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AGRICULTURAL COMMODITY SERIES

COOPERATIVES AS A FACTOR IN THE  
DISTRIBUTION OF AGRICULTURAL  
COMMODITIES



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# COOPERATIVES AS A FACTOR IN THE DISTRIBUTION OF AGRICULTURAL COMMODITIES

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## CHAPTER I.—COOPERATIVES AND THEIR GENERAL RELATION TO DISTRIBUTION

### INTRODUCTION

This report on cooperatives as a factor in distribution is one of a series of reports issued by the Bureau of the Census. It is based principally on data secured by the first Census of Distribution taken in 1930 as part of the Fifteenth Decennial Census. This report has been prepared in the Bureau of the Census under the supervision of Dr. R. J. McFall, chief statistician for distribution, by Charles D. Bohannan, in charge of the agricultural and rural distribution.

**Scope of the Census of Distribution.**—The Census of Distribution taken in 1930 was essentially a census of business or trade. The act required the rendering of reports by all individuals, firms, or organizations engaged principally in the assembling and (or) distribution of agricultural products, manufactured goods, and the like, either at wholesale or retail. It did not include the sales of farm products by the producers as this is considered an agricultural or farm operation and hence was covered by the Census of Agriculture. Neither were data secured by the Census of Distribution for manufacturers and processors on that phase of their business since that is covered by the Census of Manufactures. The Census of Distribution did, however, secure, either independently or in cooperation with the Census of Manufactures, certain data on the assembling of agricultural materials, principally livestock, butterfat, poultry, and eggs, and on the channels of distribution for sales channels used by manufacturers. The Census of Distribution did not cover storage or warehouse concerns, the transportation business, or strictly service businesses.

**Purpose of the agricultural commodities reports.**—The purpose of the reports on the distribution of agricultural commodities is to present a unified picture of the distribution of the major agricultural products, such as will be of the greatest value to individuals, firms, and organizations concerned with any phase of the industry including producers, buyers, dealers, manufacturers, and consumers, as well as to students of the economics of agriculture in its relation to the broader problems of our national economic life. To that end the reports include not only the tabular presentation of the data from the Census of Distribution and the other related economic data but also incorporate such analytic and descriptive materials as it is felt, will aid in the solution of the problems arising in connection with the distribution of the various products.

In addition to this report on cooperatives as a factor in distribution, there are also reports on the distribution of butter, cheese, evaporated and condensed milk, and ice cream; assembling of butterfat; distribution of fluid milk and cream; distribution of livestock, and grain; and the assembling of agricultural commodities by retailers.

These reports present the distribution data as gathered on the Census of Distribution schedules or obtained by certain supplementary inquiries addressed to various classes of buyers, assemblers, and other distributors of the various agricultural commodities at wholesale and also at retail, in cases where the agricultural product concerned is sold at retail to consumers in practically its original form or after a preliminary processing form.

**Method of taking the Census of Distribution.**—The business data were secured on schedules by enumerators who called at the place of business or office of the individual, firm, or organization. The census, perforce, had to be taken on the

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establishment basis and hence it is not to be expected that reports were secured from a rather large group of individuals, who, while they play a considerable part, both in the assembling of agricultural commodities and in retailing, have no established place of business. This is quite likely to occur in the case of cooperatives, both cooperative marketing associations among farmers and cooperative buying associations either among farmers or other consumers. As noted later many such organizations not only have a very loose type of organization, but maintain no place of business, frequently not even an office. The data secured have, however, been supplemented as far as possible by data from other sources. While neither the Bureau of the Census nor the writer can vouch for the accuracy of these additional data, only such data were used as were known to have been so gathered as to safeguard as much as possible their general accuracy. The justification, if any is needed, for their inclusion here is to be found in the general importance of cooperatives as a factor in distribution.

**Kinds of cooperatives included.**—While cooperatives for purposes of improved production methods and for financial, transportation, and other services are important, and have a direct bearing on the distribution of commodities or merchandise, such cooperatives were not covered by the Census of Distribution and only incidental reference is made to them in this report. Neither does this report cover the various types and forms of cooperative endeavors among retailers, such as the maintenance of cooperative wholesale establishments (other than those maintained by retail stores which are themselves cooperatives); the so-called voluntary chains; nor trade and manufacturers' associations.

**The schedules used.**—In securing reports on cooperatives, the schedules used were the same as those used for assemblers, and wholesalers. In the smaller places, that is, places under 10,000 population, a general, or omnibus schedule was used for all kinds, types, and classes of assemblers, wholesalers, and retailers. This schedule did not provide place for reporting by kind either the amounts or the value of commodities sold.

In the cities over 10,000 population differentiated schedules were used for the wholesale and for the retail trades. These schedules did provide for the break-down of sales by commodities. One exception should be noted here, and that is that in the case of retail stores doing less than \$60,000 annual volume of business a short form schedule was used which did not provide a break-down of sales by commodities.

It should also be noted that while schedules were received for cooperative stores in cities over 10,000 population, they were, for purposes germane to the work of the section having charge of big city retailing, not separately tabulated. So that in this report it is possible to present Census of Distribution data only for such cooperative stores as were located in places of less than 10,000 population and this limitation applies also to cooperative buying associations.

While it is apparent from the foregoing that the schedules were not especially designed for securing reports on cooperatives they did nevertheless cover the essential business data for such organizations with the exception of the commodity break down of sales. That is, the schedules used provided for securing the name; address; date organized; number of employees (full-time and part-time); salaries and wages; rent paid, if any; interest on any money borrowed for the conduct of the business; total sales, subitemized as to cash and credit sales; sales to other dealers; sales to retailers; and a list of the principal commodities handled.

Under the general inquiry regarding character of organization, provision was made to report whether or not the business was cooperative. Further, where a cooperative was a branch or unit of another cooperative, space was provided to give the name and address of such other cooperative. Under the general inquiry on class of business there was a listing of several different types and kinds of business and the person making out the report was required to make a check mark after the appropriate type or kind of business classification. This list of types and kinds included cooperative marketing associations and cooperative buying associations. The inquiry on number of proprietors and firm members called for the total number of members in the case of cooperatives.

**Classification used.**—The classification of a schedule as being for a cooperative naturally had to be made from the information on the schedule itself, except in a few instances where other means of checking were available. It is possible that some schedules were received for cooperatives which were not recognizable as such from the data thereon. For examples, since many cooperatives are incorporated, some are so reported as merely incorporated instead of being reported as *incorporated cooperatives*. It is also possible that some data are here included from business organizations which some persons might not be willing to accept as

coming under their own personal definition of what constitutes a cooperative. There has been a great deal of discussion, more or less heated, as to what are and what are not cooperatives, as well as to whether certain changes in membership relations cause what had been a cooperative to cease so to be. Naturally the Census of Distribution could not go into the matter of such discriminations.

Concerning the inquiry on interrelationships of cooperatives it should be noted that from the information received it was impossible in all cases to make clear-cut classifications from the standpoint of the interrelations of one association with another. However, in many cases the reports were quite clear and definite. An attempt was made to differentiate between the local cooperative associations and central or federated sales agencies and for the most part this classification seems to be quite clear cut. For example, in the case of the livestock cooperatives there was little difficulty in distinguishing between those schedules which were reports from local cooperative shipping associations and those which covered the business of the federated or cooperative producer commission companies or sales agencies on the various livestock markets. However, cooperatives, like other handlers of farm products, do not all operate entirely on the same bases and the interrelationships also vary. Further discussion on some of these interrelations are to be found in various sections of chapter II which discusses the data on cooperatives by kind of agricultural commodity handled. Any differences in the data on number of cooperatives, sales, etc., contained in this report as compared with previous census reports are due to differences in classification, principally as to commodities handled.

Total sales were not subdivided between sales for members and sales, if any, made for nonmembers. So also the inquiry on sales at retail did not differentiate between purchases for members and purchases for, or sales to, nonmembers. Neither were inquiries made as to the amount of profit, gross or net, nor as to any amounts prorated back to the members.

With the exceptions of cooperative stores and cooperative buying associations the cooperatives for which official Census of Distribution data are published in this report are agricultural cooperatives. That is, organizations which reported that they were engaged in the selling of one or more farm products for their members.

**Agricultural cooperatives are of many types.**—Agricultural cooperatives, that is, cooperative endeavors or organizations of farmers, are of many forms or types. The purposes for which organized, that is, the results sought, are likewise varied. They range from the small local, entirely independent (that is, as far as any connection or affiliation with other groups is concerned) cooperatives such as cooperative breeding associations, cooperative crop improvement associations, general community social and economic organizations, butchering rings or circles, wool pools, cooperative buying associations, and the like, to the large and rather intricate set-ups for the assembling, processing, advertising, and distribution of one or more agricultural commodities. These larger cooperatives furnish to their members supplies both for production and marketing purposes and in some instances own their own mills for the output of shipping containers. Naturally there is a vast difference between the relatively simple local and more or less temporary and loosely organized associations and these tremendous organizations. Between these two extremes are found many classes and types of cooperatives.

In these days when cooperatives are so much discussed one finds prevalent the opinion that they are something new. It is thus interesting to note that the idea of cooperatives among producers of agricultural commodities is far from a new one. This is true both of farmer or agricultural associations for the general improvement of agricultural conditions locally or throughout a State, and of marketing cooperatives. One of the earliest forms of the latter were the cooperative wool depots described in the report of the Patent Office of 1848 covering the work of the Division of Agriculture. The method of operation of the wool pools and the problems they were working on and solving were strikingly similar to those of the cooperative wool pools in Kentucky in 1915 at the time the writer of this report made a State-wide survey of the cooperative movement in that State. The advice to wool growers concerning care of flocks and fleeces was almost identical with that issued by the Kentucky wool pools and in fact similar to that now being issued by the various cooperatives as well as by the State experiment stations and the United States Department of Agriculture.

Naturally every period of pronounced economic disturbance or depression among the agricultural producers has resulted in increased attention to cooperative self-help endeavors. Some of these have been more or less sporadic marketing attempts developing at times to considerable proportions and later largely dying

out. Others have resulted in the organization of large-scale farmer organizations operating throughout many States and functioning not only in marketing but in other farm problems. Some of these have ceased to function.

### LARGE-SCALE AGRICULTURAL ORGANIZATIONS

**The Order of the Patrons of Husbandry, or the Grange,** as it is more commonly known, the first to be organized, still exists and is apparently, in spite of its ups and downs, now larger, stronger, and more efficient than ever. It was organized shortly after the Civil War (1867), by Mr. Kelly who had been commissioned by the President of the United States to make a study of agricultural problems throughout the South; it spread rapidly, especially throughout the Middle Western States in which the farmers at that time were experiencing so much economic difficulty, largely an outgrowth of conditions affecting the marketing of wheat, one of their chief crops. There was also, however, considerable development in the southern and southeastern States. In 1875 there had been organized nearly 22,000<sup>1</sup> local Granges, some in each State and territory, except Arizona.

The Grange was then, as it still is, entirely nonpartisan in its activities. However, it did interest itself in and exerted its influence in securing the passage of both State and National legislation aimed at the improvement of social and economic conditions. Here may be mentioned railroad legislation, culminating in the first State railway commission and eventually in the Interstate Commerce Commission; parcel post; good roads; increased expenditures for agricultural colleges and public education in general; and in the establishment of a Cabinet Department of Agriculture. The economic activities of the Grange in this early period of its development were chiefly concerned with the establishment of cooperative elevators, cooperative stores, cooperative shipping associations, and general cooperative buying associations. In some cases the State granges even entered into the manufacturing of farm implements and machinery.

After 1876, for various reasons, the Grange declined in membership and in the scope of its activities. The Grange did not by any means die out, but has been in continuous existence since it was first organized; and within the last 15 years has entered a new period of nation-wide development. At the present time many of the local and State Granges are quite active, both in cooperative marketing and cooperative purchasing. Some of the cooperative stores which the writer has had occasion to inspect are very well managed and up-to-date mercantile establishments.

**The Farmers' Alliance and the Agricultural Wheel.**—These two organizations, starting about the same time, one in 1875 and the other in 1882, both exercised a considerable amount of influence, but both have since passed out of existence. Probably the primary causes for the organization of each of these groups were the conditions surrounding the marketing of cotton. The Alliance, unlike the Grange, did take a very active interest in politics.

**The American Society of Equity.**—This society was organized about 1902 and was the direct outgrowth of the relatively low price of wheat. The founder of the organization and the farmers who joined it felt that the wheat price was unduly low and that by cooperative effort they could effect a material increase in price. Later the Equity became interested in the low price of tobacco in Kentucky. How much of the subsequent increase in the prices of wheat and tobacco was due to the Equity's activities and how much was due to social and economic conditions there is no way of determining. However, the work of the Equity at that time, as well as other cooperative endeavors which had been aroused by low prices, are very good illustrations of the well-known truth that during periods of prosperity strong individualism develops; while in periods of economic depression there is a general willingness to forego somewhat individual privileges and to work together for the common good. The American Society of Equity, while at present not as large in total membership as some other farmers' organizations, is still a significant factor in cooperative marketing including elevators, livestock shipping associations, cooperative shipping of eggs and poultry, and the manufacture and selling of butter. In fact, one of the largest creamery butter plants in the United States is an Equity plant.

**National Farmers' Educational and Cooperative Union.**—This organization originated in the cotton States and for years had as its chief activity the improvement of marketing methods for that important farm product. The Union, however, has expanded into other States and is today very active in connection

<sup>1</sup> Buck, "The Granger Movement."

with cooperative marketing of a number of farm products in addition to cotton, and also in cooperative purchasing, both through buying associations and the maintenance of cooperative stores.

**The American Farm Bureau Federation.**—This, the latest of the national farm organizations to develop, was an outgrowth of the county farm bureaus which developed at about the same time as the system of county agricultural agents. As these local county farm bureaus developed in strength and importance they organized the State Federation and at a meeting in Chicago in 1919 there was organized the American Farm Bureau Federation. This period immediately following the world war again presented social and economic conditions favorable to the development of cooperative endeavors among farmers. The Farm Bureau Federation interests itself both in legislative matters related to agriculture and also in the cooperative marketing of a considerable number of farm products.

Both the Grange and the Farm Bureau Federation maintain legislative representatives in Washington; and for the past 2 years the Farmers' Union has been represented in Washington during sessions of Congress by its president.

The foregoing, of course, is a very much abbreviated summary of these large-scale farm cooperative endeavors. Many other smaller organizations, many of them bearing names quite similar to these larger organizations, have existed at various times. Other very potent influences in improving agricultural production and agricultural marketing have been the various county and State horticultural and agricultural societies and associations. The local, State, and national commodity cooperative organizations are discussed at greater length in chapter II, Agricultural Cooperatives by Kind of Commodity Handled.

## SUMMARY OF THE CENSUS OF DISTRIBUTION DATA ON MARKETING COOPERATIVES

**Summary by counties.**—Table 1, page 8, presents by geographic divisions, States, and counties the local marketing cooperatives of all kinds for which the Census of Distribution received schedules covering their 1929 business. In considering the number of cooperatives, membership, and total business it should be kept in mind, as noted in the introduction, that the Census of Distribution was taken on the establishment basis, and that many cooperatives do not have places of business or establishments. Further, there have not been included in this table the federated sales agencies such as the cooperative livestock commission companies, the federated butter and cheese sales agencies, and the like. In many cases to have done so would have meant duplication of sales figures. Note, also, that the number of cooperatives and sales do not include the cooperative factories, which are especially numerous in connection with the dairy cooperatives, as is pointed out more fully in the section thereon in chapter II.

Since the reports to the Bureau of the Census are of a strictly confidential nature and no data are published which might disclose individual operations, only counties which reported three or more cooperatives could be shown separately.

Examination of the county data shows that in some States there is a wide variation between counties in the total number of cooperative associations. There is also in some States rather wide variations from county to county in the percentage of the total value of farm products sold or traded reported as sold through farmers' organizations.

In addition to the Census of Distribution data the table shows by States and counties the total value of farm products sold or traded and total sales through farmers' organizations as reported by the Census of Agriculture (1930) for the year 1929. There is also shown the percentage which the total sales through farmers' organizations formed of the total value of all farm products sold or traded.

Table 1 shows that business reports were secured on 6,025 local cooperative marketing associations which had a total business of \$1,107,374,397 of which \$1,002,163,905, or 90.5 percent, represented sales to dealers, and the balance, \$105,210,492, represented sales at retail, which in most cases represented purchases for members. These associations reported 30,850 employees, including both full-time and part-time, to whom were paid salaries and wages amounting to \$31,179,834. The total expenses of these cooperatives including those for the handling of agricultural commodities and for the retail sales business were \$62,134,860, which represented 5.6 percent of the total volume of business. While not all cooperatives reported membership, those which did report show a total membership of 688,683. As shown by the last three columns in table 1 the total value of farm products sold or traded,

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was \$9,609,924,183; while the total sales through farmers' organizations amounted to \$892,481,491, or 9.3 percent of the total value of all farm products sold or traded.

The following table shows the 10 leading States ranked according to the number of cooperative associations. The table shows for each State the total volume of business of these cooperatives and the rank in sales. It will be noted that Illinois, fourth in number, is fifth in sales, and California ranks ninth in number and first in sales, while Minnesota ranks first in number and fourth in sales.

## COOPERATIVE MARKETING ASSOCIATIONS IN 10 LEADING STATES, 1929

| STATE             | Num-<br>ber | TOTAL VOLUME OF<br>BUSINESS |      | SALES               |             |
|-------------------|-------------|-----------------------------|------|---------------------|-------------|
|                   |             | Amount                      | Rank | Sales to<br>dealers | Retail      |
| Minnesota.....    | 661         | \$91,212,755                | 4    | \$83,679,068        | \$7,533,687 |
| Iowa.....         | 602         | 114,701,619                 | 2    | 99,853,679          | 14,847,940  |
| North Dakota..... | 554         | 69,806,123                  | 7    | 64,877,935          | 4,928,188   |
| Illinois.....     | 496         | 80,616,598                  | 5    | 70,541,368          | 10,075,230  |
| Kansas.....       | 433         | 96,415,737                  | 3    | 83,124,546          | 13,291,191  |
| Nebraska.....     | 423         | 73,405,485                  | 6    | 66,037,148          | 7,368,337   |
| South Dakota..... | 363         | 45,288,457                  | 9    | 40,618,939          | 4,669,518   |
| Missouri.....     | 326         | 44,147,616                  | 10   | 35,753,071          | 8,394,545   |
| California.....   | 288         | 136,742,670                 | 1    | 134,303,883         | 2,438,787   |
| Ohio.....         | 227         | 46,907,359                  | 8    | 38,961,139          | 7,946,220   |

The total volume of business of the cooperatives in these 10 States represents over 72 percent of the total business of all cooperatives as given in the United States total (table 1).

If for some of these States we add to the number of cooperatives here given the number<sup>1</sup> of cooperative creameries and cheese factories we get the following results by States: Minnesota, 1,315; Iowa, 850; California, 312; and Ohio, 239.

While the data from the Census of Agriculture do not show as great total sales through farmers' organizations as do the Census of Distribution data, it is interesting to note that in Minnesota and in California 29.4 and 25.2 percent, respectively, of the total value of farm products sold or traded were reported as sold through farmers' organizations.

The difference between the Census of Agriculture and the Census of Distribution totals may, in large part, be due to the fact that farmers reported to the Census of Agriculture on basis of farm prices while the business figures of the cooperatives represent market prices. Further, in some States, such as Minnesota and Wisconsin, where the Census of Agriculture figures exceeded those of the Census of Distribution, this is probably due to the fact that the farmers in such States made considerable sales of milk and cream to cooperative dairy products plants, which, as already explained, were not covered by the Census of Distribution.

From table 1 it is quite apparent that from the standpoint of number, cooperative associations are much more important in the general farming regions of the West and Middle West.

The following summary table shows the number of each of several kinds of agricultural marketing cooperatives for which reports were received by the Census of Distribution. It also shows by kind the total volume of business and sales at retail.

Additional details for these various kinds of cooperatives are presented in chapter II—Agricultural Cooperatives by Kind of Commodity Handled.

<sup>1</sup> Cooperative factory data from: Cooperative Marketing and Purchasing 1920-30. United States Department of Agriculture Circular 121, 1930.

AGRICULTURAL COMMODITIES

AGRICULTURAL MARKETING COOPERATIVES—  
UNITED STATES SUMMARY BY KINDS, 1929

| COOPERATIVES              | Number | Total volume of business | Retail sales   |
|---------------------------|--------|--------------------------|----------------|
| Grain .....               | 3, 008 | \$546, 988, 488          | \$76, 477, 311 |
| Livestock .....           | 1, 273 | 193, 415, 396            | 8, 367, 112    |
| Cotton .....              | 60     | 30, 664, 321             | 503, 053       |
| Eggs and poultry .....    | 151    | 38, 618, 407             | 2, 124, 180    |
| Dairy products .....      | 563    | 66, 094, 242             | 3, 343, 717    |
| Fruit and vegetable ..... | 719    | 190, 891, 969            | 6, 636, 299    |

In addition to the local cooperatives summarized in the preceding table, the Census of Distribution received business data on cooperative centralized or federated sales agencies handling various kinds of commodities as indicated in the table following:

COOPERATIVE CENTRALIZED OR FEDERATED SALES AGENCIES, 1929

(Classified according to commodities handled)

| ITEM         | Grain          | Livestock       | Cotton         | Eggs and poultry | Dairy products | Fruit and vegetables |
|--------------|----------------|-----------------|----------------|------------------|----------------|----------------------|
| Number ..... | 14             | 33              | 9              | 21               | 9              | 31                   |
| Sales .....  | \$40, 628, 632 | \$334, 420, 915 | \$87, 640, 004 | \$41, 761, 879   | \$78, 936, 869 | \$156, 811, 269      |

**Cooperatives and other assemblers of farm products.**—Since the Census of Distribution also received reports on other assemblers of farm products, that is, in addition to cooperatives, it is possible to make at least a rough comparison as to the importance of cooperatives in this important activity. In considering the following summarized data, two points should be kept in mind: The first is that just as some cooperatives do not have established places of business so also there are numerous other assemblers of agricultural commodities who do not, and hence reports probably were not received from such by the Census of Distribution. The second is that, as already noted, the Census of Distribution did not include cooperative cheese factories, cooperative butter factories, or other cooperative factories.

ASSEMBLING OF AGRICULTURAL COMMODITIES BY COOPERATIVES AND OTHER ASSEMBLERS, TYPES OF ASSEMBLERS, 1929

| TYPE                     | NUMBER  |                  | VOLUME OF BUSINESS |                  |
|--------------------------|---------|------------------|--------------------|------------------|
|                          | Total   | Percent of total | Total <sup>1</sup> | Percent of total |
| Total (both types) ..... | 34, 143 | 100. 0           | \$4, 639, 881      | 100. 0           |
| Cooperatives .....       | 6, 025  | 17. 6            | 1, 107, 374        | 23. 9            |
| Other assemblers .....   | 28, 118 | 82. 4            | 3, 522, 507        | 76. 1            |

<sup>1</sup> Value shown in thousands of dollars.

In this table the total sales figures are used for cooperatives rather than sales of agricultural commodities. It should also be noted that the total in this table covers only these two types and is not to be considered as indicating the total value of the entire business of assembling agricultural commodities.

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TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY               | Number of cooperatives | Number of members reported | Total volume of business  | Sales to dealers          | Retail sales           |
|--------------------------------|------------------------|----------------------------|---------------------------|---------------------------|------------------------|
| <b>United States</b> .....     | <b>6, 025</b>          | <b>688, 683</b>            | <b>\$1, 107, 374, 397</b> | <b>\$1, 002, 163, 905</b> | <b>\$105, 210, 492</b> |
| <b>GEOGRAPHIC DIVISIONS</b>    |                        |                            |                           |                           |                        |
| New England <sup>1</sup> ..... | 26                     | 2, 237                     | 8, 844, 302               | 8, 657, 801               | 186, 501               |
| Middle Atlantic.....           | 303                    | 4, 282                     | 43, 193, 065              | 42, 236, 524              | 956, 541               |
| East North Central.....        | 1, 125                 | 119, 844                   | 184, 010, 396             | 154, 645, 391             | 29, 365, 005           |
| West North Central.....        | 3, 367                 | 365, 690                   | 534, 977, 792             | 473, 944, 386             | 61, 033, 404           |
| South Atlantic.....            | 211                    | 18, 011                    | 47, 299, 834              | 45, 776, 690              | 1, 523, 144            |
| East South Central.....        | 88                     | 80, 842                    | 30, 966, 635              | 30, 225, 601              | 741, 032               |
| West South Central.....        | 272                    | 39, 383                    | 53, 575, 343              | 49, 453, 451              | 4, 121, 892            |
| Mountain.....                  | 231                    | 33, 701                    | 39, 585, 520              | 37, 054, 374              | 2, 531, 146            |
| Pacific.....                   | 402                    | 24, 643                    | 164, 921, 510             | 160, 169, 687             | 4, 751, 823            |
| <b>NEW ENGLAND</b>             |                        |                            |                           |                           |                        |
| <b>New Hampshire</b> .....     |                        |                            |                           |                           |                        |
| <b>Vermont</b> .....           | <b>23</b>              | <b>1, 373</b>              | <b>6, 140, 343</b>        | <b>6, 000, 603</b>        | <b>139, 640</b>        |
| <b>Rhode Island</b> .....      |                        |                            |                           |                           |                        |
| <b>Connecticut</b> .....       |                        |                            |                           |                           |                        |
| <b>MIDDLE ATLANTIC</b>         |                        |                            |                           |                           |                        |
| <b>New York</b> .....          | <b>333</b>             | <b>3, 797</b>              | <b>34, 410, 199</b>       | <b>33, 632, 414</b>       | <b>777, 785</b>        |
| Broome.....                    | 3                      |                            | 403, 977                  | 403, 977                  |                        |
| Cattaraugus.....               | 3                      |                            | 388, 966                  | 388, 966                  |                        |
| Cayuga.....                    | 8                      |                            | 417, 629                  | 417, 629                  |                        |
| Chautauque.....                | 9                      | 1, 806                     | 1, 514, 639               | 1, 148, 083               | 366, 556               |
| Chemung.....                   | 3                      |                            | 1, 006, 101               | 1, 006, 101               |                        |
| Chenango.....                  | 7                      |                            | 1, 234, 693               | 1, 234, 693               |                        |
| Clinton.....                   | 7                      |                            | 1, 312, 695               | 1, 312, 695               |                        |
| Cortland.....                  | 6                      |                            | 867, 118                  | 867, 118                  |                        |
| Delaware.....                  | 9                      |                            | 1, 263, 189               | 1, 263, 189               |                        |
| Erie.....                      | 6                      | 886                        | 754, 915                  | 753, 415                  | 1, 500                 |
| Essex.....                     | 4                      |                            | 493, 964                  | 493, 964                  |                        |
| Franklin.....                  | 5                      |                            | 738, 113                  | 738, 113                  |                        |
| Greene.....                    | 3                      |                            | 167, 038                  | 167, 038                  |                        |
| Herkimer.....                  | 7                      |                            | 811, 840                  | 811, 840                  |                        |
| Jefferson.....                 | 10                     |                            | 1, 721, 471               | 1, 721, 471               |                        |
| Livingston.....                | 3                      |                            | 449, 462                  | 449, 462                  |                        |
| Madison.....                   | 18                     |                            | 2, 320, 188               | 2, 320, 188               |                        |
| Montgomery.....                | 3                      |                            | 265, 318                  | 265, 318                  |                        |
| Oneida.....                    | 15                     |                            | 2, 376, 442               | 2, 376, 442               |                        |
| Onondago.....                  | 4                      |                            | 1, 456, 717               | 1, 362, 976               | 93, 741                |
| Ontario.....                   | 4                      | 110                        | 298, 022                  | 244, 022                  | 54, 000                |
| Orange.....                    | 4                      |                            | 195, 339                  | 195, 339                  |                        |
| Orleans.....                   | 3                      | 238                        | 154, 114                  | 92, 238                   | 61, 876                |
| Oswego.....                    | 8                      |                            | 852, 860                  | 852, 860                  |                        |
| Otsego.....                    | 7                      |                            | 790, 568                  | 790, 568                  |                        |
| St. Lawrence.....              | 14                     |                            | 2, 622, 066               | 2, 622, 066               |                        |
| Schuyler.....                  | 3                      |                            | 98, 732                   | 98, 732                   |                        |
| Steuben.....                   | 3                      |                            | 334, 507                  | 334, 507                  |                        |
| Sullivan.....                  | 8                      |                            | 955, 446                  | 955, 446                  |                        |
| Tioga.....                     | 4                      |                            | 277, 585                  | 277, 585                  |                        |
| Ulster.....                    | 3                      |                            | 299, 894                  | 299, 894                  |                        |
| Washington.....                | 3                      |                            | 369, 631                  | 368, 631                  |                        |
| Wayne.....                     | 3                      | 22                         | 179, 583                  | 176, 776                  | 2, 807                 |
| Balance of State.....          | 32                     | 735                        | 7, 017, 377               | 6, 820, 072               | 197, 305               |
| <b>New Jersey</b> .....        | <b>5</b>               |                            | <b>363, 027</b>           | <b>362, 027</b>           |                        |

<sup>1</sup> Includes salaries and wages.<sup>2</sup> Agriculture, 1930, Bureau of the Census.<sup>3</sup> Includes data for cooperatives as follows: Maine, 1; and Massachusetts, 2; not shown separately to avoid disclosure.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses      | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 <sup>1</sup> |  |                              |
|--------------------------------|----------------|-----------------------|---------------------|---|--|------------------------------|
|                                |                |                       |                     | Total value   | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                     |   | Value                                    | Percent<br>of total<br>value |
| <b>United States</b> .....     | <b>30,850</b>  | <b>\$31,179,834</b>   | <b>\$63,134,860</b> | <b>\$9,609,924,183</b>                                      | <b>\$392,481,491</b>                     | <b>9.39</b>                  |
| <b>GEOGRAPHIC DIVISIONS</b>    |                |                       |                     |   |  |                              |
| New England <sup>2</sup> ..... | 194            | 310,847               | 960,596             | 278,460,314   | 21,067,579                               | 7.57                         |
| Middle Atlantic.....           | 1,473          | 2,000,070             | 6,831,362           | 699,484,800   | 71,167,465                               | 10.32                        |
| East North Central.....        | 3,541          | 4,006,953             | 7,487,569           | 1,608,392,456   | 150,849,215                              | 9.38                         |
| West North Central.....        | 7,443          | 8,374,875             | 16,331,445          | 2,531,421,097   | 310,334,418                              | 12.26                        |
| South Atlantic.....            | 3,107          | 2,133,032             | 3,739,477           | 921,566,354   | 41,801,737                               | 4.54                         |
| East South Central.....        | 359            | 325,282               | 495,308             | 726,998,086   | 13,602,866                               | 1.87                         |
| West South Central.....        | 961            | 884,417               | 1,705,812           | 1,254,712,974   | 48,177,517                               | 3.84                         |
| Mountain.....                  | 1,203          | 1,068,815             | 1,965,878           | 672,433,438   | 36,702,878                               | 5.46                         |
| Pacific.....                   | 12,569         | 12,075,543            | 22,617,413          | 916,454,664   | 197,777,816                              | 21.58                        |
| <b>NEW ENGLAND</b>             |                |                       |                     |   |  |                              |
| New Hampshire.....             |                |                       |                     | 24,053,619  | 675,438                                  | 2.81                         |
| Vermont.....                   | 179            | 285,272               | 903,869             | 48,413,739  | 6,807,273                                | 14.06                        |
| Rhode Island.....              |                |                       |                     | 8,969,742   | 307,824                                  | 3.43                         |
| Connecticut.....               |                |                       |                     | 47,663,545  | 7,417,309                                | 15.56                        |
| <b>MIDDLE ATLANTIC</b>         |                |                       |                     |   |  |                              |
| New York.....                  | 1,157          | 1,605,189             | 5,515,690           | 342,544,849   | 52,623,182                               | 15.36                        |
| Broome.....                    | 10             | 19,805                | 77,842              | 5,828,637   | 1,271,029                                | 21.81                        |
| Cattaraugus.....               | 10             | 18,050                | 61,909              | 8,020,847   | 1,805,586                                | 22.51                        |
| Cayuga.....                    | 19             | 20,136                | 54,390              | 6,775,323   | 856,090                                  | 21.64                        |
| Chautauqua.....                | 78             | 65,862                | 134,767             | 10,565,342  | 2,098,589                                | 19.86                        |
| Chemung.....                   | 28             | 52,421                | 250,105             | 2,555,503   | 547,705                                  | 21.43                        |
| Chemango.....                  | 35             | 52,881                | 215,994             | 9,563,556   | 2,211,660                                | 23.13                        |
| Clinton.....                   | 27             | 45,769                | 185,575             | 5,463,900   | 895,638                                  | 16.39                        |
| Cortland.....                  | 41             | 50,069                | 207,857             | 5,747,400   | 1,004,316                                | 17.47                        |
| Delaware.....                  | 34             | 52,573                | 223,453             | 12,491,396  | 1,786,617                                | 14.30                        |
| Erie.....                      | 22             | 30,098                | 91,894              | 10,863,215  | 1,642,546                                | 15.12                        |
| Essex.....                     | 10             | 14,712                | 67,707              | 2,114,681   | 367,658                                  | 17.39                        |
| Franklin.....                  | 16             | 21,707                | 103,399             | 5,512,184   | 1,375,659                                | 24.96                        |
| Greene.....                    | 25             | 11,828                | 27,818              | 2,903,985   | 438,655                                  | 15.11                        |
| Herkimer.....                  | 22             | 33,370                | 112,399             | 6,485,596   | 627,692                                  | 9.68                         |
| Jefferson.....                 | 56             | 88,066                | 315,838             | 11,171,576  | 1,066,885                                | 9.55                         |
| Livingston.....                | 10             | 15,134                | 64,247              | 5,739,412   | 722,760                                  | 12.59                        |
| Madison.....                   | 60             | 91,770                | 332,227             | 7,752,427   | 2,224,646                                | 28.70                        |
| Montgomery.....                | 10             | 12,442                | 42,013              | 4,503,489   | 466,818                                  | 10.37                        |
| Oneida.....                    | 81             | 113,951               | 521,448             | 11,459,156  | 2,002,313                                | 17.47                        |
| Onondaga.....                  | 159            | 251,665               | 468,566             | 8,771,158   | 1,115,276                                | 12.72                        |
| Ontario.....                   | 10             | 12,046                | 30,252              | 7,280,162   | 300,186                                  | 4.12                         |
| Orange.....                    | 10             | 10,529                | 49,426              | 10,903,408  | 1,957,529                                | 17.85                        |
| Orleans.....                   | 10             | 14,490                | 20,481              | 5,725,407   | 398,344                                  | 6.96                         |
| Oswego.....                    | 27             | 37,019                | 136,316             | 6,762,838   | 989,857                                  | 14.64                        |
| Otsego.....                    | 30             | 38,179                | 130,985             | 9,714,670   | 3,101,811                                | 31.93                        |
| St. Lawrence.....              | 65             | 140,154               | 659,407             | 14,984,398  | 3,097,715                                | 20.81                        |
| Schuyler.....                  | 6              | 5,571                 | 22,674              | 2,112,348   | 110,925                                  | 5.25                         |
| Steuben.....                   | 9              | 12,692                | 51,574              | 3,632,135   | 1,009,090                                | 11.69                        |
| Sullivan.....                  | 28             | 37,445                | 132,763             | 4,213,931   | 667,485                                  | 11.84                        |
| Tioga.....                     | 8              | 13,584                | 44,058              | 4,164,931   | 654,594                                  | 22.92                        |
| Ulster.....                    | 11             | 14,473                | 55,295              | 4,722,210   | 1,045,466                                | 15.55                        |
| Washington.....                | 10             | 14,807                | 58,111              | 6,283,687   | 787,975                                  | 12.54                        |
| Wayne.....                     | 10             | 11,815                | 19,272              | 9,843,438   | 442,564                                  | 4.50                         |
| Balance of State.....          | 140            | 180,276               | 526,628             | 101,012,733   | 13,231,503                               | 13.10                        |
| <b>New Jersey</b> .....        | <b>17</b>      | <b>14,584</b>         | <b>58,842</b>       | <b>83,474,060</b>   | <b>5,971,719</b>                         | <b>6.33</b>                  |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                 | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales      |
|----------------------------------|------------------------|----------------------------|--------------------------|--|-------------------|
| <b>MIDDLE ATLANTIC—Continued</b> |                        |                            |                          |  |                   |
| <b>Pennsylvania</b> .....        | <b>66</b>              | <b>485</b>                 | <b>\$8,480,889</b>       | <b>\$8,942,098</b>   | <b>\$178,756</b>  |
| Bradford.....                    | 10                     |                            | 1,415,606                | 1,415,606  |                   |
| Snyder.....                      | 3                      |                            | 237,225                  | 237,225  |                   |
| Susquehanna.....                 | 5                      |                            | 366,429                  | 366,429  |                   |
| Tioga.....                       | 6                      |                            | 1,317,049                | 1,317,049  |                   |
| Wayne.....                       | 12                     |                            | 1,790,032                | 1,790,032  |                   |
| Wyoming.....                     | 6                      |                            | 819,684                  | 819,684  |                   |
| Balance of State.....            | 24                     | 485                        | 2,474,814                | 2,296,058  | 178,756           |
| <b>EAST NORTH CENTRAL</b>        |                        |                            |                          |  |                   |
| <b>Ohio</b> .....                | <b>227</b>             | <b>27,563</b>              | <b>46,907,359</b>        | <b>38,961,139</b>  | <b>7,946,220</b>  |
| Ashland.....                     | 3                      | 739                        | 471,710                  | 471,710  |                   |
| Crawford.....                    | 9                      | 258                        | 1,561,629                | 1,101,106  | 460,523           |
| Darke.....                       | 4                      | 362                        | 753,716                  | 708,714  | 45,002            |
| Defiance.....                    | 7                      | 1,630                      | 759,021                  | 581,327  | 177,694           |
| Erie.....                        | 3                      | 793                        | 533,376                  | 367,876  | 165,500           |
| Fayette.....                     | 3                      | 2,000                      | 4,285,483                | 4,214,179  | 71,304            |
| Fulton.....                      | 3                      | 297                        | 591,409                  | 446,124  | 145,285           |
| Greene.....                      | 5                      |                            | 291,367                  | 236,452  | 54,915            |
| Hancock.....                     | 8                      | 541                        | 1,619,314                | 1,036,505  | 582,809           |
| Hardin.....                      | 11                     | 2,768                      | 1,025,623                | 1,008,944  | 16,679            |
| Henry.....                       | 13                     | 1,614                      | 2,624,764                | 2,201,988  | 422,776           |
| Huron.....                       | 6                      | 240                        | 810,704                  | 462,622  | 348,082           |
| Knox.....                        | 3                      | 697                        | 433,149                  | 377,089  | 56,060            |
| Lorain.....                      | 4                      | 112                        | 365,143                  | 304,143  | 61,000            |
| Marion.....                      | 6                      | 1,950                      | 564,535                  | 431,067  | 133,468           |
| Medina.....                      | 3                      |                            | 554,535                  | 113,889  | 440,646           |
| Ottawa.....                      | 7                      | 2,388                      | 1,272,931                | 672,416  | 600,515           |
| Paulding.....                    | 7                      | 807                        | 1,206,586                | 1,057,824  | 148,762           |
| Pickaway.....                    | 6                      | 1,190                      | 1,981,392                | 1,839,175  | 142,217           |
| Putnam.....                      | 9                      | 1,315                      | 1,557,954                | 1,545,854  | 12,100            |
| Richland.....                    | 3                      |                            | 361,146                  | 284,020  | 77,126            |
| Sandusky.....                    | 6                      | 312                        | 1,440,147                | 1,321,046  | 119,101           |
| Seneca.....                      | 12                     | 85                         | 1,248,454                | 964,150  | 284,304           |
| Shelby.....                      | 7                      | 650                        | 919,208                  | 733,142  | 186,066           |
| Van Wert.....                    | 6                      | 323                        | 1,069,044                | 779,492  | 289,552           |
| Wayne.....                       | 4                      | 389                        | 447,241                  | 334,406  | 112,835           |
| Williams.....                    | 3                      | 625                        | 752,496                  | 516,345  | 236,151           |
| Wood.....                        | 12                     | 1,727                      | 1,829,053                | 1,566,033  | 263,020           |
| Wyandot.....                     | 4                      | 808                        | 772,588                  | 629,665  | 142,923           |
| Balance of State.....            | 50                     | 2,943                      | 14,803,641               | 12,653,836   | 2,149,805         |
| <b>Indiana</b> .....             | <b>116</b>             | <b>13,421</b>              | <b>16,901,899</b>        | <b>14,495,631</b>  | <b>2,406,198</b>  |
| Allen.....                       | 5                      | 778                        | 750,328                  | 573,566  | 176,762           |
| Benton.....                      | 7                      | 82                         | 1,115,730                | 1,098,704  | 17,026            |
| Cass.....                        | 8                      | 1,479                      | 1,090,000                | 898,000  | 192,000           |
| Delaware.....                    | 5                      | 270                        | 1,839,841                | 1,683,523  | 156,318           |
| Fulton.....                      | 3                      | 295                        | 261,953                  | 168,123  | 93,830            |
| Huntington.....                  | 3                      | 105                        | 335,487                  | 248,646  | 86,841            |
| Jasper.....                      | 5                      | 206                        | 656,477                  | 642,921  | 13,556            |
| Jay.....                         | 5                      | 136                        | 866,347                  | 814,513  | 51,834            |
| Pulaski.....                     | 7                      | 773                        | 1,042,722                | 916,158  | 126,564           |
| Wabash.....                      | 4                      | 715                        | 618,000                  | 491,800  | 126,200           |
| White.....                       | 3                      | 320                        | 518,768                  | 437,155  | 81,613            |
| Whitley.....                     | 6                      | 1,462                      | 962,510                  | 829,384  | 133,126           |
| Balance of State.....            | 55                     | 6,800                      | 6,843,666                | 5,693,138  | 1,150,528         |
| <b>Illinois</b> .....            | <b>496</b>             | <b>42,970</b>              | <b>80,616,598</b>        | <b>70,541,368</b>  | <b>10,075,230</b> |
| Adams.....                       | 5                      | 406                        | 367,312                  | 351,884  | 15,428            |
| Bond.....                        | 5                      | 85                         | 348,502                  | 251,397  | 97,105            |
| Brown.....                       | 3                      | 450                        | 243,915                  | 126,430  | 117,485           |
| Bureau.....                      | 10                     | 200                        | 1,766,731                | 1,527,761  | 238,970           |
| Cass.....                        | 7                      | 683                        | 1,049,691                | 967,599  | 62,092            |
| Champaign.....                   | 25                     | 1,222                      | 3,928,700                | 3,651,953  | 276,747           |
| Christian.....                   | 9                      | 615                        | 1,324,309                | 1,191,607  | 132,702           |
| Clinton.....                     | 4                      | 201                        | 114,212                  | 53,401   | 60,811            |
| Coles.....                       | 5                      | 1,176                      | 564,662                  | 533,957  | 30,705            |
| De Kalb.....                     | 4                      | 72                         | 717,377                  | 485,283  | 232,094           |
| De Witt.....                     | 10                     | 1,157                      | 1,302,363                | 1,200,301  | 102,062           |

cludes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY              | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|-------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                               |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                               |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>MIDDLE ATLANTIC—Contd.</b> |                |                       |                             |  |  |                              |
| <b>Pennsylvania</b> .....     | <b>899</b>     | <b>\$380,897</b>      | <b>\$1,356,830</b>          | <b>\$273,465,861</b>                           | <b>\$14,973,571</b>                      | <b>5.23</b>                  |
| Bradford.....                 | 27             | 55,027                | 216,756                     | 8,133,069                                      | 1,675,748                                | 20.60                        |
| Snyder.....                   | 7              | 9,167                 | 39,710                      | 1,975,728                                      | 162,545                                  | 8.23                         |
| Susquehanna.....              | 12             | 16,540                | 55,999                      | 6,340,525                                      | 1,615,664                                | 25.48                        |
| Tioga.....                    | 32             | 55,618                | 237,053                     | 5,294,923                                      | 1,361,307                                | 25.76                        |
| Wayne.....                    | 44             | 55,705                | 208,537                     | 5,119,741                                      | 1,569,878                                | 30.66                        |
| Wyoming.....                  | 22             | 28,778                | 108,149                     | 2,217,490                                      | 506,398                                  | 22.84                        |
| Balance of State.....         | 155            | 159,462               | 390,626                     | 244,394,385                                    | 7,381,031                                | 3.02                         |
| <b>EAST NORTH CENTRAL</b>     |                |                       |                             |  |  |                              |
| <b>Ohio</b> .....             | <b>809</b>     | <b>1,013,352</b>      | <b>1,825,875</b>            | <b>\$14,834,003</b>                            | <b>\$6,103,644</b>                       | <b>8.99</b>                  |
| Ashland.....                  | 10             | 15,400                | 29,590                      | 2,775,550                                      | 178,493                                  | 6.43                         |
| Crawford.....                 | 30             | 43,885                | 103,982                     | 3,679,251                                      | 513,453                                  | 14.35                        |
| Darke.....                    | 23             | 25,037                | 39,114                      | 7,442,580                                      | 322,528                                  | 4.33                         |
| Defiance.....                 | 18             | 21,481                | 34,912                      | 3,560,686                                      | 214,410                                  | 6.02                         |
| Erie.....                     | 8              | 16,600                | 29,355                      | 2,550,936                                      | 348,849                                  | 13.68                        |
| Fayette.....                  | 14             | 27,261                | 42,912                      | 3,967,937                                      | 950,713                                  | 23.96                        |
| Fulton.....                   | 27             | 42,792                | 80,846                      | 4,818,583                                      | 61,292                                   | 1.27                         |
| Greene.....                   | 9              | 7,743                 | 14,214                      | 4,692,419                                      | 574,760                                  | 12.25                        |
| Hancock.....                  | 29             | 30,777                | 47,014                      | 5,213,559                                      | 738,550                                  | 14.17                        |
| Hardin.....                   | 4              | 4,165                 | 8,443                       | 4,146,951                                      | 504,721                                  | 12.17                        |
| Henry.....                    | 70             | 68,574                | 120,923                     | 4,476,875                                      | 516,925                                  | 11.55                        |
| Huron.....                    | 18             | 24,848                | 44,509                      | 3,473,117                                      | 247,728                                  | 7.13                         |
| Knox.....                     | 15             | 12,569                | 21,982                      | 4,006,989                                      | 187,402                                  | 4.68                         |
| Lorain.....                   | 16             | 20,711                | 34,826                      | 4,507,062                                      | 443,198                                  | 9.83                         |
| Marion.....                   | 15             | 15,844                | 26,046                      | 3,617,164                                      | 273,113                                  | 7.55                         |
| Medina.....                   | 15             | 23,958                | 47,431                      | 4,215,570                                      | 352,660                                  | 8.37                         |
| Ottawa.....                   | 21             | 30,018                | 56,694                      | 2,424,038                                      | 325,038                                  | 13.41                        |
| Paulding.....                 | 27             | 25,353                | 51,816                      | 2,959,238                                      | 385,233                                  | 13.02                        |
| Pickaway.....                 | 31             | 30,294                | 58,467                      | 5,178,834                                      | 613,821                                  | 11.85                        |
| Putnam.....                   | 16             | 20,542                | 32,056                      | 5,468,045                                      | 637,685                                  | 11.66                        |
| Richland.....                 | 12             | 15,076                | 22,393                      | 3,665,628                                      | 292,161                                  | 7.97                         |
| Sandusky.....                 | 24             | 39,632                | 66,124                      | 4,288,821                                      | 349,297                                  | 8.14                         |
| Seneca.....                   | 31             | 32,275                | 57,924                      | 5,107,513                                      | 427,111                                  | 8.36                         |
| Shelby.....                   | 24             | 29,772                | 51,834                      | 3,508,785                                      | 316,191                                  | 9.01                         |
| Van Wert.....                 | 22             | 26,067                | 47,008                      | 3,728,437                                      | 269,813                                  | 7.24                         |
| Wayne.....                    | 14             | 21,127                | 34,951                      | 7,248,589                                      | 166,603                                  | 2.30                         |
| Williams.....                 | 14             | 19,555                | 30,973                      | 3,830,294                                      | 553,408                                  | 14.45                        |
| Wood.....                     | 44             | 53,632                | 114,464                     | 7,228,170                                      | 744,991                                  | 10.31                        |
| Wyandot.....                  | 17             | 19,868                | 33,620                      | 3,931,971                                      | 460,797                                  | 11.72                        |
| Balance of State.....         | 184            | 248,436               | 441,452                     | 189,220,410                                    | 14,131,700                               | 7.47                         |
| <b>Indiana</b> .....          |                |                       |                             |  |  |                              |
| <b>Indiana</b> .....          | <b>367</b>     | <b>403,790</b>        | <b>747,417</b>              | <b>65,128,734</b>                              | <b>16,687,604</b>                        | <b>6.89</b>                  |
| Allen.....                    | 18             | 23,599                | 37,043                      | 5,160,908                                      | 150,305                                  | 2.91                         |
| Benton.....                   | 17             | 22,520                | 48,426                      | 3,886,399                                      | 112,694                                  | 2.90                         |
| Cass.....                     | 25             | 28,860                | 49,361                      | 4,049,654                                      | 158,923                                  | 3.92                         |
| Delaware.....                 | 17             | 24,247                | 44,116                      | 3,796,732                                      | 260,595                                  | 6.87                         |
| Fulton.....                   | 7              | 7,763                 | 10,739                      | 3,221,912                                      | 222,147                                  | 6.89                         |
| Huntington.....               | 13             | 15,170                | 30,170                      | 3,240,602                                      | 141,797                                  | 4.24                         |
| Jasper.....                   | 13             | 15,675                | 24,609                      | 3,887,801                                      | 137,202                                  | 3.53                         |
| Jay.....                      | 15             | 9,233                 | 12,083                      | 2,897,480                                      | 421,849                                  | 14.56                        |
| Pulaski.....                  | 17             | 18,440                | 38,042                      | 2,788,946                                      | 263,017                                  | 9.07                         |
| Wabash.....                   | 10             | 12,400                | 21,615                      | 3,919,671                                      | 228,150                                  | 5.82                         |
| White.....                    | 8              | 9,836                 | 19,055                      | 3,605,246                                      | 201,963                                  | 5.60                         |
| Whitley.....                  | 18             | 19,594                | 35,845                      | 3,183,525                                      | 342,866                                  | 10.77                        |
| Balance of State.....         | 179            | 196,453               | 376,313                     | 221,391,858                                    | 14,056,096                               | 6.35                         |
| <b>Illinois</b> .....         |                |                       |                             |  |  |                              |
| <b>Illinois</b> .....         | <b>1,318</b>   | <b>1,448,644</b>      | <b>2,693,872</b>            | <b>455,358,608</b>                             | <b>48,933,674</b>                        | <b>10.75</b>                 |
| Adams.....                    | 8              | 8,476                 | 15,894                      | 6,250,643                                      | 1,017,112                                | 16.27                        |
| Bond.....                     | 12             | 15,739                | 31,993                      | 1,964,665                                      | 60,411                                   | 3.07                         |
| Brown.....                    | 9              | 8,865                 | 17,123                      | 2,113,068                                      | 156,983                                  | 7.43                         |
| Bureau.....                   | 18             | 26,093                | 38,779                      | 9,610,829                                      | 627,423                                  | 6.53                         |
| Cass.....                     | 13             | 16,104                | 30,894                      | 3,071,920                                      | 437,240                                  | 14.23                        |
| Champaign.....                | 57             | 60,891                | 115,871                     | 12,156,241                                     | 1,063,030                                | 8.74                         |
| Christian.....                | 16             | 21,294                | 48,086                      | 6,482,394                                      | 372,839                                  | 5.74                         |
| Citron.....                   | 3              | 2,771                 | 4,973                       | 2,918,913                                      | 52,761                                   | 1.81                         |
| Coles.....                    | 8              | 7,732                 | 11,425                      | 4,852,101                                      | 590,205                                  | 11.55                        |
| De Kalb.....                  | 14             | 20,489                | 44,305                      | 8,574,199                                      | 785,534                                  | 9.16                         |
| De Witt.....                  | 16             | 17,678                | 57,291                      | 4,229,698                                      | 582,639                                  | 13.77                        |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales       |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|--------------------|
| <b>EAST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                    |
| Douglas.....                        | 5                      | 392                        | \$707, 645               | \$683, 188   | \$24, 457          |
| Effingham.....                      | 3                      | 115                        | 236, 410                 | 212, 663   | 23, 747            |
| Ford.....                           | 9                      | 224                        | 1, 698, 206              | 1, 597, 395  | 100, 811           |
| Fulton.....                         | 7                      | 351                        | 1, 313, 447              | 972, 333   | 341, 114           |
| Greene.....                         | 4                      | 259                        | 465, 255                 | 371, 662   | 93, 593            |
| Grundy.....                         | 3                      | 341                        | 1, 154, 257              | 936, 528   | 217, 729           |
| Hancock.....                        | 12                     | 281                        | 1, 280, 052              | 991, 242   | 288, 810           |
| Henry.....                          | 9                      | 1, 745                     | 1, 589, 208              | 1, 181, 654  | 407, 554           |
| Iroquois.....                       | 25                     | 2, 742                     | 4, 438, 582              | 3, 861, 657  | 576, 925           |
| Kane.....                           | 4                      | 373                        | 928, 379                 | 867, 826   | 60, 553            |
| Kankakee.....                       | 10                     | 341                        | 1, 653, 133              | 1, 501, 170  | 151, 963           |
| Kendall.....                        | 6                      | 186                        | 1, 291, 238              | 1, 127, 936  | 163, 302           |
| Knox.....                           | 7                      | 653                        | 894, 686                 | 763, 538   | 131, 148           |
| La Salle.....                       | 21                     | 1, 328                     | 4, 953, 144              | 4, 538, 295  | 414, 849           |
| Lee.....                            | 9                      | 33                         | 1, 908, 960              | 1, 664, 128  | 244, 832           |
| Livingston.....                     | 19                     | 2, 069                     | 3, 065, 666              | 2, 886, 369  | 179, 297           |
| Logan.....                          | 10                     | 936                        | 2, 080, 741              | 1, 975, 622  | 105, 119           |
| McDonough.....                      | 6                      | 430                        | 1, 048, 152              | 844, 879   | 203, 273           |
| McLean.....                         | 18                     | 722                        | 4, 481, 299              | 4, 058, 602  | 422, 697           |
| Macon.....                          | 5                      | 373                        | 677, 054                 | 576, 911   | 100, 143           |
| Macoupin.....                       | 8                      | 593                        | 613, 305                 | 408, 943   | 204, 362           |
| Madison.....                        | 3                      | 272                        | 161, 776                 | 68, 972  | 92, 804            |
| Mason.....                          | 9                      | 1, 341                     | 1, 711, 127              | 1, 663, 161  | 47, 966            |
| Menard.....                         | 5                      | 636                        | 742, 776                 | 734, 412   | 8, 364             |
| Montgomery.....                     | 6                      | 250                        | 438, 684                 | 302, 033   | 136, 651           |
| Morgan.....                         | 10                     | 6                          | 1, 192, 849              | 1, 055, 579  | 137, 270           |
| Moultrie.....                       | 6                      | 738                        | 1, 161, 252              | 1, 136, 981  | 24, 271            |
| Ogle.....                           | 3                      | 150                        | 426, 613                 | 356, 723   | 69, 890            |
| Peoria.....                         | 6                      | 244                        | 723, 199                 | 571, 339   | 151, 860           |
| Piatt.....                          | 22                     | 1, 970                     | 3, 364, 405              | 3, 026, 259  | 338, 146           |
| Pike.....                           | 3                      | 540                        | 326, 585                 | 225, 303   | 101, 282           |
| Putnam.....                         | 4                      | 158                        | 495, 535                 | 433, 988   | 61, 547            |
| St. Clair.....                      | 3                      | 360                        | 144, 652                 | 65, 044  | 79, 608            |
| Sangamon.....                       | 6                      | 333                        | 726, 156                 | 686, 403   | 39, 753            |
| Scott.....                          | 4                      | 890                        | 906, 242                 | 773, 081   | 133, 161           |
| Shelby.....                         | 6                      | 509                        | 893, 931                 | 703, 031   | 190, 900           |
| Stephenson.....                     | 13                     | 2, 831                     | 3, 691, 570              | 3, 617, 223  | 74, 347            |
| Tazewell.....                       | 27                     | ---                        | 2, 286, 524              | 2, 058, 464  | 228, 060           |
| Whiteside.....                      | 6                      | 1, 041                     | 2, 093, 098              | 1, 816, 622  | 276, 476           |
| Will.....                           | 9                      | 173                        | 2, 359, 246              | 2, 083, 049  | 276, 197           |
| Woodford.....                       | 7                      | 626                        | 1, 997, 823              | 1, 754, 058  | 243, 765           |
| Balance of State.....               | 46                     | 9, 148                     | 6, 565, 932              | 5, 025, 529  | 1, 540, 408        |
| <b>Michigan.....</b>                | <b>184</b>             | <b>23, 913</b>             | <b>27, 353, 735</b>      | <b>20, 080, 894</b>  | <b>7, 333, 801</b> |
| Allegan.....                        | 3                      | 44                         | 580, 840                 | 427, 840   | 153, 000           |
| Antrim.....                         | 5                      | 390                        | 518, 082                 | 441, 531   | 76, 551            |
| Barry.....                          | 6                      | 946                        | 636, 960                 | 331, 853   | 305, 107           |
| Cass.....                           | 4                      | ---                        | 891, 129                 | 582, 668   | 308, 461           |
| Clinton.....                        | 5                      | 1, 375                     | 1, 501, 898              | 1, 324, 586  | 177, 312           |
| Eaton.....                          | 6                      | 1, 501                     | 1, 257, 268              | 721, 961   | 535, 307           |
| Gratiot.....                        | 5                      | 1, 835                     | 1, 688, 835              | 1, 657, 156  | 31, 679            |
| Hillsdale.....                      | 8                      | 322                        | 706, 967                 | 495, 987   | 210, 980           |
| Huron.....                          | 12                     | 2, 563                     | 1, 698, 862              | 1, 475, 659  | 193, 203           |
| Ingham.....                         | 4                      | 515                        | 685, 942                 | 498, 637   | 187, 305           |
| Ionia.....                          | 6                      | 1, 345                     | 967, 269                 | 645, 071   | 322, 198           |
| Kent.....                           | 8                      | 1, 270                     | 913, 086                 | 512, 390   | 400, 696           |
| Lenawee.....                        | 3                      | 152                        | 544, 471                 | 323, 999   | 220, 472           |
| Missaukee.....                      | 4                      | 605                        | 91, 668                  | 71, 358  | 20, 310            |
| Montcalm.....                       | 9                      | 745                        | 1, 655, 469              | 1, 416, 263  | 239, 196           |
| Oakland.....                        | 3                      | 239                        | 316, 115                 | 224, 000   | 92, 115            |
| Osceola.....                        | 3                      | 99                         | 18, 836                  | 18, 836  | ---                |
| Saginaw.....                        | 6                      | 105                        | 744, 087                 | 626, 330   | 117, 757           |
| St. Clair.....                      | 5                      | 248                        | 446, 451                 | 364, 937   | 81, 514            |
| St. Joseph.....                     | 5                      | 635                        | 553, 749                 | 401, 792   | 151, 957           |
| Sanilac.....                        | 4                      | 484                        | 358, 843                 | 306, 672   | 52, 171            |
| Shiawassee.....                     | 7                      | 545                        | 867, 429                 | 760, 199   | 97, 230            |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>EAST NORTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| Douglas.....                   | 11             | \$12,848              | \$23,446                    | \$4,708,306                                    | \$395,173                                | 8.39                         |
| Effingham.....                 | 5              | 3,706                 | 5,652                       | 1,936,913                                      | 153,712                                  | 7.94                         |
| Ford.....                      | 16             | 22,866                | 48,581                      | 5,010,771                                      | 447,212                                  | 8.92                         |
| Fulton.....                    | 22             | 24,928                | 39,172                      | 7,205,362                                      | 588,124                                  | 8.16                         |
| Greene.....                    | 10             | 12,715                | 22,711                      | 5,046,530                                      | 149,758                                  | 2.97                         |
| Grundy.....                    | 14             | 15,630                | 26,063                      | 3,895,455                                      | 79,731                                   | 2.16                         |
| Hancock.....                   | 22             | 16,239                | 29,722                      | 6,874,705                                      | 697,208                                  | 10.45                        |
| Henry.....                     | 44             | 51,088                | 116,302                     | 9,102,715                                      | 1,830,536                                | 20.11                        |
| Iroquois.....                  | 64             | 81,981                | 160,354                     | 10,320,526                                     | 1,404,224                                | 13.61                        |
| Kane.....                      | 10             | 12,517                | 38,219                      | 8,464,369                                      | 1,683,133                                | 19.88                        |
| Kankakee.....                  | 29             | 29,970                | 49,898                      | 5,557,969                                      | 706,114                                  | 12.70                        |
| Kendall.....                   | 21             | 28,746                | 55,904                      | 3,377,783                                      | 363,022                                  | 10.75                        |
| Knox.....                      | 15             | 15,520                | 32,804                      | 7,037,231                                      | 893,805                                  | 12.70                        |
| La Salle.....                  | 63             | 90,344                | 150,744                     | 11,844,105                                     | 1,970,940                                | 16.64                        |
| Lee.....                       | 18             | 26,115                | 45,915                      | 6,892,681                                      | 479,752                                  | 6.96                         |
| Livingston.....                | 34             | 52,500                | 66,790                      | 12,062,155                                     | 1,360,290                                | 11.28                        |
| Logan.....                     | 22             | 29,239                | 49,410                      | 6,294,832                                      | 665,786                                  | 10.58                        |
| McDonough.....                 | 19             | 17,282                | 35,564                      | 6,410,998                                      | 272,029                                  | 4.25                         |
| McLean.....                    | 45             | 55,513                | 94,324                      | 13,978,283                                     | 1,664,765                                | 11.19                        |
| Macon.....                     | 9              | 11,801                | 22,831                      | 6,552,142                                      | 460,719                                  | 7.12                         |
| Macoupin.....                  | 15             | 22,053                | 34,814                      | 5,658,224                                      | 274,342                                  | 4.85                         |
| Madison.....                   | 7              | 5,238                 | 9,108                       | 4,670,160                                      | 90,837                                   | 1.95                         |
| Mason.....                     | 24             | 24,882                | 40,520                      | 3,529,465                                      | 230,696                                  | 6.54                         |
| Menard.....                    | 13             | 10,883                | 17,779                      | 3,280,610                                      | 222,285                                  | 6.76                         |
| Montgomery.....                | 10             | 12,762                | 25,778                      | 3,957,988                                      | 262,015                                  | 6.62                         |
| Morgan.....                    | 27             | 26,438                | 56,976                      | 5,563,451                                      | 317,292                                  | 5.70                         |
| Moultrie.....                  | 13             | 17,630                | 51,107                      | 3,406,474                                      | 267,440                                  | 7.85                         |
| Ogle.....                      | 7              | 7,597                 | 12,714                      | 6,823,975                                      | 702,484                                  | 10.29                        |
| Peoria.....                    | 13             | 15,744                | 19,769                      | 4,682,606                                      | 485,537                                  | 10.37                        |
| Platt.....                     | 38             | 45,205                | 73,782                      | 5,129,952                                      | 1,368,323                                | 26.67                        |
| Pike.....                      | 8              | 8,388                 | 10,787                      | 5,289,264                                      | 455,049                                  | 8.60                         |
| Putnam.....                    | 7              | 8,740                 | 12,249                      | 1,787,481                                      | 315,835                                  | 17.67                        |
| St. Clair.....                 | 6              | 5,521                 | 10,461                      | 4,070,827                                      | 276,029                                  | 6.80                         |
| Sangamon.....                  | 13             | 15,501                | 31,588                      | 10,036,326                                     | 895,611                                  | 8.92                         |
| Scott.....                     | 13             | 10,951                | 22,074                      | 1,889,684                                      | 311,973                                  | 16.51                        |
| Shelby.....                    | 12             | 11,374                | 27,288                      | 4,603,956                                      | 453,358                                  | 9.85                         |
| Stephenson.....                | 27             | 18,169                | 38,959                      | 6,579,869                                      | 1,516,925                                | 23.05                        |
| Tazewell.....                  | 60             | 47,886                | 86,963                      | 6,115,356                                      | 783,249                                  | 12.81                        |
| Whiteside.....                 | 15             | 29,499                | 54,038                      | 7,990,226                                      | 952,009                                  | 11.91                        |
| Will.....                      | 43             | 103,309               | 147,476                     | 7,422,537                                      | 794,184                                  | 10.70                        |
| Woodford.....                  | 33             | 37,226                | 67,231                      | 5,796,282                                      | 804,852                                  | 13.89                        |
| Balance of State.....          | 147            | 145,708               | 311,430                     | 142,567,391                                    | 15,263,939                               | 10.71                        |
| <b>Michigan.....</b>           | <b>990</b>     | <b>937,161</b>        | <b>1,809,975</b>            | <b>227,106,849</b>                             | <b>16,581,237</b>                        | <b>7.30</b>                  |
| Allegan.....                   | 25             | 24,517                | 37,838                      | 7,028,550                                      | 635,860                                  | 9.05                         |
| Antrim.....                    | 30             | 29,730                | 44,380                      | 1,477,235                                      | 234,237                                  | 15.86                        |
| Barry.....                     | 20             | 22,587                | 42,691                      | 3,712,742                                      | 523,029                                  | 14.10                        |
| Cass.....                      | 20             | 22,335                | 35,938                      | 2,870,170                                      | 360,496                                  | 12.56                        |
| Clinton.....                   | 26             | 30,361                | 50,607                      | 5,195,044                                      | 845,138                                  | 16.27                        |
| Eaton.....                     | 15             | 25,518                | 35,188                      | 5,127,907                                      | 621,284                                  | 12.12                        |
| Gratiot.....                   | 24             | 27,251                | 71,234                      | 5,200,362                                      | 502,510                                  | 9.66                         |
| Hillsdale.....                 | 14             | 13,321                | 33,685                      | 5,073,212                                      | 681,918                                  | 13.44                        |
| Huron.....                     | 113            | 64,393                | 124,952                     | 6,177,967                                      | 590,020                                  | 9.55                         |
| Ingham.....                    | 10             | 13,523                | 26,034                      | 4,686,701                                      | 425,774                                  | 9.08                         |
| Ionia.....                     | 12             | 12,337                | 29,001                      | 5,133,064                                      | 644,855                                  | 12.56                        |
| Kent.....                      | 28             | 36,365                | 73,182                      | 6,588,591                                      | 496,869                                  | 7.54                         |
| Lenawee.....                   | 17             | 23,264                | 54,758                      | 8,343,613                                      | 215,930                                  | 2.58                         |
| Missaukee.....                 | 10             | 9,427                 | 14,005                      | 1,387,877                                      | 142,414                                  | 10.26                        |
| Montcalm.....                  | 35             | 38,259                | 64,398                      | 4,676,788                                      | 391,789                                  | 8.38                         |
| Oakland.....                   | 12             | 14,407                | 23,601                      | 4,360,622                                      | 140,687                                  | 3.23                         |
| Osceola.....                   | 4              | 5,010                 | 8,484                       | 2,002,684                                      | 297,996                                  | 14.88                        |
| Saginaw.....                   | 35             | 27,700                | 45,717                      | 6,614,730                                      | 316,937                                  | 3.29                         |
| St. Clair.....                 | 24             | 22,975                | 58,411                      | 4,487,314                                      | 93,733                                   | 2.08                         |
| St. Joseph.....                | 17             | 19,705                | 30,742                      | 2,670,739                                      | 359,729                                  | 13.47                        |
| Shiawassee.....                | 11             | 15,140                | 26,955                      | 6,268,697                                      | 312,612                                  | 4.99                         |
| Shiawassee.....                | 14             | 13,911                | 26,735                      | 4,746,893                                      | 281,680                                  | 5.93                         |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales     |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|------------------|
| <b>EAST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                  |
| Tuscola.....                        | 5                      | 662                        | \$1,202,022              | \$949,818  | \$252,204        |
| Van Buren.....                      | 3                      | 762                        | 759,428                  | 668,182  | 91,246           |
| Wexford.....                        | 4                      | 273                        | 1,079,706                | 921,074  | 158,632          |
| Balance of State.....               | 51                     | 6,253                      | 6,708,323                | 3,852,025  | 2,856,298        |
| <b>Wisconsin.....</b>               | <b>102</b>             | <b>11,977</b>              | <b>19,280,885</b>        | <b>10,696,499</b>  | <b>1,604,456</b> |
| Buffalo.....                        | 3                      | 873                        | 657,832                  | 585,362  | 72,470           |
| Clark.....                          | 5                      | 551                        | 163,026                  | 163,026  | .....            |
| Fond du Lac.....                    | 5                      | 548                        | 658,000                  | 595,500  | 62,500           |
| Green.....                          | 3                      | 580                        | 455,072                  | 455,072  | .....            |
| Green Lake.....                     | 3                      | 535                        | 388,509                  | 362,869  | 25,640           |
| Iowa.....                           | 9                      | 508                        | 793,313                  | 699,958  | 93,355           |
| Lafayette.....                      | 6                      | 888                        | 1,313,977                | 1,244,025  | 69,952           |
| Manitowoc.....                      | 3                      | 245                        | 245,573                  | 135,163  | 110,410          |
| Monroe.....                         | 3                      | 223                        | 106,628                  | 106,628  | .....            |
| Pepin.....                          | 3                      | 500                        | 282,485                  | 282,015  | 470              |
| Sheboygan.....                      | 3                      | 633                        | 522,955                  | 475,547  | 47,408           |
| Watpaca.....                        | 3                      | .....                      | 287,012                  | 170,372  | 116,640          |
| Wood.....                           | 3                      | 1,160                      | 274,953                  | 274,953  | .....            |
| Balance of State.....               | 50                     | 4,733                      | 6,081,550                | 5,075,939  | 1,005,611        |
| <b>WEST NORTH CENTRAL</b>           |                        |                            |                          |  |                  |
| <b>Minnesota.....</b>               | <b>661</b>             | <b>73,109</b>              | <b>91,213,755</b>        | <b>83,679,068</b>  | <b>7,533,687</b> |
| Becker.....                         | 7                      | 529                        | 513,686                  | 448,499  | 65,187           |
| Big Stone.....                      | 9                      | 1,028                      | 944,190                  | 918,776  | 25,414           |
| Blue Earth.....                     | 9                      | 898                        | 1,286,835                | 1,199,344  | 87,491           |
| Brown.....                          | 14                     | 1,590                      | 2,953,996                | 2,913,268  | 40,728           |
| Carver.....                         | 4                      | 223                        | 307,609                  | 236,392  | 71,217           |
| Chippewa.....                       | 10                     | .....                      | 1,181,532                | 1,087,067  | 94,465           |
| Clay.....                           | 9                      | 547                        | 1,031,445                | 968,536  | 62,909           |
| Clearwater.....                     | 4                      | 425                        | 191,876                  | 173,747  | 18,129           |
| Cottonwood.....                     | 12                     | 1,895                      | 2,523,224                | 2,208,967  | 314,257          |
| Dakota.....                         | 3                      | 185                        | 615,965                  | 587,702  | 28,263           |
| Dodge.....                          | 6                      | 866                        | 334,904                  | 296,811  | 38,093           |
| Douglas.....                        | 14                     | 2,176                      | 1,673,028                | 1,658,095  | 14,933           |
| Faribault.....                      | 19                     | 1,585                      | 3,503,673                | 3,171,375  | 332,298          |
| Fillmore.....                       | 10                     | 929                        | 1,206,103                | 1,118,062  | 88,041           |
| Freeborn.....                       | 5                      | 164                        | 481,974                  | 426,488  | 55,486           |
| Goodhue.....                        | 5                      | 348                        | 716,615                  | 576,393  | 140,222          |
| Grant.....                          | 13                     | 1,752                      | 2,151,996                | 2,056,118  | 95,878           |
| Hubbard.....                        | 3                      | 115                        | 208,057                  | 166,195  | 42,862           |
| Jackson.....                        | 9                      | 1,735                      | 1,900,343                | 1,665,538  | 234,805          |
| Kandiyohi.....                      | 15                     | 1,472                      | 2,206,905                | 2,099,631  | 107,274          |
| Kittson.....                        | 14                     | 1,360                      | 1,033,891                | 927,189  | 106,702          |
| Lac qui Parle.....                  | 20                     | 2,650                      | 2,293,104                | 2,105,642  | 187,462          |
| Lincoln.....                        | 10                     | 1,773                      | 1,578,993                | 1,353,655  | 225,338          |
| Lyon.....                           | 17                     | 2,296                      | 2,651,530                | 2,573,489  | 78,041           |
| McLeod.....                         | 14                     | 2,219                      | 2,251,601                | 1,982,766  | 268,835          |
| Marshall.....                       | 19                     | 1,331                      | 1,575,909                | 1,435,823  | 140,086          |
| Martin.....                         | 15                     | 1,499                      | 2,645,653                | 2,350,482  | 295,171          |
| Meeker.....                         | 16                     | 1,416                      | 2,008,108                | 1,967,987  | 40,121           |
| Mower.....                          | 6                      | 348                        | 696,255                  | 527,595  | 168,660          |
| Murray.....                         | 9                      | 328                        | 1,300,896                | 1,122,182  | 178,714          |
| Nobles.....                         | 8                      | 1,032                      | 1,949,413                | 1,767,615  | 181,798          |
| Norman.....                         | 18                     | 1,661                      | 1,517,004                | 1,426,997  | 90,007           |
| Otter Tail.....                     | 24                     | 4,046                      | 2,532,238                | 2,337,535  | 194,703          |
| Pipestone.....                      | 9                      | 847                        | 687,538                  | 498,259  | 189,279          |
| Polk.....                           | 15                     | 1,716                      | 1,405,974                | 1,198,503  | 207,471          |
| Pope.....                           | 11                     | 843                        | 1,368,932                | 1,367,958  | 10,974           |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>EAST NORTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| Tuscola.....                   | 56             | \$39,716              | \$75,536                    | \$6,398,449                                    | \$348,652                                | 5.45                         |
| Van Buren.....                 | 21             | 14,605                | 21,751                      | 5,317,899                                      | 660,912                                  | 12.43                        |
| Wexford.....                   | 16             | 56,629                | 97,381                      | 991,812  | 28,827                                   | 2.91                         |
| Balance of State.....          | 306            | 314,175               | 656,711                     | 110,666,787                                    | 6,527,349                                | 5.90                         |
| <b>Wisconsin</b>               |                |                       |                             |  |  |                              |
| Buffalo.....                   | 9              | 9,035                 | 16,190                      | 4,464,167                                      | 1,273,242                                | 28.52                        |
| Clark.....                     | 4              | 2,463                 | 7,239                       | 8,880,710                                      | 387,749                                  | 4.37                         |
| Fond du Lac.....               | 9              | 7,357                 | 25,117                      | 9,594,914                                      | 719,216                                  | 7.50                         |
| Green.....                     | 6              | 2,875                 | 4,472                       | 7,630,141                                      | 1,158,875                                | 15.19                        |
| Green Lake.....                | 14             | 3,251                 | 4,264                       | 2,949,846                                      | 375,412                                  | 12.73                        |
| Iowa.....                      | 13             | 6,774                 | 12,737                      | 6,346,121                                      | 662,928                                  | 10.45                        |
| Lafayette.....                 | 11             | 12,141                | 31,549                      | 6,088,858                                      | 1,271,509                                | 20.88                        |
| Manitowoc.....                 | 13             | 10,032                | 20,290                      | 7,051,397                                      | 300,643                                  | 4.26                         |
| Monroe.....                    | 5              | 1,888                 | 3,708                       | 6,073,028                                      | 1,229,968                                | 20.25                        |
| Pepin.....                     | 5              | 2,104                 | 4,419                       | 1,705,396                                      | 346,183                                  | 20.80                        |
| Sheboygan.....                 | 8              | 13,515                | 14,935                      | 7,354,953                                      | 540,069                                  | 7.34                         |
| Waupaca.....                   | 15             | 12,972                | 25,468                      | 6,822,337                                      | 749,483                                  | 10.99                        |
| Wood.....                      | 4              | 2,319                 | 5,641                       | 4,553,535                                      | 532,577                                  | 11.70                        |
| Balance of State.....          | 128            | 117,300               | 234,401                     | 266,550,862                                    | 32,996,202                               | 12.38                        |
| <b>WEST NORTH CENTRAL</b>      |                |                       |                             |  |  |                              |
| <b>Minnesota</b>               |                |                       |                             |  |  |                              |
| Becker.....                    | 1,218          | 1,405,089             | 2,860,170                   | 361,020,962                                    | 105,965,588                              | 29.35                        |
| Becker.....                    | 9              | 12,601                | 23,519                      | 3,015,113                                      | 1,267,279                                | 42.03                        |
| Big Stone.....                 | 12             | 12,493                | 31,729                      | 2,600,905                                      | 290,804                                  | 11.18                        |
| Blue Earth.....                | 10             | 11,831                | 17,918                      | 7,145,733                                      | 1,648,195                                | 23.07                        |
| Brown.....                     | 33             | 26,878                | 52,345                      | 5,108,164                                      | 1,961,712                                | 38.40                        |
| Carver.....                    | 7              | 11,351                | 23,656                      | 5,151,007                                      | 1,675,566                                | 32.53                        |
| Chippewa.....                  | 23             | 24,831                | 47,024                      | 4,232,236                                      | 800,328                                  | 18.91                        |
| Clay.....                      | 21             | 26,253                | 54,611                      | 4,108,039                                      | 454,267                                  | 11.06                        |
| Clearwater.....                | 4              | 4,600                 | 13,457                      | 1,525,489                                      | 425,662                                  | 27.90                        |
| Cottonwood.....                | 30             | 37,954                | 66,039                      | 5,425,360                                      | 854,202                                  | 15.74                        |
| Dakota.....                    | 4              | 6,419                 | 22,124                      | 5,052,630                                      | 1,528,421                                | 30.27                        |
| Dodge.....                     | 10             | 8,343                 | 18,346                      | 3,601,077                                      | 1,130,007                                | 31.38                        |
| Douglas.....                   | 16             | 16,690                | 30,035                      | 4,290,063                                      | 1,952,890                                | 45.52                        |
| Faribault.....                 | 40             | 53,278                | 93,515                      | 7,571,238                                      | 2,057,509                                | 27.18                        |
| Fillmore.....                  | 10             | 14,960                | 27,130                      | 6,830,617                                      | 1,970,262                                | 28.84                        |
| Freeborn.....                  | 10             | 7,474                 | 20,065                      | 8,502,690                                      | 3,240,177                                | 38.11                        |
| Goodhue.....                   | 16             | 18,575                | 31,564                      | 6,921,265                                      | 2,026,964                                | 29.29                        |
| Grant.....                     | 20             | 25,794                | 56,695                      | 2,873,638                                      | 1,303,142                                | 45.35                        |
| Hubbard.....                   | 7              | 4,842                 | 10,018                      | 1,002,916                                      | 117,946                                  | 11.76                        |
| Jackson.....                   | 17             | 22,650                | 49,264                      | 6,589,425                                      | 1,025,464                                | 15.56                        |
| Kandiyohi.....                 | 27             | 30,352                | 59,295                      | 5,069,584                                      | 2,160,934                                | 42.63                        |
| Kittson.....                   | 18             | 14,592                | 42,003                      | 2,601,683                                      | 581,012                                  | 22.33                        |
| Lac qui Parle.....             | 25             | 32,154                | 62,428                      | 5,676,124                                      | 1,619,587                                | 28.53                        |
| Lincoln.....                   | 17             | 23,630                | 78,387                      | 4,146,253                                      | 1,236,109                                | 29.81                        |
| Lyon.....                      | 22             | 29,013                | 72,504                      | 5,555,782                                      | 1,396,648                                | 25.14                        |
| McLeod.....                    | 23             | 32,493                | 66,139                      | 5,924,690                                      | 2,187,908                                | 36.93                        |
| Marshall.....                  | 28             | 29,150                | 77,239                      | 4,207,104                                      | 775,311                                  | 18.43                        |
| Martin.....                    | 35             | 45,602                | 80,825                      | 8,467,368                                      | 1,788,511                                | 21.12                        |
| Meeker.....                    | 35             | 34,741                | 80,316                      | 5,297,894                                      | 2,756,054                                | 52.02                        |
| Mower.....                     | 19             | 25,160                | 52,082                      | 5,191,764                                      | 1,182,817                                | 22.78                        |
| Murray.....                    | 23             | 27,820                | 53,701                      | 5,238,209                                      | 838,038                                  | 16.00                        |
| Nobles.....                    | 20             | 27,513                | 42,226                      | 6,888,855                                      | 532,692                                  | 7.73                         |
| Norman.....                    | 40             | 33,189                | 68,266                      | 3,454,970                                      | 803,536                                  | 23.26                        |
| Otter Tail.....                | 45             | 52,954                | 95,043                      | 10,636,952                                     | 6,327,970                                | 59.49                        |
| Pipestone.....                 | 15             | 19,598                | 38,708                      | 3,456,726                                      | 170,994                                  | 4.95                         |
| Polk.....                      | 32             | 37,248                | 68,800                      | 7,916,358                                      | 1,431,018                                | 18.06                        |
| Pope.....                      | 17             | 13,763                | 21,668                      | 3,351,720                                      | 1,298,757                                | 38.75                        |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales      |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|-------------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                   |
| Red Lake.....                       | 4                      | 375                        | \$194,360                | \$178,000  | \$16,360          |
| Redwood.....                        | 26                     | 982                        | 4,451,408                | 4,241,814  | 209,594           |
| Renville.....                       | 20                     | 3,190                      | 4,488,497                | 4,147,358  | 341,139           |
| Rice.....                           | 3                      | 318                        | 296,499                  | 199,499  | 97,000            |
| Rock.....                           | 10                     | 780                        | 1,133,578                | 968,240  | 165,338           |
| Scott.....                          | 4                      | 593                        | 754,726                  | 634,726  | 120,000           |
| Sibley.....                         | 13                     | 2,081                      | 1,872,875                | 1,744,944  | 127,931           |
| Stearns.....                        | 22                     | 2,579                      | 3,256,134                | 3,043,160  | 212,974           |
| Steele.....                         | 11                     | 1,407                      | 1,997,068                | 1,952,263  | 44,805            |
| Stevens.....                        | 3                      | 186                        | 462,292                  | 447,509  | 14,783            |
| Swift.....                          | 5                      |                            | 762,592                  | 609,782  | 152,810           |
| Todd.....                           | 12                     | 3,378                      | 1,837,417                | 1,612,062  | 225,356           |
| Traverse.....                       | 6                      | 1,095                      | 940,112                  | 940,112  | .....             |
| Wabasha.....                        | 7                      | 2,175                      | 941,838                  | 766,038  | 175,800           |
| Wadena.....                         | 9                      | 1,195                      | 703,283                  | 620,390  | 82,893            |
| Waseca.....                         | 6                      | 207                        | 501,220                  | 480,739  | 20,481            |
| Watonwan.....                       | 16                     | 1,032                      | 2,434,710                | 2,341,390  | 93,320            |
| Wilkin.....                         | 14                     | 934                        | 1,382,518                | 1,333,985  | 48,533            |
| Winona.....                         | 5                      | 477                        | 611,751                  | 513,416  | 98,335            |
| Wright.....                         | 9                      | 828                        | 857,002                  | 797,935  | 59,067            |
| Yellow Medicine.....                | 18                     | 299                        | 3,040,590                | 2,840,418  | 200,172           |
| Balance of State.....               | 33                     | 4,171                      | 4,861,290                | 4,355,607  | 505,683           |
| <b>Iowa.....</b>                    | <b>602</b>             | <b>66,452</b>              | <b>114,701,619</b>       | <b>99,853,679</b>  | <b>14,847,940</b> |
| Adair.....                          | 3                      | 591                        | 1,267,226                | 1,131,333  | 135,893           |
| Appanoose.....                      | 7                      | 1,515                      | 793,676                  | 793,676  | .....             |
| Benton.....                         | 10                     | 345                        | 1,147,938                | 899,682  | 248,256           |
| Black Hawk.....                     | 4                      | 223                        | 273,165                  | 201,495  | 71,670            |
| Boone.....                          | 10                     | 1,202                      | 2,285,011                | 2,131,724  | 153,287           |
| Buchanan.....                       | 3                      | 393                        | 270,206                  | 256,083  | 14,123            |
| Buena Vista.....                    | 11                     | 1,640                      | 2,053,914                | 1,828,161  | 225,753           |
| Butler.....                         | 4                      | 525                        | 492,317                  | 299,720  | 192,597           |
| Calhoun.....                        | 12                     | 264                        | 2,036,449                | 1,930,173  | 106,276           |
| Carrroll.....                       | 6                      | 697                        | 1,088,278                | 980,804  | 107,474           |
| Cass.....                           | 4                      | 442                        | 873,329                  | 761,858  | 111,471           |
| Cedar.....                          | 7                      | 634                        | 1,579,778                | 1,390,908  | 188,870           |
| Cerro Gordo.....                    | 9                      | 1,062                      | 1,652,356                | 1,422,157  | 230,199           |
| Cherokee.....                       | 4                      | 530                        | 658,438                  | 633,908  | 24,530            |
| Chickasaw.....                      | 4                      | 224                        | 663,448                  | 499,307  | 164,141           |
| Clay.....                           | 6                      | 843                        | 1,393,684                | 1,147,857  | 245,827           |
| Clayton.....                        | 14                     | 1,703                      | 2,591,511                | 2,398,668  | 192,843           |
| Clinton.....                        | 3                      | 285                        | 531,142                  | 385,537  | 145,605           |
| Crawford.....                       | 4                      | 190                        | 421,202                  | 338,246  | 82,956            |
| Dallas.....                         | 4                      | 249                        | 829,726                  | 809,089  | 20,637            |
| Dickinson.....                      | 6                      | 874                        | 1,416,089                | 1,143,904  | 272,185           |
| Dubuque.....                        | 8                      | 715                        | 1,692,152                | 1,586,440  | 105,712           |
| Emmet.....                          | 3                      | 128                        | 295,435                  | 239,165  | 56,268            |
| Fayette.....                        | 3                      | 340                        | 564,962                  | 504,622  | 60,340            |
| Floyd.....                          | 7                      | 130                        | 1,063,571                | 900,101  | 163,470           |
| Franklin.....                       | 4                      | 360                        | 896,939                  | 562,958  | 308,681           |
| Fremont.....                        | 6                      | 497                        | 947,825                  | 870,840  | 76,985            |
| Greene.....                         | 8                      | 1,346                      | 1,504,273                | 1,364,045  | 140,228           |
| Grundy.....                         | 10                     | 1,080                      | 1,652,461                | 1,288,105  | 364,356           |
| Guthrie.....                        | 5                      | 85                         | 1,242,409                | 1,095,073  | 147,336           |
| Hamilton.....                       | 12                     | 1,626                      | 2,800,472                | 2,348,811  | 551,661           |
| Hancock.....                        | 10                     | 721                        | 1,854,670                | 1,378,515  | 481,155           |
| Hardin.....                         | 13                     | 2,285                      | 2,301,364                | 1,917,480  | 383,884           |
| Henry.....                          | 14                     | 1,068                      | 1,995,400                | 1,673,211  | 322,189           |
| Howard.....                         | 5                      | 1,357                      | 1,731,958                | 1,567,222  | 164,736           |
| Humboldt.....                       | 8                      | 1,480                      | 1,798,024                | 1,246,173  | 552,851           |
| Iowa.....                           | 8                      | 1,154                      | 1,792,080                | 1,788,487  | 3,593             |
| Jackson.....                        | 3                      | 487                        | 589,309                  | 563,358  | 25,951            |
| Jasper.....                         | 6                      | 513                        | 1,734,424                | 1,448,569  | 285,855           |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| Red Lake.....                  | 5              | \$7,040               | \$11,681                    | \$1,359,546                                    | \$251,012                                | 18.46                        |
| Redwood.....                   | 34             | 42,467                | 91,729                      | 7,628,468                                      | 1,947,857                                | 25.53                        |
| Renville.....                  | 43             | 50,854                | 101,563                     | 8,595,760                                      | 3,763,760                                | 43.79                        |
| Rice.....                      | 6              | 8,460                 | 14,997                      | 4,821,414                                      | 1,066,491                                | 22.12                        |
| Rock.....                      | 17             | 21,855                | 37,797                      | 4,635,845                                      | 314,923                                  | 6.79                         |
| Scott.....                     | 5              | 8,390                 | 32,384                      | 3,419,688                                      | 1,107,284                                | 32.38                        |
| Sibley.....                    | 28             | 19,711                | 69,581                      | 5,714,601                                      | 2,059,823                                | 36.04                        |
| Stearns.....                   | 31             | 31,480                | 54,718                      | 8,263,243                                      | 2,612,079                                | 31.61                        |
| Steele.....                    | 25             | 18,722                | 26,860                      | 4,291,968                                      | 1,876,654                                | 43.72                        |
| Stevens.....                   | 6              | 8,770                 | 23,049                      | 2,922,821                                      | 850,548                                  | 29.10                        |
| Swift.....                     | 11             | 18,500                | 31,141                      | 4,002,375                                      | 762,235                                  | 19.04                        |
| Todd.....                      | 24             | 28,153                | 90,448                      | 5,657,880                                      | 3,258,627                                | 57.59                        |
| Traverse.....                  | 11             | 12,871                | 18,694                      | 2,335,249                                      | 672,729                                  | 28.81                        |
| Wabasha.....                   | 19             | 31,336                | 42,178                      | 4,513,454                                      | 1,109,426                                | 24.58                        |
| Wadena.....                    | 11             | 9,995                 | 30,980                      | 1,609,827                                      | 818,605                                  | 50.85                        |
| Waseca.....                    | 8              | 11,684                | 26,512                      | 3,765,237                                      | 1,100,312                                | 29.22                        |
| Watonwan.....                  | 42             | 25,592                | 39,235                      | 4,225,690                                      | 1,540,621                                | 36.46                        |
| Wilkin.....                    | 28             | 30,313                | 55,791                      | 2,632,234                                      | 503,447                                  | 19.13                        |
| Winona.....                    | 10             | 9,919                 | 16,621                      | 5,214,649                                      | 1,537,499                                | 29.48                        |
| Wright.....                    | 16             | 9,715                 | 27,708                      | 6,641,400                                      | 2,255,853                                | 33.97                        |
| Yellow Medicine.....           | 34             | 51,503                | 95,376                      | 5,928,207                                      | 2,299,072                                | 38.78                        |
| Balance of State.....          | 64             | 91,380                | 172,443                     | 78,211,765                                     | 21,437,036                               | 27.41                        |
| <b>Iowa.....</b>               | <b>1,295</b>   | <b>1,502,867</b>      | <b>3,066,879</b>            | <b>620,820,086</b>                             | <b>74,635,414</b>                        | <b>12.02</b>                 |
| Adair.....                     | 14             | 14,936                | 20,493                      | 5,839,374                                      | 569,794                                  | 9.76                         |
| Appanoose.....                 | 7              | 4,763                 | 5,186                       | 2,666,762                                      | 400,610                                  | 15.02                        |
| Benton.....                    | 18             | 20,392                | 35,728                      | 8,701,649                                      | 771,178                                  | 8.86                         |
| Black Hawk.....                | 7              | 5,470                 | 14,083                      | 6,619,333                                      | 411,889                                  | 6.22                         |
| Boone.....                     | 18             | 25,089                | 39,430                      | 6,720,475                                      | 1,173,047                                | 17.45                        |
| Buchanan.....                  | 7              | 5,825                 | 7,503                       | 5,032,517                                      | 143,998                                  | 2.86                         |
| Buena Vista.....               | 19             | 19,823                | 42,581                      | 8,173,746                                      | 664,635                                  | 8.13                         |
| Butler.....                    | 6              | 8,222                 | 15,240                      | 5,495,085                                      | 456,551                                  | 8.31                         |
| Calhoun.....                   | 21             | 23,275                | 45,843                      | 7,298,424                                      | 607,995                                  | 8.33                         |
| Carroll.....                   | 13             | 13,575                | 22,992                      | 6,870,043                                      | 236,154                                  | 3.44                         |
| Cass.....                      | 14             | 15,481                | 27,468                      | 7,157,228                                      | 500,584                                  | 6.99                         |
| Cedar.....                     | 14             | 7,696                 | 11,482                      | 7,348,807                                      | 1,192,508                                | 16.23                        |
| Cerro Gordo.....               | 18             | 22,160                | 36,911                      | 5,662,181                                      | 1,064,343                                | 18.80                        |
| Cherokee.....                  | 7              | 11,829                | 18,067                      | 8,416,889                                      | 186,051                                  | 2.21                         |
| Chickasaw.....                 | 11             | 14,381                | 21,997                      | 4,221,175                                      | 581,892                                  | 13.79                        |
| Clay.....                      | 12             | 16,220                | 31,147                      | 7,175,026                                      | 449,455                                  | 6.26                         |
| Clayton.....                   | 16             | 12,056                | 34,521                      | 7,268,267                                      | 3,180,875                                | 43.76                        |
| Clinton.....                   | 8              | 11,909                | 22,911                      | 8,837,479                                      | 954,792                                  | 10.80                        |
| Crawford.....                  | 7              | 6,962                 | 16,475                      | 10,151,904                                     | 255,170                                  | 2.51                         |
| Dallas.....                    | 8              | 10,520                | 31,799                      | 7,968,152                                      | 778,074                                  | 9.76                         |
| Dickinson.....                 | 13             | 13,471                | 21,468                      | 4,019,787                                      | 542,428                                  | 13.49                        |
| Dubuque.....                   | 12             | 10,423                | 14,847                      | 5,589,180                                      | 1,662,349                                | 29.74                        |
| Emmet.....                     | 4              | 3,180                 | 11,998                      | 4,278,181                                      | 893,123                                  | 20.88                        |
| Fayette.....                   | 6              | 7,964                 | 15,588                      | 6,798,069                                      | 1,749,595                                | 25.74                        |
| Floyd.....                     | 13             | 16,831                | 24,636                      | 4,866,894                                      | 421,682                                  | 8.66                         |
| Franklin.....                  | 14             | 23,304                | 35,684                      | 6,672,362                                      | 917,183                                  | 13.75                        |
| Fremont.....                   | 17             | 10,762                | 17,349                      | 5,967,949                                      | 381,045                                  | 6.38                         |
| Greene.....                    | 9              | 10,875                | 43,697                      | 6,756,490                                      | 704,958                                  | 10.43                        |
| Grundy.....                    | 31             | 29,863                | 63,109                      | 6,204,389                                      | 852,269                                  | 13.74                        |
| Guthrie.....                   | 13             | 14,614                | 29,363                      | 5,999,411                                      | 1,029,383                                | 17.16                        |
| Hamilton.....                  | 25             | 31,020                | 57,908                      | 7,838,624                                      | 722,021                                  | 9.21                         |
| Hancock.....                   | 20             | 23,902                | 100,391                     | 6,036,364                                      | 1,263,086                                | 20.92                        |
| Hardin.....                    | 29             | 37,452                | 132,259                     | 7,067,686                                      | 1,207,126                                | 17.08                        |
| Henry.....                     | 27             | 26,570                | 57,759                      | 4,808,469                                      | 696,673                                  | 14.49                        |
| Howard.....                    | 12             | 14,808                | 28,824                      | 3,433,382                                      | 545,684                                  | 15.89                        |
| Humboldt.....                  | 22             | 28,903                | 52,584                      | 5,605,149                                      | 1,090,763                                | 19.46                        |
| Iowa.....                      | 13             | 9,826                 | 44,537                      | 6,744,238                                      | 988,528                                  | 14.66                        |
| Jackson.....                   | 4              | 4,011                 | 7,194                       | 5,201,639                                      | 1,291,727                                | 24.83                        |
| Jasper.....                    | 20             | 23,546                | 42,368                      | 8,792,791                                      | 1,278,316                                | 14.54                        |

## CENSUS OF DISTRIBUTION

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales     |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|------------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                  |
| Jefferson.....                      | 7                      | 892                        | \$596,786                | \$596,786  | .....            |
| Jones.....                          | 9                      | 1,807                      | 1,566,153                | 1,545,953  | \$10,200         |
| Keokuk.....                         | 9                      | 492                        | 487,117                  | 412,091  | 75,026           |
| Kossuth.....                        | 18                     | 1,814                      | 3,324,694                | 2,958,300  | 366,294          |
| Louisa.....                         | 4                      | 320                        | 300,959                  | 195,216  | 105,743          |
| Lyon.....                           | 6                      | 588                        | 877,755                  | 658,041  | 219,714          |
| Mahaska.....                        | 9                      | 812                        | 1,989,517                | 1,770,632  | 218,885          |
| Marion.....                         | 11                     | 974                        | 2,408,795                | 2,297,249  | 111,546          |
| Marshall.....                       | 19                     | 1,915                      | 2,984,767                | 2,511,280  | 473,487          |
| Mitchell.....                       | 4                      | 180                        | 708,210                  | 472,896  | 235,324          |
| Monona.....                         | 5                      | 343                        | 1,805,418                | 1,753,341  | 52,077           |
| Montgomery.....                     | 3                      | 119                        | 1,005,789                | 847,088  | 158,701          |
| O'Brien.....                        | 7                      | 939                        | 1,080,021                | 854,007  | 226,014          |
| Osceola.....                        | 8                      | 997                        | 1,163,823                | 1,136,907  | 26,916           |
| Paga.....                           | 5                      | 384                        | 926,354                  | 861,000  | 65,354           |
| Palo Alto.....                      | 12                     | 1,352                      | 2,991,810                | 2,792,437  | 199,373          |
| Plymouth.....                       | 8                      | 1,558                      | 1,837,271                | 1,408,120  | 429,151          |
| Pocahontas.....                     | 7                      | 589                        | 1,168,385                | 998,808  | 169,577          |
| Poweshiek.....                      | 8                      | 651                        | 2,044,473                | 1,885,839  | 158,634          |
| Sac.....                            | 6                      | 305                        | 1,747,555                | 1,428,788  | 318,767          |
| Scott.....                          | 9                      | 821                        | 1,080,052                | 853,381  | 226,671          |
| Sioux.....                          | 13                     | 2,657                      | 4,976,090                | 4,274,366  | 701,724          |
| Story.....                          | 16                     | 1,803                      | 2,335,717                | 2,061,322  | 274,395          |
| Tama.....                           | 9                      | 530                        | 1,041,938                | 841,778  | 200,160          |
| Union.....                          | 6                      | 620                        | 1,665,109                | 1,572,617  | 92,492           |
| Van Buren.....                      | 4                      | 938                        | 357,032                  | 357,032  | .....            |
| Washington.....                     | 6                      | 165                        | 548,990                  | 548,990  | .....            |
| Webster.....                        | 18                     | 1,516                      | 3,500,427                | 3,047,031  | 453,396          |
| Winnebago.....                      | 8                      | 867                        | 1,201,884                | 1,002,368  | 199,516          |
| Winneshek.....                      | 5                      | 1,500                      | 1,519,205                | 1,236,462  | 282,743          |
| Woodbury.....                       | 7                      | 387                        | 1,522,764                | 1,377,365  | 145,399          |
| Worth.....                          | 5                      | 819                        | 1,165,924                | 1,098,348  | 67,576           |
| Wright.....                         | 16                     | 3,088                      | 3,410,602                | 3,011,116  | 399,486          |
| Balance of State.....               | 47                     | 3,947                      | 8,490,724                | 7,505,359  | 985,365          |
| <b>Missouri.....</b>                | <b>326</b>             | <b>46,581</b>              | <b>44,147,616</b>        | <b>35,753,071</b>  | <b>8,394,545</b> |
| Adair.....                          | 7                      | 530                        | 343,960                  | 291,875  | 52,025           |
| Audrain.....                        | 3                      | 499                        | 324,574                  | 202,499  | 122,075          |
| Barry.....                          | 3                      | 203                        | 1,193,072                | 1,193,072  | .....            |
| Barton.....                         | 4                      | 550                        | 539,734                  | 425,676  | 114,058          |
| Bates.....                          | 3                      | 1,200                      | 419,496                  | 418,996  | 500              |
| Callaway.....                       | 3                      | 350                        | 175,239                  | 175,239  | .....            |
| Carroll.....                        | 4                      | 525                        | 835,811                  | 725,450  | 110,361          |
| Cedar.....                          | 3                      | 604                        | 405,092                  | 310,816  | 94,276           |
| Chariton.....                       | 6                      | 902                        | 645,750                  | 545,171  | 100,579          |
| Clark.....                          | 4                      | 20                         | 404,748                  | 302,315  | 102,433          |
| Cole.....                           | 3                      | 99                         | 222,374                  | 176,533  | 45,841           |
| Cooper.....                         | 5                      | 20                         | 485,938                  | 395,275  | 90,663           |
| Dade.....                           | 3                      | 100                        | 189,703                  | 148,871  | 40,832           |
| Dallas.....                         | 4                      | 255                        | 249,974                  | 171,536  | 78,438           |
| De Kalb.....                        | 3                      | 241                        | 155,025                  | 126,406  | 28,619           |
| Dunklin.....                        | 3                      | 297                        | 29,436                   | 29,436   | .....            |
| Franklin.....                       | 6                      | 131                        | 508,768                  | 292,352  | 216,416          |
| Gasconade.....                      | 4                      | 585                        | 392,821                  | 225,291  | 167,530          |
| Gentry.....                         | 8                      | 1,252                      | 696,912                  | 555,664  | 141,248          |
| Greene.....                         | 4                      | 398                        | 475,383                  | 275,548  | 199,835          |
| Grundy.....                         | 1                      | 4,459                      | 1,333,813                | 1,284,296  | 49,517           |
| Harrison.....                       | 4                      | 6,321                      | 1,666,267                | 1,461,113  | 205,154          |
| Henry.....                          | 6                      | 1,305                      | 938,633                  | 751,631  | 187,002          |
| Jasper.....                         | 3                      | 75                         | 173,316                  | 121,316  | 52,000           |
| Johnson.....                        | 5                      | 394                        | 716,604                  | 641,912  | 74,692           |
| Knox.....                           | 4                      | 276                        | 470,404                  | 461,052  | 19,352           |
| Lafayette.....                      | 7                      | 694                        | 1,094,551                | 835,716  | 248,835          |
| Lewis.....                          | 6                      | 575                        | 697,555                  | 562,417  | 145,138          |
| Lincoln.....                        | 6                      | 268                        | 423,597                  | 249,503  | 174,094          |
| Livingston.....                     | 6                      | 1,555                      | 2,193,047                | 2,149,331  | 43,716           |
| Macon.....                          | 7                      | 795                        | 2,014,439                | 1,647,366  | 367,073          |
| Marion.....                         | 3                      | 612                        | 899,269                  | 753,093  | 146,176          |
| Miller.....                         | 3                      | 387                        | 217,323                  | 189,804  | 77,519           |

1 Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| Jefferson.....                 | 10             | \$2,904               | \$4,095                     | \$3,658,210                                    | \$370,649                                | 10.13                        |
| Jones.....                     | 12             | 12,538                | 29,404                      | 7,010,295                                      | 1,678,142                                | 23.94                        |
| Keokuk.....                    | 10             | 4,573                 | 12,302                      | 5,905,895                                      | 561,597                                  | 9.51                         |
| Kossuth.....                   | 42             | 48,960                | 95,589                      | 10,737,717                                     | 2,076,953                                | 19.34                        |
| Louisa.....                    | 10             | 11,495                | 22,484                      | 3,931,186                                      | 496,641                                  | 12.63                        |
| Lyon.....                      | 15             | 22,588                | 41,202                      | 6,767,363                                      | 544,832                                  | 8.05                         |
| Mahaska.....                   | 22             | 23,738                | 56,918                      | 6,590,957                                      | 671,159                                  | 10.18                        |
| Marion.....                    | 29             | 31,586                | 48,771                      | 5,577,858                                      | 622,191                                  | 11.15                        |
| Marshall.....                  | 41             | 47,504                | 109,755                     | 7,332,432                                      | 1,124,503                                | 15.34                        |
| Mitchell.....                  | 10             | 15,316                | 25,266                      | 4,488,313                                      | 350,076                                  | 7.80                         |
| Monona.....                    | 12             | 27,303                | 48,823                      | 8,169,555                                      | 674,807                                  | 8.26                         |
| Montgomery.....                | 8              | 13,813                | 23,105                      | 6,147,922                                      | 267,238                                  | 4.67                         |
| O'Brien.....                   | 9              | 14,018                | 42,064                      | 7,694,211                                      | 732,079                                  | 9.51                         |
| Osceola.....                   | 14             | 17,423                | 31,901                      | 4,511,830                                      | 388,818                                  | 8.62                         |
| Page.....                      | 9              | 11,120                | 16,738                      | 6,674,751                                      | 613,556                                  | 9.19                         |
| Palo Alto.....                 | 25             | 32,029                | 58,128                      | 6,306,436                                      | 1,188,695                                | 18.85                        |
| Plymouth.....                  | 22             | 32,160                | 54,080                      | 10,597,078                                     | 727,223                                  | 6.86                         |
| Pocahontas.....                | 13             | 19,292                | 33,831                      | 7,331,473                                      | 989,154                                  | 13.49                        |
| Poweshiek.....                 | 19             | 20,695                | 28,703                      | 6,787,550                                      | 1,007,671                                | 14.85                        |
| Sac.....                       | 11             | 16,651                | 28,598                      | 7,348,711                                      | 595,224                                  | 8.10                         |
| Scott.....                     | 29             | 23,617                | 29,769                      | 6,213,869                                      | 534,470                                  | 8.60                         |
| Sioux.....                     | 43             | 60,895                | 108,726                     | 10,914,076                                     | 2,449,821                                | 22.45                        |
| Story.....                     | 34             | 32,810                | 51,105                      | 7,446,997                                      | 1,270,787                                | 17.06                        |
| Tama.....                      | 16             | 19,169                | 30,891                      | 7,718,570                                      | 685,830                                  | 8.89                         |
| Union.....                     | 21             | 21,449                | 32,981                      | 3,847,829                                      | 738,097                                  | 19.18                        |
| Van Buren.....                 | 5              | 1,490                 | 1,943                       | 2,938,439                                      | 387,856                                  | 13.20                        |
| Washington.....                | 9              | 5,100                 | 13,394                      | 7,167,464                                      | 842,780                                  | 11.76                        |
| Webster.....                   | 37             | 48,605                | 81,369                      | 8,257,479                                      | 1,593,895                                | 19.30                        |
| Winnebago.....                 | 15             | 21,119                | 50,693                      | 4,291,507                                      | 1,193,045                                | 27.80                        |
| Winneshieck.....               | 14             | 14,539                | 30,245                      | 6,247,467                                      | 1,209,729                                | 19.36                        |
| Woodbury.....                  | 29             | 36,765                | 95,953                      | 11,564,317                                     | 846,006                                  | 7.32                         |
| Worth.....                     | 9              | 11,924                | 22,759                      | 3,479,216                                      | 775,941                                  | 22.30                        |
| Wright.....                    | 32             | 43,269                | 150,262                     | 7,735,073                                      | 1,890,940                                | 24.45                        |
| Balance of State.....          | 110            | 125,521               | 261,592                     | 149,122,480                                    | 11,697,475                               | 7.84                         |
| <b>Missouri.....</b>           |                |                       |                             |  |  |                              |
| Adair.....                     | 8              | 4,973                 | 6,708                       | 2,739,115                                      | 536,673                                  | 19.59                        |
| Audrain.....                   | 9              | 10,426                | 18,391                      | 3,695,777                                      | 588,484                                  | 15.92                        |
| Barry.....                     | 6              | 5,325                 | 13,046                      | 2,869,960                                      | 364,325                                  | 12.69                        |
| Barton.....                    | 22             | 15,555                | 28,077                      | 2,266,739                                      | 122,014                                  | 5.38                         |
| Bates.....                     | 12             | 8,546                 | 14,687                      | 5,290,482                                      | 359,885                                  | 6.80                         |
| Callaway.....                  | 3              | 1,753                 | 1,787                       | 3,626,860                                      | 300,727                                  | 8.29                         |
| Carroll.....                   | 16             | 13,794                | 30,817                      | 5,147,102                                      | 404,239                                  | 7.85                         |
| Cedar.....                     | 10             | 6,950                 | 12,821                      | 1,652,500                                      | 71,189                                   | 4.31                         |
| Chariton.....                  | 20             | 21,688                | 41,787                      | 4,123,407                                      | 585,916                                  | 14.21                        |
| Clark.....                     | 11             | 10,215                | 21,533                      | 1,983,386                                      | 370,414                                  | 18.68                        |
| Cole.....                      | 8              | 7,315                 | 12,197                      | 1,925,118                                      | 461,800                                  | 23.99                        |
| Cooper.....                    | 15             | 13,787                | 23,557                      | 3,754,273                                      | 856,225                                  | 9.49                         |
| Dade.....                      | 6              | 5,700                 | 7,891                       | 2,303,654                                      | 397,219                                  | 17.24                        |
| Dallas.....                    | 14             | 9,426                 | 13,158                      | 1,626,225                                      | 106,958                                  | 6.58                         |
| De Kalb.....                   | 8              | 5,082                 | 8,053                       | 3,246,747                                      | 191,419                                  | 5.90                         |
| Dunklin.....                   | 3              | 280                   | 322                         | 6,330,853                                      | 11,762                                   | 0.19                         |
| Franklin.....                  | 15             | 12,464                | 26,803                      | 3,145,153                                      | 544,934                                  | 17.33                        |
| Gasconade.....                 | 13             | 13,185                | 22,126                      | 1,311,073                                      | 277,557                                  | 21.17                        |
| Gentry.....                    | 18             | 16,672                | 39,618                      | 3,627,343                                      | 227,592                                  | 6.27                         |
| Greene.....                    | 14             | 13,853                | 17,986                      | 5,404,982                                      | 702,198                                  | 12.99                        |
| Grundy.....                    | 41             | 22,883                | 43,273                      | 2,655,536                                      | 378,099                                  | 14.24                        |
| Harrison.....                  | 35             | 26,918                | 42,766                      | 4,230,568                                      | 459,284                                  | 10.86                        |
| Henry.....                     | 82             | 32,336                | 66,462                      | 4,307,412                                      | 536,231                                  | 12.45                        |
| Jasper.....                    | 8              | 8,131                 | 15,288                      | 3,369,956                                      | 226,218                                  | 6.71                         |
| Johnson.....                   | 9              | 4,403                 | 7,528                       | 5,329,812                                      | 444,726                                  | 8.34                         |
| Knox.....                      | 4              | 4,938                 | 8,353                       | 3,019,136                                      | 207,300                                  | 6.87                         |
| Lafayette.....                 | 21             | 30,278                | 49,459                      | 6,082,836                                      | 240,824                                  | 3.96                         |
| Lewis.....                     | 15             | 19,820                | 38,721                      | 2,500,768                                      | 429,368                                  | 17.17                        |
| Lincoln.....                   | 14             | 14,130                | 24,448                      | 2,981,442                                      | 71,797                                   | 2.41                         |
| Livingston.....                | 90             | 78,987                | 120,159                     | 2,785,763                                      | 513,170                                  | 18.42                        |
| Macon.....                     | 18             | 18,270                | 27,029                      | 4,319,266                                      | 738,494                                  | 17.10                        |
| Marion.....                    | 7              | 8,720                 | 14,662                      | 2,587,303                                      | 437,597                                  | 16.91                        |
| Miller.....                    | 11             | 5,456                 | 8,773                       | 1,877,475                                      | 359,598                                  | 19.15                        |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales     |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|------------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                  |
| Moniteau.....                       | 6                      | 9                          | \$811,412                | \$581,287  | \$230,125        |
| Monroe.....                         | 3                      | 300                        | 456,825                  | 456,825  | 17,608           |
| Morgan.....                         | 0                      | 42                         | 488,817                  | 371,239  | 117,608          |
| Nodaway.....                        | 4                      | 1,193                      | 409,107                  | 354,155  | 54,952           |
| Osage.....                          | 4                      | 850                        | 593,063                  | 431,497  | 161,566          |
| Phelps.....                         | 4                      | 738                        | 1,653,579                | 1,287,340  | 366,239          |
| Pike.....                           | 5                      | 833                        | 424,286                  | 214,479  | 209,807          |
| Platte.....                         | 3                      | 246                        | 370,723                  | 317,712  | 53,011           |
| Polk.....                           | 16                     | 2,080                      | 1,453,881                | 1,040,720  | 413,161          |
| Pulaski.....                        | 3                      | 665                        | 800,285                  | 740,000  | 60,286           |
| Randolph.....                       | 3                      | 274                        | 207,000                  | 179,000  | 28,000           |
| St. Clair.....                      | 3                      | .....                      | 192,975                  | 104,928  | 88,047           |
| St. Louis.....                      | 3                      | 83                         | 153,962                  | 103,752  | 50,210           |
| Saline.....                         | 6                      | 95                         | 799,425                  | 620,571  | 178,854          |
| Schuyler.....                       | 4                      | 573                        | 332,998                  | 245,853  | 87,145           |
| Scotland.....                       | 6                      | 279                        | 514,503                  | 447,274  | 67,229           |
| Shelby.....                         | 10                     | 2,926                      | 1,352,363                | 1,247,537  | 104,826          |
| Stoddard.....                       | 4                      | 1,113                      | 395,357                  | 373,054  | 22,303           |
| Sullivan.....                       | 6                      | 622                        | 622,687                  | 467,018  | 155,669          |
| Texas.....                          | 3                      | 110                        | 157,218                  | 126,635  | 30,583           |
| Warren.....                         | 5                      | 504                        | 367,980                  | 291,720  | 86,260           |
| Wright.....                         | 3                      | 203                        | 146,915                  | 97,065   | 49,850           |
| Balance of State.....               | 59                     | 9,316                      | 9,919,656                | 7,636,839  | 2,282,817        |
| <b>North Dakota.....</b>            | <b>554</b>             | <b>34,361</b>              | <b>69,806,123</b>        | <b>64,877,935</b>  | <b>4,928,188</b> |
| Adams.....                          | 5                      | .....                      | 1,401,608                | 1,246,130  | 155,478          |
| Barnes.....                         | 18                     | 1,693                      | 2,532,754                | 2,036,467  | 496,287          |
| Benson.....                         | 17                     | 692                        | 1,834,507                | 1,784,962  | 99,525           |
| Bottineau.....                      | 18                     | 1,192                      | 2,181,887                | 1,594,555  | 286,332          |
| Bowman.....                         | 4                      | 649                        | 1,126,361                | 947,963  | 178,398          |
| Burke.....                          | 8                      | 502                        | 734,234                  | 688,207  | 46,027           |
| Burleigh.....                       | 5                      | 105                        | 487,755                  | 474,984  | 12,771           |
| Cass.....                           | 23                     | 504                        | 2,917,568                | 2,671,857  | 245,711          |
| Cavaller.....                       | 11                     | 333                        | 1,665,793                | 1,578,948  | 86,845           |
| Dickey.....                         | 12                     | 834                        | 1,007,170                | 853,173  | 153,997          |
| Divide.....                         | 10                     | 1,106                      | 1,447,400                | 1,387,201  | 60,199           |
| Dunn.....                           | 5                      | 449                        | 637,404                  | 619,235  | 18,169           |
| Eddy.....                           | 4                      | 348                        | 682,826                  | 641,759  | 41,067           |
| Emmons.....                         | 10                     | 585                        | 1,327,232                | 1,240,868  | 86,374           |
| Foster.....                         | 6                      | 113                        | 640,989                  | 605,151  | 35,838           |
| Golden Valley.....                  | 5                      | 468                        | 1,005,382                | 967,968  | 17,414           |
| Grand Forks.....                    | 13                     | 334                        | 1,940,959                | 1,874,740  | 66,219           |
| Griggs.....                         | 8                      | 4                          | 638,788                  | 583,306  | 55,482           |
| Hettinger.....                      | 7                      | 1,119                      | 1,715,968                | 1,711,129  | 4,837            |
| Kidder.....                         | 12                     | 745                        | 1,068,359                | 938,720  | 149,639          |
| La Moure.....                       | 16                     | 643                        | 1,109,713                | 978,802  | 130,911          |
| Logan.....                          | 6                      | 175                        | 682,420                  | 654,965  | 27,455           |
| McHenry.....                        | 16                     | 1,242                      | 1,983,957                | 1,913,291  | 70,666           |
| McIntosh.....                       | 3                      | 360                        | 215,843                  | 191,362  | 24,481           |
| McKenzie.....                       | 4                      | 681                        | 1,014,197                | 1,006,373  | 7,824            |
| McLean.....                         | 9                      | 903                        | 1,643,975                | 1,610,344  | 33,631           |
| Mercer.....                         | 6                      | 462                        | 969,722                  | 957,449  | 12,273           |
| Morton.....                         | 7                      | 369                        | 1,230,188                | 1,182,764  | 67,424           |
| Mountrail.....                      | 18                     | 2,845                      | 2,794,714                | 2,748,435  | 46,279           |
| Nelson.....                         | 5                      | 96                         | 288,188                  | 271,237  | 16,951           |
| Pembina.....                        | 12                     | 485                        | 991,414                  | 945,408  | 46,006           |
| Pierce.....                         | 3                      | 94                         | 266,636                  | 261,636  | 5,000            |
| Ramsey.....                         | 33                     | 789                        | 2,588,887                | 2,278,790  | 310,097          |
| Ransom.....                         | 8                      | 279                        | 724,653                  | 638,836  | 85,817           |
| Renville.....                       | 13                     | 210                        | 1,970,312                | 1,970,312  | .....            |
| Richland.....                       | 12                     | 359                        | 1,141,010                | 1,101,552  | 39,458           |

1 Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| Moniteau.....                  | 22             | \$17, 476             | \$24, 732                   | \$2, 232, 039                                  | \$512, 030                               | 22.94                        |
| Monroe.....                    | 3              | 125                   | 235                         | 3, 211, 787                                    | 544, 229                                 | 16.94                        |
| Morgan.....                    | 11             | 12, 970               | 15, 737                     | 1, 581, 794                                    | 266, 263                                 | 16.84                        |
| Nodaway.....                   | 12             | 15, 135               | 20, 950                     | 7, 693, 554                                    | 676, 850                                 | 8.80                         |
| Osage.....                     | 10             | 9, 404                | 17, 265                     | 1, 654, 702                                    | 326, 992                                 | 19.76                        |
| Phelps.....                    | 81             | 41, 480               | 67, 439                     | 1, 468, 403                                    | 306, 505                                 | 20.87                        |
| Pike.....                      | 9              | 9, 410                | 18, 506                     | 3, 206, 891                                    | 120, 525                                 | 3.76                         |
| Platte.....                    | 10             | 11, 686               | 17, 655                     | 3, 643, 497                                    | 87, 741                                  | 2.41                         |
| Polk.....                      | 41             | 27, 835               | 45, 057                     | 2, 969, 113                                    | 628, 706                                 | 21.17                        |
| Fulaski.....                   | 20             | 19, 245               | 24, 752                     | 1, 328, 945                                    | 43, 354                                  | 3.26                         |
| Randolph.....                  | 6              | 4, 000                | 4, 576                      | 3, 296, 485                                    | 189, 534                                 | 5.75                         |
| St. Clair.....                 | 10             | 5, 787                | 7, 817                      | 2, 294, 771                                    | 100, 149                                 | 4.36                         |
| St. Louis.....                 | 7              | 7, 590                | 13, 937                     | 4, 182, 541                                    | 261, 318                                 | 6.25                         |
| Saline.....                    | 10             | 10, 477               | 34, 197                     | 7, 237, 732                                    | 1, 222, 221                              | 16.89                        |
| Schuyler.....                  | 10             | 9, 129                | 15, 061                     | 1, 545, 176                                    | 357, 222                                 | 12.12                        |
| Scotland.....                  | 9              | 6, 628                | 10, 444                     | 2, 214, 483                                    | 232, 455                                 | 9.14                         |
| Shelby.....                    | 18             | 16, 099               | 22, 244                     | 2, 900, 566                                    | 994, 173                                 | 34.17                        |
| Stoddard.....                  | 20             | 16, 543               | 1, 027                      | 3, 261, 805                                    | 177, 216                                 | 5.43                         |
| Sullivan.....                  | 7              | 5, 136                | 8, 106                      | 3, 404, 275                                    | 611, 064                                 | 17.95                        |
| Texas.....                     | 7              | 5, 136                | 8, 106                      | 1, 234, 643                                    | 290, 238                                 | 14.02                        |
| Warren.....                    | 13             | 10, 968               | 13, 647                     | 1, 271, 170                                    | 234, 869                                 | 18.48                        |
| Wright.....                    | 13             | 4, 893                | 9, 502                      | 3, 173, 604                                    | 123, 949                                 | 6.70                         |
| Balance of State.....          | 211            | 184, 156              | 307, 386                    | 151, 787, 744                                  | 9, 307, 576                              | 6.13                         |
| <b>North Dakota.....</b>       |                |                       |                             |  |  |                              |
| Adams.....                     | 8              | 17, 961               | 31, 190                     | 2, 738, 297                                    | 717, 827                                 | 26.21                        |
| Barnes.....                    | 33             | 44, 615               | 94, 045                     | 5, 102, 440                                    | 306, 750                                 | 6.07                         |
| Benson.....                    | 31             | 36, 634               | 70, 466                     | 4, 181, 620                                    | 912, 522                                 | 21.82                        |
| Bottineau.....                 | 31             | 39, 886               | 63, 808                     | 6, 343, 528                                    | 793, 180                                 | 12.50                        |
| Bowman.....                    | 11             | 11, 746               | 20, 625                     | 2, 153, 196                                    | 394, 759                                 | 18.33                        |
| Burke.....                     | 9              | 13, 588               | 27, 555                     | 3, 243, 378                                    | 450, 462                                 | 13.89                        |
| Burleigh.....                  | 7              | 8, 354                | 17, 348                     | 2, 912, 689                                    | 148, 667                                 | 5.10                         |
| Cass.....                      | 49             | 64, 104               | 127, 283                    | 8, 258, 370                                    | 391, 533                                 | 4.74                         |
| Cavalier.....                  | 24             | 26, 264               | 58, 114                     | 4, 728, 702                                    | 359, 775                                 | 7.61                         |
| Dickey.....                    | 20             | 25, 318               | 66, 465                     | 3, 404, 287                                    | 632, 358                                 | 18.58                        |
| Divide.....                    | 22             | 28, 384               | 62, 383                     | 3, 272, 812                                    | 919, 155                                 | 28.08                        |
| Dunn.....                      | 9              | 13, 610               | 25, 068                     | 3, 068, 103                                    | 236, 876                                 | 7.72                         |
| Eddy.....                      | 7              | 11, 150               | 20, 785                     | 1, 614, 487                                    | 292, 818                                 | 18.14                        |
| Emmons.....                    | 14             | 19, 900               | 46, 151                     | 3, 381, 061                                    | 262, 980                                 | 7.78                         |
| Foster.....                    | 10             | 10, 220               | 19, 328                     | 1, 776, 334                                    | 142, 376                                 | 8.02                         |
| Golden Valley.....             | 10             | 14, 289               | 35, 302                     | 1, 761, 162                                    | 368, 172                                 | 20.91                        |
| Grand Forks.....               | 54             | 80, 470               | 380, 071                    | 6, 482, 971                                    | 382, 261                                 | 5.90                         |
| Griggs.....                    | 12             | 17, 848               | 36, 910                     | 2, 032, 786                                    | 199, 644                                 | 9.82                         |
| Hottinger.....                 | 21             | 23, 090               | 41, 054                     | 3, 575, 699                                    | 773, 241                                 | 21.63                        |
| Kidder.....                    | 21             | 26, 093               | 54, 837                     | 2, 778, 366                                    | 330, 307                                 | 11.89                        |
| La Moure.....                  | 12             | 13, 179               | 63, 687                     | 3, 458, 982                                    | 423, 688                                 | 12.25                        |
| Logan.....                     | 8              | 9, 557                | 15, 760                     | 2, 688, 902                                    | 83, 060                                  | 3.11                         |
| McHenry.....                   | 26             | 29, 328               | 61, 349                     | 5, 214, 983                                    | 531, 690                                 | 10.20                        |
| McIntosh.....                  | 4              | 5, 011                | 8, 607                      | 2, 391, 720                                    | 76, 559                                  | 3.20                         |
| McKenzie.....                  | 7              | 13, 790               | 26, 300                     | 3, 964, 869                                    | 448, 447                                 | 11.31                        |
| McLean.....                    | 17             | 26, 258               | 48, 862                     | 6, 248, 717                                    | 744, 988                                 | 11.92                        |
| Mercer.....                    | 9              | 12, 085               | 32, 293                     | 2, 751, 252                                    | 40, 920                                  | 1.49                         |
| Morton.....                    | 12             | 21, 689               | 47, 138                     | 3, 718, 877                                    | 114, 003                                 | 3.07                         |
| Mountrail.....                 | 32             | 44, 919               | 114, 081                    | 4, 076, 568                                    | 910, 311                                 | 22.33                        |
| Nelson.....                    | 7              | 8, 546                | 21, 820                     | 3, 630, 239                                    | 465, 494                                 | 12.79                        |
| Pembina.....                   | 16             | 19, 107               | 51, 036                     | 4, 702, 299                                    | 267, 443                                 | 5.69                         |
| Pierce.....                    | 5              | 5, 135                | 14, 024                     | 2, 987, 866                                    | 186, 710                                 | 6.25                         |
| Ramsey.....                    | 45             | 58, 088               | 107, 446                    | 4, 901, 355                                    | 586, 612                                 | 11.56                        |
| Ransom.....                    | 17             | 19, 197               | 51, 818                     | 2, 660, 423                                    | 161, 064                                 | 6.05                         |
| Renville.....                  | 18             | 29, 387               | 61, 403                     | 3, 521, 431                                    | 377, 103                                 | 10.71                        |
| Richland.....                  | 15             | 22, 975               | 52, 342                     | 5, 754, 382                                    | 358, 577                                 | 6.23                         |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales       |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|--------------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                    |
| Rolette.....                        | 7                      | 125                        | \$690, 763               | \$651, 041   | \$39, 722          |
| Sargent.....                        | 15                     | 1, 273                     | 1, 752, 633              | 1, 586, 205  | 166, 428           |
| Sheridan.....                       | 4                      | 46                         | 505, 745                 | 479, 893   | 25, 852            |
| Stark.....                          | 5                      | 34                         | 1, 559, 006              | 1, 536, 968  | 22, 038            |
| Steele.....                         | 4                      | 406                        | 628, 851                 | 520, 278   | 108, 573           |
| Stutsman.....                       | 24                     | 1, 653                     | 2, 432, 952              | 2, 309, 450  | 123, 502           |
| Towner.....                         | 10                     | 614                        | 1, 036, 816              | 979, 651   | 57, 165            |
| Trall.....                          | 16                     | 1, 203                     | 2, 407, 751              | 1, 932, 088  | 475, 663           |
| Walsh.....                          | 14                     | 493                        | 1, 532, 604              | 1, 322, 326  | 260, 278           |
| Ward.....                           | 29                     | 2, 525                     | 3, 996, 639              | 3, 880, 784  | 105, 855           |
| Wells.....                          | 17                     | 909                        | 1, 015, 563              | 978, 566   | 36, 997            |
| Williams.....                       | 21                     | 3, 058                     | 3, 638, 788              | 3, 440, 191  | 198, 597           |
| Balance of State.....               | 16                     | 555                        | 1, 887, 241              | 1, 800, 705  | 86, 536            |
| <b>South Dakota.....</b>            | <b>363</b>             | <b>32, 048</b>             | <b>45, 288, 457</b>      | <b>40, 618, 939</b>  | <b>4, 669, 518</b> |
| Aurora.....                         | 3                      | 446                        | 166, 661                 | 152, 930   | 13, 731            |
| Beadle.....                         | 4                      | 374                        | 341, 487                 | 334, 919   | 6, 568             |
| Bon Homme.....                      | 5                      | 438                        | 502, 184                 | 483, 704   | 18, 480            |
| Brookings.....                      | 7                      | 230                        | 505, 596                 | 399, 446   | 106, 150           |
| Brown.....                          | 34                     | 5, 005                     | 2, 997, 987              | 2, 759, 103  | 238, 884           |
| Brule.....                          | 3                      | 200                        | 525, 647                 | 524, 010   | 1, 637             |
| Campbell.....                       | 4                      | 440                        | 550, 315                 | 464, 901   | 85, 414            |
| Charles Mix.....                    | 3                      | 396                        | 1, 068, 524              | 994, 495   | 74, 029            |
| Clark.....                          | 8                      | 1, 294                     | 844, 825                 | 721, 439   | 123, 386           |
| Clay.....                           | 3                      | 3                          | 493, 824                 | 442, 388   | 51, 436            |
| Codington.....                      | 10                     | 905                        | 742, 241                 | 665, 381   | 76, 860            |
| Corson.....                         | 7                      | 527                        | 1, 204, 960              | 1, 060, 884  | 144, 076           |
| Davison.....                        | 4                      | 325                        | 584, 118                 | 523, 175   | 60, 943            |
| Day.....                            | 14                     | 1, 530                     | 1, 416, 111              | 1, 267, 541  | 148, 570           |
| Deuel.....                          | 5                      | 163                        | 316, 912                 | 280, 973   | 35, 939            |
| Dewey.....                          | 6                      | 298                        | 582, 039                 | 514, 019   | 68, 020            |
| Douglas.....                        | 3                      | 250                        | 515, 428                 | 503, 059   | 12, 369            |
| Edmunds.....                        | 6                      | 267                        | 717, 883                 | 654, 927   | 62, 956            |
| Faulk.....                          | 13                     | 1, 827                     | 1, 394, 115              | 1, 003, 841  | 390, 274           |
| Grant.....                          | 10                     | 1, 010                     | 877, 629                 | 860, 590   | 17, 039            |
| Gregory.....                        | 6                      | 947                        | 1, 299, 595              | 1, 178, 645  | 90, 950            |
| Hamlin.....                         | 13                     | 1, 048                     | 1, 355, 371              | 1, 219, 119  | 136, 252           |
| Hand.....                           | 5                      | 418                        | 497, 752                 | 452, 448   | 45, 304            |
| Hanson.....                         | 4                      | 62                         | 664, 596                 | 629, 216   | 35, 380            |
| Hutchinson.....                     | 9                      | 836                        | 1, 760, 976              | 1, 521, 930  | 239, 046           |
| Jerard.....                         | 6                      | 718                        | 915, 864                 | 875, 417   | 40, 447            |
| Kingsbury.....                      | 7                      | 836                        | 527, 027                 | 483, 007   | 44, 020            |
| Lake.....                           | 6                      | 7                          | 860, 654                 | 639, 245   | 221, 409           |
| Lincoln.....                        | 5                      | 679                        | 566, 242                 | 505, 382   | 60, 860            |
| Lyman.....                          | 4                      | 171                        | 339, 892                 | 299, 275   | 40, 617            |
| McCook.....                         | 8                      | 330                        | 754, 621                 | 694, 046   | 60, 575            |
| McPherson.....                      | 5                      | 546                        | 681, 137                 | 566, 372   | 114, 765           |
| Marshall.....                       | 13                     | 1, 035                     | 1, 200, 630              | 1, 088, 020  | 112, 610           |
| Miner.....                          | 7                      | 374                        | 422, 437                 | 333, 665   | 88, 772            |
| Minnehaha.....                      | 12                     | 1, 053                     | 1, 702, 663              | 1, 505, 324  | 197, 339           |
| Potter.....                         | 6                      | 433                        | 911, 159                 | 873, 230   | 37, 929            |
| Roberts.....                        | 22                     | 3, 227                     | 2, 294, 861              | 2, 165, 104  | 129, 757           |
| Sanborn.....                        | 3                      | 397                        | 572, 545                 | 455, 691   | 116, 854           |
| Spink.....                          | 19                     | 1, 129                     | 2, 356, 659              | 2, 223, 258  | 133, 401           |
| Sully.....                          | 3                      | 249                        | 477, 987                 | 378, 262   | 99, 725            |
| Tripp.....                          | 10                     | 950                        | 1, 268, 514              | 1, 125, 193  | 143, 321           |
| Turner.....                         | 6                      | 26                         | 883, 873                 | 788, 973   | 94, 900            |
| Union.....                          | 3                      | 80                         | 936, 284                 | 892, 690   | 43, 604            |
| Walworth.....                       | 7                      | 30                         | 1, 712, 403              | 1, 606, 353  | 106, 045           |
| Yankton.....                        | 4                      | 175                        | 669, 179                 | 519, 172   | 90, 007            |
| Balance of State.....               | 18                     | 1, 203                     | 3, 397, 050              | 2, 988, 182  | 408, 868           |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—CON.</b> |                |                       |                             |  |  |                              |
| Rolette.....                   | 12             | \$15,507              | \$31,792                    | \$2,256,112                                    | \$295,520                                | 13.10                        |
| Sargent.....                   | 31             | 37,777                | 68,214                      | 3,100,999                                      | 560,680                                  | 18.08                        |
| Sheridan.....                  | 8              | 7,289                 | 18,633                      | 2,387,239                                      | 165,772                                  | 6.94                         |
| Stark.....                     | 11             | 16,653                | 38,669                      | 3,478,486                                      | 149,555                                  | 4.30                         |
| Steele.....                    | 10             | 14,715                | 26,328                      | 2,202,992                                      | 222,585                                  | 10.10                        |
| Stutsman.....                  | 31             | 44,405                | 107,952                     | 5,871,566                                      | 823,609                                  | 14.03                        |
| Towner.....                    | 14             | 15,953                | 44,986                      | 3,312,966                                      | 209,951                                  | 6.34                         |
| Traill.....                    | 36             | 38,303                | 78,013                      | 4,560,584                                      | 362,219                                  | 7.96                         |
| Walsb.....                     | 34             | 36,135                | 71,847                      | 6,358,702                                      | 334,249                                  | 5.26                         |
| Ward.....                      | 54             | 68,705                | 151,918                     | 7,114,878                                      | 942,562                                  | 13.25                        |
| Wells.....                     | 15             | 16,802                | 47,489                      | 4,064,284                                      | 315,096                                  | 7.75                         |
| Williams.....                  | 46             | 55,456                | 125,089                     | 5,153,315                                      | 1,017,593                                | 19.75                        |
| Balance of State.....          | 27             | 41,391                | 44,500                      | 8,593,270                                      | 654,671                                  | 7.62                         |
| <b>South Dakota.....</b>       | <b>698</b>     | <b>830,631</b>        | <b>1,634,030</b>            | <b>211,638,963</b>                             | <b>16,409,195</b>                        | <b>7.75</b>                  |
| Aurora.....                    | 4              | 2,408                 | 3,480                       | 3,074,865                                      | 175,346                                  | 5.70                         |
| Beadle.....                    | 6              | 8,900                 | 13,409                      | 5,995,245                                      | 235,917                                  | 3.94                         |
| Bon Homme.....                 | 5              | 6,477                 | 9,624                       | 3,905,977                                      | 67,676                                   | 1.73                         |
| Brookings.....                 | 13             | 16,951                | 30,680                      | 5,600,282                                      | 394,320                                  | 7.04                         |
| Brown.....                     | 52             | 70,487                | 138,566                     | 6,281,879                                      | 874,932                                  | 13.93                        |
| Brule.....                     | 3              | 5,424                 | 38,156                      | 2,235,752                                      | 195,117                                  | 8.73                         |
| Campbell.....                  | 6              | 9,175                 | 17,308                      | 1,905,068                                      | 198,163                                  | 10.41                        |
| Charles Mix.....               | 6              | 10,720                | 18,719                      | 6,689,050                                      | 416,498                                  | 6.23                         |
| Clark.....                     | 17             | 21,968                | 43,125                      | 3,524,601                                      | 272,869                                  | 7.74                         |
| Clay.....                      | 6              | 8,956                 | 13,927                      | 5,586,238                                      | 348,146                                  | 6.23                         |
| Codington.....                 | 16             | 18,311                | 38,020                      | 2,936,661                                      | 162,527                                  | 5.53                         |
| Corson.....                    | 12             | 16,953                | 35,733                      | 2,707,679                                      | 331,295                                  | 12.24                        |
| Davison.....                   | 9              | 9,500                 | 16,436                      | 2,664,822                                      | 197,268                                  | 7.40                         |
| Day.....                       | 20             | 29,736                | 68,623                      | 4,287,558                                      | 283,076                                  | 6.84                         |
| Deuel.....                     | 8              | 5,481                 | 8,520                       | 3,174,827                                      | 299,707                                  | 9.44                         |
| Dewey.....                     | 13             | 14,480                | 33,220                      | 1,917,214                                      | 75,171                                   | 3.92                         |
| Douglas.....                   | 6              | 7,706                 | 12,909                      | 2,713,608                                      | 141,177                                  | 5.20                         |
| Edmunds.....                   | 13             | 18,533                | 37,854                      | 2,555,841                                      | 366,737                                  | 14.35                        |
| Faulk.....                     | 21             | 31,720                | 56,258                      | 2,739,334                                      | 292,321                                  | 10.67                        |
| Grant.....                     | 24             | 14,022                | 26,221                      | 2,923,160                                      | 476,353                                  | 16.30                        |
| Gregory.....                   | 13             | 14,577                | 27,578                      | 3,772,907                                      | 237,472                                  | 6.29                         |
| Hamlin.....                    | 39             | 25,883                | 54,073                      | 2,774,071                                      | 509,647                                  | 18.37                        |
| Hand.....                      | 9              | 11,800                | 21,016                      | 4,025,978                                      | 338,837                                  | 8.42                         |
| Hanson.....                    | 7              | 11,199                | 15,620                      | 2,521,731                                      | 145,333                                  | 5.76                         |
| Hutchinson.....                | 20             | 24,389                | 47,036                      | 4,790,100                                      | 274,024                                  | 5.72                         |
| Jerauld.....                   | 11             | 13,024                | 25,141                      | 2,248,253                                      | 251,746                                  | 11.20                        |
| Kingsbury.....                 | 12             | 20,276                | 41,761                      | 4,749,113                                      | 213,051                                  | 4.49                         |
| Lake.....                      | 15             | 17,830                | 31,086                      | 3,950,480                                      | 495,336                                  | 12.54                        |
| Lincoln.....                   | 8              | 10,765                | 20,807                      | 6,233,361                                      | 268,904                                  | 3.27                         |
| Lynan.....                     | 6              | 7,020                 | 11,534                      | 2,452,244                                      | 104,431                                  | 4.26                         |
| McCook.....                    | 15             | 16,681                | 28,843                      | 3,824,220                                      | 185,952                                  | 4.86                         |
| McPherson.....                 | 9              | 13,154                | 26,221                      | 2,522,904                                      | 116,813                                  | 4.63                         |
| Marshall.....                  | 20             | 25,924                | 47,900                      | 3,125,827                                      | 387,808                                  | 11.43                        |
| Miner.....                     | 8              | 7,445                 | 13,669                      | 3,014,466                                      | 151,278                                  | 5.02                         |
| Minnehaha.....                 | 27             | 35,745                | 66,707                      | 7,395,122                                      | 923,059                                  | 12.49                        |
| Pottaw.....                    | 9              | 10,937                | 16,295                      | 2,183,152                                      | 413,538                                  | 18.94                        |
| Roberts.....                   | 39             | 46,594                | 70,390                      | 4,372,093                                      | 907,928                                  | 20.77                        |
| Sanborn.....                   | 7              | 11,187                | 19,372                      | 3,156,749                                      | 166,346                                  | 5.27                         |
| Spink.....                     | 43             | 40,542                | 83,019                      | 5,154,595                                      | 377,060                                  | 7.32                         |
| Sully.....                     | 4              | 5,160                 | 10,041                      | 2,080,211                                      | 122,839                                  | 5.91                         |
| Tripp.....                     | 33             | 29,567                | 52,305                      | 4,785,189                                      | 398,313                                  | 8.32                         |
| Turner.....                    | 10             | 10,680                | 21,878                      | 6,136,067                                      | 308,120                                  | 5.02                         |
| Union.....                     | 5              | 5,557                 | 11,152                      | 4,734,384                                      | 287,387                                  | 6.07                         |
| Walworth.....                  | 14             | 22,484                | 54,125                      | 1,982,868                                      | 523,436                                  | 26.67                        |
| Yankton.....                   | 8              | 10,645                | 19,957                      | 4,475,094                                      | 290,280                                  | 6.49                         |
| Balance of State.....          | 47             | 53,709                | 115,713                     | 41,780,080                                     | 2,290,211                                | 5.48                         |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales       |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|--------------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |                    |
| <b>Nebraska</b> .....               | <b>428</b>             | <b>38,959</b>              | <b>\$73,405,485</b>      | <b>\$66,037,148</b>  | <b>\$7,368,337</b> |
| Adams.....                          | 13                     | 93                         | 1,283,921                | 1,174,691  | 109,230            |
| Antelope.....                       | 6                      | 627                        | 815,710                  | 476,818  | 338,892            |
| Boone.....                          | 7                      | 581                        | 1,039,183                | 949,243  | 89,940             |
| Burt.....                           | 4                      | 1,200                      | 688,427                  | 648,195  | 40,232             |
| Butler.....                         | 11                     | 831                        | 2,086,115                | 1,925,580  | 160,535            |
| Cass.....                           | 10                     | 428                        | 1,807,425                | 1,695,760  | 111,665            |
| Chase.....                          | 4                      | 364                        | 1,326,961                | 1,027,581  | 299,380            |
| Cheyenne.....                       | 5                      | 488                        | 1,047,935                | 1,047,935  | -----              |
| Clay.....                           | 12                     | 1,067                      | 2,253,527                | 2,055,446  | 198,081            |
| Colfax.....                         | 4                      | 504                        | 711,972                  | 687,972  | 24,000             |
| Custer.....                         | 8                      | 561                        | 1,657,830                | 1,590,587  | 67,243             |
| Dawson.....                         | 8                      | 326                        | 1,307,769                | 1,248,364  | 59,406             |
| Dodge.....                          | 5                      | 400                        | 995,968                  | 898,777  | 97,191             |
| Dundy.....                          | 3                      | 130                        | 468,000                  | 402,000  | 66,000             |
| Fillmore.....                       | 13                     | 838                        | 1,602,091                | 1,471,468  | 130,623            |
| Franklin.....                       | 5                      | 507                        | 970,000                  | 852,642  | 117,358            |
| Frontier.....                       | 5                      | 692                        | 1,019,812                | 1,006,275  | 11,537             |
| Furnas.....                         | 13                     | 837                        | 1,665,049                | 1,576,028  | 89,023             |
| Gage.....                           | 24                     | 1,931                      | 3,317,004                | 3,150,949  | 166,055            |
| Gosper.....                         | 3                      | -----                      | 482,938                  | 421,249  | 61,689             |
| Hall.....                           | 3                      | 162                        | 309,975                  | 301,151  | 8,824              |
| Hamilton.....                       | 9                      | 1,130                      | 1,996,559                | 1,794,234  | 202,325            |
| Harlan.....                         | 4                      | 282                        | 580,365                  | 538,981  | 41,384             |
| Hitchcock.....                      | 3                      | 259                        | 1,071,849                | 901,096  | 170,753            |
| Howard.....                         | 10                     | 524                        | 1,017,255                | 795,496  | 221,769            |
| Jefferson.....                      | 15                     | 808                        | 1,750,144                | 1,671,626  | 78,518             |
| Johnson.....                        | 5                      | 14                         | 1,105,522                | 852,172  | 253,350            |
| Kearney.....                        | 5                      | 25                         | 722,204                  | 610,024  | 112,180            |
| Keith.....                          | 3                      | 225                        | 827,162                  | 782,679  | 44,483             |
| Knox.....                           | 6                      | 762                        | 1,186,010                | 1,091,209  | 94,801             |
| Lancaster.....                      | 16                     | 1,037                      | 2,118,500                | 1,933,448  | 185,052            |
| Lincoln.....                        | 5                      | 216                        | 745,136                  | 745,036  | 100                |
| Merrick.....                        | 6                      | 710                        | 714,225                  | 651,730  | 62,495             |
| Nance.....                          | 3                      | 248                        | 277,719                  | 215,482  | 62,237             |
| Nuckolls.....                       | 18                     | 1,332                      | 1,044,072                | 956,337  | 87,735             |
| Otoe.....                           | 10                     | 623                        | 1,579,936                | 1,453,659  | 126,277            |
| Pawnee.....                         | 7                      | 583                        | 614,419                  | 527,677  | 86,742             |
| Perkins.....                        | 5                      | 494                        | 1,990,618                | 1,937,893  | 52,725             |
| Phelps.....                         | 4                      | 404                        | 844,381                  | 638,362  | 206,019            |
| Pierce.....                         | 5                      | 341                        | 529,420                  | 392,420  | 137,000            |
| Platte.....                         | 7                      | 939                        | 1,056,829                | 989,004  | 67,825             |
| Polk.....                           | 4                      | 436                        | 699,561                  | 678,094  | 21,467             |
| Redwillow.....                      | 7                      | 454                        | 1,819,142                | 1,573,228  | 245,914            |
| Saline.....                         | 6                      | 1,187                      | 1,178,599                | 1,016,705  | 161,894            |
| Saunders.....                       | 15                     | 1,418                      | 3,237,183                | 2,830,216  | 406,967            |
| Scotts Bluff.....                   | 3                      | 2,591                      | 684,641                  | 622,375  | 62,266             |
| Seward.....                         | 9                      | 1,248                      | 2,385,471                | 2,069,305  | 316,166            |
| Thayer.....                         | 10                     | 442                        | 905,977                  | 847,920  | 58,057             |
| Webster.....                        | 7                      | 1,046                      | 1,196,172                | 1,084,030  | 112,142            |
| York.....                           | 7                      | 961                        | 1,244,854                | 1,083,632  | 161,222            |
| Balance of State.....               | 48                     | 5,453                      | 11,423,948               | 10,142,379   | 1,281,569          |
| <b>Kansas</b> .....                 | <b>433</b>             | <b>75,330</b>              | <b>\$6,415,737</b>       | <b>\$3,194,546</b>   | <b>13,291,191</b>  |
| Allen.....                          | 4                      | 220                        | 266,400                  | 266,400  | -----              |
| Anderson.....                       | 5                      | 228                        | 215,229                  | 134,692  | 80,537             |
| Atchison.....                       | 3                      | 148                        | 194,303                  | 113,211  | 81,092             |
| Barber.....                         | 6                      | 447                        | 624,655                  | 512,182  | 112,473            |
| Barton.....                         | 5                      | 472                        | 861,304                  | 764,123  | 97,181             |
| Brown.....                          | 8                      | 739                        | 1,161,916                | 1,023,420  | 138,496            |
| Cherokee.....                       | 6                      | 1                          | 601,290                  | 555,172  | 46,118             |
| Clark.....                          | 3                      | 213                        | 1,204,006                | 1,064,275  | 139,731            |
| Clay.....                           | 9                      | 972                        | 1,261,102                | 1,022,218  | 238,884            |
| Cloud.....                          | 4                      | 1,100                      | 600,258                  | 409,252  | 191,006            |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses     | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|--------------------|--|--|------------------------------|
|                                |                |                       |                    | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                    |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—Con.</b> |                |                       |                    |  |  |                              |
| <b>Nebraska</b> .....          | <b>943</b>     | <b>\$1,060,195</b>    | <b>\$1,903,895</b> | <b>\$397,502,662</b>                           | <b>\$26,648,713</b>                      | <b>6.70</b>                  |
| Adams.....                     | 17             | 18,173                | 25,540             | 3,604,964                                      | 211,853                                  | 5.88                         |
| Antelope.....                  | 29             | 30,460                | 50,372             | 5,984,612                                      | 304,504                                  | 5.09                         |
| Boone.....                     | 17             | 12,407                | 18,964             | 5,820,838                                      | 128,928                                  | 2.21                         |
| Burt.....                      | 13             | 18,102                | 27,575             | 7,603,466                                      | 426,358                                  | 5.61                         |
| Butler.....                    | 29             | 28,894                | 45,410             | 5,052,485                                      | 732,901                                  | 14.51                        |
| Cass.....                      | 18             | 17,545                | 32,706             | 6,158,436                                      | 783,637                                  | 12.72                        |
| Chase.....                     | 11             | 13,659                | 26,321             | 2,960,754                                      | 498,609                                  | 16.84                        |
| Cheyenne.....                  | 14             | 19,077                | 38,394             | 4,046,044                                      | 558,974                                  | 13.82                        |
| Clay.....                      | 21             | 24,538                | 42,890             | 5,067,115                                      | 1,103,968                                | 21.70                        |
| Colfax.....                    | 10             | 12,112                | 22,575             | 3,991,784                                      | 152,617                                  | 3.82                         |
| Custer.....                    | 23             | 21,846                | 32,136             | 10,075,785                                     | 437,640                                  | 4.34                         |
| Dawson.....                    | 22             | 18,042                | 36,694             | 7,990,184                                      | 218,049                                  | 2.73                         |
| Dodge.....                     | 18             | 22,215                | 39,493             | 8,733,603                                      | 714,269                                  | 8.18                         |
| Dundy.....                     | 7              | 8,500                 | 13,735             | 2,851,885                                      | 188,702                                  | 6.62                         |
| Fillmore.....                  | 28             | 26,753                | 50,920             | 4,961,858                                      | 285,055                                  | 5.74                         |
| Franklin.....                  | 7              | 8,151                 | 17,001             | 2,440,164                                      | 91,202                                   | 3.74                         |
| Frontier.....                  | 7              | 10,240                | 14,564             | 3,091,065                                      | 382,243                                  | 12.37                        |
| Furnas.....                    | 24             | 28,575                | 46,599             | 4,921,442                                      | 293,750                                  | 5.97                         |
| Gage.....                      | 35             | 38,691                | 69,602             | 6,602,923                                      | 582,122                                  | 8.82                         |
| Gosper.....                    | 4              | 3,870                 | 6,235              | 2,179,185                                      | 382,081                                  | 17.53                        |
| Hall.....                      | 6              | 5,295                 | 8,045              | 4,694,773                                      | 192,176                                  | 4.09                         |
| Hamilton.....                  | 19             | 27,631                | 56,440             | 5,240,795                                      | 486,117                                  | 9.28                         |
| Harlan.....                    | 6              | 7,300                 | 10,547             | 3,047,689                                      | 268,643                                  | 8.81                         |
| Hitchcock.....                 | 8              | 12,705                | 19,275             | 3,202,252                                      | 277,398                                  | 8.66                         |
| Howard.....                    | 16             | 15,713                | 26,388             | 3,092,060                                      | 258,073                                  | 8.35                         |
| Jefferson.....                 | 23             | 32,297                | 25,943             | 4,313,555                                      | 567,292                                  | 13.15                        |
| Johnson.....                   | 15             | 16,610                | 40,167             | 2,854,173                                      | 92,827                                   | 3.25                         |
| Kearney.....                   | 17             | 15,168                | 31,524             | 2,526,972                                      | 254,409                                  | 10.07                        |
| Keith.....                     | 9              | 7,798                 | 12,017             | 3,909,228                                      | 228,176                                  | 5.84                         |
| Knox.....                      | 14             | 12,021                | 45,499             | 6,507,476                                      | 390,741                                  | 6.00                         |
| Lancaster.....                 | 22             | 27,350                | 59,265             | 8,720,751                                      | 1,032,597                                | 11.84                        |
| Lincoln.....                   | 9              | 12,720                | 23,529             | 7,249,387                                      | 292,166                                  | 4.03                         |
| Merrick.....                   | 8              | 10,407                | 15,828             | 4,947,085                                      | 328,124                                  | 6.63                         |
| Nance.....                     | 5              | 6,395                 | 13,295             | 3,675,882                                      | 178,638                                  | 4.86                         |
| Nuckolls.....                  | 17             | 10,996                | 21,148             | 4,765,443                                      | 372,194                                  | 7.81                         |
| Otoe.....                      | 20             | 18,235                | 31,893             | 5,675,088                                      | 339,912                                  | 5.99                         |
| Pawnee.....                    | 11             | 8,389                 | 13,422             | 3,092,986                                      | 268,988                                  | 8.70                         |
| Perkins.....                   | 4              | 20,136                | 34,929             | 4,280,156                                      | 643,487                                  | 15.03                        |
| Phelps.....                    | 9              | 12,885                | 24,186             | 2,615,706                                      | 294,074                                  | 11.24                        |
| Pierce.....                    | 10             | 12,394                | 18,084             | 4,245,444                                      | 253,147                                  | 5.96                         |
| Platte.....                    | 16             | 18,754                | 37,288             | 5,859,268                                      | 627,338                                  | 10.71                        |
| Polk.....                      | 6              | 7,718                 | 14,666             | 4,961,195                                      | 394,649                                  | 7.95                         |
| Redwillow.....                 | 20             | 26,105                | 48,275             | 3,453,007                                      | 712,340                                  | 20.63                        |
| Saline.....                    | 11             | 12,381                | 22,276             | 4,972,615                                      | 617,530                                  | 12.42                        |
| Saunders.....                  | 35             | 50,158                | 80,799             | 6,825,274                                      | 1,379,129                                | 20.21                        |
| Scotts Bluff.....              | 9              | 19,460                | 44,567             | 11,392,605                                     | 147,813                                  | 1.30                         |
| Seward.....                    | 27             | 26,994                | 48,136             | 5,175,207                                      | 715,851                                  | 13.83                        |
| Thayer.....                    | 16             | 12,798                | 20,989             | 5,142,032                                      | 94,238                                   | 1.83                         |
| Webster.....                   | 11             | 15,306                | 25,205             | 3,514,569                                      | 378,870                                  | 10.78                        |
| York.....                      | 23             | 29,428                | 39,643             | 6,215,269                                      | 688,250                                  | 11.07                        |
| Balance of State.....          | 157            | 166,619               | 332,861            | 147,176,098                                    | 5,396,064                                | 3.67                         |
| <b>Kansas</b> .....            | <b>1,168</b>   | <b>1,376,606</b>      | <b>2,352,201</b>   | <b>417,687,886</b>                             | <b>36,396,390</b>                        | <b>8.71</b>                  |
| Allen.....                     | 7              | 6,210                 | 11,030             | 2,593,355                                      | 228,276                                  | 8.80                         |
| Anderson.....                  | 11             | 9,990                 | 14,561             | 2,938,314                                      | 316,991                                  | 10.79                        |
| Atchison.....                  | 4              | 4,971                 | 8,993              | 2,872,289                                      | 77,231                                   | 2.66                         |
| Barber.....                    | 12             | 13,275                | 26,195             | 4,059,911                                      | 172,924                                  | 4.26                         |
| Barton.....                    | 10             | 14,593                | 24,193             | 4,883,027                                      | 249,723                                  | 5.11                         |
| Brown.....                     | 16             | 19,040                | 32,989             | 6,227,955                                      | 539,342                                  | 8.66                         |
| Charokey.....                  | 16             | 17,554                | 23,699             | 1,869,483                                      | 105,017                                  | 5.62                         |
| Clark.....                     | 10             | 14,277                | 23,765             | 3,985,635                                      | 404,115                                  | 10.14                        |
| Clay.....                      | 20             | 21,989                | 39,481             | 4,369,356                                      | 370,151                                  | 8.47                         |
| Cloud.....                     | 11             | 12,036                | 26,145             | 4,546,039                                      | 146,657                                  | 3.23                         |

## CENSUS OF DISTRIBUTION

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|--------------|
| <b>WEST NORTH CENTRAL—Continued</b> |                        |                            |                          |  |              |
| Coffey.....                         | 5                      | 595                        | \$407, 126               | \$294, 675   | \$112, 451   |
| Crawford.....                       | 8                      | 6, 320                     | 559, 928                 | 319, 773   | 240, 155     |
| Decatur.....                        | 3                      | 4                          | 386, 262                 | 357, 262   | 29, 000      |
| Dickinson.....                      | 10                     | 969                        | 1, 729, 738              | 1, 444, 110  | 285, 628     |
| Edwards.....                        | 5                      | 350                        | 2, 009, 998              | 1, 800, 693  | 209, 315     |
| Ellis.....                          | 4                      | 549                        | 1, 763, 504              | 1, 578, 041  | 185, 463     |
| Ellsworth.....                      | 5                      | 834                        | 1, 172, 377              | 990, 576   | 181, 801     |
| Ford.....                           | 8                      | 1, 169                     | 3, 937, 808              | 3, 283, 891  | 653, 917     |
| Franklin.....                       | 5                      | 296                        | 3, 990, 297              | 3, 823, 204  | 167, 093     |
| Gove.....                           | 3                      | 442                        | 1, 020, 339              | 908, 301   | 112, 038     |
| Graham.....                         | 3                      | 378                        | 594, 425                 | 584, 425   | 10, 000      |
| Gray.....                           | 4                      | 440                        | 2, 663, 982              | 1, 429, 890  | 1, 234, 082  |
| Harper.....                         | 6                      | 72                         | 894, 600                 | 662, 000   | 232, 600     |
| Harvey.....                         | 3                      | 167                        | 304, 562                 | 287, 432   | 17, 130      |
| Jackson.....                        | 7                      | 686                        | 577, 253                 | 512, 048   | 65, 205      |
| Jewell.....                         | 3                      | -----                      | 572, 800                 | 452, 071   | 120, 729     |
| Johnson.....                        | 5                      | 110                        | 520, 391                 | 304, 418   | 215, 973     |
| Kiowa.....                          | 3                      | 412                        | 1, 085, 077              | 977, 973   | 107, 104     |
| Labette.....                        | 4                      | 311                        | 351, 800                 | 215, 800   | 136, 000     |
| Lane.....                           | 4                      | 571                        | 1, 927, 672              | 1, 849, 648  | 78, 024      |
| Lincoln.....                        | 3                      | 264                        | 678, 000                 | 556, 000   | 122, 000     |
| Logan.....                          | 3                      | 243                        | 943, 021                 | 734, 524   | 213, 497     |
| McPherson.....                      | 9                      | 893                        | 1, 345, 497              | 1, 099, 877  | 245, 620     |
| Marion.....                         | 9                      | 1, 014                     | 1, 784, 680              | 1, 467, 985  | 316, 695     |
| Marshall.....                       | 16                     | 1, 974                     | 2, 375, 628              | 2, 167, 300  | 208, 328     |
| Meade.....                          | 4                      | 523                        | 2, 415, 165              | 2, 264, 706  | 150, 459     |
| Miami.....                          | 3                      | 355                        | 210, 676                 | 122, 449   | 88, 227      |
| Mitchell.....                       | 10                     | 12, 600                    | 2, 017, 365              | 1, 935, 395  | 81, 970      |
| Morris.....                         | 4                      | 295                        | 485, 807                 | 288, 632   | 197, 175     |
| Nemaha.....                         | 5                      | 501                        | 511, 291                 | 391, 782   | 119, 509     |
| Neosho.....                         | 3                      | 345                        | 276, 354                 | 132, 451   | 143, 903     |
| Ness.....                           | 6                      | 641                        | 1, 531, 675              | 1, 415, 000  | 116, 675     |
| Norton.....                         | 3                      | 416                        | 325, 935                 | 314, 614   | 11, 321      |
| Osborne.....                        | 13                     | 11, 683                    | 1, 713, 222              | 1, 516, 977  | 196, 245     |
| Ottawa.....                         | 4                      | 474                        | 653, 120                 | 563, 558   | 89, 562      |
| Pawnee.....                         | 9                      | 1, 737                     | 3, 697, 738              | 2, 635, 194  | 762, 544     |
| Phillips.....                       | 5                      | 763                        | 971, 560                 | 897, 920   | 73, 640      |
| Pottawatomie.....                   | 3                      | 160                        | 446, 867                 | 305, 718   | 141, 149     |
| Fratt.....                          | 8                      | 699                        | 2, 463, 386              | 1, 656, 243  | 507, 143     |
| Rawlins.....                        | 8                      | 554                        | 1, 818, 000              | 1, 682, 000  | 136, 000     |
| Reno.....                           | 10                     | 277                        | 2, 097, 603              | 1, 904, 581  | 193, 022     |
| Republic.....                       | 4                      | 21                         | 430, 451                 | 404, 308   | 26, 143      |
| Rice.....                           | 7                      | 495                        | 1, 494, 255              | 1, 186, 086  | 298, 169     |
| Riley.....                          | 3                      | 552                        | 670, 889                 | 487, 796   | 183, 093     |
| Rooks.....                          | 5                      | -----                      | 1, 051, 746              | 874, 598   | 77, 148      |
| Rush.....                           | 5                      | 528                        | 1, 336, 797              | 1, 256, 451  | 80, 346      |
| Russell.....                        | 4                      | 366                        | 629, 077                 | 540, 397   | 88, 680      |
| Saline.....                         | 5                      | 371                        | 576, 712                 | 508, 120   | 68, 592      |
| Sedgwick.....                       | 13                     | 545                        | \$1, 577, 669            | \$1, 265, 065  | \$312, 604   |
| Stafford.....                       | 7                      | 750                        | 2, 111, 821              | 1, 886, 614  | 225, 207     |
| Stevens.....                        | 3                      | 165                        | 904, 781                 | 852, 773   | 52, 008      |
| Sumner.....                         | 4                      | 346                        | 344, 255                 | 280, 552   | 63, 703      |
| Thomas.....                         | 4                      | 346                        | 872, 063                 | 794, 327   | 77, 736      |
| Trego.....                          | 4                      | 7, 132                     | 340, 240                 | 318, 240   | 22, 000      |
| Wabaunsee.....                      | 5                      | 162                        | 375, 248                 | 340, 921   | 34, 327      |
| Washington.....                     | 7                      | 1, 212                     | 1, 052, 554              | 1, 015, 656  | 36, 898      |
| Balance of State.....               | 64                     | 6, 578                     | 20, 369, 189             | 18, 318, 570   | 2, 050, 619  |
| <b>SOUTH ATLANTIC</b>               |                        |                            |                          |  |              |
| <b>Delaware</b>                     |                        |                            |                          |  |              |
| Maryland.....                       | 9                      | 1, 668                     | 16, 754, 110             | 16, 553, 591   | 900, 519     |
| Worcester.....                      | 4                      | 1, 616                     | 2, 573, 494              | 2, 393, 494  | 180, 000     |
| Balance of State.....               | 5                      | 50                         | 14, 180, 616             | 14, 160, 097   | 20, 519      |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST NORTH CENTRAL—CON.</b> |                |                       |                             |  |  |                              |
| Coffey.....                    | 10             | \$10,457              | \$15,029                    | \$4,365,298                                    | \$255,923                                | 5.86                         |
| Crawford.....                  | 37             | 23,830                | 47,061                      | 2,401,922                                      | 203,468                                  | 8.47                         |
| Decatur.....                   | 4              | 4,525                 | 9,526                       | 3,687,489                                      | 195,490                                  | 5.30                         |
| Dickinson.....                 | 23             | 25,602                | 45,620                      | 7,988,154                                      | 803,571                                  | 10.06                        |
| Edwards.....                   | 19             | 30,758                | 49,984                      | 3,174,873                                      | 664,115                                  | 20.92                        |
| Ellis.....                     | 14             | 17,987                | 32,009                      | 4,217,850                                      | 945,868                                  | 22.43                        |
| Ellsworth.....                 | 10             | 16,985                | 30,405                      | 3,535,791                                      | 226,768                                  | 6.41                         |
| Ford.....                      | 28             | 37,568                | 71,293                      | 7,969,039                                      | 2,622,741                                | 32.91                        |
| Franklin.....                  | 26             | 32,565                | 47,891                      | 3,470,414                                      | 204,237                                  | 5.89                         |
| Gove.....                      | 11             | 14,666                | 24,728                      | 2,914,748                                      | 450,673                                  | 15.46                        |
| Graham.....                    | 6              | 7,580                 | 11,702                      | 3,164,488                                      | 626,148                                  | 19.79                        |
| Gray.....                      | 15             | 20,897                | 33,611                      | 5,061,417                                      | 1,312,954                                | 25.94                        |
| Harper.....                    | 14             | 14,985                | 53,016                      | 2,880,291                                      | 205,819                                  | 7.15                         |
| Harvey.....                    | 5              | 5,527                 | 11,515                      | 3,491,209                                      | 24,904                                   | .71                          |
| Jackson.....                   | 12             | 12,615                | 20,831                      | 4,340,124                                      | 80,158                                   | 1.85                         |
| Jewell.....                    | 6              | 6,204                 | 10,965                      | 5,141,212                                      | 148,211                                  | 2.88                         |
| Johnson.....                   | 21             | 21,056                | 42,148                      | 4,295,117                                      | 112,967                                  | 2.63                         |
| Kiowa.....                     | 8              | 13,305                | 20,243                      | 3,848,217                                      | 754,378                                  | 19.60                        |
| Labette.....                   | 11             | 9,600                 | 17,380                      | 3,318,801                                      | 61,490                                   | 1.85                         |
| Lane.....                      | 17             | 20,659                | 36,025                      | 2,576,404                                      | 1,018,322                                | 39.52                        |
| Lincoln.....                   | 13             | 11,800                | 25,461                      | 5,211,720                                      | 110,215                                  | 2.11                         |
| Logan.....                     | 13             | 14,991                | 23,587                      | 1,652,825                                      | 135,498                                  | 8.20                         |
| McPherson.....                 | 22             | 24,195                | 39,202                      | 6,431,465                                      | 355,026                                  | 5.52                         |
| Marion.....                    | 31             | 46,853                | 72,986                      | 5,858,382                                      | 490,190                                  | 8.20                         |
| Marshall.....                  | 24             | 29,708                | 54,703                      | 5,953,790                                      | 926,153                                  | 15.56                        |
| Meade.....                     | 17             | 20,932                | 45,009                      | 5,880,590                                      | 1,657,482                                | 28.19                        |
| Miami.....                     | 8              | 9,817                 | 16,038                      | 3,245,823                                      | 200,870                                  | 6.19                         |
| Mitchell.....                  | 25             | 28,189                | 44,134                      | 4,095,096                                      | 446,204                                  | 10.90                        |
| Morris.....                    | 11             | 10,298                | 16,387                      | 5,254,970                                      | 135,249                                  | 2.57                         |
| Nemaha.....                    | 10             | 12,866                | 19,787                      | 6,005,987                                      | 215,991                                  | 3.60                         |
| Neosho.....                    | 11             | 10,084                | 19,242                      | 3,575,491                                      | 248,417                                  | 6.95                         |
| Ness.....                      | 19             | 26,451                | 40,740                      | 4,366,842                                      | 570,235                                  | 13.06                        |
| Norton.....                    | 8              | 5,135                 | 9,099                       | 4,158,211                                      | 266,019                                  | 6.40                         |
| Osborne.....                   | 33             | 32,879                | 53,413                      | 4,766,733                                      | 743,669                                  | 15.60                        |
| Ottowa.....                    | 9              | 11,885                | 19,749                      | 4,929,874                                      | 95,792                                   | 1.94                         |
| Pawnee.....                    | 28             | 45,514                | 71,595                      | 5,111,875                                      | 873,096                                  | 17.08                        |
| Phillips.....                  | 11             | 10,150                | 19,503                      | 4,042,174                                      | 291,112                                  | 7.20                         |
| Pottawatomie.....              | 7              | 8,050                 | 17,466                      | 5,645,470                                      | 237,336                                  | 4.20                         |
| Pratt.....                     | 39             | 41,611                | 59,820                      | 4,017,942                                      | 972,619                                  | 24.21                        |
| Rawlins.....                   | 21             | 25,780                | 40,084                      | 3,768,894                                      | 1,259,335                                | 33.41                        |
| Reno.....                      | 28             | 34,315                | 53,199                      | 7,595,347                                      | 652,243                                  | 8.59                         |
| Republic.....                  | 5              | 5,325                 | 15,393                      | 5,317,585                                      | 126,256                                  | 2.37                         |
| Rice.....                      | 23             | 39,493                | 58,548                      | 3,084,430                                      | 347,988                                  | 11.28                        |
| Riley.....                     | 13             | 17,714                | 35,109                      | 4,484,188                                      | 177,942                                  | 3.97                         |
| Rooks.....                     | 15             | 13,700                | 18,344                      | 4,216,691                                      | 239,346                                  | 5.68                         |
| Rush.....                      | 10             | 15,515                | 27,857                      | 3,844,593                                      | 514,653                                  | 13.39                        |
| Russell.....                   | 10             | 10,810                | 18,145                      | 4,515,411                                      | 232,104                                  | 5.14                         |
| Saline.....                    | 9              | 9,880                 | 16,298                      | 5,165,814                                      | 269,963                                  | 5.03                         |
| Sedgwick.....                  | 28             | 36,399                | 50,844                      | 7,527,458                                      | 207,913                                  | 2.76                         |
| Stafford.....                  | 20             | 30,413                | 47,627                      | 4,123,163                                      | 887,840                                  | 21.53                        |
| Stevens.....                   | 7              | 8,260                 | 19,634                      | 3,030,582                                      | 400,894                                  | 13.23                        |
| Sumner.....                    | 8              | 11,500                | 18,103                      | 4,867,148                                      | 36,482                                   | 0.75                         |
| Thomas.....                    | 7              | 6,539                 | 10,524                      | 3,983,150                                      | 394,240                                  | 9.90                         |
| Trego.....                     | 9              | 7,979                 | 9,978                       | 3,138,901                                      | 461,791                                  | 14.71                        |
| Wabunsee.....                  | 7              | 8,462                 | 15,268                      | 6,051,948                                      | 319,211                                  | 5.27                         |
| Washington.....                | 18             | 17,642                | 29,962                      | 6,363,958                                      | 765,554                                  | 12.03                        |
| Balance of State.....          | 177            | 194,566               | 337,430                     | 126,215,143                                    | 6,622,850                                | 5.25                         |
| <b>SOUTH ATLANTIC</b>          |                |                       |                             |  |  |                              |
| <b>Delaware.....</b>           |                |                       |                             |  |  |                              |
|                                |                |                       |                             | 17,941,088                                     | 86,138                                   | .48                          |
| <b>Maryland.....</b>           |                |                       |                             |  |  |                              |
|                                | 93             | 84,667                | 150,940                     | 76,594,590                                     | 6,924,827                                | 9.04                         |
| <b>Worcester.....</b>          |                |                       |                             |  |  |                              |
|                                | 70             | 59,971                | 119,625                     | 3,539,673                                      | 406,345                                  | 11.48                        |
| Balance of State.....          | 23             | 24,686                | 30,615                      | 73,054,847                                     | 6,518,482                                | 8.92                         |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales |
|---------------------------------|------------------------|----------------------------|--------------------------|--|--------------|
| <b>SOUTH ATLANTIC—Continued</b> |                        |                            |                          |  |              |
| <b>District of Columbia</b>     |                        |                            |                          |  |              |
| Virginia                        | 52                     | 304                        | \$7,137,975              | \$7,120,975  | \$7,000      |
| Accomac                         | 28                     |                            | 3,993,043                | 3,993,043  |              |
| Northampton                     | 17                     |                            | 2,662,946                | 2,662,946  |              |
| Balance of State                | 7                      | 304                        | 471,986                  | 464,986  | 7,000        |
| West Virginia                   | 10                     | 922                        | 891,337                  | 834,337  | 57,000       |
| North Carolina                  | 9                      | 224                        | 487,484                  | 452,254  | 15,210       |
| Avery                           | 3                      | 148                        | 23,599                   | 21,099   | 2,500        |
| Pender                          | 4                      | 76                         | 82,310                   | 69,600   | 12,710       |
| Balance of State                | 2                      |                            | 361,555                  | 361,555  |              |
| South Carolina                  | 9                      | 551                        | 1,801,441                | 1,801,201  | 240          |
| Georgia                         | 39                     | 7,252                      | 2,869,952                | 2,639,677  | 230,275      |
| Colquitt                        | 10                     | 1,162                      | 276,387                  | 265,878  | 10,509       |
| Walton                          | 3                      | 27                         | 14,374                   | 14,374   |              |
| Balance of State                | 26                     | 6,063                      | 2,579,191                | 2,359,425  | 219,766      |
| Florida                         | 83                     | 7,092                      | 17,387,555               | 16,374,655   | 1,012,900    |
| Dade                            | 4                      | 177                        | 1,041,547                | 1,041,547  |              |
| De Soto                         | 3                      | 125                        | 588,001                  | 588,001  |              |
| Hardee                          | 3                      | 220                        | 169,500                  | 169,500  |              |
| Highlands                       | 3                      | 50                         | 229,864                  | 229,864  |              |
| Jackson                         | 3                      | 145                        | 62,709                   | 62,709   |              |
| Lake                            | 9                      | 991                        | 954,396                  | 954,396  |              |
| Lee                             | 3                      | 116                        | 398,562                  | 358,259  | 40,303       |
| Manatee                         | 7                      | 995                        | 1,810,978                | 1,588,351  | 222,627      |
| Orange                          | 4                      | 376                        | 1,470,986                | 1,470,986  |              |
| Polk                            | 14                     | 1,698                      | 3,892,255                | 3,892,255  |              |
| Volusia                         | 7                      | 938                        | 225,606                  | 225,606  |              |
| Balance of State                | 23                     | 1,261                      | 5,943,151                | 5,193,181  | 749,970      |
| <b>EAST SOUTH CENTRAL</b>       |                        |                            |                          |  |              |
| Kentucky                        | 16                     | 71,316                     | 6,646,637                | 6,646,637  |              |
| Warren                          | 3                      | 437                        | 121,432                  | 121,432  |              |
| Balance of State                | 13                     | 70,879                     | 6,525,204                | 6,525,204  |              |
| Tennessee                       | 13                     | 2,766                      | 4,713,441                | 4,502,207  | 211,234      |
| Gibson                          | 3                      | 2,230                      | 620,827                  | 626,827  |              |
| Balance of State                | 10                     | 536                        | 4,092,614                | 3,881,380  | 211,234      |
| Alabama                         | 31                     | 2,579                      | 2,524,020                | 2,066,720  | 457,300      |
| Baldwin                         | 4                      | 263                        | 298,821                  | 239,051  | 59,770       |
| Dale                            | 3                      | 100                        | 139,239                  | 134,239  |              |
| Geneva                          | 3                      | 4                          | 165,634                  | 165,634  |              |
| Mobile                          | 3                      | 121                        | 168,868                  | 158,868  | 10,000       |
| Balance of State                | 18                     | 2,091                      | 1,751,458                | 1,368,928  | 382,530      |
| Mississippi                     | 28                     | 4,181                      | 17,082,537               | 17,010,037   | 72,500       |
| Calhoun                         | 4                      | 3,328                      | 269,692                  | 213,192  | 56,500       |
| Sunflower                       | 3                      |                            | 2,081,405                | 2,081,405  |              |
| Balance of State                | 21                     | 853                        | 14,731,440               | 14,715,440   | 16,000       |
| <b>WEST SOUTH CENTRAL</b>       |                        |                            |                          |  |              |
| Arkansas                        | 48                     | 5,785                      | 8,764,980                | 8,667,927  | 97,053       |
| Benton                          | 6                      | 974                        | 180,487                  | 186,487  |              |
| Lonoke                          | 3                      | 395                        | 107,500                  | 107,500  |              |
| Sevier                          | 5                      | 133                        | 164,127                  | 163,230  | 897          |
| Washington                      | 15                     | 1,573                      | 6,811,524                | 6,762,645  | 48,879       |
| White                           | 11                     | 1,638                      | 880,525                  | 860,037  | 20,488       |
| Balance of State                | 8                      | 1,072                      | 614,817                  | 588,028  | 26,789       |
| Louisiana                       | 23                     | 2,666                      | 6,687,933                | 6,173,876  | 513,407      |
| Livingston                      | 6                      | 453                        | 945,395                  | 720,713  | 224,682      |
| Tangipahoa                      | 9                      | 1,469                      | 3,740,650                | 3,492,925  | 253,725      |
| Balance of State                | 8                      | 744                        | 1,995,238                | 1,960,238  | 35,000       |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY             | Em-<br>ployees | Salaries and<br>wages | Total expenses | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|------------------------------|----------------|-----------------------|----------------|--|--|------------------------------|
|                              |                |                       |                | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                              |                |                       |                |  | Value                                    | Percent<br>of total<br>value |
| <b>SOUTH ATLANTIC—Contd.</b> |                |                       |                |  |  |                              |
| <b>District of Columbia</b>  |                |                       |                | \$431, 221                                     |  |                              |
| Virginia                     | 78             | \$129, 985            | \$180, 194     | 155, 479, 988                                  | \$8, 798, 136                            | 5. 65                        |
| Accomac                      | 45             | 72, 408               | 72, 408        | 9, 376, 770                                    | 3, 736, 837                              | 39. 85                       |
| Northampton                  | 23             | 43, 702               | 43, 702        | 6, 112, 962                                    | 1, 772, 287                              | 29. 07                       |
| Balance of State             | 8              | 13, 755               | 64, 064        | 139, 990, 266                                  | 3, 278, 012                              | 2. 34                        |
| <b>West Virginia</b>         |                |                       |                |  |  |                              |
| West Virginia                | 25             | 22, 548               | 33, 482        | 52, 970, 265                                   | 1, 207, 106                              | 2. 28                        |
| <b>North Carolina</b>        |                |                       |                |  |  |                              |
| North Carolina               | 12             | 12, 645               | 21, 219        | 221, 231, 655                                  | 2, 906, 980                              | 1. 31                        |
| Avery                        | 1              | 125                   | 325            | 428, 597                                       | 4, 720                                   | 1. 10                        |
| Pender                       | 4              | 520                   | 914            | 1, 328, 857                                    | 91, 026                                  | 6. 85                        |
| Balance of State             | 7              | 12, 000               | 19, 980        | 219, 474, 201                                  | 2, 811, 234                              | 1. 28                        |
| <b>South Carolina</b>        |                |                       |                |  |  |                              |
| South Carolina               | 16             | 14, 874               | 24, 220        | 116, 642, 714                                  | 3, 855, 277                              | 3. 31                        |
| <b>Georgia</b>               |                |                       |                |  |  |                              |
| Georgia                      | 90             | 107, 266              | 137, 352       | 197, 377, 749                                  | 3, 659, 998                              | 1. 85                        |
| Colquitt                     | 12             | 9, 903                | 30, 037        | 3, 874, 619                                    | 169, 704                                 | 4. 38                        |
| Walton                       | 4              | 1, 500                | 1, 925         | 2, 640, 454                                    | 33, 972                                  | 1. 29                        |
| Balance of State             | 74             | 95, 863               | 105, 390       | 190, 862, 676                                  | 3, 456, 322                              | 1. 81                        |
| <b>Florida</b>               |                |                       |                |  |  |                              |
| Florida                      | 3, 795         | 1, 761, 177           | 3, 192, 770    | 82, 897, 144                                   | 14, 369, 275                             | 17. 35                       |
| Dade                         | 64             | 71, 251               | 87, 116        | 3, 514, 595                                    | 650, 293                                 | 18. 50                       |
| De Soto                      | 186            | 85, 712               | 175, 872       | 1, 051, 670                                    | 359, 099                                 | 34. 15                       |
| Hardee                       | 15             | 10, 449               | 12, 249        | 1, 477, 596                                    | 17, 417                                  | 1. 18                        |
| Highlands                    | 103            | 66, 091               | 123, 441       | 1, 383, 563                                    | 580, 920                                 | 41. 99                       |
| Jackson                      |                |                       |                | 2, 515, 783                                    | 34, 502                                  | 1. 37                        |
| Lake                         | 316            | 71, 698               | 185, 743       | 3, 104, 925                                    | 447, 673                                 | 14. 42                       |
| Lee                          | 70             | 50, 028               | 64, 343        | 1, 323, 379                                    | 315, 937                                 | 23. 87                       |
| Manatee                      | 231            | 156, 952              | 246, 398       | 2, 789, 362                                    | 839, 203                                 | 30. 09                       |
| Orange                       | 437            | 189, 410              | 234, 713       | 3, 267, 382                                    | 862, 034                                 | 26. 38                       |
| Polk                         | 1, 011         | 754, 479              | 1, 417, 424    | 9, 681, 989                                    | 3, 927, 918                              | 40. 57                       |
| Volusia                      | 59             | 37, 227               | 83, 993        | 1, 556, 468                                    | 401, 030                                 | 25. 77                       |
| Balance of State             | 303            | 267, 880              | 561, 578       | 51, 230, 432                                   | 5, 933, 249                              | 11. 58                       |
| <b>EAST SOUTH CENTRAL</b>    |                |                       |                |  |  |                              |
| <b>Kentucky</b>              |                |                       |                |  |  |                              |
| Kentucky                     | 153            | 94, 099               | 105, 246       | 169, 563, 035                                  | 2, 736, 445                              | 1. 61                        |
| Warren                       | 17             | 3, 850                | 6, 690         | 3, 586, 794                                    | 55, 730                                  | 1. 56                        |
| Balance of State             | 136            | 90, 179               | 98, 556        | 165, 996, 241                                  | 2, 680, 715                              | 1. 61                        |
| <b>Tennessee</b>             |                |                       |                |  |  |                              |
| Tennessee                    | 51             | 106, 124              | 218, 733       | 162, 383, 230                                  | 1, 381, 835                              | . 85                         |
| Gibson                       | 34             | 20, 022               | 40, 612        | 6, 366, 123                                    | 49, 916                                  | . 78                         |
| Balance of State             | 17             | 86, 102               | 178, 121       | 156, 017, 107                                  | 1, 331, 919                              | . 85                         |
| <b>Alabama</b>               |                |                       |                |  |  |                              |
| Alabama                      | 73             | 35, 499               | 45, 116        | 165, 439, 150                                  | 3, 863, 460                              | 2. 34                        |
| Baldwin                      | 18             | 11, 918               | 14, 422        | 2, 727, 793                                    | 366, 178                                 | 13. 42                       |
| Dale                         | 2              | 450                   | 627            | 1, 885, 050                                    | 69, 329                                  | 3. 68                        |
| Geneva                       | 3              | 95                    | 760            | 2, 900, 570                                    | 82, 488                                  | 2. 84                        |
| Mobile                       | 12             | 9, 804                | 11, 608        | 2, 263, 929                                    | 209, 022                                 | 9. 23                        |
| Balance of State             | 38             | 13, 232               | 17, 699        | 155, 661, 808                                  | 3, 136, 443                              | 2. 01                        |
| <b>Mississippi</b>           |                |                       |                |  |  |                              |
| Mississippi                  | 82             | 89, 630               | 126, 213       | 229, 612, 671                                  | 5, 621, 126                              | 2. 45                        |
| Calhoun                      | 14             | 5, 376                | 10, 908        | 1, 738, 630                                    | 69, 761                                  | 4. 01                        |
| Sunflower                    | 7              | 10, 242               | 13, 115        | 16, 590, 858                                   | 926, 290                                 | 5. 59                        |
| Balance of State             | 61             | 74, 012               | 102, 190       | 211, 313, 183                                  | 4, 625, 075                              | 2. 19                        |
| <b>WEST SOUTH CENTRAL</b>    |                |                       |                |  |  |                              |
| <b>Arkansas</b>              |                |                       |                |  |  |                              |
| Arkansas                     | 196            | 60, 045               | 160, 144       | 187, 169, 922                                  | 3, 153, 892                              | 1. 69                        |
| Benton                       | 7              | 2, 368                | 3, 043         | 3, 057, 834                                    | 125, 504                                 | 4. 10                        |
| Lonoke                       | 5              | 2, 200                | 2, 890         | 5, 926, 734                                    | 49, 662                                  | 0. 79                        |
| Sevier                       | 7              | 3, 522                | 8, 832         | 1, 277, 904                                    | 64, 147                                  | 5. 02                        |
| Washington                   | 35             | 15, 416               | 25, 007        | 3, 439, 172                                    | 465, 978                                 | 13. 55                       |
| White                        | 105            | 11, 091               | 20, 166        | 4, 026, 244                                    | 443, 942                                 | 11. 03                       |
| Balance of State             | 37             | 25, 448               | 100, 206       | 169, 442, 034                                  | 2, 007, 659                              | 1. 18                        |
| <b>Louisiana</b>             |                |                       |                |  |  |                              |
| Louisiana                    | 82             | 83, 425               | 225, 355       | 137, 360, 197                                  | 7, 075, 237                              | 5. 15                        |
| Livingston                   | 24             | 19, 503               | 31, 879        | 1, 498, 993                                    | 1, 177, 029                              | 78. 52                       |
| Tangipahoa                   | 30             | 35, 844               | 141, 127       | 3, 960, 707                                    | 2, 550, 012                              | 64. 38                       |
| Balance of State             | 28             | 28, 078               | 52, 349        | 131, 900, 497                                  | 3, 348, 196                              | 2. 54                        |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY                    | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales       |
|-------------------------------------|------------------------|----------------------------|--------------------------|--|--------------------|
| <b>WEST SOUTH CENTRAL—Continued</b> |                        |                            |                          |  |                    |
| <b>Oklahoma</b> .....               | <b>119</b>             | <b>16,950</b>              | <b>\$31,808,186</b>      | <b>\$18,548,058</b>  | <b>\$3,653,152</b> |
| Alfalfa.....                        | 6                      | 359                        | 1,026,411                | 890,716  | 135,695            |
| Beckham.....                        | 3                      | 976                        | 320,094                  | 81,980   | 238,114            |
| Blaine.....                         | 7                      | 692                        | 648,521                  | 580,014  | 68,507             |
| Caddo.....                          | 7                      | 1,015                      | 1,076,230                | 853,386  | 222,844            |
| Canadian.....                       | 4                      | 1,182                      | 910,708                  | 678,688  | 232,020            |
| Custer.....                         | 10                     | 1,523                      | 1,809,168                | 1,741,478  | 67,690             |
| Dewey.....                          | 3                      | 89                         | 473,419                  | 444,956  | 28,463             |
| Garfield.....                       | 10                     | 496                        | 1,309,095                | 1,194,190  | 114,905            |
| Grant.....                          | 9                      | 743                        | 1,312,271                | 1,002,704  | 309,567            |
| Harper.....                         | 3                      | 270                        | 546,313                  | 546,313  | -----              |
| Kay.....                            | 6                      | 1,259                      | 433,703                  | 286,211  | 147,492            |
| Kiowa.....                          | 3                      | 623                        | 673,587                  | 547,539  | 126,048            |
| Noble.....                          | 5                      | 300                        | 528,929                  | 331,000  | 197,929            |
| Roger Mills.....                    | 3                      | 1,454                      | 199,858                  | 96,164   | 103,694            |
| Tillman.....                        | 4                      | 500                        | 261,382                  | 261,382  | -----              |
| Washita.....                        | 3                      | 595                        | 243,999                  | 185,350  | 58,649             |
| Woods.....                          | 6                      | 831                        | 1,361,954                | 1,119,002  | 242,952            |
| Balance of State.....               | 27                     | 3,313                      | 8,066,564                | 7,707,963  | 358,583            |
| <b>Texas</b> .....                  | <b>82</b>              | <b>14,682</b>              | <b>16,920,892</b>        | <b>16,082,612</b>  | <b>858,280</b>     |
| Cameron.....                        | 4                      | 1,240                      | 316,300                  | 314,095  | 2,205              |
| Collingsworth.....                  | 4                      | 523                        | 629,738                  | 599,769  | 29,969             |
| Cooke.....                          | 4                      | 32                         | 377,500                  | 364,725  | 12,775             |
| Gray.....                           | 3                      | 60                         | 630,062                  | 605,062  | 25,000             |
| Hale.....                           | 4                      | 1,885                      | 644,898                  | 574,960  | 69,938             |
| Hidalgo.....                        | 4                      | 3,716                      | 748,077                  | 748,077  | -----              |
| Lipscomb.....                       | 4                      | 150                        | 1,782,245                | 1,707,926  | 74,319             |
| Ochiltree.....                      | 5                      | 240                        | 2,212,000                | 2,094,000  | 118,000            |
| Oldham.....                         | 3                      | -----                      | 372,620                  | 367,500  | 5,120              |
| Balance of State.....               | 47                     | 6,836                      | 9,207,452                | 8,686,498  | 520,954            |
| <b>MOUNTAIN</b>                     |                        |                            |                          |  |                    |
| <b>Montana</b> .....                | <b>72</b>              | <b>5,350</b>               | <b>12,447,829</b>        | <b>11,524,438</b>  | <b>923,391</b>     |
| Blaine.....                         | 3                      | 330                        | 265,031                  | 265,031  | -----              |
| Daniels.....                        | 4                      | 260                        | 1,174,496                | 1,060,296  | 114,200            |
| Fergus.....                         | 3                      | 208                        | 372,737                  | 305,468  | 67,269             |
| Judith Basin.....                   | 3                      | -----                      | 27,000                   | 27,000   | -----              |
| Phillips.....                       | 3                      | 414                        | 904,018                  | 642,368  | 261,650            |
| Pondera.....                        | 4                      | 297                        | 919,642                  | 889,290  | 30,352             |
| Richland.....                       | 3                      | 437                        | 726,815                  | 726,815  | -----              |
| Roosevelt.....                      | 6                      | 908                        | 1,689,105                | 1,686,660  | 2,445              |
| Sheridan.....                       | 6                      | 468                        | 1,109,644                | 1,077,407  | 32,177             |
| Teton.....                          | 6                      | 240                        | 1,080,031                | 1,048,333  | 11,698             |
| Valley.....                         | 6                      | 45                         | 473,136                  | 451,291  | 21,846             |
| Balance of State.....               | 25                     | 1,743                      | 3,746,174                | 3,364,419  | 381,755            |
| <b>Idaho</b> .....                  | <b>32</b>              | <b>14,728</b>              | <b>6,694,373</b>         | <b>6,300,947</b>   | <b>423,426</b>     |
| Canyon.....                         | 3                      | 1,170                      | 1,061,621                | 945,888  | 105,733            |
| Kootenai.....                       | 4                      | 10,566                     | 188,968                  | 188,968  | -----              |
| Latah.....                          | 4                      | 358                        | 871,843                  | 812,371  | 59,472             |
| Balance of State.....               | 21                     | 2,632                      | 4,511,941                | 4,253,720  | 258,221            |
| <b>Wyoming</b> .....                | <b>14</b>              | <b>2,470</b>               | <b>2,555,049</b>         | <b>2,512,049</b>   | <b>43,000</b>      |
| Laramie.....                        | 3                      | 96                         | 371,417                  | 346,417  | 25,000             |
| Balance of State.....               | 11                     | 2,374                      | 2,183,632                | 2,165,632  | 18,000             |
| <b>Colorado</b> .....               | <b>90</b>              | <b>8,989</b>               | <b>15,525,133</b>        | <b>14,420,040</b>  | <b>1,105,093</b>   |
| Conceos.....                        | 8                      | 284                        | 266,900                  | 250,160  | 6,740              |
| Delta.....                          | 4                      | 8                          | 371,779                  | 380,279  | 11,500             |
| Elbert.....                         | 3                      | 10                         | 277,543                  | 204,378  | 73,165             |
| Kit Carson.....                     | 5                      | 200                        | 793,470                  | 663,601  | 129,869            |
| Logan.....                          | 6                      | 513                        | 1,022,020                | 1,006,213  | 12,807             |
| Mesa.....                           | 4                      | 1,425                      | 1,640,844                | 1,635,844  | 5,000              |
| Montrose.....                       | 4                      | -----                      | 697,724                  | 667,724  | 30,000             |

1 Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY               | Em-<br>ployees | Salaries and<br>wages | Total expenses <sup>1</sup> | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|--------------------------------|----------------|-----------------------|-----------------------------|--|--|------------------------------|
|                                |                |                       |                             | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                                |                |                       |                             |  | Value                                    | Percent<br>of total<br>value |
| <b>WEST SOUTH CENTRAL—Con.</b> |                |                       |                             |  |  |                              |
| <b>Oklahoma</b> .....          | <b>350</b>     | <b>\$419,982</b>      | <b>\$737,390</b>            | <b>\$364,433,746</b>                           | <b>\$33,489,243</b>                      | <b>8.88</b>                  |
| Alfalfa.....                   | 13             | 16,877                | 24,862                      | 5,272,399                                      | 522,940                                  | 9.92                         |
| Beckham.....                   | 19             | 21,960                | 35,109                      | 7,065,260                                      | 726,607                                  | 10.28                        |
| Blaine.....                    | 16             | 15,977                | 28,556                      | 4,654,645                                      | 310,895                                  | 6.68                         |
| Caddo.....                     | 24             | 30,657                | 47,521                      | 9,628,046                                      | 1,216,586                                | 12.64                        |
| Canadian.....                  | 13             | 14,745                | 24,124                      | 5,722,920                                      | 342,278                                  | 5.98                         |
| Custer.....                    | 31             | 44,038                | 73,850                      | 6,077,690                                      | 661,134                                  | 10.88                        |
| Dewey.....                     | 14             | 16,600                | 25,183                      | 3,586,800                                      | 221,392                                  | 6.17                         |
| Garfield.....                  | 17             | 23,135                | 35,264                      | 5,488,896                                      | 618,695                                  | 11.27                        |
| Grant.....                     | 24             | 31,576                | 44,869                      | 5,140,740                                      | 548,662                                  | 10.67                        |
| Harper.....                    | 6              | 8,788                 | 14,724                      | 3,757,490                                      | 190,477                                  | 5.07                         |
| Kay.....                       | 9              | 15,111                | 25,515                      | 5,027,348                                      | 243,604                                  | 4.85                         |
| Kiowa.....                     | 15             | 19,670                | 33,574                      | 7,738,585                                      | 1,329,549                                | 17.18                        |
| Noble.....                     | 17             | 18,980                | 31,692                      | 2,555,802                                      | 167,559                                  | 6.56                         |
| Roger Mills.....               | 9              | 8,626                 | 19,361                      | 3,955,056                                      | 432,211                                  | 10.93                        |
| Tillman.....                   | 4              | 4,800                 | 8,531                       | 7,435,149                                      | 2,571,800                                | 34.59                        |
| Washita.....                   | 5              | 5,120                 | 16,791                      | 9,373,951                                      | 1,802,347                                | 19.23                        |
| Woods.....                     | 18             | 26,626                | 42,742                      | 4,147,314                                      | 435,119                                  | 10.49                        |
| Balance of State.....          | 76             | 96,696                | 195,052                     | 167,795,655                                    | 11,147,388                               | 6.64                         |
| <b>Texas</b> .....             | <b>353</b>     | <b>\$30,965</b>       | <b>592,993</b>              | <b>665,759,109</b>                             | <b>14,459,145</b>                        | <b>2.17</b>                  |
| Cameron.....                   | 68             | 23,743                | 34,512                      | 6,767,219                                      | 267,500                                  | 3.95                         |
| Collingsworth.....             | 2              | 1,200                 | 3,625                       | 4,116,148                                      | 117,492                                  | 2.85                         |
| Cooke.....                     | 13             | 13,067                | 23,517                      | 3,349,390                                      | 195,046                                  | 5.82                         |
| Gray.....                      | 10             | 8,280                 | 13,854                      | 3,568,160                                      | 120,243                                  | 3.37                         |
| Hale.....                      | 16             | 13,150                | 24,929                      | 5,240,581                                      | 214,148                                  | 4.09                         |
| Hidalgo.....                   | 54             | 52,697                | 112,687                     | 8,987,102                                      | 318,915                                  | 3.55                         |
| Lipscomb.....                  | 12             | 20,946                | 31,987                      | 3,064,347                                      | 555,231                                  | 18.12                        |
| Ochiltree.....                 | 17             | 21,000                | 37,600                      | 4,363,743                                      | 972,842                                  | 22.29                        |
| Oldham.....                    | 4              | 6,400                 | 7,465                       | 1,698,258                                      | 156,258                                  | 9.20                         |
| Balance of State.....          | 157            | 160,482               | 302,847                     | 624,604,191                                    | 11,541,470                               | 1.85                         |
| <b>MOUNTAIN</b>                |                |                       |                             |  |  |                              |
| <b>Montana</b> .....           | <b>267</b>     | <b>228,664</b>        | <b>515,656</b>              | <b>128,540,284</b>                             | <b>6,730,386</b>                         | <b>5.24</b>                  |
| Blaine.....                    | 5              | 7,173                 | 19,499                      | 3,649,303                                      | 327,063                                  | 8.96                         |
| Daniels.....                   | 5              | 8,400                 | 24,960                      | 1,267,866                                      | 107,955                                  | 8.51                         |
| Fergus.....                    | 6              | 6,643                 | 15,790                      | 5,294,908                                      | 404,985                                  | 7.65                         |
| Judith Basin.....              | 2              | 224                   | 884                         | 2,404,421                                      | 73,602                                   | 3.06                         |
| Phillips.....                  | 8              | 15,836                | 26,253                      | 2,757,119                                      | 253,954                                  | 9.21                         |
| Pondera.....                   | 7              | 13,400                | 27,012                      | 2,740,852                                      | 363,283                                  | 13.25                        |
| Richland.....                  | 4              | 5,955                 | 12,667                      | 3,279,790                                      | 191,591                                  | 5.84                         |
| Roosevelt.....                 | 13             | 24,365                | 47,237                      | 2,659,741                                      | 304,548                                  | 11.45                        |
| Sheridan.....                  | 9              | 14,058                | 33,482                      | 3,007,197                                      | 224,720                                  | 7.47                         |
| Teton.....                     | 8              | 12,679                | 28,740                      | 3,345,475                                      | 592,342                                  | 17.71                        |
| Valley.....                    | 9              | 12,837                | 31,356                      | 3,081,255                                      | 201,400                                  | 6.54                         |
| Balance of State.....          | 191            | 107,094               | 247,776                     | 95,052,357                                     | 3,684,943                                | 3.88                         |
| <b>Idaho</b> .....             | <b>284</b>     | <b>237,927</b>        | <b>391,350</b>              | <b>126,813,938</b>                             | <b>7,710,675</b>                         | <b>6.08</b>                  |
| Canyon.....                    | 45             | 44,681                | 75,573                      | 9,766,549                                      | 865,957                                  | 8.87                         |
| Kootenai.....                  | 15             | 7,110                 | 10,670                      | 1,715,162                                      | 112,165                                  | 6.54                         |
| Latah.....                     | 26             | 23,328                | 57,146                      | 4,253,803                                      | 360,471                                  | 8.47                         |
| Balance of State.....          | 198            | 162,808               | 247,961                     | 111,078,424                                    | 6,372,082                                | 5.74                         |
| <b>Wyoming</b> .....           | <b>61</b>      | <b>65,159</b>         | <b>103,578</b>              | <b>59,370,087</b>                              | <b>2,465,886</b>                         | <b>4.15</b>                  |
| Laramie.....                   | 6              | 8,222                 | 13,267                      | 3,451,161                                      | 141,131                                  | 4.09                         |
| Balance of State.....          | 55             | 56,937                | 89,311                      | 55,918,926                                     | 2,324,755                                | 4.16                         |
| <b>Colorado</b> .....          | <b>326</b>     | <b>380,919</b>        | <b>645,500</b>              | <b>176,837,341</b>                             | <b>8,399,417</b>                         | <b>4.75</b>                  |
| Conejos.....                   | 36             | 15,261                | 49,506                      | 2,976,613                                      | 101,012                                  | 3.39                         |
| Delta.....                     | 22             | 14,042                | 24,248                      | 3,507,221                                      | 248,669                                  | 7.09                         |
| Elbert.....                    | 10             | 10,380                | 14,161                      | 3,204,580                                      | 101,816                                  | 3.18                         |
| Kit Carson.....                | 13             | 16,658                | 31,435                      | 2,712,261                                      | 291,032                                  | 10.73                        |
| Logan.....                     | 10             | 14,154                | 26,472                      | 7,671,285                                      | 447,279                                  | 5.83                         |
| Mesa.....                      | 62             | 115,640               | 125,738                     | 5,492,549                                      | 957,790                                  | 17.44                        |
| Montrose.....                  | 19             | 15,194                | 24,030                      | 3,580,368                                      | 387,641                                  | 10.83                        |

TABLE 1.—COOPERATIVE MARKETING ASSOCIATIONS—NUMBER, MEMBERS, WAGES, AND EXPENSES, 1929, BY

| STATE AND COUNTY      | Number of cooperatives | Number of members reported | Total volume of business | Sales to dealers (including repairs and service charges, etc.) | Retail sales |
|-----------------------|------------------------|----------------------------|--------------------------|--|--------------|
| MOUNTAIN—Continued    |                        |                            |                          |  |              |
| Morgan.....           | 4                      |                            | \$458,895                | \$345,352  | \$113,543    |
| Phillips.....         | 5                      | 486                        | 1,393,161                | 1,217,894  | 175,267      |
| Rio Grande.....       | 3                      | 91                         | 1,270,107                | 1,270,107  | -----        |
| Washington.....       | 3                      | 490                        | 242,210                  | 208,210  | 34,000       |
| Weld.....             | 12                     | 1,074                      | 1,421,034                | 1,168,899  | 252,135      |
| Yuma.....             | 6                      | 2,321                      | 1,727,428                | 1,612,477  | 114,951      |
| Balance of State..... | 23                     | 2,087                      | 3,952,017                | 3,805,902  | 146,115      |
| New Mexico.....       |                        |                            |                          |  |              |
| Roosevelt.....        | 7                      | 1,263                      | 835,693                  | 614,554  | 21,089       |
| Balance of State..... | 4                      | 739                        | 215,552                  | 208,183  | 7,369        |
| Arizona.....          | 4                      | 523                        | 260,071                  | 606,371  | 13,700       |
| Arizona.....          |                        |                            |                          |  |              |
| Maricopa.....         | 5                      | 330                        | 1,170,567                | 1,170,567  | -----        |
| Balance of State..... | 3                      | 851,102                    | 319,465                  | 319,465  | -----        |
| Utah.....             | 2                      | 330                        | 319,465                  | 319,465  | -----        |
| Utah.....             |                        |                            |                          |  |              |
| Utah.....             | 7                      | 516                        | \$349,577                | \$334,409  | \$15,168     |
| Balance of State..... | 5                      | 446                        | 257,465                  | 257,465  | -----        |
| Nevada.....           | 2                      | 70                         | 92,112                   | 76,944   | 15,168       |
| Nevada.....           |                        |                            |                          |  |              |
| Nevada.....           | 4                      | 58                         | 77,370                   | 77,370   | -----        |
| PACIFIC               |                        |                            |                          |  |              |
| Washington.....       |                        |                            |                          |  |              |
| Chelan.....           | 74                     | 1,919                      | 20,873,974               | 19,480,617   | 1,393,357    |
| Grant.....            | 8                      | 401                        | 4,279,669                | 4,031,690  | 248,079      |
| Lincoln.....          | 4                      |                            | 563,682                  | 444,267  | 119,395      |
| Okanogan.....         | 6                      | 494                        | 1,267,420                | 1,175,949  | 91,471       |
| Pierce.....           | 9                      | 69                         | 1,453,129                | 1,272,571  | 180,558      |
| Spokane.....          | 3                      |                            | 462,018                  | 405,009  | 57,009       |
| Whitcom.....          | 6                      | 98                         | 811,617                  | 643,715  | 167,902      |
| Yakima.....           | 3                      |                            | 2,616,395                | 2,616,395  | -----        |
| Balance of State..... | 6                      | 850                        | 650,194                  | 650,194  | -----        |
| Oregon.....           | 29                     | 850                        | 8,789,850                | 8,240,907  | 528,943      |
| Oregon.....           |                        |                            |                          |  |              |
| Jackson.....          | 30                     | 2,455                      | 7,304,866                | 6,385,187  | 919,679      |
| Marion.....           | 3                      | 306                        | 267,710                  | 261,198  | 6,512        |
| Morrow.....           | 5                      | 711                        | 427,019                  | 427,019  | -----        |
| Union.....            | 3                      | 71                         | 737,499                  | 513,347  | 224,152      |
| Balance of State..... | 3                      | 121,335                    | 121,335                  | 121,335  | -----        |
| California.....       | 16                     | 1,367                      | 5,751,303                | 5,062,288  | 689,015      |
| California.....       |                        |                            |                          |  |              |
| Butte.....            | 898                    | 20,376                     | 136,742,670              | 134,303,883  | 2,438,787    |
| Fresno.....           | 3                      | 65                         | 312,954                  | 312,954  | -----        |
| Imperial.....         | 5                      | 200                        | 1,105,050                | 1,105,050  | -----        |
| Kern.....             | 3                      | 150                        | 1,130,046                | 1,114,896  | 15,150       |
| Los Angeles.....      | 3                      | 765                        | 603,592                  | 603,592  | -----        |
| Orange.....           | 54                     | 2,749                      | 25,194,984               | 24,886,101   | 308,883      |
| Placer.....           | 41                     | 4,874                      | 29,935,170               | 29,869,611   | 65,559       |
| Riverside.....        | 8                      | 310                        | 3,929,799                | 3,458,247  | 471,552      |
| Sacramento.....       | 20                     | 251                        | 6,646,121                | 6,646,121  | -----        |
| San Bernardino.....   | 8                      | 240                        | 1,614,283                | 1,403,820  | 210,463      |
| San Diego.....        | 42                     | 3,285                      | 17,592,350               | 16,966,789   | 625,561      |
| San Joaquin.....      | 8                      | 472                        | 1,757,397                | 1,757,397  | -----        |
| Santa Barbara.....    | 3                      | 326                        | 1,755,041                | 1,755,041  | -----        |
| Santa Clara.....      | 6                      | 253                        | 2,390,975                | 2,384,275  | 6,700        |
| Solano.....           | 3                      |                            | 800,452                  | 617,150  | 183,302      |
| Sonoma.....           | 3                      | 195                        | 1,008,129                | 919,401  | 88,728       |
| Tulare.....           | 6                      | 786                        | 11,515,466               | 11,515,466   | -----        |
| Ventura.....          | 15                     | 831                        | 10,008,564               | 9,825,936  | 182,628      |
| Balance of State..... | 45                     | 526                        | 10,637,210               | 10,542,824   | 94,386       |
| Balance of State..... | 22                     | 3,998                      | 8,805,067                | 8,619,212  | 185,875      |

<sup>1</sup> Includes salaries and wages.

TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND DIVISIONS, STATES, AND COUNTIES—Continued

| STATE AND COUNTY          | Em-<br>ployees | Salaries and<br>wages | Total expenses | VALUE OF FARM PRODUCTS SOLD<br>OR TRADED, 1929 |  |                              |
|---------------------------|----------------|-----------------------|----------------|--|--|------------------------------|
|                           |                |                       |                | Total value                                    | Sold through farm-<br>ers' organizations |                              |
|                           |                |                       |                |  | Value                                    | Percent<br>of total<br>value |
| <b>MOUNTAIN—Continued</b> |                |                       |                |  |  |                              |
| Morgan.....               | 14             | \$15,835              | \$28,655       | \$8,287,583                                    | \$293,620                                | 3.54                         |
| Phillips.....             | 19             | 28,027                | 47,752         | 2,412,216                                      | 438,115                                  | 18.16                        |
| Rio Grande.....           | 7              | 9,075                 | 18,375         | 5,963,981                                      | 928,297                                  | 15.57                        |
| Washington.....           | 6              | 9,900                 | 16,640         | 3,569,748                                      | 108,832                                  | 3.05                         |
| Weld.....                 | 37             | 45,394                | 88,889         | 25,248,696                                     | 453,553                                  | 1.80                         |
| Yuma.....                 | 13             | 17,690                | 46,918         | 5,574,737                                      | 1,132,423                                | 20.31                        |
| Balance of State.....     | 58             | 53,669                | 102,681        | 96,635,603                                     | 2,509,338                                | 2.60                         |
| <b>New Mexico</b>         |                |                       |                |  |  |                              |
| Roosevelt.....            | 33             | 38,340                | 73,696         | 56,246,375                                     | 2,531,299                                | 4.50                         |
| Roosevelt.....            | 16             | 13,320                | 17,739         | 2,720,063                                      | 96,584                                   | 3.55                         |
| Balance of State.....     | 17             | 25,020                | 54,947         | 53,526,312                                     | 2,434,715                                | 4.56                         |
| <b>Arizona</b>            |                |                       |                |  |  |                              |
| Arizona.....              | 194            | 93,414                | 203,740        | 46,519,758                                     | 3,952,999                                | 8.55                         |
| Maricopa.....             | 188            | 84,254                | 181,118        | 23,460,949                                     | 1,848,105                                | 7.88                         |
| Balance of State.....     | 6              | 9,160                 | 21,622         | 23,058,809                                     | 1,104,894                                | 4.79                         |
| <b>Utah</b>               |                |                       |                |  |  |                              |
| Utah.....                 | 36             | 18,581                | 38,583         | 59,344,043                                     | 4,263,917                                | 7.19                         |
| Utah.....                 | 12             | 12,742                | 16,044         | 7,269,009                                      | 1,182,541                                | 16.27                        |
| Balance of State.....     | 14             | 5,839                 | 12,519         | 52,075,034                                     | 3,081,376                                | 5.92                         |
| <b>Nevada</b>             |                |                       |                |  |  |                              |
| Nevada.....               | 13             | 5,811                 | 6,805          | 18,761,612                                     | 1,648,299                                | 8.79                         |
| <b>PACIFIC</b>            |                |                       |                |  |  |                              |
| <b>Washington</b>         |                |                       |                |  |  |                              |
| Washington.....           | 1,233          | 1,248,397             | 2,333,466      | 183,869,441                                    | 33,338,231                               | 18.13                        |
| Chelan.....               | 328            | 433,941               | 739,558        | 13,601,402                                     | 3,396,413                                | 24.97                        |
| Grant.....                | 11             | 14,137                | 23,621         | 2,904,288                                      | 586,059                                  | 20.18                        |
| Lincoln.....              | 23             | 35,611                | 65,810         | 6,062,730                                      | 137,911                                  | 2.27                         |
| Okanogan.....             | 205            | 163,892               | 260,877        | 5,313,821                                      | 1,058,960                                | 19.93                        |
| Pierce.....               | 31             | 26,128                | 34,752         | 7,744,613                                      | 2,985,042                                | 38.54                        |
| Spokane.....              | 84             | 41,914                | 57,392         | 8,023,239                                      | 525,831                                  | 6.55                         |
| Whatcom.....              | 122            | 113,275               | 293,420        | 7,702,180                                      | 4,074,419                                | 52.90                        |
| Yakima.....               | 97             | 83,249                | 131,878        | 29,440,902                                     | 4,794,487                                | 16.29                        |
| Balance of State.....     | 332            | 336,250               | 726,158        | 103,076,266                                    | 15,779,109                               | 15.31                        |
| <b>Oregon</b>             |                |                       |                |  |  |                              |
| Jackson.....              | 776            | 489,849               | 1,048,598      | 124,774,464                                    | 11,366,895                               | 9.11                         |
| Jackson.....              | 13             | 21,955                | 68,722         | 5,875,520                                      | 364,258                                  | 6.20                         |
| Marion.....               | 39             | 9,913                 | 20,464         | 8,258,484                                      | 902,439                                  | 10.93                        |
| Morrow.....               | 14             | 16,984                | 34,251         | 3,477,028                                      | 35,551                                   | 1.02                         |
| Union.....                | 46             | 16,142                | 40,347         | 3,866,448                                      | 289,351                                  | 7.48                         |
| Balance of State.....     | 664            | 424,855               | 884,734        | 103,296,984                                    | 9,775,296                                | 9.46                         |
| <b>California</b>         |                |                       |                |  |  |                              |
| Butte.....                | 10,560         | 10,337,397            | 19,235,419     | 607,810,759                                    | 153,072,690                              | 25.18                        |
| Butte.....                | 21             | 13,138                | 39,942         | 8,231,449                                      | 1,648,380                                | 20.03                        |
| Fresno.....               | 31             | 29,861                | 66,557         | 30,899,584                                     | 7,614,880                                | 24.64                        |
| Imperial.....             | 186            | 259,034               | 359,193        | 28,520,281                                     | 1,093,512                                | 3.83                         |
| Kern.....                 | 6              | 10,213                | 29,413         | 14,524,971                                     | 1,165,302                                | 8.02                         |
| Los Angeles.....          | 1,860          | 1,791,391             | 3,776,543      | 68,801,435                                     | 26,656,828                               | 38.74                        |
| Orange.....               | 2,791          | 2,944,778             | 5,399,523      | 28,003,986                                     | 20,146,734                               | 71.94                        |
| Placer.....               | 92             | 137,422               | 199,700        | 5,924,838                                      | 3,847,612                                | 64.94                        |
| Riverside.....            | 983            | 823,619               | 1,543,688      | 17,713,441                                     | 5,497,039                                | 31.08                        |
| Sacramento.....           | 56             | 38,608                | 64,004         | 16,226,677                                     | 2,214,776                                | 13.65                        |
| San Bernardino.....       | 1,551          | 1,695,134             | 3,231,953      | 28,765,696                                     | 13,437,699                               | 46.71                        |
| San Diego.....            | 214            | 152,137               | 165,895        | 11,230,013                                     | 2,577,162                                | 22.95                        |
| San Joaquin.....          | 39             | 62,312                | 83,790         | 27,304,822                                     | 3,021,319                                | 11.07                        |
| Santa Barbara.....        | 253            | 281,817               | 422,541        | 10,718,763                                     | 2,265,053                                | 21.13                        |
| Santa Clara.....          | 15             | 33,381                | 34,731         | 24,243,508                                     | 3,962,675                                | 16.35                        |
| Solano.....               | 20             | 29,197                | 40,234         | 9,818,377                                      | 1,604,702                                | 16.34                        |
| Sonoma.....               | 371            | 308,366               | 384,438        | 25,121,932                                     | 8,309,803                                | 33.08                        |
| Tulare.....               | 531            | 464,121               | 602,715        | 36,860,127                                     | 12,530,069                               | 33.99                        |
| Ventura.....              | 1,156          | 906,116               | 2,281,829      | 20,523,325                                     | 12,682,891                               | 61.80                        |
| Balance of State.....     | 384            | 356,652               | 508,730        | 194,377,534                                    | 22,797,254                               | 11.73                        |

## CHAPTER II. AGRICULTURAL COOPERATIVES BY KIND OF COMMODITY HANDLED

### GRAIN COOPERATIVES

The total number of grain cooperatives, that is, other than central sales organizations and (or) their branches for which the Census of Distribution received reports, was 3,008, with a total business in 1929 of \$546,988,488. Table 2, page 51, presents a summary of the principal business data on grain cooperatives by States.

Of these grain cooperatives 2,541, or 84.5 percent, definitely reported the operation of elevators. Other forms of grain cooperatives include grain-selling organizations which do not own or operate grain elevators, although some of them, particularly in the Pacific Northwest, own grain-storage warehouses. The data in this table and also in tables 3 and 4, pages 53 and 54, do not include bean and rice cooperatives, which are separately discussed later in this chapter. It is probably true that some of the grain cooperatives not here classified as operating elevators do actually have elevators, but that fact was not designated on their reports.

The cooperative grain elevator, while not the earliest form of cooperative marketing to develop in this country, was one of the earliest. The movement has, like most forms or kinds of organization for the distribution of agricultural commodities, as well as other merchandise, for that matter, had its ups and downs. Economic and social conditions and the political conditions arising therefrom are not static and distribution machinery changes accordingly, or if it fails to adjust itself to new conditions or changes too slowly, is discarded either in toto or in part.

There seems reason to believe that the first, or at least one of the first, cooperative elevators to be organized in this country was that in Blairstown, Benton County, Iowa, which was established in 1868.<sup>1</sup>

Farmers in certain counties in Iowa, as well as those in other States, took up the idea of cooperative elevators largely stimulated by the economic and social conditions, which, as was pointed out in chapter I, gave rise to the first national farmers' organization, the Grange. In fact, many, if not most of the cooperative elevators organized at that time were under the auspices of the Grange. Thus in 1874 the Iowa State Grange reported that there were 53 farmers' elevators.<sup>2</sup> This development of cooperative elevators began in 1868 and reached its culmination about 1880. Following that time there was a lull in the grain cooperative movement which probably resulted in an actual net decrease in the number of cooperative elevators.

Again in 1902 there developed an interest among the farmers in the grain States in having their own elevators. The chief factors underlying this development were probably the following: First, a farm price of wheat of 63 cents per bushel as contrasted with 81 cents in 1897, and second, dissatisfaction with the grading and dockage practice of the privately owned elevators and the degree to which local elevators other than cooperative had come to be operated by the so-called line-elevator companies. This line-elevator development, getting under way about 1885, had developed until in 1902 thousands of grain elevators throughout the grain States were in the hands of one or another of the line-elevator companies, the members of whose boards of directors were also in many cases members of the directorate of the railroads over which the grain was shipped. Rightfully or wrongfully the grain farmers naturally attributed at least part of their economic ills to this centralized control of the country market outlets for one of their chief cash crops and determined to go into the elevator business for themselves. It was at this time that the American Society of Equity was formed. The number of cooperative elevators increased rapidly.

<sup>1</sup> Agricultural Cooperative Associations, marketing and purchasing, 1925. United States Department of Agriculture, Technical Bulletin No. 40, 1928.

<sup>2</sup> Hibbard, B. H., Marketing Agricultural Products, p. 207.

Many of these were patterned after the cooperative elevator started in Rockwell, Iowa, in 1889 by the "Alliance." This elevator, when it opened, immediately announced higher prices for wheat than the other local elevators were paying. The latter countered by raising the price an additional 5 cents and began to receive much of the wheat of the cooperative members. The board of managers of the cooperative finally worked out a plan whereby members were permitted to sell their grain to the other elevators whenever they offered a higher price than the cooperative could afford to pay, but with the understanding that a certain amount of this increased price was to be paid by the member into the treasury of the cooperative elevator company. This, of course, made it impossible for the independent and line elevators to drive a cooperative out of business by the simple expedient of paying a higher price for a brief period of time.

**The census data on grain cooperatives.**—Table 2 shows the local grain cooperatives for which the Census of Distribution received reports were located in 26 States, the 5 leading States in number of cooperatives being: North Dakota, 429; Illinois, 363; Kansas, 351; Iowa, 336; and Nebraska, 311. These five States thus reported a total of 1,790 grain cooperatives or 59.5 percent of the United States total, and the combined total volume of business including sales to dealers and sales at retail were \$346,236,532, or 63.3 percent of the United States total.

The total volume of business of all these grain cooperatives, amounting to \$546,988,488, included \$76,477,311, or 14 percent, of retail business which was probably chiefly purchases for (or sales to) members, although also probably including some sales to nonmembers. In some counties of some States cooperative elevators in common with the independent and line elevators represent very important factors in the retail trade. The total expenses, not including the cost or value of the grain or other commodities handled, were \$19,214,437, or approximately 3.5 percent of total volume of business.

In addition to these local, or production-point, grain cooperatives there were 14 sales agencies and (or) sales offices maintained by grain cooperatives in 1929. Their total sales were \$40,628,632.

While not all of the grain cooperatives rendered a membership report the total as reported was 264,871. Additional details on membership are shown in table 3. By that table it is seen that as a matter of fact only 1,882 reported on that point, with an average membership per cooperative of 141. If this number be used as a basis for estimating the membership of the 1,126 cooperatives not reporting, we get an estimated membership of 158,766. This, added to the actual reported members of the other cooperatives, gives a total, reported and estimated, of 423,637.

Table 3 shows that of the 3,008 grain cooperatives 1,615, or 54 percent, reported that the only agricultural commodity handled was grain. An additional 179 reported sales of only grain and livestock; while the balance, 1,214, reported the sale of various agricultural products in addition to grain and livestock. These included such products as cream, eggs, poultry, vegetables, etc. Since the schedule used did not provide for break-down of sales by commodities it was impossible to tabulate these separately and to show what part of the business was represented by the sales of each. It should also be noted that in table 6, livestock cooperatives, there are shown an additional 46 cooperatives whose sales consisted only of livestock and grain. These were not included in the table on grain cooperatives because there was evidence on the schedules that their principal business was the marketing of livestock.

In considering table 3, note that "Sales to dealers" does not include sales at retail or purchases for members. The total combined sales to dealers of these 3,008 cooperatives were \$469,232,453, of which \$254,058,021, or 54.1 percent, were sales made by those selling grain only; \$41,733,241, or 9 percent, by those selling only grain and livestock; and \$173,441,191, or 36.9 percent, by those selling grain and other commodities.

Table 4 presents comparative business data by size of grain sales for a group of 1,389 cooperative elevators. Only those elevators were included here which either had no sales other than grain, or in addition to grain sales, had sales at retail which were reported separately. The total sales, both grain and retail, for this group of elevators were \$236,239,165, of which \$202,698,464, or 85.8 percent, represented grain sales, and the remainder sales at retail. Total sales of all cooperative elevators including grain and livestock and other commodities and sales at retail were \$435,861,879. Thus the sales of this group of 1,389 elevators represented 54.2 percent of the total sales of all cooperative elevators. The average sales for this group were \$145,931.

The table shows the number of elevators in each of several size groups. Thus there are 37, each of which had sales of grain of less than \$20,000, and 4 each of which had sales of grain in excess of \$1,000,000. The largest number of elevators in any single size group was 533, which had sales from \$100,001 to \$200,000, with average sales of \$121,531. The next largest size group was the \$50,001 to \$100,000, with 315 elevators. Of the total (1,389), 1,019, or 73.4 percent, of the elevators covered in this table had sales not exceeding \$200,000.

The average expenses of all of these elevators were \$5,686. The average expenses by size groups ranged from \$2,200 to \$15,977, increasing with the size of business. This, of course, is natural. On the other hand, as clearly shown in the percent columns, the percentage which expenses formed of sales decreased with increased total sales of grain. It should be noted that these are total expense figures, and not necessarily exclusively those for the handling of the grain business of the elevators. Part of them, in many cases, are chargeable to the retail end of the business. However, there was no information secured which made it possible to segregate the expenses incident to sales of grain and those chargeable to sales at retail.

**Retail sales.**—As already noted the 3,008 grain cooperatives had total sales at retail as reported of \$76,477,311. Table 2 shows these retail sales by States. The commodities sold at retail are principally such items as coal, feeds, fertilizers, and other farm supplies. However, in some cases cooperative elevators maintain a much more diversified retail business; and, in fact, some of the grain cooperatives included in this table have in conjunction with them what are essentially cooperative stores, on which separate retail reports were obtained. Also in numerous cases the cooperative elevators handle gasoline and oils and in some cases farm implements and machinery.

The following summary table presents comparative data on cooperative grain elevators, line elevators, and independent elevators. It shows for each kind the number, sales to dealers (grain and other commodities), average sales, expenses, average expenses, and the percent which expenses were of sales.

GRAIN ELEVATORS.—UNITED STATES SUMMARY, 1929

| TYPE               | Number | SALES TO DEALERS |                      | EXPENSES     |                      |                  |
|--------------------|--------|------------------|----------------------|--------------|----------------------|------------------|
|                    |        | Amount           | Average per elevator | Amount       | Average per elevator | Percent of sales |
| United States..... | 9,457  | \$934,458,920    | 986,811              | \$42,401,398 | \$4,484              | 4.54             |
| Independent.....   | 2,899  | 272,330,297      | 93,939               | 12,742,050   | 4,395                | 4.68             |
| Line.....          | 4,017  | 289,367,225      | 72,036               | 14,089,345   | 3,507                | 4.87             |
| Cooperative.....   | 2,541  | 372,761,398      | 146,899              | 15,570,003   | 6,128                | 4.18             |

According to this table, 2,541, or 26.9 percent, of the 9,457 elevators were cooperatives, as compared with 30.6 percent for independents, and 42.5 percent for line elevators. Of the total sales to dealers in 1929 (\$934,458,920), the business of the cooperative elevators, \$372,761,398, constituted 39.9 percent. The relation of total expenses to total sales differs very little in the three types. As already noted in the case of those cooperative elevators which reported only grain sales, or sales of grain, and retail business, the percentage of sales represented by expense was 3.9 percent.

**Centralized cooperative selling of grain.**—As previously indicated the cooperative elevator movement seems to be well established as a factor in the production-point marketing of grain. Numerous attempts have also been made at centralized or federated selling in the intermediate and (or) terminal markets. These do not seem to have developed to the same relative degree as have the local cooperatives. Doubtless one of the limiting factors here has been the great extent of the wheat growing territory of the United States and the large number of wheat farmers. Another factor is undoubtedly that numerous cooperative elevators have been organized under different auspices, i.e., by different farmers' organizations, some of them national or sectional in scope, and some of them by entirely local groups. Further, not all wheat (wheat is the chief commercial grain) is of the same kind and there may be some competition on this basis, as well as a competitive feeling between growers located in different States. It is also true that the management

of a single local cooperative elevator or, as in some cases, a group of several such elevators is a far simpler matter than participation in grain dealing in the large grain markets.

This, of course, should not be interpreted as meaning that such centralized cooperative selling of grain cannot be developed. Several attempts have been made. Given the proper type of managerial ability, with adequately developed plans backed up with adequate statistical and market information service, there would seem to be no reason why large numbers of grain growers might not market their grain through central sales agencies if they feel that such selling would result in sufficient savings or other material benefits such as strengthening their strategic position in the market.

Of the 14 selling agencies (see p. 35), for which the Census of Distribution received reports, 4 were organized between 1914 and 1919; 7 between 1920 and 1924; 1 in 1925; 1 in 1926; and 1 in the last half of 1929.

### LIVESTOCK COOPERATIVES

Cooperative efforts among producers of livestock like those of other producers are for different purposes and take on different forms. Some of them have for their chief purposes improvement of breeding and feeding methods; while others are comparatively simple organizations for the disposal of livestock, either meat animals or dairy animals, or for the purchase of either feeding stock or stock for breeding in the case of both meat animals and dairy animals, or of mature dairy animals for building up the herd. It is impossible to ascertain the date or type of the first cooperative efforts of livestock producers in this country; but this, of course, is relatively immaterial. At the present time cooperative marketing efforts range from the local shipping associations to the cooperative commission firms or sales agencies located on the principal livestock markets and whose business for members or member associations runs into thousands of cars annually. Some of these central agencies also operate subsidiary companies whose business is to buy feeder stock or to arrange to have it shipped direct from the regions where the livestock are raised to the farms of the feeders.

The local shipping associations, include some which are really associations in name only, having no definite organization and no established place of business, and many other local organizations which are quite definitely organized and function year after year in much the same manner. In addition to livestock marketing by the livestock shipping associations considerable quantities of livestock are also shipped cooperatively by associations whose chief business is the marketing of other products, especially grain. In fact, many associations carry the joint title of Livestock and Grain Shipping Association.

**Census data on livestock cooperatives.**—As one would naturally expect, there are more livestock shipping associations in the general farming States. The rancher, because of the size of his livestock production, does not need to cooperate with his neighbors in order to make up car lots or train loads for shipment. Table 5, page 53, presents a summary for the United States on the State basis, showing the number of livestock cooperatives and their total business in 1929. This table includes both those livestock cooperatives which handled livestock only and those which also reported sales of other commodities; while in table 6, page 54, the data are subdivided into the two kinds of livestock cooperatives. It should be noted that in these tables there are included only the local cooperatives, since to have included the cooperative commission companies and sales agencies would have resulted in duplication of sales figures.

The State with the largest number of livestock cooperatives was Minnesota, with 315; and Iowa was second, with 244. The total volume of business of the 1,273 associations amounted to \$193,415,396, of which \$8,367,112 was retail business, probably consisting chiefly of purchase of feeds and other supplies for members. The total expenses of these associations were \$3,461,752, or 1.8 per cent of their business.

The Census of Distribution received reports on 5,084 assemblers of livestock other than cooperatives; and their 1929 business amounted to \$382,961,910. Further details both on cooperatives and on these other assemblers of livestock, by State and county, are given in the Census of Distribution report, Distribution of Livestock.

The cooperative livestock shipping associations in addition to shipping to market for sale, also make some sales direct to packers. The Census of Distribution data on direct receipts of livestock by packers show that cooperative associations sold in that manner 1,775,738 head of livestock as compared with the 3,229,942 head of livestock received by packers direct from individual farmers, and approximately 12,000,000 head from independent and company buyers.

Further details of direct receipts from these various classes of buyers and shippers are also given in the livestock report already mentioned.

Unfortunately no data are available which show the total number of head of livestock sold by all farmers in 1929, so that it is impossible to show what percent of the total farm marketing of livestock was made through cooperatives or through the various classes of buyers.

Table 6 shows that of the 1,273 cooperatives 1,110 reported that the only products sold for members were livestock. In addition there were 46 which reported sale of livestock and grain; and in considering these figures it should be noted as pointed out in the section on grain cooperatives, that the corresponding table 31 on such cooperatives shows an additional 179 associations reporting grain and livestock. There were also 117 other associations whose major business was that of selling livestock for members, but who also reported the sale of other commodities. Since, as was noted in the introduction, the schedule did not provide for adequately reporting the quantities and value of different commodities sold, it was impossible to report how much of their business covered livestock and how much the other commodities.

Approximately 80 percent, or 1,024, of the cooperatives reported on the number of members, having a total membership of 176,974, or an average of 173. If one estimates on the average basis, the membership of the few associations which did not definitely report, it is found that the total membership as reported and as estimated for the 1,273 is 220,051. In considering these figures of the total number of cooperative associations and total membership, one should not lose sight of the fact previously noted, that the Census of Distribution was taken on the establishment basis; hence, it is not to be expected that schedules were secured on cooperative livestock associations unless they did have established places of business.

Table 7, page 54, presents sales and expense data for the 1,110 associations reporting exclusively sales of livestock. The data are so arranged as to show total sales, average sales, expenses, average expenses, and percent expenses are of sales for the association in each of several size groups. The range in size of business of these cooperative associations is from less than \$20,000 (99 associations) to sales of over \$1,000,000 each, reported by 7 associations. It will be noted that 581, or approximately one half of these associations, had business ranging from \$50,000 to \$200,000. This group of associations is about equally divided between those doing from \$50,000 to \$100,000 and those doing from \$100,000 to \$200,000.

The average sales of the entire group of cooperatives were \$140,400; and the average expenses were \$2,255, or 1.61 percent of their total sales. While, as one would naturally expect, the larger associations show larger average expenses, the percent of sales column shows quite clearly that the percentage which expenses form of sales decreases with increased size of business. Thus the 99 associations in the smaller size group had expenses which formed 3.73 percent of total sales as compared with the average of 1.61 percent of the whole group; while the associations in the two largest size groups had expenses which represented 0.66 and 0.98 percent of total sales.

**Terminal market sales agencies.**—In addition to the local shipping associations covered by these tables, the Census of Distribution received reports for 33 cooperative sales agencies located on 23 different markets and having in 1929 total business valued at \$334,420,915. These sales agencies were located at the following livestock market centers, the number on each market being indicated immediately after the name of the city where the market is located.

NUMBER OF COOPERATIVE SALES AGENCIES IN 1929

| Market                | Number    | Market                    | Number |
|-----------------------|-----------|---------------------------|--------|
| <b>Total</b> .....    | <b>33</b> | Milwaukee.....            | 1      |
| San Francisco.....    | 1         | Denver.....               | 1      |
| Chicago.....          | 2         | Peoria.....               | 1      |
| Springfield, Ill..... | 1         | Evansville, Ind.....      | 1      |
| Indianapolis.....     | 1         | Muncie.....               | 1      |
| Sioux City.....       | 2         | Wichita.....              | 1      |
| Detroit.....          | 1         | South St. Paul.....       | 3      |
| Kansas City.....      | 2         | South St. Joseph, Mo..... | 1      |
| Springfield, Mo.....  | 1         | Omaha.....                | 1      |
| Buffalo.....          | 2         | Cincinnati.....           | 2      |
| Cleveland.....        | 2         | Columbus, Ohio.....       | 3      |
| Pittsburgh.....       | 1         | Sioux Falls, S. Dak.....  | 1      |

In view of the confidential nature of the Census of Distribution returns it is impossible to publish the individual sales figures for these different cooperative sales agencies.

It will be noted that the total sales of these terminal cooperative sales agencies are greater than the totals for the local cooperative shipping associations. This is accounted for by the fact that, first, terminal cooperative sales agencies also accept shipments direct from farms, and second, by the differences in production-point and terminal-market prices.

However, a considerable amount of data on some of these agencies have already appeared in print elsewhere, published either by the cooperatives themselves or other authorities; and the following data are based on these other reports.

According to a publication of the United States Department of Agriculture, the first of the terminal market sales organizations now in existence was started in 1917; and by 1926 there were 25 operating on 19 markets and selling livestock valued at \$286,597,921.<sup>1</sup> The following table taken from another United States Department of Agriculture bulletin<sup>2</sup> shows the number and location of the cooperative sales agencies reporting to the Department in 1929 together with their total sales.

In considering these data it should be kept in mind that these are not official Census of Distribution data and therefore are not taken from the confidential reports made to the Bureau of the Census.

LIVESTOCK RECEIPTS, SALES, AND PURCHASES, BY TERMINAL MARKET COOPERATIVE SALES AGENCIES, 1929<sup>a</sup>

| MARKET                | Agencies | Total animals handled | Amount of sale | Amount of purchases | Total business |
|-----------------------|----------|-----------------------|----------------|---------------------|----------------|
|                       | Number   | Number                | 1,000 dollars  | 1,000 dollars       | 1,000 dollars  |
| Buffalo.....          | 1        | 530,086               | 10,717         | -----               | 10,717         |
| Chicago.....          | 2        | 2,057,957             | 50,041         | 1,368               | 51,409         |
| Cincinnati.....       | 1        | 475,175               | 8,351          | 7                   | 8,358          |
| Cleveland.....        | 1        | 273,449               | 5,314          | -----               | 5,314          |
| Denver.....           | 1        | 381,795               | 4,627          | 1,751               | 6,378          |
| Detroit.....          | 1        | 537,625               | 8,834          | 1,130               | 9,964          |
| East St. Louis.....   | 2        | 2,002,534             | 49,387         | 584                 | 49,971         |
| Evansville.....       | 1        | 109,097               | 2,463          | -----               | 2,463          |
| Fort Worth.....       | 1        | 57,456                | 2,474          | 31                  | 2,505          |
| Indianapolis.....     | 1        | 858,577               | 22,302         | 35                  | 22,337         |
| Kansas City.....      | 2        | 673,043               | 17,879         | 3,200               | 21,079         |
| Milwaukee.....        | 1        | 190,624               | 4,241          | -----               | 4,241          |
| Muncie.....           | 1        | 76,412                | 1,583          | -----               | 1,583          |
| Omaha.....            | 1        | 547,750               | 13,923         | 552                 | 14,475         |
| Peoria.....           | 1        | 210,908               | 5,148          | -----               | 5,148          |
| Pittsburgh.....       | 1        | 338,421               | 6,536          | -----               | 6,536          |
| St. Joseph.....       | 1        | 507,701               | 13,607         | 586                 | 14,493         |
| Sioux City.....       | 2        | 614,930               | 17,789         | 538                 | 18,327         |
| South St. Paul.....   | 3        | 2,104,528             | 52,464         | 1,283               | 53,747         |
| Springfield, Ill..... | 1        | 55,065                | 1,288          | -----               | 1,288          |
| Springfield, Mo.....  | 1        | 39,142                | 766            | 2                   | 768            |
| Wichita.....          | 1        | 113,372               | 3,161          | 261                 | 3,422          |
| Total.....            | 28       | 12,755,647            | 302,895        | 11,628              | 314,523        |

- <sup>a</sup> Including animals in stocker and feeder pools.
- <sup>b</sup> Including sales for Chicago Stocker & Feeder Co.
- <sup>c</sup> Including 114,757 sheep, valued at \$906,040 from producers to feeders.

COTTON COOPERATIVES

Cotton being an extremely important cash crop throughout wide areas of the South and having been subject to rather extreme price fluctuations it is but natural that some of the most determined cooperative efforts have been those organized to attempt to improve cotton marketing. Mention was made in the first chapter of the Grange, Alliance, Agricultural Wheel, the Farmers' Union, and the Farm Bureau. Each of these made attempts at securing cooperative action among cotton farmers. Some of the Granges in the South in the early days of that movement maintained selling agents on some of the European mar-

<sup>1</sup> Cooperative Marketing of Livestock in the United States by Terminal Associations. United States Department of Agriculture, Technical Bulletin No. 57, 1928.

<sup>2</sup> Cooperative Marketing and Purchasing. United States Department of Agriculture Circular No. 121, 1930.

kets but the plan did not prove permanent. In fact, a number of other cooperative efforts in connection with cotton developed and flourished for a time and then passed into oblivion.

Some of the reasons both for the recurring efforts at cooperative cotton marketing, as well as for the lack of permanency of some of these earlier attempts may perhaps be seen in the following: According to the Census of Agriculture, 1930, cotton was produced on 1,986,726 farms during 1929; the total value of the cotton crop (including cottonseed) in the main cotton States was \$1,458,309,421 or 32.7 percent of the total value of all farm products sold, traded, or used by the operator's family in these States.

Since there are so many persons directly affected by any price change in cotton, or by any improvements in the local marketing conditions thereof, numerous attempts at self-help during periods of price decline were bound to develop. These efforts have centered largely around the following: The use of seed from improved strains of cotton and improved cultural methods; better and more uniform grading to prevent price discrimination as between markets; development of better credit system through warehouse certificates, or otherwise, to free the grower from necessity of selling at a disadvantage; cooperatively operated gins, in an effort both to keep ginning costs at a minimum and to eliminate gin damage; more direct sales from growers to mills; and the control of production to prevent a large carry-over and its depressive effect on prices. On the other hand, just because cotton is produced by many different farmers on so many different types of land and under different systems of farm management, and because for many of these growers and their tenants the cotton crop has represented the major source of cash income, it has not proven as readily possible to develop permanent cooperatives for the marketing of cotton as it has in connection with certain other farm products, such as wheat and livestock, which are also rather widely produced; or as it has in the case of some of the more specialized products produced in more limited areas. The influence of this latter factor is also seen in connection with special kinds of cotton, notably the long staple varieties produced in rather limited and concentrated areas, where apparently it has been easier to secure united action. Some at least of the reasons for the various cooperative developments among the farmers are seen in the production and price table following.

COTTON.—ACREAGE, PRODUCTION, AND VALUE: 1909-31<sup>1</sup>

| YEAR | Acreage harvested  |                    | Production (equivalent 500-lb. bales) | Price, per pound, received by producers Dec. 1 | Farm value, basis Dec. 1 farm price | YEAR          | Acreage harvested |                      | Production (equivalent 500-lb. bales) | Price, per pound, received by producers Dec. 1 | Farm value, basis Dec. 1 farm price |
|------|--------------------|--------------------|---------------------------------------|--|-------------------------------------|---------------|-------------------|----------------------|---------------------------------------|--|-------------------------------------|
|      | <i>1,000 acres</i> | <i>1,000 bales</i> |                                       |  |                                     |               | <i>Cents</i>      | <i>1,000 dollars</i> |                                       |  |                                     |
| 1909 | <i>32,044</i>      | <i>10,005</i>      | 13.9                                  | 697,681  | 1921                                | <i>30,509</i> | <i>7,954</i>      | 16.2                 | 643,933                               |  |                                     |
| 1910 | <i>32,403</i>      | <i>11,609</i>      | 14.1                                  | 820,407  | 1922                                | <i>33,036</i> | <i>9,755</i>      | 23.8                 | 1,180,968                             |  |                                     |
| 1911 | <i>36,045</i>      | <i>15,693</i>      | 8.8                                   | 687,888  | 1923                                | <i>37,123</i> | <i>10,110</i>     | 31.0                 | 1,571,829                             |  |                                     |
| 1912 | <i>34,283</i>      | <i>13,703</i>      | 11.9                                  | 817,055  | 1924                                | <i>39,204</i> | <i>13,628</i>     | 22.6                 | 1,540,884                             |  |                                     |
| 1913 | <i>37,089</i>      | <i>14,156</i>      | 12.2                                  | 862,708  | 1925                                | <i>46,053</i> | <i>16,104</i>     | 18.2                 | 1,464,032                             |  |                                     |
| 1914 | <i>36,832</i>      | <i>16,135</i>      | 6.8                                   | 549,036  | 1926                                | <i>47,087</i> | <i>17,977</i>     | 10.9                 | 982,736                               |  |                                     |
| 1915 | <i>31,412</i>      | <i>11,192</i>      | 11.3                                  | 631,460  | 1927                                | <i>40,138</i> | <i>12,955</i>     | 19.6                 | 1,289,885                             |  |                                     |
| 1916 | <i>34,985</i>      | <i>11,450</i>      | 19.6                                  | 1,122,295                                      | 1928                                | <i>45,341</i> | <i>14,478</i>     | 18.0                 | 1,301,796                             |  |                                     |
| 1917 | <i>33,841</i>      | <i>11,302</i>      | 27.7                                  | 1,566,198                                      | 1929                                | <i>45,227</i> | <i>14,828</i>     | 16.4                 | 1,217,829                             |  |                                     |
| 1918 | <i>36,006</i>      | <i>12,041</i>      | 27.6                                  | 1,663,633                                      | 1930                                | <i>45,091</i> | <i>13,932</i>     | 9.5                  | 659,455                               |  |                                     |
| 1919 | <i>35,740</i>      | <i>11,421</i>      | 35.6                                  | 2,034,558                                      | 1931                                | <i>40,495</i> | <i>17,096</i>     | 5.7                  | 490,720                               |  |                                     |
| 1920 | <i>35,878</i>      | <i>13,440</i>      | 13.9                                  | 933,658  |                                     |               |                   |                      |                                       |  |                                     |

<sup>1</sup> Department of Agriculture Yearbook, 1932, except figures in italics, which are taken from Agriculture, 1930, Bureau of the Census.

<sup>2</sup> Computed on basis of preliminary estimates.

It is readily apparent that there have been wide fluctuations in the quantity of cotton produced and consequently in the price received per pound. Practically every low-cotton price year has been followed by renewed efforts at cooperative marketing. If these efforts are followed the next season by higher prices the cooperatives tend to gain strength. If, however, prices continue low the growers tend to lose interest in the cooperatives since they believe they did not success-

fully function. In like manner if the price of cotton stays relatively high for several years, growers again lose interest in the cooperatives as they feel they can get fairly satisfactory prices by selling where and to whom they please. There is also a tendency to feel that the latter method facilitates the securing of credit for farm and family needs. These considerations, apply of course, not only to cotton but to other commodities, as pointed out in chapter I.

The data on cotton cooperatives as secured by the Census of Distribution are given in tables 8 and 9 on page 55. Here again it should be noted that the data do not include the federated sales agencies or the State or regional centralized cotton cooperatives. Cotton gins were not officially covered by the Census of Distribution, although a few reports were received, and those which showed sales of cotton in addition to ginning operations were tabulated. So that this table on cotton cooperatives does not include all of the cooperative cotton gins (only 10 in fact). According to a bulletin <sup>1</sup> issued by the Bureau of Foreign and Domestic Commerce there were 37 cooperative gins in Texas, 104 in Oklahoma, and 15 or 20 in Mississippi.

**COTTON COOPERATIVES.—NUMBER, MEMBERS, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES**

| STATE                               | Number of cooperatives | Number of members | Total volume of business | Retail sales     | Em-<br>ployees | Salaries and wages | Total ex-<br>penses * |
|-------------------------------------|------------------------|-------------------|--------------------------|------------------|----------------|--------------------|-----------------------|
| <b>United States</b> .....          | <b>60</b>              | <b>8,360</b>      | <b>\$30,064,321</b>      | <b>\$503,053</b> | <b>107</b>     | <b>\$140,451</b>   | <b>\$260,703</b>      |
| Alabama .....                       | 9                      | 1,797             | 1,108,399                | 208,295          | 11             | 6,842              | 10,149                |
| Mississippi .....                   | 15                     | 61                | 16,059,530               | -----            | 51             | 68,394             | 90,912                |
| Oklahoma .....                      | 7                      | 764               | 4,498,919                | 4,319            | 4              | 8,300              | 26,524                |
| Texas .....                         | 20                     | 4,240             | 2,722,587                | 155,424          | 19             | 19,926             | 42,743                |
| All other States <sup>b</sup> ..... | 9                      | 1,498             | 6,274,886                | 135,015          | 22             | 36,989             | 90,375                |

\* Includes salaries and wages.

<sup>b</sup> Includes data for cooperatives as follows: Arizona, 1; California, 1; Georgia, 2; Louisiana, 1; New Mexico, 1; North Carolina, 1; South Carolina, 1; and Tennessee, 1; not shown separately to avoid disclosure of individual operations.

There are a number of state-wide or regional centralized cotton-cooperative marketing associations which do not have local marketing units. The members, in a given locality, ship their cotton to a central agency for grading and sale. An example of this is the Oklahoma Cotton Growers' Association which reported receipts of cotton from 223 different shipping points in 1929. Likewise there are a number of central cotton-marketing cooperatives which do have local associations as their members. A total of nine central sales agencies reporting to the Census of Distribution had total sales of \$87,640,004 in 1929. According to a publication of the United States Department of Agriculture <sup>2</sup> there were in 1929 a number of large-scale marketing organizations located in various States and cities as indicated in the following table, which also shows the year in which each was organized and the amount of cotton handled by each during the crop years of 1928 and 1929.

<sup>1</sup> Cotton production and distribution in the Gulf Southwest, 1931, United States Department of Commerce.

<sup>2</sup> Cooperative Marketing and Purchasing 1920-30, 1930.

## COTTON RECEIVED BY LARGE-SCALE COOPERATIVE ASSOCIATIONS, 1928-29

| ASSOCIATION  | Address                  | Year organized | COTTON RECEIVED IN— |                    |
|--|--------------------------|----------------|---------------------|--------------------|
|  |                          |                | 1927-28 (bales)     | 1928-29 (bales)    |
| <b>Total</b> .....   |                          |                | <b>825, 786</b>     | <b>1, 163, 957</b> |
| Alabama Farm Bureau Cotton Association.....                    | Montgomery, Ala.....     | 1922           | 80, 238             | 56, 446            |
| Arizona Pima Cotton Growers.....                               | Phoenix, Ariz.....       | 1921           | 19, 862             | 65, 127            |
| Arkansas Cotton Growers' Cooperative Association.              | Little Rock, Ark.....    | 1922           | 11, 316             | 22, 771            |
| Arkansas Farmers' Union Cotton Growers' Association.           | .....do.....             | 1921           | 699                 | 750                |
| California Cotton Growers' Association.....                    | Delano, Calif.....       | 1927           | 7, 800              | 5, 716             |
| Georgia Cotton Growers' Cooperative Association.....           | Atlanta, Ga.....         | 1922           | 21, 487             | 62, 252            |
| Louisiana Farm Bureau Cotton Growers' Cooperative Association. | Shreveport, La.....      | 1923           | 27, 414             | 26, 962            |
| Staple Cotton Cooperative Association.....                     | Greenwood, Miss.....     | 1921           | 135, 550            | 231, 485           |
| Mississippi Farm Bureau Cotton Association.....                | Jackson, Miss.....       | 1923           | 67, 810             | 75, 699            |
| Missouri Cotton Growers' Cooperative Association.              | New Madrid, Mo.....      | 1923           | * 722               | * 1, 129           |
| North Carolina Cotton Growers' Cooperative Association.        | Raleigh, N.C.....        | 1922           | 46, 325             | 58, 349            |
| Oklahoma Cotton Growers' Association.....                      | Oklahoma City, Okla..... | 1921           | 163, 944            | 363, 616           |
| South Carolina Cotton Growers' Cooperative Association.        | Columbia, S.C.....       | 1922           | 27, 873             | 27, 997            |
| Tennessee Cotton Growers' Association.....                     | Memphis, Tenn.....       | 1923           | 20, 982             | 28, 490            |
| Texas Farm Bureau Cotton Association.....                      | Dallas, Tex.....         | 1921           | 175, 747            | 137, 168           |
| Southwestern Irrigated Cotton Growers' Association.            | El Paso, Tex.....        | 1926           | 18, 017             |                    |

\* Sold through Arkansas Cotton Growers' Cooperative Association.

Table 9 presents data on 51 cotton cooperatives arranged by size of business. It shows for the entire group and also by several size of business groups the relation between operating expenses and total sales.

## EGG AND POULTRY COOPERATIVES

The data on the local egg and (or) poultry marketing cooperatives are presented in summary form in table 10, page 56. This table shows 151 associations with total 1929 business of \$38,618,407. The associations here covered did not include central sales agencies. The simplest forms of cooperative marketing among egg and poultry producers are probably represented by cooperative egg circles and the joint shipment of live poultry. Both of these forms of cooperative marketing may be loosely organized and do not necessarily have established places of business. Hence, there was probably a considerable number of these for which reports were not received and the data on which, accordingly, are not included in the tables. The table does not include central sales agencies or sales offices which are maintained by some groups of local egg and poultry cooperatives which are federated or otherwise associated themselves together for the purpose of centralized selling. The locals of these, of course, are included. For example, this table does not include the Seattle office of the Washington Cooperative Egg and Poultry Association, nor does it include the business of the New York sales office of the Pacific Egg Producers' Cooperative (Inc.).

Altogether there were 21 reports received for such central sales offices with total business of \$41,751,879 in 1929.

Poultry and eggs are also sold for members by some of the dairy cooperatives as well as by other kinds of cooperatives and by cooperative stores. For most of these other cooperatives the data are not available to enable us to separately tabulate their sales of eggs and (or) poultry. For example, a bulletin of the Iowa State College of Agriculture states that in Iowa there are 106 cooperatives of various kinds which handle eggs for their members.<sup>1</sup>

Cooperatives are only one of the numerous market outlets available to producers. Included among others are local stores, cream stations, produce stations, and hucksters and other itinerant buyers. The wholesale summary for the United States presents data on 2,284 assemblers of poultry and poultry products other than cooperatives, with total 1929 business amounting to \$160,642,000.

<sup>1</sup> Marketing Iowa's Poultry Products. Iowa State College of Agriculture and Mechanic Arts, Extension Service Bulletin 173, 1931.

Part of this total business, of course, includes the handling of other than poultry products just as the total business of firms classified as assemblers of dairy products includes some business in poultry and eggs. In addition, numerous direct shipments of eggs and poultry are made by producers either cooperatively or individually; but no data on these were gathered by the Census of Distribution other than for the cooperatives shown in the table. According to the Census of Agriculture the total value of chickens reported as sold by farmers was \$262,516,035 in 1929, while that of chicken eggs sold was \$585,868,022.

Table 10 presents data on membership and also shows total volume of business, retail sales, number of employees and expenses. Of the 151 associations 88 reported a total of 36,277 members, or an average membership of 412. If the average for the 88 reporting membership be used for the 63 associations not reporting, we get an estimated membership of 25,956, or a total membership for the 151 associations of 62,233.

As will be noted, 105 associations reported that the only products sold for members were poultry and eggs, and that the total value thereof was \$26,633,335. In addition, 7 associations reported sales of poultry and dairy products; and 39 reported sales of poultry and (or) eggs and other agricultural commodities. As noted in the section on dairy cooperatives, 200 associations reported sales of dairy and poultry products. Since the schedule used did not provide in all cases for commodity break-down of sales, it is impossible to show the sales of these various commodities separately. Nor is it possible to show for those associations selling both poultry and eggs the value of each. The 105 associations included the following: 24 selling eggs only with business amounting to \$8,713,798; 20 which reported sale of live poultry only with total business amounting to \$4,121,700; and 8 associations reporting sale of dressed poultry only with total sales of \$467,192. The average sales of these three kinds of associations were as follows: eggs only, \$363,075; live poultry only, \$206,085; and dressed poultry, \$58,399.

One of the most interesting examples of cooperative marketing of agricultural products is found in the cooperative sale of eggs by some of the egg producers on the Pacific coast. While it is impossible, within the scope of this report, to present anything approaching a detailed discussion of the methods of operation and the interrelations of the various associations, the general outlines of the plans are as follows:

Certain sections of California, Oregon, and Washington are very heavy surplus egg-producing areas. The principal markets for many of these eggs are the cities on the eastern coast of the United States. Two-egg marketing cooperatives in California, one in Oregon, and one in Washington, each with several locals, market a large part of their eggs which are sold in the East, through the Pacific Egg Producers' Sales Agency maintained in New York City. The Pacific Egg Producers' Association also has branch sales agencies in other eastern cities. When the New York agency first opened, a large proportion of the eggs was sold at auction; but at the present time the larger share is sold direct, many to the large chain-store systems.

### DAIRY PRODUCTS COOPERATIVES

Cooperative developments among farm producers of dairy products include both those whose chief purpose is that of increasing the efficiency of production, and those organized to secure, or attempt to secure, advantage in the marketing of the products. The marketing cooperatives range from rather simple loosely organized arrangements for transportation of milk or cream to a collecting station or to a distributing or processing plant, to such highly organized and complicated undertakings as city distribution of milk and cream, both at wholesale and at retail and complete set-ups for the gathering of milk and butterfat and the manufacture and sales of butter, cheese, evaporated and condensed milk, milk powder, casein, ice cream, and other dairy products.

Between these two extremes, that is, the simplest and the most complicated forms, are a wide variety of dairy cooperatives performing different functions.

The dairy products cooperatives differ from other cooperatives in that the majority of them are factories. That is, they do not sell the products of the members in the form in which produced, but utilize them in the manufacture of cheese, butter, and the like.

In addition to factory cooperatives there are a number of cooperative cream-shipping stations and cooperative milk-shipping stations. In the larger city milk sheds there are cooperative bargaining associations, which while they do not necessarily handle the milk produced by the member farmers, do operate as sales

agencies and work out various trade relations with the distributors. On some city markets there are also cooperatives which sell the milk of the members either at wholesale or at both wholesale and retail.

Since the Census of Distribution did not receive reports for the cooperative dairy products plants or for most of the bargaining associations, it is impossible to present as complete data as in the case of grain cooperatives and livestock cooperatives. Further, there is so much difference in the functions of some kinds of dairy cooperatives, as compared with grain cooperatives and livestock cooperatives, as to make a general composite table of little value.

Table 12, page 58, presents a summary for the United States on the State basis of some of the dairy cooperatives for which schedules were secured. This table has been arranged as nearly as possible on the same basis of the other commodity cooperatives. It does not include data on the sales agencies for federated cooperative cheese factories such as the National Cheese Producers Federation, or for cooperative creameries such as Land O' Lakes, Challenge Cream and Butter Association, and the like. Nor does it include data for the large marketing associations or the large city milk associations. The locals of the bargaining associations are included wherever schedules were received for them, and also for a few cooperative marketing associations in smaller cities.

**Cooperative dairy products plants.**—Cooperative dairy products plants range from rather small cooperative creameries and cooperative cheese factories to quite large creameries and cheese factories and large general dairy production plants equipped to make a wide range of dairy products including evaporated milk, powdered milk, casein, and the like. The general idea of these larger diversified production factories is, of course, to have them so arranged that the milk produced by the members can be made up into different products to take advantage of different markets and also to shift production from time to time in order to meet price differentials as between different dairy products. Some cooperative manufacturing of dairy products is done by associations which are in what are essentially city milk areas, but that, of course, is incidental to their main business and represents rather an attempt to take care of surplus milk than to enter the manufactured products market as such.

In other words, we find by far the greatest number of cooperative manufacturing plants in what is well recognized as the factory milk and cream region. The leading States in this area are Wisconsin, Minnesota, Illinois, Iowa, Nebraska, and Kansas, and in addition, the Pacific Coast States. Further emphasis is given to this point by the following table showing by geographic divisions the percent of total receipts by farmers for sales in dairy products represented by specified products.

VALUE OF SPECIFIED DAIRY PRODUCTS SOLD BY FARMERS, 1929,<sup>1</sup> WITH PERCENT OF THE TOTAL VALUE REPRESENTED BY THESE PRODUCTS: FOR THE UNITED STATES, BY GEOGRAPHIC DIVISIONS

[Values are expressed in thousands of dollars]

| DIVISION                | Value of specified dairy products sold | WHOLE MILK  |                  | CREAM SOLD AS BUTTERFAT |                  | CREAM SOLD NOT AS BUTTERFAT |                  | BUTTER   |                  |
|-------------------------|--|-------------|------------------|-------------------------|------------------|-----------------------------|------------------|----------|------------------|
|                         |  | Value       | Percent of total | Value                   | Percent of total | Value                       | Percent of total | Value    | Percent of total |
| United States.....      | \$1,657,641                            | \$1,036,651 | 62.5             | \$538,795               | 32.5             | \$26,139                    | 1.6              | \$56,056 | 3.4              |
| New England.....        | 97,109                                 | 83,461      | 84.0             | 6,235                   | 6.4              | 2,731                       | 2.8              | 4,682    | 4.8              |
| Middle Atlantic.....    | 289,897                                | 271,535     | 93.7             | 6,048                   | 2.1              | 2,144                       | 0.7              | 10,170   | 3.5              |
| East North Central..... | 494,795                                | 348,546     | 70.4             | 132,403                 | 26.8             | 4,870                       | 1.0              | 8,978    | 1.8              |
| West North Central..... | 355,310                                | 66,732      | 18.8             | 275,519                 | 77.5             | 7,354                       | 2.1              | 5,655    | 1.6              |
| South Atlantic.....     | 77,820                                 | 37,242      | 47.5             | 7,421                   | 9.5              | 1,987                       | 2.6              | 11,170   | 14.4             |
| East South Central..... | 57,204                                 | 34,026      | 59.5             | 16,624                  | 29.1             | 1,445                       | 2.5              | 5,109    | 8.9              |
| West South Central..... | 78,174                                 | 38,799      | 49.6             | 28,042                  | 37.0             | 1,932                       | 2.5              | 8,501    | 10.9             |
| Mountain.....           | 62,828                                 | 30,509      | 48.5             | 29,196                  | 46.5             | 1,807                       | 2.9              | 1,317    | 2.1              |
| Pacific.....            | 144,503                                | 105,751     | 73.2             | 36,407                  | 25.2             | 1,869                       | 1.3              | 476      | 0.3              |

<sup>1</sup> Census of Agriculture, 1930, U.S. Bureau of the Census.

As far as the writer has been able to ascertain the first cooperative manufacture of dairy products was in 1851,<sup>1</sup> in Oneida County, N.Y., which was a cooperative cheese factory, and in 1856 a cooperative creamery was organized in Orange County, N.Y. According to a report of the United States Department of Agriculture there were in 1929 a total of 1,400 cooperative creameries and 740 cheese factories. The total estimated business in 1928 of the cooperative creameries as estimated by the Department of Agriculture was approximately \$245,000,000; and that of the cooperative cheese factories was approximately \$30,000,000. As will be noted in the following summary table Minnesota, Wisconsin, and Iowa lead in the number of cooperative creameries; while the State of Wisconsin contained 592 of the 740 cooperative cheese factories.

COOPERATIVE CREAMERIES AND CHEESE FACTORIES \*

[Values are expressed in thousands of dollars]

| STATE              | CREAMERIES    |                    | CHEESE FACTORIES |                    |
|--------------------|---------------|--------------------|------------------|--------------------|
|                    | Number listed | Estimated business | Number listed    | Estimated business |
| United States..... | 1,400         | \$245,000          | 740              | \$30,000           |
| New York.....      | 6             | 420                | 30               | 1,300              |
| Minnesota.....     | 624           | 85,000             | 30               | 1,400              |
| Wisconsin.....     | 255           | 50,000             | 592              | 22,500             |
| Pennsylvania.....  | 18            | 1,200              | 5                | 140                |
| Iowa.....          | 248           | 40,000             | -----            | -----              |
| Massachusetts..... | 3             | 60                 | -----            | -----              |
| California.....    | 14            | 18,000             | -----            | -----              |
| Michigan.....      | 53            | 9,500              | 9                | 510                |
| Ohio.....          | 6             | 1,400              | 6                | 90                 |
| Washington.....    | 14            | 6,500              | 2                | 550                |
| Connecticut.....   | 2             | 20                 | -----            | -----              |
| Vermont.....       | 18            | 1,650              | 1                | 150                |
| All others.....    | 139           | 31,250             | 65               | 3,360              |

\* "Cooperative Marketing and Purchasing", 1920-30, United States Department of Agriculture Circular No. 121, 1930.

The total number of butter factories of all kinds, both cooperative and privately owned, in 1929, according to the Census of Manufactures was 3,527 and the total number of cheese factories was 2,758. Illustrations of the cooperative diversified dairy products plants are those of a number of county and State dairy products cooperatives in the Pacific Coast States.

**Cooperative bargaining associations.**—These, as previously stated, are organizations set up by milk producers engaged in the production of milk for fluid consumption. Their chief purpose is to represent the producers in their relations with the distributors on the particular market concerned. Some of them do, however, render other services in connection with such matters as planning and controlling of production, sanitation, and the like.

The problem of the fluid milk and cream supply for a large city is a complicated one and it has many ramifications and interrelations. Some of the most complicated of the latter are the relations to and effect on other phases of the dairy industry. To supply the milk needed for a large city requires many cows and the labor of many producers. If that were all and if the city people could use all the milk produced throughout the year by the farms which supply it, the matter would be relatively simple. However, most cities of any size, in order to safeguard the health of their citizens have adopted codes of rules and regulations setting up certain standards of general sanitary conditions under which the milk must be produced. Further, within the city itself the milk sold may be of different grades with different specifications for each. Milk consumption, that is, fluid milk and cream, is fairly uniform throughout the year, if one makes due allowance for differences in weather conditions, and would probably be more nearly constant if prices were stable. Milk production, however, is not naturally uniform, falling off in the fall and winter months and increasing in the late spring and summer. Nor has it for the most part been found to be practicable to so control breeding and feeding operations as to bring about uniformity. The same number of dairy cows required to provide milk needed in the late fall and winter will in late spring

<sup>1</sup> Agricultural Cooperative Associations, Marketing and Purchasing Technical Bulletin No. 40, U.S. Department of Agriculture, 1928.

and summer produce a considerable surplus over and above consumption requirements. Further, since milk for fluid use generally commands a higher price than that for manufacturing purposes there is a constant tendency towards increase of the amount available. This actual or potential increase may be caused by those already producing on the market who expand production, by other farmers going into the business in the immediate area of the city, and by milk producers at a greater distance sending in their milk to take advantage of the higher prices. This surplus problem is the hardest one confronting not only the producers and their cooperative associations, but milk distributors and the manufacturers of dairy products. It is far from easy in the surplus months to determine what part of the total production of fluid milk can and shall be sold and, hence, paid for as fluid milk and (or) cream and what part of it shall be utilized in processing and manufacturing; and the setting up of price differentials is still more complicated and extremely difficult to work out to safeguard the long time interests of producers, distributors, manufacturers, and consumers.

From the above brief sketch it is readily apparent that the farmer who wishes to produce milk for the city market is faced with a considerable number of problems which can better be solved cooperatively than by individual action. It is impossible within the scope of this report to discuss in detail the various milk producers' bargaining associations and the various methods by which they have attempted to solve these and other problems. As already noted, the Census of Distribution did not receive reports for the business of all bargaining associations.

According to a report published in 1932 by the Federal Farm Board<sup>1</sup> there were, during 1929, 161 milk cooperatives, of which 111 were marketing associations. The same report indicates that the estimated business of the 161 cooperatives was \$367,945,000 in 1929. Some milk cooperatives operate both as bargaining associations and as wholesalers for disposing of part of the milk. During 1929 milk cooperatives were in the retail distribution end of the business in very few<sup>2</sup> of the large cities, although there were such cooperatives in Cincinnati, Los Angeles, and St. Louis.

The Census of Distribution secured reports for 70 milk cooperatives having a total business of \$140,623,064. The difference between these figures and those of the Federal Farm Board is accounted for by the fact that a considerable number of the cooperatives do not operate established places of business as interpreted by the field force which secured the census reports.

The cooperative associations also frequently render other services for their members, including arrangements for cooperative purchase of feed and other supplies; advice on production, sanitation, and financial matters. The Federation of Associated Milk Producers maintains headquarters, with a paid secretary, in Washington, D.C. During 1929, there were 47 cooperatives which were members of this Federation, and their total business that year was, approximately, \$332,074,026.

As already noted, the cooperatives are a very important factor in the butter industry. For years many of them have sold most of their output to wholesale dealers. Within comparatively recent years there has been a strong tendency toward the establishment of federated sales agencies of one type or another. The National Cheese Producers' Federation, a cooperative sales agency, with headquarters at Plymouth, Wis., acts as a sales agent for a considerable group of cooperative cheese factories. In 1929 the Federation received 47,899,645 pounds<sup>3</sup> of cheese from member factories. A number of district branch offices and warehouses are maintained which receive cheese from the member factories and make shipments as per sales arrangements made by the central office. During 1929 the Federation also maintained sales offices in a number of the larger cities,

### FRUIT AND VEGETABLE COOPERATIVES

Tables 14, 15, and 16, on pages 59, 60, and 61, present the data on fruits and vegetables local cooperatives on which the Census of Distribution received reports.

In addition to these local cooperatives, reports were received from 31 central sales agencies with total sales of \$156,811,269 in 1929. These include only the central sales offices, and do not include the sales branches or offices which some of these federations or exchanges maintain in the various cities.

In considering the total number of local fruits and vegetables cooperatives the following point should be kept in mind. It is apparent that some of the larger cooperative fruits and vegetables exchanges rendered a report only on their

<sup>1</sup> Statistics of Farmers' Selling and Buying Associations, United States, 1863-1931. Bulletin No. 9, Federal Farm Board, June 1932.

<sup>2</sup> Cooperative Marketing of Fluid Milk, United States Department of Agriculture, Technical Bulletin No. 179, May 1930.

<sup>3</sup> From the sixteenth annual business report of the National Cheese Producers' Federation, Plymouth, Wis.

central sales offices and/or their city sales offices and did not render either through the central office or the local office reports for all of their local cooperatives. Further, in some sections on account of the seasonal nature of production the cooperative shipping associations were not active at the time the Census of Distribution was taken and, hence, no data were secured from these. Also, as previously noted, in connection with other kinds of cooperatives many local fruit and vegetable shipping associations do not maintain an established place of business, and hence were not covered by the Census of Distribution. The percentage of coverage of fruit and vegetable local cooperatives is accordingly not as complete as for certain other kinds of cooperatives, especially grain, livestock, and poultry and eggs.

Some of the most successful cooperative marketing efforts have been developed in connection with some particular kinds of fruits and/or vegetables. Notable illustrations here are the well known California Fruit Growers Exchange, the Florida Citrus Exchange, Eastern Short of Virginia Produce Exchange, some of the apple cooperative marketing associations of the Pacific Northwest, the American Cranberry Exchange, and some of the smaller though apparently quite successful melon, berry, and potato cooperatives.

Some kinds and types of fruits, vegetables, and truck crops, since they are produced in relatively small concentrated production areas, lend themselves quite well to the development of cooperative marketing organizations. On the other hand, it is also true that because some kinds and types of fruits and vegetables are produced rather widely throughout the United States with a considerable share of the marketed product coming from producers whose individual total production is relatively small, cooperatives, apparently do not handle even in the local marketing stages as large a percentage of the total fruits and vegetables production as is true in some other commodities.

However, as already noted with certain kinds and types of fruits and vegetables cooperatives, judging from the length of time they have been in business and the total volume of local or State production handled, have been quite successful. From the standpoint of distribution in general, some of these cooperatives have exerted a very wholesome influence on the matters of production and standardization of grades and packs. Other things being equal well-graded lots of any agricultural commodity bring a higher average price than do ungraded lots, and this is, of course, especially true where arrangements can be made, as they have in many cases, for otherwise disposing of the culls and low grades. The closer to the production point such grading and elimination can be done, the more it tends to decrease the total final cost of distribution. In fact, it is not too much to say that a large share of the success of some of the fruits and vegetables cooperatives has been due to their rigid inspection of grading and packing rules which have been necessary to, and form the basis for, rather widespread advertising campaigns.

### OTHER MARKETING COOPERATIVES

**Other commodity cooperatives.**—In addition to the commodity cooperatives discussed in the foregoing sections of this chapter there are numbers of others, which while quite important, are found in so few States as to make it unnecessary to present the data in such detailed tables. In other words they are cooperatives developed to handle the marketing of agricultural commodities produced in relatively limited areas, for example, such commodities as beans, rice, nuts, wool, and various types of tobacco.

**Bean cooperatives.**—The principal producing areas for dried beans are found in certain sections of the following States, which are listed in order of the importance of their total production during 1929: California, Michigan, Idaho, Colorado, New Mexico, and New York. In these States there were harvested in 1929 approximately nine-tenths of the total United States production of beans, including navy, pinto, lima, kidney, and other ripe field beans, but not including soybeans and velvetbeans.

Because of the concentration of the area of production it has, in some cases at least, been relatively easy to develop cooperative marketing of dried beans, either through local and central sales organizations or through centralized pools and (or) bargaining associations. The Census of Distribution secured reports covering the business of 9 bean locals with total business of \$3,168,929, and 3 bean cooperative sales agencies with total business of \$14,804,129 in 1929.

**Rice cooperatives.**—Rice is also a commodity produced in relatively few States. The total 1929 production reported by the Census of Agriculture, 1930, was

33,468,983 bushels, over 99 percent of which was produced in four States named in the order of their total production as follows: Louisiana, Arkansas, Texas, and California. The Census of Distribution received reports covering two large central sales agencies.

According to a publication of the United States Department of Agriculture, there were active in the 1928-29 crop season the following rice cooperative marketing associations: The Arkansas Rice Growers' Association and the River Farms Rice Growers' Association in Louisiana, which associations both milled the rough rice and sold the milled product. In addition, according to the same authority, there were the American Rice Growers' Cooperative Association of Louisiana and the Rice Growers' Association of California, which for the most part sell only rough rice. The American Rice Growers' Association operates in three States, Arkansas, Louisiana, and Texas, with its central office at Lake Charles, La., and local offices at Beaumont and Houston, Tex.; and Iowa, Sulphur, Lake Charles, and Welch, La.

*Nut cooperatives.*—The Census of Distribution received reports on 18 local nut associations, with total 1929 business of \$6,203,147. The business of the commercial nut cooperatives was principally in English (or Persian) walnuts, pecans, peanuts, and almonds. According to the Census of Agriculture the 1929 production of walnuts amounted to 78,159,951 pounds, California being the leading State with a production of 75,479,128 pounds, and Oregon, the second most important State with a production of 2,484,004 pounds.

The pecan production in 1929, was 26,150,546 pounds; and the leading States were Texas, with a production of 9,588,376 pounds; Oklahoma, 5,718,978 pounds; Georgia, 3,809,177 pounds; Alabama, 1,543,616 pounds; and Mississippi, 1,428,428 pounds; and Louisiana, 1,303,148 pounds.

In the case of almonds, California alone produced 9,389,952 pounds of the total reported production for the United States of 9,403,155 pounds. According to a publication of the United States Department of Agriculture there were operating during the 1929-30 season the cooperative nut associations listed in the following table, which given the names, dates organized, and the quantity handled by each association. The same report shows that during the 1929-30 season the almond association received from members 5,116,000 pounds; the walnut associations received 57,238,105 pounds; and the pecan associations received 788,426 pounds.

NUTS RECEIVED BY SPECIFIED ASSOCIATIONS, 1929-30<sup>1</sup>

| ASSOCIATION AND ADDRESS   | Year organized | NUTS                       |                  |
|---|----------------|----------------------------|------------------|
|   |                | Handled                    | Received 1929-30 |
|   |                | <i>Kind</i>                | <i>Pounds</i>    |
| California Walnut Growers' Association, Los Angeles, Calif. ....  | 1912           | Walnuts .....              | 55,460,000       |
| California Almond Growers' Exchange, San Francisco, Calif. ....   | 1910           | Almonds <sup>2</sup> ..... | 5,116,000        |
| National Pecan Growers' Exchange, Albany, Ga. <sup>3</sup> .....  | 1923           | Pecans .....               | 720,138          |
| Southern Pecan Growers' Cooperative Association, Albany, Ga. .... | 1923           | do .....                   | 68,288           |
| North Pacific Nut Growers' Cooperative, Dundee, Oreg. ....        | 1924           | Filberts .....             | 200,000          |
|   |                | Walnuts .....              | 1,600,000        |
| Eugene Fruit Growers' Association, Eugene, Oreg. ....             | 1908           | Filberts .....             | 39,617           |
|   |                | Walnuts .....              | 178,105          |
| Peanut Growers' Association, Norfolk, Va. ....                    | 1919           | Peanuts .....              | -----            |

<sup>1</sup> Cooperative Marketing and Purchasing, 1920-30. United States Department of Agriculture Circular No. 121, August 1930.

<sup>2</sup> Including sticktightns.

<sup>3</sup> Incorporated in 1923.

<sup>4</sup> Through January 1930.

<sup>5</sup> Estimated.

*Wool cooperatives.*—As noted in the introduction, one of the earliest recorded forms of cooperative marketing endeavors was a cooperative wool pool or depot, organized about 1848. Local or county wool pools have existed in a number of the wool producing counties in the eastern States over a considerable period of years. With the development of the very large commercial production of wool in the western ranch States and the Pacific Northwest there quite naturally arose a desire among the producers to effect such savings as possible through centralized selling, which up to the time the Census of Distribution was taken consisted principally in cooperative wool pooling on a large scale. Since the Census of

Distribution was taken entirely on the establishment basis, it is to be expected that reports were not received for the local or county wool pools which ordinarily do not have any established place of business. Altogether the Census of Distribution received reports for 9 such pools with total 1929 business of \$400,244; and 2 cooperative wool sales agencies with total sales of \$1,464,737. According to the United States Department of Agriculture there were active during the handling of the 1929 wool clip the cooperative wool-marketing associations listed in the following table, which also gives the number of pounds of wool reported handled by each association or sales agency.

WOOL RECEIVED BY THE LARGER WOOL-MARKETING ASSOCIATIONS, 1929<sup>1</sup>

| ASSOCIATION   | WOOL RECEIVED          |
|---|------------------------|
|   | 1929 clip              |
|   | <i>Pounds</i>          |
| Colorado Wool Marketing Association.....                        | 1,622,000              |
| Consolidated Wool Growers' Association.....                     | 155,000                |
| Saguache Mutual Wool Association.....                           |                        |
| Iowa Fleeces Wool Growers' Association.....                     | 560,000                |
| Minnesota Cooperative Wool Growers' Association, Inc.....       | 804,789                |
| Stillwater County Woolgrowers' Association.....                 | 985,000                |
| Montana Wool Cooperative Marketing Association.....             | 6,400,000              |
| New York State Sheep Growers' Cooperative Association, Inc..... | 212,000                |
| North Dakota Cooperative Wool Marketing Association.....        | 1,300,000              |
| Ohio Wool Growers' Cooperative Association <sup>2</sup> .....   | 3,832,624              |
| Pacific Cooperative Wool Growers.....                           | <sup>3</sup> 5,058,602 |
| Cooperative Wool Growers of South Dakota.....                   | 2,200,000              |
| Tennessee Wool Pools.....                                       | 457,897                |
| Jericho Pool.....   |                        |
| Manti Wool Pool.....  |                        |
| West Virginia Cooperative Wool Growers' Association.....        | 150,000                |
| Wisconsin Cooperative Equity Wool Marketing Association.....    |                        |
| Wyoming Wool Cooperative Marketing Association.....             | 4,060,925              |
| Northern California Wool Warehouse Co. <sup>4</sup> .....       | 976,224                |
| National Wool Exchange <sup>4</sup> .....                       | 18,000,000             |

<sup>1</sup> Cooperative Marketing and Purchasing, 1920-30. United States Department of Agriculture Circular No. 121.

<sup>2</sup> Includes wool handled for Indiana Wool Growers' Association, Indianapolis, Ind., and Michigan Farm Bureau Wool Pool, Lansing, Mich.

<sup>3</sup> Including 389,583 pounds of mohair.

<sup>4</sup> Sales agency.

*Tobacco cooperatives.*—While most of the varieties of tobacco are produced in relatively small and concentrated production areas, which as already noted, is a situation generally lending itself to cooperative marketing endeavors, and while numerous tobacco associations have been organized from time to time, the majority have apparently not succeeded in surviving for a long period of time.

The Kentucky Burley tobacco region has been the scene of a number of cooperative attempts, as has also the dark tobacco region of western Kentucky and Tennessee. However, at the time the Census of Distribution was taken, reports were received for only two tobacco cooperatives one of which was a sales agency and the other a local tobacco warehouse or sales floor.

In this connection the following table, from a Department of Agriculture report is interesting. It shows for each of 7 large-scale tobacco-marketing associations, the year organized, and the amount of tobacco handled for various crop years. It will be noted that only two of these were operating during the crop year 1928-29.

TOBACCO MARKETING ASSOCIATIONS, YEAR OF ORGANIZATION, AND QUANTITIES OF TOBACCO RECEIVED, 1923-24 TO 1928-29<sup>1</sup>

| ASSOCIATION  | Address                           | Year organized | TOBACCO HANDLED IN—  |                      |                      |                      |                      |                     |
|--|-----------------------------------|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
|  |                                   |                | 1923-24              | 1924-25              | 1925-26              | 1926-27              | 1927-28              | 1928-29             |
| Maryland Tobacco Growers' Association.....   | Baltimore, Md.....                | 1919           | Pounds<br>15,143,000 | Pounds<br>13,266,380 | Pounds<br>12,867,655 | Pounds<br>11,176,930 | Pounds<br>11,043,780 | Pounds<br>9,021,180 |
| Burley Tobacco Growers' Cooperative Association.....                                     | Lexington, Ky. <sup>2</sup> ..... | 1921           | 245,443,005          | 171,403,690          | 135,590,170          | 118,359,923          | ( <sup>3</sup> )     | ( <sup>4</sup> )    |
| Tobacco Growers' Cooperative Association (Virginia, North Carolina, South Carolina)..... | Raleigh, N. C. <sup>2</sup> ..... | 1922           | 180,137,952          | 103,841,300          | 83,633,674           | ( <sup>5</sup> )     | ( <sup>5</sup> )     | ( <sup>5</sup> )    |
| Dark Tobacco Growers' Cooperative Association.....                                       | Hopkinsville, Ky.....             | 1922           | 173,568,632          | 90,391,821           | ( <sup>4</sup> )     | 46,963,000           | ( <sup>5</sup> )     | ( <sup>5</sup> )    |
| Connecticut Valley Tobacco Association.....  | Hartford, Conn.....               | 1922           | 35,311,079           | 30,740,308           | 26,428,254           | ( <sup>5</sup> )     | ( <sup>5</sup> )     | ( <sup>5</sup> )    |
| Northern Wisconsin Cooperative Tobacco Pool.....   | Madison, Wis.....                 | 1922           | 31,059,012           | 15,728,150           | 18,068,383           | 11,743,322           | 10,761,146           | 17,170,944          |
| Miami Valley Tobacco Growers' Cooperative Association.....                               | Dayton, Ohio.....                 | 1923           | 19,742,000           | 5,051,622            | ( <sup>4</sup> )     | ( <sup>5</sup> )     | ( <sup>5</sup> )     | ( <sup>5</sup> )    |
| <b>Total.....</b>  |                                   |                | 700,404,681          | 430,423,281          | 276,618,136          | 188,263,175          | 21,804,926           | 26,192,124          |

<sup>1</sup> Cooperative Marketing and Purchasing, 1929-30. U. S. Department of Agriculture Circular No. 121.<sup>2</sup> Reported by EISINGER, V. THE BURLEY TOBACCO GROWERS' EXPERIMENT. In American Cooperation, vol. II, p. 583, 1928.<sup>3</sup> United States Department of Agriculture.<sup>4</sup> Not operating.<sup>5</sup> Out of business.

**Miscellaneous selling organizations.**—In addition to the various commodity marketing cooperatives there are in the United States a very considerable number of what may best be termed miscellaneous selling organizations, many of them handling for their members practically any product which such members may desire to sell through them. Some of these are local in character, while others are organized on the county basis, some of these latter having locals affiliated with them. In some States a considerable number of the locals and/or county organizations have federated into regional or State selling organizations. Many of these, like some of the local commodity organizations, do not have established places of business. However, in table 17, page 61, are presented the data on those for which the Census of Distribution received reports.

**TABLE 2.—GRAIN COOPERATIVES—NUMBER, MEMBERS, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES**

| STATE                               | Number of cooperatives | Number of members | Total volume of business | Retail sales   | Em-<br>ployees | Salaries and wages | Total ex-<br>penses <sup>1</sup> |
|-------------------------------------|------------------------|-------------------|--------------------------|----------------|----------------|--------------------|----------------------------------|
| United States.....                  | 3, 008                 | 264, 871          | \$546, 988, 488          | \$76, 477, 311 | 7, 911         | \$10, 000, 126     | \$19, 214, 437                   |
| Colorado.....                       | 36                     | 3, 323            | 7, 341, 975              | 781, 543       | 107            | 148, 608           | 293, 209                         |
| Idaho.....                          | 6                      | 436               | 1, 942, 418              | 113, 312       | 45             | 58, 027            | 104, 628                         |
| Illinois.....                       | 363                    | 19, 968           | 64, 367, 757             | 9, 222, 131    | 958            | 1, 225, 574        | 2, 256, 091                      |
| Indiana.....                        | 73                     | 4, 947            | 9, 467, 713              | 1, 926, 024    | 219            | 260, 842           | 484, 766                         |
| Iowa.....                           | 336                    | 31, 549           | 68, 904, 517             | 12, 242, 011   | 852            | 1, 081, 491        | 2, 113, 565                      |
| Kansas.....                         | 351                    | 60, 924           | 86, 758, 859             | 11, 188, 963   | 950            | 1, 179, 941        | 2, 023, 734                      |
| Michigan.....                       | 80                     | 10, 261           | 14, 808, 135             | 4, 868, 495    | 537            | 522, 102           | 977, 365                         |
| Minnesota.....                      | 302                    | 22, 241           | 38, 907, 469             | 6, 582, 053    | 631            | 877, 930           | 1, 736, 769                      |
| Missouri.....                       | 74                     | 4, 278            | 9, 059, 748              | 2, 705, 039    | 225            | 237, 783           | 411, 761                         |
| Montana.....                        | 57                     | 5, 144            | 11, 851, 178             | 899, 797       | 114            | 202, 410           | 472, 808                         |
| Nebraska.....                       | 311                    | 26, 139           | 62, 542, 036             | 6, 314, 354    | 714            | 850, 286           | 1, 503, 462                      |
| North Dakota.....                   | 429                    | 24, 125           | 63, 663, 363             | 4, 774, 969    | 846            | 1, 180, 857        | 2, 757, 438                      |
| Ohio.....                           | 147                    | 13, 593           | 21, 020, 462             | 6, 454, 333    | 525            | 674, 877           | 1, 235, 943                      |
| Oklahoma.....                       | 92                     | 11, 519           | 14, 668, 351             | 2, 342, 953    | 257            | 338, 518           | 578, 198                         |
| Oregon.....                         | 7                      | 107               | 1, 212, 479              | 359, 906       | 36             | 49, 265            | 91, 928                          |
| South Dakota.....                   | 266                    | 23, 253           | 36, 569, 246             | 4, 329, 136    | 527            | 699, 189           | 1, 377, 460                      |
| Texas.....                          | 35                     | 914               | 10, 980, 651             | 502, 827       | 140            | 152, 971           | 293, 719                         |
| Washington.....                     | 22                     | 1, 085            | 5, 098, 341              | 526, 085       | 124            | 125, 069           | 227, 287                         |
| Wisconsin.....                      | 10                     | 652               | 1, 308, 638              | 261, 360       | 30             | 42, 360            | 82, 938                          |
| All other States <sup>2</sup> ..... | 11                     | 413               | 16, 515, 152             | 82, 000        | 74             | 92, 026            | 191, 368                         |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes data for cooperatives as follows: Arkansas, 1; California, 1; Louisiana, 2; Maryland, 2; South Carolina, 1; West Virginia, 2; and Wyoming, 2; not shown separately to avoid disclosure of individual operations.

## CENSUS OF DISTRIBUTION

TABLE 3.—GRAIN COOPERATIVES—NUMBER, MEMBERSHIP, AND SALES, 1929, BY STATES

[(x) is used to prevent disclosure of individual operations]

| STATE               | NUMBER OF GRAIN COOPERATIVES <sup>1</sup> |           |       | MEMBERSHIP REPORTED    |         | MEMBERSHIP NOT REPORTED  |                        | SALES TO DEALERS            |  |               |  |               |
|---------------------|---|-----------|-------|------------------------|---------|--------------------------|------------------------|-----------------------------|--|---------------|--|---------------|
|                     | Total                                     | Elevators | Other | Number of cooperatives | Members |                          | Number of cooperatives | Estimated number of members | Cooperatives selling grain exclusively |               | Cooperatives selling grain and other commodities |               |
|                     |   |           |       |                        | Number  | Average, per cooperative |                        |                             | Number                                 | Sales         | Number   | Sales         |
| United States.....  | 3,008                                     | 2,541     | 467   | 1,882                  | 264,871 | 141                      | 1,126                  | 158,766                     | 1,615                                  | \$254,058,081 | 1,393  | \$315,174,433 |
| Arkansas.....       | 1   |           | 1     | 1                      | 245     |                          |                        |                             |  |               | 1  | (x)           |
| California.....     | 1   |           | 1     | 1                      | 150     |                          |                        |                             |  |               | 1  | (x)           |
| Colorado.....       | 36  | 28        | 8     | 21                     | 3,323   | 158                      | 15                     | 2,370                       | 18                                     | 3,056,005     | 18   | 3,492,287     |
| Idaho.....          | 6   |           | 6     | 3                      | 436     | 145                      | 3                      | 435                         |  |               | 6  | 1,829,106     |
| Illinois.....       | 363                                       | 293       | 70    | 181                    | 19,968  | 110                      | 182                    | 20,020                      | 257                                    | 40,321,957    | 106  | 14,823,669    |
| Indiana.....        | 73  | 65        | 18    | 41                     | 4,947   | 121                      | 32                     | 3,872                       | 45                                     | 4,512,586     | 28   | 2,966,853     |
| Iowa.....           | 336                                       | 274       | 62    | 231                    | 31,549  | 137                      | 105                    | 14,385                      | 226                                    | 32,119,421    | 110  | 24,509,718    |
| Kansas.....         | 351                                       | 315       | 36    | 280                    | 60,924  | 218                      | 71                     | 15,478                      | 286                                    | 64,008,009    | 65   | 11,533,167    |
| Louisiana.....      | 2   |           | 2     | 1                      | 18      | 18                       | 1                      | 18                          |  |               | 2  | (x)           |
| Maryland.....       | 2   |           | 2     |                        |         |                          | 2                      |                             |  | (x)           | 1  | (x)           |
| Michigan.....       | 80  | 65        | 15    | 60                     | 10,261  | 171                      | 20                     | 3,420                       | 14                                     | 622,029       | 66   | 9,279,996     |
| Minnesota.....      | 302                                       | 266       | 36    | 182                    | 22,241  | 122                      | 120                    | 14,640                      | 85                                     | 7,768,203     | 217  | 24,517,910    |
| Missouri.....       | 74  | 47        | 27    | 37                     | 4,278   | 116                      | 37                     | 4,292                       | 26                                     | 1,812,510     | 48   | 4,527,199     |
| Montana.....        | 57  | 49        | 8     | 39                     | 5,144   | 132                      | 18                     | 2,376                       | 19                                     | 2,685,835     | 38   | 8,260,007     |
| Nebraska.....       | 311                                       | 266       | 45    | 235                    | 26,139  | 111                      | 76                     | 8,436                       | 231                                    | 36,272,161    | 80   | 19,795,951    |
| North Dakota.....   | 429                                       | 413       | 16    | 223                    | 24,125  | 108                      | 206                    | 22,248                      | 89                                     | 9,618,345     | 344  | 48,946,771    |
| Ohio.....           | 147                                       | 129       | 18    | 68                     | 13,593  | 200                      | 79                     | 15,800                      | 83                                     | 6,423,332     | 64   | 7,916,231     |
| Oklahoma.....       | 92  | 61        | 31    | 68                     | 11,519  | 169                      | 24                     | 4,056                       | 80                                     | 9,056,038     | 12   | 3,265,446     |
| Oregon.....         | 7   | 5         | 2     | 3                      | 107     | 36                       | 4                      | 144                         | 4                                      | 573,573       | 3  | 279,000       |
| South Carolina..... | 1   |           | 1     |                        |         |                          | 1                      |                             |  |               | 1  | (x)           |
| South Dakota.....   | 266                                       | 238       | 28    | 182                    | 23,253  | 128                      | 84                     | 10,752                      | 101                                    | 10,602,008    | 165  | 21,602,562    |
| Texas.....          | 35  | 21        | 14    | 12                     | 914     | 76                       | 23                     | 1,748                       | 25                                     | 5,588,512     | 10   | 4,848,980     |
| Washington.....     | 22  | 6         | 16    | 8                      | 1,085   | 136                      | 14                     | 1,904                       | 22                                     | 4,296,646     |  |               |
| West Virginia.....  | 2   | 2         |       |                        |         |                          | 2                      |                             |  | (x)           |  |               |
| Wisconsin.....      | 10  | 5         | 5     | 5                      | 652     | 130                      | 5                      | 650                         | 5                                      | 637,851       | 5  | 409,427       |
| Wyoming.....        | 2   | 2         |       |                        |         |                          | 2                      |                             |  |               | 2  | (x)           |

<sup>1</sup> "Total" includes all grain cooperatives for which reports were received. "Elevators" includes only those definitely reporting an elevator. A number of those listed under "Other" no doubt also operated elevators.

<sup>2</sup> Includes 179 cooperatives selling grain and livestock, exclusively, with sales amounting to \$41,733,241.

TABLE 4.—GRAIN COOPERATIVE ELEVATORS<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of cooperatives | SALES OF GRAIN     |                         | EXPENSES    |                         |                  |
|----------------------------|------------------------|--------------------|-------------------------|-------------|-------------------------|------------------|
|                            |                        | Total <sup>2</sup> | Average per cooperative | Total       | Average per cooperative | Percent of sales |
| Total.....                 | 1,389                  | \$302,698,464      | \$145,931               | \$7,897,639 | \$5,686                 | 3.90             |
| \$20,000 and under.....    | 37                     | 341,130            | 9,220                   | 81,413      | 2,200                   | 23.87            |
| \$20,001-\$50,000.....     | 134                    | 4,103,007          | 30,619                  | 424,108     | 3,165                   | 10.34            |
| \$50,001-\$100,000.....    | 315                    | 19,574,977         | 62,143                  | 1,384,157   | 4,394                   | 7.07             |
| \$100,001-\$200,000.....   | 533                    | 64,775,993         | 121,531                 | 2,877,151   | 5,398                   | 4.44             |
| \$200,001-\$300,000.....   | 206                    | 43,063,651         | 209,144                 | 1,532,404   | 7,439                   | 3.56             |
| \$300,001-\$400,000.....   | 98                     | 29,822,364         | 304,310                 | 877,215     | 8,951                   | 2.94             |
| \$400,001-\$500,000.....   | 33                     | 13,216,790         | 400,509                 | 287,125     | 8,701                   | 2.19             |
| \$500,001-\$750,000.....   | 25                     | 13,398,072         | 535,923                 | 320,795     | 12,832                  | 2.39             |
| \$750,001-\$1,000,000..... | 4                      | 2,810,003          | 702,501                 | 49,365      | 12,341                  | 1.76             |
| Over \$1,000,000.....      | 4                      | 11,572,477         | 2,893,119               | 63,906      | 15,977                  | 0.55             |

<sup>1</sup> Includes only those grain cooperatives which definitely reported operating an elevator and which either sold only grain or reported retail sales separately.

<sup>2</sup> Does not include sales at retail or purchases of feed, fertilizer, implements, coal, and other supplies for members.

TABLE 5.—LIVESTOCK COOPERATIVES—NUMBER, MEMBERS, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES

| STATE                               | Number of cooperatives | Number of members | Total volume of business | Retail sales | Employees | Salaries and wages | Total expenses <sup>1</sup> |
|-------------------------------------|------------------------|-------------------|--------------------------|--------------|-----------|--------------------|-----------------------------|
| United States.....                  | 1,273                  | 178,974           | \$183,415,396            | \$8,367,112  | 2,031     | \$1,694,567        | \$3,461,752                 |
| Alabama.....                        | 12                     | 269               | 660,434                  | 106,799      | 16        | 2,235              | 3,687                       |
| Arkansas.....                       | 4                      | 805               | 137,897                  | .....        | 2         | 365                | 404                         |
| Colorado.....                       | 6                      | 1,537             | 1,313,620                | 53,388       | 9         | 11,066             | 19,516                      |
| Florida.....                        | 3                      | 115               | 89,205                   | .....        | .....     | .....              | 150                         |
| Georgia.....                        | 5                      | .....             | 120,389                  | 3,970        | 3         | 830                | 2,668                       |
| Illinois.....                       | 99                     | 17,973            | 13,170,646               | 274,346      | 131       | 95,072             | 186,234                     |
| Indiana.....                        | 25                     | 4,107             | 5,154,532                | 125,982      | 38        | 34,184             | 44,420                      |
| Iowa.....                           | 244                    | 31,962            | 42,807,506               | 2,300,187    | 358       | 330,754            | 751,233                     |
| Kansas.....                         | 36                     | 3,949             | 5,992,079                | 773,577      | 80        | 75,723             | 131,249                     |
| Kentucky.....                       | 7                      | 629               | 4,691,549                | .....        | 65        | 21,144             | 28,361                      |
| Michigan.....                       | 56                     | 9,108             | 6,400,597                | 813,821      | 130       | 116,632            | 214,187                     |
| Minnesota.....                      | 315                    | 41,712            | 47,293,273               | 482,380      | 452       | 382,305            | 877,391                     |
| Missouri.....                       | 83                     | 17,726            | 12,538,113               | 838,080      | 111       | 86,133             | 161,959                     |
| Montana.....                        | 4                      | 161               | 251,528                  | 16,649       | 4         | 4,780              | 6,456                       |
| Nebraska.....                       | 50                     | 5,034             | 7,051,512                | 641,468      | 79        | 73,432             | 147,441                     |
| North Dakota.....                   | 106                    | 8,832             | 4,694,364                | 81,400       | 98        | 58,031             | 137,146                     |
| Ohio.....                           | 46                     | 10,063            | 19,819,184               | 301,623      | 111       | 121,457            | 214,802                     |
| South Dakota.....                   | 69                     | 6,489             | 7,219,563                | 240,776      | 92        | 69,941             | 160,490                     |
| Texas.....                          | 3                      | 131               | 849,271                  | 78,680       | 13        | 16,432             | 24,654                      |
| Virginia.....                       | 4                      | 304               | 199,600                  | 7,000        | 4         | 3,650              | 3,910                       |
| Washington.....                     | 3                      | 200               | 361,403                  | 12,049       | 12        | 8,069              | 16,455                      |
| West Virginia.....                  | 5                      | 652               | 133,889                  | .....        | 3         | 310                | 2,294                       |
| Wisconsin.....                      | 77                     | 10,705            | 9,838,222                | 1,196,989    | 168       | 117,448            | 232,259                     |
| All other States <sup>2</sup> ..... | 11                     | 4,611             | 2,627,020                | 37,948       | 52        | 64,554             | 94,396                      |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes data for cooperatives as follows: California, 1; Idaho, 1; Mississippi, 1; New York, 1; North Carolina, 1; Oklahoma, 1; South Carolina, 1; Tennessee, 2; and Wyoming, 2; not shown separately, to avoid disclosure of individual operations.

## CENSUS OF DISTRIBUTION

TABLE 6.—LIVESTOCK COOPERATIVES—NUMBER, MEMBERSHIP, AND SALES, 1929, BY STATES

[(x) is used to prevent disclosure of individual operations]

| STATE                  | Total number of co-operatives | MEMBERSHIP REPORTED     |                 | MEMBERSHIP NOT REPORTED  |                         | SALES TO DEALERS            |   |                        |  |                       |
|------------------------|-------------------------------|-------------------------|-----------------|--------------------------|-------------------------|-----------------------------|---|------------------------|--|-----------------------|
|                        |                               | Number of co-operatives | Members         |                          | Number of co-operatives | Estimated number of members | Cooperatives selling livestock, exclusively |                        | Cooperatives selling livestock and other commodities |                       |
|                        |                               |                         | Number          | Average per co-operative |                         |                             | Number                                      | Sales                  | Number   | Sales                 |
| <b>United States..</b> | <b>1, 373</b>                 | <b>1, 024</b>           | <b>176, 974</b> | <b>173</b>               | <b>949</b>              | <b>43, 077</b>              | <b>1, 110</b>                               | <b>\$155, 844, 035</b> | <b>1 163</b>   | <b>\$39, 185, 548</b> |
| Alabama.....           | 12                            | 3                       | 269             | 90                       | 9                       | 810                         | 10  | 430, 951               | 2  | (x)                   |
| Arkansas.....          | 4                             | 2                       | 805             | 403                      | 2                       | 805                         | 4   | 137, 897               |  |                       |
| California.....        | 1                             | 1                       | 3, 500          | 3, 500                   |                         |                             | 1   | (x)                    |  |                       |
| Colorado.....          | 6                             | 4                       | 1, 537          | 384                      | 2                       | 768                         | 4   | 426, 102               | 2  | (x)                   |
| Florida.....           | 3                             | 3                       | 115             | 38                       |                         |                             | 3   | 89, 205                |  |                       |
| Georgia.....           | 5                             |                         |                 |                          |                         | 6                           |   |                        | 5  | 116, 419              |
| Idaho.....             | 1                             | 1                       | 102             | 102                      |                         |                             |   |                        | 1  | (x)                   |
| Illinois.....          | 99                            | 82                      | 17, 973         | 219                      | 17                      | 3, 723                      | 95  | 12, 329, 556           | 4  | 566, 744              |
| Indiana.....           | 25                            | 15                      | 4, 107          | 274                      | 10                      | 2, 740                      | 24  | 4, 910, 550            | 1  | (x)                   |
| Iowa.....              | 244                           | 219                     | 31, 962         | 146                      | 25                      | 3, 650                      | 210   | 32, 637, 197           | 34   | 7, 865, 717           |
| Kansas.....            | 36                            | 35                      | 3, 949          | 113                      | 1                       | 113                         | 11  | 744, 474               | 25   | 4, 474, 028           |
| Kentucky.....          | 7                             | 5                       | 629             | 126                      | 2                       | 252                         | 7   | 4, 691, 549            |  |                       |
| Michigan.....          | 56                            | 48                      | 9, 108          | 190                      | 8                       | 1, 520                      | 41  | 3, 705, 424            | 15   | 1, 881, 352           |
| Minnesota.....         | 315                           | 252                     | 41, 712         | 166                      | 63                      | 10, 458                     | 304   | 45, 237, 794           | 11   | 1, 590, 285           |
| Mississippi.....       | 1                             |                         |                 |                          |                         | 1                           |   |                        | 1  | (x)                   |
| Missouri.....          | 83                            | 69                      | 17, 726         | 257                      | 14                      | 3, 598                      | 69  | 9, 302, 137            | 14   | 2, 397, 896           |
| Montana.....           | 4                             | 1                       | 161             | 161                      | 3                       | 483                         | 3   | 189, 718               | 1  | (x)                   |
| Nebraska.....          | 50                            | 45                      | 5, 034          | 112                      | 5                       | 560                         | 33  | 2, 927, 180            | 17   | 3, 482, 864           |
| New York.....          | 1                             | 1                       | 139             | 139                      |                         |                             | 1   | (x)                    |  |                       |
| North Carolina.....    | 1                             | 1                       | 38              | 38                       |                         |                             | 1   | (x)                    |  |                       |
| North Dakota.....      | 106                           | 85                      | 8, 832          | 104                      | 21                      | 2, 184                      | 103   | 4, 376, 089            | 3  | 236, 271              |
| Ohio.....              | 46                            | 29                      | 10, 063         | 347                      | 17                      | 5, 899                      | 42  | 18, 473, 494           | 4  | 1, 044, 067           |
| Oklahoma.....          | 1                             | 1                       | 202             | 202                      |                         |                             |   |                        | 1  | (x)                   |
| South Carolina.....    | 1                             |                         |                 |                          |                         | 1                           |   |                        | 1  | (x)                   |
| South Dakota.....      | 69                            | 54                      | 6, 489          | 120                      | 15                      | 1, 800                      | 65  | 6, 318, 427            | 4  | 657, 447              |
| Tennessee.....         | 2                             | 2                       | 334             | 167                      |                         |                             |   |                        | 2  | (x)                   |
| Texas.....             | 3                             | 2                       | 131             | 66                       | 1                       | 66                          |   |                        | 3  | 770, 591              |
| Virginia.....          | 4                             | 4                       | 304             | 76                       |                         |                             | 4   | 192, 600               |  |                       |
| Washington.....        | 3                             | 1                       | 200             | 200                      | 2                       | 400                         | 2   | (x)                    | 1  | (x)                   |
| West Virginia.....     | 5                             | 2                       | 552             | 276                      | 3                       | 828                         | 5   | 133, 889               |  |                       |
| Wisconsin.....         | 77                            | 55                      | 10, 705         | 195                      | 22                      | 4, 290                      | 67  | 7, 350, 777            | 10   | 1, 287, 781           |
| Wyoming.....           | 2                             | 2                       | 296             | 148                      |                         |                             | 1   | (x)                    | 1  | (x)                   |

<sup>1</sup> Includes 46 cooperatives selling livestock and grain, exclusively, with sales of \$8,758,263.TABLE 7.—LIVESTOCK COOPERATIVES<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of co-operatives | SALE OF LIVESTOCK      |                          | EXPENSES             |                          |                  |
|----------------------------|-------------------------|------------------------|--------------------------|----------------------|--------------------------|------------------|
|                            |                         | Total                  | Average per co-operative | Total                | Average per co-operative | Percent of sales |
| <b>Total.....</b>          | <b>1, 110</b>           | <b>\$155, 844, 035</b> | <b>\$140, 400</b>        | <b>\$2, 503, 516</b> | <b>2, 255</b>            | <b>1. 61</b>     |
| \$20,000 and under.....    | 99                      | 1, 070, 030            | 10, 808                  | 89, 905              | 403                      | 3. 73            |
| \$20,001-\$50,000.....     | 205                     | 7, 334, 232            | 35, 777                  | 159, 359             | 777                      | 2. 17            |
| \$50,001-\$100,000.....    | 289                     | 21, 590, 738           | 74, 708                  | 412, 990             | 1, 429                   | 1. 91            |
| \$100,001-\$200,000.....   | 292                     | 40, 700, 898           | 139, 387                 | 693, 878             | 2, 376                   | 1. 70            |
| \$200,001-\$300,000.....   | 125                     | 29, 385, 972           | 235, 088                 | 513, 773             | 4, 110                   | 1. 75            |
| \$300,001-\$400,000.....   | 54                      | 18, 461, 706           | 341, 883                 | 262, 407             | 4, 859                   | 1. 42            |
| \$400,001-\$500,000.....   | 17                      | 7, 688, 799            | 452, 282                 | 106, 747             | 6, 279                   | 1. 39            |
| \$500,001-\$750,000.....   | 17                      | 10, 001, 141           | 588, 302                 | 135, 459             | 7, 968                   | 1. 35            |
| \$750,001-\$1,000,000..... | 5                       | 4, 064, 726            | 810, 945                 | 26, 703              | 5, 341                   | . 66             |
| Over \$1,000,000.....      | 7                       | 15, 555, 793           | 2, 222, 256              | 152, 295             | 21, 756                  | . 98             |

<sup>1</sup> Includes only cooperative livestock associations which reported sales of livestock exclusively.

TABLE 8.—COTTON COOPERATIVES—NUMBER, MEMBERSHIP, AND SALES, 1929, BY STATES

((x) is used to prevent disclosure of individual operations))

| STATE               | Number of cooperatives | MEMBERSHIP REPORTED    |         |                         | MEMBERSHIP NOT REPORTED |                             | SALES TO DEALERS  |              |
|---------------------|------------------------|------------------------|---------|-------------------------|-------------------------|-----------------------------|---|--------------|
|                     |                        | Number of cooperatives | Members |                         | Number of cooperatives  | Estimated number of members | Cooperatives selling cotton and (or) cottonseed exclusively |              |
|                     |                        |                        | Number  | Average per cooperative |                         |                             | Number  | Sales        |
| United States.....  | 60                     | 36                     | 8,360   | 232                     | 24                      | 5,568                       | 51  | \$39,276,522 |
| Alabama.....        | 9                      | 7                      | 1,797   | 257                     | 2                       | 514                         | 5   | 628,474      |
| Arizona.....        | 1                      | 1                      | 220     | 220                     |                         |                             | 1   | (x)          |
| California.....     | 1                      | 1                      | 750     | 750                     |                         |                             | 1   | (x)          |
| Georgia.....        | 2                      | 1                      | 50      | 50                      | 1                       | 50                          | 2   | (x)          |
| Louisiana.....      | 1                      | 1                      | 28      | 28                      |                         |                             |   |              |
| Mississippi.....    | 15                     | 1                      | 61      | 61                      | 14                      | 854                         | 14  | 15,884,945   |
| New Mexico.....     | 1                      | 1                      | 450     | 450                     |                         |                             | 1   | (x)          |
| North Carolina..... | 1                      |                        |         |                         | 1                       | 261                         | 1   | (x)          |
| Oklahoma.....       | 7                      | 6                      | 764     | 127                     | 1                       | 127                         | 7   | 4,494,600    |
| South Carolina..... | 1                      |                        |         |                         | 1                       | 261                         | 1   | (x)          |
| Tennessee.....      | 1                      |                        |         |                         | 1                       | 261                         | 1   | (x)          |
| Texas.....          | 20                     | 17                     | 4,240   | 249                     | 3                       | 747                         | 17  | 2,257,067    |

<sup>1</sup> Includes 9 cooperatives selling cotton and (or) cottonseed and other products with total sales of \$882,746.

TABLE 9.—COTTON COOPERATIVES<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of cooperatives | SALES OF COTTON AND (OR) COTTONSEED |                         | EXPENSES <sup>2</sup> |                         |                  |
|----------------------------|------------------------|-------------------------------------|-------------------------|-----------------------|-------------------------|------------------|
|                            |                        | Total                               | Average per cooperative | Total                 | Average per cooperative | Percent of sales |
| Total.....                 | 51                     | \$39,414,967                        | \$576,764               | \$311,585             | \$4,149                 | 0.72             |
| \$20,000 and under.....    | 6                      | 78,099                              | 13,016                  | 2,933                 | 497                     | 3.82             |
| \$20,001-\$50,000.....     | 6                      | 197,232                             | 32,872                  | 7,640                 | 1,273                   | 3.87             |
| \$50,001-\$100,000.....    | 6                      | 497,953                             | 82,992                  | 13,057                | 2,176                   | 2.62             |
| \$100,001-\$200,000.....   | 9                      | 1,162,035                           | 129,115                 | 7,339                 | 815                     | .63              |
| \$200,001-\$300,000.....   | 4                      | 979,172                             | 244,793                 | 5,531                 | 1,383                   | .66              |
| \$300,001-\$400,000.....   | 4                      | 1,409,064                           | 352,271                 | 21,854                | 5,464                   | 1.55             |
| \$400,001-\$500,000.....   | 3                      | 1,296,038                           | 432,013                 | 29,131                | 9,710                   | 2.25             |
| \$500,001-\$750,000.....   | 2                      | 1,261,935                           | 630,968                 | 8,704                 | 4,352                   | .69              |
| \$750,001-\$1,000,000..... | 3                      | 2,568,690                           | 856,230                 | 16,245                | 5,415                   | .63              |
| Over \$1,000,000.....      | 8                      | 19,964,749                          | 2,495,594               | 99,101                | 12,388                  | .50              |

<sup>1</sup> Includes only cooperative cotton associations which reported sales of cotton and (or) cottonseed exclusively.

<sup>2</sup> Includes salaries and wages.

## CENSUS OF DISTRIBUTION

TABLE 10.—EGG AND POULTRY COOPERATIVES—NUMBER, MEMBERSHIP, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES

[ (x) is used to prevent disclosure of individual operations ]

| STATE               | MEMBERSHIP REPORTED    |           | MEMBERSHIP NOT REPORTED |                        | Total volume of business | Retail sales | Employees  | Salaries and wages | Total expenses <sup>1</sup> |                             |         |
|---------------------|------------------------|-----------|-------------------------|------------------------|--------------------------|--------------|------------|--------------------|-----------------------------|-----------------------------|---------|
|                     | Number of cooperatives | Members   |                         | Number of cooperatives |                          |              |            |                    |                             | Estimated number of members |         |
|                     |                        | Number    | Average per cooperative |                        |                          |              |            |                    |                             |                             |         |
| United States....   | 151                    | 88,36,277 | 419                     | 68,35,956              | \$35,618,407             | \$3,194,180  | 1,280      | \$1,956,633        | \$2,142,610                 |                             |         |
| Alabama.....        | 2                      | 2         | 229                     | 115                    | (x)                      | (x)          | (x)        | (x)                | (x)                         |                             |         |
| Arkansas.....       | 1                      | 1         | 30                      | 30                     | (x)                      | (x)          | (x)        | (x)                | (x)                         |                             |         |
| California.....     | 18                     | 2         | 856                     | 428                    | 16                       | 6,848        | 16,233,425 | 673,690            | 387                         | 450,177                     | 589,650 |
| Colorado.....       | 6                      | 5         | 2,023                   | 405                    | 1                        | 405          | 645,218    |                    | 31                          | 18,879                      | 38,496  |
| Florida.....        | 6                      | 5         | 504                     | 101                    | 1                        | 101          | 373,824    | 68,000             | 14                          | 8,410                       | 14,633  |
| Georgia.....        | 5                      | 2         | 230                     | 115                    | 3                        | 345          | 227,670    |                    | 4                           | 516                         | 746     |
| Idaho.....          | 4                      | 3         | 11,751                  | 3,917                  | 1                        | 3,917        | 1,267,386  | 128,555            | 55                          | 47,529                      | 75,503  |
| Illinois.....       | 4                      | 4         | 152                     | 38                     |                          |              | 484,449    | 110,991            | 19                          | 10,511                      | 23,510  |
| Iowa.....           | 3                      | 2         | 518                     | 259                    | 1                        | 259          | 252,936    | 64,377             | 8                           | 9,716                       | 20,275  |
| Kansas.....         | 11                     | 9         | 4,900                   | 544                    | 2                        | 1,088        | 638,005    | 197,926            | 29                          | 27,108                      | 37,926  |
| Kentucky.....       | 1                      |           |                         |                        | 1                        |              | (x)        |                    |                             |                             |         |
| Maryland.....       | 1                      |           |                         |                        | 1                        |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Minnesota.....      | 15                     | 13        | 3,912                   | 301                    | 2                        | 602          | 710,066    | 29,219             | 20                          | 20,928                      | 32,027  |
| Mississippi.....    | 4                      | 3         | 624                     | 208                    | 1                        | 208          | 30,997     | 1,000              | 7                           | 1,450                       | 2,500   |
| Missouri.....       | 18                     | 14        | 6,597                   | 471                    | 4                        | 1,884        | 4,169,321  | 426,500            | 221                         | 145,759                     | 253,077 |
| Montana.....        | 5                      |           |                         |                        | 5                        |              | 98,232     | 4,000              | 5                           | 2,971                       | 3,802   |
| Nebraska.....       | 8                      | 5         | 1,605                   | 321                    | 3                        | 963          | 580,417    | 28,713             | 37                          | 32,326                      | 42,375  |
| Nevada.....         | 2                      | 2         | 36                      | 18                     |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| New York.....       | 1                      | 1         | 53                      | 53                     |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| North Carolina..... | 1                      |           |                         |                        | 1                        |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| North Dakota.....   | 1                      | 1         | 92                      | 92                     |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Ohio.....           | 4                      | 2         | 255                     | 128                    | 2                        | 256          | 587,071    | 72,648             | 29                          | 42,250                      | 77,773  |
| Oklahoma.....       | 3                      | 2         | 363                     | 182                    | 1                        | 182          | 112,495    | 34,257             | 5                           | 5,892                       | 9,165   |
| Oregon.....         | 2                      | 1         | 6                       | 6                      | 1                        | 6            | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| South Dakota.....   | 4                      | 2         | 170                     | 85                     | 2                        | 170          | 197,838    | 13,052             | 7                           | 9,786                       | 14,154  |
| Tennessee.....      | 2                      | 1         | 6                       | 6                      | 1                        | 6            | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Texas.....          | 1                      | 1         | 389                     | 389                    |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Virginia.....       | 1                      |           |                         |                        | 1                        |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Washington.....     | 11                     |           |                         |                        | 11                       |              | 6,827,863  | 263,733            | 316                         | 324,094                     | 776,098 |
| West Virginia.....  | 1                      | 1         | 370                     | 370                    |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |
| Wisconsin.....      | 3                      | 2         | 271                     | 136                    | 1                        | 136          | 185,071    |                    | 5                           | 9,210                       | 13,747  |
| Wyoming.....        | 2                      | 2         | 335                     | 168                    |                          |              | (x)        | (x)                | (x)                         | (x)                         | (x)     |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes 105 cooperatives selling poultry and poultry products exclusively, with total sales of \$26,633,335; 7 cooperatives selling poultry and dairy products with total sales of \$335,011; and 39 cooperatives selling poultry and other commodities with total sales of \$9,224,847.

TABLE 11.—EGG AND POULTRY COOPERATIVES<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of cooperatives | SALES OF POULTRY AND POULTRY PRODUCTS |                                | EXPENSES    |          |                  |
|----------------------------|------------------------|---------------------------------------|--------------------------------|-------------|----------|------------------|
|                            |                        | Total                                 | Average per cooperative dollar | Total       | Average  | Percent of sales |
| United States.....         | 105                    | \$28,633,335                          | \$253,651                      | \$1,659,416 | \$15,804 | 6.23             |
| \$20,000 and under.....    | 24                     | 206,947                               | 8,623                          | 15,403      | 642      | 7.44             |
| \$20,001-\$50,000.....     | 27                     | 778,980                               | 28,851                         | 41,504      | 1,537    | 5.33             |
| \$50,001-\$100,000.....    | 22                     | 1,586,051                             | 72,093                         | 90,219      | 4,101    | 5.69             |
| \$100,001-\$200,000.....   | 10                     | 1,272,413                             | 127,241                        | 107,031     | 10,703   | 8.41             |
| \$200,001-\$300,000.....   | 7                      | 1,400,633                             | 200,090                        | 156,908     | 22,401   | 11.20            |
| \$300,001-\$400,000.....   | 1                      | 310,943                               | 310,943                        | 25,826      | 25,826   | 8.31             |
| \$400,001-\$500,000.....   | 2                      | 527,673                               | 263,837                        | 51,497      | 25,749   | 9.76             |
| \$500,001-\$750,000.....   | 2                      | 1,045,833                             | 522,917                        | 78,595      | 39,298   | 7.52             |
| \$750,001-\$1,000,000..... | 5                      | 3,955,723                             | 791,145                        | 321,286     | 64,257   | 8.12             |
| Over \$1,000,000.....      | 5                      | 15,548,139                            | 3,109,628                      | 771,247     | 154,249  | 4.96             |

<sup>1</sup> Includes only cooperative poultry products associations which reported selling poultry and poultry products exclusively.

TABLE 12.—DAIRY PRODUCTS COOPERATIVES—NUMBER, MEMBERSHIP, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES

[(x) is used to prevent disclosure of individual operations]

| STATE               | Number of cooperatives | MEMBERSHIP REPORTED    |         | MEMBERSHIP NOT REPORTED |                        | Total volume of business | Retail sales | Employees   | Salaries and wages | Total expenses <sup>1</sup> |                             |
|---------------------|------------------------|------------------------|---------|-------------------------|------------------------|--------------------------|--------------|-------------|--------------------|-----------------------------|-----------------------------|
|                     |                        | Number of cooperatives | Members |                         | Number of cooperatives |                          |              |             |                    |                             | Estimated number of members |
|                     |                        |                        | Number  | Average per cooperative |                        |                          |              |             |                    |                             |                             |
| United States...    | 563                    | 210                    | 34,343  | 164                     | 353                    | 57,892                   | \$86,094,243 | \$3,343,717 | 3,365              | \$3,044,914                 | \$9,123,565                 |
| Arkansas.....       | 1                      |                        |         |                         | 1                      |                          | (X)          | (X)         | (X)                | (X)                         | (X)                         |
| California.....     | 4                      |                        |         |                         | 4                      | 960,150                  |              | 5           | 10,530             | 14,920                      |                             |
| Colorado.....       | 1                      | 1                      | 5       | 5                       |                        | (X)                      | (X)          | (X)         | (X)                | (X)                         |                             |
| Florida.....        | 1                      |                        |         |                         | 1                      |                          | (X)          | (X)         | (X)                | (X)                         |                             |
| Idaho.....          | 3                      | 3                      | 750     | 250                     |                        | 445,442                  | 21,100       | 7           | 9,600              | 14,696                      |                             |
| Illinois.....       | 23                     | 23                     | 3,779   | 164                     |                        | 2,012,745                | 418,432      | 90          | 90,071             | 154,750                     |                             |
| Indiana.....        | 13                     | 10                     | 3,902   | 390                     | 3                      | 1,676,365                | 144,708      | 82          | 86,254             | 172,438                     |                             |
| Iowa.....           | 13                     | 11                     | 920     | 84                      | 2                      | 1,721,069                | 158,997      | 41          | 47,442             | 94,871                      |                             |
| Kansas.....         | 23                     | 22                     | 4,286   | 195                     | 1                      | 905,154                  | 153,566      | 46          | 39,366             | 61,649                      |                             |
| Massachusetts.....  | 1                      | 1                      | 860     | 860                     |                        | (X)                      | (X)          | (X)         | (X)                | (X)                         |                             |
| Michigan.....       | 6                      | 5                      | 391     | 78                      | 1                      | 976,579                  | 340,997      | 90          | 117,146            | 188,647                     |                             |
| Minnesota.....      | 10                     | 4                      | 343     | 86                      | 6                      | 2,861,928                | 131,908      | 34          | 51,402             | 103,795                     |                             |
| Mississippi.....    | 1                      | 1                      | 48      | 48                      |                        | (X)                      | (X)          | (X)         | (X)                | (X)                         |                             |
| Missouri.....       | 40                     | 29                     | 2,366   | 82                      | 11                     | 902                      | 2,719,072    | 696,188     | 113                | 88,601                      | 147,480                     |
| Nebraska.....       | 51                     | 40                     | 3,695   | 92                      | 11                     | 1,012                    | 2,192,952    | 235,653     | 88                 | 70,182                      | 147,378                     |
| New Jersey.....     | 5                      |                        |         |                         | 5                      |                          | 362,027      |             | 17                 | 14,584                      | 58,842                      |
| New Mexico.....     | 3                      | 2                      | 692     | 346                     | 1                      | 346                      | 208,377      |             | 21                 | 20,064                      | 41,354                      |
| New York.....       | 202                    |                        |         |                         | 202                    | 27,800,426               |              | 998         | 1,425,837          | 5,203,763                   |                             |
| North Carolina..... | 1                      | 1                      | 13      | 13                      |                        | (X)                      | (X)          | (X)         | (X)                | (X)                         |                             |
| North Dakota.....   | 9                      | 7                      | 771     | 110                     | 2                      | 220                      | 403,190      | 27,040      | 9                  | 12,735                      | 18,708                      |
| Ohio.....           | 17                     | 6                      | 2,027   | 338                     | 11                     | 3,718                    | 1,366,932    | 63,147      | 59                 | 61,903                      | 93,234                      |
| Oklahoma.....       | 15                     | 11                     | 3,302   | 300                     | 4                      | 1,200                    | 1,412,186    | 271,623     | 54                 | 49,104                      | 89,498                      |
| Pennsylvania.....   | 64                     | 4                      | 125     | 31                      | 60                     | 1,860                    | 7,846,759    | 41,976      | 259                | 356,363                     | 1,220,958                   |
| South Dakota.....   | 19                     | 13                     | 1,741   | 134                     | 6                      | 804                      | 985,320      | 60,778      | 47                 | 43,380                      | 64,265                      |
| Tennessee.....      | 2                      | 1                      | 5       | 5                       | 1                      | 5                        | (X)          | (X)         | (X)                | (X)                         |                             |
| Texas.....          | 5                      | 5                      | 2,701   | 540                     |                        |                          | 219,253      | 34,916      | 13                 | 14,324                      | 20,990                      |
| Utah.....           | 2                      | 2                      | 163     | 82                      |                        |                          | (X)          | (X)         | (X)                | (X)                         |                             |
| Vermont.....        | 23                     | 6                      | 1,373   | 229                     | 17                     | 3,893                    | 6,140,242    | 139,640     | 179                | 285,272                     | 902,869                     |
| Washington.....     | 3                      | 1                      | 52      | 52                      | 2                      | 104                      | 725,807      | 84,357      | 18                 | 29,531                      | 66,500                      |
| Wisconsin.....      | 2                      | 1                      | 33      | 33                      | 1                      | 33                       | (X)          | (X)         | (X)                | (X)                         |                             |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes 355 cooperatives selling dairy products exclusively, with total sales of \$60,410,577; 200 cooperatives selling dairy and poultry products with total sales of \$9,507,648; and 8 cooperatives selling dairy and other commodities, with total sales of \$2,163,217.

TABLE 13.—DAIRY PRODUCTS COOPERATIVES<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of cooperatives | SALES OF DAIRY PRODUCTS |                         | EXPENSES           |                         |                  |
|----------------------------|------------------------|-------------------------|-------------------------|--------------------|-------------------------|------------------|
|                            |                        | Total                   | Average per cooperative | Total              | Average per cooperative | Percent of sales |
| <b>Total</b> .....         | <b>355</b>             | <b>\$50,410,577</b>     | <b>\$142,002</b>        | <b>\$7,982,174</b> | <b>\$22,485</b>         | <b>15.88</b>     |
| \$20,000 and under.....    | 24                     | 228,355                 | 9,515                   | 66,925             | 2,789                   | 29.31            |
| \$20,001-\$50,000.....     | 41                     | 1,426,436               | 34,791                  | 214,635            | 5,235                   | 15.06            |
| \$50,001-\$100,000.....    | 103                    | 7,654,405               | 74,315                  | 1,366,386          | 13,266                  | 17.85            |
| \$100,001-\$200,000.....   | 125                    | 16,691,417              | 133,531                 | 2,417,291          | 19,338                  | 14.48            |
| \$200,001-\$300,000.....   | 28                     | 6,884,713               | 245,883                 | 922,182            | 32,935                  | 13.39            |
| \$300,001-\$400,000.....   | 16                     | 5,583,641               | 348,978                 | 718,068            | 44,879                  | 12.86            |
| \$400,001-\$500,000.....   | 6                      | 2,616,972               | 436,162                 | 468,025            | 78,004                  | 17.88            |
| \$500,001-\$750,000.....   | 7                      | 4,501,967               | 643,138                 | 637,049            | 91,007                  | 14.15            |
| \$750,001-\$1,000,000..... | 4                      | 3,138,250               | 784,563                 | 509,589            | 127,397                 | 16.24            |
| Over \$1,000,000.....      | 1                      | 1,684,421               | 1,684,421               | 662,024            | 662,024                 | 39.30            |

<sup>1</sup> Includes only cooperative dairy products associations which reported sales of dairy products, exclusively.

TABLE 14.—FRUIT AND VEGETABLE COOPERATIVES—NUMBER, MEMBERS, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES

| STATE                               | Number of cooperatives | Number of members | Total volume of business | Retail sales       | Employees     | Salaries and wages  | Total expenses <sup>1</sup> |
|-------------------------------------|------------------------|-------------------|--------------------------|--------------------|---------------|---------------------|-----------------------------|
| <b>United States</b> .....          | <b>719</b>             | <b>59,832</b>     | <b>\$190,891,969</b>     | <b>\$6,636,299</b> | <b>15,967</b> | <b>\$13,939,724</b> | <b>\$25,917,088</b>         |
| Alabama.....                        | 6                      | 284               | 383,647                  | 69,770             | 26            | 18,362              | 22,560                      |
| Arkansas.....                       | 41                     | 4,705             | 8,160,126                | 96,403             | 163           | 35,732              | 61,359                      |
| California.....                     | 257                    | 13,358            | 111,318,911              | 1,759,459          | 9,864         | 9,647,671           | 18,235,658                  |
| Colorado.....                       | 37                     | 1,638             | 5,585,313                | 204,213            | 155           | 182,716             | 267,408                     |
| Florida.....                        | 67                     | 5,123             | 16,115,607               | 944,900            | 2,709         | 1,738,129           | 3,163,338                   |
| Georgia.....                        | 14                     | 4,127             | 1,430,948                | 128,545            | 56            | 50,325              | 118,564                     |
| Idaho.....                          | 14                     | 802               | 1,142,651                | 40,155             | 153           | 95,184              | 160,579                     |
| Kentucky.....                       | 6                      | 637               | 387,357                  | -----              | 38            | 6,650               | 10,660                      |
| Louisiana.....                      | 20                     | 2,620             | 5,318,779                | 408,642            | 73            | 70,325              | 205,605                     |
| Maryland.....                       | 6                      | 1,666             | 2,615,033                | 197,000            | 76            | 61,872              | 122,126                     |
| Michigan.....                       | 29                     | 3,170             | 3,104,654                | 607,087            | 146           | 173,781             | 281,124                     |
| Minnesota.....                      | 16                     | 1,564             | 527,180                  | 80,119             | 61            | 39,062              | 57,717                      |
| Mississippi.....                    | 5                      | 148               | 494,039                  | 15,000             | 12            | 12,120              | 19,423                      |
| Missouri.....                       | 4                      | 278               | 1,294,479                | 3,807              | 19            | 5,930               | 13,279                      |
| Montana.....                        | 3                      | 45                | 112,540                  | -----              | 141           | 15,117              | 24,345                      |
| New York.....                       | 24                     | 3,491             | 2,735,601                | 632,352            | 146           | 133,744             | 227,296                     |
| North Carolina.....                 | 4                      | 173               | 71,210                   | 15,210             | 4             | 597                 | 1,071                       |
| North Dakota.....                   | 5                      | 179               | 198,013                  | 8,989              | 20            | 15,683              | 19,954                      |
| Ohio.....                           | 4                      | 75                | 1,153,455                | 74,920             | 17            | 29,300              | 52,068                      |
| Oregon.....                         | 19                     | 2,075             | 5,496,556                | 559,773            | 677           | 409,093             | 913,948                     |
| South Carolina.....                 | 4                      | 494               | 194,800                  | -----              | 7             | 2,660               | 5,570                       |
| South Dakota.....                   | 3                      | 116               | 192,243                  | -----              | 21            | 3,637               | 7,338                       |
| Tennessee.....                      | 6                      | 2,421             | 637,073                  | -----              | 37            | 21,579              | 42,669                      |
| Texas.....                          | 13                     | 6,236             | 1,601,681                | 58,793             | 148           | 93,096              | 172,731                     |
| Utah.....                           | 5                      | 353               | 252,577                  | 15,168             | 18            | 10,701              | 19,523                      |
| Virginia.....                       | 45                     | -----             | 6,655,989                | -----              | 68            | 116,110             | 116,110                     |
| Washington.....                     | 35                     | 575               | 7,860,560                | 507,133            | 763           | 761,634             | 1,247,126                   |
| Wisconsin.....                      | 8                      | 234               | 291,973                  | 63,712             | 17            | 17,003              | 31,938                      |
| Wyoming.....                        | 4                      | 439               | 279,705                  | -----              | 5             | 5,673               | 13,071                      |
| All other States <sup>2</sup> ..... | 15                     | 2,816             | 5,279,369                | 145,149            | 267           | 166,238             | 302,940                     |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes data for cooperatives as follows: Arizona, 2; Illinois, 2; Iowa, 1; Maine, 1; Massachusetts, 1; Nebraska, 1; Nevada, 2; New Mexico, 1; Oklahoma, 1; Pennsylvania, 2; and West Virginia, 1; not shown separately to avoid disclosure of individual operations.

TABLE 15.—FRUIT AND VEGETABLE COOPERATIVES—NUMBER, MEMBERSHIP, AND SALES, 1929, BY STATES

[(x) is used to prevent disclosure of individual operations]

| STATE               | Number of cooperatives | MEMBERSHIP REPORTED    |         | MEMBERSHIP NOT REPORTED |                        | SALES TO DEALERS            |   |                 |
|---------------------|------------------------|------------------------|---------|-------------------------|------------------------|-----------------------------|---|-----------------|
|                     |                        | Number of cooperatives | Members |                         | Number of cooperatives | Estimated number of members | Cooperatives selling fruits and vegetables, exclusively |                 |
|                     |                        |                        | Number  | Average per cooperative |                        |                             | Number  | Sales           |
| United States.....  | 1 719                  | 432                    | 59, 632 | 139                     | 287                    | 39, 893                     | 687   | \$176, 931, 641 |
| Alabama.....        | 6                      | 5                      | 284     | 57                      | 1                      | 57                          | 6   | 313, 877        |
| Arizona.....        | 2                      |                        |         |                         | 2                      |                             | 2   | (x)             |
| Arkansas.....       | 41                     | 34                     | 4, 705  | 138                     | 7                      | 966                         | 40  | 8, 040, 843     |
| California.....     | 257                    | 142                    | 13, 358 | 94                      | 115                    | 10, 810                     | 257   | 109, 234, 266   |
| Colorado.....       | 37                     | 12                     | 1, 638  | 137                     | 25                     | 3, 425                      | 32  | 3, 934, 071     |
| Florida.....        | 67                     | 50                     | 5, 123  | 102                     | 17                     | 1, 734                      | 64  | 14, 550, 939    |
| Georgia.....        | 14                     | 12                     | 4, 127  | 344                     | 2                      | 688                         | 14  | 1, 302, 403     |
| Idaho.....          | 14                     | 14                     | 802     | 57                      |                        |                             | 13  | 795, 912        |
| Illinois.....       | 2                      | 1                      | 8       | 8                       | 1                      | 8                           | 2   | (x)             |
| Iowa.....           | 1                      | 1                      | 125     | 125                     |                        |                             | 1   | (x)             |
| Kentucky.....       | 6                      | 4                      | 637     | 159                     | 2                      | 318                         | 6   | 387, 357        |
| Louisiana.....      | 20                     | 17                     | 2, 620  | 154                     | 3                      | 462                         | 19  | 4, 700, 308     |
| Maine.....          | 1                      | 1                      | 54      | 54                      |                        |                             | 1   | (x)             |
| Maryland.....       | 6                      | 3                      | 1, 666  | 555                     | 3                      | 1, 666                      | 5   | 298, 997        |
| Massachusetts.....  | 1                      | 1                      |         |                         |                        |                             | 1   | (x)             |
| Michigan.....       | 29                     | 28                     | 3, 170  | 113                     | 1                      | 113                         | 20  | 1, 771, 743     |
| Minnesota.....      | 16                     | 15                     | 1, 564  | 104                     | 1                      | 104                         | 15  | 388, 204        |
| Mississippi.....    | 5                      | 3                      | 148     | 49                      | 2                      | 98                          | 4   | 444, 039        |
| Missouri.....       | 4                      | 2                      | 278     | 139                     | 2                      | 278                         | 4   | 1, 290, 672     |
| Montana.....        | 3                      | 1                      | 45      | 45                      | 2                      | 90                          | 3   | 112, 540        |
| Nebraska.....       | 1                      | 1                      | 2, 100  | 2, 100                  |                        |                             |   |                 |
| Nevada.....         | 2                      | 1                      | 22      | 22                      | 1                      | 22                          | 2   | (x)             |
| New Mexico.....     | 1                      | 1                      | 47      | 47                      |                        |                             | 1   | (x)             |
| New York.....       | 24                     | 21                     | 3, 491  | 166                     | 3                      | 498                         | 24  | 2, 103, 249     |
| North Carolina..... | 4                      | 4                      | 173     | 43                      |                        |                             | 4   | 56, 000         |
| North Dakota.....   | 5                      | 4                      | 179     | 45                      | 1                      | 45                          | 5   | 187, 090        |
| Ohio.....           | 4                      | 1                      | 75      | 75                      | 3                      | 225                         | 4   | 1, 078, 535     |
| Oklahoma.....       | 1                      | 1                      | 100     | 100                     |                        |                             | 1   | (x)             |
| Oregon.....         | 19                     | 14                     | 2, 075  | 148                     | 5                      | 740                         | 17  | 4, 436, 668     |
| Pennsylvania.....   | 2                      | 2                      | 360     | 180                     |                        |                             | 2   | (x)             |
| South Carolina..... | 4                      | 3                      | 484     | 161                     | 1                      | 161                         | 4   | 191, 200        |
| South Dakota.....   | 3                      | 3                      | 116     | 39                      |                        |                             | 3   | 186, 192        |
| Tennessee.....      | 6                      | 5                      | 2, 421  | 484                     | 1                      | 484                         | 6   | 637, 073        |
| Texas.....          | 13                     | 9                      | 6, 236  | 693                     | 4                      | 2, 772                      | 12  | 1, 254, 987     |
| Utah.....           | 5                      | 4                      | 353     | 88                      | 1                      | 88                          | 4   | 187, 409        |
| Virginia.....       | 45                     |                        |         |                         | 45                     |                             | 45  | 6, 655, 989     |
| Washington.....     | 35                     | 4                      | 575     | 144                     | 31                     | 4, 464                      | 35  | 7, 090, 466     |
| West Virginia.....  | 1                      | 1                      |         |                         |                        |                             | 1   | (x)             |
| Wisconsin.....      | 8                      | 3                      | 234     | 78                      | 5                      | 390                         | 4   | 119, 687        |
| Wyoming.....        | 4                      | 4                      | 439     | 110                     |                        |                             | 4   | 279, 705        |

¹ Includes 32 cooperatives selling fruits and vegetables with other commodities with total sales of \$6, 278, 606.

TABLE 16.—FRUIT AND VEGETABLE COOPERATIVES<sup>1</sup>—NUMBER, SALES, AND EXPENSES, 1929, BY SIZE OF BUSINESS

| SIZE OF BUSINESS           | Number of cooperatives | SALES OF FRUITS AND VEGETABLES |                          | EXPENSES            |                          |                  |
|----------------------------|------------------------|--------------------------------|--------------------------|---------------------|--------------------------|------------------|
|                            |                        | Total                          | Average, per cooperative | Total               | Average, per cooperative | Percent of sales |
| <b>Total</b> .....         | <b>687</b>             | <b>183,984,343</b>             | <b>\$267,808</b>         | <b>\$25,412,330</b> | <b>\$36,990</b>          | <b>13.81</b>     |
| \$20,000 and under.....    | 106                    | 1,050,331                      | 9,909                    | 140,832             | 1,329                    | 13.41            |
| \$20,001-\$50,000.....     | 101                    | 3,554,219                      | 35,190                   | 470,724             | 4,661                    | 13.24            |
| \$50,001-\$100,000.....    | 97                     | 6,892,772                      | 71,060                   | 674,318             | 6,952                    | 9.78             |
| \$100,001-\$200,000.....   | 133                    | 19,967,682                     | 150,133                  | 2,606,707           | 19,599                   | 13.05            |
| \$200,001-\$300,000.....   | 71                     | 17,343,465                     | 244,274                  | 2,657,740           | 37,433                   | 15.32            |
| \$300,001-\$400,000.....   | 48                     | 16,600,173                     | 345,837                  | 1,963,365           | 40,903                   | 11.83            |
| \$400,001-\$500,000.....   | 36                     | 16,014,316                     | 444,842                  | 2,174,289           | 60,397                   | 13.68            |
| \$500,001-\$750,000.....   | 39                     | 23,610,290                     | 605,392                  | 3,111,827           | 79,790                   | 13.18            |
| \$750,001-\$1,000,000..... | 23                     | 19,574,233                     | 851,054                  | 3,020,825           | 131,340                  | 15.43            |
| Over \$1,000,000.....      | 33                     | 59,376,861                     | 1,799,299                | 8,591,703           | 260,355                  | 14.47            |

<sup>1</sup> Includes only cooperative fruit and vegetable associations which reported sales of fruits and vegetables exclusively.

TABLE 17.—OTHER MARKETING COOPERATIVES—NUMBER, MEMBERS, TOTAL VOLUME OF BUSINESS, RETAIL SALES, EMPLOYEES, SALARIES AND WAGES, EXPENSES, BY STATES AND FOR SPECIFIED COOPERATIVES NOT DISTRIBUTED BY STATES, 1929

| STATE AND ITEM                      | Number of cooperatives | Number of members | Total volume of business | Retail sales       | Employees  | Salaries and wages | Total expenses <sup>1</sup> |
|-------------------------------------|------------------------|-------------------|--------------------------|--------------------|------------|--------------------|-----------------------------|
| <b>United States</b> .....          | <b>194</b>             | <b>97,856</b>     | <b>\$29,001,164</b>      | <b>\$7,733,788</b> | <b>806</b> | <b>\$741,515</b>   | <b>\$1,425,897</b>          |
| Colorado.....                       | 3                      | 238               | 423,736                  | 59,448             | 12         | 12,880             | 19,059                      |
| Georgia.....                        | 11                     | 2,320             | 508,695                  | 67,510             | 13         | 2,295              | 6,480                       |
| Illinois.....                       | 3                      | 179               | 186,871                  | 48,330             | 8          | 8,528              | 21,620                      |
| Indiana.....                        | 4                      | 365               | 581,712                  | 209,484            | 16         | 20,950             | 43,434                      |
| Iowa.....                           | 4                      | 974               | 861,972                  | 82,368             | 21         | 23,753             | 77,204                      |
| Kansas.....                         | 12                     | 1,171             | 2,121,640                | 977,139            | 63         | 54,468             | 97,643                      |
| Michigan.....                       | 13                     | 983               | 2,063,760                | 702,501            | 17         | 7,500              | 148,652                     |
| Missouri.....                       | 107                    | 15,286            | 14,366,883               | 3,724,931          | 450        | 354,175            | 566,632                     |
| Nebraska.....                       | 5                      | 326               | 772,568                  | 148,049            | 18         | 17,695             | 49,604                      |
| New York.....                       | 3                      | 94                | 356,155                  | 145,433            | 8          | 19,343             | 54,115                      |
| North Dakota.....                   | 4                      | 362               | 802,927                  | 35,790             | 8          | 12,360             | 22,842                      |
| Ohio.....                           | 9                      | 1,550             | 2,960,255                | 979,549            | 61         | 83,545             | 152,055                     |
| Texas.....                          | 4                      | 31                | 411,549                  | 27,641             | 13         | 15,016             | 25,589                      |
| All other States <sup>2</sup> ..... | 12                     | 73,977            | 3,182,441                | 525,615            | 98         | 109,007            | 140,968                     |
| NOT DISTRIBUTED BY STATES           |                        |                   |                          |                    |            |                    |                             |
| <b>Total</b> .....                  | <b>57</b>              | <b>10,170</b>     | <b>11,100,410</b>        | <b>25,032</b>      | <b>383</b> | <b>361,705</b>     | <b>588,808</b>              |
| Nut.....                            | 18                     | 1,741             | 6,203,147                | 5,878              | 252        | 207,872            | 392,718                     |
| Bean.....                           | 9                      | 2,516             | 3,168,929                | 5,000              | 69         | 62,087             | 69,624                      |
| Hay.....                            | 21                     | 3,690             | 1,328,090                | 13,800             | 46         | 71,483             | 102,677                     |
| Wool.....                           | 9                      | 2,223             | 400,244                  | 364                | 16         | 20,263             | 23,789                      |

<sup>1</sup> Includes salaries and wages.

<sup>2</sup> Includes data for cooperatives as follows: Alabama, 2; Idaho, 1; Kentucky, 1; Minnesota, 2; Mississippi, 1; Montana, 1; South Carolina, 1; South Dakota, 1; Virginia, 1; and Wyoming, 1; not shown separately to avoid disclosure of individual operations.

### CHAPTER III.—COOPERATIVE PURCHASING

Cooperative purchasing, like cooperative marketing or selling, is an attempt to effect savings for members. The simplest form is probably that whereby a group of persons, farmers, or others, pool their requirements for a single kind of commodity or group of commodities in order to effect such savings as possible through the placing of a quantity order rather than a considerable number of small ones. Such purchases are for example made by a group of farmers supplying themselves with coal, fertilizer, feed, and the like. A similar form in the cities is the placing of group or pool orders for staple groceries, nursery stock, and the like. These are frequently referred to as club orders. As already noted in the introduction it is not probable that Census of Distribution reports were secured for many of these loosely organized groups as they have no place of business.

In the case of the pooled orders of the farmers the shipments are usually in car-lot loads, the members being notified on arrival, the unloading being done direct from the car to farm truck or wagon. Some of the farmer organizations have purchasing committees which look after all business arrangements. In still other cases there are definitely organized cooperative buying associations both among farmers and townspeople.

**Cooperative buying associations.**—Table 18 presents the data on those cooperative buying associations in the smaller places; that is, places having less than 10,000 population, from which the Census of Distribution received reports. Those cooperative purchasing groups which maintain regular retail stores were not included in this table, as they were automatically classified as stores; that is, cooperatives with definite places of business, which data appears in table 19.

In addition, a considerable amount of purchasing for members is done by cooperative marketing associations. This consists chiefly of production and marketing supplies—feed, seed, fertilizers, spray materials, box shooks, crates, and the like; although coal, fuel oil, motor oil, and gasoline are also commonly purchased. As noted in chapter II some of these, however, handle many other lines of goods for their members.

The total sales at retail of the marketing cooperatives, most of which represent chiefly their purchases for members, were \$105,210,492. Retail purchases, if any, from marketing cooperatives made by nonmembers are, nevertheless purchases from a cooperative. Adding this amount to the total sales of the cooperative buying associations, \$40,960,108, we get a total of retail purchases through or from these two kinds of cooperatives of \$146,170,600. It is interesting to compare these data with the Census of Agriculture figures for cooperative purchases by farmers which amounted to \$125,048,597 for 1929.

The purchases of supplies for members of some of the large-scale cooperative associations runs into considerable sums. Many of these maintain what practically amounts to separate purchasing organizations. The data for such large-scale cooperative purchasing being principally made through the federated or central sales offices are not included in the totals given for local cooperative marketing associations.

In addition there has also developed within recent years a number of large-scale purchasing associations whose operations are not included in the buying association table. A notable illustration here is the Grange-League Federation operating principally in the State of New York. This is a joint cooperative undertaking between members of the Grange and the New York Dairymen's League. Other outstanding illustrations of central cooperative purchasing are the Ohio State Farm Bureau Federation, and some of the Grange and Farmers' Union State wholesale purchasing organizations.

While, as previously noted, it is impossible to publish the official Census of Distribution data for individual organizations due to the confidential nature of all information furnished the Bureau of the Census, the following data taken from an article in the June 1931 issue of the Cooperative Marketing Journal are of interest in this connection. According to this article the Grange-League Feder-

ation has a capital and surplus of slightly over \$2,500,000, and now serves some 90,000 patrons in the three States of New York, Pennsylvania, and New Jersey. The Federation owns feed mills, fertilizer plants, and a seed warehouse, and also operates, through a subsidiary, 72 local stores. The total business for the year 1928-1929 according to this same article amounted to slightly over \$24,500,000. A somewhat similar although smaller organization, the Eastern States Farmers' Exchange, operates among farmers in New England, and in Delaware, Maryland, and Pennsylvania. Their reported business for 1929 amounted to slightly over \$11,900,000.

The article mentioned also presented data on the purchases made for members of some of the large-scale cooperative-marketing associations either directly or through subsidiaries.

**Cooperative stores.**—Table 19 shows by States the number of cooperative stores in places under 10,000 population and their 1929 sales as reported to the Census of Distribution. There are also a number of cooperative stores in cities of over 10,000 population. However, these reports were not separately tabulated but were placed with other classification groups by the section in charge of larger city retailing.

Some of the first cooperative stores in the United States were established by the Grange during its early days as noted in chapter I. Many of these stores flourished for a while and then for one reason or another ceased to exist. Some persons who have known or heard of the apparent failure of these early cooperative stores have the idea that all cooperative stores even at the present time are still poorly managed, render few services, and are barely able to exist. However, quite the contrary is true of some of the present day Grange and Farmers' Union and other farmer cooperative stores, as well as cooperative stores organized by townspeople. The same rules for success apparently apply to cooperative stores as to privately owned stores, that is, proper and efficient management and needed goods, adequately merchandised and serviced at prices which the purchasing public can and are willing to pay.

Examination of data in table 19 shows that 520 of the 1,143 cooperative stores included therein are located in the West North Central region with the next largest number in the East North Central. In considering the data in this table it must be kept in mind that the data cover only cooperative stores in places of less than 10,000 population.

It is interesting to compare the percentages which the expenses of all these cooperative stores formed of total volume of business, 9.97, with the similar percentage figure for all retail stores in the United States, 24.83.

TABLE 18.—COOPERATIVE BUYING ASSOCIATIONS<sup>1</sup>—NUMBER, TOTAL VOLUME OF BUSINESS, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1920, BY STATES

| STATE                          | Number of cooperatives | Total <sup>2</sup> volume of business | Em-<br>ployees | Salaries and wages | TOTAL EXPENSES <sup>3</sup> |                       |
|--------------------------------|------------------------|---------------------------------------|----------------|--------------------|-----------------------------|-----------------------|
|                                |                        |                                       |                |                    | Amount                      | Per-<br>cent of sales |
| United States.....             | 566                    | \$40,960,108                          | 1,693          | \$1,787,863        | \$3,018,747                 | 7.37                  |
| <b>New England.....</b>        | <b>5</b>               | <b>612,719</b>                        | <b>10</b>      | <b>8,263</b>       | <b>12,953</b>               | <b>2.39</b>           |
| Maine.....                     | 1                      | 7,238                                 | 1              | 11                 | 11                          | .15                   |
| New Hampshire.....             | 3                      | 439,547                               | 8              | 7,242              | 11,242                      | 2.56                  |
| Massachusetts.....             | 1                      | 65,934                                | 1              | 1,000              | 1,000                       | 1.62                  |
| Rhode Island.....              |                        |                                       |                |                    |                             |                       |
| Connecticut.....               |                        |                                       |                |                    |                             |                       |
| <b>Middle Atlantic.....</b>    | <b>30</b>              | <b>2,975,717</b>                      | <b>99</b>      | <b>103,004</b>     | <b>173,771</b>              | <b>5.84</b>           |
| New York.....                  | 7                      | 1,020,329                             | 23             | 30,392             | 49,954                      | 4.90                  |
| New Jersey.....                | 1                      | 564                                   |                |                    | 100                         | 17.73                 |
| Pennsylvania.....              | 22                     | 1,954,824                             | 76             | 72,612             | 123,717                     | 6.33                  |
| <b>East North Central.....</b> | <b>171</b>             | <b>10,151,938</b>                     | <b>516</b>     | <b>529,485</b>     | <b>940,905</b>              | <b>9.27</b>           |
| Ohio.....                      | 23                     | 1,462,106                             | 53             | 72,061             | 120,058                     | 8.21                  |
| Indiana.....                   | 35                     | 980,275                               | 52             | 41,886             | 64,920                      | 6.62                  |
| Illinois.....                  | 17                     | 1,039,372                             | 75             | 80,576             | 128,952                     | 12.41                 |
| Michigan.....                  | 34                     | 2,585,324                             | 150            | 134,801            | 267,744                     | 10.36                 |
| Wisconsin.....                 | 62                     | 4,084,861                             | 186            | 200,161            | 359,231                     | 8.79                  |
| <b>West North Central.....</b> | <b>259</b>             | <b>19,696,105</b>                     | <b>761</b>     | <b>880,089</b>     | <b>1,480,487</b>            | <b>7.52</b>           |
| Minnesota.....                 | 42                     | 2,209,900                             | 95             | 141,373            | 215,545                     | 9.76                  |
| Iowa.....                      | 47                     | 4,319,390                             | 132            | 150,955            | 268,025                     | 6.21                  |
| Missouri.....                  | 57                     | 5,520,340                             | 211            | 180,301            | 309,104                     | 5.60                  |
| North Dakota.....              | 12                     | 553,961                               | 21             | 26,195             | 66,273                      | 11.96                 |
| South Dakota.....              | 12                     | 512,481                               | 30             | 38,342             | 75,991                      | 14.83                 |
| Nebraska.....                  | 66                     | 4,151,211                             | 190            | 254,901            | 395,329                     | 9.52                  |
| Kansas.....                    | 23                     | 2,428,822                             | 82             | 88,022             | 150,220                     | 6.18                  |
| <b>South Atlantic.....</b>     | <b>38</b>              | <b>2,418,334</b>                      | <b>87</b>      | <b>84,759</b>      | <b>126,621</b>              | <b>5.24</b>           |
| Delaware.....                  |                        |                                       |                |                    |                             |                       |
| Maryland.....                  | 5                      | 478,986                               | 16             | 14,696             | 22,046                      | 4.60                  |
| Virginia.....                  | 9                      | 1,447,121                             | 37             | 44,130             | 70,577                      | 4.88                  |
| West Virginia.....             | 6                      | 141,027                               | 8              | 6,466              | 9,865                       | 7.00                  |
| North Carolina.....            | 5                      | 170,687                               | 9              | 8,267              | 10,232                      | 5.99                  |
| South Carolina.....            | 1                      | 51,919                                | 2              | 1,800              | 1,800                       | 3.47                  |
| Georgia.....                   | 4                      | 44,014                                | 4              | 2,800              | 4,731                       | 10.75                 |
| Florida.....                   | 2                      | 84,580                                | 11             | 6,600              | 7,370                       | 8.71                  |
| <b>East South Central.....</b> | <b>31</b>              | <b>1,886,101</b>                      | <b>65</b>      | <b>33,466</b>      | <b>58,648</b>               | <b>3.11</b>           |
| Kentucky.....                  | 1                      | 21,110                                | 2              | 1,680              | 4,860                       | 23.02                 |
| Tennessee.....                 | 6                      | 407,461                               | 15             | 7,619              | 12,007                      | 2.95                  |
| Alabama.....                   | 13                     | 587,232                               | 24             | 11,715             | 26,350                      | 4.49                  |
| Mississippi.....               | 11                     | 870,298                               | 24             | 12,452             | 15,431                      | 1.77                  |
| <b>West South Central.....</b> | <b>16</b>              | <b>656,571</b>                        | <b>28</b>      | <b>25,463</b>      | <b>38,323</b>               | <b>5.84</b>           |
| Arkansas.....                  | 2                      | 215,005                               | 9              | 8,549              | 14,264                      | 6.63                  |
| Louisiana.....                 | 3                      | 100,719                               | 4              | 3,669              | 3,669                       | 3.64                  |
| Oklahoma.....                  | 6                      | 148,063                               | 8              | 8,650              | 14,310                      | 9.66                  |
| Texas.....                     | 5                      | 192,784                               | 7              | 4,594              | 6,080                       | 3.15                  |
| <b>Mountain.....</b>           | <b>15</b>              | <b>730,650</b>                        | <b>69</b>      | <b>37,335</b>      | <b>63,504</b>               | <b>8.69</b>           |
| Montana.....                   | 7                      | 308,226                               | 8              | 8,243              | 11,913                      | 3.87                  |
| Idaho.....                     | 1                      | 10,000                                | 2              | 500                | 700                         | 7.00                  |
| Wyoming.....                   | 1                      | 57,689                                | 4              | 7,366              | 16,947                      | 29.38                 |
| Colorado.....                  | 1                      | 12,282                                |                |                    | 654                         | 5.32                  |
| New Mexico.....                | 2                      | 274,562                               | 12             | 10,316             | 20,116                      | 7.33                  |
| Arizona.....                   | 1                      | 20,000                                | 5              | 630                | 630                         | 3.15                  |
| Utah.....                      | 2                      | 47,891                                | 38             | 10,280             | 12,544                      | 26.19                 |
| Nevada.....                    |                        |                                       |                |                    |                             |                       |
| <b>Pacific.....</b>            | <b>7</b>               | <b>1,931,973</b>                      | <b>58</b>      | <b>86,010</b>      | <b>124,335</b>              | <b>6.43</b>           |
| Washington.....                | 1                      | 176,097                               | 7              | 13,500             | 20,829                      | 11.83                 |
| Oregon.....                    | 3                      | 439,192                               | 14             | 14,040             | 24,620                      | 5.61                  |
| California.....                | 3                      | 1,316,684                             | 37             | 58,470             | 78,886                      | 5.98                  |

<sup>1</sup> Includes only cooperative buying associations located in places of less than 10,000 population.

<sup>2</sup> Includes sales at retail, purchases for members, receipts from service operations, if any, also receipts from sale of farm products to other dealers.

<sup>3</sup> Includes salaries and wages.

TABLE 19.—COOPERATIVE STORES<sup>1</sup>—NUMBER, TOTAL VOLUME OF BUSINESS, EMPLOYEES, SALARIES AND WAGES, AND EXPENSES, 1929, BY STATES

| STATE                   | Number of cooperative stores | Total <sup>2</sup> volume of business | Employees | Salaries and wages | TOTAL EXPENSE <sup>3</sup> |                   |
|-------------------------|------------------------------|---------------------------------------|-----------|--------------------|----------------------------|-------------------|
|                         |                              |                                       |           |                    | Amount                     | Per cent of sales |
| United States.....      | 1, 143                       | \$76, 034, 839                        | 4, 182    | \$4, 582, 990      | \$7, 563, 949              | 9. 97             |
| New England.....        | 45                           | 4, 188, 943                           | 187       | 276, 203           | 456, 134                   | 10. 89            |
| Maine.....              | 17                           | 1, 981, 043                           | 77        | 105, 338           | 180, 914                   | 9. 13             |
| New Hampshire.....      | 2                            | 93, 070                               | 12        | 9, 665             | 17, 484                    | 18. 79            |
| Vermont.....            | 3                            | 621, 995                              | 7         | 12, 497            | 20, 889                    | 3. 36             |
| Massachusetts.....      | 12                           | 714, 256                              | 56        | 101, 979           | 150, 557                   | 21. 08            |
| Rhode Island.....       | 4                            | 176, 885                              | 10        | 13, 471            | 18, 648                    | 10. 54            |
| Connecticut.....        | 8                            | 600, 094                              | 25        | 35, 202            | 67, 642                    | 11. 26            |
| Middle Atlantic.....    | 116                          | 8, 545, 359                           | 378       | 331, 979           | 580, 375                   | 6. 79             |
| New York.....           | 56                           | 6, 150, 632                           | 130       | 108, 046           | 301, 190                   | 5. 85             |
| New Jersey.....         | 8                            | 1, 198, 802                           | 48        | 52, 474            | 86, 898                    | 7. 25             |
| Pennsylvania.....       | 52                           | 2, 195, 925                           | 100       | 110, 459           | 192, 287                   | 8. 76             |
| East North Central..... | 246                          | 14, 889, 323                          | 914       | 968, 683           | 1, 657, 957                | 11. 14            |
| Ohio.....               | 49                           | 2, 616, 232                           | 182       | 174, 922           | 295, 173                   | 11. 28            |
| Indiana.....            | 32                           | 1, 685, 118                           | 90        | 79, 295            | 119, 201                   | 7. 07             |
| Illinois.....           | 59                           | 2, 941, 274                           | 182       | 220, 075           | 337, 738                   | 11. 48            |
| Michigan.....           | 44                           | 3, 620, 853                           | 234       | 255, 038           | 452, 885                   | 12. 51            |
| Wisconsin.....          | 62                           | 4, 025, 846                           | 226       | 259, 352           | 452, 960                   | 11. 25            |
| West North Central..... | 590                          | 34, 654, 012                          | 2, 020    | 2, 163, 609        | 3, 606, 780                | 10. 41            |
| Minnesota.....          | 132                          | 8, 610, 519                           | 545       | 625, 666           | 1, 088, 834                | 12. 65            |
| Iowa.....               | 75                           | 5, 101, 115                           | 267       | 115, 348           | 520, 723                   | 10. 21            |
| Missouri.....           | 56                           | 4, 617, 302                           | 189       | 154, 755           | 247, 421                   | 5. 36             |
| North Dakota.....       | 43                           | 2, 239, 172                           | 135       | 187, 737           | 299, 908                   | 13. 39            |
| South Dakota.....       | 42                           | 2, 446, 193                           | 154       | 175, 928           | 310, 521                   | 12. 69            |
| Nebraska.....           | 83                           | 5, 967, 115                           | 332       | 321, 601           | 552, 688                   | 9. 26             |
| Kansas.....             | 89                           | 5, 672, 596                           | 398       | 382, 574           | 586, 685                   | 10. 34            |
| South Atlantic.....     | 35                           | 1, 917, 874                           | 111       | 106, 383           | 156, 598                   | 8. 11             |
| Delaware.....           | 1                            | 88, 884                               | 3         | 2, 607             | 4, 412                     | 4. 96             |
| Maryland.....           | 13                           | 788, 160                              | 42        | 42, 729            | 63, 522                    | 8. 06             |
| West Virginia.....      | 6                            | 284, 232                              | 22        | 21, 429            | 34, 267                    | 12. 06            |
| North Carolina.....     | 7                            | 292, 434                              | 16        | 15, 840            | 23, 160                    | 7. 92             |
| South Carolina.....     | 1                            | 42, 589                               | 5         | 4, 390             | 5, 820                     | 13. 67            |
| Georgia.....            | 5                            | 291, 369                              | 17        | 10, 890            | 14, 747                    | 5. 06             |
| Florida.....            | 2                            | 130, 206                              | 6         | 8, 508             | 9, 670                     | 7. 43             |
| East South Central..... | 18                           | 778, 833                              | 43        | 33, 852            | 52, 983                    | 6. 80             |
| Kentucky.....           | 5                            | 214, 906                              | 15        | 12, 671            | 21, 812                    | 10. 15            |
| Tennessee.....          | 5                            | 206, 251                              | 11        | 6, 616             | 8, 403                     | 4. 07             |
| Alabama.....            | 3                            | 174, 094                              | 2         | 1, 600             | 2, 540                     | 1. 46             |
| Mississippi.....        | 5                            | 183, 582                              | 15        | 11, 965            | 20, 228                    | 11. 02            |
| West South Central..... | 104                          | 6, 372, 953                           | 373       | 363, 082           | 554, 656                   | 8. 70             |
| Arkansas.....           | 11                           | 453, 641                              | 28        | 18, 265            | 29, 416                    | 6. 48             |
| Louisiana.....          | 3                            | 171, 500                              | 13        | 7, 478             | 15, 280                    | 8. 91             |
| Oklahoma.....           | 37                           | 3, 236, 209                           | 181       | 193, 252           | 287, 156                   | 8. 87             |
| Texas.....              | 53                           | 2, 511, 603                           | 151       | 144, 087           | 222, 804                   | 8. 87             |
| Mountain.....           | 25                           | 1, 678, 494                           | 113       | 137, 591           | 227, 523                   | 13. 56            |
| Montana.....            | 5                            | 250, 467                              | 14        | 18, 111            | 26, 676                    | 10. 65            |
| Idaho.....              | 6                            | 286, 614                              | 21        | 24, 012            | 42, 200                    | 14. 72            |
| Wyoming.....            | 2                            | 497, 918                              | 20        | 35, 831            | 60, 926                    | 12. 24            |
| Colorado.....           | 4                            | 154, 183                              | 17        | 11, 715            | 17, 845                    | 11. 57            |
| New Mexico.....         | 1                            | 42, 673                               | 3         | 3, 570             | 4, 270                     | 10. 01            |
| Arizona.....            | 6                            | 342, 639                              | 33        | 33, 252            | 57, 536                    | 16. 79            |
| Nevada.....             | 1                            | 104, 000                              | 5         | 11, 100            | 18, 070                    | 17. 38            |
| Pacific.....            | 34                           | 3, 009, 738                           | 143       | 180, 610           | 291, 943                   | 9. 70             |
| Washington.....         | 27                           | 2, 327, 964                           | 104       | 130, 057           | 207, 360                   | 8. 91             |
| Oregon.....             | 2                            | 215, 811                              | 11        | 13, 670            | 28, 643                    | 13. 27            |
| California.....         | 5                            | 465, 963                              | 28        | 36, 883            | 55, 940                    | 12. 01            |

<sup>1</sup> Includes only stores located in places of less than 10,000 population.

<sup>2</sup> Includes sales at retail, receipts from service operations, if any, also receipts from sale of farm products to other dealers.

<sup>3</sup> Includes salaries and wages.