of members reported in 1925, and the quantities of tobacco received of the various crops, are indicated in Table 23.

TABLE 23.—Large-scale tobacco marketing associations, year of organization, number of members, and quantities of tobacco received, 1919 to 1925

Association	Year organized	Number of members ¹	1919-20		1920-21	1921-22	1922-23	1923-24	1924-25
			Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
Maryland Tobacco Growers' Association	1910	4,600	6,533,100	8,085,600	9,500,000	14,700,000	15,143,000	13,260,390	
Burley Tobacco Growers' Cooperative Association	1921	108,200			119,914,613	197,009,743	245,307,781	171,344,983	
Tobacco Growers' Cooperative Association (Virginia, North Carolina, and South Carolina)	1922	97,400				163,513,820	180,137,952	103,834,844	
Dark Tobacco Growers' Cooperative Association	1922	71,100				175,057,787	173,568,632	90,301,821	
Connecticut Valley Tobacco Association	1922	4,200				26,901,714	35,311,079	30,733,077	
Northern Wisconsin Cooperative Tobacco Pool	1922	7,800				30,630,692	30,664,445	14,953,656	
Miami Valley Tobacco Growers' Association	1923	4,600					10,742,000	5,051,623	
Total		208,200	6,533,100	8,085,600	129,414,613	607,843,756	699,864,889	429,570,392	

¹ As of December, 1925.

It is estimated that less than 1 per cent of the tobacco crop of 1919 was delivered to cooperative associations and more than 48 per cent of the crop of 1922. The percentages of the various crops delivered to the cooperative organizations for the several years for which data are available are shown in Table 24.

TABLE 24.—Percentages of total tobacco crop delivered to cooperative associations by years, 1919 to 1925

[Associations listed by the United States Department of Agriculture]

Season	Tobacco production for United States (16, p. 1024)	Tobacco received by associations	
	Pounds	Pounds	Per cent
1919-20.....	1,465,481,000	6,533,100	0.4
1920-21.....	1,582,225,000	8,088,600	.5
1921-22.....	1,069,693,000	129,414,613	12.1
1922-23.....	1,216,837,000	607,843,756	49.8
1923-24.....	1,515,110,000	699,864,899	46.2
1924-25.....	1,251,343,000	420,576,392	34.3

Many difficult problems confronted the managements of the several associations. In some cases no satisfactory solutions were found. Two of the associations ceased to function in 1926 and are now being liquidated. A third functioned but feebly. The Tobacco Growers' Cooperative Association of Virginia, North Carolina, and South Carolina, and the Miami Valley Tobacco Growers' Association, have gone out of business permanently. The Dark Tobacco Growers' Cooperative Association of Hopkinsville, Ky., received no tobacco of the 1925 crop, the board of directors having decided not to enforce the contract with the growers which requires a delivery of all tobacco produced. The association received tobacco of the 1926 crop.

WOOL ASSOCIATIONS

The 91 cooperative wool marketing associations listed by the department at the close of 1925 had an estimated membership of 50,000 and were transacting business estimated at \$10,000,000 annually. (Appendix, Tables 5 and 6.) These associations were of five general types; namely, regional pools, independent local associations, sales agencies, associations handling wool as a secondary consideration, and educational associations. The greater part of the wool marketed cooperatively was handled by the regional pools. These were associations operating over a large area, which received wool, graded it, and sold it to the mills or other purchasers, returning to its members the average pool prices for the grades of wool delivered. The sales agencies were located in the markets and received wool on consignment from producers wherever they might be, returning to them the sales prices less expenses for the cooperatively operated association.

According to the information collected, the Putnam County Wool Growers' Association, of Greencastle, Ind., appears to be the oldest of the existing associations. The farmers in this section have been selling jointly since 1885. Any farmer who wished to list his wool for sale could do so. Each lot, however, was handled separately, the

cooperation being principally in the listing of the wool and in attracting buyers by presenting an opportunity to purchase many fleeces with a minimum of expense.

Practically all of the early attempts at the cooperative marketing of wool were local efforts. There appears to have been little, if any, thought of trying to do more than serve the wool growers of single communities. Some of the associations were more formally organized than others. Some were little more than associations in name. They came into existence each year as the wool marketing season approached, were active for a few weeks, and then became dormant. A few associations enjoyed continuous existence, had active officers, and regular meetings. As a rule these associations were small; rarely did they have 100 members. They concerned themselves primarily with assembling and selling or shipping the clips of their members. About 30 of this type are still active. About half of the

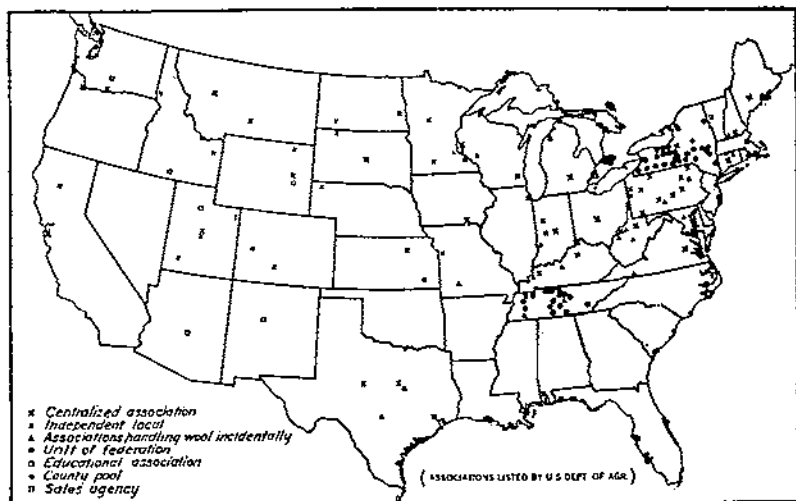


FIG. 40.—ASSOCIATIONS MARKETING WOOL COOPERATIVELY, 1925

Cooperative associations for the marketing of wool were to be found in nearly all the States in 1925 except those in the southeastern group.

existing organizations have come into existence since the beginning of 1920.

The associations listed by the department at the close of 1925 were located in 28 States, as follows: New York, 32 associations; Pennsylvania, 8; Indiana, 6; Minnesota, 5; Tennessee, 4; Ohio, 3; Kentucky, 3; Utah, 3; Massachusetts, North Dakota, South Dakota, West Virginia, Idaho, and Colorado, 2 each; Maine, Illinois, Michigan, Wisconsin, Iowa, Missouri, Virginia, Montana, Wyoming, Arizona, Washington, Oregon, and California, 1 each. (Fig. 40; appendix, Table 15.) Iowa, with 1 association, was credited with the largest estimated membership; Ohio, with 3 associations, came second; and Indiana, with 6 associations, was in third place.

Oregon, with its one association, led in the amount of business transacted in 1925. Ohio was in second place and Utah in third. (Appendix, Table 15.)

Reports indicate that the average number of pounds of wool handled annually per association has varied greatly, as is shown by the figures in Table 25.

TABLE 25.—*Wool marketing associations reporting, consignors, and quantity of wool handled and average quantity per association, 1920 to 1925*

[Associations listed by the United States Department of Agriculture]

Wool clip	Associa- tions re- porting	Con- signors	Wool handled		
			Associa- tions re- porting	Quantity	Average per asso- ciation
			Number	Pounds	Pounds
1920.....	13	17, 623	13	7, 711, 581	593, 199
1921.....	19	21, 025	23	12, 699, 916	552, 170
1922.....	28	15, 139	42	10, 829, 024	257, 835
1923.....	34	21, 756	47	19, 147, 020	407, 403
1924.....	41	21, 455	54	17, 360, 518	321, 491
1925.....	40	24, 511	50	21, 893, 804	437, 876

COLLECTIVE PURCHASING ASSOCIATIONS

Approximately 50 per cent of the marketing and purchasing associations are engaged in cooperative buying. Of the 10,803 associations listed by the department 5,386 report having made cooperative purchases for their members, over 1,000,000 in number.

Of the 5,386 associations reporting cooperative purchases, 62 per cent bought feeds; 47 per cent, fuel; 30 per cent, containers; 20 per cent, seeds; 19 per cent, fertilizers; 15 per cent, building materials; 13 per cent, fencing; 11 per cent, implements and machinery; 7 per cent, hardware; 5 per cent, spraying materials; 5 per cent, general merchandise; and 30 per cent, miscellaneous commodities. (Appendix, Table 16.)

All of the associations reporting for Maryland reported cooperative buying, as did 90 per cent of those in New Jersey and 72 per cent of those in Kansas. The percentages for some of the more important cooperative States are Ohio, 68; Nebraska, 65; Pennsylvania and North Dakota, each 64; Indiana and Missouri, each 60; Michigan, 59; California, 58; Iowa, 49; New York, 45; Minnesota, 35; and Wisconsin, 26.

The associations in the New England and Middle Atlantic States bought largely feeds and fertilizers, and the associations in the South Atlantic States bought fertilizers, seeds, and containers. Those in the North Central States bought feeds and fuel largely, and those in the Pacific coast States bought containers, including fruit packages. (Appendix Table 16.)

By commodity groups, the percentages of associations reporting cooperative buying were as follows: Grain associations, 86 per cent; fruits and vegetables, 58; forage crops, 50; poultry and poultry products, 39; wool, 34; cotton and cotton products, 27; livestock, 23; dairy products, 18; nuts, 13; tobacco, 8.

The associations handling dairy products bought containers (butter tubs), feeds, and fuel; the associations that marketed grain and shipped livestock bought feeds, as did those that marketed poultry and poultry products. The farmers' elevators were heavy purchasers

of fuel. Containers and fertilizers were bought largely by the associations that handle fruits and vegetables. The tobacco associations bought fertilizer, and the wool marketing associations bought wool sacks. (Appendix, Table 16.)

ASSOCIATIONS OUT OF BUSINESS

Records have been obtained from about 1,500 associations which had gone out of business prior to December 31, 1926. The years in which the largest number of associations ceased to function were 1923, 1922, 1921, and 1924 in the order named. The death rate among dairy associations was fairly uniform for the six years ending with 1923, except for 1919, when the rate was below the average for the period. The years 1921, 1922, 1923, and 1924 were hard ones for associations that handled fruits and vegetables, grain, and livestock.

Of the associations for which both date of organization and date of ceasing to operate have been obtained, 3 per cent functioned less than 1 year; 10 per cent, 1 year but not 2 years; 14 per cent, 2 years but not 3; 16 per cent, more than 10 years. (Table 26.)

TABLE 26.—Percentage of associations out of business that operated specified lengths of time

[Associations listed by the United States Department of Agriculture]

Length of time	Associations		
	Number	Per cent	Cumulative per cent
Less than 1 year.....	41	3.0	3.9
1 year.....	140	10.2	13.2
2 years.....	201	14.6	27.8
3 years.....	174	12.7	40.5
4 years.....	161	11.7	52.2
5 years.....	128	9.3	61.5
6 years.....	90	6.5	68.0
7 years.....	69	5.0	73.0
8 years.....	52	3.8	76.8
9 years.....	49	3.6	80.4
10 years.....	51	3.7	84.1
11-20 years.....	162	11.8	95.9
More than 20 years.....	57	4.1	100.0
Total.....	1,375	100.0	

The average length of life for 328 associations marketing dairy products but now out of business, was 9.9 years; the average length for 28 associations handling cotton was 9.6 years; 290 associations marketing grain, 6.9 years; 263 associations handling fruits and vegetables, 4 years; 96 associations handling livestock, 3.7 years; 11 associations handling poultry and poultry products, 5.2 years; 13 associations handling wool, 3.8 years; and 346 other associations, 5 years.

An effort has been made to classify the reasons given as to why the different associations ceased to function. In many cases more than one reason was given, so that the total number of reasons is much larger than the number of reports. The percentage of the total number of associations grouped under each cause was as follows: Insufficient business, 23 per cent; insufficient working capital, 24 per cent; inefficient management, 72 per cent; dishonest management,

8 per cent; too liberal credit to patrons, 17 per cent; unfair competition, 2 per cent; acts of Providence, 6 per cent; voluntary dissolution, 12 per cent; miscellaneous causes, 8 per cent.

Seventy-six per cent of the associations, for which out-of-business records have been obtained, were incorporated. They had an average membership of 46, were transacting an annual average business of about \$92,000 at the time of ceasing to function, and the average amount of losses sustained was about \$13,800 per association.

COOPERATIVE CREDIT ASSOCIATIONS

Associations for supplying credit for financing farm enterprises have been functioning on a cooperative basis for a number of years. Recent developments have centered largely around the Federal farm loan system, established in 1916 and enlarged in scope in 1923.

Under the system, 4,665 national farm loan associations have been formed, which obtain loans for their members from the 12 Federal land banks provided by the system. Up to December 31, 1926, \$1,300,000,000 had been loaned to 416,768 borrowers. Federal legislation in 1923 established 12 intermediate credit banks, which are noncooperative but are authorized to discount agricultural credit paper and to make loans to cooperative marketing associations that offer paper secured by warehouse receipts or other acceptable security. Approximately 400 agricultural credit corporations and livestock loan companies had been formed prior to the close of 1926 to avail themselves of the discount facilities of these banks. Discounts for these credit institutions and direct loans to cooperative marketing associations, made prior to the close of 1926 amounted to approximately \$490,000,000.

MUTUAL INSURANCE COMPANIES

Cooperative insurance associations, commonly referred to as mutual insurance companies, are an important phase of the agricultural cooperative movement in the United States. There are, according to a recent estimate, 1,950 farmers' mutual fire insurance companies carrying risks that amount to approximately \$10,000,000,000. There are in addition, about 40 windstorm insurance companies carrying risks estimated at \$2,000,000,000, also 30 hail insurance companies, and 25 livestock insurance organizations. The volume of risks carried by the hail insurance companies is large. The livestock insurance companies, however, are relatively unimportant as measured by volume of risks carried. Recently a new type of farmers' mutual insurance company was developed, namely the automobile insurance company. Four such companies were operating at the close of 1926. All of these associations were located in the Middle West. One company was operating in eight States. These companies furnish insurance against fire, theft, collision, property damage, and injury to persons.

COOPERATIVE PUBLIC UTILITY ASSOCIATIONS

A rough estimate places the number of rural telephone companies at 40,000. These companies are serving about 2,000,000 farmers. Some of the farmers' companies are operating on a profit basis, but it is believed that the vast majority are maintained chiefly as service institutions on a cost-of-service basis.

In some sections of the country, farmers' companies have been formed on the cooperative basis for the purpose of distributing electric current for light and power purposes and for conducting irrigation projects on a cost-of-service basis.

There are a few associations for furnishing transportation service on a cooperative basis. In most cases these associations are concerned with the operation of motor-truck lines, although there is at least one association that operates cooperatively a short electric railway line.

APPENDIX

STATISTICS BASED ON STATE STUDIES

MICHIGAN

A bulletin dealing with cooperative marketing and purchasing in Michigan is in course of preparation by C. F. Clayton, Michigan State College of Agriculture. Data compiled for 486 associations for the year 1923-24 have been tabulated. These associations were serving approximately 150,000 patrons and handled business amounting to approximately \$60,000,000 annually. The preliminary figures for the different kinds of associations are as follows: Grain, 128 associations, 54,528 patrons, \$19,904,000 business; livestock, 138 associations, 38,696 patrons, \$14,959,000 business; dairy products, 70 associations, 21,956 patrons, \$10,479,000 business; potato, 79 associations, 12,782 patrons, \$5,609,000 business; fruit, 22 associations, 6,050 patrons, \$3,469,000 business; stores, 40, 14,006 patrons, \$4,444,000 business; supply associations, 9, 1,803 patrons, \$411,000 business; total, 486 associations, 149,821 patrons, \$59,275,000 business.

MINNESOTA

Information furnished by J. H. Hay, deputy commissioner of agriculture, relative to cooperative activity in Minnesota, includes the following: 660 creameries, 99,000 patrons, \$126,800,000 business; 49 cheese factories, 5,000 patrons, \$1,600,000 business; 6 milk distributing associations, 7,200 patrons, \$8,000,000 business; forage crop, 1 association, 100 patrons; 200 farmers' warehouses, 15,000 patrons; 6 berry marketing associations, 210 patrons, \$25,000 business; 417 farmers' elevators, 73,000 patrons, \$56,100,000 business; 655 livestock shipping associations, 98,000 patrons, \$50,000,000 business; 14 poultry and egg associations, \$2,800,000 business; 1 tobacco association, 305 members; 3 wool marketing associations, with 20 county units and 400 members, \$300,000 business; 114 farmers' stores, 22,000 patrons, \$8,700,000 business; 44 oil filling stations, 6,600 patrons, \$2,000,000 business; 4 starch factories, 800 patrons.

A survey made by B. B. Derrick for the University of Minnesota for 1925 covered 577 livestock shipping associations, which handled 47,620 cars of livestock valued at \$58,812,000.

MISSOURI

Data are being compiled at the University of Missouri for a bulletin dealing with cooperative activity in that State. Advance information indicates 1,068 local associations, serving 256,000 patrons, and transacting business to the amount of \$130,151,000. The items are as follows: Cotton, 8 associations, 1,600 patrons, \$1,050,000 business; fruits and vegetables, 78 associations, 11,200 patrons, \$6,545,000 business; grain, 164 elevators, 54,300 patrons, \$34,728,000 business; livestock, 463 shipping associations, 94,900 patrons, \$41,199,000

business; produce, 301 exchanges, 83,700 patrons, \$44,368,000 business; all others, 54 associations, 10,300 patrons, \$2,261,000 business. The above figures are reported as being exclusive of district poultry and egg packing plants and central sales agencies for selling grain, livestock, fruit, and cotton.

NEW YORK

An economic study of farmers' cooperative business organizations in New York was completed by J. F. Booth in June of 1926 (1). Data were obtained regarding 260 active marketing and purchasing associations. These had a total membership, including shareholders, contract members, and patrons, of nearly 160,000. It was estimated that the business transactions of these organizations amounted to \$105,000,000 for the 1924-25 season.

PENNSYLVANIA

A bulletin issued under date of June 1, 1926, by the Pennsylvania Department of Agriculture (6) states that 108 active local and 6 interstate associations had a total membership of 41,990 at the close of 1925. Sales and purchases for 1925 are reported as follows: Milk and milk products, \$29,029,518; fruits and vegetables, \$1,105,824; eggs, \$89,910; wool, \$79,183; farm supplies, \$4,653,744; cattle, \$51,500; total, \$35,009,679.

WASHINGTON

Cooperation in Marketing Washington Farm Products, by E. F. Dummer (2), appeared as Bulletin No. 194, State College of Washington, Pullman, Wash., in December, 1925. According to this publication there were 168 active cooperative associations in Washington on June 1, 1925. These associations are reported as transacting business to the amount of \$45,000,000 in 1924.

WISCONSIN

Information furnished by Theodore Macklin, University of Wisconsin, indicates that there are in Wisconsin "approximately 325 livestock shipping associations doing a business of upward of \$25,000,000. * * * Approximately 1,300 butter and cheese factories," which do a cooperative business amounting to more than \$75,000,000, and that the total cooperative business for the State amounts to not less than \$150,000,000 a year.

APPENDIX TABLES

TABLE 1.—Associations of different kinds reporting business, by States, 1913

[Source of data: Department Bulletin No. 547]

State and geographic division	Cotton		Dairy products		Fruit and produce		Grain		Livestock		Tobacco		Stores		Miscellaneous		Total			
	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount		
Maine.....			2	\$2,059,545	8	\$216,800								1	\$26,000	15	\$816,137	26	\$3,118,482	
New Hampshire.....			5	121,158														5	121,158	
Vermont.....			15	688,472														15	688,472	
Massachusetts.....			7	256,202	3	1,210,603								6	404,795	2	50,000	18	1,921,600	
Rhode Island.....														2	101,630			2	101,630	
Connecticut.....			11	560,600	1	5,500										1	47,000	13	613,100	
New England.....			40	3,685,977	12	1,432,903								9	532,425	18	913,137	79	6,564,442	
New York.....			45	2,059,160	18	0,244,842								5	209,489	3	60,500	71	11,579,997	
New Jersey.....			2	585,274	3	1,449,400								2	120,000	1	500	8	2,155,174	
Pennsylvania.....			30	757,212	1	390,500										5	337,200	36	1,484,012	
Middle Atlantic.....			77	3,401,652	22	11,084,742														
Ohio.....			23	811,772	9	909,827	16	\$1,829,701	1	\$3,275										
Indiana.....			21	658,558	10	385,500	16	2,370,044			7	\$249,931			1	155,000	4	17,000	61	3,976,596
Illinois.....			23	653,746	4	187,500	139	24,605,105										49	3,438,102	
Michigan.....			55	2,345,155	17	718,604	6	1,002,700										2	250,000	
Wisconsin.....			216	10,132,421	17	784,908	14	743,104	3	77,879					1	672,647	2	200,602	82	5,076,987
East North Central.....			338	14,001,652	57	2,086,339	191	30,550,654	5	191,622	7	249,931			19	1,466,079	24	977,322	641	51,024,499
Minnesota.....			437	20,393,399	13	453,357	150	16,293,064	12	951,960					14	715,763	22	1,318,352	648	40,125,895
Iowa.....			161	8,527,224	4	142,542	158	23,650,965	15	2,707,453					7	593,000	26	2,799,534	371	38,420,808
Missouri.....	1	\$65,000	11	498,317	26	1,191,282	4	224,821						2	27,000	1	17,000	45	2,023,420	
North Dakota.....			16	322,027			138	19,616,065										4	112,085	
South Dakota.....			18	506,107			80	9,684,110										2	80,998	
Nebraska.....			6	550,000	6	33,852	83	11,195,185	9	746,222					2	36,000	3	684,615	108	10,855,836
Kansas.....			4	37,539	7	325,282	82	9,271,785	2	171,282					17	756,580	16	3,331,203	122	14,377,669
West North Central.....	1	65,000	653	30,834,613	56	2,146,315	605	89,836,001	38	4,576,917					47	2,321,516	94	10,038,971	1,584	139,819,333

Delaware		2	40,075	1	500,000							1	20,000	4	560,075			
Maryland		1	5,000	3	1,289,559							3	194,000	7	1,488,559			
Virginia		4	105,500	7	5,816,000							4	14,100	15	5,935,000			
West Virginia												1	9,000	1	9,000			
North Carolina	6	3,727,000	1	23,000	7	109,500			1	725,000	11	263,384	14	147,848	40	4,995,732		
South Carolina	6	466,500									1	4,500	6	319,222	13	790,222		
Georgia	14	1,952,800			2	11,000							3	64,000	19	2,027,800		
Florida				25	1,682,200								4	300,400	29	1,982,600		
South Atlantic	26	6,146,300	8	173,575	45	9,498,259				1	725,000	12	267,884	36	1,068,570	128	17,780,588	
Kentucky			4	43,200	7	401,700	1	100,000		10	1,580,489	4	76,000	8	283,930	34	2,494,470	
Tennessee	2	31,000	1	28,000	10	287,838						1	3,000	2	14,100	16	363,938	
Alabama	4	4,802,000			10	861,177								2	66,670	14	5,663,177	
Mississippi	7	659,100			13	170,440										22	896,210	
East South Central	13	5,492,100	5	71,200	40	1,721,155	1	100,000			10	1,580,489	5	79,000	12	373,860	88	9,417,804
Arkansas	4	530,348			39	1,412,204						1	4,000	2	71,052	46	2,024,504	
Louisiana	1	50,000			16	482,683							5	292,000	22	824,683		
Oklahoma	8	419,757	3	66,573	2	10,000	8	631,000	1	55,000					22	1,191,330		
Texas	25	2,275,839	4	182,004	14	2,582,104	3	470,000							46	5,509,947		
West South Central	38	3,281,944	7	248,577	71	4,495,991	11	1,101,000	1	55,000			1	4,000	7	363,952	136	9,550,464
Montana			8	410,736	4	66,900	8	1,485,099				1	20,000	2	236,000	23	2,224,735	
Idaho			2	57,000	6	458,000	5	164,807				1	5,000	11	1,433,400	28	2,118,207	
Wyoming			1	12,000			2	440,000							3	452,000		
Colorado			8	111,701	18	2,042,620							3	191,630	29	2,345,951		
New Mexico					2	37,500							4	413,967	6	451,407		
Arizona	1	112,500			1	45,000								2	157,500	2	157,500	
Utah			5	229,723	8	1,008,439	1	12,000						2	55,000	16	1,305,162	
Nevada			1	7,850											1	7,850	1	7,850
Mountain	1	112,500	25	829,010	42	3,058,459	16	2,101,900					2	31,000	22	2,329,907	103	9,062,872
Washington			10	786,291	27	8,056,784	32	5,215,431					6	600,535	3	163,000	78	14,882,041
Oregon			5	754,767	20	4,220,936	14	1,659,229					2	160,289	1	36,000	42	6,822,221
California			19	4,313,791	64	20,709,498							1	75,000	18	5,001,659	102	30,159,948
Pacific			34	5,854,849	111	32,987,218	46	6,865,660					9	895,824	22	5,260,659	222	51,864,210
United States	79	15,097,844	1,187	59,701,105	459	69,921,381	960	130,555,221	44	4,823,539	18	2,555,420	111	5,928,117	244	21,730,668	3,009	310,313,295
Average		191,112		50,296		153,336		135,995		109,626		141,968		53,400		89,060		100,133

TABLE 2.—Associations, estimated membership and estimated business,¹ by kinds and States, 1915

[Source of data: Department Bulletin No. 547 (8, p. 14-25)]

State and geographic division	Cotton			Dairy products			Fruit and produce			Grain			Livestock		
	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business
Maine.....				7	567	\$400,000	10	1,197	\$47,500	1	102	\$145,460			
New Hampshire.....				8	1,012	140,000									
Vermont.....				22	902	1,221,000									
Massachusetts.....				10	820	469,140	5	695	556,410						
Connecticut.....				14	1,946	341,712	3	129	333,840						
New England.....				61	6,147	2,661,852	27	2,021	937,750	1	102	145,460			
New York.....				75	3,675	1,950,075	32	4,864	48,000,000						
New Jersey.....				2	52	93,828	9	4,032	22,500						
Pennsylvania.....				48	2,448	2,468,304	4	308	309,000						
Middle Atlantic.....				125	6,175	4,521,207	45	9,201	48,322,500						
Ohio.....				20	6,612	725,000	10	1,005	1,280,000	31	3,286	2,325,000	1	90	\$58,400
Indiana.....				27	1,215	1,485,000	10	494	47,500	27	2,808	1,215,000			
Illinois.....				34	3,400	134,300	11	737	27,500	102	10,968	31,320,000			
Michigan.....				70	7,980	3,658,150	31	5,508	4,650,000	12	2,112	1,800,000	2	210	116,800
Wisconsin.....				301	22,274	30,965,375	24	1,998	2,670,768	23	2,806	2,506,080	7	1,092	140,000
East North Central.....				461	41,481	36,997,835	101	9,415	8,075,768	285	30,980	39,166,080	10	1,392	315,200
Minnesota.....				624	48,048	26,060,736	28	2,100	1,120,000	24	30,125	28,012,037	30	4,410	1,200,000
Iowa.....				204	22,032	10,361,772	8	632	32,000	228	27,132	93,183,600	20	2,580	1,168,000
Missouri.....	1	14	\$7,975	15	645	105,000	34	3,468	345,190	13	1,495	520,000	1	140	58,400
North Dakota.....				20	1,363	357,657				264	10,536	45,672,792	2	180	75,000
South Dakota.....				26	2,314	407,054	1	7	70,000	135	13,230	22,770,495			
Nebraska.....				15	1,665	703,710	7	819	778,974	183	18,117	4,093,344	25	3,975	2,250,000
Kansas.....				6	300	63,198	10	1,370	2,000,000	153	14,229	27,645,111	2	370	116,800
West North Central.....	1	14	7,975	910	76,367	38,059,727	88	8,396	4,346,074	1,217	123,864	221,936,379	80	11,661	4,958,200
Delaware.....				3	249	140,742	1	1,200	111,282						
Maryland.....				1	54	46,914	8	1,014	40,000						
Virginia.....				8	408	375,312	13	5,252	338,000				1	45	58,400
West Virginia.....							4	372	445,128						
North Carolina.....	10	1,350	79,750	4	644	960,000	9	2,160	1,001,538				1	50	58,400

South Carolina.....	14	854	111,650	1	56	5,500	7	357	1,229,515						
Georgia.....	44	3,300	132,000				5	520	25,000						
Florida.....	2	30	15,950				55	2,255	907,500						
South Atlantic.....	70	5,534	339,350	17	1,411	1,528,468	102	13,132	4,097,963				2	95	116,800
Kentucky.....				6	378	281,484	15	1,185	19,125	1	85	145,460			
Tennessee.....	7	413	24,500	2	136	93,828	18	2,628	426,600						
Alabama.....	19	2,469	28,500				26	3,926	827,658				1	140	58,400
Mississippi.....	11	286	124,707				26	1,690	39,000						
East South Central.....	37	3,188	177,707	8	514	378,312	85	9,429	1,312,383	1	85	145,460	1	140	58,400
Arkansas.....	15	735	13,875	1	83	1,800	63	4,158	442,764						
Louisiana.....	3	15	23,925				34	3,400	1,627,172						
Oklahoma.....	13	819	276,250	8	648	163,032	9	405	20,250	11	968	1,796,663	2	138	116,800
Texas.....	71	7,952	639,000	9	387	137,250	31	6,200	328,600	7	735	1,018,220			
West South Central.....	102	9,521	953,050	18	1,118	302,082	137	14,163	2,418,786	18	1,703	2,814,883	2	138	116,800
Montana.....				12	1,140	562,968	7	574	70,000	27	2,835	3,069,000			
Idaho.....				6	900	900,000	17	1,343	1,891,794	9	504	1,309,140			
Wyoming.....				2	70	320,000				8	560	1,163,680	1	12	58,400
Colorado.....				13	351	158,041	28	4,564	3,500,000	3	675	750,000			
New Mexico.....							3	120	300,000						
Arizona.....	1	87	7,975				3	219	333,846						
Utah.....				9	702	162,000	12	2,064	1,335,384	4	192	360,000			
Nevada.....				1	83	46,914									
Mountain.....	1	87	7,975	43	3,246	2,149,923	70	8,884	7,431,024	51	4,766	7,551,820	1	12	58,400
Washington.....				14	1,330	1,050,000	52	14,924	5,786,664	48	4,320	9,029,136			
Oregon.....				16	880	195,200	40	4,600	1,000,000	16	1,008	8,000,000			
California.....	2	60	15,950	26	1,898	1,219,764	124	15,748	117,213,728						
Pacific.....	2	60	15,950	56	4,108	2,464,964	216	35,272	124,000,392	64	5,328	17,929,136			
United States.....	213	18,404	1,502,007	1,708	140,567	89,061,370	871	109,916	201,542,646	1,637	166,828	289,689,218	96	13,438	5,623,800

¹ Based on reports for 534 associations as follows: Grain, 180 associations; fruits and vegetables, 58; dairy products, 176; farmers' stores 38; tobacco, 2; livestock, 10; cotton, 18; all others, 52. The estimates for cotton, livestock, and stores are undoubtedly too low.

TABLE 2.—Associations, estimated membership and estimated business,¹ by kinds and States, 1915—Continued

State and geographic division	Tobacco			Stores			Miscellaneous			Total		
	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business	Number reporting	Estimated membership	Estimated business
Maine.....				5	1,135	\$195,000	39	5,070	\$1,812,870	71	8,071	\$2,690,836
New Hampshire.....										8	1,912	140,000
Mont.							1	150	46,484	23	1,052	1,267,484
Massachusetts.....				11	4,072	633,776	5	170	232,420	31	6,657	1,591,746
R. Island.....				3	642	122,565	1	180	46,489	4	822	169,054
Col.							3	465	139,452	20	2,540	815,010
Ne. England.....				19	6,749	951,341	49	6,035	2,277,721	157	21,054	6,974,130
New York.....				7	1,057	285,985	10	930	1,500,000	124	10,526	51,745,060
New Jersey.....				4	1,000	44,616	5	2,255	532,420	20	7,330	393,364
Pennsylvania.....	2	630	\$300,000	4	424	59,332	8	42,206	800,000	63	46,106	3,957,636
Middle Atlantic.....	2	630	300,000	15	2,451	419,933	23	45,481	2,532,420	210	63,971	50,096,060
Ohio.....	7	553	1,050,000		1,012	163,420	9	1,809	119,187	97	14,370	5,721,007
Indiana.....							11	825	594,000	84	5,342	3,341,500
Illinois.....				7	588	81,710	24	6,384	1,115,616	263	31,077	32,679,126
Michigan.....				7	5,012	285,985	5	640	625	127	21,162	10,541,570
Wisconsin.....				32	4,480	1,173,344	15	2,760	375,000	402	35,380	37,830,567
East North Central.....	7	553	1,650,000	45	11,092	1,704,459	64	12,418	2,204,428	973	107,331	90,113,770
Minnesota.....				30	3,090	1,200,000	27	2,619	1,255,068	980	90,392	58,067,841
Iowa.....				14	2,156	574,970	31	4,619	1,441,004	505	59,151	106,758,346
Missouri.....				6	408	67,500	3	567	139,452	73	6,737	1,243,427
North Dakota.....				12	888	480,000	6	480	675,000	313	22,453	47,260,440
South Dakota.....				4	244	163,420	12	1,656	396,000	178	17,451	23,816,569
Nebraska.....				6	396	180,000	46	4,064	7,532,500	282	29,366	15,538,528
Kansas.....				36	7,380	1,182,852	39	5,226	1,941,654	246	28,875	32,949,615
West North Central.....				108	14,862	3,845,742	164	19,261	13,380,678	2,577	254,425	286,534,775
Delaware.....							1	3	46,484	5	1,452	298,508
Maryland.....							10	600	300,000	19	1,760	386,914
Virginia.....	5	400	750,000	3	150	15,000	28	5,064	138,124	58	12,228	1,674,836
West Virginia.....				1	150	30,000	7	1,100	63,000	12	1,712	538,128
North Carolina.....	5	2,120	750,000	17	1,751	694,535	28	1,904	33,000	74	9,979	3,577,823
South Carolina.....	1	18	150,000	2	8	81,710	12	1,356	294,324	37	2,649	1,872,609

Georgia.....				2	100	90,000	4	308	185,936	55	4,228	438,936
Florida.....							12	804	557,808	69	3,089	1,481,258
South Atlantic.....	11	2,538	1,650,000	25	2,168	917,245	102	12,219	1,610,276	329	37,097	10,260,102
Kentucky.....	21	14,028	3,150,000	6	1,098	245,130	17	2,686	68,000	60	19,460	3,900,199
Tennessee.....	1	20	150,000	13	2,158	377,000	15	1,605	574,995	56	6,960	1,646,923
Alabama.....				1	15	120,000	4	488	80,000	51	7,058	1,114,558
Mississippi.....	1	80	150,000				4	300	185,936	42	2,356	499,643
East South Central.....	23	14,128	3,450,000	20	3,271	742,130	40	5,079	906,931	215	35,834	7,170,323
Arkansas.....				3	423	122,565	7	315	325,388	69	5,714	906,392
Louisiana.....							7	749	325,388	44	4,164	1,976,485
Oklahoma.....				2	602	81,710	3	93	42	48	3,673	2,454,747
Texas.....							16	1,968	223,040	134	17,242	2,346,110
West South Central.....				5	1,025	204,275	33	3,125	873,858	315	30,793	7,683,734
Montana.....				2	124	81,710	3	111	139,452	51	4,784	4,823,130
Idaho.....				1	27	40,855	26	13,052	1,208,584	69	15,826	5,350,373
Wyoming.....				2	116	81,710	3	513	139,452	16	1,271	1,763,242
Colorado.....				1	80	40,855	8	816	371,872	53	6,486	4,820,768
New Mexico.....							10	760	464,840	13	880	764,840
Arizona.....							3	534	180,000	7	840	521,821
Utah.....				1	457	40,855	5	915	450,000	31	4,330	2,348,239
Nevada.....							1	231	46,484	2	314	93,398
Mountain.....				7	804	285,985	59	16,932	3,000,684	232	34,731	20,485,811
Washington.....				12	11,496	1,830,000	8	664	371,872	134	32,734	18,967,672
Oregon.....				8	4,048	326,840	5	305	232,420	85	10,841	9,754,460
California.....				11	1,507	449,405	34	3,162	2,890,000	197	22,376	121,788,847
Pacific.....				31	17,051	2,600,245	47	4,131	3,494,202	416	65,950	150,510,979
United States.....	43	17,849	6,450,000	275	59,503	11,677,355	581	124,681	30,292,288	5,424	651,186	635,838,684

¹ Based on reports for 534 associations as follows: Grain, 180 associations; fruits and vegetables, 58; dairy products, 176; farmers' stores, 38; tobacco, 2; livestock, 10; cotton, 18; all others, 52. The estimates for cotton, livestock, and stores are undoubtedly too low.

TABLE 3.—Associations reporting active in the various years, 1863 to 1925

[Associations listed by United States Department of Agriculture]

Year of organization	Cotton	Dairy	Forage crops	Fruits and vegetables	Grain	Livestock	Nuts	Poultry	Tobacco	Wool	Miscellaneous selling	Miscellaneous buying	Total
1863		1										1	2
1864		1										1	2
1865		1										1	2
1866		1										1	2
1867		1										1	2
1868		3										1	3
1869		3										1	3
1870		2										1	3
1871		3										1	4
1872		3										1	4
1873		5										1	7
1874		5										1	7
1875		5										1	12
1876		5										1	13
1877		6										1	15
1878		5			1							10	16
1879		6			1							10	17
1880		7			1							10	17
1881		7			1							10	18
1882		10			1							11	19
1883		17			1							11	22
1884		19			1							11	30
1885		25			1							13	34
1886		28			3							13	40
1887		38			5							13	46
1888		51			5							13	61
1889		68			6							13	77
1890	1	98			10			1				16	102
1891	2	110			10			1				17	132
1892	2	140			7			1				21	161
1893	2	161			8			1				25	200
1894	2	196			21			2				26	242
1895	3	236			23			2		1		30	288
1896	3	270			33			3		1		30	333
1897	3	310			43			3		1		31	395
1898	3	357			49			4		1		31	449
1899	3	386			58			4		1		32	511
1900	3	428			62			6		1		32	554
1901	3	463			68			6		1		33	615
1902	3	502			84			7		1		35	685
1903	3	534			92			9		1		39	761
1904	4	573			97			9		1		48	866
1905	5	613			105			8		1		51	975
1906	8	664			150			8		1		61	1,131
1907	14	710			218			10		1		71	1,300
1908	20	755	1		306			12		1		84	1,469
1909	21	806	1		127			15		1		96	1,654
1910	26	862	1		137			18		1		113	1,873
1911	26	930	1		156			21		1		124	2,076
1912	28	1,012	2		177			21		1		133	2,387
1913	35	1,085	2		215			27		1		151	2,587
1914	45	1,178	2		257			33		1		190	2,800
1915	50	1,261	3		294			39		1		225	3,070
1916	53	1,371	3		334			48		1		271	3,304
1917	56	1,462	4		389			60		1		301	3,770
1918	60	1,593	4		448			77		1		346	4,350
1919	66	1,719	5		477			93		1		403	4,893
1920	75	1,829	5		529			111		1		473	5,598
1921	83	1,970	9		601			129		1		550	6,071
1922	90	2,055	13		682			158		1		660	7,912
1923	99	2,112	14		852			197		1		885	8,885
1924	102	2,131	14		1,059			242		1		1,043	9,432
1925	106	2,136	14		1,117			273		1		1,073	9,938
					1,121			315		1		1,078	9,907
					3,212			489		1			
					1,529			59		1			

TABLE 4.—Associations, by kinds and States, 1925

[Associations listed by the United States Department of Agriculture]

State and geographic division	Cotton and cotton products	Dairy products	Forage crops	Fruits and vegetables	Grain ¹	Livestock	Nuts	Poultry and poultry products	Tobacco	Wool	Miscellaneous selling	Miscellaneous buying ²	Total
Maine.....		7		34				1		1	2	31	82
New Hampshire.....		4			1						2	7	14
Vermont.....		42		1	1	1					12	4	61
Massachusetts.....		18		5	1							4	17
Rhode Island.....		2						2	1		1	4	7
Connecticut.....		7		5								31	47
New England.....		80		45	3	1		3	3	3	27	94	250
New York.....		80	2	81	4	2		2	1	32	18	55	286
New Jersey.....				5							3	12	20
Pennsylvania.....		57		20	3	1		1	4	8	24	98	216
Middle Atlantic.....		143	2	109	7	3		3	5	40	45	195	522
Ohio.....		39		21	205	74		1	2	3	17	33	395
Indiana.....		25		24	133	91		1		6	13	32	330
Illinois.....	1	30		22	432	273				1	22	31	822
Michigan.....		87		60	92	82		1		1	77	36	436
Wisconsin.....		716		28	57	154		1	4	1	61	72	1,092
East North Central.....	1	900		153	924	674		5	6	12	199	204	3,075
Minnesota.....		578		53	301	300		11		5	22	113	1,383
Iowa.....		226		3	368	374		1		1	17	104	1,094
Missouri.....	6	11		31	163	117		8		1	133	68	537
North Dakota.....		16		13	332	60				2	9	23	460
South Dakota.....		25		8	235	94				2	4	20	397
Nebraska.....		14		5	344	37					10	81	488
Kansas.....		7		3	347	23				2	8	76	466
West North Central.....	5	874		116	2,690	1,905		20		13	203	499	4,825
Delaware.....		1		5							2	4	12
Maryland.....		2		4	2				1		2	5	10
District of Columbia.....		1											6
Virginia.....		13	1	14	2	12	1			1	13	39	96
West Virginia.....				9		18		1		2	6	6	42
North Carolina.....	6	5		11	1			2			10	15	50
South Carolina.....	4		1	11							1	1	18
Georgia.....	15			10			3	1	1		12	4	46
Florida.....		1		98							2	3	104
South Atlantic.....	25	23	2	102	5	39	4	2	4	3	48	77	385
Kentucky.....		6		7	1	8		4	2	3	0	16	56
Tennessee.....	3	25	1	36	2	8	1	2	3	4	19	7	111
Alabama.....	12	3	1	21		6					15	4	63
Mississippi.....	3	3		17				2			22		47
East South Central.....	18	37	2	82	3	22	1	8	5	7	65	27	277
Arkansas.....	6			70	2			2			7	14	101
Louisiana.....	2	1		20	5			1			7	2	38
Oklahoma.....	11	2		8	89	4					9	20	143
Texas.....	49	6	2	40	16	3	1	0			22	16	172
West South Central.....	68	8	2	147	112	7	1	11	1		45	52	454
Montana.....		6		4	64	12		2		1	5	8	102
Idaho.....		9		18	12			1			2	8	59
Wyoming.....		1		2	6	1		1		1	3	3	18
Colorado.....		6		34	40	7				2	7	6	101
New Mexico.....	1	1	2	2	5	1		1			8	1	20
Arizona.....	3	1	1	5	1					1	6	2	20
Utah.....		9		11	3			3		3	5	7	41
Nevada.....					1						1		2
Mountain.....	4	33	3	78	132	21		8		10	42	34	363
Washington.....		24	1	55	42			2		1	5	42	172
Oregon.....		50	1	37	9	2	3	2		1	8	8	121
California.....		19	3	255	11	5	30	7		1	4	15	350
Pacific.....		93	5	347	62	7	33	11		3	17	65	643
United States.....	121	2,197	16	1,237	3,338	1,770	30	71	24	91	682	1,217	10,803

¹ Including rice and dry beans.

² Including farmers' cooperative stores.

TABLE 5.—Associations and estimated membership¹ by kinds and States, 1925

[Based on reports from 9,463 associations]

State and geographic division	Cotton and cotton products		Dairy products		Forage		Fruits and vegetables		Grain		Livestock		Nuts	
	Associations	Members	Associations	Members	Associations	Members	Associations	Members	Associations	Members	Associations	Members	Associations	Members
Maine.....			7	4,600			34	1,700						
New Hampshire.....			4	400										
Vermont.....			42	5,500			1	40	1	120				
Massachusetts.....			18	22,500			5	520	1	10	1	40		
Rhode Island.....			2	160					1	30				
Connecticut.....			7	3,200			5	210						
New England.....			80	36,360			45	2,470	3	160	1	40		
New York.....			86	79,300	2	200	84	7,900	4	930	2	250		
New Jersey.....							5	2,720						
Pennsylvania.....			57	34,500			20	1,250	3	360	1	200		
Middle Atlantic.....			143	113,800	2	200	109	11,870	7	1,290	3	450		
Ohio.....			39	25,900			21	1,400	205	31,800	74	27,700		
Indiana.....			25	5,100			24	2,000	138	30,000	91	24,630		
Illinois.....	1	30	39	18,400			22	1,400	432	48,000	273	50,850		
Michigan.....			87	26,600			60	7,200	92	18,900	82	16,900		
Wisconsin.....			710	54,500			26	2,800	57	9,400	154	27,150		
East North Central.....	1	30	906	130,500			153	14,800	924	144,700	674	147,230		
Minnesota.....			578	78,200			53	5,300	301	50,800	300	52,300		
Iowa.....			226	33,700			3	350	368	47,300	374	53,350		
Missouri.....	5	1,000	11	1,400			31	4,420	163	21,100	117	88,700		
North Dakota.....			16	1,500			13	980	332	46,000	60	7,450		
South Dakota.....			25	8,100			8	620	235	32,300	94	17,600		
Nebraska.....			11	7,230			5	580	344	42,700	37	6,600		
Kansas.....			7	1,350			3	140	347	62,300	23	5,650		
West North Central.....	5	1,000	874	131,450			116	12,390	2,090	302,560	1,005	236,650		
Delaware.....			1	20			5	350						
Maryland.....			2	3,730			4	1,080	2	760				
District of Columbia.....			1	1,000										
Virginia.....			13	2,080	1	80	14	8,000	2	140	12	2,300	1	4,090
West Virginia.....							9	640			18	2,000		

North Carolina.....	6	27,400	5	320			11	730	1	20				
South Carolina.....	4	15,200			1	120	11	1,140					3	8,570
Georgia.....	15	50,000					10	4,300						
Florida.....			1	70			88	8,300						
South Atlantic.....	25	102,600	23	7,220	2	200	162	24,540	5	920	30	4,300	4	12,570
Kentucky.....			6	7,060			7	1,770	1	70	8	1,450		
Tennessee.....	3	9,160	25	3,900	1	200	36	4,000	2	100	8	2,000	1	200
Alabama.....	12	28,100	3	200		250	22	2,360			6	1,150		
Mississippi.....	3	21,900	3	120			17	1,530						
East South Central.....	18	59,100	37	11,280	2	450	82	9,660	3	170	22	4,600	1	200
Arkansas.....	6	19,500					70	5,650	2	1,200				
Louisiana.....	2	6,800	1	20			20	3,150	5	2,100				
Oklahoma.....	11	55,400	2	170			8	1,270	89	23,400	4	\$60		
Texas.....	49	55,000	5	580	2	20	49	2,950	16	7,000	3	500	1	30
West South Central.....	68	136,700	8	770	2	20	147	13,020	112	33,700	7	1,360	1	30
Montana.....			6	330			4	450	64	17,200	12	1,450		
Idaho.....			0	4,100			18	2,300	12	1,330				
Wyoming.....			1	60			2	110	6	600	1	20		
Colorado.....			6	770			34	6,950	40	10,900	7	1,000		
New Mexico.....	1	330	1	50	2	200	2	80	5	300	1	200		
Arizona.....	3	240			1	300	5	370	1	280				
Utah.....			0	600			11	9,500	3	350				
Nevada.....									1	40				
Mountain.....	4	570	33	6,290	3	500	76	19,760	132	31,030	21	2,670		
Washington.....			24	9,800	1	1,100	55	6,100	42	2,600				
Oregon.....			50	4,500	1	260	37	5,440	9	540	2	200	3	200
California.....			19	8,000	3	270	255	59,950	11	2,130	5	2,500	30	7,000
Pacific.....			93	22,300	5	1,630	347	71,490	62	5,470	7	2,700	33	7,200
United States.....	121	300,000	2,197	460,000	16	3,000	1,237	180,000	3,338	520,000	1,770	400,000	39	20,000

¹ Includes shareholders, contract members, patrons, shippers, and consignors of the 10,803 associations listed. As many producers are members of several associations the number of producers engaged in cooperative marketing and purchasing is considerably less than 2,700,000. Furthermore, not all the producers who are included are delivering products to the associations of which they are members.

TABLE 5.—Associations and estimated membership¹ by kinds and States, 1925—Continued

State and geographic division	Poultry and poultry products		Tobacco		Wool and mohair		Miscellaneous selling		Miscellaneous buying ¹		Total	
	Associa-tions	Members	Associa-tions	Members	Associa-tions	Members	Associa-tions	Members	Associa-tions	Members	Associa-tions ¹	Members
Maine.....	1	600			1	500	8	1,200	31	5,800	82	14,400
New Hampshire.....							2	980	7	1,100	14	2,600
Vermont.....							12	1,510	4	1,100	61	8,200
Massachusetts.....			1	40	2	60	4	250	17	15,800	48	39,200
Rhode Island.....							1	110	4	130	7	400
Connecticut.....	2	200	2	5,000					31	1,590	47	10,200
New England.....	3	800	3	5,040	3	560	27	4,050	94	25,520	259	75,000
New York.....	2	600	1	200	32	1,500	18	2,980	55	6,140	286	100,000
New Jersey.....							3	1,440	12	1,840	20	6,000
Pennsylvania.....	1	400	4	400	8	900	24	2,580	98	13,010	216	54,000
Middle Atlantic.....	3	1,000	5	600	40	2,400	45	7,400	165	20,990	522	160,000
Ohio.....	1	2,000	2	5,000	3	12,000	17	4,140	33	5,300	395	115,300
Indiana.....	1	200			6	5,000	13	3,600	32	3,770	330	80,300
Illinois.....	1	100			1	400	22	6,170	31	5,050	822	131,000
Michigan.....	1	500			1	900	77	12,260	36	45,040	436	128,300
Wisconsin.....	1	300	4	8,000	1	100	61	9,150	72	5,700	1,092	120,100
East North Central.....	5	3,100	6	13,000	12	18,400	190	35,320	204	67,920	3,075	575,000
Minnesota.....	11	11,000			5	2,000	22	3,570	113	14,230	1,383	217,400
Iowa.....	1	100			1	13,500	17	2,600	104	23,900	1,091	179,800
Missouri.....	8	14,000			1	200	133	29,120	68	10,660	537	170,600
North Dakota.....					2	1,000	9	1,050	28	2,320	460	60,300
South Dakota.....					2	1,800	4	580	29	3,700	397	65,000
Nebraska.....					2	1,200	10	1,480	81	15,450	488	74,100
Kansas.....					2	1,200	8	1,830	76	10,330	466	82,800
West North Central.....	20	25,100			13	10,700	203	40,530	499	80,590	4,825	850,000
Delaware.....							2	200	4	630	12	1,200
Maryland.....			1	4,700			2	330	5	2,000	16	12,600
District of Columbia.....											1	1,000
Virginia.....					1	1,000	13	3,370	39	4,730	96	25,700
West Virginia.....					2	1,500	6	1,050	6	610	42	6,100
North Carolina.....	1	300	2	98,000			10	1,170	15	2,260	50	139,900
South Carolina.....							1	100	1	40	18	16,600

Georgia.....	1	50	1	100			12	4,570	4	310	46	67,900
Florida.....							2	320	3	310	104	9,000
South Atlantic.....	2	350	4	102,800	3	2,500	48	11,110	77	10,890	385	280,000
Kentucky.....	4	300	2	178,000	3	1,300	9	1,520	16	3,730	56	194,700
Tennessee.....	2	200	3	500	4	500	19	5,650	7	6,250	111	32,600
Alabama.....							15	4,100	4	2,140	63	38,300
Mississippi.....	2	200					22	5,630			47	20,400
East South Central.....	8	700	5	178,500	7	1,800	65	16,920	27	11,620	277	295,000
Arkansas.....	2	200					7	26,400	14	1,550	101	54,500
Louisiana.....			1	60			7	2,520	2	11,150	38	25,800
Oklahoma.....							9	8,700	20	2,400	143	92,200
Texas.....	9	3,200					22	7,170	16	1,050	172	77,500
West South Central.....	11	3,400	1	60			45	44,790	52	16,150	454	250,000
Montana.....	2	400			1	200	5	620	8	550	102	21,200
Idaho.....	1	1,000			2	50	9	1,790	8	630	50	11,200
Wyoming.....	1	200			1	50	3	700	3	560	18	2,300
Colorado.....					2	100	7	1,140	5	340	101	21,200
New Mexico.....	1	50					6	1,270	1	20	20	2,500
Arizona.....					1	110	6	740	2	180	20	2,600
Utah.....	3	1,500			3	100	5	970	7	750	41	13,800
Nevada.....							1	160			2	200
Mountain.....	8	3,150			10	610	42	7,390	34	3,030	363	75,000
Washington.....	2	5,000			1	30	5	720	42	6,150	172	31,700
Oregon.....	2	1,000			1	3,000	8	1,120	8	840	121	17,100
California.....	7	6,400			1	1,600	4	650	15	3,300	350	91,200
Pacific.....	11	12,400			3	4,030	17	2,490	65	10,290	643	140,000
United States.....	71	50,000	24	300,000	91	50,000	682	170,000	1,217	247,000	10,803	2,700,000

¹ Includes shareholders, contract members, patrons, shippers, and consignors of the 10,803 associations listed. As many producers are members of several associations the number of producers engaged in cooperative marketing and purchasing is considerably less than 2,700,000. Furthermore, not all the producers who are included are delivering products to the associations of which they are members.

² Including farmers' cooperative stores.

³ Number of associations listed by the United States Department of Agriculture, December, 1925.

TABLE 6.—Associations and estimated business, by kinds and States, 1925

[Based on reports from 7,250 associations]

State and geographic division	Cotton and cotton products		Dairy products		Forage		Fruits and vegetables		Grain		Livestock		Nuts	
	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business
	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars
Maine.....			7	7,000										
New Hampshire.....			4	900			34	1,400						
Vermont.....			42	8,500					1	150				
Massachusetts.....			18	26,000			1	20	1	250	1	10		
Rhode Island.....			2	700					1	10				
Connecticut.....			7	9,000										
New England.....			80	52,100			45	6,470	3	410	1	10		
New York.....			86	78,000	2	160	84	8,000	4	2,000	2	3,000		
New Jersey.....							5	4,300						
Pennsylvania.....			57	33,700			20	1,850	3	200	1	1,000		
Middle Atlantic.....			143	111,700	2	160	109	14,150	7	2,200	3	4,000		
Ohio.....			30	28,000			21	4,000	205	40,000	74	22,000		
Indiana.....			25	3,500			24	4,250	138	28,000	91	20,000		
Illinois.....	1	70	39	29,000			22	2,000	432	92,000	273	66,000		
Michigan.....			87	30,680			60	5,500	92	23,000	82	10,000		
Wisconsin.....			716	74,000			26	3,600	57	6,000	154	14,000		
East North Central.....	1	70	906	165,180			153	19,350	924	189,000	674	132,000		
Minnesota.....			578	83,000			53	2,620	301	70,000	300	56,000		
Iowa.....			226	32,500			3	100	368	65,000	374	65,000		
Missouri.....			11	2,800			31	3,200	163	25,000	117	20,000		
North Dakota.....			16	850			13	410	332	85,000	60	3,000		
South Dakota.....			25	2,930			8	100	235	58,000	94	10,000		
Nebraska.....			11	3,500			5	120	344	70,000	37	9,000		
Kansas.....			7	450			3	40	347	90,000	23	1,800		
West North Central.....	5	1,050	874	126,030			116	6,590	2,090	463,000	1,005	164,800		

Delaware.....			1	10			5	730						
Maryland.....			2	6,500			4	260						
District of Columbia.....			1	2,300										
Virginia.....			13	1,600	1	10	14	13,500	2	170	12	2,600	1	185
West Virginia.....							9	1,100			18	500		
North Carolina.....	6	15,220	5	160			11	1,550	1	10				
South Carolina.....	4	9,420			1	5	11	8,680						
Georgia.....	15	12,470					10	550					3	1,540
Florida.....			1	80			98	34,000						
South Atlantic.....	25	37,110	23	10,650	2	15	162	60,370	5	780	30	3,100	4	1,725
Kentucky.....			6	750			7	840	1	200	8	2,000		
Tennessee.....	3	2,800	25	1,950	1	10	36	2,500	2	40	8	100	1	200
Alabama.....	12	10,210	3	1,050	1	100	22	1,500			6	140		
Mississippi.....	3	30,120	3	600			17	400						
East South Central.....	18	43,130	37	4,350	2	110	82	5,240	3	240	22	2,240	1	200
Arkansas.....	6	9,250					70	2,870	2	5,000				
Louisiana.....	2	5,000	1	150			20	2,000	5	4,000				
Oklahoma.....	11	10,680	2	80			8	60	89	22,000	4	550		
Texas.....	49	31,370	5	710	2	100	49	2,700	16	10,000	3	2,000	1	35
West South Central.....	68	65,300	8	940	2	100	147	8,520	112	41,000	7	2,550	1	35
Montana.....			6	650			4	450	64	16,000	12	800		
Idaho.....			9	5,270			18	2,000	12	3,100				
Wyoming.....			1	40			2	10	6	1,500	1	10		
Colorado.....			6	450			34	4,100	40	15,000	7	2,400		
New Mexico.....	1	1,030	1	110	2	555	2	100	5	40	1	10		
Arizona.....	3	2,310	1	500	1	500	5	1,260	1	10				
Utah.....			9	230			11	780	3	150				
Nevada.....									1	70				
Mountain.....	4	3,340	33	7,250	3	1,055	76	8,700	132	35,870	21	3,220		
Washington.....			24	10,500	1	500	55	9,500	42	9,000				
Oregon.....			50	6,300	1	60	37	9,100	9	500	2	80	3	40
California.....			19	34,000	3	2,000	255	132,000	11	8,000	5	8,000	30	14,000
Pacific.....			93	56,800	5	2,560	347	150,600	62	17,500	7	8,080	33	14,040
United States.....	121	150,000	2,197	535,000	16	4,000	1,237	280,000	3,338	750,000	1,770	320,000	39	10,000

TABLE 6.—Associations and estimated business, by kinds and States, 1925—Continued

State and geographic division	Poultry and poultry products		Tobacco		Wool		Miscellaneous selling		Miscellaneous buying		Total	
	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business	Associations	Amount of business
	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars	Number	Thousand dollars
Maine.....	1	219			1	50	8	800	31	3,000	82	12,460
New Hampshire.....							2	450	7	1,730	14	3,230
Vermont.....							12	1,700	4	560	61	11,040
Massachusetts.....			1	10	2	10	4	400	17	7,700	48	39,130
Rhode Island.....							1	420	4	180	7	1,300
Connecticut.....	2	420	2	7,240					31	1,300	47	18,010
New England.....	3	630	3	7,250	3	60	27	3,700	94	14,470	259	85,700
New York.....	2	600	1	70	32	360	18	950	55	10,620	286	103,760
New Jersey.....							3	800	12	830	20	5,930
Pennsylvania.....	1	10	4	20	8	110	24	2,000	98	4,500	216	43,390
Middle Atlantic.....	3	610	5	90	40	470	45	3,750	165	15,950	522	153,080
Ohio.....	1	300	2	1,280	3	2,000	17	3,500	33	6,260	395	107,340
Indiana.....	1	10			6	170	13	1,050	32	3,460	330	60,440
Illinois.....	1	20			1	40	22	1,700	31	4,380	822	195,210
Michigan.....	1	350			1	140	77	7,400	36	5,130	436	82,200
Wisconsin.....	1	50	4	1,870	1	20	61	4,600	72	8,940	1,092	113,080
East North Central.....	5	730	6	3,150	12	2,370	190	18,250	204	28,170	3,075	558,270
Minnesota.....	11	1,900			5	250	22	2,100	113	8,110	1,383	223,980
Iowa.....	1	10			1	140	17	3,300	104	6,660	1,094	172,710
Missouri.....	8	8,330			1	10	133	16,400	68	5,700	537	83,490
North Dakota.....					2	120	9	300	28	1,600	460	91,280
South Dakota.....					2	380	4	1,350	29	1,320	397	74,080
Nebraska.....					2	40	10	1,650	81	7,660	488	91,930
Kansas.....					2	40	8	1,000	76	5,830	466	99,160
West North Central.....	20	10,240			13	940	203	26,100	499	37,880	4,825	836,630
Delaware.....							2	200	4	20	12	960
Maryland.....			1	3,060			2	270	5	1,570	16	12,200
District of Columbia.....											1	2,300

Virginia.....					1	100	13	1,000	39	2,450	96	21,615
West Virginia.....	1	10			2	190	6	550	6	470	42	2,820
North Carolina.....			2	22,520			10	300	15	3,620	50	43,380
South Carolina.....							1	10	1	15	18	18,130
Georgia.....	1	40	1	400			12	1,000	4	210	46	16,210
Florida.....							2	30	3	600	104	34,710
South Atlantic.....	2	50	4	25,920	3	290	48	3,360	77	8,955	385	152,325
Kentucky.....	4	10	2	53,350	3	130	9	300	16	1,040	56	58,050
Tennessee.....	2	70	3	200	4	100	19	850	7	740	111	9,560
Alabama.....							15	1,000	4	2,940	63	16,940
Mississippi.....	2						22	1,000			47	32,120
East South Central.....	8	80	5	53,590	7	230	65	3,150	27	4,720	277	117,270
Arkansas.....	2	5					7	340	14	470	101	17,935
Louisiana.....			1	10			7	420	2	660	38	13,340
Oklahoma.....							9	2,100	20	2,060	143	46,550
Texas.....	9	410					22	2,500	16	980	172	50,805
West South Central.....	11	415	1	10			45	5,360	52	4,390	454	128,630
Montana.....	2	70			1	1,160	5	50	3	510	102	19,690
Idaho.....	1	330			2	70	9	2,300	8	180	59	13,250
Wyoming.....	1	20			1	40	3	550	3	350	18	2,520
Colorado.....					2	170	7	1,000	6	480	101	23,600
New Mexico.....	1	10					6	300	1	5	20	2,160
Arizona.....					1	20	6	500	2	140	20	5,240
Utah.....	3	7,500			3	1,200	5	50	7	500	41	4,410
Nevada.....							1	10			2	50
Mountain.....	8	1,930			10	2,660	42	4,760	34	2,165	363	70,950
Washington.....	2	11,100			1	100	5	100	42	5,260	172	52,060
Oregon.....	2	1,615			1	2,500	8	1,000	8	460	121	21,655
California.....	7	12,600			1	380	4	400	15	12,580	350	223,960
Pacific.....	11	25,315			3	2,980	17	1,500	65	18,300	643	297,675
United States.....	71	40,000	24	90,000	91	10,000	682	70,000	1,217	135,000	10,803	2,400,000

TABLE 7.—Associations, estimated membership, and estimated business, by geographic divisions and commodity groups, 1915 and 1925

[Associations listed by the United States Department of Agriculture]

GEOGRAPHIC DIVISION	Associations listed				Estimated membership				Estimated business			
	1915		1925		1915		1925		1915		1925	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Thousand dollars	Per cent	Thousand dollars	Per cent
West North Central.....	2,577	47.5	4,825	44.7	254,425	39.1	850,000	31.5	286,535	45.1	836,630	34.9
East North Central.....	973	17.9	3,075	28.5	107,331	16.5	575,000	21.3	90,114	14.2	558,270	23.3
Pacific.....	416	7.7	643	5.9	65,950	10.1	143,000	5.2	150,511	23.7	297,675	12.4
South Atlantic.....	329	6.1	385	3.6	37,097	5.7	280,000	10.4	10,269	1.6	152,325	6.3
West South Central.....	315	5.8	454	4.2	30,793	4.7	250,000	9.2	7,684	1.2	128,630	5.4
Mountain.....	232	4.3	363	3.3	34,731	5.4	75,000	2.8	20,486	3.2	70,950	2.9
East South Central.....	215	3.9	277	2.6	35,834	5.5	295,000	10.9	7,170	1.1	117,270	4.9
Middle Atlantic.....	210	3.9	522	4.8	63,971	9.8	160,000	5.9	56,096	8.8	153,080	6.4
New England.....	157	2.9	250	2.4	21,054	3.2	75,000	2.8	6,974	1.1	85,170	3.5
Total.....	5,424	100.0	10,803	100.0	651,186	100.0	2,700,000	100.0	635,839	100.0	2,400,000	100.0
COMMODITY GROUP												
Dairy products.....	1,708	31.5	2,197	20.3	140,567	21.6	400,000	17.0	89,061	14.0	1,535,000	22.3
Grain.....	1,637	30.2	3,338	30.9	166,826	25.6	520,000	19.3	289,689	45.6	750,000	31.2
Fruits and vegetables.....	871	16.0	1,237	11.4	109,916	16.9	180,000	6.7	201,543	31.7	280,000	11.7
Cotton and cotton products.....	213	3.9	121	1.1	18,404	2.8	300,000	11.1	1,502	.2	150,000	6.2
Livestock.....	96	1.8	1,770	16.4	13,438	2.1	400,000	14.8	5,624	.9	320,000	13.3
Tobacco.....	43	.8	24	.2	17,849	2.7	300,000	11.1	6,450	1.0	90,000	3.8
All others.....	856	15.8	2,116	19.7	184,184	28.3	640,000	20.0	41,970	6.6	275,000	11.5
Total.....	5,424	100.0	10,803	100.0	651,186	100.0	2,700,000	100.0	635,839	100.0	2,400,000	100.0

¹ Including sales by milk-bargaining associations.

² Including sales by terminal livestock sales agencies of livestock not received from cooperative shipping associations.

TABLE 8.—Number of associations reporting organization characteristics, by geographic divisions and States, 1925¹

[Associations listed by the United States Department of Agriculture]

State and geographic division	Incorporated		Capital stock		Capital stock dividends		Patronage refunds		Products of non-members		Contracts	
	Reporting	Incorporated	Reporting	With capital stock	Reporting	Paying dividends	Reporting	Making refunds	Reporting	Serving non-members	Reporting	Using contracts
Maine.....	67	62	64	58	02	35	59	40	9	7	16	7
New Hampshire.....	13	10	14	19	14	9	11	8	2	2	3	2
Vermont.....	41	59	61	59	58	42	55	48	23	17	21	6
Massachusetts.....	39	32	41	29	34	30	33	24	10	7	12	6
Rhode Island.....	6	6	7	7	4	5	5	5	5	3	1	0
Connecticut.....	45	41	45	35	42	30	37	23	15	8	15	9
New England.....	227	210	232	195	216	131	200	148	64	44	68	29
New York.....	257	238	250	132	212	57	203	127	91	53	139	77
New Jersey.....	25	23	25	10	20	10	19	11	7	2	9	5
Pennsylvania.....	204	150	209	76	182	51	165	72	60	52	78	17
Middle Atlantic.....	486	411	484	168	414	118	387	210	167	107	226	69
Ohio.....	380	332	377	300	354	206	352	223	234	222	238	23
Indiana.....	362	215	238	177	268	17	250	160	149	126	151	27
Illinois.....	812	616	818	494	721	367	687	250	577	478	570	44
Michigan.....	390	379	410	224	361	149	353	231	244	209	255	53
Wisconsin.....	980	818	1,008	806	964	529	915	393	675	601	685	30
East North Central.....	2,873	2,365	2,911	2,001	2,671	1,418	2,557	1,257	1,879	1,638	1,899	177
Minnesota.....	1,274	1,029	1,320	991	1,210	672	1,194	754	764	710	750	30
Iowa.....	1,079	910	1,099	798	996	490	977	480	631	520	636	53
Missouri.....	515	377	515	358	459	301	442	315	236	220	247	45
North Dakota.....	497	442	492	428	446	340	481	354	305	296	304	8
South Dakota.....	388	310	388	296	362	255	368	275	229	196	222	10
Nebraska.....	472	440	492	440	377	350	458	328	288	274	285	11
Kansas.....	469	419	461	424	434	343	440	340	285	275	274	8
West North Central.....	4,635	3,927	4,776	3,654	4,414	2,790	4,360	2,680	2,727	2,500	2,718	169
Delaware.....	8	6	8	4	5	3	7	4	5	3	6	3
Maryland.....	29	23	28	10	26	11	23	14	18	9	21	15
District of Columbia.....	1	1	1	0	0	0	1	0	1	0	1	1
Virginia.....	33	30	35	38	76	31	70	28	27	17	31	8
West Virginia.....	34	21	34	9	29	6	27	11	17	18	18	8
North Carolina.....	40	31	44	28	44	28	37	21	13	6	11	7
South Carolina.....	13	11	13	9	13	8	12	7	1	0	7	5
Georgia.....	39	30	35	23	30	17	32	10	7	1	10	7
Florida.....	70	59	82	14	65	12	76	63	9	2	57	41
South Atlantic.....	323	232	333	135	280	116	285	167	98	53	162	95
Kentucky.....	47	29	47	22	41	14	38	24	10	4	12	7
Tennessee.....	96	52	98	36	87	21	78	55	31	23	37	18
Alabama.....	56	34	54	15	51	10	30	24	2	0	14	10
Mississippi.....	37	15	38	7	33	4	37	19	1	1	7	3
East South Central.....	236	139	237	80	212	49	192	122	44	28	70	39
Arkansas.....	89	47	88	31	70	17	69	60	14	10	40	20
Louisiana.....	29	19	25	9	22	6	23	20	5	2	12	8
Oklahoma.....	143	131	146	123	137	265	131	107	72	65	80	12
Texas.....	153	118	169	92	142	73	140	82	55	40	67	22
West South Central.....	468	314	429	255	371	291	363	259	146	117	190	62
Montana.....	97	92	100	37	93	68	96	63	77	55	63	5
Idaho.....	42	38	46	33	37	22	41	24	14	9	22	14
Wyoming.....	15	11	15	8	12	9	13	7	5	4	6	2
Colorado.....	92	85	98	66	85	50	88	65	38	33	53	24
New Mexico.....	10	16	20	11	18	8	13	11	10	7	8	5
Arizona.....	15	12	16	7	16	3	16	12	5	1	9	7
Utah.....	28	23	30	21	27	17	25	12	12	8	18	11
Nevada.....	2	2	2	1	2	0	2	1	0	0	0	0
Mountain.....	310	279	327	234	290	177	298	195	161	117	179	68
Washington.....	168	153	169	128	159	86	141	59	57	44	88	47
Oregon.....	112	106	111	86	102	50	100	67	65	53	76	28
California.....	310	306	333	172	316	50	308	257	65	27	207	153
Pacific.....	590	545	613	386	574	195	548	383	187	124	371	228
United States.....	10,147	8,433	10,342	7,108	9,451	5,165	9,191	5,591	5,473	4,726	5,862	968

¹ Including independent associations, local units of federations, and centralized associations.

TABLE 9.—Associations, by organization characteristics and States, 1925¹

(Associations listed by the United States Department of Agriculture)

Geographic division	Number of associations listed		Incorporation		Capital stock		Capital stock dividends		Patronage refunds		Business for non-members		Contracts	
	Number reporting	Per cent incorporated	Number reporting	Per cent with capital stock	Number reporting	Per cent paying	Number reporting	Per cent paying	Number reporting	Per cent paying	Number reporting	Per cent handling non-member business	Number reporting	Per cent using contracts
New England.....	259	227	87.6	232	84.0	210	80.6	200	74.0	64	63.7	69	42.6	
Middle Atlantic.....	522	486	93.1	484	92.7	414	79.3	337	64.5	167	64.1	226	43.3	
East North Central.....	3,075	2,873	93.3	2,911	94.3	2,671	88.1	2,557	83.1	1,879	87.1	1,899	87.8	
West North Central.....	4,826	4,685	97.1	4,776	99.1	4,414	91.5	4,360	90.3	3,277	91.7	2,718	82.2	
South Atlantic.....	335	323	96.4	333	98.2	280	83.6	235	70.1	98	54.1	162	59.2	
East South Central.....	277	230	83.0	237	85.6	212	76.5	192	69.3	44	63.6	70	55.7	
West South Central.....	454	408	90.0	429	94.5	371	81.7	363	80.0	146	80.1	199	31.2	
Mountain.....	363	310	85.4	327	90.1	290	79.9	298	82.1	161	72.7	179	38.0	
Pacific.....	643	599	93.1	613	95.2	574	89.3	549	85.4	187	66.3	371	61.3	
United States.....	10,803	10,147	93.9	10,342	95.7	9,451	87.5	9,191	84.1	5,473	86.3	5,802	10.4	
Leading States:														
New York.....	286	257	89.9	250	87.4	212	73.8	203	71.0	91	58.2	139	55.4	
Pennsylvania.....	216	204	94.4	209	96.7	182	84.3	165	76.4	69	75.4	78	21.8	
Ohio.....	395	380	96.2	377	95.4	354	89.6	352	89.1	234	94.6	236	9.7	
Indiana.....	330	302	91.5	298	89.9	268	81.2	256	77.6	149	84.6	151	17.0	
Illinois.....	822	812	98.9	818	99.5	724	88.1	687	83.6	577	82.8	570	7.7	
Michigan.....	436	399	91.5	410	94.0	361	82.6	353	83.0	244	85.7	255	26.8	
Wisconsin.....	1,092	980	89.7	1,008	92.3	964	88.3	915	83.8	675	89.0	683	4.4	
Minnesota.....	1,383	1,274	91.9	1,320	95.4	1,240	89.7	1,194	86.3	764	94.1	750	4.8	
Iowa.....	1,094	1,079	98.6	1,099	100.0	996	90.6	977	89.3	631	82.4	636	3.3	
Missouri.....	537	515	95.9	515	95.9	459	85.5	442	71.3	236	93.2	247	18.2	
North Dakota.....	460	497	107.8	492	106.9	446	97.0	431	94.6	303	97.0	304	2.0	
South Dakota.....	307	388	126.4	388	126.4	362	117.9	368	119.8	220	89.1	222	4.5	
Nebraska.....	488	472	96.7	492	100.8	477	97.7	458	93.8	285	95.8	283	3.9	
Kansas.....	466	460	98.7	461	98.9	434	93.1	440	94.4	283	96.3	274	2.9	
Washington.....	172	168	97.7	169	98.3	156	90.7	141	83.7	87	77.2	88	53.4	
Oregon.....	121	112	92.5	111	91.7	102	84.3	100	82.7	65	61.5	76	26.8	
California.....	350	319	91.1	333	95.1	316	90.3	303	86.6	63	41.5	207	73.9	

¹ Including independent associations, local units of federations, and centralized associations.

TABLE 10.—Associations with specified organization characteristics, by commodities and leading States, 1925 ¹

[Associations listed by the United States Department of Agriculture]

COTTON

State	All associations listed	Incorporation		Capital stock		Capital stock dividends		Patronage refunds		Business for non-members		Contracts	
		Reports	Percentage incorporated	Reports	Percentage with capital stock	Reports	Percentage pay-ing stock divi-dends	Reports	Percentage pay-ing patronage refunds	Reports	Percentage han-dling business for nonmembers	Reports	Percentage with contracts
		Number	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number
Texas.....	49	46	92.5	42	78.6	39	71.8	39	48.7	17	100.0	16	6.3
United States.....	121	93	93.5	97	83.5	89	77.5	84	30.3	33	83.9	31	18.1

DAIRY PRODUCTS

Wisconsin.....	716	614	85.8	613	87.4	628	56.2	583	40.5	568	82.6	511	4.1
Minnesota.....	678	535	93.0	563	88.3	542	51.8	515	68.2	412	67.1	409	3.4
Iowa.....	226	202	90.1	213	74.0	190	38.7	196	75.0	134	94.8	137	2.2
Michigan.....	87	79	90.1	77	85.7	72	56.0	60	69.6	68	85.3	68	7.4
New York.....	86	60	85.0	48	68.7	57	45.6	48	62.5	31	87.1	29	31.0
United States.....	2,197	1,837	90.3	1,055	85.0	1,873	53.8	1,793	60.9	1,387	91.7	1,303	7.4

FORAGE

United States.....	10	8	87.5	11	18.2	9	22.2	9	66.7				
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FRUITS AND VEGETABLES

California.....	255	200	95.2	218	54.1	200	14.1	202	84.2	34	26.5	168	77.4
Florida.....	98	58	82.8	68	13.2	51	14.8	65	84.0	9	22.2	50	73.2
New York.....	84	65	90.9	68	17.0	59	12.0	57	77.2	20	55.0	61	83.6
Arkansas.....	70	60	40.0	62	19.4	49	12.2	40	60.6	9	55.0	35	49.6
Michigan.....	69	38	81.6	38	31.6	30	33.3	29	72.4	16	56.2	32	53.1
Washington.....	55	48	85.4	40	46.9	30	41.0	38	52.6	9	11.1	39	92.3
Minnesota.....	63	34	89.2	34	91.2	33	51.5	30	80.7	4	75.0	21	38.1
Texas.....	49	29	51.7	34	20.6	27	14.8	27	77.8	6	50.0	16	56.2
Oregon.....	37	32	100.0	31	51.8	26	34.0	25	52.0	16	43.7	25	52.0
Colorado.....	34	28	92.0	27	29.6	19	36.8	25	68.0	5	80.0	21	81.0
Missouri.....	31	25	20.0	25	8.0	20	10.0	18	72.2	6	66.7	21	28.6
United States.....	1,237	934	78.5	960	30.4	816	24.0	814	74.8	211	38.9	693	67.0

GRAIN

Illinois.....	432	429	99.8	432	100.0	414	82.6	411	38.7	335	98.5	319	1.9
Iowa.....	368	361	98.0	366	98.4	351	84.9	363	47.0	250	99.2	244	1.2
Kansas.....	347	341	96.5	341	98.5	327	84.4	329	80.9	246	99.0	231	2.6
Nebraska.....	344	335	99.1	344	98.9	338	87.3	331	74.3	237	99.2	233	3.0
North Dakota.....	332	332	99.7	332	99.7	332	88.4	332	75.1	273	99.6	268	1.9
Minnesota.....	301	283	98.9	289	96.7	276	80.0	273	54.6	213	90.1	169	3.0
South Dakota.....	235	232	99.0	234	99.6	237	89.4	228	84.2	158	90.4	156	3.2
Ohio.....	205	205	100.0	205	100.0	202	88.6	204	70.6	168	100.0	161	2.4
Missouri.....	163	154	97.4	154	98.1	146	50.1	136	64.7	114	98.2	107	4.7
Indiana.....	138	130	90.2	129	99.2	128	87.5	121	67.8	99	100.0	95	4.2
United States.....	3,338	3,294	98.9	3,326	98.2	3,178	85.4	3,190	63.9	2,426	98.2	2,292	3.4

¹ Independent locals and units of federations only.

TABLE 10.—Associations with specified organization characteristics, by commodities and leading States, 1925¹—Continued

LIVESTOCK														
State	All associations listed		Incorporation		Capital stock		Capital stock dividends		Patronage refunds		Business for non-members		Contracts	
			Reports	Percentage incorporated	Reports	Percentage with capital stock	Reports	Percentage paying stock dividends	Reports	Percentage paying patronage refunds	Reports	Percentage handling business for nonmembers	Reports	Percentage with contracts
Iowa.....	374	374	84.1	374	23.1	331	11.8	303	35.6	223	55.2	220	19.7	
Minnesota.....	300	249	23.7	267	10.5	231	8.7	216	37.9	77	84.4	90	0	
Illinois.....	273	273	38.6	273	1.1	224	1.3	198	32.2	191	38.7	194	3.1	
Wisconsin.....	154	127	35.4	124	20.2	114	15.8	117	45.3	60	86.7	62	1.6	
Missouri.....	117	109	17.4	109	5.5	84	9.5	70	61.8	39	92.1	44	13.6	
South Dakota.....	94	88	18.2	86	4.7	71	11.5	73	57.7	44	54.5	46	43.5	
Indiana.....	91	82	46.3	80	22.5	72	97.3	66	60.4	17	82.4	17	0	
Michigan.....	82	81	84.0	80	31.2	77	39.9	66	45.5	31	64.5	36	0	
United States.....	1,770	1,684	44.2	1,698	15.7	1,438	8.8	1,342	45.4	793	65.7	827	8.8	

NUTS													
United States.....	39	32	93.8	32	25.0	29	0	30	93.3	4	25.0	4	75.0

POULTRY AND EGGS													
United States.....	71	52	73.1	51	35.3	37	35.1	45	64.4	32	21.9	33	76.8

TOBACCO													
United States.....	24	9	100.0	9	44.4	7	28.6	8	87.5	2	50.0	2	100.0

WOOL													
United States.....	91	74	62.2	74	9.5	63	3.3	41	47.7	22	31.8	22	54.5

MISCELLANEOUS SELLING													
United States.....	632	603	51.3	610	60.3	553	51.2	532	67.9	140	83.6	135	37.8

MISCELLANEOUS BUYING													
United States.....	1,217	1,086	34.7	1,100	74.1	1,019	65.0	954	54.1	250	33.5	222	11.3

¹ Independent locals and units of federations only.

TABLE 11.—Dairy products: Associations, estimated membership, and estimated business, by geographic divisions and leading States, 1925

[Associations listed by the United States Department of Agriculture]

Geographic division	Number of associations			Geographic division	Membership, 1925				Geographic division	Amount of business, 1925			
	Number	Per cent	Cumulative per cent		Number	Estimated membership	Per cent	Cumulative per cent		Number	Estimated business	Per cent	Cumulative per cent
East North Central.....	906	41.2	41.2	West North Central.....	874	131,480	28.6	28.6	East North Central.....	906	105,150	30.9	30.9
West North Central.....	874	39.8	81.0	East North Central.....	906	130,500	28.4	57.0	West North Central.....	874	126,030	23.6	51.4
Middle Atlantic.....	143	6.5	87.5	Middle Atlantic.....	143	113,800	24.7	81.7	Middle Atlantic.....	143	111,700	20.9	75.5
Pacific.....	93	4.2	91.7	New England.....	80	36,360	7.9	89.6	Pacific.....	93	56,800	10.6	86.0
New England.....	80	3.6	95.3	Pacific.....	93	22,300	4.8	94.4	New England.....	80	52,100	9.7	95.7
East South Central.....	37	1.7	97.0	East South Central.....	37	11,280	2.4	96.8	South Atlantic.....	23	10,650	2.0	97.7
Mountain.....	33	1.5	98.5	South Atlantic.....	23	7,220	1.6	98.4	Mountain.....	33	7,250	1.3	99.0
South Atlantic.....	23	1.1	99.6	Mountain.....	33	6,290	1.4	99.8	East South Central.....	37	4,350	.8	99.8
West South Central.....	8	.4	100.0	West South Central.....	8	770	.2	100.0	West South Central.....	8	940	.2	100.0
United States.....	2,197	100.0		United States.....	2,197	460,000	100.0		United States.....	2,197	535,000	100.0	
Leading States:				Leading States:					Leading States:				
Wisconsin.....	716	32.6	32.6	New York.....	86	79,300	17.2	17.2	Minnesota.....	578	83,000	15.5	15.5
Minnesota.....	578	26.3	58.9	Minnesota.....	578	78,200	17.0	34.2	New York.....	86	78,000	14.6	30.1
Iowa.....	226	10.3	69.2	Wisconsin.....	716	54,500	11.9	46.1	Wisconsin.....	716	74,000	13.8	43.9
Michigan.....	87	4.0	73.2	Pennsylvania.....	57	34,500	7.5	53.6	California.....	19	34,000	6.4	50.3
New York.....	86	3.9	77.1	Iowa.....	226	33,700	7.3	60.9	Pennsylvania.....	57	33,700	6.3	56.6
Pennsylvania.....	57	2.6	79.7	Michigan.....	87	26,600	5.8	66.7	Iowa.....	226	32,500	0.1	62.7
Oregon.....	50	2.3	82.0	Ohio.....	39	25,900	5.6	72.3	Michigan.....	87	30,680	5.7	68.4
Vermont.....	42	1.9	83.9	Massachusetts.....	18	22,500	4.9	77.2	Illinois.....	39	29,000	5.4	73.8
Illinois.....	39	1.8	85.7	Illinois.....	39	18,400	4.0	81.2	Ohio.....	39	23,000	5.2	79.0
Ohio.....	39	1.8	87.5	Washington.....	24	9,800	2.1	83.3	Massachusetts.....	18	26,060	4.9	83.9
Indiana.....	25	1.1	88.6	South Dakota.....	25	8,100	1.8	85.1	Washington.....	24	16,500	3.1	87.0
South Dakota.....	25	1.1	89.7	California.....	19	8,060	1.7	86.8	Connecticut.....	7	9,000	1.7	88.7
Tennessee.....	25	1.1	90.8	Nebraska.....	11	7,230	1.6	88.4	Vermont.....	42	8,500	1.6	90.3
Washington.....	24	1.1	91.9	Kentucky.....	6	7,060	1.5	89.9	Maine.....	7	7,000	1.3	91.6
California.....	19	.9	92.8	Vermont.....	42	5,500	1.2	91.1	Maryland.....	2	6,500	1.2	92.8
All others.....	159	7.2	100.0	All others.....	224	40,710	8.9	100.0	All others.....	250	38,620	7.2	100.0
Total.....	2,197	100.0		Total.....	2,197	460,000	100.0		Total.....	2,197	535,000	100.0	

TABLE 12.—Fruits and vegetables: Associations, estimated membership, and estimated business, by geographic divisions and leading States, 1925

[Associations listed by the United States Department of Agriculture]

Geographic division	Number of associations			Geographic division	Membership, 1925				Geographic division	Amount of business			
	Number	Per cent	Cumulative per cent		Number	Estimated membership	Per cent	Cumulative per cent		Number	Estimated business	Per cent	Cumulative per cent
Pacific.....	347	28.1	28.1	Pacific.....	347	71,400	39.7	39.7	Pacific.....	347	150,600	53.8	53.8
South Atlantic.....	162	13.1	41.2	South Atlantic.....	162	24,540	13.6	53.3	South Atlantic.....	162	60,370	21.6	75.4
East North Central.....	153	12.4	53.6	Mountain.....	76	19,760	11.0	64.3	East North Central.....	153	19,350	6.9	82.3
West South Central.....	147	11.9	65.5	East North Central.....	153	14,800	8.2	72.5	Middle Atlantic.....	109	14,150	5.0	87.3
West North Central.....	116	9.4	74.9	West South Central.....	147	13,620	7.2	79.7	Mountain.....	76	8,700	3.1	90.4
Middle Atlantic.....	109	8.8	83.7	West North Central.....	116	12,390	6.9	86.6	West South Central.....	147	8,530	3.1	93.5
East South Central.....	82	6.6	90.3	Middle Atlantic.....	109	11,870	6.6	93.2	West North Central.....	116	6,590	2.3	95.8
Mountain.....	76	6.1	96.4	East South Central.....	82	9,660	5.4	98.6	New England.....	45	6,470	2.3	98.1
New England.....	45	3.6	100.0	New England.....	45	2,470	1.4	100.0	East South Central.....	82	5,240	1.9	100.0
United States.....	1,237	100.0	-----	United States.....	1,237	180,000	100.0	-----	United States.....	1,237	280,000	100.0	-----
Leading States:				Leading States:					Leading States:				
California.....	255	20.6	20.6	California.....	255	59,950	33.3	33.3	California.....	255	132,000	47.1	47.1
Florida.....	98	7.9	28.5	Utah.....	11	19,500	5.3	38.6	Florida.....	98	34,000	12.1	59.2
New York.....	84	6.8	35.3	Florida.....	98	8,300	4.6	43.2	Virginia.....	14	13,500	4.8	64.0
Arkansas.....	70	5.7	41.0	Virginia.....	14	8,000	4.4	47.6	Washington.....	55	9,500	3.4	67.4
Michigan.....	60	4.8	45.8	New York.....	84	7,900	4.4	52.0	Oregon.....	37	9,100	3.3	70.7
Washington.....	55	4.4	50.2	Michigan.....	60	7,200	4.0	56.0	South Carolina.....	11	8,680	3.1	73.8
Minnesota.....	53	4.3	54.5	Colorado.....	34	6,950	3.9	59.9	New York.....	84	8,000	2.9	76.7
Texas.....	49	4.0	58.5	Washington.....	70	6,100	3.4	63.3	Michigan.....	60	5,500	2.0	78.7
Oregon.....	37	3.0	61.5	Arkansas.....	70	5,650	3.1	66.4	Massachusetts.....	5	5,000	1.8	80.5
Tennessee.....	36	2.9	64.4	Oregon.....	37	5,410	3.0	69.4	New Jersey.....	5	4,300	1.5	82.0
Colorado.....	34	2.8	67.2	Minnesota.....	53	5,200	2.9	72.3	Indiana.....	24	4,250	1.5	83.5
Maine.....	34	2.8	70.0	Missouri.....	31	5,300	2.5	72.8	Colorado.....	34	4,100	1.5	85.0
Missouri.....	31	2.5	72.5	Georgia.....	10	4,420	2.4	77.2	Ohio.....	21	4,090	1.4	86.4
Wisconsin.....	26	2.1	74.6	Tennessee.....	36	4,360	2.4	79.6	Wisconsin.....	26	3,690	1.3	87.7
Indiana.....	24	1.9	76.5	Louisiana.....	20	3,150	1.8	81.2	Missouri.....	31	3,200	1.1	88.8
All others.....	291	23.5	100.0	All others.....	369	33,840	18.8	100.0	All others.....	477	31,270	11.2	100.0
Total.....	1,237	100.0	-----	Total.....	1,237	180,000	100.0	-----	Total.....	1,237	280,000	100.0	-----

1 Including Utah Sugar-beet Cooperative Association.

TABLE 13.—Grain: Associations, estimated membership, and estimated business, by geographic divisions and leading States, 1925

[Associations listed by the United States Department of Agriculture]

Geographic division	Number of associations			Geographic division	Membership, 1925				Geographic division	Amount of business			
	Number	Per cent	Cumulative per cent		Number	Estimated membership	Per cent	Cumulative per cent		Number	Estimated business	Per cent	Cumulative per cent
West North Central.....	2,090	62.6	62.6	West North Central.....	2,090	302,560	58.2	58.2	West North Central.....	2,090	463,000	61.7	61.7
East North Central.....	924	27.7	90.3	East North Central.....	924	144,700	27.8	86.0	East North Central.....	924	189,000	25.2	84.9
Mountain.....	132	3.9	94.2	West South Central.....	112	33,700	6.5	92.5	West South Central.....	112	41,000	5.5	92.4
West South Central.....	112	3.4	97.6	Mountain.....	132	31,030	6.0	98.5	Mountain.....	132	35,870	4.8	97.2
Pacific.....	62	1.9	99.5	Pacific.....	62	5,470	1.1	99.6	Pacific.....	62	17,200	2.3	99.5
Middle Atlantic.....	7	.2	99.7	Middle Atlantic.....	7	1,290	.2	99.8	Middle Atlantic.....	7	1,200	.3	99.8
South Atlantic.....	5	.1	99.8	South Atlantic.....	5	920	.2	100.0	South Atlantic.....	5	780	.1	99.9
East South Central.....	3	.1	99.9	East South Central.....	3	170	.0		New England.....	3	410	.1	100.0
New England.....	3	.1	100.0	New England.....	3	160	.0		East South Central.....	3	240	.0	
United States.....	3,338	100.0		United States.....	3,338	520,000	100.0		United States.....	3,338	750,000	100.0	
Leading States:				Leading States:					Leading States:				
Illinois.....	432	12.9	12.9	Kansas.....	347	62,300	12.0	12.0	Illinois.....	432	92,000	12.3	12.3
Iowa.....	368	11.0	23.9	Minnesota.....	301	50,800	9.8	21.6	Kansas.....	347	90,000	12.0	24.3
Kansas.....	347	10.4	34.3	Illinois.....	432	48,600	9.3	31.1	North Dakota.....	332	85,000	11.3	35.6
Nebraska.....	344	10.3	44.6	Iowa.....	368	47,300	9.1	40.2	Nebraska.....	344	70,000	9.4	45.0
North Dakota.....	332	10.0	54.6	North Dakota.....	332	46,000	8.8	49.0	Minnesota.....	301	70,000	9.4	54.4
Minnesota.....	301	9.0	63.6	Nebraska.....	344	42,760	8.2	57.2	Iowa.....	368	65,000	8.7	63.1
South Dakota.....	235	7.0	70.6	Indiana.....	138	36,000	6.9	64.1	South Dakota.....	235	58,000	7.7	70.8
Ohio.....	205	6.1	76.7	South Dakota.....	235	32,300	6.2	70.3	Ohio.....	205	40,000	5.3	76.1
Missouri.....	163	4.9	81.6	Ohio.....	205	31,800	6.1	76.4	Indiana.....	138	28,000	3.7	79.8
Indiana.....	138	4.1	85.7	Oklahoma.....	89	23,400	4.5	80.9	Missouri.....	163	25,000	3.3	83.1
Michigan.....	92	2.8	88.5	Missouri.....	163	21,100	4.1	85.0	Michigan.....	92	23,000	3.1	86.2
Oklahoma.....	89	2.7	91.2	Michigan.....	92	18,900	3.7	88.7	Oklahoma.....	89	22,000	2.9	89.1
Montana.....	64	1.9	93.1	Montana.....	64	17,200	3.3	92.0	Montana.....	64	16,000	2.1	91.2
Wisconsin.....	57	1.7	94.8	Colorado.....	40	10,900	2.1	94.1	Colorado.....	40	15,000	2.0	93.2
Washington.....	42	1.3	96.1	Wisconsin.....	57	9,400	1.8	95.9	Texas.....	16	10,000	1.3	94.5
All others.....	129	3.9	100.0	All others.....	131	21,240	4.1	100.0	All others.....	172	41,000	5.5	100.0
Total.....	3,338	100.0		Total.....	3,338	520,000	100.0		Total.....	3,338	750,000	100.0	

AGRICULTURAL COOPERATIVE ASSOCIATIONS, 1925

TABLE 14.—Livestock: Associations, estimated membership, and estimated business, by geographic divisions and leading States, 1925

[Associations listed by the United States Department of Agriculture]

Geographic division	Number of associations			Geographic division	Membership, 1925				Geographic division	Amount of business, 1925			
	Number	Per cent	Cumulative, per cent		Number	Estimated membership	Per cent	Cumulative, per cent		Number	Estimated business	Per cent	Cumulative, per cent
West North Central.....	1,005	56.8	56.8	West North Central.....	1,005	236,650	59.2	59.2	West North Central.....	1,005	164,800	51.5	51.5
East North Central.....	674	38.1	94.9	East North Central.....	674	147,230	36.8	96.0	East North Central.....	674	132,000	41.3	92.8
South Atlantic.....	30	1.7	96.6	East South Central.....	22	4,600	1.1	97.1	Pacific.....	7	8,080	2.5	95.3
East South Central.....	22	1.2	97.8	South Atlantic.....	30	4,300	1.1	98.2	Middle Atlantic.....	3	4,000	1.2	96.5
Mountain.....	21	1.2	99.0	Pacific.....	7	2,700	.7	98.9	Mountain.....	21	3,220	1.0	97.5
Pacific.....	7	.4	99.4	Mountain.....	21	2,670	.7	99.6	South Atlantic.....	30	3,100	1.0	98.5
West South Central.....	7	.4	99.8	West South Central.....	7	1,360	.3	99.9	West South Central.....	7	2,550	.8	99.3
Middle Atlantic.....	3	.2	100.0	Middle Atlantic.....	3	450	.1	100.0	East South Central.....	22	2,240	.7	100.0
New England.....	1	.0		New England.....	4	40	.0		New England.....	1	10	.0	
United States.....	1,770	100.0		United States.....	1,770	400,000	100.0		United States.....	1,770	320,000	100.0	
Leading States:				Leading States:					Leading States:				
Iowa.....	374	21.1	21.1	Missouri.....	117	88,700	22.2	22.2	Illinois.....	273	66,000	20.6	20.6
Minnesota.....	300	17.0	38.1	Iowa.....	374	58,350	14.6	36.8	Iowa.....	374	65,000	20.3	40.9
Illinois.....	273	15.4	53.5	Minnesota.....	300	52,300	13.1	49.9	Minnesota.....	300	56,000	17.5	58.4
Wisconsin.....	154	8.7	62.2	Illinois.....	273	50,850	12.7	62.6	Ohio.....	74	22,000	6.9	65.3
Missouri.....	117	6.6	68.8	Ohio.....	74	27,700	6.9	69.5	Indiana.....	91	20,000	6.3	71.6
South Dakota.....	94	5.3	74.1	Wisconsin.....	154	27,150	6.8	76.3	Missouri.....	117	20,000	6.3	77.9
Indiana.....	91	5.2	79.3	Indiana.....	91	24,630	6.2	82.5	Wisconsin.....	154	14,000	4.4	82.3
Michigan.....	82	4.6	83.9	South Dakota.....	94	17,000	4.4	86.9	South Dakota.....	94	10,000	3.1	85.4
Ohio.....	74	4.2	88.1	Michigan.....	82	16,000	4.2	91.1	Michigan.....	82	10,000	3.1	88.5
North Dakota.....	60	3.4	91.5	North Dakota.....	60	7,450	1.9	93.0	Nebraska.....	37	9,000	2.8	91.3
Nebraska.....	37	2.1	93.6	Nebraska.....	37	6,600	1.6	94.6	California.....	5	8,000	2.5	93.8
Kansas.....	23	1.3	94.9	Kansas.....	23	5,650	1.4	96.0	New York.....	2	3,000	.9	94.7
West Virginia.....	18	1.0	95.9	California.....	5	2,500	.6	96.6	North Dakota.....	60	3,000	.9	95.6
All others.....	73	4.1	100.0	All others.....	86	13,620	3.4	100.0	All others.....	107	14,000	4.4	100.0
Total.....	1,770	100.0		Total.....	1,770	400,000	100.0		Total.....	1,770	320,000	100.0	

TABLE 15.—Wool: Associations, estimated membership, and estimated business, by geographic divisions and leading States, 1925

[Associations listed by the United States Department of Agriculture]

Geographic division	Number of associations			Geographic division	Membership, 1925				Geographic division	Amount of business, 1925			
	Number	Per cent	Cumulative, per cent		Number	Estimated membership	Per cent	Cumulative, per cent		Number	Estimated business	Per cent	Cumulative, per cent
Middle Atlantic.....	40	43.9	43.9	West North Central.....	13	19,700	39.4	39.4	Pacific.....	3	2,980	29.8	29.8
West North Central.....	13	14.3	58.2	East North Central.....	12	18,400	36.8	76.2	Mountain.....	10	2,650	26.6	56.4
East North Central.....	12	13.2	71.4	Pacific.....	3	4,030	8.1	84.3	East North Central.....	12	2,370	23.7	80.1
Mountain.....	10	11.0	82.4	South Atlantic.....	3	2,500	5.0	89.3	West North Central.....	13	940	9.4	89.5
East South Central.....	7	7.7	90.1	Middle Atlantic.....	40	2,400	4.8	94.1	Middle Atlantic.....	40	470	4.7	94.2
Pacific.....	3	3.3	93.4	East South Central.....	7	1,800	3.6	97.7	South Atlantic.....	3	290	2.9	97.1
South Atlantic.....	3	3.3	96.7	Mountain.....	10	610	1.2	98.9	East South Central.....	7	230	2.3	99.4
New England.....	3	3.3	100.0	New England.....	3	560	1.1	100.0	New England.....	3	60	.6	100.0
West South Central.....	0			West South Central.....	0				United States.....	91	10,000	100.0	
United States.....	91	100.0		United States.....	91	50,000	100.0		Leading States:				
Leading States:				Leading States:					Oregon.....	1	2,500	25.0	25.0
New York.....	32	35.1	35.1	Iowa.....	1	13,500	27.0	27.0	Ohio.....	3	2,000	20.0	45.0
Pennsylvania.....	8	8.8	43.9	Ohio.....	3	12,000	24.0	51.0	Utah.....	3	1,200	12.0	57.0
Indiana.....	6	6.6	50.5	Indiana.....	6	5,000	10.0	61.0	Montana.....	1	1,160	11.6	68.6
Minnesota.....	5	5.5	56.0	Oregon.....	1	3,000	6.0	67.0	South Dakota.....	2	380	3.8	72.4
Tennessee.....	4	4.4	60.4	Minnesota.....	5	2,000	4.0	71.0	California.....	1	380	3.8	76.2
Ohio.....	3	3.3	63.7	South Dakota.....	2	1,800	3.6	74.6	New York.....	32	360	3.6	79.8
Kentucky.....	3	3.3	67.0	New York.....	32	1,500	3.0	77.6	Minnesota.....	5	250	2.5	82.3
Utah.....	3	3.3	70.3	West Virginia.....	2	1,560	3.0	80.6	West Virginia.....	2	190	1.9	84.2
Colorado.....	2	2.2	72.5	Kentucky.....	3	1,300	2.6	83.2	Colorado.....	2	170	1.7	85.9
Idaho.....	2	2.2	74.7	Kansas.....	2	1,200	2.4	85.6	Indiana.....	6	170	1.7	87.6
Kansas.....	2	2.2	76.9	Virginia.....	1	1,000	2.0	87.6	Michigan.....	1	140	1.4	89.0
Massachusetts.....	2	2.2	79.1	North Dakota.....	2	1,000	2.0	89.6	Iowa.....	1	140	1.4	90.4
North Dakota.....	2	2.2	81.3	California.....	1	1,000	2.0	91.6	Kentucky.....	3	130	1.3	91.7
South Dakota.....	2	2.2	83.5	Pennsylvania.....	8	900	1.8	93.4	North Dakota.....	2	120	1.2	92.9
West Virginia.....	2	2.2	85.7	Michigan.....	1	900	1.8	95.2	All others.....	26	710	7.1	100.0
All others.....	13	14.3	100.0	All others.....	21	2,400	4.8	100.0	Total.....	91	10,000	100.0	
Total.....	91	100.0		Total.....	91	50,000	100.0						

TABLE 16.—Associations purchasing supplies, by geographic divisions and States, 1925

[Associations listed by the United States Department of Agriculture]

State and geographic division	Number of associations reporting	Building materials	Containers	Feeds	Fencing	Fertilizers	Fuel	Hardware	Instruments and machinery	Seeds	Spraying materials	General merchandise	Miscellaneous
Maine.....	31		9	13		20		2	1	3	13	7	10
New Hampshire.....	8	4	1	8		7				5	4	4	4
Vermont.....	21	4	5	14		10		1	0	2	4	8	8
Massachusetts.....	18	2	3	4		13		1	1	1	3	2	4
Rhode Island.....	5		2	4		3		2	1	1	1	4	4
Connecticut.....	35	3	4	20	3	22	3	2	3	15	4		12
New England.....	118	14	24	70	6	72	4	11	7	41	25	11	46
New York.....	130	10	76	53	10	62	17	5	3	37	24	4	33
New Jersey.....	18	2	8	6		10	2	1		9	6		12
Pennsylvania.....	133	31	58	60	6	94	13	5	10	55	25	20	55
Middle Atlantic.....	280	43	142	128	16	166	32	15	22	101	55	21	100
Ohio.....	270	59	70	204	104	123	150	7	19	54	6	3	117
Indiana.....	199	37	79	142	55	91	110	6	9	67	2	3	66
Illinois.....	379	131	114	315	122	27	291	46	48	125	7	19	114
Michigan.....	259	65	73	188	41	120	111	17	21	110	45	15	94
Wisconsin.....	284	22	72	177	8	8	68	20	24	38	4	16	136
East North Central.....	1,382	344	408	1,026	330	378	730	96	124	390	64	56	526
Minnesota.....	486	44	137	294	37	3	235	30	52	45	17	13	133
Iowa.....	539	151	131	406	120	4	348	32	26	90	4	30	125
Missouri.....	320	17	50	267	18	90	83	36	20	71	8	8	119
North Dakota.....	293	15	92	174	19	1	222	6	34	52	2	9	10
South Dakota.....	217	16	81	163	24	1	172	10	23	24	2	3	24
Nebraska.....	319	79	44	155	37		244	24	73	19	1	26	61
Kansas.....	337	28	49	279	11	7	236	34	82	56	1	42	73
West North Central.....	2,511	350	614	1,738	268	96	1,540	172	310	357	35	131	554
Delaware.....	4		1	1		4	1		2		1		1
Maryland.....	18	6	8	3	10		3	2	1	8	2		8
Virginia.....	45	3	10	9	5	32	2	2	8	30	4	4	18
West Virginia.....	1		1										
North Carolina.....	26	1	7	6	2	12	1	3	4	7	3	8	7
South Carolina.....	9		5	2		1				3			4
Georgia.....	10	1	4			12	1			5			6
Florida.....	51		20	6		34			10	10	10	5	17
South Atlantic.....	173	11	55	37	10	106	8	7	26	64	21	17	61
Kentucky.....	19	1	5	9	1	9	5		2	5	2	1	5
Tennessee.....	49	3	21	15	5	23	1		2	13	4	2	20
Alabama.....	38	1	9	9	3	28	1		5	17	3	2	9
Mississippi.....	30	1	15	10	1	27				21			11
East South Central.....	136	6	50	43	10	87	7		9	55	9	6	45
Arkansas.....	32		35	6		18	2		2	7	2	3	8
Louisiana.....	18		9	4		10				8			3
Oklahoma.....	105	4	23	73	7		69	10	7	15	1	12	16
Texas.....	71		26	30	2	14	17	3	2	20	2	2	27
West South Central.....	246	4	96	113	9	42	88	13	11	50	5	17	54
Montana.....	60		18	45	4		24	4	7	9	2	1	13
Idaho.....	30		21	9	2	1	2	4	9	3	7	4	6
Wyoming.....	9		6	6	2		2	2	4	3	3		2
Colorado.....	71	7	30	35	6	1	31	11	16	11	4	5	18
New Mexico.....	14	1	7	5	1		6	4		3	1		4
Arizona.....	10	1	7	1			2	2				2	1
Utah.....	10		4	4			1	2	3				4
Nevada.....	1												1
Mountain.....	205	10	63	105	15	2	68	29	38	29	17	12	48
Washington.....	91	5	48	35	11	8	26	18	12	4	16	5	32
Oregon.....	34		18	13	4	7	3		3	3	7	3	12
California.....	204	4	71	14	2	78		11	23	7	35	9	125
Pacific.....	329	9	137	62	17	93	29	20	33	14	58	17	160
United States.....	5,388	791	1,619	3,331	679	1,042	2,515	372	535	1,101	289	291	1,603

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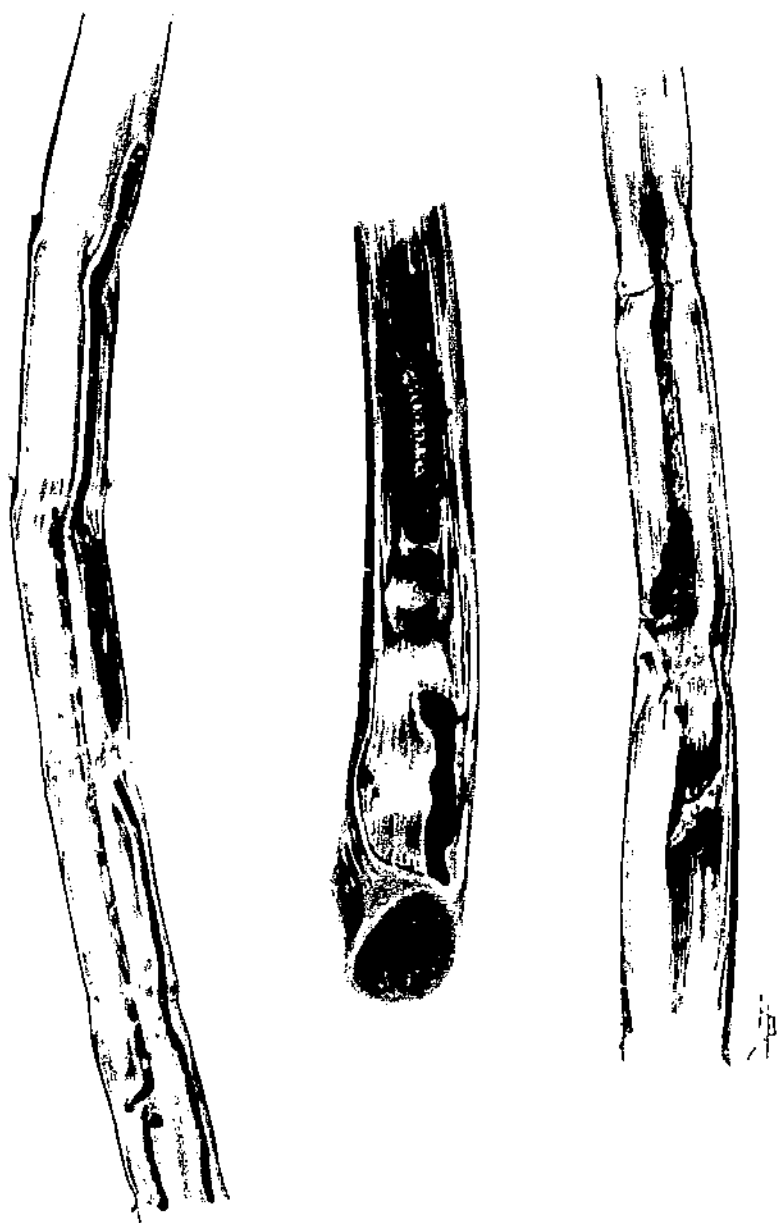
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BORER AND A BORER IN ITS TUNNEL**

The normal tissues are of white or yellowish color, and the reds and other colors are the results of diseases, especially "red rot," which follow the borer in the cane stalk, causing additional deterioration.

END