

CHAPTER VII

SELECTED FARM EXPENDITURES, COOPERATIVE MARKETING AND PURCHASING AND FARM FACILITIES

CONTENTS

	Page
Introduction.....	503
Farm expenditures for labor, fertilizer, feed, electric light and power, and farm implements and machinery.....	503
Expenditures for farm labor.....	505
Expenditures for fertilizers.....	506
Expenditures for feed.....	506
Electric light and power purchased from a power company.....	508
Expenditures for farm implements and machinery.....	508
Cooperative marketing and purchasing by farmers.....	524
Farm facilities.....	530
Farm motor equipment.....	530
Automobiles.....	532
Farm facilities—Continued.	
Farm motor equipment—Continued.	
Motor trucks.....	532
Tractors.....	532
Electric motors for farm work.....	532
Stationary gas engines.....	532
Farm home conveniences.....	532
Telephones.....	533
Dwellings lighted by electricity.....	533
Water piped into dwelling.....	533
Water piped into bathroom.....	533
Kind of road adjoining farms.....	534

SUMMARY TABLES FOR THE UNITED STATES

	Page
Farm expenditures, with farms reporting, for labor, fertilizer, and feed, 1929, 1924, and 1919; for electric light and power and implements and machinery, 1929; and by tenure of operator, 1929 and 1924.....	504
Farm expenditures for labor, 1899 to 1929; for fertilizer, 1879 to 1929; and for feed, 1909 to 1929; with farms reporting, 1909 to 1929.....	505
Sales and purchases through farmers' cooperative organizations, 1929, 1924, and 1919; and value of all products on farms reporting cooperative sales, 1929.....	525

TABLES FOR GEOGRAPHIC DIVISIONS AND STATES

	Page
Farm expenditures for labor, fertilizer, and feed, 1929 and 1924; days of hired labor, and tons of commercial fertilizer purchased, 1929; with farms reporting; by tenure of operator.....	510
Electric light and power, by tenure of farm operator, census of 1930.....	518
Farm expenditures for implements and machinery, 1929, with farms reporting; and farms reporting value of implements and machinery, April 1, 1930; by tenure of operator.....	519
Farm expenditures for labor (cash), 1899 to 1929; with farms reporting, 1909 to 1929.....	520
Farm expenditures for fertilizer, 1879 to 1929; with farms reporting, 1909 to 1929.....	521
Farm expenditures for feed, with farms reporting: 1929, 1919, and 1909.....	522
Per cent distribution of selected farm expenditures: 1929 and 1919.....	523
Sales and purchases through farmers' cooperative organizations, 1929, 1924, and 1919; and value of all products on farms reporting cooperative sales, 1929.....	526
Farms reporting sales and (or) purchases through farmers' cooperative organizations, with per cent distribution: 1929, 1924, and 1919.....	525
Automobiles on farms—Farms reporting and number of automobiles, 1930 and 1920; by tenure of operator, 1930.....	535
Motor trucks on farms—Farms reporting and number of trucks, 1930 and 1920; by tenure of operator, 1930.....	536
Tractors on farms—Farms reporting and number of tractors, 1930, 1925, and 1920; by tenure of operator, 1930.....	537
Electric motors for farm work and stationary gas engines on farms—Farms reporting and number of electric motors and gas engines, 1930.....	538
Telephones, and dwellings lighted by electricity on farms—Farms reporting, 1930 and 1920; by tenure of operator, 1930.....	539
Farms reporting water piped into dwellings, 1930 and 1920; and into bathrooms, 1930; by tenure of farm operator for 1930.....	540
Per cent distribution of all farms and of farms reporting telephones, electric light, and water, by tenure of operator, 1930.....	541
Kind of road—Farms classified by kind of road on which located, with per cent distribution: 1930 and 1925.....	542

MAPS

	Page
Cash expenditures for farm labor (exclusive of housework), amount in 1929.....	507
Commercial fertilizer purchased, quantity (tons) in 1929.....	507
Farm expenditures for fertilizer (including noncommercial fertilizer), amount in 1929.....	509
Farm expenditures for feed, amount in 1929.....	509
Farmers' dwellings lighted by electricity, April 1, 1930.....	524
Number of farms reporting sales or purchases through farmers' cooperative organizations, 1929.....	524
Automobiles on farms, April 1, 1930.....	531
Tractors on farms, April 1, 1930.....	531

DIAGRAMS

	Page
Cash expenditures for farm labor (exclusive of housework) by States: 1929 and 1919.....	503
Farm expenditures for feed, by States: 1929 and 1919.....	508

CHAPTER VII.—SELECTED FARM EXPENDITURES, COOPERATIVE MARKETING AND PURCHASING, AND FARM FACILITIES

Introduction.—This chapter presents statistics collected at the 1930 census of agriculture for three series of items more or less independent in character, viz: (1) Farm expenditures for labor, fertilizer, feed, electric light and power, and farm implements and machinery; (2) cooperative marketing and purchasing by farm operators; and (3) farm facilities, which include farm motor equipment, farm home conveniences, and kind of road adjoining farms.

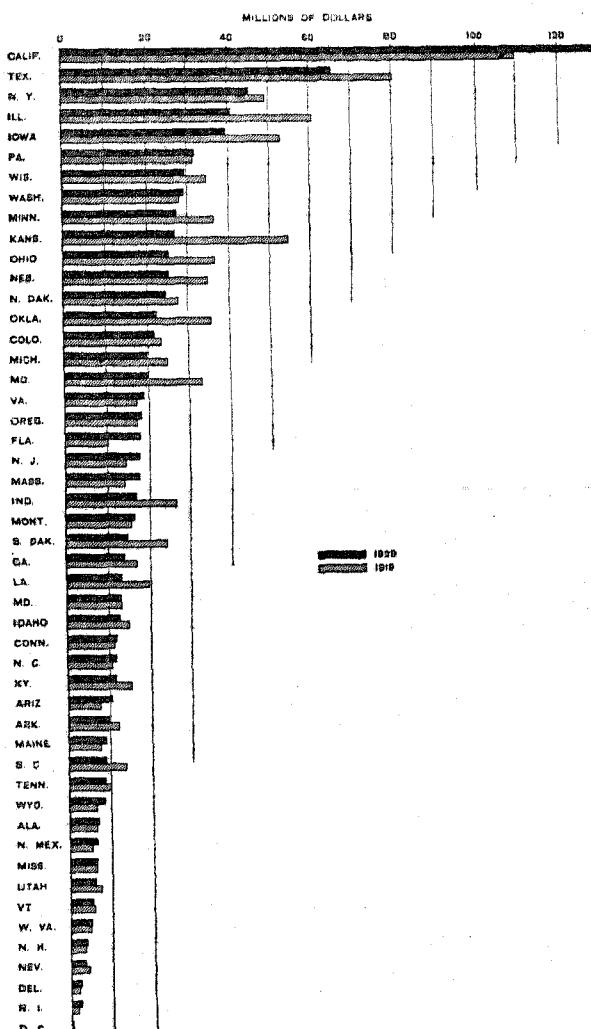
Comparable data are presented for earlier years when available. Some of the data for 1930 are presented by color and tenure of operator for the United States as a whole, and most of the remainder are presented by tenure only. Nearly all the figures for geographic divisions and States are presented by tenure. The total number of farms by color and tenure of operator, on which many of the percentages in this chapter are based, is available in Chapter III. It should be borne in mind that the number of farm operators coincides with the number of farms, so that the total of the tenures (owners, managers, and tenants) reporting any item is identical with the total number of farms reporting the same item; also, the term "number of owners reporting" is used interchangeably with the "number of owner-operated farms reporting" or with the "number of farms operated by owners reporting."

FARM EXPENDITURES FOR LABOR, FERTILIZER, FEED, ELECTRIC LIGHT AND POWER, AND FARM IMPLEMENTS AND MACHINERY

Of the five classes of farm expenditures (labor, fertilizer, feed, electric light and power, and farm implements and machinery) for which information was secured in 1930, those for labor, fertilizer, and feed are direct operating costs incurred by farm operators; that for light and power may be a direct cost such as expenditures for pumping irrigation water, or an indirect cost such as expenditures for home lighting; that for implements and machinery, however, is a capital charge which should be reduced annually by an allowance for depreciation to obtain the correct charge against present operations. These expenditures, or that portion representing an annual charge, are by no means all the costs involved in farm operations. Allowances must be made for taxes, insurance, depreciation, repairs, interest, rent, return on invested capital, family labor, custom work, purchase of gas and oil, livestock, packing and crating materials, sprays, poisons, seeds, irrigation water, and all such items. Among the factors which partly determine the amount of these expenditures are the tenure under which the farm is operated, the type of farming, and the locality in which the

farm is situated. The census secured information on gross cash farm-income and also for the value of the products of the farm used by the operator's family. A net farm-income figure can not be directly secured, because of the omission of the items herein listed, and also on account of changes in inventories of feed, livestock, and growing crops.

CASH EXPENDITURES FOR FARM LABOR (EXCLUSIVE OF HOUSEWORK) BY STATES: 1929 AND 1919



In considering the expenditures for any item in one year in comparison with another year, it should be remembered that usually a change in the amount expended does not measure a like change in the physical quantity of the article purchased. Unit prices, then, should be considered along with dollar volume to obtain the actual change in the physical quantity purchased in two different periods. This change in the physical volume of a composite group such as feed or fertilizers, or in services purchased, can

AGRICULTURE

not be readily measured. Various products in changing quantities and analyses make up the groups "feed" and "fertilizers," while the wages paid for hired services vary between years, seasons, according to perquisites furnished, and other considerations.

It should also be noted that differences in the expenditures for feed in any particular State between periods, or among States for the same period, may be partially due to shortage or abundance of feed. An increase or decrease in the expenditures for fertilizers may be partially due to high or low prices received for farm products in the year prior to the expenditures. An increase or decrease in the expenditures for hired labor may be reflected, in part, in a

decrease or an increase in expenditures for machinery and supplies.

The data for each of the items of expenditure are presented for the calendar year next preceding the year in which the census was taken. For labor, figures are presented for the decennial periods 1899 to 1929; for fertilizer, 1879 to 1929; for feed, 1909 to 1929; and for all three items for the interdecennial period 1924. The information on electric light and power and for farm implements and machinery was first obtained for the year 1929. Current figures for the United States by tenure of operator are presented in Table 1, while historical figures are presented in Table 2.

TABLE 1.—FARM EXPENDITURES, WITH FARMS REPORTING, FOR LABOR, FERTILIZER, AND FEED, 1929, 1924, AND 1919; FOR ELECTRIC LIGHT AND POWER AND IMPLEMENTS AND MACHINERY, 1929; AND BY TENURE OF OPERATOR, 1929 AND 1924; FOR THE UNITED STATES

[Statistics for divisions and States in Tables 3, 4, 5, 6, 7, and 8]

TENURE AND YEAR	FARM LABOR (EXCLUSIVE OF HOUSEWORK)						COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE ¹								
	Farms reporting ²		Days of hired labor		Cash expenditures		Total expenditures (all items)			Commercial fertilizer only					
	Number	Per cent of all farms ³	Number	Average per farm reporting	Amount	Average wage per day	Number	Per cent of all farms ³	Total	Average per farm reporting	Number	Per cent of all farms ³	Number	Average per farm reporting	
Total.....	2,631,601	41.8	410,964,722	156	\$955,420,813	\$2.32	3,663	2,324,090	37.0	\$271,068,673	\$117	2,239,546	35.6	7,535,022	3.36
1924.....	2,536,721	39.8			864,982,384	-----	341	2,184,056	34.3	230,528,446	106	-----	-----	-----	-----
1919.....	2,888,999	44.8			1,098,712,517		380	2,271,179	35.2	326,399,520	144	-----	-----	-----	-----
Owners.....	1,717,713	48.1	262,479,687	153	611,950,820	2.32	356	1,371,260	38.4	156,062,735	114	1,304,177	36.5	4,209,186	3.23
1924.....	1,651,061	42.7			560,609,080		240	1,337,271	34.6	141,187,692	106	-----	-----	-----	-----
Full owners.....	1,332,637	45.8	189,340,633	142	432,565,304	2.28	328	1,155,118	39.8	129,134,342	112	1,103,119	37.9	3,476,884	3.15
Part owners.....	385,076	58.6	74,130,654	193	178,364,516	2.42	466	213,142	32.5	20,928,393	126	201,058	30.6	732,302	3.04
Managers.....	38,617	69.1	42,925,104	1,112	118,256,327	2.68	2,983	22,476	40.2	14,738,200	056	20,655	37.0	327,595	15.86
Tenants.....	28,433	69.9			75,156,330		2,644	14,552	35.8	8,957,581	616	-----	-----	-----	-----
1929.....	875,271	32.9	104,560,871	119	228,205,966	2.18	261	930,354	34.9	100,257,672	108	914,714	34.3	2,998,241	3.23
1924.....	857,227	34.8			228,986,074		267	832,233	33.8	80,383,773	97	-----	-----	-----	-----
Cash.....	183,267	37.5	27,816,099	152	62,985,908	2.26	344	146,878	30.0	17,221,946	117	132,202	29.1	465,003	3.23
Other.....	692,004	31.8	76,753,772	111	165,218,058	2.15	239	783,476	36.0	83,086,726	106	772,512	35.5	2,532,333	3.23
 FEED															
TENURE AND YEAR	FEED			ELECTRIC LIGHT AND POWER			FARM IMPLEMENTS AND MACHINERY (INCLUDING AUTOMOBILES AND MOTOR TRUCKS)								
	Farms reporting		Expenditures		Farms reporting dwellings lighted by electricity (Apr. 1, 1930)	Farms reporting purchases	Expenditures (paid to power companies)			Farms reporting value of implements and machinery (Apr. 1, 1930)	Farms reporting purchases		Expenditures		
	Number	Per cent of all farms ³	Amount	Average per farm reporting	Number	Per cent of farms reporting dwellings ⁴	Number	Per cent of all farms ³	Amount	Average per farm reporting	Number	Per cent of all farms ³	Amount	Average per farm reporting	
Total.....	3,283,400	52.2	\$919,180,626	\$280	841,310	14.3	571,007	9.1	\$46,483,885	\$81	5,529,424	1,750,588	27.8	\$692,545,103	\$396
1924.....	3,190,739	50.1	750,444,560	235	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1919.....	3,511,121	54.4	1,097,224,648	312	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Owners.....	2,209,385	61.9	665,597,091	301	693,083	20.2	277,487	13.4	33,160,996	74	3,228,475	1,121,720	31.4	473,114,873	422
1924.....	2,162,717	55.9	542,580,734	261	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Full owners.....	1,787,204	61.4	524,001,568	268	586,857	21.0	406,889	14.1	29,060,318	71	2,568,264	836,090	28.7	313,405,201	375
Part owners.....	422,181	64.3	141,595,623	338	106,326	16.7	67,628	10.3	6,100,078	90	630,211	285,630	43.5	159,709,672	559
Managers.....	31,988	26.2	45,905,498	1,463	19,647	40.8	13,902	24.9	4,673,491	336	46,330	19,524	34.9	17,311,436	887
Tenants.....	1,042,627	39.1	207,684,037	199	128,580	5.4	79,618	3.0	6,649,398	84	2,254,610	606,344	22.9	202,121,794	332
1924.....	1,008,318	40.8	181,788,113	181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Cash.....	256,722	53.1	86,650,469	311	54,087	12.0	36,484	7.5	3,178,920	87	420,396	141,329	28.9	48,036,365	340
Other.....	782,905	36.0	127,033,568	162	74,493	3.8	43,134	2.0	3,470,478	80	1,828,223	468,015	21.6	154,085,429	329

¹ All of these products were specifically called for in the question covering expenditures for 1929; manure was not specified for 1924; and only manure and fertilizer were specified for 1919.

² See text discussion and footnote 1, on Table 2.

³ Based on all farms in each tenure class, see Chapter III.

⁴ Based on farms reporting dwellings in each tenure class, see Chapter III.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 505

TABLE 2.—FARM EXPENDITURES FOR LABOR, 1899 TO 1929; FOR FERTILIZER, 1879 TO 1929; AND FOR FEED, 1909 TO 1929; WITH FARMS REPORTING, 1899 TO 1929; FOR THE UNITED STATES

[Statistics for divisions and States in Tables 3, 6, 7, and 8]

ITEM	1929	1919	1909	1899	1889	1879
LABOR¹						
Farms reporting	2,631,601	2,888,969	2,922,279			
Per cent of all farms	41.8	44.8	45.9			
Total expenditures	\$1,356,565,463	\$651,611,287	\$357,391,930			
Increase over preceding census	\$704,954,176	\$294,219,357				
Per cent of increase	108.2	82.3				
Average expenditure per farm reporting	\$470	\$223				
Amount in cash	\$955,420,313	\$1,098,712,517	\$821,729,941			
Increase over preceding census ²	-\$143,292,204	\$570,982,576				
Per cent of increase ²	-13.0	110.6				
Average expenditure per farm reporting	\$363	\$280	\$179			
Value of rent and board furnished		\$257,852,946	\$129,881,346			
Days of hired labor	410,984,722					
Average wage per day	\$2.32					
FERTILIZER³						
Farms reporting expenditures	2,324,090	2,271,179	1,823,032			
Per cent of all farms	37.0	35.2	28.7			
Amount expended	\$271,058,673	\$326,399,520	\$114,882,541	\$53,430,910	\$38,469,598	\$28,586,397
Increase over preceding census ²	-\$35,840,847	\$211,516,978	\$61,451,631	\$14,961,312	\$9,882,201	
Per cent of increase ²	-17.0	184.1	115.0	38.9	34.0	
Average expenditure per farm reporting	\$117	\$144	\$63			
Average expenditure, based on all farms	\$43	\$51	\$18			
Average expenditure per 1,000 acres of crop land harvested	\$755					
Tons of commercial fertilizer purchased	7,535,022					
Farms reporting	2,239,546					
Average number of tons per farm reporting	3.36					
FEED						
Farms reporting expenditures	3,283,400	3,511,121	2,368,905			
Per cent of all farms	52.2	54.4	37.2			
Amount expended	\$919,189,626	\$1,097,224,648	\$299,839,887			
Increase over preceding census ²	-\$178,035,022	\$797,384,791				
Per cent of increase ²	-16.2	265.9				
Average expenditure per farm reporting	\$280	\$312	\$127			

¹ For 1929, 1919, 1909, and 1899 the schedules specifically excluded housework. For 1929 the question was confined to the amount spent in cash; for 1919 and 1909 two questions were asked, one relating to the amount spent in cash and the other to value of house rent and board furnished; while for 1899 one question was asked relating to the amount expended including the value of board furnished.

² A minus sign (-) denotes decrease.

³ For 1929 the question specifically called for amount expended for commercial fertilizer, manure, marl, lime, and ground limestone; for 1919, manure and fertilizer; for 1909, manure and other fertilizers; and for 1899, 1889, and 1879, fertilizers.

Expenditures for farm labor.—Since first made in the census of 1900 this inquiry has expressly excluded housework. The questions covering farm labor for the years 1929 and 1924 related to the amount actually expended in cash, that is, money wages exclusive of the value of rent, board, and other perquisites furnished; for 1919 and 1909 a separate figure was obtained for the cash expenditure and another for the estimated value of rent and board furnished farm laborers; while for 1899 the one inquiry covered the combined cash expenditure and estimated value of board furnished.

In 1930, for the first time, the farm schedule carried an inquiry relating to the number of days of farm work done in 1929 by hired laborers of all ages. The average wage per day as presented in the accompanying tables is affected by the season, by the amount of board, rent, or supplies furnished, by term of employment, and other conditions.

The number of farms reporting cash expenditures for farm labor in 1929 was 2,631,601, or 41.8 per cent of all farms in the United States; 39.8 per cent of all farms in 1924; while in 1919 and 1909 the value of rent and board furnished was included with cash expenditures, and the per cent was, respectively, 44.8 and 45.9. The days of farm work done by hired laborers in 1929 amounted to 410,984,722, or an average of 156 days per farm reporting. The cash expenditure for labor

in 1929 amounted to \$955,420,313 or an average daily wage of \$2.32 and an average of \$363 for the year for each farm reporting. Among the States the percentage of all farms reporting cash expenditures for labor, in 1929, varied from 15.3 per cent in Mississippi to 74.2 per cent in North Dakota; the average number of days of hired labor employed ranged from a low of 88 in both North Carolina and Tennessee to a high of 641 in Arizona; the lowest average wage per day, \$1.04, was reported in South Carolina and the highest, \$3.55, in California; and the extremes in the average amount expended per farm reporting were \$117 in Alabama and \$1,723 in Nevada.

For the country as a whole, manager-operated farms exceeded those held under other tenure in the percentage reporting expenditures for labor, in the average number of days of hired labor per farm reporting, in the average daily wage paid to farm laborers, and in the average annual expenditure per farm reporting. In some cases it was probable that when replying to this question, farm managers included their own compensation.

The percentage of all managers reporting expenditures for labor in 1929 was 69.1 for the United States. In the States, the range was from 48.7 per cent in Kentucky to 82.8 per cent in both Massachusetts and New Hampshire. These percentages appear to be

somewhat low, since managed farms usually require labor in addition to that of the manager. The percentage of all owners reporting expenditures for labor for the United States was 48.1, ranging from a low of 27.5 per cent in Mississippi to a high of 75.8 per cent in North Dakota, and for all tenants the percentage for the United States was 32.9, ranging from 10.4 per cent in Mississippi to 71.1 per cent in North Dakota.

The average number of days of farm work done by hired laborers in 1929, for the United States as a whole, was 1,112 days for manager-operated farms, 153 days for owner-operated farms, and 119 for tenant-operated farms. This average for manager-operated farms ranged from 554 in Iowa to 5,124 in Louisiana; for owner-operated farms from 78 in West Virginia to 489 in Nevada; and for tenant-operated farms from 49 in Mississippi to 724 in Arizona.

The average daily wage paid on manager-operated farms was \$2.68, on owner-operated farms \$2.32, and on tenant-operated farms \$2.18. The average daily wage on farms operated by managers varied from \$1.25 in South Carolina to \$3.76 in Washington; on farms operated by owners, from \$1.02 in South Carolina to \$3.59 in California; and on farms operated by tenants, from \$1.01 in South Carolina to \$3.50 in Connecticut.

The average expenditure per farm reporting by tenure of operators was: Managers, \$2,985, owners, \$356, and tenants, \$261. Among the States the figures for managers varied from \$1,275 in Tennessee to \$7,001 in Louisiana; for owners, from \$126 in Tennessee to \$1,424 in Nevada; and for tenants, from \$61 in Alabama to \$1,946 in Arizona.

Farm expenditures for fertilizers.—Various products have been included under this heading in the different census years. For the 1929 expenditures the schedule specifically called for the inclusion of commercial fertilizers, manure, marl, lime, and ground limestone; in the question for 1924, marl was not specified; for 1919 the question specified manure and fertilizer; for 1909 the question specified manure and other fertilizers; while for 1899, 1889, and 1879 the schedules mentioned "fertilizers" only.

In addition to the expenditure for fertilizer, in 1930 the general farm schedule carried for the first time an inquiry relating to the tonnage of commercial fertilizer purchased, excluding in this question the other forms of plant food and soil conditioners.

There were 2,324,090 farms, or 37 per cent of all farms in the United States on April 1, 1930, which reported expenditures for one or more of the items classed here under "fertilizers." With due consideration to these differences, the percentage of all farms reporting can be compared with 34.3 per cent for the year 1924, 35.2 per cent for 1919, and 28.7 per cent for 1909.

The percentage of all farms reporting expenditures for fertilizers in the year 1929 varied from 0.4 in South Dakota to 88.2 in South Carolina. The amount expended in 1929 totaled \$271,058,673, which was an increase of 17.6 per cent over the amount expended in 1924 and a 17 per cent decrease from the amount expended in 1919. The average expenditure for 1929 per farm reporting was \$117 for the United States, ranging from \$35 in Kentucky to \$593 in California.

The total number of farms reporting the quantity of commercial fertilizer purchased in 1929 was 2,239,546 or 35.6 per cent of all farms and the number of tons purchased was 7,535,022 or 3.36 tons per farm reporting. Commercial fertilizer is often purchased in small quantities such as a fraction of a ton, or in amounts exceeding even tons. Such fractions were included in arriving at totals.

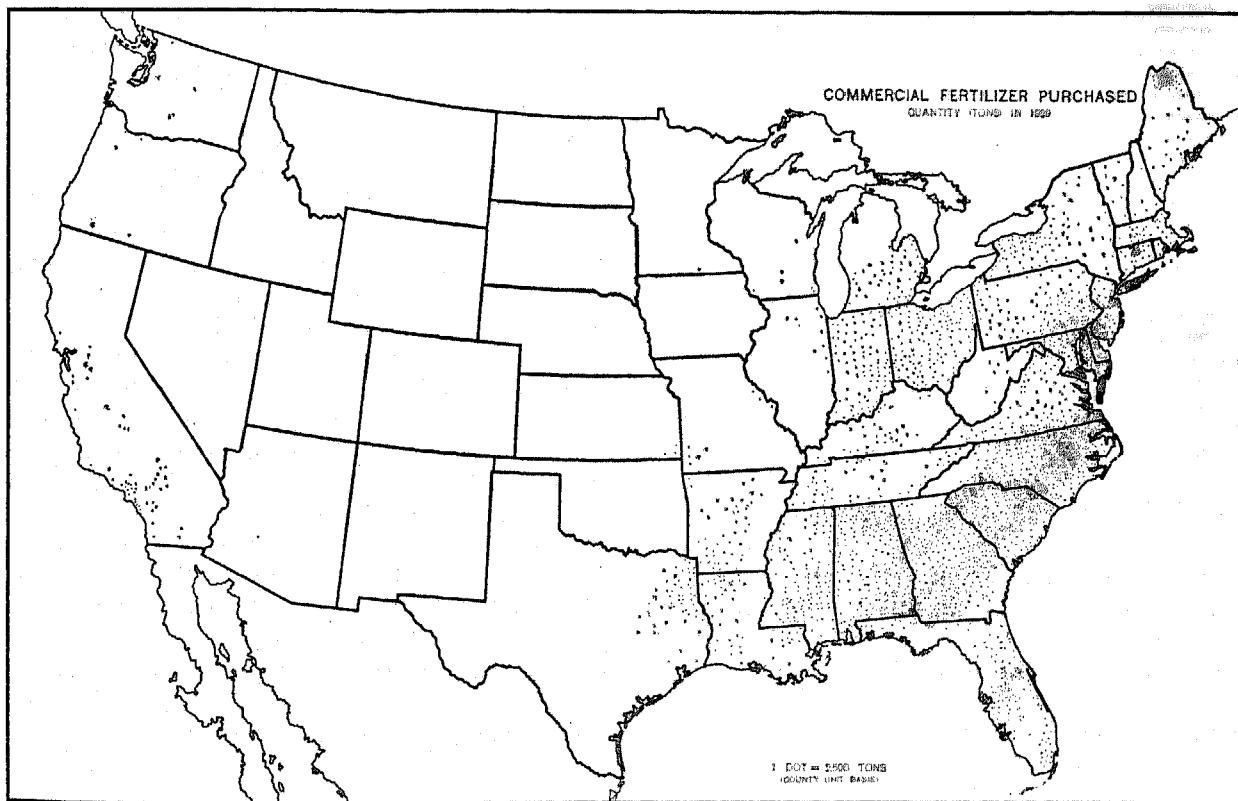
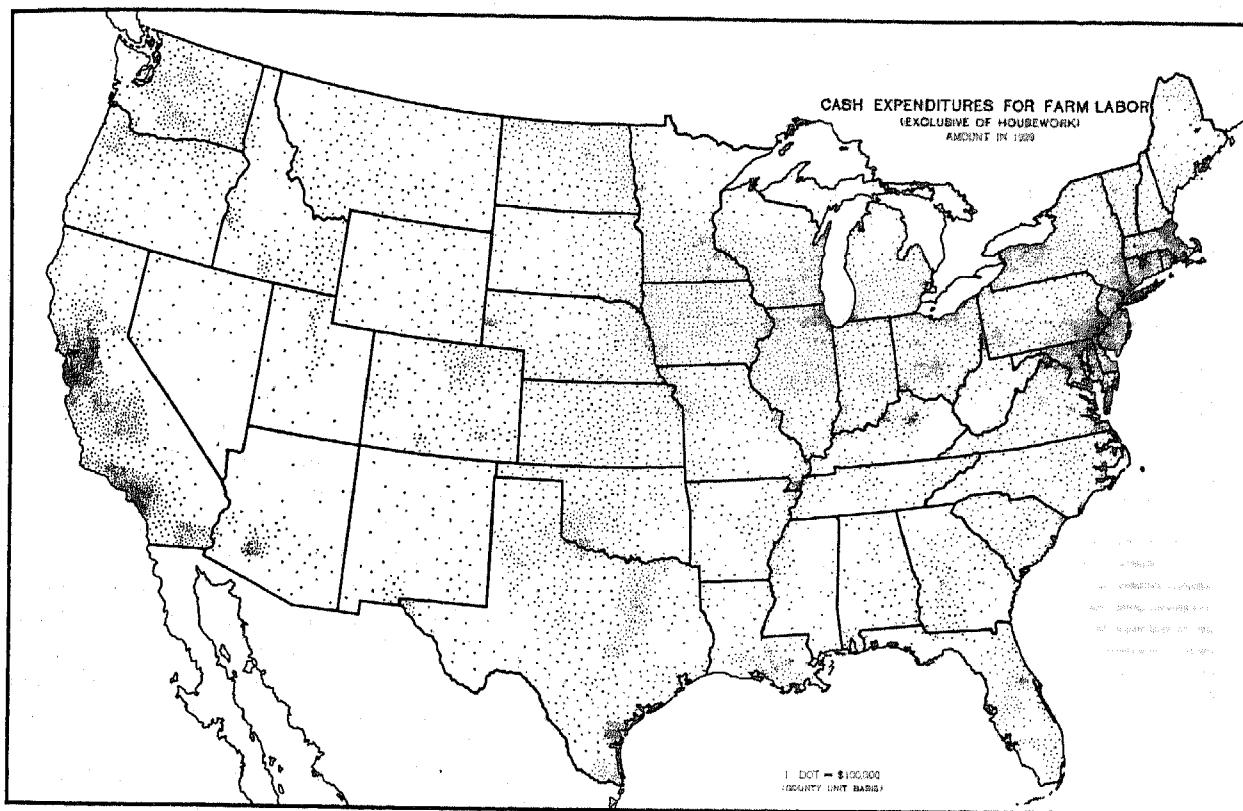
The use of commercial fertilizer is most common in the cotton and tobacco areas of the South Atlantic and East South Central States, in the concentrated truck, fruit, and specialized crop areas in many States, and to a lesser degree in general farming areas in several States. Thus, nearly 60 per cent of all farms reporting purchases of commercial fertilizer in 1929 were in the two geographic divisions just mentioned, and these same farms reported nearly 65 per cent of the total quantity. The South Atlantic division alone had 36 per cent of all the farms reporting commercial fertilizer and 49 per cent of the tonnage. The greatest average per farm reporting, however, was 9.60 tons in New Jersey.

Figures, by tenure of operator, are available in Table 1 for the United States and in Table 3 for divisions and States.

Farm expenditures for feed.—The number of farms reporting feed purchased in 1929 was 3,283,400, or 52.2 per cent of all farms in the United States on April 1, 1930. The percentages for earlier years were 50.1 for 1924, 54.4 for 1919, and 37.2 for 1909. The expenditures for feed in 1929 amounted to \$919,189,626, which represents an increase of 22.5 per cent over 1924 and 16.2 per cent decrease from the expenditures in 1919. The average expenditure per farm reporting for 1929 was \$280; for 1924, \$235; for 1919, \$312; and for 1909, \$127.

The percentage of all farms reporting feed purchased in 1929 was highest in the New England and Middle Atlantic divisions, with 83.8 per cent and 82.1 per cent, respectively. These two divisions are in general areas producing insufficient feed for local requirements, so that while only 12 per cent of the farms in the United States reporting feed purchased were located in these two divisions, their purchases were approximately 24 per cent of the total value of feed purchased.

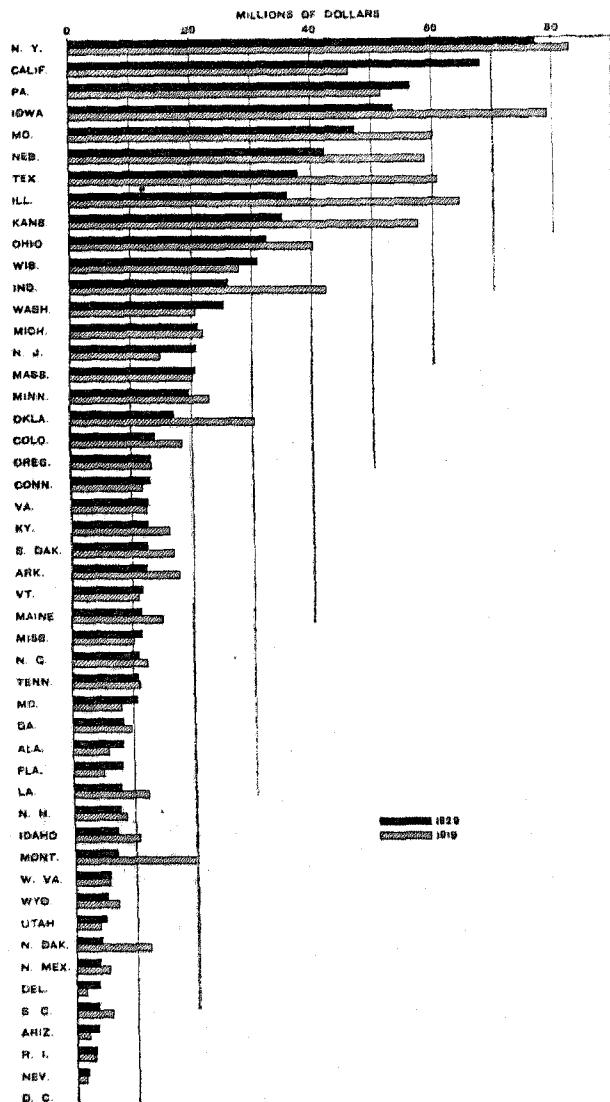
SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 507



AGRICULTURE

In some areas much of the expenditure for feed represents amounts paid by farm operators for products grown locally which do not pass through the hands of dealers. In other sections, particularly areas where insufficient feed for home use is raised, products must be shipped in from distant points, so that the actual expenditure for a given quantity is higher than in areas

FARM EXPENDITURES FOR FEED, BY STATES: 1929 AND 1919



of surplus production. For the States the percentage of all farms purchasing feed in 1929 ranged from 88 per cent in Vermont to 25.4 per cent in South Carolina, and the average expenditure per farm reporting varied from a high of \$1,054 in Rhode Island to a low of \$89 in South Carolina.

Electric light and power purchased from a power company.—The number of operators reporting their dwellings lighted by electricity as of April 1, 1930, was 841,310, or 14.3 per cent of all farms reporting dwellings; of this number, 571,007 reported light and power purchased from a power company. These expenditures amounted to \$46,483,885, or an average of \$81 per farm reporting, the average ranging from \$38 in Utah to \$252 in Arizona.

Not all farms which reported the operator's dwelling lighted by electricity purchased it from power companies, for in numerous cases farm homes have an individual home lighting plant. It is also possible for an operator to be a customer of a power company and still not have his dwelling lighted by electricity.

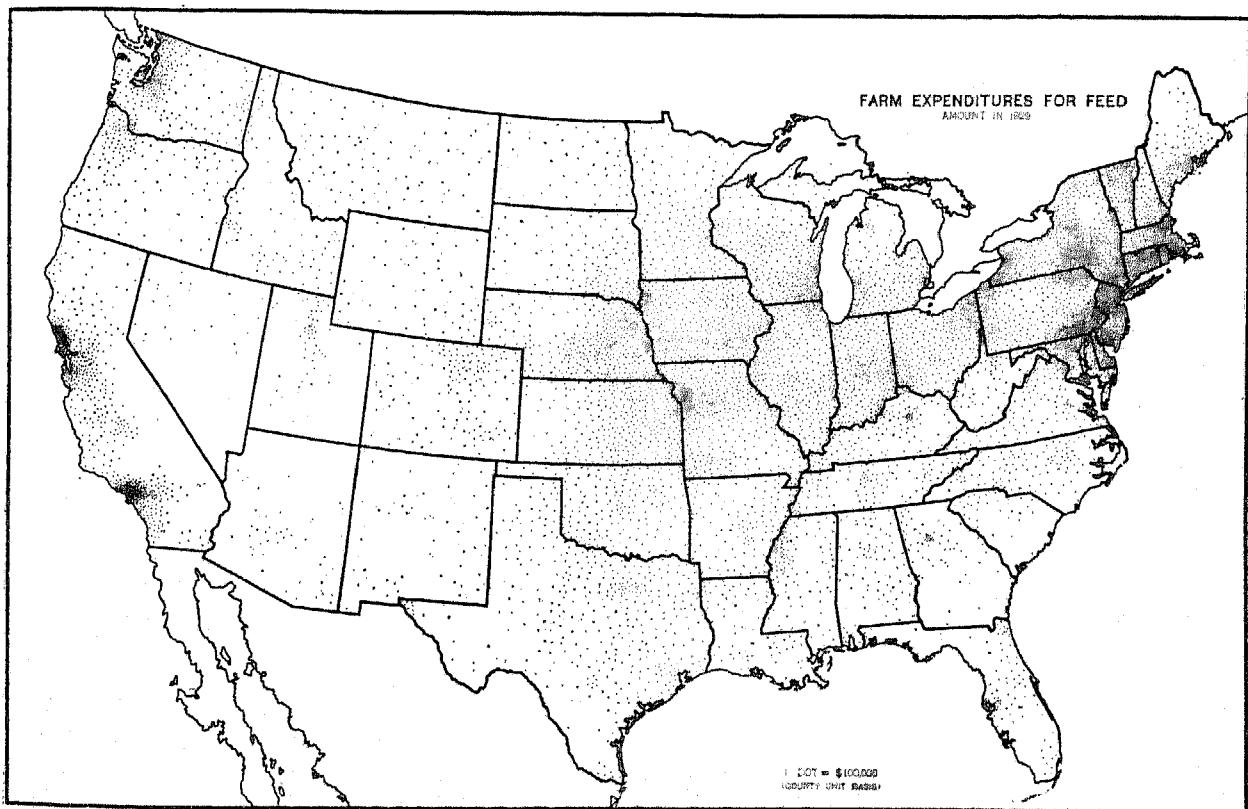
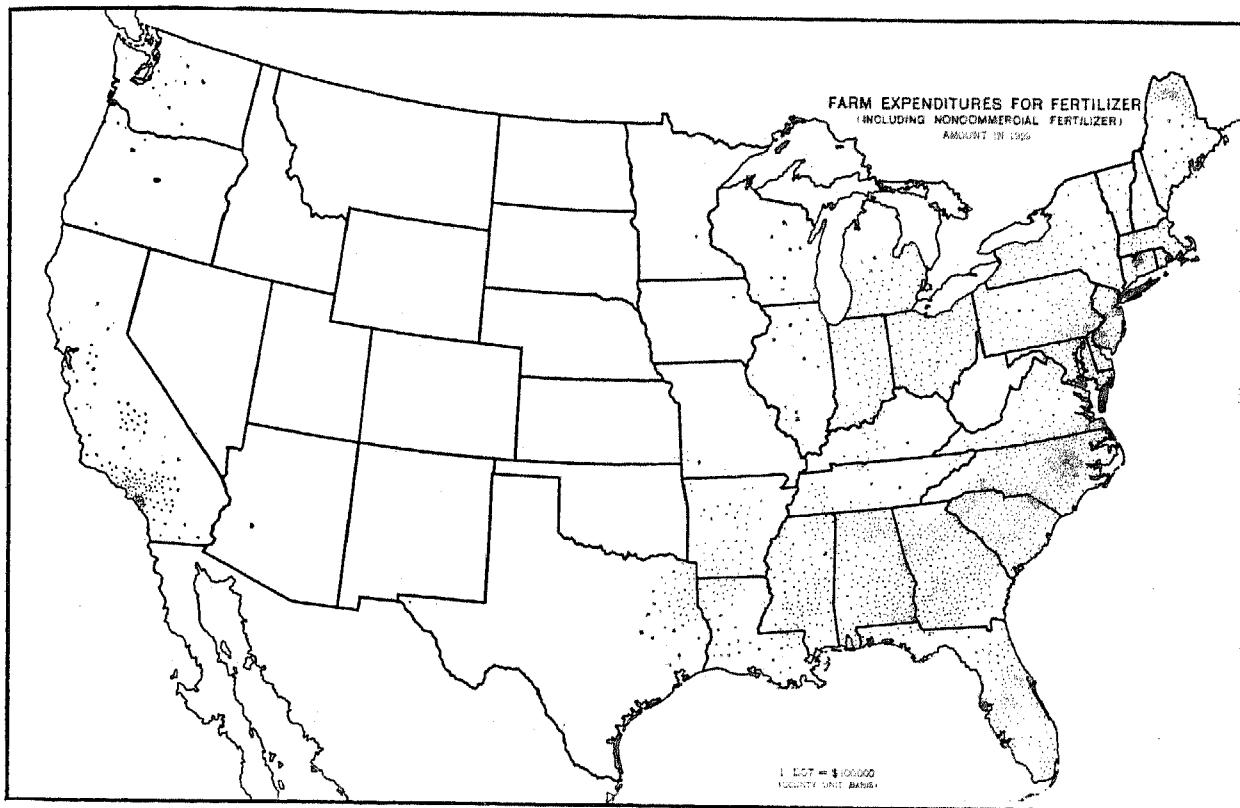
The nature of the farm operations, the section of the country, and the availability of electricity have much to do with the percentage of farms reporting purchases and the actual amount paid to power companies. Thus those sections of the country in which irrigation, requiring pumping, is practiced tend to be the largest consumers of electricity. The Pacific division, with approximately 21 per cent of all farms reporting light or power purchased, represented about 39 per cent of the total expenditure.

A number of farms reported a higher expenditure than could be normally expected. In some cases it was probable that enumerators had reported expenditures made for power line construction which had been incurred by the power company and the cost thereof assessed against individual users. Some reports probably covered expenditures for equipment purchased from power companies.

Expenditures for farm implements and machinery.—The number of farms reporting purchases of implements and machinery in 1929 was 1,750,588, or 27.8 per cent of all farms in the United States on April 1, 1930. The number reporting the value of their inventory of implements and machinery for April 1, 1930, was 5,529,424 or 87.9 per cent of all farms. This data, distributed by tenure of operator, is presented in Table 1 for the United States, and in Table 5 for divisions and States. The percentage of farms reporting purchases was lowest in Kentucky with 10.8 per cent and highest in North Dakota with 52.9 per cent.

The expenditures for the year 1929 amounted to \$692,548,103, or an average of \$396 per farm reporting. This average varied from a low of \$87 in Georgia to a high of \$838 in Montana. The two North Central divisions reported 53.5 per cent of the total expenditures in 1929, whereas they represented only 34.8 per cent of all the farms reporting a value of implements and machinery, according to inventory, April 1, 1930.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 509



AGRICULTURE

TABLE 3.—FARM EXPENDITURES FOR LABOR, FERTILIZER, AND FEED, 1929 AND 1924; DAYS OF HIRED OF OPERATOR; BY

DIVISION OR STATE AND TENURE	FARM LABOR (EXCLUSIVE OF HOUSEWORK)										COMMERCIAL FERTILIZER ONLY, 1929				
	Farms reporting				Days of hired labor, 1929		Cash expenditures				Farms reporting purchases	Tons purchased			
	Number		Per cent of all farms ¹		Number	Ave- rage per farm report- ing	Amount		Average per farm report- ing	Ave- rage wage per day, 1929					
	1929	1924	1929	1924			1929	1924	1929	Number	Per cent of all farms ¹	Number	Ave- rage per farm report- ing		
UNITED STATES															
1 Total.....	2,631,601	2,556,721	41.8	39.8	410,984,722	156	3855,420,313	3864,982,384	3865	8341	82.32	2,239,546	35.6	7,535,022	8.38
2 Owners.....	1,717,713	1,661,061	48.1	42.7	263,479,087	153	611,959,820	560,809,980	356	340	2.32	1,304,177	30.5	4,209,180	8.22
3 Managers.....	38,617	28,433	69.1	69.9	42,925,164	1,112	115,256,527	75,186,330	2,985	2,644	2.08	20,655	37.0	827,595	15.86
4 Tenants.....	875,271	837,227	32.9	34.8	104,569,871	119	228,203,966	228,980,074	201	267	2.18	914,714	34.3	2,998,241	8.28
GEOGRAPHIC DIVISIONS															
NEW ENGLAND															
5 Total.....	73,836	77,313	59.1	48.5	16,356,800	232	49,638,146	41,245,110	675	533	3.05	68,318	54.7	345,303	5.05
6 Owners.....	67,309	71,320	59.0	48.1	13,132,825	195	39,477,077	32,665,757	587	458	3.01	62,740	55.0	301,081	4.81
7 Managers.....	2,336	2,043	79.6	83.0	2,346,150	1,004	7,884,778	6,686,727	3,375	3,273	3.36	1,898	64.6	24,258	12.78
8 Tenants.....	4,191	3,950	53.2	44.5	877,625	209	2,477,290	1,902,626	501	482	2.82	3,080	46.7	19,364	5.26
MIDDLE ATLANTIC															
9 Total.....	167,968	214,878	55.4	61.3	35,907,799	181	94,687,576	80,797,449	478	376	2.64	206,325	57.7	768,433	8.87
10 Owners.....	164,650	174,649	55.0	50.2	26,784,626	163	69,299,306	60,901,065	349	349	2.59	172,980	57.8	621,004	8.50
11 Managers.....	4,450	3,416	73.5	76.5	4,117,910	925	13,320,812	7,780,131	2,983	2,278	2.33	3,674	60.7	33,744	9.18
12 Tenants.....	28,868	36,815	55.0	55.6	5,005,263	173	12,067,468	12,116,253	418	329	2.41	20,671	56.6	143,074	4.84
EAST NORTH CENTRAL															
13 Total.....	448,363	472,301	46.4	44.9	80,663,746	135	132,476,146	126,504,958	295	268	2.18	318,594	33.0	773,057	2.43
14 Owners.....	317,122	329,777	45.7	42.7	40,517,473	128	57,797,410	53,249,638	277	252	2.17	239,664	24.5	542,033	2.26
15 Managers.....	5,427	4,180	62.9	63.3	4,076,001	751	11,195,115	7,567,212	2,083	1,810	2.75	3,037	35.2	20,788	6.85
16 Tenants.....	125,813	138,344	47.7	50.7	16,071,272	128	33,483,618	35,587,408	266	258	2.08	75,893	28.7	210,226	2.77
WEST NORTH CENTRAL															
17 Total.....	603,904	608,112	54.3	54.7	76,337,944	186	178,678,087	166,963,887	296	307	2.34	56,419	5.1	106,332	1.88
18 Owners.....	365,247	366,071	55.2	53.4	47,722,725	131	110,597,280	118,560,437	303	324	2.32	40,992	6.2	73,408	1.79
19 Managers.....	4,404	3,294	58.9	59.1	2,902,689	650	7,238,410	4,056,054	1,644	1,231	2.53	536	7.2	2,901	5.41
20 Tenants.....	234,253	238,747	52.7	56.9	25,751,930	110	60,842,397	64,347,376	260	270	2.38	14,891	3.4	30,023	2.02
SOUTH ATLANTIC															
21 Total.....	367,183	366,598	34.7	27.7	57,253,068	156	91,879,757	73,255,983	250	239	1.80	808,199	76.4	3,707,805	4.59
22 Owners.....	229,456	198,455	42.5	32.6	36,341,989	158	58,103,062	49,715,737	253	251	1.60	393,213	72.8	1,788,901	4.42
23 Managers.....	6,763	4,476	75.3	72.9	7,826,213	1,081	15,158,247	8,852,342	2,425	1,978	1.94	7,064	78.8	177,433	25.12
24 Tenants.....	130,976	103,667	25.7	21.0	18,084,806	100	18,618,448	14,767,854	142	142	1.42	407,922	80.1	1,790,956	4.30
EAST SOUTH CENTRAL															
25 Total.....	230,148	194,282	23.5	19.2	23,581,895	94	33,774,888	36,016,333	135	135	1.44	529,175	49.8	1,185,827	2.24
26 Owners.....	156,850	121,763	33.7	24.5	16,134,621	103	22,830,223	18,306,145	146	150	1.41	256,841	55.2	576,814	2.25
27 Managers.....	1,725	943	59.7	54.5	1,778,782	1,081	3,111,559	1,404,388	1,804	1,489	1.75	1,389	48.1	20,054	14.44
28 Tenants.....	91,543	70,556	15.4	13.9	5,618,492	61	7,883,107	6,306,802	86	89	1.39	270,945	46.6	588,950	2.17
WEST SOUTH CENTRAL															
29 Total.....	394,848	386,980	35.8	35.0	58,308,283	148	110,614,558	119,705,023	280	310	1.89	219,773	19.9	431,855	1.87
30 Owners.....	190,332	173,638	46.4	42.1	30,529,123	160	58,122,750	59,085,800	305	340	1.90	111,159	27.1	232,020	2.00
31 Managers.....	3,286	1,964	59.7	64.2	5,750,899	1,750	9,764,935	5,546,980	2,972	2,875	1.70	792	14.4	10,894	16.78
32 Tenants.....	201,230	210,658	29.3	35.0	22,118,261	110	42,720,873	54,972,243	212	261	1.03	107,822	15.7	188,941	1.75
MOUNTAIN															
33 Total.....	132,285	128,982	54.8	55.2	31,241,774	236	55,897,088	68,350,305	649	530	2.75	3,894	1.6	10,272	2.69
34 Owners.....	98,705	96,437	55.2	53.8	21,228,171	215	55,227,713	48,134,894	589	490	2.91	2,979	1.7	6,970	2.34
35 Managers.....	2,476	1,685	69.0	56.7	3,621,567	1,463	9,811,803	5,754,086	3,963	3,415	2.71	160	4.5	1,563	9.77
36 Tenants.....	31,014	30,746	52.7	50.4	6,392,036	206	17,857,570	14,461,355	576	470	2.79	685	1.2	1,739	2.54
PACIFIC															
37 Total.....	168,065	146,108	62.3	56.1	51,294,873	215	177,573,069	142,064,106	1,089	953	3.46	28,919	11.0	176,638	6.11
38 Owners.....	127,922	118,931	62.2	55.1	31,068,134	243	167,504,999	90,201,507	840	758	3.46	23,600	11.5	116,344	4.93
39 Managers.....	7,769	6,433	78.8	77.0	10,666,053	1,360	37,770,865	27,438,442	4,867	4,265	3.58	2,105	21.4	35,945	17.08
40 Tenants.....	27,383	23,744	59.2	57.4	9,630,186	352	32,297,205	24,424,157	1,179	1,020	3.35	3,205	6.9	24,349	7.60
NEW ENGLAND															
41 Maine, total.....	22,795	23,641	58.4	47.3	3,090,656	136	9,042,583	6,799,791	297	288	2.93	23,865	81.2	170,950	7.18
42 Owners.....	21,587	22,714	58.7	47.3	2,740,894	127	7,975,866	6,124,397	370	270	2.91	22,568	61.4	150,160	6.92
43 Managers.....	377	282	75.0	80.6	2,237,301	629	742,865	449,092	1,070	1,503	3.18	338	0.72	6,031	17.84
44 Tenants.....	851	645	48.5	38.0	112,461	132	323,802	216,302	380	335	2.88	969	55.2	8,760	9.04
45 New Hampshire, total.....	8,640	8,292	58.4	44.1	1,410,856	159	3,960,361	3,014,573	450	324	2.82	6,947	48.6	11,500	1.66
46 Owners.....	8,182	8,812	59.3	44.3	1,138,254	140	3,131,635	2,612,932	384	297	2.75	4,042	40.5	9,330	1.46
47 Managers.....	294	138	82.8	88.5	10,666,053	1,360	37,770,865	27,438,442	4,867	4,265	3.58	223	62.8	1,581	7.09
48 Tenants.....	403	342	50.6	33.7	52,501	130	130,502	87,687	324	256	2.49	322	40.6	689	1.83

¹ Marl was not specified in the question covering expenditures in 1924.² Based on all farms in each tenure class, see Chapter III.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 511

LABOR, AND TONS OF COMMERCIAL FERTILIZER PURCHASED, 1929; WITH FARMS REPORTING; BY TENURE DIVISIONS AND STATES

EXPENDITURES FOR COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE ¹										FEED							
Farms reporting				Amount				Farms reporting				Expenditures					
Number		Per cent of all farms ²		1929	1924	Average per farm reporting		Number		Per cent of all farms ²		1929	1924	Average per farm reporting			
1929	1924	1929	1924			1929	1924	1929	1924	1929	1924			1929	1924	1929	1924
2,324,090 1,371,260 22,476 930,354	2,184,056 1,337,271 14,552 832,233	37.0 38.4 40.2 34.9	34.3 34.6 35.8 33.8	\$271,058,673 156,062,735 14,738,266 100,257,672	\$230,528,446 141,157,002 8,957,581 80,383,773	\$117 114 636 108	\$106 106 616 97	3,283,400 2,209,385 31,388 1,042,627	3,190,739 2,162,717 22,704 1,005,318	52.2 61.9 55.9 39.1	50.1 685,597,091 45,908,498 207,684,037	\$819,189,626 542,580,724 26,074,713 181,789,113	\$750,444,560 508 261 1,463	\$280 251 1,148 199	\$235 251 1,148 181	1 2 3 4	
68,537 62,047 1,903 3,637	74,289 69,088 1,577 8,624	54.9 55.2 64.8 46.8	48.6 45.6 64.1 40.9	15,413,246 13,417,825 1,188,651 830,760	16,336,211 14,180,409 1,256,399 869,403	295 213 816 227	290 205 816 240	104,673 95,984 2,390 6,299	130,968 121,902 2,056 7,010	83.8 84.1 81.4 79.0	82.1 82.3 83.5 79.0	67,416,362 59,219,298 4,011,959 4,185,105	64,821,537 57,999,050 3,262,005 3,620,482	644 617 1,679 664	485 476 1,557 516	5 6 7 8	
224,819 189,258 4,042 31,489	250,649 205,478 2,960 80,205	62.9 63.8 66.8 60.0	59.8 59.9 66.4 59.2	30,202,326 23,677,163 1,389,869 5,135,294	31,393,261 24,782,553 940,128 5,670,580	134 125 344 163	135 119 317 145	293,504 245,883 4,661 39,960	320,362 268,395 3,362 48,605	82.1 83.2 77.0 76.2	76.5 77.1 75.3 73.4	154,686,628 126,355,213 7,504,116 20,827,299	122,164,760 99,555,451 4,116,210 18,493,129	527 508 1,610 521	881 371 1,224 380	9 10 11 12	
350,789 264,497 3,485 82,877	315,639 236,126 2,141 77,372	36.3 38.1 40.4 31.4	30.0 30.6 32.4 28.3	29,283,692 20,747,729 964,480 7,671,488	22,189,610 15,912,340 495,316 5,731,954	83 78 277 91	70 67 231 74	642,422 450,667 5,251 156,204	605,811 455,742 3,630 146,539	66.5 69.3 60.8 59.2	57.6 59.0 55.0 53.7	146,849,753 107,638,978 5,618,148 33,504,829	118,828,205 87,270,917 2,879,184 29,375,104	229 224 1,070 215	187 192 763 200	13 14 15 16	
67,978 49,304 906 17,978	44,007 38,530 229 10,248	8.1 7.5 9.3 4.0	4.0 4.9 4.1 2.4	4,471,681 2,089,522 150,482 1,231,677	3,099,167 2,209,656 50,577 771,904	66 63 216 69	70 68 221 75	678,626 427,920 4,049 246,637	800,968 378,588 2,515 219,583	61.0 64.7 54.2 55.5	54.1 55.2 45.2 52.4	214,675,463 142,130,710 7,330,676 65,214,098	173,730,678 116,585,420 3,312,441 53,500,017	816 232 1,610 264	289 308 1,317 245	17 18 19 20	
813,149 396,776 7,147 400,226	842,966 429,789 79,759 408,572	76.8 75.5 75.0 80.3	76.1 70.5 75.0 82.9	119,238,902 56,139,822 6,366,106 56,782,914	110,473,100 57,109,157 3,464,118 49,598,827	147 141 801 129	181 133 762 122	427,590 274,003 4,061 147,901	402,747 274,003 3,013 125,731	40.4 51.0 46.3 29.0	38.8 45.0 49.1 25.5	63,893,397 45,686,500 3,562,204 14,344,633	49,769,841 36,149,068 2,293,770 11,376,994	149 166 951 97	124 132 745 90	21 22 23 24	
530,273 257,496 1,398 271,379	448,613 239,739 857 206,017	49.9 56.3 48.4 45.7	44.4 48.2 49.5 40.7	40,068,986 19,046,570 13,275,611 20,338,091	25,890,508 17,209,556 385,669 12,126,328	76 74 454 75	58 56 454 59	390,887 223,422 1,499 156,966	368,664 216,032 1,499 152,837	86.8 49.3 51.9 26.9	86.6 43.2 47.9 30.2	43,041,378 27,188,285 2,559,067 13,294,036	85,585,920 23,042,091 878,057 11,662,742	110 119 1,707 83	87 107 1,064 76	25 26 27 28	
221,100 112,004 812 108,284	178,498 94,135 638 83,823	20.0 27.3 14.7 15.8	17.5 22.8 17.6 13.9	15,719,081 8,441,005 468,913 6,809,163	11,481,389 6,408,035 577,917 4,476,430	71 73 577 63	84 68 1,074 63	454,367 219,294 2,711 232,362	486,710 229,400 1,713 265,597	41.2 53.4 49.2 33.8	47.8 55.7 56.0 42.4	76,920,485 42,791,823 4,812,198 27,616,404	72,778,489 38,608,863 2,534,747 31,634,879	186 195 1,775 119	150 168 1,420 124	29 30 31 32	
5,817 4,646 3,454 188 983	4,077 3,454 2,61 562	2.4 2.8 1.9 5.2 1.7	1.7 4.1 2.5 1.1	630,169 420,332 100,078 105,869	375,113 284,563 22,188 71,362	108 90 537 111	92 82 364 127	117,397 90,306 1,742 28,340	107,396 81,035 1,742 24,314	48.6 50.5 45.7 43.1	48.0 50.5 47.6 47.0	46,824,374 24,758,437 3,521,782 8,543,155	31,637,626 22,976,618 2,202,459 6,408,568	399 385 2,022 337	285 280 1,622 266	33 34 35 36	
41,628 34,372 2,805 4,461	27,820 22,932 1,578 2,810	15.9 16.7 28.5 9.6	10.3 10.6 19.1 8.8	16,005,710 11,082,757 3,429,422 1,493,531	9,365,094 6,864,838 1,732,271 767,985	384 322 1,223 336	343 299 1,098 273	174,004 137,740 5,024 24,802	166,988 63,611 4,444 60.4	68.5 63.6 53.8 59.9	62.9 63.6 53.8 59.9	106,581,766 73,826,787 6,690,361 20,064,618	80,383,275 60,320,256 4,705,821 15,307,198	613 566 1,332 718	481 438 1,059 617	37 38 39 40	
28,968 22,643 340 970	25,497 24,440 242 755	61.4 61.5 67.6 55.3	50.8 50.9 69.1 44.4	7,287,869 6,672,067 247,117 868,685	7,065,555 6,476,698 298,496 317,161	304 295 727 380	273 265 1,233 420	30,483 25,943 373 1,177	37,257 35,890 211 1,156	78.2 78.5 74.2 67.1	74.5 74.8 60.3 68.0	11,497,733 10,704,144 359,459 404,130	11,907,509 11,442,825 146,771 316,913	377 370 1,044 343	280 319 606 274	41 42 43 44	
6,960 6,415 228 322	6,983 6,571 105 307	48.7 46.6 62.8 40.5	33.1 33.0 67.3 30.3	439,914 355,345 50,911 27,658	440,634 386,466 39,234 14,934	63 55 374 85	63 59 295 49	12,716 11,762 145 659	17,938 16,244 4,445 839	85.2 50.5 47.6 82.8	81.8 51.6 81.2 82.7	7,692,931 6,870,515 4,220,378 322,528	7,467,404 6,954,908 213,534 298,962	599 585 1,427 459	483 486 473 366	45 46 47 48	

AGRICULTURE

TABLE 3.—FARM EXPENDITURES FOR LABOR, FERTILIZER, AND FEED, 1929 AND 1924; DAYS OF HIRED OPERATOR; BY DIVISIONS

DIVISION OR STATE AND TENURE	FARM LABOR (EXCLUSIVE OF HOUSEWORK)												COMMERCIAL FERTILIZER ONLY, 1929			
	Farms reporting				Days of hired labor, 1929		Cash expenditures				Farms reporting purchases	Tons purchased				
	Number		Per cent of all farms ¹				Amount		Average per farm reporting				Number	Per cent of all farms ²	Number	Ave- rage per farm reporting
	1929	1924	1929	1924	Number	Aver- age per farm reporting	1929	1924	1929	1924	Average per day, 1929					
NEW ENGLAND—Con.																
1 Vermont, total	15,364	14,823	61.7	53.3	2,430,947	158	\$5,495,428	\$4,559,726	\$358	\$308	\$2.26	11,928	47.9	17,443	1.48	
2 Owners	13,687	13,217	62.2	53.1	2,001,054	146	4,401,684	3,706,252	322	285	2.20	10,731	48.8	14,096	1.37	
3 Managers	361	280	75.2	74.9	223,360	619	684,882	375,423	1,897	1,632	3.07	264	55.0	1,282	4.78	
4 Tenants	1,316	1,375	54.6	53.1	206,533	157	408,892	418,041	311	304	1.98	333	38.7	1,485	1.50	
5 Massachusetts, total	15,247	15,788	59.6	47.2	5,128,252	337	17,288,318	14,374,649	1,184	910	3.38	14,232	55.6	68,811	4.82	
6 Owners	13,685	14,311	59.0	46.4	4,067,663	297	13,407,437	11,157,879	986	780	3.32	12,891	55.6	68,976	4.57	
7 Managers	793	823	82.8	84.1	833,659	1,051	3,081,048	2,812,794	3,855	3,418	3.70	661	60.0	6,345	9.60	
8 Tenants	789	654	53.3	40.7	236,930	308	709,533	403,976	923	618	3.00	680	47.2	3,290	4.84	
9 Rhode Island, total	1,885	2,159	56.7	55.3	720,381	389	2,276,788	1,894,161	1,208	877	3.16	1,872	56.4	7,909	4.92	
10 Owners	1,567	1,767	55.8	54.2	509,064	325	1,632,618	1,397,427	1,042	701	3.21	1,557	55.4	6,254	4.02	
11 Managers	77	138	77.8	78.4	151,233	1,964	471,475	329,771	6,123	2,390	3.12	69	69.7	517	7.49	
12 Tenants	241	254	68.1	53.8	249	172,695	166,903	717	657	2,377	246	59.3	1,138	4.63		
13 Connecticut, total	9,696	11,611	56.4	50.0	3,566,065	388	11,755,717	10,602,910	1,212	913	3.30	9,474	55.1	68,890	7.27	
14 Owners	8,651	10,499	55.5	49.4	2,675,896	309	8,837,867	7,886,870	1,022	723	2.56	8,601	55.2	56,265	6.54	
15 Managers	434	432	80.2	87.4	680,987	1,569	2,186,284	2,405,583	5,038	5,568	3.21	343	63.4	8,522	24.85	
16 Tenants	611	680	57.2	45.7	209,122	342	731,566	602,757	1,197	897	3.50	530	49.0	4,103	7.74	
MIDDLE ATLANTIC																
17 New York, total	90,455	101,081	56.6	53.6	17,419,836	193	45,421,486	42,325,628	602	418	2.61	81,424	51.0	287,659	3.54	
18 Owners	77,122	84,225	56.7	52.7	13,676,964	177	34,970,107	32,500,335	453	386	2.56	89,751	51.3	231,226	3.32	
19 Managers	1,974	1,769	74.4	78.2	1,654,430	838	5,431,418	4,383,423	2,706	2,478	3.23	1,377	51.9	10,004	7.27	
20 Tenants	11,259	15,007	53.8	56.9	2,088,433	184	5,109,961	5,348,870	450	354	2.45	10,290	48.8	46,729	4.54	
21 New Jersey, total	14,648	15,478	57.7	53.2	8,636,346	385	17,552,491	14,186,113	1,198	917	3.11	16,913	66.6	182,381	9.60	
22 Owners	11,629	12,020	56.0	49.3	3,824,185	329	11,966,339	10,655,928	1,023	881	3.13	13,712	66.0	123,061	8.67	
23 Managers	499	812	75.7	75.5	913,451	1,831	3,003,634	1,165,517	6,081	8,739	2.29	471	71.5	9,552	20.28	
24 Tenants	2,520	3,076	63.5	65.1	998,710	257	2,574,518	2,362,608	1,022	768	2.86	2,730	69.1	29,748	10.90	
25 Pennsylvania, total	92,865	98,810	53.9	49.0	12,851,617	138	31,713,599	24,375,708	343	248	2.47	107,988	62.6	348,113	3.22	
26 Owners	75,899	78,934	53.3	47.9	9,283,477	122	22,960,860	17,740,802	295	226	2.41	89,517	62.9	266,728	2.98	
27 Managers	1,977	1,334	72.1	74.5	1,550,020	784	4,969,760	2,230,191	2,514	1,672	3.21	1,826	66.6	14,188	7.77	
28 Tenants	14,939	18,642	54.7	53.8	2,018,120	135	4,382,979	4,404,715	292	236	2.17	16,645	60.8	67,107	4.04	
EAST NORTH CENTRAL																
29 Ohio, total	90,963	93,180	41.2	37.7	11,065,757	122	25,409,283	22,026,027	281	238	2.30	128,486	59.0	330,444	2.55	
30 Owners	65,835	64,468	41.2	35.5	7,589,747	115	17,416,430	14,706,756	265	228	2.29	95,710	59.9	220,775	2.40	
31 Managers	1,110	766	60.2	72.3	874,072	787	2,431,240	1,620,801	2,235	2,110	2.84	1,088	58.9	7,119	6.56	
32 Tenants	23,418	26,956	40.7	43.3	2,591,938	111	5,511,603	4,608,470	235	211	2.13	32,600	56.7	93,525	2.88	
33 Indiana, total	88,943	86,430	38.0	33.9	8,257,812	190	18,736,360	14,648,159	243	231	2.03	81,679	45.0	208,144	2.52	
34 Owners	46,771	43,475	37.3	31.6	5,378,691	115	10,930,968	9,392,846	234	216	2.03	57,633	45.9	134,831	2.34	
35 Managers	827	683	56.0	53.9	457,652	590	1,175,936	764,356	1,422	1,119	2.41	706	47.8	3,891	5.51	
36 Tenants	21,345	22,272	39.1	39.0	2,391,489	112	4,678,426	4,490,957	219	202	1.96	23,340	42.8	67,422	2.89	
37 Illinois, total	112,916	124,543	52.6	55.2	18,216,508	161	40,946,080	48,146,174	363	346	2.25	15,143	7.1	53,800	3.55	
38 Owners	68,231	64,566	49.4	50.0	9,436,422	159	21,331,118	21,988,373	360	341	2.26	0,437	7.9	31,049	3.29	
39 Managers	1,328	1,138	62.6	60.6	1,123,880	851	8,085,980	2,416,085	2,324	2,124	2.73	270	12.7	2,054	10.94	
40 Tenants	52,357	58,845	56.6	62.2	7,650,200	146	16,528,982	18,741,116	316	318	2.16	5,436	5.9	19,797	3.04	
41 Michigan, total	76,078	85,213	44.9	44.3	8,267,791	109	19,828,747	19,847,287	261	233	2.40	66,550	39.3	140,083	2.10	
42 Owners	64,228	70,778	45.3	43.7	6,370,187	99	15,082,845	15,510,678	238	219	2.37	55,916	39.5	118,920	2.04	
43 Managers	1,064	821	69.5	66.5	910,943	836	2,689,477	1,769,232	2,537	2,142	2.98	618	40.4	4,270	6.91	
44 Tenants	10,786	13,614	41.2	46.8	980,661	91	2,070,925	2,577,377	192	180	2.10	10,016	38.2	21,893	2.19	
45 Wisconsin, total	100,062	103,925	55.0	53.8	14,865,884	149	29,481,697	26,836,611	295	258	1.98	25,738	14.2	42,588	1.65	
46 Owners	81,057	86,496	55.1	53.4	11,742,420	145	23,036,540	21,550,985	284	250	1.96	20,988	14.3	32,453	1.55	
47 Managers	1,098	772	66.2	66.2	672,454	612	1,752,505	1,006,183	1,596	1,303	2.61	357	21.5	2,504	7.18	
48 Tenants	17,967	16,637	54.1	55.6	2,451,004	137	4,692,652	4,179,488	202	251	1.91	4,411	13.3	7,564	1.71	
West North Central																
49 Minnesota, total	105,057	104,924	56.7	55.7	18,204,376	196	27,526,878	27,468,220	262	282	2.08	8,968	4.8	15,803	1.76	
50 Owners	70,466	72,664	55.7	53.3	8,847,251	126	18,184,714	19,316,283	258	206	2.06	6,569	5.2	11,351	1.73	
51 Managers	711	472	67.9	61.6	539,037	758	1,419,036	1,006,578	1,996	1,285	2.63	138	13.2	668	4.84	
52 Tenants	33,850	31,788	58.8	62.2	3,818,058	113	7,923,128	7,540,363	234	237	2.08	2,271	3.9	3,784	1.67	
53 Iowa, total	122,669	118,763	57.1	56.1	17,608,422	144	39,881,166	35,529,168	393	297	2.25	10,015	4.7	21,177	2.11	
54 Owners	62,877	62,266	56.5	53.5	9,433,600	140	21,130,410	19,851,543	336	319	2.24	6,116	5.5	12,151	1.99	
55 Managers	1,124	999	56.8	60.5	622,416	554	1,547,371	961,632	1,277	903	2.49	120	6.1	833	6.94	
56 Tenants	58,668	56,488	57.7	59.2	7,532,166	129	16,394,375	14,715,903	261	225	2.25	3,770	3.7	8,193	2.17	

¹ Marl was not specified in the question covering expenditures in 1924.² Based on all farms in each tenure class, see Chapter III.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 513

LABOR, AND TONS OF COMMERCIAL FERTILIZER PURCHASED, 1929; WITH FARMS REPORTING; BY TENURE AND STATES—Continued

EXPENDITURES FOR COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE ¹										FEED							
Farms reporting				Amount				Farms reporting				Expenditures					
Number		Per cent of all farms ²		1929		1924		Number		Per cent of all farms ²		Amount		Average per farm reporting			
1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924
11,945	18,008	48.0	46.8	\$881,259	\$793,793	357	361	21,900	22,287	88.0	83.8	\$11,546,985	\$10,084,490	8527	8431	1	
10,747	11,699	48.8	47.0	576,646	683,470	54	58	19,468	20,898	88.5	84.0	10,045,429	8,773,093	516	420	2	
284	178	55.0	58.0	49,470	33,952	187	191	398	245	82.9	79.8	445,794	283,318	1,120	1,156	3	
934	1,129	38.8	43.6	56,243	76,371	60	68	2,034	2,144	84.4	82.8	1,055,772	978,079	519	456	4	
14,289	15,146	55.8	45.3	3,014,621	3,336,237	211	220	21,634	22,855	84.5	86.2	20,671,183	19,775,434	955	885	5	
12,943	13,980	55.8	45.3	2,606,622	2,863,596	201	205	19,676	26,847	84.8	87.0	17,756,620	17,308,578	902	645	6	
662	600	69.1	61.3	273,985	350,383	423	584	787	837	82.2	85.5	1,808,982	1,690,126	2,299	2,019	7	
684	566	47.4	35.3	128,014	117,268	187	207	1,171	1,169	81.2	72.8	1,105,631	776,730	944	664	8	
1,890	2,184	56.9	55.8	386,198	301,414	178	138	2,892	3,633	87.1	92.9	3,047,274	3,046,410	1,054	839	9	
1,573	1,801	50.0	55.2	264,169	229,947	168	128	2,437	3,017	86.8	92.5	2,370,544	2,414,483	973	800	10	
71	126	71.7	71.6	21,747	25,848	306	205	88	168	83.8	95.5	209,310	172,991	2,522	1,030	11	
246	257	59.3	54.4	50,280	45,619	204	178	372	448	89.6	94.9	467,420	458,931	1,257	1,024	12	
9,500	11,533	55.2	49.6	3,653,387	4,368,578	385	379	15,038	20,710	87.5	89.1	18,030,306	12,590,290	886	608	13	
8,626	10,597	55.3	49.8	2,944,086	3,532,032	341	333	13,698	19,006	87.9	89.4	11,463,046	11,104,158	837	584	14	
343	326	63.4	66.0	503,421	538,486	1,468	1,652	454	450	83.9	91.1	737,536	695,265	1,625	1,545	15	
531	610	49.7	41.0	205,880	298,060	388	489	886	1,254	83.0	84.3	829,724	790,867	930	631	16	
80,500	102,403	56.8	54.3	11,505,537	11,806,671	127	113	131,917	145,614	82.5	77.1	77,399,938	62,075,138	587	426	17	
77,785	80,381	57.2	54.0	9,157,371	9,298,678	118	108	112,706	124,578	83.6	77.9	64,967,888	51,870,191	571	416	18	
1,388	1,308	59.4	60.5	428,871	388,601	272	284	1,769	1,769	79.3	77.8	3,192,251	2,364,176	1,517	1,344	19	
11,160	14,654	52.9	55.2	1,919,295	1,919,392	172	131	16,107	19,277	76.3	72.6	9,239,849	7,840,772	574	407	20	
16,948	20,191	66.8	68.0	6,583,386	8,597,114	388	428	20,970	24,906	82.6	83.9	20,898,368	18,489,007	983	661	21	
13,745	16,418	65.2	68.9	5,021,930	6,667,665	365	406	17,395	20,730	83.7	84.5	16,267,887	13,322,375	935	643	22	
471	306	71.5	74.1	398,663	246,495	846	806	494	305	75.0	73.8	1,741,744	800,880	3,526	1,970	23	
2,732	3,407	69.2	73.4	1,162,575	1,682,754	426	485	2,081	3,871	78.0	82.0	2,818,727	2,535,752	915	655	24	
117,371	128,055	68.1	68.9	12,113,421	11,189,476	103	87	140,617	149,642	81.8	74.8	56,456,382	43,620,645	402	261	25	
97,778	105,679	68.7	64.6	9,497,982	8,816,010	97	83	117,782	123,087	82.8	75.2	45,119,488	34,352,885	383	270	26	
1,990	1,292	72.8	72.1	562,335	305,082	282	236	2,068	1,298	75.2	72.5	2,570,121	1,151,155	1,246	887	27	
17,597	21,084	64.2	60.3	2,053,124	2,068,434	117	98	20,772	25,457	75.8	72.8	8,768,723	8,116,605	422	319	28	
181,372	137,207	59.9	56.1	11,028,050	9,081,866	84	66	140,188	142,395	63.9	58.2	32,603,845	26,086,571	233	183	29	
97,272	100,062	60.9	55.2	7,810,905	6,432,294	80	64	107,287	108,035	67.1	59.6	24,657,791	19,374,186	280	179	30	
1,127	671	61.2	63.8	2,777,419	139,042	246	207	1,143	689	62.0	65.0	1,248,968	924,294	1,093	906	31	
32,973	36,474	57.2	58.5	2,939,726	2,510,330	89	69	31,692	33,671	55.0	54.1	6,697,086	6,088,142	211	181	32	
83,006	76,950	45.7	39.3	7,054,319	5,711,549	85	74	113,734	102,795	62.6	52.5	28,158,018	19,085,687	230	185	33	
58,617	54,627	46.7	39.7	4,643,034	3,898,625	79	71	83,225	74,714	66.3	54.4	18,707,017	13,463,616	225	180	34	
742	546	50.2	43.1	156,103	53,407	210	153	816	577	55.2	45.5	768,168	369,466	941	640	35	
23,647	21,777	43.3	38.1	2,255,182	1,731,517	95	80	29,693	27,504	54.4	48.2	6,659,833	5,232,605	224	190	36	
30,639	21,558	14.3	9.6	3,583,825	2,298,485	117	104	143,837	128,484	66.8	57.0	35,973,445	32,871,062	251	258	37	
19,936	14,526	16.6	11.3	2,198,681	1,409,858	110	97	76,245	84,916	70.8	59.1	22,296,180	20,310,655	263	268	38	
488	254	23.0	13.5	176,335	131,452	381	518	1,195	892	56.3	47.5	1,505,573	923,275	1,260	1,035	39	
10,215	6,779	11.0	7.2	2,128,859	698,155	119	103	57,227	51,347	61.9	64.2	12,171,742	11,637,122	213	227	40	
72,128	61,874	49.6	32.2	5,474,121	3,970,682	78	84	107,275	95,802	63.3	49.6	31,050,635	14,599,725	196	153	41	
60,813	51,545	42.9	31.8	4,447,212	3,257,105	73	63	91,959	80,961	64.9	50.0	17,209,883	11,963,308	187	148	42	
701	460	46.8	38.0	218,758	100,693	312	215	965	699	63.1	64.6	1,135,009	551,649	1,176	789	43	
10,614	9,860	40.5	33.9	808,151	612,888	76	62	14,351	13,642	54.8	40.8	2,705,743	2,084,708	189	153	44	
83,644	18,049	18.5	9.3	2,133,377	1,197,288	68	63	137,954	136,835	75.8	70.9	31,086,790	27,002,160	206	187	45	
27,789	15,366	18.9	9.5	1,647,947	917,458	59	60	113,581	115,787	77.3	71.5	24,768,137	22,268,203	218	192	46	
427	201	25.7	17.2	135,865	40,710	318	208	1,132	778	68.2	66.2	958,428	410,500	847	531	47	
5,428	2,482	16.4	8.3	349,565	179,094	64	72	23,241	20,375	70.2	68.1	5,360,225	4,332,457	231	213	48	
9,402	4,989	5.1	2.7	714,055	453,944	76	91	113,627	95,044	61.3	50.5	19,678,968	14,638,508	173	154	49	
6,871	4,045	5.4	3.0	510,993	350,886	74	87	80,664	70,805	63.7	51.9	13,685,502	10,830,477	170	153	50	
147	51	14.0	6.7	38,814	19,478	264	382	610	378	58.3	48.7	538,919	210,558	883	664	51	
2,384	893	4.1	1.7	164,248	83,580	69	94	32,353	23,586	56.1	40.7	5,434,545	3,597,467	169	151	52	
15,787	6,382	7.3	5.0	1,171,393	537,703	74	84	145,500	134,282	67.7	62.9	53,709,953	49,281,009	369	367	53	
10,060	4,266	9.0	3.7	704,377	351,209	70	82	78,844	70,890	71.7	65.6	32,227,594	31,000,073	404	406	54	
208	56	10.5	3.4	47,076	12,271	226	219	1,061	694	53.6	42.1	1,439,771	762,119	1,357	1,068	55	
5,490	2,060	5.4	2.2	419,940	174,223	76	85	64,595	57,198	63.6	60.0	20,035,588					

AGRICULTURE

TABLE 3.—FARM EXPENDITURES FOR LABOR, FERTILIZER, AND FEED, 1929 AND 1924; DAYS OF HIRED OPERATOR; BY DIVISIONS

DIVISION OR STATE AND TENURE	FARM LABOR (EXCLUSIVE OF HOUSEWORK)												COMMERCIAL FERTILIZER ONLY, 1929			
	Farms reporting				Days of hired labor, 1929		Cash expenditures				Farms reporting purchases	Tons purchased				
	Number		Per cent of all farms ²		Number	Ave- rage per farm report- ing	Amount		Average per farm report- ing	Ave- rage wage per day, 1929	Number	Per cent of all farms ²	Number	Ave- rage per farm report- ing		
	1929	1924	1923	1924			1929	1924	1929	1924						
WEST NORTH CENTRAL—Continued																
1 Missouri, total	96,649	94,715	87.8	36.4	10,662,948	110	\$19,851,509	\$18,631,739	\$905	\$197	32,584	12.7	57,432	1.76		
2 Owners	68,746	64,762	41.6	37.1	7,235,108	105	13,246,061	12,317,305	193	190	25,128	15.2	42,195	1.63		
3 Managers	868	666	52.3	82.7	593,759	735	1,377,718	650,307	1,705	1,161	2,322	14.8	1,221	5.33		
4 Tenants	27,005	29,393	30.4	34.6	2,835,980	105	5,227,700	5,664,127	193	184	7,207	8.1	14,016	1.94		
5 North Dakota, total	57,838	62,856	74.2	81.7	8,765,369	152	24,664,684	33,502,659	425	540	2,81	342	0.4	958	2.80	
6 Owners	37,906	40,833	75.8	82.5	6,111,644	161	17,122,109	23,458,287	451	574	2,80	251	0.5	624	2.49	
7 Managers	366	289	77.9	80.1	216,173	591	552,988	498,079	1,511	1,682	2,56	12	2.6	45	3.75	
8 Tenants	19,476	20,928	71.1	80.2	2,437,652	125	6,910,587	6,558,323	355	457	2,84	79	0.3	289	3.06	
9 South Dakota, total	45,762	49,540	58.6	62.3	6,144,287	136	14,647,192	15,493,334	300	313	2.38	103	0.1	133	1.93	
10 Owners	27,475	28,084	60.2	60.8	3,822,989	139	9,034,016	9,776,915	329	348	2.36	73	0.2	77	1.05	
11 Managers	273	165	60.1	49.8	156,502	573	362,815	224,275	1,429	1,359	2.51	1	0.2	1	1.00	
12 Tenants	21,914	21,291	56.7	64.4	2,164,806	103	5,220,362	5,491,144	248	258	2.41	29	0.1	55	1.90	
13 Nebraska, total	76,806	74,950	59.3	55.7	9,846,115	128	25,356,051	22,560,194	330	301	2.55	428	0.3	733	1.71	
14 Owners	40,751	39,472	60.5	65.2	8,791,448	142	14,573,323	13,876,539	357	339	2.52	238	0.4	426	1.84	
15 Managers	357	357	56.3	53.4	352,128	619	910,057	827,346	1,585	1,477	2.56	10	1.0	20	2.00	
16 Tenants	35,451	35,121	55.1	58.2	3,799,598	107	9,872,671	8,656,309	278	246	2.60	180	0.3	273	1.52	
17 Kansas, total	96,123	102,190	57.9	61.8	10,065,827	104	27,020,617	33,764,544	281	381	2.70	8,998	2.4	10,097	2.59	
18 Owners	56,906	57,990	60.1	60.9	6,482,584	114	17,297,618	20,463,595	304	353	2.67	2,027	2.8	6,671	2.50	
19 Managers	548	452	57.4	62.0	279,574	693	1,033,425	599,837	1,805	1,327	2.74	28	2.7	118	4.35	
20 Tenants	36,669	43,735	55.0	62.5	3,143,669	81	8,684,574	12,721,112	225	291	2.76	1,346	1.9	3,413	2.54	
SOUTH ATLANTIC																
21 Delaware, total	5,265	4,426	54.4	43.3	1,060,233	206	2,516,058	1,768,536	476	400	2.31	7,525	77.5	42,736	5.68	
22 Owners	3,542	2,712	56.6	41.6	658,110	186	1,536,866	874,949	434	323	2.34	5,072	81.0	25,518	5.03	
23 Managers	118	66	71.5	89.2	115,616	980	323,230	228,116	7,739	3,457	2.80	113	68.5	1,340	16.28	
24 Tenants	1,626	1,648	49.5	44.9	316,507	195	657,962	665,412	405	404	2.08	2,340	71.3	15,380	6.57	
25 Maryland total	26,454	24,665	58.9	50.3	5,965,744	234	12,865,994	9,833,006	505	399	2.18	33,676	77.9	180,363	5.36	
26 Owners	18,077	17,040	58.6	48.5	8,813,708	211	8,407,231	6,016,801	465	383	2.20	24,046	78.0	114,539	4.76	
27 Managers	747	712	70.6	76.1	693,766	929	1,720,729	1,227,513	2,304	1,724	2.48	741	78.9	10,428	14.07	
28 Tenants	6,630	6,907	57.9	53.4	1,458,280	220	2,738,034	2,588,692	413	375	1.88	8,839	77.7	55,396	6.23	
29 District of Columbia, total	70	75	67.3	56.1	95,538	1,365	316,842	322,480	4,526	4,134	3.82	72	69.3	305	4.34	
30 Owners	58	42	64.4	51.9	21,889	576	60,116	74,484	1,582	1,773	2.75	40	67.8	128	3.20	
31 Managers	18	16	85.7	84.2	70,223	3,901	248,791	280,612	13,413	3,54	16	76.2	185	8.44		
32 Tenants	14	20	58.3	51.3	3,424	245	7,935	17,404	567	870	2.82	16	66.7	42	2.63	
33 Virginia, total	62,451	60,427	36.6	31.2	10,337,668	166	18,774,106	15,287,301	301	252	1.82	108,162	63.4	388,837	3.60	
34 Owners	49,545	47,475	40.9	33.1	7,381,238	140	13,018,282	11,017,142	263	232	1.70	76,680	63.3	247,979	8.23	
35 Managers	1,124	889	73.2	71.8	1,279,398	1,138	2,749,430	1,576,395	2,446	1,773	2.15	1,032	0.72	14,143	18.70	
36 Tenants	11,783	12,963	24.6	24.7	1,677,692	142	3,006,424	2,643,764	255	219	1.79	30,450	63.5	120,815	4.16	
37 West Virginia, total	28,933	24,300	35.0	26.9	2,500,687	89	5,011,736	3,761,028	173	155	1.94	30,208	36.8	45,656	1.51	
38 Owners	25,400	21,266	38.2	28.4	1,974,844	78	8,743,215	2,808,174	147	132	1.90	26,591	39.9	37,765	1.42	
39 Managers	445	294	61.7	59.5	398,457	761	783,023	544,384	1,760	1,382	2.31	396	54.9	2,210	5.58	
40 Tenants	3,085	2,650	20.1	17.9	267,380	87	485,498	406,464	157	154	1.82	3,221	21.0	5,631	1.76	
41 North Carolina, total	68,837	69,551	31.6	24.5	7,857,744	88	11,673,988	8,066,128	131	116	1.49	233,467	83.5	1,107,763	4.74	
42 Owners	52,914	50,936	37.4	25.7	4,063,498	94	7,330,872	5,029,970	139	126	1.48	117,776	83.3	505,084	4.29	
43 Managers	455	275	70.2	65.0	618,244	1,359	1,107,134	580,285	2,433	2,070	1.70	561	86.6	14,450	25.76	
44 Tenants	35,468	29,473	23.8	23.0	2,274,002	64	3,226,932	2,496,568	91	85	1.42	115,130	88.7	588,229	5.11	
45 South Carolina, total	49,190	50,631	31.1	22.9	8,556,808	176	9,002,864	8,188,898	206	104	1.04	188,976	88.0	708,470	5.10	
46 Owners	20,647	46,452	34.4	34.4	6,612,312	223	5,749,588	5,569,343	228	271	1.02	47,570	87.3	280,557	5.00	
47 Managers	492	261	71.0	70.9	774,296	1,574	987,139	438,937	1,966	1,682	1.25	592	85.4	18,820	31.70	
48 Tenants	23,517	18,623	22.9	16.6	2,262,901	97	2,286,167	2,130,612	97	114	1.01	90,814	88.4	409,093	4.50	
49 Georgia, total	78,998	60,345	30.9	24.2	12,928,188	154	18,992,163	11,926,186	177	188	1.15	216,633	84.8	860,803	3.97	
50 Owners	34,557	29,659	43.5	33.5	6,751,149	195	7,633,874	7,404,356	221	249	1.13	67,820	85.0	206,294	4.37	
51 Managers	1,018	1,023	72.4	72.7	1,750,490	1,720	2,326,316	1,630,756	2,285	1,594	1.33	1,158	82.4	30,600	26.42	
52 Tenants	43,423	29,633	24.9	18.6	2,700,524	85	4,931,962	2,891,012	93	98	1.09	147,646	84.7	533,708	3.01	
53 Florida, total	27,977	23,275	47.4	39.3	8,486,734	303	17,734,087	14,232,447	884	611	2.09	38,480	67.0	372,473	9.43	
54 Owners	20,212	19,785	51.3	43.4	5,163,241	235	10,614,078	8,509,536	526	561	2.06	27,609	70.1	231,089	8.37	
55 Managers	2,326	846	82.4	83.2	2,185,703	936	4,932,455	2,406,285	2,111	2,805	2.26	2,455	86.6	84,812	34.55	
56 Tenants	5,429	2,650	32.4	21.0	1,117,690	206	2,177,584	925,626	401	349	1.95	9,416	56.3	56,622	6.01	
EAST SOUTH CENTRAL																
57 Kentucky, total	70,786	54,879	28.7	21.3	8,906,7											

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 515

LABOR, AND TONS OF COMMERCIAL FERTILIZER PURCHASED, 1929; WITH FARMS REPORTING; BY TENURE AND STATES—Continued

EXPENDITURES FOR COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE ¹										FRED							
Farms reporting				Amount				Farms reporting				Expenditures					
Number		Per cent of all farms ²				Average per farm reporting		Number		Per cent of all farms ²							
1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924	1929	1924
35,762	27,624	14.0	10.7	\$2,030,492	\$1,497,843	\$87	\$54	167,613	144,743	65.5	55.6	\$47,352,496	\$33,841,346	\$282	\$284	1	
27,670	22,184	16.7	12.7	1,510,531	1,171,160	55	53	119,429	102,804	72.2	59.0	35,250,049	25,339,193	205	246	2	
269	106	17.4	10.0	51,651	15,914	192	150	903	522	58.4	49.1	1,526,503	639,516	1,060	1,225	3	
7,814	5,664	8.8	6.7	408,310	210,709	60	55	47,281	41,416	53.1	48.7	10,466,944	7,862,037	221	190	4	
572	341	0.7	0.4	51,658	76,291	91	224	26,296	26,260	36.3	34.6	4,208,745	3,845,079	149	146	5	
397	234	0.8	0.5	30,809	40,931	78	201	17,320	15,275	34.6	30.9	2,503,016	2,224,199	145	146	6	
15	15	3.2	—	2,794	186	189	133	150	40.2	26.8	110,768	51,729	586	389	7		
160	107	0.6	0.4	18,255	20,360	114	274	10,787	10,862	39.4	41.6	1,589,961	1,588,151	147	145	8	
319	309	0.4	0.4	21,452	51,838	87	168	40,527	30,411	48.7	38.2	12,435,836	8,737,498	307	287	9	
205	182	0.4	0.4	13,148	23,786	84	158	22,835	16,871	50.1	36.5	7,429,255	5,298,570	325	314	10	
4	1	0.9	0.3	177	500	44	600	212	116	46.7	35.0	413,748	162,711	1,932	1,403	11	
110	126	0.3	0.4	8,127	22,552	74	179	17,480	13,424	47.1	40.6	4,592,823	3,281,215	263	244	12	
885	815	0.5	0.6	65,709	132,890	78	163	78,855	71,092	61.8	55.7	42,286,136	34,309,338	533	483	13	
887	484	0.6	0.7	31,230	82,827	81	173	44,009	38,736	68.8	57.2	26,789,187	22,360,014	609	577	14	
11	2	1.1	0.3	1,112	220	101	110	550	319	53.9	47.7	2,219,950	1,045,332	4,036	3,287	15	
287	329	0.5	0.6	21,367	40,143	74	149	34,796	32,037	57.0	54.0	13,276,099	10,890,802	382	340	16	
5,471	3,247	3.3	2.0	428,622	341,658	78	105	103,706	99,135	69.5	59.8	35,115,361	28,078,108	339	293	17	
3,096	2,165	3.9	2.3	288,434	237,187	78	110	63,819	57,087	60.6	60.6	24,287,107	18,509,994	380	338	18	
42	18	4.4	1.8	8,868	2,194	211	169	624	368	64.9	49.1	1,081,018	437,276	2,068	1,221	19	
1,733	1,069	2.5	1.5	181,330	102,277	76	96	39,865	41,096	56.0	58.7	9,797,288	8,130,338	249	222	20	
7,550	7,836	77.8	76.4	1,300,871	1,142,487	173	146	7,417	6,926	76.4	67.5	8,884,889	1,935,095	487	279	21	
5,090	5,143	81.3	78.9	804,772	683,650	158	133	5,147	4,608	82.2	70.7	2,946,990	1,912,581	553	285	22	
115	61	69.7	82.4	64,010	32,433	557	532	105	54	63.6	73.0	111,383	94,208	1,061	1,745	23	
2,845	2,632	71.5	71.8	431,789	426,404	184	162	2,165	2,264	66.0	61.7	726,516	528,216	336	233	24	
33,697	35,595	78.0	72.6	5,625,079	5,195,701	164	144	38,070	32,544	74.2	66.4	10,613,261	7,599,600	331	334	25	
24,062	25,243	78.1	71.8	3,636,862	3,401,594	151	135	24,070	24,453	69.6	64.4	5,896,048	5,622,217	328	230	26	
743	695	79.1	74.3	312,620	191,513	421	276	682	595	70.5	63.6	651,819	361,488	985	608	27	
8,892	9,657	77.7	74.7	1,575,597	1,582,594	177	159	7,838	7,496	64.1	58.0	2,065,394	1,616,895	281	216	28	
75	89	70.2	64.0	18,159	39,104	949	439	84	100	60.6	71.9	117,080	201,497	1,398	3,015	29	
40	56	67.8	69.1	5,145	15,076	129	269	44	57	76.6	70.4	9,957	8,456	228	608	30	
17	11	81.0	57.9	10,981	19,811	648	1,801	18	15	85.7	78.9	102,433	154,821	5,691	10,821	31	
16	22	66.7	56.4	2,038	4,217	127	192	22	28	91.7	73.8	4,640	12,020	211	429	22	
110,588	118,373	84.8	86.2	11,780,935	13,082,775	107	104	81,507	91,338	47.8	47.1	12,640,444	10,866,783	155	118	33	
78,725	90,640	65.0	63.1	7,312,164	8,246,152	93	91	65,398	78,615	50.4	51.3	10,021,084	8,897,911	183	114	34	
1,081	822	70.4	66.4	479,601	361,260	444	439	997	695	58.4	61.1	884,240	536,334	986	772	25	
30,732	34,911	64.2	71.4	3,989,170	4,475,363	130	128	15,212	17,028	31.7	34.8	1,735,140	1,432,538	114	84	36	
30,320	28,945	36.7	32.0	1,161,087	1,049,207	38	36	44,942	51,486	54.4	56.9	5,893,976	5,968,121	127	116	37	
26,602	25,623	40.1	34.2	952,783	871,153	38	34	38,595	43,347	58.0	57.8	4,810,576	5,012,768	126	116	38	
308	291	54.9	44.0	71,651	46,313	181	150	402	322	55.8	53.2	168,081	101,452	418	288	39	
3,232	3,081	21.1	20.5	136,653	131,741	42	43	5,945	7,767	38.7	32.6	715,319	846,901	120	100	40	
234,496	238,319	83.8	84.1	34,686,830	33,001,784	148	134	131,859	107,359	43.6	37.9	11,115,763	8,674,786	91	81	41	
118,322	125,923	83.7	81.3	15,028,115	15,323,402	132	122	73,873	68,199	52.2	42.8	7,206,864	5,571,783	98	84	42	
565	351	57.2	58.0	457,363	242,456	809	691	281	219	58.8	51.8	487,570	198,940	1,260	908	43	
115,469	112,045	83.9	87.4	18,601,362	16,455,896	161	147	47,605	40,941	34.6	31.9	8,421,329	2,904,068	72	71	44	
139,234	155,850	88.2	90.1	22,080,531	24,306,494	159	156	40,134	28,741	25.4	15.8	8,873,484	2,821,975	80	87	45	
47,639	53,461	87.5	89.1	8,847,916	10,364,381	188	194	17,701	11,897	33.5	18.8	1,986,624	1,215,764	112	102	46	
595	321	86.3	87.2	588,744	535,775	985	1,102	221	96	26.1	21.6	206,958	40,086	1,181	417	47	
90,967	101,868	88.5	90.6	12,048,871	13,588,338	189	183	22,212	14,748	21.6	13.1	1,326,913	1,066,185	80	72	48	
217,456	212,914	85.1	85.2	27,533,063	21,100,035	127	99	77,050	68,682	30.1	28.8	8,357,699	6,305,053	108	101	49	
68,247	78,161	85.5	82.5	9,488,579	8,206,036	139	113	33,117	29,356	41.5	33.1	4,763,577	3,617,933	144	123	50	
1,167	1,191	83.0	84.6	934,543	734,881	801	617	538	538	38.1	35.2	499,282	282,003	981	524	51	
148,012	137,882	84.9	86.7	17,109,941	12,069,118	116	88	43,397	32,788	24.9	20.6	3,094,840	2,405,117	71	73	52	
39,805	37,945	87.5	84.1	15,162,647	12,624,513	381	333	22,487	23,591	38.1	38.8	8,066,841	6,498,881	361	271	53	
27,550	30,530	70.7	67.0	9,463,486	9,907,713	340	324	17,613	20,471	44.7	44.9	6,145,860	5,862,485	349	262	54	
2,465	2,662	86.9	85.3	8,446,653	1,481,644	1,308	1,719	339	449	29.6	44.5	6,966,438	474,407	830	1,057	55	
9,481	6,644	56.6	51.9	2,242,508	1,230,156	237	189	4,005	2,671	23.9	21.2	1,254,543	566,059	313	212	56	
74,112	71,874	30.1	27.8	2,588,592	2,278,874	35	32	105,456	94,052	42.8	38.4	12,506,508	9,183,075	110	87	57	
67,388	66,790	36.4	3														

AGRICULTURE

TABLE 3.—FARM EXPENDITURES FOR LABOR, FERTILIZER, AND FEED, 1929 AND 1924; DAYS OF HIRED OPERATOR; BY DIVISIONS

DIVISION OR STATE AND TENURE	FARM LABOR (EXCLUSIVE OF HOUSEWORK)										COMMERCIAL FERTILIZER ONLY, 1929				
	Farms reporting				Days of hired labor, 1929		Cash expenditures				Farms reporting purchases	Tons purchased			
	Number		Per cent of all farms ¹		Number	Ave- rage per farm report- ing	Amount		Average per farm report- ing	Ave- rage wage per day, 1929	Number	Per cent of all farms ¹	Number	Ave- rage per farm report- ing	
	1929	1924	1929	1924			1929	1924							
EAST SOUTH CENTRAL—Continued															
1 Alabama, total...	60,385	62,892	23.5	23.3	5,745,780	95	\$7,072,800	\$5,503,444	\$117	\$104	\$1.23	207,677	80.7	646,707	3.11
2 Owners...	29,576	24,481	32.7	26.3	3,628,123	123	4,500,045	3,347,542	152	137	1.24	78,206	86.6	265,910	3.40
3 Managers...	408	285	67.7	63.6	470,298	1,153	706,599	379,423	1,732	1,331	1.50	429	71.1	9,632	22.48
4 Tenants...	30,381	28,126	18.3	19.5	1,647,359	54	1,865,556	1,776,479	61	63	1.13	128,082	77.5	371,165	2.38
5 Mississippi, total...	47,811	29,159	15.3	11.8	4,807,382	96	6,552,268	4,635,371	137	156	1.42	151,063	48.3	307,697	2.04
6 Owners...	23,086	16,330	27.5	20.2	2,772,640	117	3,793,979	3,064,447	160	188	1.37	59,411	69.0	146,614	2.47
7 Managers...	644	344	64.5	50.7	694,655	1,079	1,136,186	477,637	1,764	1,388	1.64	498	49.8	7,348	14.76
8 Tenants...	23,491	12,485	10.4	7.1	1,140,107	49	1,622,101	993,287	69	80	1.42	91,184	40.4	153,735	1.09
WEST SOUTH CENTRAL															
9 Arkansas, total...	68,036	62,223	27.2	23.0	6,043,458	92	9,627,117	8,677,517	148	156	1.59	73,814	30.3	127,288	1.74
10 Owners...	33,951	29,200	38.1	30.6	3,451,016	102	5,448,672	4,933,945	160	169	1.58	40,009	45.0	70,360	1.76
11 Managers...	373	418	58.8	67.9	423,077	1,134	754,764	505,883	2,023	2,167	1.78	199	31.4	1,924	9.67
12 Tenants...	31,712	32,605	20.8	25.9	2,169,365	68	3,423,681	3,837,689	108	118	1.58	33,046	21.6	55,009	1.66
13 Louisiana, total...	35,919	27,191	22.2	20.5	8,863,103	247	13,061,388	11,855,448	364	436	1.47	86,333	41.1	143,617	2.17
14 Owners...	18,293	15,122	34.4	28.9	4,335,235	237	6,001,276	6,702,186	361	443	1.52	30,136	56.7	73,543	2.44
15 Managers...	489	388	66.5	77.1	2,505,729	5,124	3,423,462	2,417,110	7,001	6,230	1.37	340	46.3	7,122	20.95
16 Tenants...	17,137	11,681	15.9	14.7	2,042,139	119	3,066,650	2,736,652	178	234	1.50	35,857	33.3	62,992	1.76
17 Oklahoma, total...	96,806	94,978	44.4	43.2	10,024,544	111	22,945,141	26,288,224	246	276	2.22	4,171	2.0	7,895	1.89
18 Owners...	43,107	43,385	55.5	53.4	5,435,077	126	12,050,820	13,176,962	280	304	2.22	2,252	2.9	4,628	2.06
19 Managers...	454	303	55.2	61.3	3,577,945	788	754,162	475,968	1,661	1,571	2.11	37	4.5	168	4.64
20 Tenants...	47,045	51,290	27.5	44.4	4,231,522	90	9,440,150	12,055,294	201	245	2.23	1,882	1.5	3,009	1.65
21 Texas, total...	202,287	201,888	40.8	43.4	33,447,178	165	65,660,912	71,933,324	325	356	1.98	75,955	15.3	183,010	2.01
22 Owners...	94,981	85,951	49.9	47.0	17,307,795	182	34,621,982	34,727,707	368	399	1.97	38,702	20.3	83,489	2.18
23 Managers...	1,970	855	59.4	59.2	2,464,148	1,251	4,832,647	1,848,019	2,453	2,161	1.96	216	6.5	1,680	7.78
24 Tenants...	105,336	115,826	24.9	40.9	13,675,235	130	26,806,383	35,812,608	254	311	1.96	37,037	12.3	67,841	1.83
MOUNTAIN															
25 Montana, total...	27,481	30,408	57.7	64.8	5,758,906	210	16,371,283	15,155,728	597	498	2.85	157	0.3	248	1.58
26 Owners...	21,111	23,201	59.7	63.9	4,431,319	210	12,612,828	11,505,833	597	496	2.85	112	0.3	154	1.38
27 Managers...	367	282	71.4	76.8	440,732	1,261	1,236,082	801,897	3,868	2,844	2.80	5	1.0	41	8.20
28 Tenants...	5,943	6,322	51.1	67.5	881,741	145	2,822,394	2,822,394	424	408	2.84	40	0.3	53	1.33
29 Idaho, total...	25,475	22,811	61.1	56.2	4,086,019	160	12,708,885	9,983,688	499	407	3.11	1,342	3.2	2,091	1.56
30 Owners...	19,008	16,740	62.3	55.4	4,962,121	150	9,155,755	6,605,683	482	395	3.09	1,162	3.8	1,557	1.34
31 Managers...	404	301	67.0	53.9	374,517	927	1,177,029	877,455	2,913	2,915	3.14	22	3.6	149	6.77
32 Tenants...	6,065	5,770	57.4	58.4	751,374	124	2,373,451	1,810,570	391	314	3.16	188	1.5	385	2.44
33 Wyoming, total...	8,481	7,012	53.0	45.2	3,199,405	377	8,605,019	5,753,408	1,015	818	2.69	203	1.3	358	1.78
34 Owners...	6,555	5,493	53.8	43.8	2,418,381	369	6,464,534	4,211,044	988	787	2.67	102	0.8	206	2.02
35 Managers...	222	160	75.0	63.8	844,814	1,553	1,000,182	776,065	4,505	4,850	2.90	8	2.7	16	2.00
36 Tenants...	1,704	1,359	49.0	49.0	436,010	256	1,140,530	636,299	669	488	2.62	93	2.6	138	1.46
37 Colorado, total...	35,016	33,749	58.4	58.2	7,756,160	222	21,549,844	18,858,544	815	498	2.78	749	1.2	1,175	1.57
38 Owners...	22,864	22,813	59.5	56.5	4,673,624	204	12,732,609	9,072,392	507	447	2.72	558	1.5	762	1.37
39 Managers...	557	432	60.5	73.8	522,006	937	1,423,433	1,081,184	2,566	2,433	2.73	18	2.1	126	7.00
40 Tenants...	11,935	11,004	56.0	61.4	2,560,530	221	2,793,842	2,101,701	467	417	2.04	133	2.1	412	3.10
41 New Mexico, total...	12,483	11,823	39.7	37.3	3,255,949	281	6,556,566	4,933,529	525	417	2.01	720	2.3	2,339	3.25
42 Owners...	9,685	9,285	39.2	37.5	2,241,956	231	4,458,081	3,457,423	460	376	1.99	570	2.3	1,699	2.98
43 Managers...	202	137	60.5	53.5	419,030	2,074	890,853	444,398	4,410	3,244	2.13	17	5.1	228	13.41
44 Tenants...	2,986	2,401	49.9	44.2	392,963	221	1,207,032	1,001,701	467	417	2.04	133	2.1	412	3.10
45 Arizona, total...	8,158	6,820	43.4	53.8	9,945,943	641	10,388,821	7,286,868	1,887	1,252	2.63	512	3.6	3,704	7.23
46 Owners...	4,570	4,197	40.5	51.3	2,067,538	452	5,450,630	4,487,472	1,193	1,060	2.64	309	3.3	2,924	6.30
47 Managers...	382	235	69.7	76.0	1,004,773	2,630	2,591,894	1,101,663	6,785	4,896	2.58	87	15.9	988	11.36
48 Tenants...	1,208	1,398	51.7	60.1	873,630	724	2,846,297	1,097,843	1,946	1,214	2.09	56	2.4	392	7.00
49 Utah, total...	15,127	14,917	55.7	57.4	1,973,928	180	6,058,847	5,145,486	401	345	3.07	106	0.4	264	2.49
50 Owners...	13,311	12,158	56.4	47.2	1,610,418	121	4,935,935	4,501,708	372	342	3.08	79	0.3	202	2.56
51 Managers...	158	65	68.7	72.2	176,320	1,135	837,872	158,010	3,404	2,431	3.00	1	0.4	2	2.00
52 Tenants...	1,698	1,094	49.9	58.6	184,190	111	664,840	485,748	341	287	3.07	26	0.8	60	2.31
53 Nevada, total...	2,124	2,398	61.7	60.0	1,370,469	598	3,868,671	1,723,101	2,123	3,05	2.88	36	1.0	93	2.68
54 Owners...	1,683	2,050	60.8	69.2	822,498	488	2,397,381	3,252,359	1,424	1,587	2.91	27	1.0	66	2.44
55 Managers...	184	83	81.1	72.8	336,373	1,828	954,477	543,494	5,187	6,548	2.84	2	0.9	13	6.50
56 Tenants...	267	195	57.8	63.7	111,598	434	308,813	172,227	1,202	883	2.77	6	1.3	14	2.33
PACIFIC															
57 Washington, total...	40,990	36,155	57.8	49.3	8,453,831	906	29,157,841	31,726,903	711	601	3.45	8,370	11.8	21,661	2.58
58 Owners...	32,871	28,526	57.1	47.2	5,935,445	181	20,379,296	14,922,152	620	523	3.43	7,142	12.4	15,079	2.18
59 Managers...	921	736	74.4	80.8	985,480	1,070	3,705,839	2,420,080	4,024	3,201	3.78	345	27.9	3,088	8.95
60 Tenants...	7,193														

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 517

LABOR, AND TONS OF COMMERCIAL FERTILIZER PURCHASED, 1929; WITH FARMS REPORTING; BY TENURE AND STATES—Continued

EXPENDITURES FOR COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE ¹										FEED											
Farms reporting				Amount				Farms reporting				Expenditures									
Number		Per cent of all farms ²		1929	1924	Average per farm reporting		1929	1924	Number		Per cent of all farms ²		1929	1924	Amount		1929	1924	Average per farm reporting	
1929	1924	1929	1924			1929	1924			1929	1924	1929	1924			1929	1924				
208,058	184,079	80.8	77.5	821,829,959	\$14,564,214	\$105	\$79	88,111	86,806	34.2	36.4	\$8,228,525	\$7,062,866	\$88	\$82	1	1	1	1		
78,420	74,010	88.8	79.6	9,070,888	6,125,047	116	83	39,043	38,881	43.2	41.8	4,722,324	3,844,663	121	99	2	2	2	2		
431	315	71.5	70.3	300,422	172,926	607	549	298	215	42.5	48.0	444,434	123,426	1,723	574	3	3	3	3		
129,198	109,751	77.6	76.1	12,458,049	8,266,241	96	75	48,810	47,510	29.3	32.9	3,081,767	3,084,767	63	65	4	4	4	4		
151,309	104,578	48.4	40.7	11,555,349	6,261,668	76	60	92,814	95,897	29.7	37.3	11,496,863	10,655,748	134	111	5	5	5	5		
59,541	48,737	69.2	60.8	5,301,994	3,348,668	89	69	38,496	41,195	44.7	51.0	5,191,480	5,529,452	135	124	6	6	6	6		
600	325	50.1	47.9	316,900	178,340	634	549	590	335	59.1	49.4	1,147,444	460,066	1,945	1,373	7	7	7	7		
91,268	55,516	40.5	31.6	5,926,365	2,734,661	65	49	53,723	54,367	23.8	30.9	5,157,439	4,866,230	98	86	8	8	8	8		
78,688	56,828	30.4	25.6	4,806,637	2,995,267	63	53	110,876	111,809	45.7	50.4	12,406,586	12,378,669	112	111	9	9	9	9		
40,312	32,235	45.3	33.8	2,529,121	1,730,642	63	54	53,193	57,739	59.8	60.5	6,540,239	6,544,228	125	118	10	10	10	10		
202	137	31.9	22.2	80,563	89,773	399	655	398	408	56.5	68.2	393,265	448,486	1,099	1,099	11	11	11	11		
33,172	24,456	21.7	19.4	1,996,933	1,174,842	60	48	57,125	53,662	37.4	42.6	5,369,043	5,389,944	94	100	12	12	12	12		
66,641	54,412	41.2	41.1	5,228,630	4,139,756	79	76	56,055	66,910	36.8	50.5	7,871,650	10,120,935	133	151	13	13	13	13		
30,249	27,361	56.9	52.2	2,663,114	2,267,664	88	83	26,326	32,551	49.5	62.1	4,297,278	5,782,414	163	178	14	14	14	14		
343	255	46.7	56.7	307,767	438,509	897	1,539	373	394	50.7	76.3	705,233	794,110	1,891	2,068	15	15	15	15		
35,949	26,766	33.4	33.6	2,257,759	1,443,583	63	54	22,356	33,975	30.1	42.7	2,860,339	2,544,411	89	104	16	16	16	16		
4,440	2,235	2.2	1.1	252,511	202,864	57	91	63,234	108,105	45.7	53.8	17,138,034	15,617,722	184	147	17	17	17	17		
2,430	1,336	8.1	1.6	150,285	124,911	62	93	43,973	45,755	56.6	56.3	9,672,289	7,966,468	220	174	18	18	18	18		
43	16	5.2	3.2	6,776	4,965	158	310	427	258	51.9	52.2	549,417	269,315	1,089	1,044	19	19	19	19		
1,967	883	1.6	0.8	95,450	72,788	49	82	45,834	60,092	39.0	52.0	6,616,323	7,381,909	135	123	20	20	20	20		
76,433	65,021	15.4	14.0	5,631,303	4,128,705	74	68	101,402	201,886	38.6	43.4	37,804,065	34,661,163	198	172	21	21	21	21		
39,013	33,203	20.5	18.1	8,008,486	2,294,818	79	69	95,802	93,355	50.3	51.0	22,178,023	16,319,742	231	196	22	22	22	22		
224	100	6.8	6.9	73,817	44,670	330	447	1,553	663	46.9	45.0	2,864,283	1,022,806	1,844	1,543	23	23	23	23		
37,196	31,718	12.3	11.3	2,459,001	1,784,217	66	66	94,047	107,868	31.2	38.4	12,761,754	15,318,615	136	142	24	24	24	24		
303	132	0.6	0.3	29,947	6,001	99	45	20,699	18,404	43.8	35.0	6,871,984	8,578,073	332	218	25	25	25	25		
238	114	0.7	0.3	15,637	4,231	66	37	15,604	12,214	44.4	33.7	5,190,372	2,607,586	331	213	26	26	26	26		
11	5	2.1	1.4	9,996	993	909	187	247	134	48.1	36.5	396,865	178,313	1,006	1,293	27	27	27	27		
54	13	0.5	0.1	4,314	837	80	64	4,751	4,058	40.9	39.6	1,275,947	797,204	209	196	28	28	28	28		
1,694	633	4.1	1.6	80,894	59,493	48	94	23,051	19,860	52.9	47.7	7,040,244	5,494,083	319	284	24	24	24	24		
1,468	540	4.8	1.8	60,006	42,062	41	78	17,122	14,523	56.1	48.1	5,523,880	4,150,881	323	286	30	30	30	30		
25	15	4.1	2.9	5,956	4,523	233	302	230	183	38.1	35.8	4,602,672	476,428	1,751	2,603	31	31	31	31		
201	78	1.0	0.8	13,832	12,866	69	165	4,699	4,654	44.6	47.1	1,107,712	866,764	236	180	32	32	32	32		
281	45	1.8	0.3	25,423	7,044	90	187	7,985	7,050	49.9	48.4	5,138,287	2,587,238	642	367	33	33	33	33		
163	33	1.3	0.8	14,735	5,396	90	142	6,295	5,656	51.6	45.1	3,981,685	2,019,230	633	357	34	34	34	34		
10	2	3.4	1.0	952	1,540	95	770	168	117	56.8	61.3	581,917	265,465	3,484	2,295	35	35	35	35		
108	5	3.1	0.2	9,733	10,826	108	22	1,532	1,277	43.5	46.0	572,885	299,583	374	235	36	36	36	36		
1,484	1,182	2.5	2.0	165,188	197,118	111	108	31,919	29,598	51.1	51.0	13,829,825	10,370,591	443	350	37	37	37	37		
1,118	962	2.9	2.4	120,522	92,318	108	96	21,616	20,352	56.3	51.5	9,057,011	6,672,405	419	328	38	38	38	38		
26	15	3.1	2.6	8,521	8,635	528	576	421	315	50.2	53.8	9,153,933	615,882	2,176	1,965	35	35	35	35		
339	205	1.6	1.1	36,145	26,162	107	128	9,175	8,981	44.3	49.8	3,830,381	3,079,304	420	345	40	40	40	40		
844	1,127	2.7	3.6	98,590	88,101	117	78	12,476	15,349	39.7	48.4	3,816,839	3,471,950	306	218	41	41	41	41		
682	970	2.8	3.7	68,974	69,973	102	72	9,816	12,473	39.7	48.0	2,774,961	2,473,368	263	198	42	42	42	42		
20	12	6.0	4.7	14,110	3,340	706	278	188	145	55.7	56.6	552,031	270,020	1,833	1,882	43	43	43	43		
142	145	2.2	2.7	14,788	12,706	103	102	2,474	2,731	50.3	50.3	639,347	603,256	279	221	44	44	44	44		
524	252	3.7	2.3	178,691	45,706	181	181	6,855	6,138	46.6	56.8	3,471,950	2,419,778	504	393	45	45	45	45		
390	194	3.4	2.4	95,758	31,816	252	164	5,160	4,671	45.3	57.1	2,655,256	1,675,004	486	359	46	46	46	46		
88	10	16.1	3.4	58,778	2,969	679	297	283	148	50.0	50.0	326,551	192,646	1,242	1,302	47	47	47	47		
56	48	2.4	2.1	20,485	10,621	265	223	1,162	1,320	49.8	56.7	490,143	545,126	422	413	45	45	45	45		
844	684	2.4	2.6	48,846	43,398	78	82	18,999	11,313	51.3	48.5	4,937,875	2,502,090	355	221	49	49	49	49		
564	616	2.4	2.7	38,964	36,703	69	60	12,626	10,118	53.1	44.0	4,288,256	2,738,801	350	226	50	50	50	50		
6	2	2.6	2.2	1,115	248	186	122	100	29	43.5	43.3	176,409	42,175	1,764	1,081	51	51				

AGRICULTURE

TABLE 4.—ELECTRIC LIGHT AND POWER,¹ BY TENURE OF FARM OPERATOR, BY DIVISIONS AND STATES CENSUS OF 1930

DIVISION AND STATE	TOTAL						OWNERS AND MANAGERS						TENANTS						
	Farms report- ing dwellings lighted by electricity (Apr. 1, 1930)		Farms report- ing electric light and power purchased, 1929		Expenditures for electric light and power, ¹ 1929		Farms report- ing dwellings lighted by electricity (Apr. 1, 1930)		Farms report- ing electric light and power purchased, 1929		Expenditures for electric light and power, ¹ 1929		Farms report- ing dwellings lighted by electricity (Apr. 1, 1930)		Farms report- ing electric light and power purchased, 1929		Expenditures for electric light and power, ¹ 1929		
	Number	Per cent of farms reporting dwell- ings	Number	Per cent of all farms ²	Amount	Average per farm reporting	Number	Per cent of farms reporting dwell- ings	Number	Per cent of all owners and man- agers ³	Amount	Average per farm reporting	Number	Per cent of farms reporting dwell- ings	Number	Per cent of all tenants ⁴	Amount	Average per farm reporting	
United States	841,310	14.3	571,007	9.1	\$46,483,885	\$81	712,730	20.5	491,989	18.6	\$38,834,487	\$81	128,580	5.4	79,618	8.0	\$6,649,398	\$84	
GEOGRAPHIC DIVISIONS:																			
New England	53,655	45.0	45,522	36.4	2,955,478	66	51,045	45.4	43,265	37.1	2,836,348	65	2,610	37.9	2,157	27.4	149,130	69	
Middle Atlantic	114,098	33.3	87,533	24.5	5,735,411	66	102,049	34.7	78,437	25.7	5,212,533	66	12,049	25.3	9,096	17.3	522,878	57	
East North Central	202,656	21.8	129,047	13.4	7,371,738	57	166,984	24.5	107,561	15.3	6,267,698	58	35,072	14.4	21,486	8.1	1,104,040	51	
West North Central	146,969	13.8	72,093	6.5	4,568,823	63	115,707	17.8	56,743	8.5	3,650,024	64	31,282	7.6	15,350	3.5	918,799	60	
South Atlantic	64,173	6.5	37,416	3.5	2,241,126	60	60,755	10.6	32,993	6.0	2,046,164	62	8,421	1.9	4,423	0.9	194,961	44	
East South Central	81,952	3.3	18,776	1.8	1,030,976	55	27,214	6.0	16,287	3.5	930,464	57	4,738	0.9	2,489	0.4	100,512	40	
West South Central	40,240	4.0	18,534	1.7	1,679,907	91	32,889	8.3	15,463	3.7	1,402,639	91	7,351	1.2	3,071	0.4	277,268	90	
Mountain	49,173	22.4	29,160	16.2	2,789,161	71	41,828	26.0	33,681	18.5	2,420,847	72	7,345	14.1	5,479	9.3	368,814	67	
Pacific	138,394	57.3	122,926	47.0	18,051,266	147	119,202	59.4	106,859	49.6	15,067,770	141	19,132	46.8	16,067	34.7	3,013,496	188	
NEW ENGLAND:																			
Maine	12,920	34.8	10,933	28.0	493,160	46	12,520	35.1	10,602	28.5	482,831	46	400	27.1	336	19.1	15,338	46	
New Hampshire	6,160	43.5	5,014	33.6	306,648	61	5,921	44.0	4,840	34.3	297,291	61	239	34.0	174	21.9	9,357	54	
Vermont	7,565	31.2	6,403	25.7	331,068	52	7,062	32.1	5,988	26.6	310,749	52	513	22.3	416	17.2	20,259	49	
Massachusetts	16,037	68.8	13,821	54.0	1,061,306	76	15,264	66.7	13,177	54.5	1,007,222	76	773	67.6	644	44.7	44,083	68	
Rhode Island	1,910	61.1	1,671	50.3	153,011	92	1,728	62.2	1,504	51.7	134,948	90	182	52.0	167	40.2	18,063	108	
Connecticut	9,063	55.0	7,675	44.6	845,337	84	8,560	55.0	7,254	45.0	803,307	83	503	55.2	421	39.4	42,030	100	
MIDDLE ATLANTIC:																			
New York	55,019	35.9	43,360	27.1	2,769,649	64	49,848	37.3	39,309	28.3	2,535,041	64	5,171	26.7	4,041	19.1	234,608	58	
New Jersey	12,441	56.1	10,965	42.2	920,355	84	12,112	50.1	9,971	46.5	842,453	84	1,329	38.5	997	25.3	77,882	78	
Pennsylvania	46,638	27.7	33,215	19.3	2,045,427	62	40,089	28.6	20,167	20.1	1,835,039	63	5,549	22.8	4,058	14.8	210,388	52	
EAST NORTH CENTRAL:																			
Ohio	56,740	27.0	37,605	17.2	1,930,262	51	46,956	30.1	31,420	19.4	1,650,056	53	9,784	18.2	6,266	10.9	280,226	45	
Indiana	30,335	17.6	18,569	10.2	906,296	40	24,480	20.0	15,050	11.9	750,182	50	5,855	11.6	3,519	6.4	168,114	45	
Illinois	34,231	16.6	18,317	8.5	1,191,792	65	24,772	20.9	13,346	9.8	898,424	67	9,459	10.7	4,971	5.4	293,308	59	
Michigan	24,785	21.3	24,233	14.3	1,261,834	52	30,737	22.1	21,618	15.1	1,141,285	53	4,048	16.6	2,615	10.0	110,549	42	
Wisconsin	46,565	26.3	30,233	16.6	2,089,534	69	40,039	27.5	26,118	17.6	1,827,691	70	6,526	20.8	4,116	12.4	261,843	64	
WEST NORTH CENTRAL:																			
Minnesota	23,342	13.0	12,413	6.7	885,425	69	19,261	15.4	10,290	8.1	718,204	70	4,081	7.4	2,123	3.7	187,221	66	
Iowa	40,042	22.2	25,149	11.7	1,626,563	65	33,724	30.5	18,288	16.1	1,200,988	66	12,818	12.7	6,861	6.8	425,575	62	
Missouri	20,223	8.3	12,486	4.9	662,387	48	16,891	10.4	10,597	6.4	524,782	50	3,332	4.0	1,889	2.1	77,005	41	
North Dakota	6,192	8.5	5,721	2.2	149,581	87	5,180	10.7	4,405	2.8	127,133	90	1,012	4.1	316	1.2	22,448	71	
South Dakota	9,070	11.6	5,534	3.0	182,145	72	7,154	16.1	1,917	4.2	144,966	76	1,916	5.6	617	1.7	37,179	60	
Nebraska	21,880	17.4	7,485	5.8	538,545	75	16,630	25.1	5,789	8.5	441,453	76	4,760	8.4	1,696	2.8	117,092	69	
Kansas	20,720	13.3	10,305	6.2	594,177	58	16,867	18.3	8,457	8.8	492,498	58	3,853	6.0	1,848	2.6	101,670	55	
SOUTH ATLANTIC:																			
Delaware	1,561	17.0	1,027	10.6	86,315	87	1,371	21.9	901	14.0	79,715	88	190	6.5	126	3.8	9,600	76	
Maryland	9,143	22.1	6,226	14.4	445,723	72	8,124	26.3	5,560	17.5	412,164	74	1,021	9.7	666	5.8	33,559	50	
Dist. of Columbia	67	69.1	54	51.9	3,049	56	56	76.7	47	58.8	2,858	61	11	45.8	7	29.2	190	27	
Virginia	13,009	8.0	7,780	4.5	469,524	61	11,731	9.8	7,036	5.7	431,710	61	1,278	3.0	694	1.4	37,814	54	
West Virginia	5,330	6.7	2,844	2.4	154,305	54	4,884	7.5	2,598	3.9	143,321	55	476	3.4	246	1.6	10,984	45	
North Carolina	15,006	5.8	8,774	3.1	403,120	46	12,836	9.3	7,640	5.4	363,028	48	2,180	1.8	1,184	0.8	39,492	35	
South Carolina	6,067	4.1	3,039	1.9	145,105	48	4,818	9.0	2,426	4.4	127,158	52	1,249	1.3	613	0.6	17,947	29	
Georgia	7,499	3.2	2,561	1.4	205,932	58	6,010	7.7	2,988	8.6	183,236	62	1,489	1.0	633	0.4	23,696	37	
Florida	6,429	13.7	4,181	7.0	324,062	78	5,962	17.1	8,827	9.1	302,878	79	527	4.2	304	1.8	21,679	71	
EAST SOUTH CENTRAL:																			
Kentucky	10,601	4.8	5,863	2.4	323,162	55	9,338	6.2	5,222	3.8	295,200	57	1,353	1.9	641	0.7	27,952	44	
Tennessee	16,010	4.4	6,720	2.7	336,965	50	8,699	6.8	5,924	4.5	307,885	52	1,311	1.3	786	0.7	29,080	37	
Alabama	6,459	2.7	3,859	1.5	196,455	51	5,088	5.8	3,057	3.4	168,929	55	1,371	0.9	782	0.5	27,626	35	
Mississippi	4,792	1.7	2,354	0.8	174,404	74	4,098	4.9	2,074	2.4	158,450	76	703	0.4	280	0.1	15,954	57	
WEST SOUTH CENTRAL:																			
Arkansas	5,121	2.3	2,689	1.1	308,610	118	4,146	4.8	2,198	2.5	233,199	106	975	0.7	491	0.3	76,411	166	
Louisiana	4,174	2.8	1,943	1.2	240,936	124	3,472	6.7	1,688	3.1	206,813	128	702	0.7	261	0.2	34,113	131	
Oklahoma	8,091	4.8	3,942	1.9	267,710	68	6,514	8.7	3,183	4.1	225,980	71	1,577	1.4	759	0.6	41,780	55	
Texas	22,854	5.2	9,954	2.0	861,661	87	18,757	10.2	8,394	4.3	736,697	88	4,097	1.6	1,500	0.5	124,964	80	
MOUNTAIN:																			
Montana	3,547	7.9	1,983	4.2	155,207	80	2,063	8.											

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 519

TABLE 5.—FARM EXPENDITURES FOR IMPLEMENTS AND MACHINERY, 1929, WITH FARMS REPORTING; AND FARMS REPORTING VALUE OF IMPLEMENTS AND MACHINERY, APRIL 1, 1930; BY TENURE OF OPERATOR; BY DIVISIONS AND STATES

[Total number of farms and the actual value of the inventory of farm implements and machinery are shown in Chapter II]

DIVISION AND STATE	TOTAL			OWNERS AND MANAGERS						TENANTS					
	Farms reporting value of implements and machinery (April 1, 1930)	Number	Per cent of all farms ¹	Expenditures for implements and machinery, 1929		Farms reporting value of implements and machinery (April 1, 1930)	Number	Per cent of all owners and managers ¹	Expenditures for implements and machinery, 1929		Farms reporting value of implements and machinery (April 1, 1930)	Number	Per cent of all tenants ²	Expenditures for implements and machinery, 1929	
				Average per farm reporting	Amount				Average per farm reporting	Amount				Average per farm reporting	Amount
United States.....	5,629,424	1,750,568	27.8	\$892,548,103	\$398	3,274,805	1,141,244	31.5	\$490,428,309	\$430	2,254,819	602,344	22.9	\$302,121,794	\$332
GEOGRAPHIC DIVISIONS:															
New England.....	109,414	40,420	32.4	17,807,647	436	103,013	38,008	32.5	16,600,385	437	6,401	2,412	30.6	1,007,262	418
Middle Atlantic.....	320,213	137,646	38.5	56,993,915	414	274,672	116,562	38.2	48,408,040	416	45,341	21,064	40.2	8,525,875	405
East North Central.....	876,016	330,482	34.2	124,123,029	376	636,469	234,796	33.4	87,524,270	373	240,447	95,086	36.2	30,559,359	382
West North Central.....	1,044,277	481,100	43.2	246,396,561	512	628,764	287,816	43.0	152,216,022	530	415,513	193,784	43.6	94,180,539	488
South Atlantic.....	904,322	222,033	21.0	37,512,589	169	483,058	125,828	22.9	36,494,538	242	421,264	96,206	18.9	7,018,051	73
East South Central.....	878,324	168,151	14.9	24,724,078	156	421,404	92,991	19.9	19,247,282	207	456,920	65,160	11.0	5,476,796	84
West South Central.....	963,184	215,330	19.5	74,715,178	347	384,568	115,039	27.7	48,715,891	423	578,616	100,291	14.6	25,999,287	259
Mountain.....	218,779	88,578	36.7	56,907,903	642	161,799	67,929	37.2	44,298,577	652	51,980	20,649	35.1	12,809,326	611
Pacific.....	218,995	76,848	29.4	53,566,603	697	180,858	62,755	29.1	42,861,304	683	38,137	14,053	30.5	10,705,299	760
NEW ENGLAND:															
Maine.....	34,138	12,140	31.1	5,384,029	448	32,816	11,642	31.3	5,140,216	442	1,322	498	28.4	234,812	472
New Hampshire.....	13,041	4,209	28.2	1,669,847	404	12,404	3,995	28.3	1,627,359	407	837	214	26.9	71,988	336
Vermont.....	22,739	8,413	33.8	3,083,924	367	20,602	7,748	34.5	2,857,518	369	2,187	668	27.6	226,406	340
Massachusetts.....	22,034	8,775	34.3	4,134,752	471	20,911	8,295	34.8	3,927,367	473	1,223	480	33.3	207,385	432
Rhode Island.....	2,783	1,139	34.3	581,345	510	2,439	967	33.3	496,988	514	344	172	41.4	84,387	491
Connecticut.....	14,670	5,744	33.4	2,724,250	474	13,841	5,361	33.2	2,541,967	474	838	283	35.9	182,283	470
MIDDLE ATLANTIC:															
New York.....	145,003	65,326	40.9	28,040,580	429	126,414	56,534	40.8	24,428,318	432	18,849	8,792	41.6	3,612,214	411
New Jersey.....	22,031	9,880	38.9	5,409,483	548	18,694	8,216	38.3	4,477,511	545	8,337	1,664	42.1	931,972	560
Pennsylvania.....	153,119	62,440	36.2	23,548,902	377	120,764	51,832	35.7	19,562,213	377	23,355	10,608	38.7	3,981,689	375
EAST NORTH CENTRAL:															
Ohio.....	193,173	57,431	26.2	20,616,620	369	141,962	40,680	25.2	16,020,819	369	51,211	16,751	29.1	5,565,801	334
Indiana.....	150,628	45,752	25.2	16,579,833	362	110,980	30,049	23.7	11,018,945	367	48,648	15,703	28.8	5,560,888	354
Illinois.....	198,036	77,321	36.0	34,332,841	444	111,252	38,284	32.2	17,534,661	448	86,784	38,037	41.1	16,797,060	442
Michigan.....	155,060	60,932	36.0	20,847,593	342	131,672	51,670	36.1	17,790,983	344	23,397	9,262	35.4	3,056,610	330
Wisconsin.....	171,010	89,046	49.0	31,747,242	357	140,603	73,113	49.2	26,188,872	358	30,407	15,933	48.1	5,568,270	351
WEST NORTH CENTRAL:															
Minnesota.....	174,773	87,672	47.3	35,115,213	401	120,591	58,153	46.4	23,714,607	401	54,182	28,519	49.5	11,400,006	400
Iowa.....	202,295	108,236	50.4	51,587,092	476	106,031	55,113	48.6	26,375,623	498	96,264	53,173	52.3	24,691,469	464
Missouri.....	234,226	59,551	23.3	17,400,633	292	154,263	41,531	23.9	12,615,853	304	79,963	18,020	20.2	4,784,810	286
North Dakota.....	74,388	41,261	52.9	26,745,021	648	48,587	27,706	54.8	18,967,708	685	25,301	15,555	49.5	7,777,815	574
South Dakota.....	70,116	41,186	49.5	24,375,581	592	44,088	23,447	50.9	14,875,398	634	35,028	17,789	47.8	9,500,183	536
Nebraska.....	123,183	65,862	50.9	36,079,965	548	65,130	35,887	51.7	20,993,608	593	58,053	30,475	49.9	15,086,567	495
Kansas.....	156,296	77,282	46.5	55,113,026	713	90,074	44,979	47.0	34,173,227	700	66,222	32,808	45.9	20,989,799	648
SOUTH ATLANTIC:															
Delaware.....	8,874	3,423	35.3	1,354,268	396	6,035	2,306	35.9	975,310	423	2,839	1,117	34.0	378,958	339
Maryland.....	38,823	13,407	31.0	5,128,116	382	28,366	9,771	30.8	3,957,554	405	9,957	3,636	31.8	1,170,502	322
District of Columbia.....	92	22	21.2	10,240	466	68	18	22.5	9,506	528	24	4	16.7	740	185
Virginia.....	145,693	31,478	18.5	8,474,421	209	107,843	24,595	20.1	7,351,245	299	37,850	6,883	14.3	1,123,176	103
West Virginia.....	66,834	11,737	14.2	2,879,905	245	55,602	10,254	15.2	2,615,569	265	10,732	1,483	9.7	264,038	178
North Carolina.....	240,671	48,125	17.2	6,705,069	139	127,860	27,845	19.6	5,434,525	195	112,811	20,280	14.7	1,270,644	63
South Carolina.....	135,734	38,082	22.2	3,588,651	102	50,847	15,984	29.0	2,749,614	172	84,887	19,008	18.6	830,037	44
Georgia.....	223,843	67,896	26.5	5,898,832	87	74,680	26,632	32.8	4,269,677	160	149,163	41,174	23.6	1,628,355	40
Florida.....	44,768	10,953	18.6	3,473,881	817	31,757	8,423	19.9	3,131,238	372	18,001	2,530	15.1	342,648	185
EAST SOUTH CENTRAL:															
Kentucky.....	195,463	26,550	10.8	6,155,404	232	184,967	20,309	12.8	4,989,769	246	60,486	6,241	7.1	1,165,635	187
Tennessee.....	207,302	36,009	14.7	6,574,605	183	119,170	24,906	18.9	5,270,632	212	58,192	11,100	9.8	1,234,973	117
Alabama.....	224,507	60,208	23.4	5,588,757	92	85,136	27,723	30.5	4,106,269	148	188,971	32,486	19.5	1,462,498	45
Mississippi.....	251,002	35,384	11.3	6,425,312	152	81,731	20,050	23.0	4,871,622	243	109,271	15,334	6.8	1,653,090	101
WEST SOUTH CENTRAL:															
Arkansas.....	203,159	39,988	16.5	6,955,017	149	83,405	22,817	25.5	4,372,245	187	119,754	17,171	11.2	1,652,772	98
Louisiana.....	140,329	23,704	14.7	4,360,741	184	50,490	12,251	22.7	3,244,906	205	89,839	11,453	10.6	1,115,835	97
Oklahoma.....	183,581	53,682	26.3	24,462,388	456	72,296	26,858	34.2	16,328,173	571	111,285	21,494	21.4	9,189,103	341
Texas.....	436,115	97,056	19.8	39,937,052	408	178,877	53,113	27.4	25,875,665	487	257,738	44,843	14.9	14,001,487	314
mountain:															
Montana.....	44,486	20,812	43.8	17,442,033	838	33,803	16,319	45.5	14,018,796	859	10,683	4,493	38.6	3,423,287	762
Idaho.....	37,343	17,836	41.6	9,697,751	559	28,076	13,313	42.8	7,531,558	566	9,267	4,018	38.1	2,163,165	538
Wyoming.....	14,742	6,873	42.9	4,726,835	688	11,523	5,574	44.6	3,865,945	694	3,219	1,296	36.9	860,890	663
Colorado.....	53,494	22,834	38.1	13,609,687	600	25,072	14,990	38.2	9,091,180	606	18,424	7,844	37.9	4,608,827	588
New Mexico.....	26,515	6,960	22.2	3,750,575	539	21,123	5,565	22.2	3,001,004	555	5,392	1,395	22.0	659,571</	

AGRICULTURE

TABLE 6.—FARM EXPENDITURES FOR LABOR (CASH), 1899 TO 1929; WITH FARMS REPORTING, 1909 TO 1929; BY DIVISIONS AND STATES

[Exclusive of cash paid for housework]

DIVISION AND STATE	FARMS REPORTING ¹						AMOUNT EXPENDED IN CASH				AVERAGE CASH EXPENDITURES PER FARM REPORTING		
	Number			Per cent of all farms			1929	1919	1909	1899 ²	1929	1919	1909
	1929	1919	1909	1929	1919	1909							
United States.....	2,631,601	2,838,999	2,922,279	41.8	44.8	45.9	\$955,420,313	\$1,098,712,517	\$521,729,941	\$357,391,930	\$363	\$350	\$179
GEOGRAPHIC DIVISIONS:													
New England.....	73,836	90,031	124,619	58.1	57.5	60.0	49,839,145	43,686,874	27,603,492	20,727,980	675	485	222
Middle Atlantic.....	197,968	206,960	308,950	55.4	61.4	65.8	94,687,576	95,198,358	59,913,169	50,469,590	478	305	194
East North Central.....	448,362	582,622	582,364	46.4	53.7	52.7	132,476,146	182,314,444	91,591,170	67,556,520	295	313	155
West North Central.....	602,904	672,998	586,347	54.3	61.4	51.0	178,678,087	263,703,339	105,023,453	75,764,460	296	302	185
South Atlantic.....	367,185	376,580	469,370	34.7	32.5	42.2	91,879,757	88,225,678	55,413,285	37,086,040	250	234	118
East South Central.....	250,148	247,908	329,583	23.5	23.6	31.6	33,774,889	37,855,340	28,662,434	19,575,416	135	153	87
West South Central.....	394,848	389,904	336,094	35.8	32.9	35.6	110,614,558	147,416,506	52,219,927	29,871,225	280	378	155
Mountain.....	132,285	125,480	85,931	54.8	51.4	46.8	85,897,086	84,892,214	37,384,662	20,372,255	649	677	436
Pacific.....	163,065	142,428	110,081	62.3	60.8	58.0	177,573,069	155,419,764	63,918,359	35,968,144	1,089	1,091	581
NEW ENGLAND:													
Maine.....	22,795	26,735	37,190	58.4	55.4	62.0	9,042,533	7,500,437	4,485,911	2,667,260	397	281	121
New Hampshire.....	8,849	11,365	17,385	59.4	55.4	64.3	3,980,361	3,665,259	2,600,008	2,304,520	450	323	155
Vermont.....	15,364	18,171	21,810	61.7	62.5	66.7	5,495,428	5,788,588	3,570,709	3,133,140	358	319	164
Massachusetts.....	15,247	18,322	26,758	59.6	57.3	72.5	17,288,318	13,929,305	9,906,209	7,487,280	1,134	760	370
Rhode Island.....	1,885	2,296	3,621	56.7	56.2	66.5	2,276,788	1,730,402	1,420,388	1,032,360	1,208	754	408
Connecticut.....	9,606	13,142	17,955	56.4	58.0	67.0	11,755,717	11,066,883	5,512,179	4,103,420	1,212	842	307
MIDDLE ATLANTIC:													
New York.....	90,455	121,256	145,095	56.6	62.8	67.3	45,421,486	49,345,089	32,000,566	27,102,130	502	407	221
New Jersey.....	14,648	18,588	23,448	57.7	62.6	70.0	17,582,491	14,358,519	8,633,475	6,720,030	1,108	772	308
Pennsylvania.....	92,865	121,116	139,507	53.9	59.9	63.6	31,713,599	31,494,150	19,270,128	16,647,730	342	260	138
EAST NORTH CENTRAL:													
Ohio.....	90,363	124,806	145,515	41.2	48.6	53.5	25,409,282	36,339,046	20,426,904	14,502,600	261	291	140
Indiana.....	68,943	93,207	103,947	38.0	45.4	48.2	16,786,360	25,608,743	14,013,473	9,685,540	243	275	135
Illinois.....	112,916	151,300	139,941	52.6	63.8	55.6	40,946,060	60,909,392	27,988,488	22,182,550	363	403	200
Michigan.....	76,078	103,431	111,842	44.9	52.1	54.0	19,862,747	24,875,549	15,073,007	10,717,220	261	243	135
Wisconsin.....	100,062	110,878	91,119	55.0	58.6	51.4	29,481,697	34,581,714	14,087,638	10,468,610	295	312	155
WEST NORTH CENTRAL:													
Minnesota.....	105,037	111,697	94,994	56.7	62.8	60.8	27,526,878	36,460,774	16,673,777	16,657,820	202	326	176
Iowa.....	122,669	136,682	108,890	57.1	64.0	50.2	39,081,156	52,942,172	18,586,300	16,375,670	323	387	171
Missouri.....	96,649	125,248	120,714	37.8	47.6	43.5	19,851,509	33,037,414	14,970,635	9,803,610	205	264	124
North Dakota.....	57,838	51,109	45,775	74.2	65.8	61.6	24,594,684	27,786,109	17,198,082	9,207,220	425	544	376
South Dakota.....	48,762	49,658	41,180	58.6	66.5	53.0	14,647,192	24,121,602	9,908,389	5,528,070	300	486	241
Nebraska.....	76,806	80,096	62,655	59.3	64.9	48.3	25,386,051	34,004,188	11,422,188	7,399,160	330	420	182
Kansas.....	96,123	117,908	92,189	57.9	71.3	51.8	27,020,617	54,761,080	16,264,082	10,702,910	281	464	176
SOUTH ATLANTIC:													
Delaware.....	5,285	5,304	6,841	54.4	53.2	63.1	2,518,088	2,052,218	1,257,198	1,075,900	470	380	184
Maryland.....	25,454	29,123	31,982	58.9	60.8	65.4	12,865,994	12,915,060	6,743,157	5,715,520	505	443	211
District of Columbia.....	70	112	146	67.3	64.9	67.3	316,842	189,895	212,803	197,420	4,526	1,249	1,458
Virginia.....	62,451	66,500	84,636	36.6	35.7	46.0	18,774,106	17,002,779	10,822,816	7,780,720	301	256	128
West Virginia.....	28,603	31,328	43,871	35.0	35.9	45.4	5,011,736	4,756,810	3,203,924	2,041,500	173	153	73
North Carolina.....	88,837	78,394	97,461	31.8	28.1	38.4	11,673,938	10,818,456	7,643,783	5,444,950	131	138	78
South Carolina.....	49,180	62,005	69,491	31.1	32.2	39.4	9,002,864	13,687,696	9,351,384	8,107,100	183	220	135
Georgia.....	78,998	83,444	113,782	30.9	26.9	39.1	13,982,152	16,705,234	11,185,852	7,244,520	177	200	98
Florida.....	27,977	20,100	21,160	47.4	37.4	42.3	17,724,067	10,117,531	4,992,278	1,468,290	634	501	236
EAST SOUTH CENTRAL:													
Kentucky.....	70,788	76,933	91,642	28.7	28.4	35.4	11,488,725	15,292,160	10,007,302	6,613,330	162	199	109
Tennessee.....	71,184	76,494	88,670	29.0	27.9	38.0	8,661,098	9,047,363	7,030,564	4,730,370	122	137	79
Alabama.....	60,365	57,308	83,643	23.5	22.4	31.8	7,072,860	6,588,966	6,033,123	4,314,460	117	115	72
Mississippi.....	47,811	43,151	65,628	15.3	15.9	23.9	6,552,266	6,226,842	5,585,445	3,917,256	137	147	85
WEST SOUTH CENTRAL:													
Arkansas.....	66,036	66,720	70,638	27.2	28.7	32.9	9,627,117	12,068,268	6,304,160	3,171,090	146	181	89
Louisiana.....	35,919	30,166	31,772	22.2	22.3	26.3	12,081,388	19,699,806	15,208,744	10,692,710	304	653	482
Oklahoma.....	90,606	102,674	73,126	44.4	53.5	38.4	22,245,141	35,333,151	7,963,617	3,675,520	246	344	109
Texas.....	202,287	190,434	160,538	40.8	43.7	38.4	65,660,912	80,815,281	22,053,397	12,331,905	325	422	141
MOUNTAIN:													
Montana.....	27,421	24,278	12,482	57.7	42.3	47.6	16,371,283	15,603,271	8,268,350	5,077,340	597	640	662
Idaho.....	25,475	24,789	15,715	61.1	58.9	51.0	12,706,235	14,733,621	5,573,209	2,250,450	499	594	355
Wyoming.....	8,481	6,961	5,450	53.0	44.2	49.6	8,005,019	6,717,376	4,555,847	2,615,230	1,015	905	836
Colorado.....	35,016	35,149	22,179	58.4	58.6	48.0	21,549,844	23,146,568	8,770,753	4,100,906	615	659	395
New Mexico.....	12,483	11,538	13,124	39.7	38.7	36.8	6,556,566	5,259,834	2,985,826	1,961,110	525	456	228
Arizona.....	6,158	5,639	3,300	43.4	56.5	35.8	10,268,821	7,663,620	2,061,462	1,152,670	1,687	1,359	625
Utah.....	15,127	15,033	11,805	55.7	58.6	54.5	6,058,647	7,472,300	2,863,709	1,837,900	401	497	243
Nevada.....	2,124	1,953	1,776	61.7	63.0	66.0	3,060,671	4,295,724	2,315,406	1,386,650	1,723	2,155	1,304
PACIFIC:													
Washington.....	40,990	38,055	29,965	57.8	57.4	53.3	29,157,841	28,330,116	12,602,203	5,280,190	711	744	421
Oregon.....	31,563	27,958	24,228	57.3	55.7	53.2	18,256,718	17,161,695	9,110,241	4,842,834	578	614	376
California.....	90,482	76,414	55,857	66.7	64.9	63.4	130,158,510	109,928,053	42,205,915	25,845,120	1,438	1,439	755

¹ For 1929, farms reporting cash expended; for 1919 and 1909, farms reporting cash expended and (or) value of rent and board furnished.² Includes value of board furnished.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 521

TABLE 7.—FARM EXPENDITURES FOR FERTILIZER, 1879 TO 1929; WITH FARMS REPORTING, 1909 TO 1929; BY DIVISIONS AND STATES

DIVISION AND STATE	FARMS REPORTING						AMOUNT EXPENDED ¹						AVERAGE EXPENDITURES PER FARM REPORTING		
	Number			Per cent of all farms			1929	1919	1909	1899	1889	1879	1929	1919	1909
	1929	1919	1909	1929	1919	1909									
United States	2,324,090	2,271,178	1,823,032	37.0	35.2	28.7	8271,058,673	8326,398,520	8114,882,541	853,430,910	838,469,588	828,566,397	\$117	\$144	\$63
GEOGRAPHIC DIVISIONS:															
New England	68,537	77,965	114,022	54.9	49.8	60.9	15,413,246	18,322,697	9,407,759	4,297,705	2,599,314	1,796,386	225	235	82
Middle Atlantic	224,810	280,583	267,337	62.9	66.0	57.1	30,202,326	41,438,394	18,221,474	11,344,290	8,849,755	7,842,422	134	148	68
East North Central	350,789	360,314	219,848	36.3	33.2	19.6	29,283,692	30,589,412	8,058,881	5,866,520	2,783,782	1,544,775	83	85	37
West North Central	67,978	60,913	23,790	6.1	5.6	2.1	4,471,581	6,168,462	983,216	1,407,175	283,723	384,048	66	101	41
South Atlantic	813,149	933,634	769,616	76.8	80.6	69.2	119,238,903	185,700,177	59,026,190	22,732,070	18,759,139	14,832,926	147	199	77
East South Central	530,273	418,217	352,199	49.9	39.8	33.8	40,093,966	25,476,855	12,901,239	5,337,708	3,889,244	1,627,325	76	61	37
West South Central	221,100	108,894	60,777	20.0	10.9	6.4	15,719,081	8,606,846	3,225,927	1,374,116	1,062,769	409,416	71	80	53
Mountain	5,817	4,926	2,385	2.4	2.0	1.3									
Pacific	41,028	25,733	12,158	15.9	11.0	6.4	16,005,710	9,198,159	2,299,573	993,610	173,880	119,251	384	357	189
NEW ENGLAND:															
Maine	23,063	22,641	39,947	61.4	46.9	66.6	7,287,869	7,759,067	4,069,479	819,680	456,515	212,135	304	343	102
New Hampshire	6,960	8,799	15,351	46.7	42.9	50.7	439,914	526,180	512,580	367,980	246,293	105,293	63	60	33
Vermont	11,945	14,508	19,033	48.0	50.1	58.2	681,259	857,273	570,752	447,065	217,397	127,670	57	59	30
Massachusetts	14,289	16,902	21,689	55.8	53.1	58.8	3,014,621	3,906,733	1,965,682	1,320,600	896,500	683,422	211	230	91
Rhode Island	1,890	2,207	3,318	56.9	55.3	62.7	336,196	379,786	335,103	264,140	172,900	140,318	178	165	101
Connecticut	9,500	12,668	15,584	55.2	55.9	58.1	8,653,387	4,893,658	1,954,163	1,078,240	608,549	497,448	385	386	125
MIDDLE ATLANTIC:															
New York	90,500	113,578	113,883	56.6	58.8	52.8	11,505,587	15,067,371	7,142,265	4,493,050	3,627,726	2,715,477	127	133	63
New Jersey	16,948	22,774	23,685	66.8	76.7	70.7	6,583,368	10,742,682	4,277,604	2,165,320	1,837,719	1,801,609	388	472	181
Pennsylvania	117,371	144,231	129,769	68.1	71.3	59.2	12,113,421	15,628,341	6,801,605	4,085,920	3,884,310	3,525,336	103	108	52
EAST NORTH CENTRAL:															
Ohio	181,372	165,556	118,888	59.9	64.5	43.7	11,028,050	18,206,018	4,180,485	2,695,470	1,602,869	550,029	84	80	35
Indiana	83,006	98,703	55,431	45.7	48.1	25.7	7,064,319	8,734,698	2,189,695	1,553,710	777,727	340,582	85	88	40
Illinois	30,639	22,488	11,207	14.8	9.5	4.4	3,593,825	2,996,403	615,594	830,660	124,977	174,277	117	133	55
Michigan	72,128	65,782	31,327	42.6	33.5	15.1	5,474,121	4,872,543	945,354	492,300	173,017	300,995	76	74	30
Wisconsin	38,644	7,785	2,995	18.5	4.1	1.7	2,133,377	779,750	127,753	294,320	105,192	178,892	63	100	43
WEST NORTH CENTRAL:															
Minnesota	9,402	3,031	1,438	5.1	1.7	0.9	714,055	432,080	74,653	251,120	61,578	93,250	76	143	52
Iowa	15,767	3,177	1,776	7.3	1.5	0.8	1,171,393	596,537	108,570	237,190	86,843	98,567	74	183	62
Missouri	35,762	47,383	18,434	14.0	18.0	6.6	2,030,492	3,941,488	671,073	370,630	65,705	109,724	57	83	36
North Dakota	572	488	175	0.7	0.6	0.2	51,858	119,502	10,003	13,855	8,923	91	245	57	
South Dakota	319	175	185	0.4	0.2	0.2	21,452	34,466	11,294	12,940	15,675	67	197	61	
Nebraska	685	476	369	0.5	0.4	0.3	53,709	64,752	31,021	153,080	19,269	20,794	78	136	84
Kansas	5,471	6,183	1,415	3.3	3.7	0.8	428,622	979,037	75,602	268,360	25,740	61,713	78	158	53
SOUTH ATLANTIC:															
Delaware	7,550	9,107	9,023	77.8	89.8	83.3	1,300,571	1,222,829	864,577	539,040	460,465	467,228	172	134	96
Maryland	33,697	39,270	37,164	78.0	82.0	75.9	5,525,079	7,610,478	3,387,634	2,618,860	2,419,826	2,838,465	164	194	91
District of Columbia	73	116	77	70.2	56.9	35.5	18,159	23,267	16,975	22,600	16,651	22,352	249	201	220
Virginia	110,588	135,218	111,277	64.8	72.6	60.5	11,780,935	17,277,705	6,932,455	3,681,790	2,820,200	2,137,283	107	128	62
West Virginia	30,320	35,300	23,967	36.7	40.5	24.8	1,161,087	1,709,546	528,937	405,270	210,767	176,300	38	48	22
North Carolina	234,424	228,767	181,718	83.8	84.8	71.6	34,686,830	48,796,694	12,262,533	4,479,030	2,882,238	2,111,767	148	213	67
South Carolina	139,234	176,537	140,303	88.2	91.6	79.5	22,060,531	52,546,795	15,162,017	4,494,410	3,867,418	2,659,969	159	298	108
Georgia	217,456	280,355	236,271	85.1	90.2	81.2	27,533,063	46,196,434	16,880,149	5,724,520	5,724,187	4,344,920	127	165	71
Florida	39,805	28,925	29,828	67.5	53.6	59.6	15,152,647	10,316,929	8,609,853	753,120	857,327	72,642	381	357	121
EAST SOUTH CENTRAL:															
Kentucky	74,112	86,687	56,783	30.1	32.0	21.9	2,508,592	3,597,449	1,350,720	908,250	317,231	145,674	35	41	24
Tennessee	96,794	84,827	53,498	39.4	33.6	21.7	4,110,066	3,525,133	1,216,296	888,070	361,097	157,442	42	42	23
Alabama	208,058	175,407	163,241	80.8	68.5	62.1	21,829,959	14,066,108	7,630,952	2,599,290	2,421,648	1,200,956	105	80	47
Mississippi	151,309	71,296	78,677	48.4	26.2	28.7	11,555,349	4,288,165	2,703,271	932,098	789,268	123,253	76	60	34
WEST SOUTH CENTRAL:															
Arkansas	73,686	41,338	22,113	30.4	17.8	10.3	4,606,637	2,572,678	596,553	172,510	93,980	56,314	63	62	27
Louisiana	66,541	37,652	22,111	41.2	27.8	18.3	5,223,630	3,840,489	2,004,919	1,076,890	906,348	278,305	79	102	91
Oklahoma ¹	4,440	2,445	622	2.2	1.3	0.3	252,511	452,492	29,092	-----	3,817	-----	57	185	47
Texas	76,433	27,459	15,931	15.4	6.3	3.8	5,631,303	1,831,207	595,363	124,716	58,665	74,707	74	67	37
MOUNTAIN:															
Montana	303	453	89	0.6	0.8	0.3	29,947	126,232	12,323	3,940	4,757	-----	99	279	133
Idaho	1,694	575	237	4.1	1.4	0.8	80,694	106,121	20,737	17,150	2,137	-----	48	185	87
Wyoming	281	55	33	1.8	0.8	0.3	25,423	8,439	5,302	12,700	1,548	-----	90	154	161
Colorado	1,484	1,184	560	2.5	2.0	1.2	165,188	294,448	61,113	23,225	26,074	5,198	111	249	100
New Mexico	844	1,458	827	2.7	4.9	2.3	98,520	113,483	25,371	2,880	9,217	10,733	117	78	31
Arizona	524	126	33	3.7	1.3	0.4	176,021	40,892	6,090	2,521	10	-----	336	225	184
Utah	646	1,017	571	2.4	4.0	2.6	48,846	108,056	20,037	14,300	23,211	11,394	76	107	35
Nevada	41	58	35	1.2	1.8	1.3	5,530	9,897	8,879	-----	2,010	2,526	135	171	239
PACIFIC:															
Washington	9,610	3,645	1,801	13.6	5.5	3.2	1,194,379	525,637	87,023	29,165	11,633	-----	124	144	48
Oregon	8,163	5,014													

AGRICULTURE

TABLE 8.—FARM EXPENDITURES FOR FEED, WITH FARMS REPORTING, BY DIVISIONS AND STATES: 1929, 1919, AND 1909

DIVISION AND STATE	FARMS REPORTING						AMOUNT EXPENDED			AVERAGE EXPENDITURES PER FARM REPORTING		
	Number			Per cent of all farms			1929	1919	1909	1929	1919	1909
	1929	1919	1909	1929	1919	1909						
United States.....	3,263,400	3,511,121	3,365,905	52.2	54.4	57.2	\$919,189,628	\$1,097,224,648	\$299,839,567	\$280	\$312	\$127
GEOGRAPHIC DIVISIONS:												
New England.....	104,673	134,450	151,385	83.8	85.9	80.2	67,416,302	69,538,522	34,613,064	644	517	220
Middle Atlantic.....	203,504	340,060	316,000	82.1	80.0	67.6	154,656,628	149,363,407	54,096,044	527	439	173
East North Central.....	642,422	683,476	413,476	66.5	63.0	36.8	146,849,753	197,070,423	40,011,121	229	288	98
West North Central.....	678,626	693,629	417,828	61.0	62.2	37.6	214,675,483	307,183,328	76,207,557	316	443	182
South Atlantic.....	427,520	480,494	385,980	40.4	41.5	30.2	63,803,397	60,504,537	19,255,280	149	126	57
East South Central.....	390,587	369,149	296,938	36.8	35.1	27.9	43,041,878	43,363,604	15,607,673	110	117	54
West South Central.....	454,367	505,460	276,833	41.2	50.7	29.4	75,220,485	121,091,054	24,723,146	166	240	89
Mountain.....	117,397	141,139	66,007	48.6	57.8	36.0	46,824,374	68,635,906	18,204,500	309	486	200
Pacific.....	174,004	163,214	99,750	66.5	69.7	52.5	106,581,766	80,402,877	20,920,563	613	493	210
NEW ENGLAND:												
Maine.....	30,493	30,794	46,643	78.2	82.5	77.7	11,497,733	14,858,557	7,267,854	377	373	156
New Hampshire.....	12,716	18,015	21,983	83.3	87.8	81.3	7,622,921	8,725,716	4,614,938	599	484	210
Vermont.....	21,906	25,399	26,332	88.0	87.3	80.5	11,546,995	11,070,656	4,768,703	527	438	181
Massachusetts.....	21,634	27,853	30,500	84.5	87.0	82.6	20,671,133	20,272,851	10,878,178	955	728	357
Rhode Island.....	2,892	3,608	4,358	87.1	88.4	82.4	3,047,274	2,889,450	1,678,183	1,054	801	385
Connecticut.....	16,038	19,791	21,569	87.5	87.4	80.4	12,030,308	11,721,292	5,416,108	866	592	251
MIDDLE ATLANTIC:												
New York.....	131,917	158,428	151,962	82.5	82.0	70.5	77,309,938	82,966,821	29,545,703	587	524	194
New Jersey.....	20,970	24,933	23,014	82.6	83.9	68.7	20,528,358	14,710,159	5,947,181	998	590	258
Pennsylvania.....	140,617	156,719	141,638	81.8	77.5	64.6	56,458,832	51,678,017	10,202,160	402	330	136
EAST NORTH CENTRAL:												
Ohio.....	140,122	161,658	96,050	63.9	63.0	34.9	32,603,845	40,378,027	8,445,761	233	260	89
Indiana.....	113,754	130,075	74,859	62.6	63.4	34.8	26,135,018	42,306,030	8,693,901	230	325	92
Illinois.....	143,337	158,180	94,143	66.8	66.7	37.4	35,973,405	64,528,040	13,915,028	251	408	148
Michigan.....	107,276	111,181	75,882	68.3	66.6	36.7	21,050,635	21,988,870	5,682,915	196	197	75
Wisconsin.....	137,954	122,372	73,512	75.9	64.6	41.5	31,086,790	27,919,456	5,672,916	225	228	77
WEST NORTH CENTRAL:												
Minnesota.....	113,627	100,530	58,551	61.3	56.3	37.5	19,878,966	22,940,660	5,041,925	178	228	86
Iowa.....	145,500	147,665	81,302	67.7	69.2	37.5	53,702,953	79,068,635	18,582,251	369	536	229
Missouri.....	107,613	164,638	110,418	65.5	62.0	39.8	47,252,498	60,171,516	17,148,008	282	365	155
North Dakota.....	28,296	41,907	19,624	36.3	54.0	26.4	4,203,745	12,155,122	2,003,028	149	290	102
South Dakota.....	40,527	37,966	21,763	45.7	50.9	28.0	12,425,826	16,689,237	3,049,255	307	440	140
Nebraska.....	78,355	83,374	49,251	61.3	67.0	38.0	42,286,186	58,628,746	12,567,838	533	703	255
Kansas.....	103,708	117,548	76,921	62.5	71.1	42.3	35,115,361	57,514,522	17,815,252	339	489	232
SOUTH ATLANTIC:												
Delaware.....	7,417	6,405	3,461	76.4	63.2	31.9	3,084,880	1,490,252	337,841	497	233	98
Maryland.....	22,670	33,353	23,198	74.2	69.6	47.4	10,613,261	8,044,715	2,445,065	331	241	105
District of Columbia.....	84	153	183	80.8	75.0	84.3	117,080	170,768	130,077	1,393	1,116	711
Virginia.....	81,807	97,297	62,267	47.8	52.2	33.8	12,640,444	12,400,193	3,504,680	155	127	56
West Virginia.....	44,942	47,183	37,301	54.4	54.1	38.6	5,693,976	5,639,713	1,938,233	127	120	52
North Carolina.....	121,869	128,904	76,837	43.6	47.8	30.3	11,115,763	12,291,850	3,151,190	91	95	41
South Carolina.....	40,134	60,068	40,130	25.4	31.2	22.7	3,573,494	5,903,025	1,830,815	89	98	46
Georgia.....	77,050	86,580	75,975	30.1	27.9	26.1	8,357,099	9,538,763	4,097,043	108	110	54
Florida.....	22,467	20,471	16,638	38.1	37.9	33.2	8,096,841	5,024,668	1,820,356	361	246	109
EAST SOUTH CENTRAL:												
Kentucky.....	105,486	119,689	65,699	42.8	44.2	25.3	12,500,509	18,010,069	4,014,098	119	134	61
Tennessee.....	104,476	100,074	70,212	42.5	39.6	28.5	10,809,981	11,165,456	3,570,551	103	112	51
Alabama.....	88,111	71,668	81,275	34.2	28.0	30.9	8,228,526	5,920,837	4,041,486	98	83	50
Mississippi.....	92,814	77,718	73,783	29.7	28.6	26.9	11,496,363	10,260,642	3,080,638	124	182	54
WEST SOUTH CENTRAL:												
Arkansas.....	110,676	118,908	73,098	45.7	51.2	34.1	12,406,536	17,725,489	4,275,587	112	149	58
Louisiana.....	59,065	56,423	28,323	36.6	41.7	23.5	7,871,850	12,232,235	3,754,140	133	217	134
Oklahoma.....	93,234	114,488	62,646	45.7	59.6	32.9	17,128,034	30,372,146	5,863,373	184	265	94
Texas.....	191,402	215,561	112,866	38.6	49.4	27.0	87,804,065	80,762,084	10,800,046	198	282	98
MOUNTAIN:												
Montana.....	20,692	37,901	8,069	43.6	65.7	30.9	6,871,984	10,701,034	1,741,071	332	522	215
Idaho.....	22,051	24,062	10,639	42.9	57.1	34.5	7,040,244	10,709,475	2,122,709	319	445	200
Wyoming.....	7,995	8,823	4,469	49.9	58.0	40.7	5,136,287	6,908,684	1,508,828	642	783	338
Colorado.....	31,212	36,092	19,545	52.1	60.2	42.3	13,829,325	18,430,975	4,502,799	443	511	285
New Mexico.....	12,476	14,586	13,470	39.7	48.9	37.8	3,816,839	5,370,823	1,527,087	306	368	113
Arizona.....	6,885	4,966	2,714	48.6	49.2	29.4	3,471,960	2,059,885	541,371	504	420	199
Utah.....	13,920	13,082	6,086	51.3	51.0	28.1	4,937,875	3,941,388	727,409	355	301	120
Nevada.....	2,157	1,657	1,085	62.7	53.3	40.3	1,720,370	1,422,672	443,285	798	843	409
PACIFIC:												
Washington.....	51,429	51,038	29,375	72.5	77.0	52.3	25,297,333	20,721,880	5,045,297	492	406	172
Oregon.....	38,519	34,404	21,012	68.8	68.5	46.2	13,166,800	13,390,428	3,198,363	342	389	152
California.....	84,056	77,772	49,372	62.0	66.1	56.0	68,117,633	46,380,569	12,676,903	810	590	257

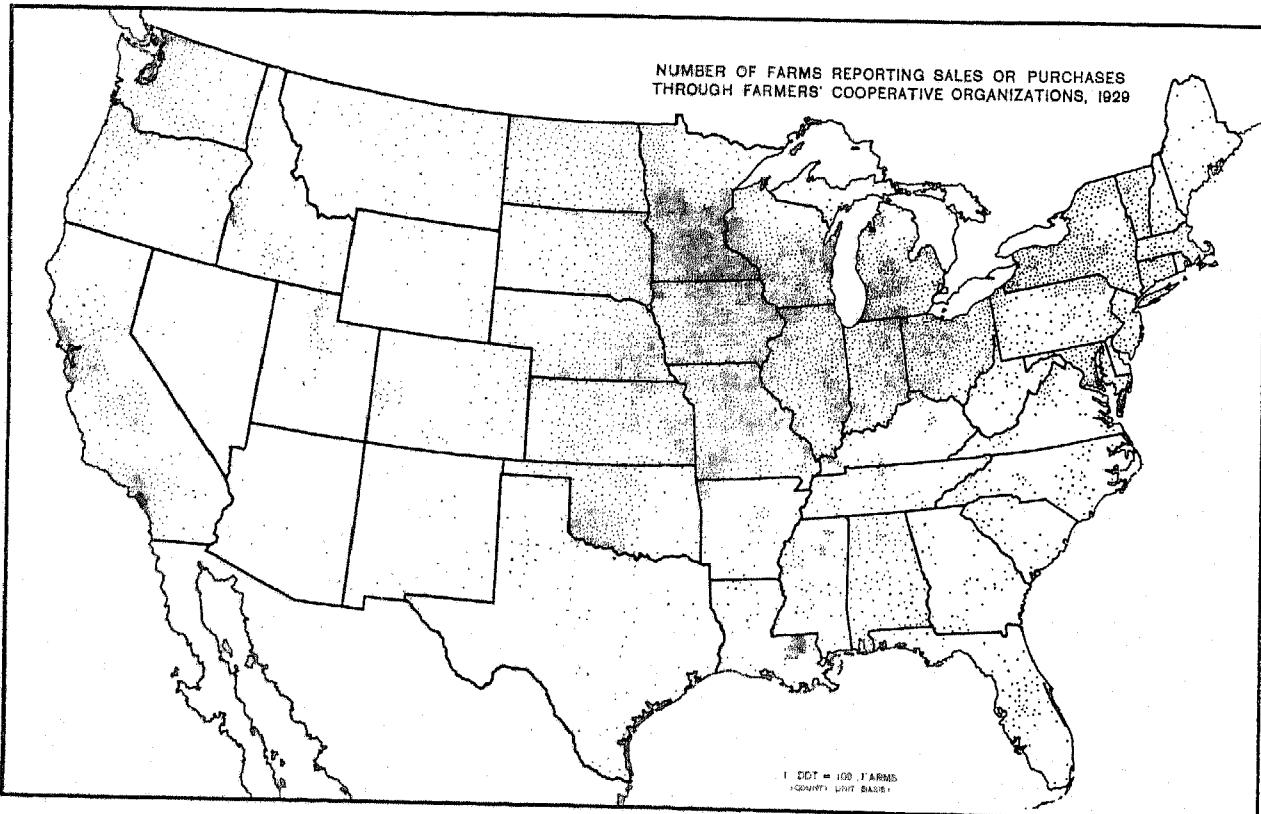
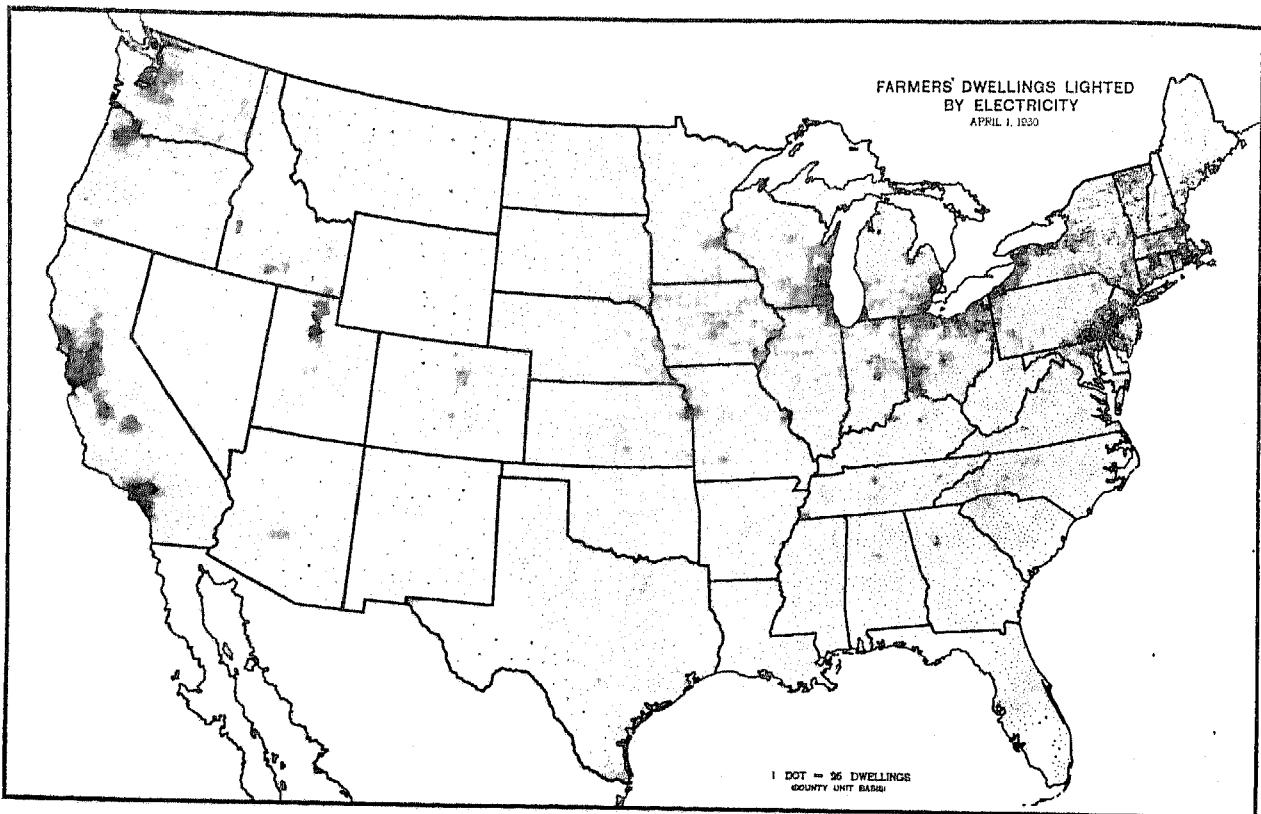
SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 523

TABLE 9.—PER CENT DISTRIBUTION OF SELECTED FARM EXPENDITURES, BY DIVISIONS AND STATES: 1929
AND 1919

[All percentages based on figures in Tables 3, 4, 5, 6, 7, and 8. See footnotes on those tables.]

DIVISION AND STATE	FARM LABOR (EXCLUSIVE OF HOUSEWORK)				COMMERCIAL FERTILIZER, MANURE, MARL, LIME, AND GROUND LIMESTONE				FEED				ELECTRIC LIGHT AND POWER, 1929				FARM IMPLEMENTS AND MACHINERY, 1929							
	Farms reporting		Days of hired labor, 1929	Expenditures (cash)	Total expenditures		Commercial fertilizer (only) purchased, 1929		Farms reporting		Expenditures		Farms reporting—		Electric light and power purchased		Farms reporting—		Value Apr. 1, 1930		Purchases		Expenditures	
	1929	1919			1929	1919	1929	1919	Farms reporting	Tons	1929	1919	Dwellings lighted by electricity, Apr. 1, 1930	Electric light and power purchased	Expenditures	1929	1919	1929	1919	1929	1919	1929	1919	
	1929	1919			1929	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929	1919		
United States.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
GEOGRAPHIC DIVISIONS:																								
New England.....	2.81	3.12	3.98	5.22	3.98	2.95	3.43	5.69	5.61	3.05	4.58	3.19	3.83	7.33	6.34	6.38	7.97	6.42	1.98	2.31	2.54			
Middle Atlantic.....	7.52	9.03	8.74	9.91	8.66	9.67	12.35	11.14	12.70	9.21	10.60	8.94	9.69	16.83	13.61	13.56	15.32	12.34	5.79	7.86	8.23			
East North Central.....	17.04	13.17	14.76	18.87	16.59	16.09	15.86	10.80	9.37	14.23	10.26	19.57	19.47	15.96	17.96	24.00	22.60	15.86	15.86	18.88	17.92			
West North Central.....	22.95	23.30	18.87	18.70	24.00	2.92	2.68	1.65	1.89	2.52	1.41	20.67	19.76	23.25	27.99	17.47	12.63	9.83	15.89	2.47	35.58			
South Atlantic.....	13.95	13.03	13.93	9.62	8.03	34.99	41.11	43.09	56.89	38.09	49.20	13.02	13.68	6.93	5.51	7.63	6.55	4.82	16.35	12.68	5.42			
East South Central.....	9.51	8.58	5.73	3.54	3.46	22.82	18.41	14.79	7.81	23.63	15.74	11.90	10.51	4.68	3.95	8.50	8.29	2.22	15.88	9.03	3.57			
West South Central.....	15.00	13.50	14.21	11.58	12.12	9.51	4.79	5.80	2.66	9.81	5.73	13.54	14.40	8.18	11.04	4.78	3.25	3.61	17.42	12.30	10.79			
Mountain.....	5.03	4.34	7.60	8.99	7.73	0.26	0.22	0.25	0.17	0.14	3.58	4.02	5.09	6.26	5.84	6.86	6.00	3.87	5.06	5.06	8.22			
Pacific.....	6.20	4.93	12.48	18.59	14.15	1.79	1.13	5.90	2.82	1.29	2.34	5.30	4.65	11.60	7.34	16.45	21.53	38.90	3.96	4.39	7.73			
NEW ENGLAND:																								
Maine.....	0.87	0.93	0.78	0.96	0.68	1.03	1.00	2.69	2.38	1.07	2.27	0.93	1.13	1.25	1.25	1.54	1.92	1.07	0.62	0.69	0.78			
New Hampshire.....	0.34	0.89	0.84	0.42	0.83	0.30	0.39	0.16	0.18	0.31	0.15	0.39	0.51	0.83	0.80	0.73	0.88	0.66	0.24	0.24	0.25			
Vermont.....	0.58	0.63	0.59	0.58	0.53	0.51	0.64	0.25	0.26	0.53	0.23	0.67	0.72	1.26	1.01	0.90	1.12	0.71	0.41	0.48	0.45			
Massachusetts.....	0.58	0.63	1.25	1.81	1.27	0.61	0.75	1.11	1.20	0.64	0.91	0.66	0.79	2.25	1.85	1.91	2.42	2.26	0.40	0.50	0.60			
Rhode Island.....	0.07	0.08	0.18	0.24	0.16	0.08	0.10	0.12	0.12	0.08	0.10	0.09	0.10	0.33	0.26	0.23	0.29	0.33	0.06	0.07	0.08			
Connecticut.....	0.37	0.45	0.87	1.23	1.01	0.41	0.56	1.35	1.50	0.42	0.91	0.46	0.56	1.42	1.07	1.08	1.34	1.39	0.27	0.33	0.39			
MIDDLE ATLANTIC:																								
New York.....	3.44	4.20	4.24	4.75	4.49	3.89	5.00	4.24	4.62	3.64	3.82	4.02	4.51	8.42	7.56	8.54	7.59	5.96	2.62	3.73	4.05			
New Jersey.....	0.56	0.64	1.87	1.84	1.31	0.73	1.00	2.43	2.29	0.76	2.15	0.64	0.71	2.27	1.34	1.60	1.92	1.98	0.40	0.56	0.78			
Pennsylvania.....	3.53	4.19	3.18	3.32	2.87	5.06	6.36	4.47	4.79	4.82	4.62	4.28	4.46	6.14	4.71	5.42	5.82	4.40	2.77	3.57	3.40			
EAST NORTH CENTRAL:																								
Ohio.....	3.43	4.22	2.68	2.68	3.31	5.65	7.29	4.07	4.05	5.78	4.39	4.27	4.60	3.55	3.68	6.74	6.60	4.15	3.49	3.28	2.98			
Indiana.....	2.02	3.23	2.01	1.76	2.33	8.57	4.35	2.60	2.68	3.65	2.74	3.46	3.70	2.84	2.86	3.61	3.25	1.96	2.89					
Illinois.....	4.29	5.24	4.48	4.29	5.54	1.32	0.99	1.33	0.92	0.68	0.71	4.37	4.51	3.91	5.88	4.07	3.21	2.56	3.58	4.42	4.98			
Michigan.....	2.89	3.55	2.01	2.08	2.26	3.10	2.90	2.02	1.49	2.97	1.86	3.27	3.17	2.29	2.00	4.13	4.24	2.69	2.80	3.48	3.01			
Wisconsin.....	3.80	3.84	3.62	3.00	3.15	1.45	0.34	0.79	0.24	1.15	0.57	4.20	3.49	3.85	2.64	5.58	5.20	4.50	3.09	5.09	4.58			
WEST NORTH CENTRAL:																								
Minnesota.....	3.99	3.87	3.21	2.88	3.82	0.40	0.13	0.26	0.13	0.40	0.23	3.46	2.86	2.14	2.09	2.77	2.17	1.84	3.10	5.01	5.07			
Iowa.....	4.66	4.73	4.28	4.16	4.82	0.68	0.14	0.43	0.18	0.45	0.26	4.43	4.20	5.84	7.21	5.47	4.40	3.50	3.66	6.19	7.45			
Missouri.....	3.67	4.34	2.59	2.08	3.01	1.64	2.00	0.75	1.21	1.45	0.76	5.10	4.69	5.14	5.46	2.40	2.18	1.30	4.24	3.40	2.51			
North Dakota.....	2.20	1.77	2.13	2.57	2.53	0.02	0.02	0.04	0.04	0.02	0.01	0.86	1.20	0.46	1.11	0.74	0.30	1.35	3.36					
South Dakota.....	1.85	1.72	1.50	1.53	2.20	0.01	0.01	0.01	0.01	(1)	(1)	1.23	1.08	1.35	1.52	1.08	0.44	0.39	1.43	2.36	3.52			
Nebraska.....	2.92	2.79	2.42	2.65	3.15	0.03	0.02	0.02	0.02	0.02	0.01	2.42	2.27	4.60	5.34	2.54	1.31	1.20	2.23	3.76	5.21			
Kansas.....	3.65	4.08	2.43	2.88	4.98	0.24	0.27	0.18	0.20	0.18	0.13	3.16	3.35	3.82	5.24	2.40	1.80	1.28	2.83	4.41	7.96			
SOUTH ATLANTIC:																								
Delaware.....	0.20	0.19	0.27	0.26	0.19	0.82	0.40	0.48	0.37	0.34	0.57	0.23	0.18	0.40	0.14	0.19	0.18	0.19	0.19	0.16	0.20	0.20		
Maryland.....	0.97	1.01	1.45	1.36	1.18	1.45	1.73	2.04	2.33	1.50	2.39	0.98	0.95	1.15	0.73	1.09	1.09	0.96	0.69	0.77	0.74			
District of Columbia.....	(1)	(1)	0.02	0.03	0.01	(1)	0.01	0.01	0.01	(1)	(1)	(1)	(1)	(1)	(1)	0.01	0.01	0.01	(1)	(1)				
Virginia.....	2.37	2.80	2.52	1.97	1.56	4.76	5.95	4.35	5.29	4.88	5.16	2.45	2.77	1.38	1.13	1.55	1.25	1.81	2.63	1.80	1.22			
West Virginia.....	1.10	1.08	0.63	0.52	0.44	1.30	1.55	0.43	0.62	1.35	0.61	1.37	1.34	0.62	0.51	0.63	0.50	0.33	1.20	0.67	0.42			
North Carolina.....	3.38	2.71	1.91	1.22	0.98	10.09	10.70	12.80	14.95	10.42	14.70	3.71	3.67	1.21	1.12	1.78	1.54	0.87	4.35	2.75	0.97			
South Carolina.....	1.87	2.15	2.11	0.94	0.94	5.99	7.77	8.15	16.10	6.21	9.40	1.22	1.71	0.39	0.64	0.72	0.53	0.31	2.45	2.00	0.52			
Georgia.....	3.00	2.59	2.97	1.46	1.52	9.36	12.35	10.16	14.16	9.67	11.42	2.35	2.47	0.91	0.87	0.89	0.63	0.45	4.06	3.87	0.85			
Florida.....	1.06	0.70	2.06	1.86	0.92	1.71	1.27	5.59	3.16	1.76	4.94	0.68	0.58	0.88	0.46	0.77	0.72	0.70	0.81	0.63	0.50			
EAST SOUTH CENTRAL:																								
Kentucky.....	2.69	2.66	1.68	1.20	1.89	3.19	3.82	0.96	1.10	3.80</														

AGRICULTURE



COOPERATIVE MARKETING AND PURCHASING BY FARMERS

Data for cooperative marketing of farm products and for cooperative purchasing of supplies by farm operators

were collected at the 1930, 1925, and 1920 censuses. Cooperative activities are carried on by associations ranging from rather informal organizations to more or less formal organizations incorporated under general corporation laws or under cooperative statutes.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 525

It should be borne in mind that the number of farmers reporting cooperative purchases or sales do not give a *count* of the *membership* of cooperative associations, but rather the *number of individual operators* who bought or sold through such associations in a particular year. Thus, non-members trading through such associations would be included, inactive members not dealing through cooperative associations in the particular year in question would be excluded, and operators who dealt through more than one association would be counted but once. The nature of the questions would exclude those operators whose cooperative activities were limited to strictly service functions such as insurance, financing, cotton ginning, and telephone communication.

TABLE 10.—SALES AND PURCHASES THROUGH FARMERS' CO-OPERATIVE ORGANIZATIONS, 1929, 1924, AND 1919; AND VALUE OF ALL PRODUCTS¹ ON FARMS REPORTING COOPERATIVE SALES, 1929; FOR THE UNITED STATES

[Statistics for divisions and States in Tables 12 and 13]

ITEM	1929	1924	1919
All farms ²	6,288,048	6,371,040	6,448,343
Farms reporting cooperative sales and (or) cooperative purchases.....	824,537	987,376	624,527
Per cent of all farms.....	13.1	15.5	9.7
Farms reporting cooperative sales.....	691,895	884,207	511,383
Per cent of all farms.....	11.0	13.9	7.9
Value of all products ¹	\$2,138,048,366		
Average value per farm reporting.....	\$3,040		
Value of products sold cooperatively.....	\$892,481,491	\$858,284,387	\$721,953,639
Average value per farm reporting.....	\$1,290	\$971	\$1,412
Per cent of all products for farms reporting cooperative sales.....	41.7		
Farms reporting cooperative purchases.....	410,914	362,745	329,449
Per cent of all farms.....	6.5	5.7	5.1
Value of supplies purchased cooperatively.....	\$125,048,597	\$75,971,169	\$84,015,609
Average value per farm reporting.....	\$304	\$209	\$257

¹ Sold, traded, or consumed by farm operator's family.

² Number on April 1, 1930, and January 1, 1925 and 1920.

In 1930 there were 824,537, or 13.1 per cent, of all farm operators in the United States who reported trading through farmers' cooperative organizations during the calendar year 1929. Of those reporting cooperative activities, 278,272, or 33.7 per cent, made both sales and purchases through cooperative associations; 413,623, or 50.2 per cent, reported sales and no purchases; and 132,642, or 16.1 per cent, reported purchases and no sales. Thus the combined number selling through cooperative organizations was 691,895, or 11 per cent of all operators, and the number who made purchases was 410,914, or 6.5 per cent.

The proportion of all farms reporting transactions through cooperative associations was 9.7 per cent in 1920. It increased to 15.5 per cent in 1925 and receded to 13.1 per cent in 1930. The decline from 1925 to 1930 was due to a considerable reduction in the number of producers who sold cooperatively, which was only partially offset by an increase in the number who reported purchases. Thus covering operations in the preceding calendar year, the respective percentages reporting sales in 1930, 1925, and 1920 were 11, 13.9, and 7.9, while the percentages reporting

purchases for the same period were 6.5, 5.7, and 5.1. The number and percentage of producers reporting sales in the three census years were affected materially by large increases reported in 1925 over 1920 in the three Southern divisions and by a heavy decrease in the number of farms reporting in the South in 1930 in comparison with 1925. Minnesota has held the foremost rank in the percentage of farms reporting cooperative sales for the three census years, the percentages being 51.6 for 1930, 42.4 for 1925, and 43.9 for 1920. The States leading in the percentage of farms reporting cooperative purchases for the three census years were Minnesota in 1930 with 21.4 per cent, Iowa in 1925 with 15.9 per cent, and Nebraska in 1920 with 22 per cent.

The value of all farm products sold, traded, or consumed by the farm operator's family for the year 1929 for those farms reporting cooperative sales amounted to \$2,138,048,366, or an average of \$3,090 per farm; of this total amount, \$892,481,491, or 41.7 per cent, represented the value of products sold cooperatively. The average sales per farm made through cooperative associations in 1929 was \$1,290, as compared with \$971 in 1924 and \$1,412 in 1919. With the exception of the Mountain division, the increase for 1929 over 1924 was general in all geographic divisions. The range in the average value of products per farm sold cooperatively in 1929 varied from \$389 in Tennessee to \$4,621 in Arizona. For those farms reporting cooperative sales, the proportion of such sales to the value of all farm products sold, traded, or consumed by the operator's family on such farms, varied from 20.1 per cent in Tennessee to 77.4 per cent in Florida.

The value of supplies purchased through farmers' organizations by farm operators in 1929 amounted to \$125,048,597, or an average purchase of \$304 per farm reporting, compared with \$209 in 1924 and \$257 in 1919. Thus in 1929, on a "farm reporting" basis, cooperative sales were more than four times greater than cooperative purchases. The average expenditure per farm in 1929 for supplies purchased cooperatively ranged from \$133 in Tennessee to \$1,329 in Connecticut.

TABLE 11.—FARMS REPORTING SALES AND (OR) PURCHASES THROUGH FARMERS' COOPERATIVE ORGANIZATIONS, WITH PER CENT DISTRIBUTION, FOR THE UNITED STATES: 1929, 1924, AND 1919

[Statistics for divisions and States in Tables 12 and 13]

ITEM	FARMS REPORTING			PER CENT DISTRIBUTION		
	1929	1924	1919	1929	1924	1919
Sales and (or) purchases.....	824,537	987,376	624,527	100.0	100.0	100.0
Sales.....	691,895	884,207	511,383	83.9	89.6	81.9
Sales and purchases.....	278,272	259,576	216,305	33.7	26.3	34.6
Sales and no purchases.....	413,623	624,631	295,078	50.2	63.3	47.2
Purchases.....	410,914	362,745	329,449	49.8	36.7	52.8
Sales and purchases.....	278,272	259,576	216,305	33.7	26.3	34.6
Purchases and no sales.....	132,642	103,169	113,144	16.1	10.4	18.1

AGRICULTURE

TABLE 12.—SALES AND PURCHASES THROUGH FARMERS' COOPERATIVE ORGANIZATIONS, 1929, 1924, BY DIVISIONS

DIVISION AND STATE	ALL FARMS	FARMS REPORTING COOPERATIVE SALES AND (OR) COOPERATIVE PURCHASES						FARMS REPORTING COOPERATIVE SALES						FARMS REPORTING CO-OPERATIVE PURCHASES					
		Number			Per cent of all farms			Number			Per cent of all farms			Number					
		1920	1925	1929	1929	1924	1919	1929	1924	1919	1929	1924	1919	1929	1924	1919			
1	United States....	6,288,648	6,371,640	6,448,343	824,587	967,876	624,527	13.1	15.6	8.7	691,895	884,207	511,383	11.0	13.9	7.9	410,914	382,745	329,449
2	GEOGRAPHIC DIVISIONS:																		
3	New England....	124,925	159,489	156,564	16,989	18,458	10,229	13.6	11.6	6.5	9,170	10,845	4,060	7.3	6.8	2.6	10,897	10,787	7,579
4	Middle Atlantic....	357,603	418,868	425,147	57,788	52,710	45,079	16.2	12.6	10.6	41,068	39,205	33,884	11.5	9.4	8.0	30,856	24,716	17,884
5	E. North Central....	966,502	1,051,572	1,084,744	216,280	236,552	173,672	22.4	22.5	16.0	170,092	205,400	144,339	17.7	19.5	13.3	115,368	103,199	88,518
6	W. North Central....	1,112,755	1,111,314	1,096,951	322,528	277,510	284,123	29.0	29.5	25.0	290,199	303,190	243,288	26.1	27.3	22.2	159,988	140,588	106,084
7	South Atlantic....	1,058,468	1,103,061	1,158,976	36,600	39,899	18,770	3.5	9.0	1.6	28,682	90,879	9,517	2.7	8.2	0.8	15,866	20,930	12,230
8	E. South Central....	1,062,214	1,006,052	1,051,606	29,501	29,547	15,488	2.8	9.7	1.6	19,670	91,073	12,705	1.9	9.1	1.2	15,948	21,293	5,285
9	W. South Central....	1,103,134	1,017,305	996,088	47,417	73,259	18,755	4.3	7.2	1.9	42,292	67,715	15,635	3.8	6.7	1.6	18,421	17,720	9,332
10	Mountain....	241,814	233,392	244,109	31,483	26,947	19,097	13.0	11.5	8.1	28,347	24,581	12,785	11.7	10.5	5.2	12,208	8,000	13,875
	Pacific....	261,733	265,587	284,164	68,905	54,494	38,714	25.2	20.5	16.5	61,495	51,220	35,200	23.5	19.3	15.0	31,272	15,612	13,082
11	NEW ENGLAND:																		
12	Maine....	39,008	50,033	48,227	2,098	3,885	4,062	5.4	7.8	8.4	755	2,555	1,264	1.9	5.1	2.6	1,874	1,398	3,407
13	New Hampshire....	14,906	21,065	20,625	1,912	1,933	1,027	12.8	9.2	5.0	401	428	122	3.1	2.0	0.6	1,047	1,701	940
14	Vermont....	24,838	27,788	29,075	5,826	4,886	2,513	23.4	17.6	8.6	4,304	2,748	1,239	17.3	9.9	4.3	2,032	3,186	1,672
15	Massachusetts....	25,598	35,454	32,001	3,678	3,653	1,647	14.4	10.9	4.8	1,448	2,091	747	5.7	6.8	2.3	2,891	2,099	1,009
16	Rhode Island....	3,322	3,911	4,083	241	348	145	7.3	8.9	3.6	140	235	95	4.2	6.0	2.3	148	213	88
17	Connecticut....	17,195	23,240	22,665	3,230	3,783	686	18.8	16.1	4.1	2,062	2,791	598	12.0	12.0	2.6	1,905	1,513	459
18	MIDDLE ATLANTIC:																		
19	New York....	159,806	188,754	193,195	38,230	31,957	27,283	23.9	16.9	14.1	28,015	26,586	23,494	17.5	14.1	12.2	19,933	12,509	7,108
20	New Jersey....	25,378	29,671	28,702	2,810	2,379	4,282	11.1	8.0	14.4	1,750	1,401	2,768	6.9	4.7	0.3	1,899	1,006	2,798
21	Pennsylvania....	172,419	200,443	202,260	16,730	18,374	13,514	9.7	9.2	6.7	11,303	11,308	7,602	6.6	5.0	3.8	9,024	10,601	7,980
22	EAST NORTH CENTRAL:																		
23	Ohio....	219,286	244,703	256,696	41,894	48,127	30,621	19.1	19.7	11.0	31,067	39,995	19,952	14.2	16.3	7.8	26,730	24,711	21,250
24	Indiana....	181,570	195,786	205,128	30,057	33,906	19,212	16.6	17.3	9.4	20,461	28,550	14,038	11.3	14.6	7.1	18,742	14,558	10,019
25	Illinois....	214,407	225,601	237,181	46,749	56,618	28,628	21.8	25.1	12.1	41,857	52,606	24,797	19.5	23.8	10.5	16,861	17,471	12,303
26	Michigan....	169,372	192,327	196,447	44,206	47,446	47,021	26.1	24.7	23.9	31,331	28,730	42,104	18.5	20.1	21.4	28,721	26,124	18,164
27	Wisconsin....	181,767	193,155	189,295	53,354	50,556	48,190	29.4	26.2	25.6	46,276	45,528	42,848	25.5	23.6	22.6	24,808	21,335	21,702
28	W. NORTH CENTRAL:																		
29	Minnesota....	185,255	188,231	178,478	98,981	82,419	81,145	53.4	43.8	45.5	95,639	79,891	78,314	51.6	42.4	43.9	39,561	26,066	28,611
30	Iowa....	214,928	213,490	213,439	66,825	79,188	51,830	31.0	37.1	24.2	58,970	72,639	48,350	27.4	34.0	20.3	33,183	34,034	32,530
31	Missouri....	255,940	266,473	263,004	54,761	60,637	26,496	21.4	25.6	9.7	47,442	60,860	17,748	18.5	23.4	6.7	31,982	33,343	17,954
32	North Dakota....	77,975	75,970	77,960	22,739	13,470	19,814	29.2	17.7	25.5	20,882	12,913	17,488	26.1	17.0	22.4	11,085	5,527	12,670
33	South Dakota....	83,157	78,537	74,687	20,967	19,341	22,517	24.2	24.3	30.2	18,141	17,769	20,241	21.8	22.8	27.1	11,176	8,835	13,754
34	Nebraska....	129,458	127,734	124,417	27,670	31,331	40,333	21.4	24.5	22.4	23,397	28,139	32,543	18.1	22.0	26.2	15,098	15,461	27,335
35	Kansas....	166,042	165,879	165,286	30,885	35,115	43,188	18.6	21.2	26.1	26,238	30,070	33,654	15.8	18.7	20.4	17,903	17,822	32,321
36	SOUTH ATLANTIC:																		
37	Delaware....	9,707	10,257	10,140	229	507	610	2.4	4.9	6.0	64	198	548	0.7	1.9	5.4	186	415	275
38	Maryland....	43,203	48,061	47,908	6,130	8,283	2,177	14.2	16.9	4.5	4,588	6,121	1,868	10.5	12.5	3.9	8,883	3,817	637
39	Distr. of Columbia....	104	139	204															
40	Virginia....	170,610	193,723	186,242	6,939	30,877	7,537	4.1	15.7	4.0	4,394	27,560	3,849	2.6	14.2	2.1	3,947	5,708	5,161
41	West Virginia....	82,641	90,380	87,289	5,307	5,054	2,565	4.0	5.6	2.9	1,652	2,106	625	2.0	3.4	0.7	2,203	2,709	
42	North Carolina....	279,708	283,482	269,763	5,601	23,208	3,524	2.0	8.2	1.3	4,006	22,167	850	1.6	7.8	0.3	2,168	2,791	2,976
43	South Carolina....	157,931	172,767	192,688	2,590	10,679	338	1.6	6.2	0.2	2,469	10,801	203	1.6	6.1	0.1	555	819	186
44	Georgia....	255,598	240,096	310,732	5,759	13,705	586	2.3	5.5	0.2	8,142	13,376	210	2.0	5.4	0.1	1,724	2,388	411
45	Florida....	58,966	59,217	54,005	6,042	7,989	1,433	10.2	13.5	2.7	5,802	7,755	1,387	0.8	13.1	2.5	1,645	2,003	381
46	EAST SOUTH CENTRAL:																		
47	Kentucky....	246,499	258,524	270,826	5,113	54,506	4,543	2.1	21.1	1.7	4,763	53,704	3,498	1.9	20.8	1.3	1,280	3,308	2,844
48	Tennessee....	245,657	252,629	254,774	5,232	16,398	2,121	2.1	6.5	0.8	5,552	15,303	1,255	1.4	6.1	0.5	2,872	4,490	1,174
49	Alabama....	257,395	257,631	256,099	11,831	13,744	2,822	4.6	5.8	1.1	7,270	11,365	2,678	2.8	4.8	1.0	7,682	7,040	422
50	Mississippi....	312,663	267,226	272,101	7,305	12,890	5,999	2.3	5.0	2.2	4,085	10,701	5,274	1.3	4.2	1.9	4,134	5,855	1,345
51	WEST SOUTH CENTRAL:																		
52	Arkansas....	242,394	221,991	232,004	5,110	10,889	3,144	2.1	4.7	1.4	4,651	8,861	2,885	1.9	4.0	1.2	2,519	3,910	1,072
53	Louisiana....	161,445	132,450	135,483	8,781	11,079	4,329	5.4	8.4	3.2	7,467	10,114	4,284	4.6	7.6	3.2	6,929	4,893	1,591
54	Oklahoma....	203,866	197,218	191,089	23,243	20,753	7,718	11.4	10.5	4.0	21,715	19,049	5,980	10.7	9.7	3.1	5,273	4,878	4,900
55</td																			

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 527

AND 1919; AND VALUE OF ALL PRODUCTS¹ ON FARMS REPORTING COOPERATIVE SALES, 1929;
AND STATES

FARMS REPORTING COOPERATIVE PURCHASES— continued		VALUE OF ALL PROD- UCTS ¹ ON FARMS REPORTING COOP- ERATIVE SALES, 1929		VALUE OF PRODUCTS SOLD COOPERATIVELY						VALUE OF SUPPLIES PURCHASED COOPERATIVELY							
Per cent of all farms	Amount	Aver- age per farm reporting	Amount			Average per farm reporting			Per cent of all products, 1929 ²	Amount			Average per farm reporting				
			1929	1924	1919	1929	1924	1919		1929	1924	1919	1929	1924	1919		
6.5	5.7	5.1	\$2,138,048,866	\$3,090	\$892,481,491	\$858,284,387	\$721,983,659	\$1,280	8971	\$1,412	41.7	\$125,048,597	\$75,971,169	\$84,615,669	\$304	\$209	\$257
8.7	6.8	4.8	30,450,836	3,976	21,067,579	20,745,826	5,916,681	2,207	1,913	1,457	57.8	\$8,802,124	5,709,116	3,035,806	808	529	401
8.6	5.9	4.2	135,252,269	3,293	72,167,465	50,273,909	61,224,128	1,757	1,279	1,808	53.4	16,870,555	7,376,663	6,193,647	547	298	246
11.9	9.8	7.7	466,493,134	2,728	150,849,215	145,068,090	132,639,450	882	706	910	32.3	24,448,719	15,688,188	14,305,981	212	152	171
14.4	12.7	15.1	871,316,979	3,002	310,354,418	292,354,272	300,820,976	1,069	964	1,236	35.6	33,572,528	25,740,405	43,115,568	210	183	260
1.5	1.9	1.1	79,471,647	2,773	41,801,737	73,376,626	20,639,686	1,458	807	2,169	52.6	6,610,074	4,968,028	2,607,639	417	239	218
1.5	2.1	0.5	36,435,245	1,852	13,602,866	49,827,199	5,271,001	692	547	415	37.3	2,526,309	2,601,511	763,054	158	126	144
1.7	1.7	0.9	109,310,004	2,585	48,177,517	75,724,191	26,934,455	1,139	1,118	1,723	44.1	3,851,814	2,702,699	2,803,314	211	163	300
5.1	3.4	5.7	109,898,884	3,877	36,702,878	35,043,394	17,443,431	1,295	1,426	1,364	33.4	3,573,028	1,709,581	3,769,213	291	214	272
11.9	5.9	5.8	293,412,778	4,771	107,777,816	115,871,386	151,003,881	3,216	2,262	4,202	67.4	24,762,846	9,384,978	8,021,407	792	601	587
4.8	3.8	7.1	2,376,965	3,148	871,777	3,823,291	1,421,022	1,155	1,496	1,124	36.7	928,175	626,998	1,498,395	554	330	440
11.0	8.1	4.6	1,060,081	3,816	675,438	375,303	120,427	1,465	877	987	40.5	1,113,317	911,434	246,059	676	536	290
10.6	11.5	5.8	12,750,078	2,902	6,807,273	3,876,575	1,449,389	1,582	1,412	1,170	53.4	1,612,633	1,485,455	510,306	575	466	305
11.3	0.8	3.2	7,449,095	5,144	4,987,968	4,144,690	1,671,099	3,445	1,982	2,237	67.0	2,444,891	1,461,878	521,547	880	642	517
4.5	5.4	2.1	548,453	3,018	307,824	570,650	222,078	2,199	2,428	2,338	56.1	171,679	122,670	30,534	1,160	576	355
11.1	6.5	2.0	11,665,264	5,657	7,417,809	7,954,808	1,082,666	3,597	2,860	1,741	63.6	2,531,429	1,101,686	228,966	1,329	728	499
12.5	6.6	3.7	96,143,771	8,432	52,623,182	87,944,517	44,906,247	1,878	1,427	1,011	54.7	11,407,972	3,927,479	2,270,976	572	314	320
7.5	5.4	9.4	8,460,614	4,838	5,271,712	2,309,491	6,803,253	3,012	1,648	2,394	62.3	1,785,290	956,753	2,093,705	940	590	748
5.2	5.3	8.9	30,041,974	2,711	14,272,571	10,019,001	9,714,628	1,263	886	1,278	46.6	3,677,203	2,492,431	1,828,966	408	236	229
12.2	10.1	8.3	84,514,770	2,720	26,102,644	27,961,322	18,762,020	840	700	940	30.9	6,167,597	3,590,296	3,197,047	231	145	150
10.3	7.4	4.9	55,651,449	2,720	18,657,604	17,212,911	12,778,040	816	603	873	30.0	3,463,461	1,774,005	1,766,268	185	122	176
7.9	7.7	5.2	136,680,440	3,206	48,933,674	52,827,619	47,920,487	1,160	1,004	1,983	35.8	3,826,054	2,978,782	3,388,667	227	170	271
17.0	13.1	9.2	66,974,421	2,138	18,651,237	19,562,039	24,294,688	529	505	577	24.8	5,797,257	3,606,650	2,446,953	202	144	135
13.4	11.0	11.5	122,663,048	2,651	42,544,056	27,484,199	28,884,215	919	604	674	34.7	5,194,330	3,738,488	3,562,956	214	175	164
21.4	13.8	16.6	250,594,425	2,820	105,965,586	73,260,576	82,700,459	1,108	917	1,057	42.8	6,414,232	3,843,614	6,642,162	102	147	224
15.4	15.9	15.2	219,181,028	3,717	74,655,414	81,290,603	59,408,626	1,268	1,119	1,370	34.1	7,462,346	6,581,022	6,760,952	228	193	208
12.5	12.8	8.8	92,502,268	1,950	29,448,470	32,674,606	13,474,902	621	535	759	31.8	6,806,189	4,587,598	2,964,714	203	188	165
14.2	7.3	16.2	68,871,582	3,281	20,880,641	17,081,784	24,454,558	1,022	1,319	1,404	31.2	1,622,265	1,362,573	3,840,811	146	247	306
13.4	11.1	18.4	80,021,704	3,309	16,409,198	18,651,404	31,651,244	905	1,080	1,504	37.3	2,079,436	1,451,712	3,583,771	186	261	29
11.7	12.1	22.0	84,201,907	3,659	26,848,713	32,740,682	44,765,140	1,189	1,184	1,375	31.6	4,441,475	3,715,257	9,660,107	294	240	353
10.8	10.4	19.6	97,944,065	3,734	38,396,390	38,604,833	44,200,987	1,388	1,188	1,316	37.2	5,046,612	4,108,549	9,663,051	282	242	299
1.9	4.0	2.7	226,167	8,634	86,188	121,602	218,034	1,346	620	308	38.1	188,492	135,506	29,564	745	327	107
7.8	7.8	1.3	13,875,977	3,061	6,924,827	7,297,676	8,089,200	1,528	1,102	1,656	49.9	1,178,464	909,891	272,420	348	238	428
2.8	3.0	2.8	17,241,373	3,924	8,792,136	20,012,832	10,186,052	2,001	759	2,046	51.0	1,474,478	1,256,058	374	218	234	35
2.7	3.1	2.5	4,078,215	2,469	1,207,106	919,188	284,180	731	296	455	29.6	389,264	320,138	218,219	116	99	36
0.8	1.0	1.1	7,963,284	1,720	2,906,980	13,017,587	663,227	631	587	780	36.5	483,038	450,018	421,142	224	161	142
0.4	0.5	0.1	7,094,403	2,878	3,855,277	8,922,354	961,999	1,581	842	4,739	54.3	718,361	335,269	126,190	1,294	409	678
0.7	1.0	0.1	10,420,381	2,027	3,659,998	9,081,692	890,605	712	679	4,241	35.1	399,988	304,178	65,446	282	127	159
2.8	3.6	0.7	18,571,847	3,201	14,369,275	13,104,280	4,846,379	2,477	1,600	3,180	77.4	1,528,597	1,256,275	269,000	1,112	609	706
0.5	1.3	0.9	9,810,872	2,047	2,736,445	27,515,129	2,430,792	571	512	695	27.9	276,814	503,626	381,406	219	152	163
1.2	1.8	0.5	6,876,610	1,936	1,881,835	7,181,022	607,671	889	469	484	20.1	382,158	445,590	132,270	138	99	114
3.0	3.2	0.2	11,122,211	1,630	3,863,460	7,028,647	837,498	681	818	313	34.7	1,360,428	1,021,328	72,287	177	134	171
1.3	2.3	0.5	8,625,552	2,127	5,621,126	8,101,501	1,305,040	1,386	757	265	65.2	507,909	720,968	170,091	123	131	44
1.0	1.8	0.5	8,350,697	1,797	3,163,892	7,118,097	4,726,491	678	803	1,638	37.7	358,222	459,424	178,722	142	117	162
4.3	3.8	1.2	11,245,464	1,506	7,075,287	8,604,125	9,715,844	948	881	2,268	62.9	1,365,996	782,417	869,389	197	178	546
2.6	2.5	2.6	53,975,988	2,716	23,489,243	20,554,280	8,055,084	1,062	1,008	1,247	39.8	950,004	668,886	1,106,270	180	137	226
0.7	1.0	0.4	30,726,455	3,032	14,489,145	30,146,689	4,437,036	1,709	318	1,785	47.1	1,207,582	793,972	653,933	326	176	370
6.4	1.5	5.1	19,325,074	3,467	6,730,386	3,080,564	1,538,303	1,207	1,063	790	34.8	821,793	184,927	871,192	271	191	268
5.2	2.6	0.8	26,471,025	3,765	7,710,675	2,712,165	8,389,508	1,097	829	1,455	29.1	447,462	144,484	657,952	208	189	248
3.6	3.3	3.9	9,711,915	4,528	2,465,886	1,008,912	646,748	1,180	820	1,748	25.4	218,118	225,785	137,403	375	441	225
5.6	6.4	9.4	27,331,190	4,029	8,399,417	21,000,456	4,308,346	1,288	1,048	1,591	30.7	804,878	883,318	1			

AGRICULTURE

TABLE 13.—FARMS REPORTING SALES AND (OR) PURCHASES THROUGH FARMERS' COOPERATIVE

Division and State	Sales and (or) purchases	Farms Reporting											
		Sales						Purchases					
		Total			Sales and purchases			Sales and no purchases			Total		
		1920	1924	1919	1920	1924	1919	1920	1924	1919	1920	1924	1919
1	United States.....	824,537	987,376	624,527	681,395	884,207	511,383	278,272	258,576	216,305	413,623	624,631	295,078
2	GEOGRAPHIC DIVISIONS:												
3	New England.....	16,980	18,458	10,229	9,170	10,845	4,060	3,078	3,174	1,410	6,002	7,071	2,650
4	Middle Atlantic.....	57,788	52,710	45,079	41,068	39,255	33,854	14,136	11,301	6,659	26,932	27,994	27,195
5	East North Central.....	216,260	236,552	173,672	170,992	205,409	144,330	70,100	72,056	54,185	100,892	133,353	90,154
6	West North Central.....	322,528	327,510	284,123	290,199	403,190	243,288	127,659	116,268	125,249	162,540	186,922	118,039
7	South Atlantic.....	36,606	69,899	18,770	28,062	90,879	9,517	7,922	11,810	2,977	20,740	79,069	6,540
8	East South Central.....	29,501	97,547	15,488	19,670	91,073	12,705	6,117	14,819	2,502	13,553	76,254	10,203
9	West South Central.....	47,417	73,259	18,755	42,292	67,715	15,635	13,296	12,176	6,212	28,996	55,530	9,423
10	Mountain.....	31,453	26,947	19,697	28,347	24,581	12,765	9,162	5,634	6,963	19,185	18,947	5,822
	Pacific.....	65,985	54,494	38,714	61,495	51,220	35,200	26,802	12,338	10,148	34,693	38,882	25,052
	NEW ENGLAND:												
11	Maine.....	2,093	3,885	4,062	755	2,555	1,264	336	566	609	419	1,989	655
12	New Hampshire.....	1,912	1,953	1,027	461	428	122	196	196	41	265	232	81
13	Vermont.....	5,826	4,886	2,513	4,304	2,745	1,239	1,110	1,045	398	3,194	1,700	841
14	Massachusetts.....	3,678	3,653	1,547	1,448	2,061	747	661	716	209	787	1,375	538
15	Rhode Island.....	241	348	145	140	235	95	47	100	36	93	135	59
16	Connecticut.....	3,239	3,753	935	2,062	2,791	593	728	551	117	1,334	2,240	476
	MIDDLE ATLANTIC:												
17	New York.....	38,239	31,957	27,283	28,015	26,586	23,494	9,709	7,138	3,317	18,306	19,448	20,177
18	New Jersey.....	2,810	2,379	4,282	1,750	1,401	2,758	839	628	1,274	911	773	1,484
19	Pennsylvania.....	16,730	18,374	13,614	11,303	11,308	7,602	3,583	3,535	2,068	7,715	7,773	5,534
	EAST NORTH CENTRAL:												
20	Ohio.....	41,894	48,127	30,621	31,067	39,995	16,952	15,909	16,579	10,581	15,158	23,416	9,371
21	Indiana.....	30,057	33,905	19,212	20,461	28,550	14,638	9,146	9,203	5,445	11,315	19,347	9,193
22	Illinois.....	46,749	56,518	28,628	41,857	52,606	24,797	11,969	13,559	8,472	29,888	39,047	16,325
23	Michigan.....	44,206	47,448	47,021	31,321	28,730	42,104	15,546	16,408	13,237	15,458	22,455	28,867
24	Wisconsin.....	53,254	50,556	48,190	46,276	45,528	42,848	17,230	16,307	16,450	29,046	29,221	26,398
	WEST NORTH CENTRAL:												
25	Minnesota.....	98,081	82,419	81,145	95,639	79,891	78,314	36,219	23,538	26,780	59,420	56,363	51,534
26	Iowa.....	66,525	70,188	51,630	58,970	72,639	43,350	25,628	27,485	24,250	33,342	45,164	19,100
27	Missouri.....	54,761	66,637	25,496	47,442	60,860	17,748	24,663	27,566	10,206	22,779	33,294	7,542
28	North Dakota.....	22,739	13,479	19,814	20,382	12,913	17,438	8,728	4,961	10,203	11,654	7,952	7,235
29	South Dakota.....	20,967	19,341	22,517	18,141	17,769	20,241	8,350	7,263	11,478	9,701	10,506	8,763
30	Nebraska.....	27,670	31,331	40,333	23,397	28,139	32,543	10,825	12,269	19,545	12,572	15,870	12,998
31	Kansas.....	30,885	35,115	43,188	26,228	30,979	33,654	13,246	13,186	22,787	12,982	17,793	10,867
	SOUTH ATLANTIC:												
32	Delaware.....	229	507	610	64	193	548	21	101	213	43	92	335
33	Maryland.....	6,139	8,283	2,177	4,533	6,121	1,865	1,777	1,655	325	2,756	4,466	1,540
34	Dist. of Columbia.....												3,383
35	Virginia.....	6,939	30,377	7,537	4,394	27,560	3,849	1,402	2,951	1,473	2,992	24,609	2,376
36	West Virginia.....	3,307	5,055	2,565	1,632	3,106	625	613	820	263	1,039	2,286	3,203
37	North Carolina.....	5,601	23,308	3,524	4,606	22,167	850	1,163	1,650	302	3,443	20,517	548
38	South Carolina.....	2,590	10,675	238	2,469	10,601	203	434	745	51	2,036	9,856	152
39	Georgia.....	5,739	13,705	586	8,142	13,376	210	1,107	2,089	35	4,035	11,317	175
40	Florida.....	6,042	7,989	1,433	5,802	7,755	1,367	1,405	1,829	315	4,397	5,928	1,052
	EAST SOUTH CENTRAL:												
41	Kentucky.....	5,113	54,506	4,543	4,793	53,704	3,498	940	2,506	1,299	3,853	51,198	2,199
42	Tennessee.....	5,232	16,398	2,121	3,552	15,303	1,253	1,192	3,395	308	2,360	11,908	947
43	Alabama.....	11,851	13,744	2,825	7,270	11,365	2,678	3,101	5,261	275	4,169	6,104	2,403
44	Mississippi.....	7,305	12,899	5,999	4,055	10,701	5,274	884	3,657	620	3,171	7,044	4,654
	WEST SOUTH CENTRAL:												
45	Arkansas.....	5,116	10,389	3,144	4,651	8,861	2,885	2,060	2,382	813	2,591	6,479	2,072
46	Louisiana.....	8,781	11,079	4,329	7,467	10,114	4,284	5,615	3,428	1,546	1,852	6,686	2,738
47	Oklahoma.....	23,243	20,753	7,718	21,715	19,049	5,980	3,745	3,174	3,162	17,970	15,875	5,273
48	Texas.....	10,283	31,038	3,564	8,439	29,691	2,436	1,876	3,192	601	6,583	26,499	1,795
	MOUNTAIN:												
49	Montana.....	6,939	3,069	3,804	5,574	2,890	1,048	1,669	538	1,070	3,905	2,361	878
50	Idaho.....	7,304	3,734	3,749	7,031	3,272	2,336	1,901	578	1,240	5,130	2,094	1,096
51	Wyoming.....	2,352	1,403	737	2,145	1,231	376	374	340	244	1,771	891	126
52	Colorado.....	7,423	11,591	7,789	6,763	10,828	5,847	2,690	2,940	3,671	4,084	7,888	581
53	New Mexico.....	1,620	2,348	1,247	1,443	2,014	975	362	495	302	1,051	1,519	673
54	Arizona.....	710	674	224	639	523	180	111	71	77	523	452	103
55	Utah.....	4,554	4,085	2,145	4,193	3,775	1,127	1,923	664	359	2,270	3,111	768
56	Nevada.....	581	43	2	539	39	2	93	8	446	81	2	135
	PACIFIC:												
57	Washington.....	18,461	14,526	7,457	16,737	13,205	5,583	10,161	5,179	3,481	6,570	8,026	2,102
58	Oregon.....	9,671	6,503	4,842	8,638	5,590	3,845	3,460	1,945	1,518	5,100	3,645	2,327
59	California.....	37,833	33,465	26,415	36,120	32,425	25,772	18,172	5,214	5,149	22,948	27,211	20,623

¹ All percentages based on total number of farms reporting "sales and (or) purchases."

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 529

ORGANIZATIONS, WITH PER CENT DISTRIBUTION, BY DIVISIONS AND STATES: 1929, 1924, AND 1919

F FARMS REPORTING—continued						PER CENT DISTRIBUTION ¹																	
Purchases—Continued						Farms reporting sales						Farms reporting purchases											
Sales and purchases			Purchases and no sales			Total			Sales and purchases			Sales and no purchases			Total			Sales and purchases					
1929	1924	1919	1929	1924	1919	1920	1924	1919	1929	1924	1919	1929	1924	1919	1920	1924	1919	1929	1924	1919			
278,272	259,576	216,306	132,642	103,169	113,144	83.9	89.6	81.9	33.7	26.3	34.6	50.2	63.3	47.2	49.8	38.7	52.8	33.7	26.3	34.6	16.1	10.4	18.1
3,078	3,174	1,410	7,810	7,613	6,109	54.0	58.8	39.7	18.1	17.2	13.8	35.9	41.6	25.9	64.1	58.4	74.1	18.1	17.2	13.8	46.0	41.2	60.3
14,136	11,301	6,659	16,720	13,415	11,225	71.1	74.5	75.1	24.5	21.4	14.8	46.6	53.1	60.3	53.4	46.9	39.7	41.5	21.4	14.8	28.9	25.5	24.9
70,100	72,056	54,185	45,265	31,143	29,333	79.1	86.8	83.1	32.4	30.5	48.7	56.4	51.9	53.3	43.6	48.1	32.4	30.5	31.2	20.9	13.2	16.9	4
127,659	110,268	125,249	32,329	24,320	40,835	90.0	92.6	85.6	39.6	35.5	44.1	50.4	57.1	41.5	49.6	42.9	55.5	39.6	35.5	44.1	10.0	7.4	14.4
7,922	11,810	2,977	7,944	9,020	9,253	78.3	91.0	50.7	21.6	11.8	15.9	66.7	79.1	34.8	43.3	20.9	65.2	21.6	11.8	15.9	21.7	9.0	49.3
6,117	14,819	2,502	9,881	6,474	2,783	66.7	93.4	82.0	20.7	15.2	16.2	45.9	78.2	65.9	54.1	21.8	34.1	20.7	15.2	16.2	33.3	6.6	18.0
13,296	12,176	6,212	5,125	5,544	3,120	89.2	92.4	83.4	28.0	16.6	33.1	61.2	75.8	50.2	39.8	24.2	49.8	28.0	16.6	33.1	10.8	7.6	16.6
9,162	5,634	6,963	3,136	2,366	6,912	90.0	91.2	64.9	29.1	20.9	35.4	60.9	70.3	29.6	39.1	29.7	70.4	29.1	20.9	35.4	10.0	8.8	35.1
26,802	12,338	10,148	4,470	3,274	3,514	93.2	94.0	90.9	40.6	22.6	26.2	52.6	71.4	64.7	47.4	28.6	35.3	40.6	22.6	26.2	6.8	6.0	9.1
336	566	609	1,338	1,330	2,708	36.1	65.8	31.1	16.1	14.6	15.0	20.0	51.2	16.1	80.0	48.8	83.9	16.1	14.6	15.0	63.9	34.2	66.9
196	196	41	1,451	1,505	905	24.1	22.1	11.9	10.3	10.1	4.0	13.9	12.0	7.9	56.1	88.0	52.1	10.3	10.1	4.0	75.9	77.9	88.1
1,110	1,046	398	1,522	2,141	1,274	73.9	56.2	49.3	19.1	21.4	15.8	54.8	34.8	33.5	45.2	55.2	66.5	19.1	21.4	15.8	26.1	43.8	50.7
661	716	209	2,230	1,502	800	39.4	57.2	48.3	18.0	19.6	13.5	21.4	37.6	34.8	78.6	62.4	52.2	18.0	19.6	13.5	60.6	42.8	51.7
47	100	36	101	113	50	58.1	67.5	65.5	19.5	28.7	24.8	38.6	38.8	40.7	61.4	61.2	59.3	19.5	28.7	24.8	41.9	32.5	34.5
728	551	117	1,177	962	342	63.7	74.4	83.4	22.5	14.7	12.5	41.2	59.7	50.9	58.8	40.3	49.1	22.5	14.7	12.5	36.3	25.6	36.6
9,709	7,138	3,317	10,224	5,371	3,789	73.3	83.2	80.1	25.4	22.8	12.2	47.9	60.9	74.0	52.1	39.1	26.0	25.4	22.3	12.2	26.7	16.8	13.9
839	628	1,274	1,080	978	1,524	62.3	58.9	64.4	29.9	26.4	29.8	32.4	32.5	34.7	67.6	67.5	65.3	29.9	26.4	29.8	37.7	41.1	35.6
3,588	3,535	2,008	5,436	7,066	5,912	87.5	61.5	66.3	21.4	19.2	15.3	46.1	42.3	41.0	53.9	57.7	50.0	21.4	19.2	15.3	32.5	38.5	43.7
15,909	16,579	10,581	10,827	8,132	10,069	74.2	83.1	85.2	38.0	34.4	34.6	36.2	48.7	30.6	63.8	51.3	69.4	38.0	34.4	34.6	25.8	16.0	34.8
9,140	9,203	5,445	9,596	5,355	4,574	68.1	84.2	76.2	30.4	27.1	28.3	27.6	57.1	47.9	62.4	42.9	52.1	30.4	27.1	28.3	31.9	15.8	23.8
11,969	13,559	8,472	4,892	3,912	3,831	80.5	93.1	86.6	25.6	24.0	29.6	63.9	69.1	57.0	36.1	30.9	43.0	25.6	24.0	29.6	10.5	6.9	13.4
15,846	16,408	13,237	12,875	8,716	4,917	70.9	81.6	89.5	35.8	34.6	28.2	35.0	47.0	61.4	65.0	53.0	38.6	38.4	28.2	29.1	18.4	10.5	23
17,230	16,307	16,450	7,078	5,028	86.7	90.1	88.9	32.3	32.3	34.1	54.4	57.8	54.8	45.6	42.2	45.2	32.3	32.3	34.1	13.3	9.9	11.1	
30,219	23,538	26,780	3,342	2,528	2,831	96.8	96.9	90.5	38.6	28.6	33.0	60.0	68.4	63.5	40.0	31.6	36.5	36.6	28.6	33.0	3.4	3.1	3.5
25,628	27,485	24,250	7,555	6,549	8,280	88.6	91.7	84.0	35.5	34.7	47.0	50.1	57.0	37.0	49.9	43.0	63.0	38.5	34.7	47.0	11.4	8.3	16.0
24,663	27,566	10,206	7,319	5,777	7,748	86.6	91.3	69.6	45.0	41.4	40.0	41.6	50.0	29.6	58.4	50.0	70.1	45.0	41.4	40.0	13.4	8.7	30.4
8,728	4,961	10,203	2,357	566	2,376	89.0	95.8	88.0	38.4	36.8	51.5	51.3	50.0	36.5	45.7	41.0	63.5	38.4	36.8	51.5	10.4	4.2	12.0
8,360	7,263	11,478	2,826	1,572	2,276	86.5	91.9	89.9	39.8	37.6	51.0	46.7	54.3	38.9	53.3	45.7	61.1	39.8	51.0	13.5	8.1	10.1	29
10,825	12,269	19,546	4,273	3,192	7,700	84.6	89.8	80.7	39.1	39.2	48.5	45.4	50.7	32.2	54.6	39.1	39.2	48.5	15.4	10.2	19.3	30	
13,246	13,186	22,787	4,657	4,136	9,534	84.9	88.2	77.9	42.9	37.6	52.8	42.0	50.7	25.2	58.0	49.3	74.8	42.9	37.6	52.8	15.1	11.8	22.1
21	101	213	165	314	62	27.9	38.1	89.8	9.2	19.9	34.9	18.8	18.1	54.9	81.2	81.9	45.1	9.2	19.9	34.9	72.1	61.0	10.2
1,777	1,655	325	1,606	2,182	312	73.8	73.9	85.7	28.9	20.0	14.9	44.9	53.9	70.7	55.1	46.1	29.3	28.9	20.0	14.9	26.2	20.1	14.3
1,402	2,951	1,473	2,545	2,817	3,688	63.3	90.7	51.1	20.2	9.7	16.5	43.1	81.0	31.5	56.9	19.0	68.5	20.2	9.7	19.5	36.7	9.3	48.9
613	820	263	1,655	1,949	1,940	50.0	61.4	24.4	18.5	16.2	10.3	31.4	45.2	14.1	68.6	54.8	85.9	18.5	16.2	10.3	60.0	38.6	75.6
1,163	1,650	302	995	1,141	2,674	82.2	96.1	24.1	20.8	7.1	8.6	61.5	88.0	15.6	38.5	12.0	84.4	20.8	7.1	8.6	17.8	4.9	75.9
434	745	51	121	74	135	95.3	90.3	60.1	16.8	7.0	15.1	78.6	92.3	45.0	21.4	7.7	55.0	16.8	7.0	15.1	4.7	0.7	39.9
1,107	2,059	35	617	829	376	89.3	97.6	35.8	19.2	15.0	6.0	70.1	82.6	20.9	29.9	17.4	70.1	19.2	15.0	6.0	10.7	2.4	64.2
1,405	1,829	315	240	234	66	90.0	97.1	95.4	23.3	22.9	22.0	72.8	74.2	73.4	27.2	25.8	23.3	22.9	22.0	4.0	2.9	4.6	
940	2,506	1,299	320	802	1,045	93.7	98.5	77.0	18.4	4.6	28.6	75.4	93.9	48.4	24.6	6.1	51.6	18.4	4.6	28.6	6.3	1.5	23.0
1,102	3,395	308	1,680	1,095	866	67.9	93.3	59.2	22.8	20.7	14.5	45.1	72.6	44.0	54.9	27.4	55.4	22.8	20.7	14.5	32.1	6.7	40.8
3,101	5,261	275	4,581	2,379	147	61.3	82.7	94.8	28.2	36.8	9.7	35.2	44.1	85.1	64.8	55.6	14.9	38.3	9.7	38.7	17.3	5.2	43
884	3,657	620	3,250	2,198	725	55.5	83.0	87.9	12.1	28.4	10.3	43.4	64.6	77.6	56.6	45.4	22.4	12.1	28.4	10.3	44.5	17.0	12.1
2,000	2,382	813	459	1,528	269	91.0	85.3	91.8	40.3	22.9	25.9	50.7	62.4	65.9	49.3	37.6	34.1	40.3	22.9	25.9	9.0	14.7	8.2
5,615	3,428	1,546	1,314	965	45	85.0	91.3	99.0	63.9														

AGRICULTURE

FARM FACILITIES

The statistics presented under the title "Farm Facilities" relate to farm motor equipment, farm home conveniences, and kind of road adjoining each individual farm. For brevity, the term "farm motor equipment" is used to include automobiles, motor trucks, tractors, electric motors for farm work, and stationary gas engines, and the term "farm home conveniences" is applied to telephones on farms and to electric light and water in houses of farm operators.

The data presented for 1930 relate to April 1, and for 1925 and 1920 to January 1. The 1930 figures, with the exception of those for "kind of road," are presented for the United States as a whole by color and by tenure of operator, while, for divisions and States

presentation is made by tenure only for all items, with the exception of electric motors, stationary gas engines, and kind of road which are not shown either by color or tenure.

FARM MOTOR EQUIPMENT

In 1930 information was obtained for the first time for the number of electric motors for farm work and for stationary gas engines. The number of tractors was also obtained in both 1925 and 1920, and the number of automobiles and motor trucks, in 1920, but not in 1925.

The increase in the percentage of farms reporting and in the number of automobiles, motor trucks, and tractors indicates the direction and extent to which motor power is being utilized on farms.

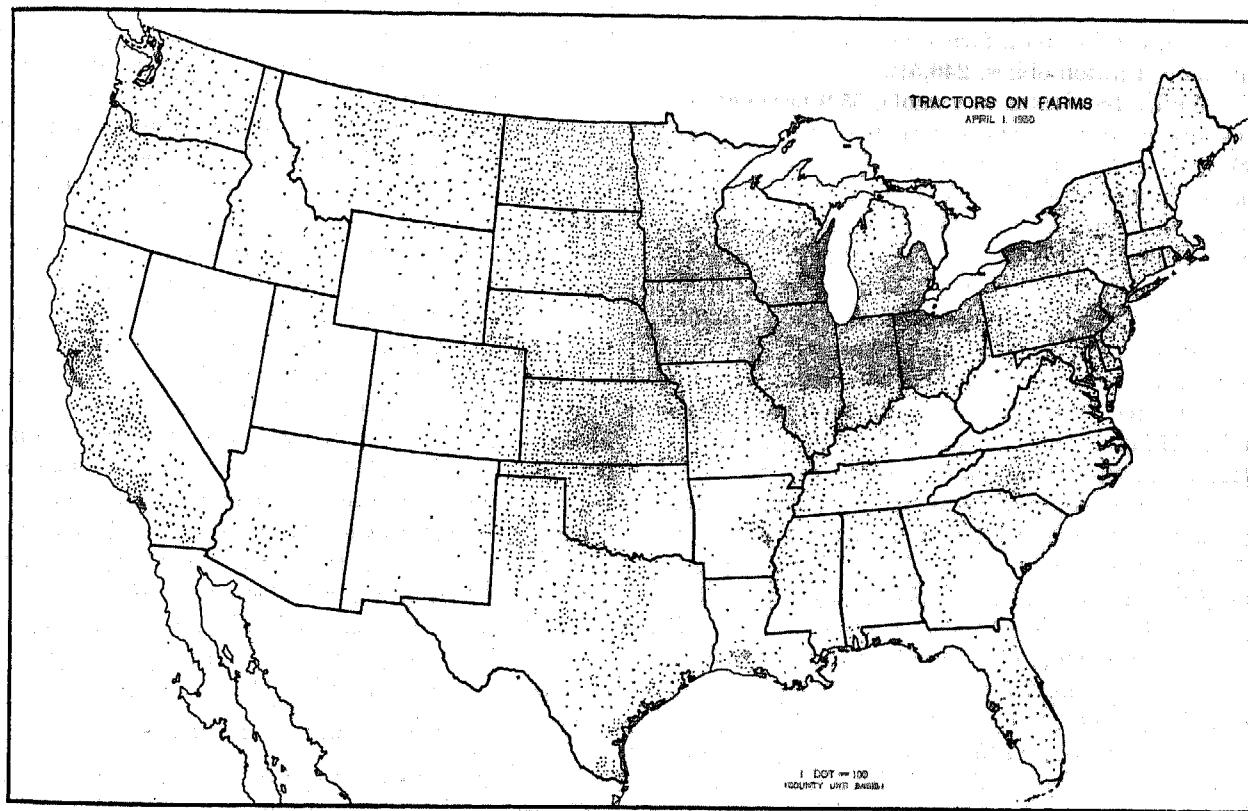
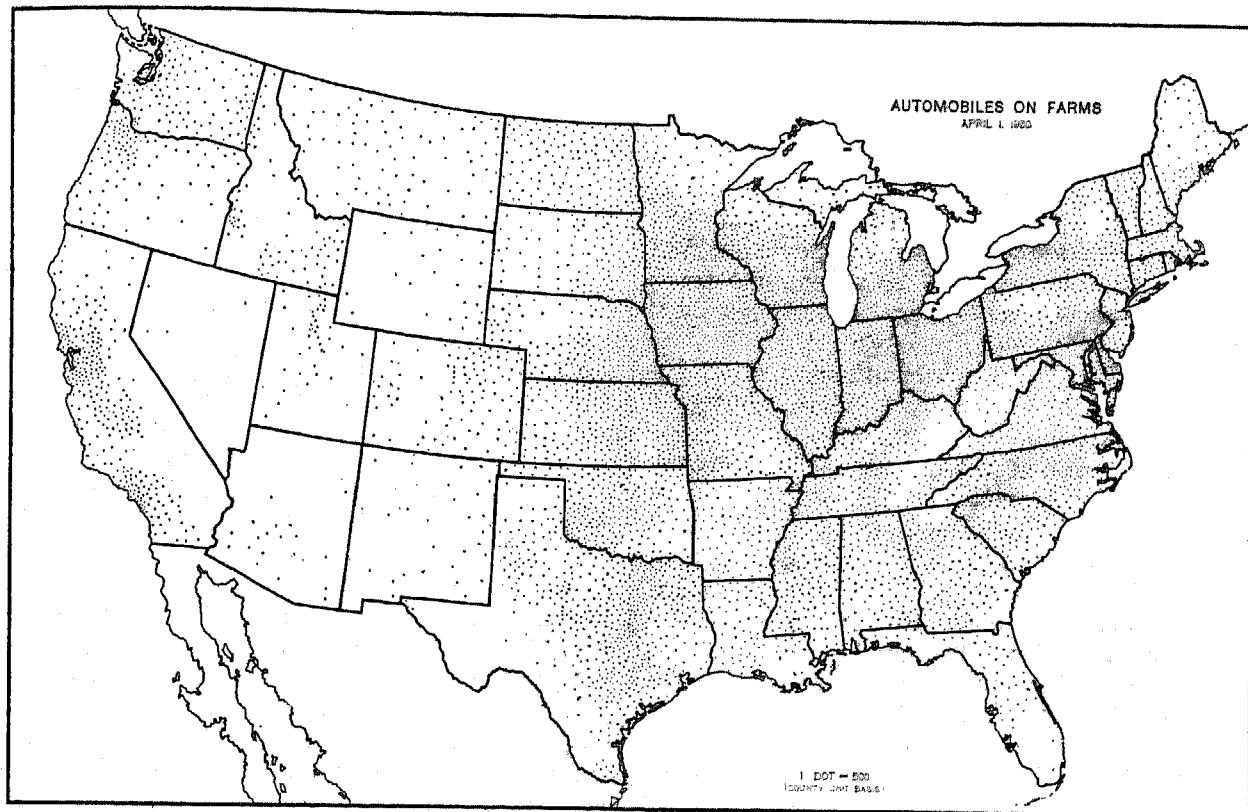
TABLE 14.—FARM MOTOR EQUIPMENT, 1930 AND 1920; BY COLOR AND TENURE OF OPERATOR, 1930; WITH TRACTORS, BY TENURE OF OPERATOR, 1925; FOR THE UNITED STATES

[Statistics for 1930 relate to April 1, and for 1925 and 1920 to January 1. Figures for divisions and States in Tables 17, 18, 19, and 20. "White" includes Mexicans and Hindus. "Colored" includes Negroes, Indians, Chinese, Japanese, and all other nonwhite races]

ITEM AND YEAR	TOTAL				OWNERS				MANAGERS				TENANTS				PER CENT DISTRIBUTION OF FARMS REPORTING, BY TENURE			
	Farms reporting		Number reported	Number per 1,000 of farms reporting	Farms reporting		Number reported	Number per 1,000 of farms reporting	Farms reporting		Number reported	Number per 1,000 of farms reporting	Farms reporting		Number reported	Number per 1,000 of farms reporting	Per cent of all farms	Managers	Tenants	
	Number	Per cent of all farms			Number	Per cent of all farms			Number	Per cent of all managers			Number	Per cent of all managers						
ALL FARM OPERATORS																				
Automobiles.....1930.....	3,650,003	58.0	4,134,675	1,132.8	657,5	2,350,332	65.9	2,717,880	1,156.4	34,837	92.3	40,651	1,839.1	1,264,834	47.5	1,870,144	1,033.3	64.4	1.0	34.7
1920.....	1,979,564	30.7	2,116,362	1,084.3	332.9															
Motor trucks.....1930.....	845,335	13.4	900,385	1,065.1	143.2	608,241	17.0	648,868	1,066.8	17,151	30.7	22,762	1,327.2	219,943	8.8	228,755	1,040.1	72.0	2.0	26.0
1920.....	131,351	2.6	136,189	1,057.9	21.6															
Tractors.....1930.....	851,457	13.5	920,621	1,086.6	146.3	650,083	15.4	695,722	1,081.2	19,029	34.0	26,032	1,368.0	281,445	10.6	298,267	1,059.8	64.7	2.2	33.1
1925.....	473,848	7.4	505,933	1,067.7	79.4	318,473	8.8	340,526	1,065.9	10,683	26.2	14,086	1,318.5	143,692	5.8	151,321	1,053.1	67.4	2.3	30.3
1920.....	229,332	3.6	246,083	1,073.0	58.2															
Electric motors.....1930.....	256,663	4.1	386,191	1,104.7	61.4	205,170	5.7	303,695	1,480.2	9,533	17.1	30,708	2,172.2	41,960	1.6	61,788	1,472.5	79.9	3.7	16.3
Stationary gas engines.....1930.....	945,000	15.0	1,131,108	1,196.9	179.9	654,011	18.3	788,006	1,204.9	18,051	25.0	20,298	1,454.6	277,038	10.4	322,809	1,165.2	69.2	1.5	29.3
WHITE FARM OPERATORS																				
Automobiles.....1930.....	3,452,494	64.3	3,933,237	1,139.2	732.1	2,290,047	68.0	2,635,611	1,159.6	32,857	82.3	44,311	1,348.6	1,129,590	57.8	1,233,315	1,091.8	66.3	1.0	32.7
1920.....	829,516	15.4	983,579	1,065.2	164.5	600,908	17.8	640,983	1,067.1	15,790	29.9	21,206	1,343.0	213,418	10.9	221,787	1,039.2	72.4	1.9	25.7
Motor trucks.....1930.....	846,634	15.8	914,723	1,086.4	170.3	549,023	16.3	593,604	1,081.2	18,244	34.6	25,130	1,377.4	270,367	14.8	295,989	1,059.5	64.8	2.2	33.0
1925.....	254,433	4.7	383,314	1,106.5	71.3	204,611	6.1	302,822	1,480.7	8,805	16.7	19,704	2,244.6	41,117	2.1	60,728	1,477.0	80.4	3.5	16.2
Tractors.....1930.....	941,903	17.5	1,127,693	1,197.2	209.9	652,222	19.4	786,056	1,205.2	13,638	25.8	19,928	1,481.5	276,048	14.1	321,711	1,165.4	69.2	1.4	29.3
COLORED FARM OPERATORS																				
Automobiles.....1930.....	127,500	21.6	201,438	1,019.9	219.9	60,265	29.7	62,260	1,032.9	1,980	63.4	2,340	1,181.8	135,244	19.0	136,829	1,011.7	30.5	1.0	68.5
1920.....	15,819	1.7	16,806	1,062.6	18.3	7,933	1.9	8,285	1,044.4	1,361	43.6	1,556	1,142.8	6,525	0.9	6,968	1,067.9	50.1	8.6	41.2
Motor trucks.....1930.....	4,823	0.5	5,298	1,028.5	5.5	1,980	1.6	2,118	1,050.6	786	28.1	902	1,149.0	2,078	0.3	2,278	1,096.2	40.6	16.3	43.1
Tractors.....1930.....	2,230	0.2	2,877	1,260.1	3.1	689	0.3	878	1,324.7	728	23.3	944	1,296.7	843	0.1	1,060	1,257.4	29.6	82.6	37.8
Electric motors.....1930.....	3,095	0.3	3,413	1,162.7	3.7	1,789	0.9	1,950	1,090.0	316	10.1	365	1,155.1	990	0.1	1,098	1,109.1	57.8	10.2	32.0

¹ Based on all farms in each color class, see Chapter III.

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 531



Automobiles.—In 1930 there were 3,650,003 farms, or 58 per cent of all farms in the United States, which reported automobiles as compared with 1,979,564 farms, or 30.7 per cent in 1920. The number of automobiles on farms was 4,134,675 for 1930 and 2,146,362 for 1920, representing an increase of 92.6 per cent. Figures are not available on the number of farms which reported more than one automobile, but there were 1,133 automobiles for every 1,000 farms reporting automobiles in 1930 against 1,084 per 1,000 farms in 1920.

The proportion of all farms reporting automobiles in 1930 ranged from 25.7 per cent in Louisiana to 91.8 per cent in Nebraska, while in 1920 the range was from 5.5 per cent in Mississippi to 75.6 per cent in Nebraska. The three divisions comprising the South (South Atlantic, East South Central, and West South Central) had the smallest proportion of farms reporting automobiles for the two census years, but showed the greatest relative increase in the number of farms reporting for the 10-year period. The greatest numerical increase in farms reporting was 329,939 in the West South Central division, while the greatest numerical increase in the number of automobiles, 382,546, occurred in the West North Central division. Texas led all States in both farms reporting and in the number of automobiles, with 280,758 and 300,176, respectively; Iowa was second in both farms reporting, 193,810, and in number of automobiles, 240,512.

For the United States as a whole, 65.9 per cent of all farms operated by owners reported automobiles in 1930 against 47.5 per cent of all farms operated by tenants. One interesting feature developed in the presentation of the data by tenure of operator in Table 17 is that the proportion of tenants reporting automobiles was higher than for owners in all geographic divisions except the Southern divisions, and New England, the proportion of tenants and owners in the latter being nearly the same. The South has this great effect on the United States figures by reason of its large number of farms and high proportion of tenancy.

Motor trucks.—The number of motor trucks on farms, for the country as a whole, increased from 139,169 in 1920 to 900,385 in 1930, resulting in a gain of 547 per cent, while the number of farms reporting increased from 131,551 to 845,335 and the percentage of all farms reporting from 2 to 13.4. Among the States the proportion of farms reporting motor trucks in 1930 varied from 2.7 per cent in Kentucky to 49.3 per cent in New Jersey. In 1930 New York, with 58,974 trucks on 54,084 farms, led in both the number of trucks and in the number of farms reporting.

The percentage of all owner-operated farms reporting motor trucks for the United States for 1930 was 17 per cent, of all manager-operated farms 30.7 per cent, and of all tenant-operated farms 8.3 per cent.

Tractors.—In 1930 there were 920,021 tractors reported on farms in the United States as compared with 505,933 in 1925 and 246,083 in 1920. The percentage of increase from 1920 to 1925 was 105.6, from 1925 to 1930 was 81.8, and from 1920 to 1930 was 273.9 per cent. The number of farms reporting was 851,457, in 1930, or 13.5 per cent of all farms; 473,848, in 1925, or 7.4 per cent; and 229,332, in 1920, or 3.6 per cent. The highest proportion of farms reporting tractors in 1930 and 1925 was 43.8 and 20.9 per cent, respectively, in North Dakota; and in 1920 was 16.3 per cent in South Dakota. Illinois was the leading State in the total number and in farms reporting tractors in 1930, with 69,628 tractors on 66,172 farms.

Table 19 presents the number of tractors with farms reporting, by tenure of operator, by divisions and States. For the United States 15.4 per cent of all owners reported tractors in 1930, against 10.6 per cent of all tenants, the greater percentage for owners is entirely due to the three Southern divisions with their high proportion of tenancy.

Electric motors for farm work.—In 1930, the only year for which data on this subject are available, 386,191 electric motors used for farm work were reported on 256,663 farms, or 4.1 per cent of all farms. For every 1,000 farms reporting electric motors, there were 1,505 motors, averaging about 1.5 motors per farm. As in the case of automobiles, figures are not available on the number of farms reporting more than one electric motor. For the United States as a whole, electric motors were reported on 5.7 per cent of all owner-operated farms, on 17.1 per cent of all manager-operated farms, and on 1.6 per cent of all tenant-operated farms. The percentage for white owners was 6.1 against 0.3 for colored owners. California, with 32.2, had the highest percentage of farms reporting electric motors. This State also led in both the number of farms reporting, 43,676, and in the number of electric motors, 66,260.

Stationary gas engines.—In 1930, the first census to obtain such data, 1,131,108 stationary gas engines were reported on 945,000 farms, or 15 per cent of all farms. The proportion of all owners reporting stationary gas engines was 18.3 per cent, of all managers 25 per cent, and of all tenants 10.4 per cent. Minnesota, with 50.4, had the highest percentage of farms reporting stationary gas engines. Iowa was the leading State both in the number and in farms reporting stationary gas engines with 114,977 on 94,772 farms.

FARM HOME CONVENiences

Information concerning farm home conveniences, first secured in 1920, was obtained again in 1930. The inquiries for telephones and water piped into operator's dwelling were similar for the two years, and, in 1930 an additional question was asked concerning

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 533

water piped into bathrooms. The inquiry relating to lights in the operator's dwelling was restricted to electricity in 1930, whereas in 1920 it included both gas and electric lights; hence, the figures presented for the two years are not strictly comparable.

The data for 1930 are presented for the United States by color and tenure of operator whereas for divisions and States the figures are presented by tenure of operator only.

Telephones.—In 1930 the number of farms reporting telephones totaled 2,139,194, or 34 per cent of all farms, which was a decrease of 14.4 per cent from 2,498,493 or 38.7 per cent of all farms reporting in 1920. Decreases in the percentage of farms reporting telephones between 1920 and 1930 occurred in 30 States. Iowa, with 84.2 per cent of all its farms reporting telephones in 1930 and 86.1 per cent in 1920, ranked first among all the States. The lowest percentage of farms reporting telephones in 1930 was 3.8 in Louisiana, while in 1920 the lowest was 5.7 in South Carolina.

In the 1930 census, telephones were reported by 43.2 per cent of all owners, 50.8 per cent of all managers, and 21.4 per cent of all tenants. Except in Wisconsin the percentage of telephones was higher for owners than for tenants.

Dwellings lighted by electricity.—In 1930 there were 841,310 or 13.4 per cent of all farms, reporting the operator's dwelling lighted by electricity as against 452,620 or 7 per cent of all farms reporting dwellings lighted by gas or electricity in 1920. With the

exception of West Virginia and Alabama, the percentage of farms reporting the one item was greater in 1930 than for the two items in 1920. California, with 63.3, led the States in the percentage of dwellings lighted by electricity.

Water piped into dwelling.—The question regarding water piped into dwelling was answered in the affirmative by 994,202 or 15.8 per cent of all operators in 1930, as against 643,899 or 10 per cent of all operators in 1920. Massachusetts had the highest percentage, 74.5, of farms reporting. Relatively, a higher proportion of owners reported water piped into the dwellings than of tenants, the percentages for the United States as a whole being 21.8 and 7.2, respectively.

Water piped into bathroom.—This question was asked for the first time in 1930. Of the 994,202 operators reporting water piped into dwellings, 531,248 or 53.4 per cent also reported water piped into bathroom. Of those reporting water piped into dwellings, the following percentages reported water piped into bathrooms: Owners, 55.3 per cent; managers, 75.9 per cent; and tenants, 42.8 per cent. The percentage of all operators reporting water piped into bathroom was 8.4, of all owners 12.1, of all managers 33, and of all tenants 3.1. The wide difference between the farms reporting "water piped into dwelling," and those reporting "water piped into bathroom," may be partly due to the inclusion of hand-operated pumps without accompanying storage tanks, installed in houses for pumping water direct from wells.

TABLE 15.—TELEPHONES, ELECTRIC LIGHT,¹ AND WATER PIPED INTO DWELLINGS ON FARMS, 1930 AND 1920; AND BY COLOR AND TENURE OF OPERATOR, 1930; FOR THE UNITED STATES

[Statistics for 1930 relate to April 1, and for 1920 to January 1. Figures for divisions and States in Tables 21, 22, and 23. "White" includes Mexicans and Hindus. "Colored" includes Negroes, Indians, Chinese, Japanese, and all other nonwhite races]

ITEM	TOTAL				OWNERS, 1930		MANAGERS, 1930		TENANTS, 1920		PER CENT DISTRIBUTION OF FARMS REPORTING, BY TENURE, 1930		
	Farms reporting		Per cent of all farms ²		Number reporting	Per cent of all owners ²	Number reporting	Per cent of all managers ²	Number reporting	Per cent of all tenants ²	Owners	Managers	Tenants
	1930	1920	1930	1920									
ALL FARM OPERATORS													
Telephones	2,139,194	2,498,493	34.0	38.7	1,540,313	43.2	28,399	50.8	570,482	21.4	72.0	1.3	26.7
Dwellings lighted by electricity ¹	841,310	452,620	13.4	7.0	616,083	19.4	19,647	35.2	128,580	4.8	82.4	2.3	15.3
Water piped into dwellings	643,899	643,899	15.8	10.0	779,327	21.8	24,300	43.5	190,575	7.2	78.4	2.4	19.2
Water piped into bathrooms	531,248	531,248	8.4	-----	431,340	12.1	18,432	33.0	81,476	3.1	81.2	3.5	15.3
WHITE FARM OPERATORS													
Telephones	2,130,755	-----	39.7	-----	1,535,724	45.6	27,767	52.6	567,284	29.0	72.1	1.3	26.6
Dwellings lighted by electricity ¹	834,220	-----	15.5	-----	690,089	20.5	18,263	34.6	125,868	6.4	82.7	2.2	15.1
Water piped into dwellings	987,124	-----	18.4	-----	776,919	23.1	22,671	43.0	187,534	9.6	78.7	2.3	19.0
Water piped into bathrooms	526,949	-----	9.8	-----	429,903	12.8	17,199	32.6	79,847	4.1	81.6	3.3	15.2
COLORED FARM OPERATORS													
Telephones	8,439	-----	0.9	-----	4,589	2.3	632	20.2	3,218	0.5	54.4	7.5	38.1
Dwellings lighted by electricity ¹	7,090	-----	0.8	-----	2,994	1.5	1,384	44.3	2,712	0.4	42.2	19.5	38.3
Water piped into dwellings	7,078	-----	0.8	-----	2,408	1.2	1,629	52.2	3,041	0.4	34.0	23.0	43.0
Water piped into bathrooms	4,299	-----	0.5	-----	1,437	0.7	1,232	39.5	1,629	0.2	33.4	28.7	37.9

¹ Gas or electricity for 1920.

² Based on all farms in each color class.

AGRICULTURE

KIND OF ROAD ADJOINING FARMS

The information relating to kind of road adjoining each individual farm was first called for in the census of 1925 and was obtained again in the census of 1930. The question was identical in the two census years. But the explanatory note accompanying the question differed for the two years. Therefore, in presenting the figures it has been necessary to make several combinations in the 1930 data to obtain figures more nearly comparable with those for 1925.

In both years a number of roads were reported by trade names or names peculiar to a locality, such as wood-block, shell, tar-bound, settlement road, pike, post road, or State highway. In 1930, those capable of classification were grouped with the type of roads to which they were most similar; for example, wood-block was included with brick, shell with gravel, etc., while settlement roads, post roads, pikes, and State highways, had to be grouped with "all other (including not reported)." A slightly different disposition was made in 1925 which may partly explain the decrease in the number and in the percentage of farms located on macadam roads and the heavy increase in the number of farms located on gravel roads.

In many sections of the country oil-bound macadam roads are locally called macadam without the qualifying term "oil-bound." The returns indicated that a number of enumerators failed to distinguish between oil-bound macadam and water-bound macadam roads, hence these have been combined for 1930 under one class designated as "macadam." Other differences appeared in classifying "improved dirt" and "unimproved dirt" roads.

With road-improvement programs throughout all sections of the country during the 5-year period, 1925 to 1930, it is only natural to assume that the proportion of farms on improved roads has materially increased. For 1930 there were 1,873,295 farms or 29.8

per cent of the entire number which adjoined roads of the quality of gravel or better, while in 1925 only 1,419,018 or 22.3 per cent of all farms were so reported. Considerably over half of the farms are still located on unsurfaced roads and 36.3 per cent were still reported on unimproved dirt roads in 1930. The following divisions and States led in the proportion of all their farms on various type roads: Concrete, Middle Atlantic with 9.9 per cent and Delaware with 20.1 per cent; brick, East North Central with 0.9 per cent and Ohio with 3.2 per cent; asphalt, Pacific with 3.2 per cent and Florida with 11.7 per cent; macadam, Middle Atlantic with 18.1 per cent and Massachusetts with 30 per cent; gravel, East North Central with 40.9 per cent and Indiana with 58.3 per cent; sand-clay, South Atlantic with 10.4 per cent and South Carolina with 16.1 per cent; improved dirt, West North Central with 38.1 per cent and Nebraska with 55.4 per cent; unimproved dirt, Middle Atlantic with 45 per cent and West Virginia with 62.4 per cent.

TABLE 16.—KIND OF ROAD—FARMS CLASSIFIED BY KIND OF ROAD ON WHICH LOCATED, WITH PER CENT DISTRIBUTION, FOR THE UNITED STATES: 1930 AND 1925

[Statistics for 1930 relate to April 1, and for 1925 to January 1. Figures for divisions and States in Table 24]

KIND OF ROAD	1930		1925	
	Number of farms	Per cent of all farms	Number of farms	Per cent of all farms
Total.....	6,268,648	100.0	6,371,640	100.0
Located on—				
Concrete road.....	202,594	3.2	156,434	2.5
Brick road.....	13,180	0.2		
Asphalt road.....	72,011	1.1	(1)	
Macadam road.....	306,397	4.9	316,527	5.0
Gravel road.....	1,279,118	20.3	946,057	14.8
Sand-clay road.....	156,631	2.5		
Improved dirt road.....	1,638,054	26.1	1,968,704	31.4
Unimproved dirt road.....	2,270,980	36.3	2,747,732	43.1
All other (including not reported).....	330,879	5.4	206,186	3.2

* Included with "All other."

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 535

TABLE 17.—AUTOMOBILES ON FARMS—FARMS REPORTING AND NUMBER OF AUTOMOBILES, 1930 AND 1920; BY TENURE OF OPERATOR, 1930; BY DIVISIONS AND STATES

[Statistics for 1930 relate to April 1, and for 1920 to January 1]

DIVISION AND STATE	TOTAL								OWNERS, 1930				MANAGERS, 1930				TENANTS, 1930			
	Farms reporting				Number of automobiles	Number of automobiles per 1,000 of all farms	Farms reporting		Number of automobiles	Farms reporting		Number of automobiles	Farms reporting		Number of automobiles	Farms reporting		Number of automobiles		
	Number		Per cent of all farms				Number	Per cent of all owners		Number	Per cent of all managers		Number	Per cent of all managers		Number	Per cent of all tenants			
	1930	1920	1930	1920			1930	1920		1930	1920		1930	1920		1930	1920			
United States	3,650,003	1,979,564	58.0	30.7	4,134,675	2,148,362	657.5	332.9	2,350,332	65.9	2,717,850	34,837	82.3	46,651	1,264,884	47.5	1,370,144			
GEOGRAPHIC DIVISIONS:																				
New England	75,566	40,209	60.5	25.7	89,287	44,754	714.7	285.9	69,274	60.7	81,499	1,588	54.1	2,337	4,704	59.7	5,451			
Middle Atlantic	254,084	149,569	71.1	35.2	316,509	164,939	585.1	388.0	211,778	79.8	263,936	3,875	64.0	5,721	38,481	73.3	46,852			
East North Central	770,108	513,052	79.7	47.3	876,667	550,858	907.1	507.8	544,296	78.4	625,775	6,057	70.2	7,770	219,755	83.2	243,122			
West North Central	920,814	631,631	82.8	57.6	1,075,578	603,032	966.6	631.8	542,728	82.1	631,041	5,613	75.1	5,917	372,473	83.9	417,620			
South Atlantic	445,454	187,236	42.1	16.2	481,693	200,103	455.1	172.7	279,533	51.8	308,532	4,484	50.0	6,012	161,437	31.7	167,149			
East South Central	320,640	81,830	30.2	7.8	335,003	80,141	315.4	81.9	189,745	40.8	201,527	5,158	52.6	1,865	129,377	21.8	131,611			
West South Central	503,548	173,609	45.6	17.4	530,041	184,275	486.5	185.0	239,978	58.5	263,491	3,361	61.0	4,330	260,209	37.9	266,820			
Mountain	163,303	91,098	67.7	37.6	183,020	98,727	758.4	404.4	118,427	66.2	133,260	2,204	61.4	2,960	42,672	72.5	46,800			
Pacific	196,486	110,640	75.1	47.2	240,277	123,533	918.0	527.5	154,573	75.2	188,819	6,137	62.3	8,739	35,776	77.3	42,719			
NEW ENGLAND:																				
Maine	23,015	11,686	50.0	24.2	26,227	12,569	672.4	260.6	21,823	59.4	24,843	252	50.1	321	940	53.0	1,063			
New Hampshire	9,288	4,797	62.3	23.4	11,079	5,263	743.3	256.4	8,587	62.4	10,183	210	59.2	331	491	61.7	565			
Vermont	15,825	7,013	63.6	26.2	18,620	8,172	747.9	261.1	14,002	63.6	18,492	267	55.6	345	1,556	64.6	1,783			
Massachusetts	14,737	8,181	57.6	25.6	17,638	9,309	689.0	290.9	13,459	58.0	15,982	486	50.7	741	792	54.9	915			
Rhode Island	2,056	1,198	61.9	29.3	2,560	1,395	773.3	341.7	1,754	62.5	2,188	55.6	83	246	59.3	298				
Connecticut	10,646	6,796	61.9	30.0	13,154	8,046	765.0	355.2	9,619	61.9	11,811	318	58.8	516	679	63.6	827			
MIDDLE ATLANTIC:																				
New York	115,010	68,003	72.0	35.2	141,916	74,753	888.1	386.9	97,703	71.8	120,473	1,691	63.8	2,503	15,616	74.0	18,940			
New Jersey	17,782	11,781	70.1	39.5	22,371	13,695	881.5	461.1	14,247	69.1	17,919	432	65.6	741	3,003	76.1	3,711			
Pennsylvania	121,292	69,865	70.3	34.5	152,222	76,491	882.9	378.2	99,728	70.1	125,544	1,752	63.9	2,477	19,812	72.3	24,201			
EAST NORTH CENTRAL:																				
Ohio	172,078	119,511	78.5	46.6	201,552	128,384	918.1	500.1	123,020	77.0	145,926	1,235	67.0	1,647	47,823	83.0	53,979			
Indiana	141,374	95,238	77.9	46.4	154,566	102,122	851.2	497.9	98,005	76.5	105,895	1,020	69.0	1,245	44,349	81.3	47,506			
Illinois	170,606	125,586	79.5	52.9	192,873	139,090	869.2	586.4	91,340	76.2	105,366	1,535	72.3	1,917	77,781	84.0	85,590			
Michigan	133,565	78,910	78.9	40.2	150,922	82,437	891.1	419.6	111,445	78.7	126,029	1,041	68.0	1,405	21,070	80.5	23,458			
Wisconsin	152,485	92,798	83.9	49.6	170,764	98,825	972.5	522.1	122,458	83.8	142,649	1,230	73.9	1,556	28,773	86.9	32,559			
WEST NORTH CENTRAL:																				
Minnesota	159,372	101,847	86.0	57.1	185,717	107,824	1,002.5	604.1	106,908	84.5	126,551	707	73.3	974	51,097	89.7	58,192			
Iowa	193,810	100,081	90.2	73.1	240,512	177,558	1,119.0	831.9	98,271	88.3	127,810	1,622	81.9	1,969	93,917	92.4	110,733			
Missouri	164,087	81,892	64.1	30.9	176,466	86.220	689.5	327.9	110,943	67.1	120,588	938	60.7	1,088	52,206	68.6	54,706			
North Dakota	67,498	44,010	86.6	56.6	78,708	47,711	1,010.6	614.1	43,649	87.1	52,335	355	75.5	461	23,492	85.7	26,002			
South Dakota	71,965	51,780	86.5	60.4	81,923	58,202	985.2	779.8	38,960	85.4	46,013	338	74.4	390	32,667	88.1	34,520			
Nebraska	118,800	94,004	91.8	75.6	141,144	104,453	1,090.3	839.5	61,381	91.0	76,665	855	83.8	1,077	56,624	92.8	63,402			
Kansas	145,224	102,617	87.5	62.0	171,018	111,055	1,030.0	879.0	82,616	87.2	101,079	708	77.4	958	61,870	88.0	68,981			
SOUTH ATLANTIC:																				
Delaware	7,408	3,003	77.2	36.4	8,724	4,014	898.7	395.9	4,865	77.7	5,741	100	60.6	132	2,533	77.2	2,551			
Maryland	30,519	16,049	70.6	33.5	37,972	17,702	878.9	369.5	21,602	70.4	27,093	635	67.6	1,010	8,192	71.6	8,869			
District of Columbia	45	50	43.3	24.5	60	58	576.9	284.3	22	37.3	28	10	47.6	15	13	54.2	17			
Virginia	80,268	28,557	47.1	16.8	88,463	30,959	518.5	186.2	61,639	50.9	68,561	935	60.9	1,235	17,722	36.9	18,567			
West Virginia	33,434	10,405	40.5	11.9	36,978	11,127	447.5	127.5	28,709	43.1	31,884	381	52.8	460	4,344	28.3	4,634			
North Carolina	125,196	41,830	44.8	15.5	132,876	44,207	475.1	163.9	74,923	53.0	81,254	395	61.0	516	49,878	36.2	51,106			
South Carolina	59,029	30,709	37.4	15.9	61,754	32,812	391.0	170.3	28,479	52.3	30,622	400	57.7	491	30,150	29.3	30,641			
Georgia	85,276	47,173	33.4	15.2	88,479	49,841	346.2	180.4	40,244	50.4	42,023	774	55.0	909	44,258	25.4	44,947			
Florida	24,161	8,761	41.0	16.2	26,387	9,383	447.5	173.7	18,960	48.1	20,728	854	30.1	1,144	4,347	26.0	4,517			
EAST SOUTH CENTRAL:																				
Kentucky	82,034	28,532	33.3	10.5	86,784	30,146	352.1	111.4	56,194	35.7	60,114	329	48.7	415	25,511	28.9	26,255			
Tennessee	84,067	22,446	34.2	8.9	89,022	23,550	362.4	98.2	54,887	41.7	58,994	268	48.8	360	28,582	25.4	26,659			
Alabama	71,167	15,906	27.6	6.2	73,634	16,592	286.1	64.8	39,727	44.0	41,711	273	45.3	332	31,167	18.7	31,581			
Mississippi	83,872	14,946	26.7	5.5	85,563	15,863	273.7	58.3	38,037	45.3	40,708	618	61.9	749	43,817	19.4	44,106			
WEST SOUTH CENTRAL:																				
Arkansas	63,800	15,401	26.3	6.6	65,985	18,408	272.1	70.5	34,462	38.7	36,069	363	57.3	452	28,975	19.0	29,414			
Louisiana	41,453	9,494	25.7	7.0	43,082	10,612	266.9	77.6	22,675	42.7	23,877	389	52.9	407	18,389	17.1	18,598			
Oklahoma	117,537	49,017	57.7	25.5	127,448	52,063	625.2	271.2	54,183	69.7	61,002	476	57.8	692	62,878	20.2	65,854			
Texas	280,758	99,697	56.7	22.9	300,176	105,292	605.6	241.5	128,668	67.5	142,543	2,133	64.4	2,679	149,967	49.7	154,954			
MOUNTAIN:																				
Montana	34,477	20,749	72.6	36.0	38,166	22,072	803.6	382.7	25,767	72.9	28,707	321	62.5	449	8,389	72.1	9,010</			

AGRICULTURE

TABLE 18.—MOTOR TRUCKS ON FARMS—FARMS REPORTING AND NUMBER OF TRUCKS, 1930 AND 1920; BY TENURE OF OPERATOR, 1930; BY DIVISIONS AND STATES

[Statistics for 1930 relate to April 1, and for 1920 to January 1]

DIVISION AND STATE	TOTAL								OWNERS, 1930			MANAGERS, 1930			TENANTS, 1930		
	Farms reporting				Number of motor trucks	Number of trucks per 1,000 of all farms		Number	Per cent of all owners	Number of motor trucks	Per cent of all managers	Number	Per cent of all tenants	Number of motor trucks			
	Number	Per cent of all farms	1930	1920		1930	1920										
	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	
United States....	845,335	131,551	13.4	2.0	900,355	139,169	143.2	21.6	608,241	17.0	648,868	17,151	30.7	22,762	219,943	8.3	228,755
GEOGRAPHIC DIVISIONS:																	
New England.....	33,328	7,284	26.7	4.7	37,972	8,119	304.0	51.9	30,029	26.3	33,951	1,244	42.4	1,738	2,055	26.1	2,283
Middle Atlantic.....	109,756	20,472	30.7	4.8	120,789	22,011	337.8	51.8	91,256	30.5	100,163	2,408	40.8	3,350	16,032	30.6	17,267
East North Central.....	189,040	24,942	19.6	2.3	198,172	26,074	205.0	24.0	136,675	19.7	143,488	2,065	30.9	3,464	49,700	18.8	51,220
West North Central.....	174,764	32,331	15.7	2.9	180,857	33,375	162.5	30.4	112,969	17.1	117,231	1,515	20.3	1,524	60,280	13.6	61,802
South Atlantic.....	88,019	14,716	8.3	1.3	94,946	15,787	80.7	13.6	66,840	12.4	71,932	2,471	27.0	3,455	18,708	3.7	19,550
East South Central.....	43,234	4,969	4.1	0.5	45,568	5,153	42.9	4.9	31,092	6.7	32,849	721	25.0	922	11,421	1.9	11,797
West South Central.....	92,300	8,960	8.4	0.9	96,791	9,455	87.7	9.5	54,369	13.2	57,364	1,565	28.4	1,959	36,366	5.3	37,468
Mountain.....	52,488	7,168	21.8	2.9	55,742	7,589	231.0	31.1	38,541	21.5	40,805	1,077	30.0	1,398	12,870	21.9	13,470
Pacific.....	62,406	10,809	22.8	4.6	69,548	11,606	265.7	49.6	46,470	22.6	51,025	3,425	34.8	4,643	12,511	27.0	13,880
NEW ENGLAND:																	
Maine.....	9,879	1,061	25.3	2.2	10,781	1,120	276.4	23.2	9,297	25.3	10,113	176	35.0	234	406	23.1	434
New Hampshire.....	4,051	663	27.2	3.2	4,539	717	304.5	34.9	3,682	26.8	4,102	178	50.1	223	191	24.0	214
Vermont.....	4,625	576	18.6	2.0	5,035	616	202.2	21.1	4,051	18.4	4,400	144	30.0	184	430	17.8	451
Massachusetts.....	7,982	3,136	31.2	9.8	9,572	3,535	373.9	110.5	7,067	30.5	8,389	434	45.3	628	481	33.4	555
Rhode Island.....	1,366	471	41.1	11.5	1,701	536	512.0	181.3	1,125	40.1	1,398	56	56.6	91	185	44.6	212
Connecticut.....	5,425	1,377	31.5	6.1	6,344	1,595	308.9	70.4	4,807	30.8	5,549	256	47.3	378	362	33.9	417
MIDDLE ATLANTIC:																	
New York.....	54,084	8,636	23.8	4.5	58,974	9,259	369.0	47.9	45,461	33.4	49,525	1,139	42.9	1,411	7,484	35.4	8,038
New Jersey.....	12,504	3,075	49.3	10.4	14,753	3,380	581.3	118.8	9,920	47.8	11,646	355	53.9	590	2,229	56.5	2,508
Pennsylvania.....	43,168	8,761	25.0	4.3	47,062	9,372	273.0	46.3	35,875	25.2	38,992	974	35.5	1,349	6,319	23.1	6,721
EAST NORTH CENTRAL:																	
Ohio.....	36,693	6,960	16.7	2.7	39,210	7,319	178.8	28.5	27,424	17.2	29,347	602	32.7	820	8,667	15.0	9,048
Indiana.....	28,468	3,501	15.7	1.7	30,037	3,671	165.4	17.0	19,417	15.5	20,575	329	22.3	432	8,722	16.0	9,030
Illinois.....	38,877	5,907	18.1	2.5	40,371	6,154	188.2	25.9	20,671	17.2	21,490	593	27.9	787	17,713	19.2	18,094
Michigan.....	34,894	4,681	20.6	2.4	36,768	4,886	217.1	24.9	28,986	20.5	30,471	595	38.9	759	5,313	20.3	5,588
Wisconsin.....	50,108	3,863	27.6	2.1	51,786	4,044	284.9	21.4	40,277	27.4	41,605	646	32.9	666	9,285	23.0	9,515
WEST NORTH CENTRAL:																	
Minnesota.....	35,503	3,677	19.2	2.1	36,557	3,803	197.3	21.3	25,773	20.4	26,543	294	28.1	353	9,438	16.4	9,661
Iowa.....	31,874	8,600	14.8	4.1	32,669	8,910	162.0	41.7	17,601	15.8	18,125	268	13.5	318	14,005	13.8	14,226
Missouri.....	19,215	4,878	7.5	1.9	20,132	5,059	78.7	19.2	13,530	8.2	14,156	281	18.2	349	5,404	6.1	5,627
North Dakota.....	16,502	743	21.2	1.0	16,990	774	217.9	10.0	12,093	24.1	12,453	131	27.9	478	4,278	15.6	4,386
South Dakota.....	14,485	4,249	17.4	5.7	14,816	4,353	178.2	58.3	9,295	20.4	9,535	75	16.5	91	5,115	18.8	5,190
Nebraska.....	25,176	6,333	19.4	5.1	26,045	6,548	201.2	52.6	14,934	22.2	15,515	206	20.2	236	10,036	16.4	10,294
Kansas.....	32,009	3,782	19.3	2.3	33,648	3,928	202.6	23.8	19,743	20.8	20,904	260	27.3	326	12,006	17.1	12,418
SOUTH ATLANTIC:																	
Delaware.....	2,781	233	28.6	2.8	2,996	304	308.6	30.0	1,989	31.8	2,157	52	31.5	73	740	22.5	766
Maryland.....	10,205	2,556	23.6	5.3	11,284	2,805	261.2	58.5	7,843	26.4	8,723	288	30.7	369	2,074	18.1	2,192
District of Columbia.....	57	29	54.8	14.2	81	29	778.8	142.2	33	55.9	43	11	52.4	23	13	54.2	15
Virginia.....	17,904	2,399	10.5	1.3	19,450	2,644	114.1	13.7	14,664	12.1	15,813	481	31.3	688	2,819	5.9	2,963
West Virginia.....	6,936	886	8.4	1.0	7,432	936	89.9	10.7	5,874	8.8	6,202	170	23.6	222	892	5.8	948
North Carolina.....	17,613	2,551	6.3	0.9	18,558	2,671	66.3	9.9	14,024	9.9	14,765	244	37.7	330	3,345	2.4	3,463
South Carolina.....	6,575	1,609	4.2	0.8	6,966	1,736	44.1	9.0	4,625	8.5	4,898	175	25.3	233	1,775	1.7	1,835
Georgia.....	15,036	2,913	5.9	0.9	15,967	3,145	62.5	10.1	9,648	12.1	10,207	469	33.4	605	4,910	2.8	5,095
Florida.....	10,852	1,500	18.4	2.8	12,203	1,617	206.9	20.9	8,140	20.7	9,004	581	20.5	917	2,131	12.7	2,282
EAST SOUTH CENTRAL:																	
Kentucky.....	6,740	1,455	2.7	0.5	7,188	1,538	29.2	5.7	5,252	3.3	5,585	101	15.0	140	1,387	1.6	1,463
Tennessee.....	8,563	1,362	3.5	0.5	9,030	1,430	36.8	5.7	6,302	4.9	6,755	134	21.9	177	2,037	1.8	2,107
Alabama.....	12,169	1,114	4.7	0.4	12,838	1,180	49.9	4.6	8,632	9.6	9,126	154	25.5	203	3,383	2.0	3,509
Mississippi.....	15,762	938	5.0	0.3	16,503	1,005	52.8	3.7	10,816	12.6	11,383	332	33.2	402	4,614	2.0	4,718
WEST SOUTH CENTRAL:																	
Arkansas.....	10,526	973	4.3	0.4	11,000	1,027	45.4	4.4	6,781	7.6	7,107	197	31.1	241	3,548	2.3	3,652
Louisiana.....	8,769	793	5.4	0.6	9,281	874	57.5	6.5	6,096	11.5	6,455	239	32.5	321	2,434	2.8	2,605
Oklahoma.....	23,039	2,070	11.3	1.1	23,930	2,155	117.4	11.2	12,653	16.3	13,234	235	28.6	279	10,151	8.1	10,417
Texas.....	49,966	5,124	10.1	1.2	52,580	5,399	106.1	12.4	28,839	15.1	30,508	894	27.0	1,118	20,233	6.7	20,894
MOUNTAIN:																	
Montana.....	13,783	1,167	29.0	2.0	14,615	1,225	307.7	21.2	10,734	30.4	11,358	194	37.7	258	2,855	24.6	2,999
Idaho.....	5,986	779	14.4	1.9	6,281	837	150.7	19.0	4,623	14.8	4,734	106	17.6	135	1,357	12.0	1,412
Wyoming.....	3,820	554	23.0	3.5	4,108	591	256.6	37.5	2,879	23.6	3,056	110	37.2	175	831	23.6	877
Colorado.....	16,052	2,684	26.8	4.8	16,918	3,016	282.2	50.3	10,218	26.6	10,841	249	29.7	290	5,585	27.0	5,781
New Mexico.....	5,024	532	16.0	1.8	5,228	593	169.7	19.9	3,815	16.4	4,038	92	27.5	114	1,117	17.6	1,176
Arizona.....	2,719	527	19.2	5.3	3,062	581	216.0	58.2	1,967	17.4</td							

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 537

TABLE 19.—TRACTORS ON FARMS—FARMS REPORTING AND NUMBER OF TRACTORS, 1930, 1925, AND 1920;
BY TENURE OF OPERATOR, 1930; BY DIVISIONS AND STATES

[Statistics for 1930 relate to April 1, and for 1925 and 1929 to January 1.]

DIVISION AND STATE	TOTAL												OWNERS, 1930				MANAGERS, 1930				TENANTS, 1930			
	Farms reporting						Number of tractors						Number of tractors per 1,000 of all farms				Farms reporting		Farms reporting		Farms reporting		Farms reporting	
	Number			Per cent of all farms			1930			1925			1920			Number	Per cent of all owners	Number	Per cent of all managers	Number	Per cent of all tenants	Number	Per cent of all tractors	
	1930	1925	1920	1930	1925	1920	1930	1925	1920	1930	1925	1920	1930	1925	1920	Number	Per cent of all owners	Number	Per cent of all managers	Number	Per cent of all tenants	Number	Per cent of all tractors	
United States.....	851,467	473,848	229,332	15.5	7.4	3.6	920,021	505,833	246,053	146.3	79.4	38.2	550,983	15.4	595,722	10,092	34.0	36,032	381,445	10.6	398,287			
GEOGRAPHIC DIVISIONS:																								
New England.....	13,111	7,310	2,245	10.5	4.0	1.4	14,109	7,844	2,397	112.9	49.2	15.3	11,344	9.9	12,082	889	30.3	1,097	878	11.1	930			
Middle Atlantic.....	76,719	47,471	13,240	21.5	11.3	3.1	81,970	49,864	14,140	229.2	119.0	33.3	60,222	20.1	63,935	2,647	43.7	3,459	13,850	26.4	14,526			
East North Central.....	238,996	141,070	55,413	27.4	13.5	5.1	249,333	146,665	55,082	258.0	139.5	53.6	130,136	21.6	156,540	3,596	41.7	4,693	88,263	32.3	88,100			
West North Central.....	205,100	161,838	92,123	26.5	13.7	8.4	318,180	161,559	97,584	265.9	145.4	89.2	170,708	20.8	186,240	2,332	31.2	2,989	122,120	27.5	128,925			
South Atlantic.....	43,983	28,036	10,460	4.2	2.6	0.9	47,376	31,075	11,229	44.8	28.0	9.7	33,116	6.1	35,046	2,718	30.3	3,762	8,149	1.6	8,566			
East South Central.....	22,584	13,299	5,044	2.1	1.3	0.5	24,308	14,097	8,379	23.0	14.0	5.1	16,968	3.6	18,097	609	31.5	1,253	4,707	0.8	4,943			
West South Central.....	63,177	29,846	17,435	5.7	2.0	1.8	74,010	34,688	17,671	34.1	20.0	8.6	36,661	8.9	43,384	1,572	28.6	2,503	24,944	3.6	28,123			
Mountain.....	43,171	17,899	16,865	17.9	7.7	6.5	48,007	19,935	17,513	108.9	85.4	71.7	30,522	17.1	33,911	943	26.3	1,259	11,706	19.9	12,737			
Pacific.....	54,557	35,569	17,507	20.6	13.4	7.5	62,663	40,206	19,557	239.4	151.4	83.5	41,306	20.1	46,431	3,423	34.8	4,817	9,828	21.2	11,415			
NEW ENGLAND:																								
Maine.....	3,214	1,084	605	8.2	3.4	1.3	3,410	1,774	635	87.4	35.5	13.2	2,957	8.0	3,115	129	25.6	160	128	7.3	135			
New Hampshire.....	1,013	494	196	6.8	2.3	1.0	1,006	531	207	73.5	25.2	10.1	882	6.4	941	90	25.4	112	41	5.2	43			
Vermont.....	2,342	1,500	424	9.4	5.4	1.5	2,426	1,588	444	97.4	56.4	15.3	1,930	8.8	1,990	114	23.8	133	298	12.4	303			
Massachusetts.....	3,553	2,046	540	13.9	6.1	1.7	3,921	2,212	562	163.2	66.1	18.5	3,055	13.2	3,244	324	33.8	393	184	12.8	204			
Rhode Island.....	516	280	69	15.5	7.2	1.7	589	318	79	177.3	81.3	19.3	413	14.7	463	45	45.5	62	58	14.0	64			
Connecticut.....	2,463	1,315	411	14.3	5.7	1.8	2,667	1,441	440	155.1	62.0	19.4	2,107	13.5	2,249	187	34.6	237	169	15.8	181			
MIDDLE ATLANTIC:																								
New York.....	37,700	24,360	7,021	23.6	12.9	3.6	40,369	25,681	7,497	252.6	126.1	38.8	30,478	22.4	32,446	1,076	40.6	1,348	6,236	29.5	6,575			
New Jersey.....	7,241	4,113	845	28.5	13.9	2.8	8,088	4,419	946	318.7	148.9	31.8	5,427	26.1	6,006	378	57.4	555	1,436	36.4	1,527			
Pennsylvania.....	31,688	19,008	5,374	18.4	9.5	2.7	33,513	19,764	5,697	104.4	98.6	23.2	24,317	17.1	25,533	1,193	43.5	1,556	6,178	22.6	6,424			
EAST NORTH CENTRAL:																								
Ohio.....	50,693	29,951	9,934	23.1	12.2	3.9	52,974	30,905	10,469	241.6	126.8	40.8	32,400	20.3	33,889	812	44.1	1,020	17,481	30.3	18,065			
Indiana.....	40,402	22,817	8,871	22.3	11.7	4.3	41,979	23,507	9,230	231.2	120.4	45.0	23,831	19.0	24,801	556	37.6	696	16,015	23.3	16,482			
Illinois.....	68,172	41,436	21,932	30.8	18.4	9.2	69,628	43,325	23,102	324.6	192.0	97.4	29,235	24.4	31,002	900	42.4	1,226	36,037	39.0	37,400			
Michigan.....	33,098	18,515	5,684	19.5	9.6	2.8	34,579	19,217	5,884	204.2	99.0	30.0	26,141	18.5	27,158	660	48.1	921	22,697	24.0	6,500			
Wisconsin.....	48,630	28,952	9,092	26.8	15.0	4.8	50,173	29,651	9,407	276.0	153.5	49.7	38,529	26.2	39,690	608	40.3	830	9,438	28.5	9,633			
WEST NORTH CENTRAL:																								
Minnesota.....	46,171	25,539	14,794	24.9	13.6	8.3	43,457	26,739	15,503	261.6	142.1	88.9	29,554	23.3	31,149	283	36.6	493	16,284	28.2	16,815			
Iowa.....	63,166	35,692	19,427	20.4	16.7	9.1	66,258	37,230	20,270	308.3	174.4	95.0	30,704	27.7	32,660	552	27.9	673	31,820	31.3	32,895			
Missouri.....	23,673	12,066	7,438	9.2	4.6	2.8	24,999	12,745	7,889	97.7	48.9	30.0	15,125	9.1	15,987	358	23.2	453	8,190	9.2	8,550			
North Dakota.....	34,148	15,853	11,834	43.8	20.9	15.2	37,605	17,483	13,008	482.3	230.1	167.4	22,971	45.8	25,563	267	56.8	341	10,910	39.8	11,701			
South Dakota.....	30,972	16,373	12,160	27.2	20.0	16.3	33,837	17,426	12,939	49.9	219.1	174.4	18,107	39.7	20,053	165	37.0	22,122	697	21.1	15,562			
Nebraska.....	37,956	17,728	10,342	29.3	13.9	8.3	40,729	18,765	11,100	314.6	148.9	89.2	21,135	31.3	23,034	262	25.7	313	16,558	27.1	17,382			
Kansas.....	59,075	28,687	16,128	35.6	17.2	9.8	66,276	31,171	17,177	399.1	187.9	103.9	33,022	34.8	37,770	342	35.8	494	25,711	36.0	28,011			
SOUTH ATLANTIC:																								
Delaware.....	1,447	619	220	14.9	6.0	2.2	1,000	694	239	164.8	67.7	23.6	881	14.1	975	66	40.0	98	500	15.2	527			
Maryland.....	6,744	3,814	1,410	15.6	7.8	2.9	7,208	4,026	1,525	166.8	82.2	31.8	4,559	14.8	4,862	308	39.2	458	1,817	15.0	1,888			
District of Columbia.....	15	4	1	14.4	2.9	0.5	17	8	1	163.5	57.6	4.9	3	5.1	3	9	42.9	11	3	12.5	3			
Virginia.....	9,142	6,362	2,206	5.4	3.3	1.2	9,751	6,750	2,379	57.2	34.8	12.8	7,225	0.0	7,634	533	34.7	673	1,384	2.9	1,450			
West Virginia.....	2,041	1,705	541	3.2	2.0	0.6	2,792	1,860	572	33.8	20.6	6.6	2,159	3.2	2,251	187	25.9	233	295	1.9	308			
North Carolina.....	11,034	7,595	2,184	3.9	2.7	0.8	11,426	7,909	2,777	40.8	27.9	8.4	9,034	6.4	9,314	257	39.7	330	1,743	1.3	1,782			
South Carolina.....	3,229	2,220	1,213	2.0	1.5	0.6	3,462	2,906	1,304	21.9	16.8	6.8	2,506	4.6	2,675	199	28.7	239	524	0.5	548			
Georgia.....	5,349	3,769	2,083	2.1	1.5	0.7	5,870	4,145	2,425	23.0	16.6	7.2	5,508	4.4	5,704	546	38.8	724	1,395	0.7	1,362			
Florida.....	4,382	2,352	602	7.4	4.0	1.1	5,244	2,777	680	88.9	46.9	12.6	3,241	8.2	3,638	553	19.5	996	588	3.5	710			
EAST SOUTH CENTRAL:																								
Kentucky.....	6,951	4,793	1,913	2.8	1.9	0.7	7,822	4,994	2,029	29.7	19.3	7.5	5,234	3.3	5,603	146	21.6	189	1,571	1.8	1,630			
Tennessee.....	6,556	4,571	1,796	2.7	1.8	0.7	6,865	4,767	1,872	27.9	18.9	7.4	5,003	3.8	5,290	159	26.0	200	1,334	1.2	1,375			
Alabama.....	4,259	2,261	737	1.7	1.0	0.3	4,664	2,465	811	18.1	10.4	3.2	3,117	3.4	3,314	177	20.4	326	965	0.6	1,024			
Mississippi.....	4,818	1,674	598	1.5	0.7	0.2	5,542	1,871	667	17.7	7.3	2.5	3,554	4.1	3,990	427	42.7	638	837	0.4	914			
WEST SOUTH CENTRAL:																								
Arkansas.....	4,263	2,554	1,423	1.8	1.2	0.6	5,084	3,476	1,822	23.5	15.7	7.8	2,713	3.0	3,519	234	36.9	384	1,316	0.9	1,781			
Louisiana.....	8,810	2,406	2,142	2.4	1.9	1.6	5,016	3,482	2,812	31.1	26.3	20.8	2,237	4.2	2,870	280	38.1	500	1,293	1.2	1,547</td			

AGRICULTURE

TABLE 20.—ELECTRIC MOTORS FOR FARM WORK AND STATIONARY GAS ENGINES ON FARMS—FARMS REPORTING AND NUMBER OF ELECTRIC MOTORS AND GAS ENGINES, BY DIVISIONS AND STATES, 1930

DIVISION AND STATE	ELECTRIC MOTORS FOR FARM WORK			STATIONARY GAS ENGINES			DIVISION AND STATE	ELECTRIC MOTORS FOR FARM WORK			STATIONARY GAS ENGINES		
	Farms reporting		Number of motors per 1,000 of all farms	Farms reporting		Number of engines per 1,000 of all farms		Farms reporting		Number of motors per 1,000 of all farms	Farms reporting		Number of engines per 1,000 of all farms
	Number	Per cent of all farms	Number	Number	Per cent of all farms	Number	Per cent of all farms	Number	Per cent of all farms	Number	Number	Per cent of all farms	Number
United States.....	256,668	4.1	386,191	61.4	945,000	15.0	1,131,168	179.9					
GEOGRAPHIC DIVISIONS:													
New England.....	14,702	11.8	23,706	189.8	27,828	22.3	34,481	276.0	Delaware.....	884	4.0	513	52.8
Middle Atlantic.....	32,311	9.0	48,682	136.1	103,864	29.0	131,099	366.6	Maryland.....	2,557	5.9	3,669	84.9
East North Central.....	65,344	6.8	96,552	99.9	281,878	29.2	334,988	346.3	Dist. of Columbia.....	7	6.7	8	76.9
West North Central.....	40,972	4.5	78,006	70.1	356,995	32.1	422,474	379.7	Virginia.....	2,427	1.4	3,032	21.3
South Atlantic.....	11,206	1.1	16,083	15.2	36,595	3.5	42,900	40.5	West Virginia.....	884	1.1	1,269	15.4
East South Central.....	3,508	0.3	4,691	4.4	13,284	1.3	14,892	14.0	North Carolina.....	1,038	0.6	2,320	8.8
West South Central.....	7,306	0.7	9,862	8.9	30,671	2.8	35,706	32.4	South Carolina.....	757	0.5	945	0.0
Mountain.....	11,751	4.9	17,551	72.7	38,671	16.0	46,133	191.2	Georgia.....	968	0.4	1,246	4.9
Pacific.....	60,470	23.1	91,658	347.9	55,214	21.1	68,735	262.6	Florida.....	1,592	2.7	2,481	42.1
NEW ENGLAND:													
Maine.....	3,447	8.8	5,575	142.9	7,005	18.0	8,342	213.9	EAST SOUTH CENTRAL:				
New Hampshire.....	1,561	10.5	2,416	162.1	3,020	20.3	3,725	249.9	Kentucky.....	1,121	0.5	1,484	6.0
Vermont.....	2,358	9.5	3,645	146.4	8,437	33.9	10,932	440.3	Tennessee.....	1,216	0.5	1,608	6.5
Massachusetts.....	4,266	16.7	6,846	267.4	4,328	16.9	5,283	206.4	Alabama.....	678	0.3	972	3.8
Rhode Island.....	646	19.4	1,181	355.5	544	16.4	707	212.8	Mississippi.....	494	0.2	632	2.0
Connecticut.....	2,514	14.6	4,043	235.1	4,494	26.1	5,402	317.7	WEST SOUTH CENTRAL:				
MIDDLE ATLANTIC:									Arkansas.....	1,056	0.4	1,460	0.0
New York.....	16,012	16.0	24,342	152.3	50,094	31.3	64,723	405.0	Louisiana.....	510	0.3	633	3.9
New Jersey.....	4,102	16.2	5,870	231.7	6,963	27.4	9,036	356.1	Oklahoma.....	1,688	0.8	2,418	11.9
Pennsylvania.....	12,197	7.1	18,461	167.1	46,807	27.1	57,340	332.6	Texas.....	4,061	0.8	5,351	10.8
EAST NORTH CENTRAL:									MOUNTAIN:				
Ohio.....	14,000	6.4	21,278	97.0	45,108	20.6	52,508	239.4	Montana.....	1,088	2.3	1,708	36.0
Indiana.....	7,705	4.3	11,090	60.7	35,192	19.4	39,380	216.9	Idaho.....	4,406	10.0	6,713	161.1
Illinois.....	10,452	4.9	15,557	72.5	56,640	31.1	79,300	389.7	Wyoming.....	315	2.0	481	30.0
Michigan.....	10,285	6.1	14,862	87.9	46,874	27.5	55,366	326.9	Colorado.....	2,289	3.8	3,299	55.0
Wisconsin.....	22,812	12.6	33,795	185.9	88,364	45.6	108,134	594.9	New Mexico.....	393	1.3	580	18.5
WEST NORTH CENTRAL:									Arizona.....	1,427	10.1	2,064	144.9
Minnesota.....	11,721	6.3	19,926	107.6	93,382	60.4	112,376	606.6	Utah.....	1,269	4.7	1,756	64.7
Iowa.....	17,277	8.0	27,801	129.4	94,772	44.1	114,977	535.0	Nevada.....	564	16.4	960	278.9
Missouri.....	3,590	1.4	4,949	19.3	27,477	10.7	31,718	126.9	PACIFIC:				
North Dakota.....	3,203	4.1	4,878	62.6	35,226	45.2	44,166	566.4	Washington.....	10,751	15.2	15,783	222.7
South Dakota.....	3,283	3.9	4,086	56.4	29,765	35.8	34,475	414.6	Oregon.....	6,043	11.0	9,010	168.4
Nebraska.....	5,807	4.5	8,303	64.1	41,946	32.4	45,902	384.6	California.....	43,076	32.2	64,260	488.4
Kansas.....	5,101	3.1	7,463	44.9	34,428	20.7	38,861	234.0					

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 539

TABLE 21.—TELEPHONES, AND DWELLINGS LIGHTED BY ELECTRICITY¹ ON FARMS—FARMS REPORTING 1930 AND 1920; BY TENURE OF OPERATOR, 1930; BY DIVISIONS AND STATES

[Statistics for 1930 relate to April 1, and for 1920 to January 1]

DIVISION AND STATE	TELEPHONES								OPERATORS' DWELLINGS LIGHTED BY ELECTRICITY ¹											
	Total		Owners, 1930		Managers, 1930		Tenants, 1930		Total		Owners, 1930		Managers, 1930		Tenants, 1930					
	Number of farms reporting		Per cent of all farms		Number reporting		Per cent of all own- ers		Number reporting		Per cent of all re- porting		Number reporting		Per cent of all all own- ers					
	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920	1930	1920				
United States	2,139,194	2,498,493	34.0	38.7	1,540,313	43.2	38,399	50.8	570,482	21.4	841,310	452,620	15.4	7.0	682,053	19.4	19,647	35.2	128,880	4.8
GEOGRAPHIC DIVISIONS:																				
New England	76,284	80,510	61.1	51.4	60,770	61.2	2,338	79.8	4,167	52.8	53,655	24,000	42.9	15.3	49,097	43.0	1,948	66.3	2,610	33.1
Middle Atlantic	161,879	189,344	45.3	44.5	127,469	46.0	3,725	61.5	20,685	39.4	114,066	60,102	31.9	14.1	99,055	33.1	2,984	49.8	12,049	23.0
East North Central	560,462	678,862	58.0	62.6	405,834	56.5	5,598	64.8	149,030	56.5	202,056	113,871	21.0	10.5	163,920	23.6	3,064	35.5	35,672	13.5
West North Central	724,545	762,442	65.1	69.5	455,476	68.9	5,182	69.4	263,887	59.4	146,969	97,847	18.2	8.9	114,124	17.3	1,583	21.2	31,262	7.0
South Atlantic	117,464	164,213	11.1	14.2	98,260	18.2	2,997	33.4	16,207	3.2	64,172	45,407	6.1	3.9	53,696	9.9	2,056	22.9	8,421	1.7
East South Central	142,204	198,692	13.4	18.7	111,052	24.0	1,240	42.9	29,282	4.9	31,932	21,720	3.0	2.1	40,240	19,352	3.6	1.9	31,861	1,028
West South Central	181,647	273,315	16.5	27.4	121,607	29.6	2,137	38.8	57,903	8.4	40,240	25,161	20.4	10.3	40,862	22.8	966	26.9	7,345	12.5
Mountain	68,217	82,503	28.3	25.6	52,167	29.2	1,541	42.9	14,509	24.7	49,173	25,161	20.4	10.3	40,862	22.8	966	26.9	7,345	12.5
Pacific	106,402	90,612	40.7	34.7	88,039	42.8	3,641	37.0	14,812	32.0	188,294	45,160	62.9	19.3	114,008	55.4	5,254	53.4	19,132	41.3
NEW ENGLAND:																				
Maine	22,189	23,632	56.9	49.0	21,059	57.3	358	71.2	772	44.0	12,920	4,625	33.1	9.6	12,254	33.3	266	52.9	400	22.8
New Hampshire	9,313	10,166	62.5	40.5	8,587	62.4	297	83.7	429	53.9	6,160	2,322	41.3	11.3	5,886	41.3	235	66.2	239	30.0
Vermont	15,063	16,752	60.6	57.6	13,455	61.1	348	72.5	1,290	53.5	7,565	3,328	30.4	11.4	6,828	31.0	226	47.1	513	21.3
Massachusetts	16,581	16,537	64.8	51.7	14,979	64.6	793	82.8	800	56.1	16,037	9,062	62.6	28.3	14,514	62.6	750	78.3	773	53.6
Rhode Island	1,742	1,685	52.4	41.3	1,484	52.8	73	73.7	185	44.6	1,910	700	57.5	17.1	1,659	59.1	69	69.7	182	43.9
Connecticut	11,306	11,738	66.1	51.8	10,215	65.5	409	86.7	682	63.0	9,063	3,963	57.7	17.5	8,188	52.3	402	74.3	503	47.1
MIDDLE ATLANTIC:																				
New York	75,185	91,973	48.9	47.0	67,474	49.0	1,724	65.0	8,887	42.6	55,019	24,882	34.4	12.9	48,477	35.0	1,371	51.7	5,171	24.5
New Jersey	10,373	9,484	40.9	31.0	8,455	40.7	401	60.8	1,517	38.4	13,441	4,551	53.0	15.8	11,711	56.4	401	60.8	1,329	33.7
Pennsylvania	73,321	87,887	42.5	43.5	61,540	43.3	1,600	58.4	10,181	37.2	45,638	30,669	26.5	15.2	38,877	27.3	1,212	44.2	5,649	20.3
EAST NORTH CENTRAL:																				
Ohio	121,214	159,478	55.3	62.1	92,621	57.9	1,146	62.2	27,447	47.6	58,740	37,745	25.9	14.7	46,169	28.9	787	42.7	9,784	17.0
Indiana	110,333	136,140	60.8	66.4	80,092	63.8	951	64.3	29,290	53.7	30,335	20,564	16.7	10.0	24,106	19.2	374	25.3	5,885	10.7
Illinois	147,672	173,572	68.8	73.2	84,003	70.1	1,506	70.9	62,164	67.2	34,231	28,273	16.0	9.8	24,200	20.2	572	26.9	9,469	10.2
Michigan	73,757	97,874	43.5	49.8	63,128	44.6	921	60.2	9,713	37.1	34,756	15,695	20.5	8.0	30,057	21.2	680	44.4	4,048	15.5
Wisconsin	107,486	111,798	59.1	50.1	85,995	58.5	1,075	64.8	20,416	61.0	46,565	16,574	25.0	8.8	39,388	26.8	681	39.2	6,526	19.7
WEST NORTH CENTRAL:																				
Minnesota	114,693	110,568	61.9	62.0	81,081	64.1	719	65.7	32,893	57.1	23,342	13,539	12.6	7.6	18,953	15.0	308	29.4	4,081	7.1
Iowa	180,876	183,852	84.2	80.1	98,996	87.1	1,564	70.0	82,310	81.0	46,042	32,552	21.4	15.3	33,228	29.9	396	30.0	12,318	12.1
Missouri	187,712	163,548	58.8	62.2	101,012	61.1	1,007	65.1	35,693	40.1	20,222	14,341	7.9	5.5	16,565	10.0	320	21.1	3,832	3.7
North Dakota	31,878	30,349	40.9	46.8	22,882	45.7	242	61.5	8,754	61.5	6,192	4,516	7.9	5.8	5,107	10.2	73	18.8	1,012	3.7
South Dakota	44,608	44,327	53.6	59.4	28,079	57.2	260	55.1	18,279	40.3	9,070	6,445	10.9	8.6	7,082	15.5	72	15.9	1,916	5.2
Nebraska	63,888	95,050	72.5	76.4	52,575	78.0	725	71.1	40,688	66.6	21,380	12,002	16.5	9.7	16,455	24.4	175	17.2	4,760	7.8
Kansas	120,590	128,753	72.8	77.9	74,851	79.0	675	70.8	15,364	64.5	20,720	14,390	12.5	8.7	16,334	17.6	233	24.4	3,853	5.5
SOUTH ATLANTIC:																				
Delaware	2,420	2,763	24.9	27.2	1,741	27.8	80	48.5	599	18.2	1,581	397	16.1	3.9	1,315	21.0	56	33.0	190	5.8
Maryland	11,935	11,755	27.6	24.5	9,263	30.0	443	47.2	2,290	19.6	9,145	3,320	21.2	7.0	7,816	25.4	308	32.8	1,021	8.9
District of Columbia	69	67	66.3	32.8	42	71.2	17	81.0	10	41.7	67	52	64.5	25.5	41	69.5	15	71.4	45.8	
Virginia	80,418	83,482	17.8	18.0	26,185	21.6	785	51.1	2,448	7.2	13,008	7,874	7.6	4.2	11,312	9.3	419	27.3	1,278	2.7
West Virginia	28,117	37,739	34.0	43.3	25,188	37.8	345	48.3	2,581	18.8	5,230	12,900	6.4	14.8	4,730	7.1	124	17.2	470	3.1
North Carolina	19,562	33,029	7.1	12.2	16,811	11.9	272	42.0	2,709	2.0	15,006	7,816	5.4	2.9	12,581	8.9	245	37.8	2,180	1.6
South Carolina	6,357	10,943	4.0	5.7	5,129	9.4	200	26.9	1,028	1.0	6,067	5,170	3.8	2.7	4,861	8.6	157	22.7	1,249	1.2
Georgia	14,771	29,861	5.8	9.6	10,973	13.8	509	36.2	3,289	1.9	7,409	5,826	2.9	1.9	5,730	7.2	280	19.9	1,480	0.9
Florida	3,526	4,524	6.0	8.4	2,938	7.5	843	12.1	244	1.5	6,459	2,042	11.0	3.8	5,510	14.0	482	15.0	527	2.1
EAST SOUTH CENTRAL:																				
Kentucky	61,631	73,145	25.0	27.0	40,606	31.5	831	52.0	11,674	18.2	10,691	5,925	4.3	2.2	9,159	5.8	179	26.5	1,358	1.5
Tennessee	45,205	56,880	18.4	22.5	34,979	26.0	298	48.8	9,928	8.7	10,010	4,554	4.1	1.8	8,534	6.5	165	27.0	1,311	1.2
Alabama	19,510	38,407	7.6	15.0	14,704	16.3	172	38.5	4,034	2.8	8,459	8,845	2.5	3.3	4,951	5.5	137	22.7	1,371	0.8
Mississippi	15,553	28,260	5.1	10.4	12,393	14.4	419	41.9	8,046	1.4	4,792	2,896	1.5	1.1	3,806	4.4	283	28.3	703	0.3
WEST SOUTH CENTRAL:																				
Arkansas	25,046	52,860	10.3	22.7	19,224	21.6	244	38.5	5,578	8.7	5,121	2,643	2.1	1.1	3,992	4.5	154	24.3		

AGRICULTURE

TABLE 22.—FARMS REPORTING WATER PIPIED INTO DWELLINGS, 1930 AND 1920; AND INTO BATHROOMS, 1930; BY TENURE OF FARM OPERATOR FOR 1930; BY DIVISIONS AND STATES

[Statistics for 1930 relate to April 1, and for 1920 to January 1]

DIVISION AND STATE	WATER PIPIED INTO DWELLINGS										WATER PIPIED INTO BATHROOMS, 1930															
	Total				Owners, 1930			Managers, 1930			Tenants, 1930			Total				Owners			Managers			Tenants		
	Number of farms reporting		Percent of all farms		Num-ber reporting	Per cent of all owners	Num-ber reporting	Per cent of all managers	Num-ber reporting	Per cent of all tenants	Num-ber of farms reporting	Per cent of all farms	Num-ber reporting	Per cent of all owners	Num-ber reporting	Per cent of all managers	Num-ber reporting	Per cent of all tenants	Num-ber reporting	Per cent of all managers	Num-ber reporting	Per cent of all tenants				
	1930	1920	1930	1920																						
United States	994,203	643,899	15.8	10.0	779,327	21.8	94,300	43.5	190,575	7.2	531,248	8.4	431,340	12.1	18,432	33.0	81,476	3.1								
GEOGRAPHIC DIVISIONS:																										
New England	79,815	74,954	63.9	47.9	72,986	64.0	2,347	79.9	4,482	56.8	32,684	26.2	29,138	25.5	1,854	63.1	1,692	21.5								
Middle Atlantic	135,690	98,936	37.9	23.3	116,569	39.0	3,521	58.2	15,609	29.8	63,766	17.8	55,112	18.4	2,592	42.8	6,002	11.6								
East North Central	211,273	134,877	21.9	12.4	160,954	23.2	3,096	35.9	47,222	17.9	92,459	9.6	73,309	10.6	2,181	25.3	16,998	6.4								
West North Central	180,402	107,015	16.2	9.8	126,431	19.1	1,955	26.2	32,016	11.7	94,108	8.5	72,070	10.9	1,314	17.6	20,724	4.7								
South Atlantic	66,763	38,775	6.3	3.3	55,027	10.2	2,902	33.0	8,774	1.7	41,354	3.9	34,508	6.4	2,272	25.3	4,576	0.9								
East South Central	27,171	15,999	2.6	1.5	21,897	4.7	968	33.5	4,306	0.7	17,316	1.6	14,270	3.1	840	29.1	2,206	0.4								
West South Central	88,376	49,191	8.0	4.9	61,201	14.9	1,952	35.5	25,223	3.7	50,281	4.8	38,480	9.4	1,477	26.8	10,324	1.5								
Mountain	45,324	26,843	20.0	10.8	39,229	21.9	1,280	35.7	7,815	13.3	26,303	10.9	22,098	12.4	890	24.8	3,315	5.6								
Pacific	156,380	97,809	59.7	41.8	125,033	60.8	6,219	63.1	25,128	54.3	112,947	43.2	92,357	44.0	5,012	50.9	15,578	33.7								
NEW ENGLAND:																										
Maine	19,121	18,020	49.0	37.4	18,087	49.2	354	70.4	680	38.7	4,918	12.6	4,548	12.4	192	38.2	178	10.1								
New Hampshire	10,995	10,765	73.8	52.5	10,164	73.9	304	85.6	527	66.2	3,857	25.9	3,445	25.0	244	68.7	168	21.1								
Vermont	18,013	18,301	72.3	62.9	16,143	73.3	384	80.0	1,486	61.7	6,185	24.8	5,510	25.0	257	53.5	418	17.4								
Massachusetts	19,063	18,893	74.5	52.8	17,337	74.7	778	81.2	968	67.1	10,939	42.7	9,716	41.9	716	74.7	507	36.2								
Rhode Island	1,887	1,451	56.8	35.5	1,621	57.7	76	76.8	190	45.8	1,027	30.9	875	31.2	64	84.6	88	21.2								
Connecticut	10,716	9,524	62.3	42.0	9,634	61.8	451	83.4	631	59.1	5,758	33.5	5,044	32.4	381	70.4	333	31.2								
MIDDLE ATLANTIC:																										
New York	59,276	45,487	37.1	23.5	51,625	37.9	1,591	60.0	6,060	28.7	29,555	18.5	25,828	19.0	1,198	45.2	2,520	12.0								
New Jersey	12,360	7,047	48.7	23.7	10,384	50.0	453	68.7	1,522	38.6	8,162	32.2	6,963	33.5	376	57.1	823	20.8								
Pennsylvania	64,064	46,402	37.2	22.9	54,560	38.3	1,477	53.9	8,027	29.3	26,049	15.1	22,321	15.7	1,018	37.1	2,710	9.0								
EAST NORTH CENTRAL:																										
Ohio	64,104	41,531	29.2	16.2	49,886	31.2	792	43.0	13,426	23.3	24,320	11.1	20,071	12.6	532	28.9	3,717	6.5								
Indiana	35,451	23,476	19.5	11.4	26,114	20.8	415	28.1	8,922	16.3	14,380	7.9	11,425	9.1	274	18.5	2,681	4.9								
Illinois	42,391	26,676	19.8	11.2	26,668	22.2	665	31.3	15,068	16.3	23,583	11.0	16,074	13.4	480	22.6	7,020	7.6								
Michigan	40,872	29,729	24.1	15.1	34,664	24.5	752	49.2	5,456	20.8	15,673	9.3	13,523	9.5	543	35.5	1,607	6.1								
Wisconsin	28,454	13,465	15.7	7.1	23,632	16.1	472	28.5	4,350	13.1	14,533	8.0	12,216	8.3	352	21.2	1,965	5.9								
WEST NORTH CENTRAL:																										
Minnesota	23,124	11,392	12.5	6.4	18,067	14.3	310	29.6	4,747	8.2	11,183	6.0	9,071	7.2	240	22.9	1,872	3.2								
Iowa	51,635	33,851	24.0	15.9	33,516	30.1	522	26.4	17,507	17.3	31,435	14.6	22,521	20.2	344	17.4	8,570	8.4								
Missouri	21,308	11,901	8.3	4.5	16,957	10.3	266	23.7	3,985	4.5	10,881	4.3	9,038	5.5	277	17.9	1,568	1.8								
North Dakota	5,844	4,684	7.5	6.0	4,173	8.3	81	17.2	1,590	5.8	2,537	3.3	2,012	4.0	49	10.4	476	1.7								
South Dakota	12,089	9,157	14.5	12.3	7,631	16.7	104	22.9	4,354	11.7	4,657	5.6	3,564	7.8	56	12.3	1,037	2.8								
Nebraska	38,357	20,691	29.6	16.6	25,239	37.4	317	31.1	12,801	21.0	17,817	13.8	13,360	19.8	155	15.2	4,295	7.0								
Kansas	28,045	15,339	16.9	9.3	20,848	22.0	255	26.7	6,942	9.9	15,598	9.4	12,495	13.2	193	20.2	2,910	4.1								
SOUTH ATLANTIC:																										
Delaware	1,500	752	15.5	7.4	1,125	18.0	68	41.2	307	9.4	1,033	10.6	813	13.0	53	32.1	167	5.1								
Maryland	10,354	6,702	24.0	14.0	8,173	26.5	444	47.3	1,737	15.2	6,173	14.3	5,060	16.4	324	34.5	780	6.8								
Dist. of Columbia	48	51	46.2	25.0	30	50.8	15	71.4	3	12.5	43	41.3	27	45.8	15	71.4	1	4.2								
Virginia	15,291	9,474	9.0	5.1	13,021	10.8	642	41.8	1,628	3.4	10,032	5.9	8,548	7.1	526	34.2	958	2.0								
West Virginia	9,650	4,974	11.7	5.7	8,690	13.0	181	25.1	809	5.3	3,848	4.7	3,479	5.2	101	14.0	268	1.7								
North Carolina	9,308	4,423	3.8	1.6	7,999	5.7	247	38.1	1,062	0.8	5,351	1.0	4,577	3.2	212	32.7	562	0.4								
South Carolina	5,176	3,443	3.8	1.8	4,080	7.5	205	29.6	891	0.9	3,757	2.4	3,017	5.5	108	24.2	572	0.6								
Georgia	7,877	5,615	3.1	1.8	5,634	7.1	523	37.2	1,720	1.0	4,989	1.9	3,779	4.7	334	23.8	846	0.5								
Florida	7,559	3,341	12.8	6.2	6,305	16.0	637	22.5	617	3.7	6,158	10.4	5,107	13.2	539	19.0	422	2.5								
EAST SOUTH CENTRAL:																										
Kentucky	8,378	5,139	3.4	1.9	7,043	4.5	173	25.6	1,162	1.3	5,128	2.1	4,360	2.8	161	22.4	617	0.7								
Tennessee	8,018	4,800	3.3	1.9	6,728	5.1	184	30.1	1,106	1.0	4,903	2.0	4,204	3.2	145	23.7	554	0.5								
Alabama	5,182	2,987	2.0	1.2	3,969	4.4	179	29.7	1,034	0.6	3,194	1.2	2,584	2.9	151	25.0	450	0.3								
Mississippi	5,593	2,983	1.8	1.1	4,157	4.8	432	43.2	1,004	0.4	4,001	1.3	3,122	3.6	393	39.3	576	0.3								
WEST SOUTH CENTRAL:																										
Arkansas	3,690	1,780	1.5	0.8	2,867	3.2	157	24.8	666	0.4	2,392	1.0	1,876	2.1	135	21.3	381	0.2								
Louisiana	4,964	2,182	3.1	1.6	3,730	7.0	304	41.4	930	0.9	3,841	2.4	2,982	5.0	279	38.0	580	0.5								
Oklahoma	10,820	6,646	5.3	3.5	8,156	10.5</																				

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 541

TABLE 23.—PER CENT DISTRIBUTION OF ALL FARMS AND OF FARMS REPORTING TELEPHONES, ELECTRIC LIGHT, AND WATER, BY TENURE OF OPERATOR, BY DIVISIONS AND STATES, 1930

[All percentages for farms reporting based on figures shown in Tables 21 and 22. Total number of all farms and of farms reporting each item by tenure equals 100 per cent]

DIVISION AND STATE	ALL FARMS			TELEPHONES			DWELLINGS LIGHTED BY ELECTRICITY			WATER PIPED INTO DWELLINGS			WATER PIPED INTO BATHROOMS		
	Owners	Manag-ers	Ten-ants	Owners	Manag-ers	Ten-ants	Owners	Manag-ers	Ten-ants	Owners	Manag-ers	Ten-ants	Owners	Manag-ers	Ten-ants
United States.....	56.7	0.9	42.4	72.0	1.3	26.7	82.4	2.3	15.3	78.4	2.4	19.2	81.8	3.5	15.3
GEOGRAPHIC DIVISIONS:															
New England.....	91.3	2.4	6.3	91.5	3.1	5.5	91.5	3.6	4.9	91.4	2.9	5.6	80.2	5.7	5.2
Middle Atlantic.....	83.6	1.7	14.7	84.9	2.3	12.8	86.8	2.6	10.6	85.9	2.6	11.5	86.4	4.1	9.5
East North Central.....	71.8	0.9	27.3	72.4	1.0	26.6	89.9	1.5	17.6	78.2	1.5	22.4	79.3	2.4	18.4
West North Central.....	59.4	0.7	39.9	62.9	0.7	36.4	77.7	1.1	21.3	70.1	1.1	28.8	76.6	1.4	22.0
South Atlantic.....	51.0	0.8	48.1	83.7	2.6	13.8	83.7	3.2	13.1	82.4	4.4	13.1	83.4	5.5	11.1
East South Central.....	43.8	0.3	55.9	78.5	0.9	20.6	82.8	2.4	14.8	80.6	3.6	15.8	82.4	4.9	12.7
West South Central.....	37.2	0.5	62.3	66.9	1.2	31.9	79.2	2.6	18.3	69.3	2.2	28.5	76.5	2.9	20.5
Mountain.....	74.1	1.5	24.4	76.5	2.3	21.3	83.1	2.0	14.9	81.2	2.6	16.2	84.0	3.4	12.6
Pacific.....	78.6	3.8	17.7	82.7	3.4	13.9	82.4	3.8	12.8	80.0	4.0	16.1	81.8	4.4	13.8
NEW ENGLAND:															
Maine.....	94.2	1.3	4.5	94.9	1.6	3.5	94.8	2.1	3.1	94.6	1.9	3.6	92.5	3.9	3.6
New Hampshire.....	92.3	2.4	5.3	92.2	3.2	4.6	92.3	3.8	3.9	92.4	2.8	4.8	89.3	6.3	4.4
Vermont.....	88.4	1.0	9.7	89.1	2.3	8.5	90.2	3.0	6.8	89.6	2.1	8.2	89.1	4.2	6.8
Massachusetts.....	90.6	3.7	5.6	90.3	4.8	4.9	90.5	4.7	4.8	90.9	4.1	5.1	88.8	6.5	4.6
Rhode Island.....	84.5	3.0	12.5	85.2	4.2	10.6	86.9	3.6	9.5	85.9	4.0	10.1	85.2	6.2	8.6
Connecticut.....	90.6	3.1	6.2	89.9	4.1	6.0	90.0	4.4	5.6	89.9	4.2	5.9	87.6	6.6	5.8
MIDDLE ATLANTIC:															
New York.....	85.1	1.7	13.2	86.3	2.2	11.5	88.1	2.5	9.4	87.1	2.7	10.2	87.4	4.1	8.6
New Jersey.....	81.8	2.6	15.6	81.5	3.9	14.6	87.1	3.0	9.9	84.0	3.7	12.3	85.3	4.6	10.1
Pennsylvania.....	82.5	1.6	15.9	83.9	2.2	13.9	85.2	2.7	12.2	85.2	2.8	12.5	85.7	3.9	10.4
EAST NORTH CENTRAL:															
Ohio.....	72.9	0.8	26.3	76.4	0.9	22.6	81.4	1.4	17.2	77.8	1.2	20.9	82.5	2.2	15.3
Indiana.....	69.1	0.8	30.1	72.6	0.9	28.5	79.5	1.2	19.3	73.7	1.2	25.2	79.5	1.9	18.6
Illinois.....	55.9	1.0	43.1	56.9	1.0	42.1	70.7	1.7	27.6	62.9	1.6	35.5	68.2	2.0	29.8
Michigan.....	83.6	0.9	15.5	85.6	1.2	13.2	86.4	2.0	11.6	84.8	1.8	13.3	86.3	3.5	10.3
Wisconsin.....	80.9	0.9	18.2	80.0	1.0	19.0	84.6	1.4	14.0	83.1	1.7	15.3	84.1	2.4	13.5
WEST NORTH CENTRAL:															
Minnesota.....	68.3	0.6	31.1	70.7	0.6	28.7	81.2	1.3	17.5	78.1	1.3	20.5	81.1	2.1	16.7
Iowa.....	61.8	0.9	47.3	53.6	0.9	45.5	72.4	0.9	26.8	64.9	1.0	34.1	71.6	1.1	27.3
Missouri.....	64.6	0.6	34.3	73.4	0.7	25.9	81.9	1.6	16.5	79.6	1.7	18.7	83.1	2.5	14.4
North Dakota.....	64.3	0.6	35.1	71.8	0.8	27.5	82.5	1.2	16.3	71.4	1.4	27.2	79.3	1.9	18.8
South Dakota.....	54.3	0.5	44.6	58.5	0.6	41.0	78.1	0.8	21.1	63.1	0.9	36.0	76.5	1.2	22.3
Nebraska.....	52.1	0.8	47.1	56.0	0.8	43.2	77.0	0.8	22.2	65.8	0.8	33.4	75.0	0.9	24.1
Kansas.....	57.1	0.6	42.4	61.9	0.6	37.5	80.3	1.1	18.6	74.3	0.9	24.8	80.1	1.2	18.7
SOUTH ATLANTIC:															
Delaware.....	64.5	1.7	33.8	71.9	3.3	24.8	84.2	3.6	12.2	75.0	4.5	20.5	78.7	5.1	16.2
Maryland.....	71.3	2.2	26.5	77.5	3.7	18.8	85.5	3.4	11.2	78.9	4.8	16.8	82.1	5.2	12.6
District of Columbia.....	56.7	20.2	23.1	60.9	24.6	14.5	61.2	22.4	16.4	62.5	31.8	6.3	62.8	34.9	2.3
Virginia.....	71.0	0.9	28.1	86.1	2.6	11.3	87.0	3.2	9.8	85.2	4.2	10.6	85.2	5.2	9.5
West Virginia.....	80.6	0.9	18.6	89.6	1.2	9.2	88.7	2.3	8.9	89.7	1.9	8.4	90.4	2.6	7.0
North Carolina.....	60.6	0.2	49.2	84.7	1.4	13.9	83.8	1.6	14.5	85.9	2.7	11.4	85.5	4.0	10.5
South Carolina.....	34.5	0.4	65.1	80.7	3.1	16.2	76.8	2.6	20.6	78.8	4.0	17.2	80.3	4.5	15.2
Georgia.....	81.2	0.6	68.2	74.3	3.4	22.3	76.4	3.7	19.9	71.5	6.6	21.8	76.2	6.7	17.1
Florida.....	66.8	4.8	28.4	83.3	9.7	6.9	84.9	7.0	8.1	83.4	8.4	8.2	84.4	8.8	6.9
EAST SOUTH CENTRAL:															
Kentucky.....	63.9	0.3	35.9	80.5	0.6	18.9	85.7	1.7	12.7	84.1	2.1	13.9	85.0	2.9	12.0
Tennessee.....	53.5	0.2	46.2	77.4	0.7	22.0	85.3	1.6	13.1	83.9	2.3	13.8	85.7	3.0	11.3
Alabama.....	35.1	0.2	64.7	75.4	0.9	23.8	76.7	2.1	21.2	76.6	3.5	20.0	80.9	4.7	14.4
Mississippi.....	27.5	0.3	72.2	78.1	2.6	19.2	79.4	5.9	14.7	74.3	7.7	18.0	76.3	9.6	14.1
WEST SOUTH CENTRAL:															
Arkansas.....	36.7	0.3	63.0	76.8	1.0	22.3	78.0	3.0	19.0	77.7	4.3	18.0	78.4	5.6	15.9
Louisiana.....	32.9	0.5	66.6	77.5	4.8	17.7	78.0	5.2	16.8	75.1	6.1	18.7	77.6	7.2	15.1
Oklahoma.....	38.1	0.4	61.5	62.3	0.6	37.0	78.5	2.0	19.5	75.4	1.8	22.8	80.2	2.3	17.4
Texas.....	38.4	0.7	60.9	66.3	1.3	32.4	79.9	2.2	17.9	67.4	1.9	30.7	75.6	2.4	21.9
MOUNTAIN:															
Montana.....	74.4	1.1	24.5	70.2	2.2	18.6	83.1	3.2	13.6	80.1	3.2	16.7	81.4	4.4	14.1
Idaho.....	73.2	1.4	25.3	77.9	1.6	20.6	79.4	1.4	19.2	80.8	1.8	17.4	84.5	2.1	13.4
Wyoming.....	76.2	1.8	22.0	79.1	3.4	17.4	82.4	5.4	12.2	81.8	5.0	13.2	81.7	7.3	11.0
Colorado.....	64.1	1.4	34.5	68.5	1.9	29.6	77.5	2.2	20.3	73.3	2.4	24.4	77.7	3.3	19.0
New Mexico.....	78.8	1.1	20.2	78.5	3.3	18.2	83.3	3.4	13.2	81.0	4.0	16.0	82.6	5.4	12.0
Arizona.....	79.7	3.9	16.4	79.3	6.9	13.8	80.5	5.3	14.2	79.5	6.0	14.5	81.3	6.9	11.8
Utah.....	86.9	0.8	12.2	91.5	1.2	7.3	90.1	0.6	9.3	91.8	0.8	7.4	93.0	0.8	6.2
Nevada.....	80.5	6.6	12.9	79.1	8.4	12.5	82.6	5.0	12.4	81.8	8.2	10.0	83.6	8.8	7.6
PACIFIC:															
Washington.....	81.2	1.7	17.0	82.0	1.8	16.2	86.5	1.9	11.6	82.9	1.8	15.2	84.8	2.1	13.1
Oregon.....	80.7	1.5	17.8	88.1	1.7	15.2	84.9	1.6	13.4	82.2	1.0	15.9	84.3	2.2	13.5
California.....	76.3	5.7	18.0	82.9	5.4	11.7	80.2	5.0	14.8	78.4	5.2	16.4	80.5	5.5	14.0

AGRICULTURE

TABLE 24.—KIND OF ROAD—FARMS CLASSIFIED BY KIND OF ROAD ON WHICH LOCATED, WITH PER CENT DISTRIBUTION, BY DIVISIONS AND STATES: 1930 AND 1925

[Statistics for 1930 relate to April 1, and for 1925 to January 1]

DIVISION AND STATE	ALL FARMS	NUMBER OF FARMS LOCATED ON—													
		Concrete or brick road			Asphalt road, ¹ 1920	Macadam road		Gravel road		Sand-clay and improved dirt road			Im- proved dirt, 1925		
		1930		1925		Total	Concrete	Brick	1930	1925	1930	1925	Total		
		1930	1925						1930	1925			1930		
United States.....	6,288,648	6,371,640	215,774	208,594	13,180	166,434	72,011	306,897	316,527	1,270,113	946,057	1,795,485	156,531	1,638,954	1,998,704
GEOGRAPHIC DIVISIONS:															
New England.....	124,925	150,489	3,102	3,185	7	2,066	1,892	18,894	19,074	31,400	38,936	18,905	456	18,449	35,656
Middle Atlantic.....	357,003	418,868	37,109	35,395	1,714	26,048	4,743	64,821	66,883	35,833	33,832	30,936	1,257	38,679	63,270
East North Central.....	966,402	1,051,572	68,394	60,022	8,372	52,298	5,849	91,538	101,281	395,149	339,076	136,557	4,915	131,642	188,622
West North Central.....	1,112,755	1,111,314	21,840	20,704	1,156	8,735	1,115	7,290	6,420	209,730	115,906	428,894	5,102	423,792	495,410
South Atlantic.....	1,058,468	1,108,061	32,553	31,032	1,521	24,644	22,704	37,188	30,672	64,802	42,703	378,004	109,702	268,212	385,994
East South Central.....	1,062,214	1,066,052	12,038	11,875	163	8,495	9,016	46,221	64,227	249,862	152,580	262,756	19,901	242,765	281,337
West South Central.....	1,103,134	1,017,305	14,272	14,026	179	7,548	17,405	4,822	7,703	152,481	112,573	420,528	13,810	406,718	410,785
Mountain.....	241,314	233,392	4,412	4,409	3	4,833	864	2,748	831	51,806	30,954	71,277	912	70,365	82,777
Pacific.....	261,733	265,587	21,904	21,879	65	23,767	8,414	30,875	19,436	87,990	79,497	38,028	296	38,332	54,953
NEW ENGLAND:															
Maine.....	39,006	50,033	362	358	4	131	230	2,901	1,669	12,503	14,155	5,157	186	4,971	12,391
New Hampshire.....	14,906	21,055	283	283	-----	108	458	2,912	2,780	2,181	4,879	1,811	18	1,793	3,874
Vermont.....	24,898	27,786	675	675	-----	83	19	559	208	9,354	10,176	5,007	80	4,927	6,385
Massachusetts.....	25,598	33,454	626	623	3	792	915	7,678	8,834	5,217	7,177	8,625	121	3,404	7,788
Rhode Island.....	3,322	3,911	152	152	-----	58	149	981	1,232	397	237	544	1	543	1,315
Connecticut.....	17,195	23,240	1,094	1,094	-----	894	121	2,853	4,351	1,808	2,312	2,861	50	2,811	3,953
MIDDLE ATLANTIC:															
New York.....	159,806	188,754	18,463	17,636	827	12,202	2,844	38,759	42,787	14,344	16,767	16,022	263	15,759	30,986
New Jersey.....	25,378	29,671	3,051	3,046	5	2,378	930	4,548	4,608	6,805	7,735	2,547	184	2,863	2,421
Pennsylvania.....	172,419	200,443	15,595	14,713	882	11,488	969	21,514	19,488	14,084	9,280	21,307	810	20,557	28,863
EAST NORTH CENTRAL:															
Ohio.....	210,296	244,703	18,120	11,020	7,119	17,954	2,827	55,104	55,307	78,508	66,647	10,194	590	9,604	16,408
Indiana.....	181,570	195,786	9,669	9,125	544	5,897	1,426	21,938	29,733	105,936	105,947	7,161	371	6,790	9,337
Illinois.....	214,497	225,691	19,819	19,130	689	12,026	196	8,580	8,443	44,752	32,473	57,492	343	57,149	81,150
Michigan.....	169,372	192,327	9,577	9,562	15	7,328	1,249	6,445	7,321	79,231	72,766	25,702	2,124	23,578	34,829
Wisconsin.....	181,707	193,155	11,190	11,185	5	8,063	117	4,451	5,367	80,632	61,243	30,008	1,487	34,521	46,798
WEST NORTH CENTRAL:															
Minnesota.....	185,255	188,231	2,279	2,259	20	1,183	197	1,355	238	75,942	54,998	52,010	1,318	50,692	72,155
Iowa.....	214,928	211,400	8,079	7,803	276	2,286	125	730	466	47,902	21,187	55,816	521	65,295	85,419
Missouri.....	285,940	260,473	6,963	6,903	62	2,307	506	3,816	4,510	40,275	28,209	72,048	416	71,632	93,930
North Dakota.....	77,975	75,970	12	12	-----	12	2	63	9	5,142	1,234	38,995	97	38,898	38,882
South Dakota.....	83,157	79,527	48	47	1	7	8	29	55	11,346	4,197	42,458	3	42,455	40,824
Nebraska.....	129,458	127,784	817	641	176	501	54	35	24	15,310	2,254	72,246	497	71,749	75,735
Kansas.....	166,042	165,879	3,640	3,039	601	2,349	222	1,262	1,098	13,813	3,787	85,321	2,250	83,071	88,465
SOUTH ATLANTIC:															
Delaware.....	8,707	10,287	1,955	1,953	2	1,502	93	914	679	688	121	1,729	115	1,614	2,939
Maryland.....	43,203	49,001	4,840	4,830	10	3,681	176	7,097	6,358	5,147	4,254	6,439	214	6,226	6,162
District of Columbia.....	104	139	13	13	-----	12	29	29	52	16	28	3	3	15	15
Virginia.....	170,610	193,723	2,342	2,328	14	1,954	2,810	14,486	12,806	16,432	11,204	43,769	12,602	31,167	42,112
West Virginia.....	92,641	90,380	3,160	2,751	409	2,980	1,793	4,685	3,888	4,724	1,153	10,697	513	10,184	12,318
North Carolina.....	279,705	283,482	11,491	11,160	331	8,651	6,086	4,914	2,651	17,732	12,240	116,902	42,828	74,074	119,590
South Carolina.....	187,901	172,767	4,454	4,429	25	1,602	1,935	782	57	5,661	4,316	69,600	25,435	44,166	70,815
Georgia.....	255,898	249,095	2,918	2,907	9	1,735	2,875	898	593	12,079	7,034	113,093	23,161	80,932	115,283
Florida.....	58,936	60,217	1,382	661	721	2,897	3,284	4,093	2,328	2,353	15,772	4,924	10,848	17,200	17,200
EAST SOUTH CENTRAL:															
Kentucky.....	246,499	253,524	1,798	1,769	29	1,203	2,343	33,222	42,039	39,576	25,927	31,803	814	31,079	51,631
Tennessee.....	246,657	252,669	4,950	4,943	7	1,729	4,511	13,972	18,100	56,857	38,886	45,812	933	44,870	74,340
Alabama.....	237,395	237,631	1,685	1,679	16	356	1,816	1,005	2,211	48,214	24,973	95,455	12,794	82,661	71,966
Mississippi.....	312,663	257,228	3,505	3,484	111	3,207	345	22	1,877	110,215	62,794	89,596	5,450	84,146	88,400
WEST SOUTH CENTRAL:															
Arkansas.....	282,334	221,901	3,012	3,011	1	3,654	3,440	312	2,346	35,094	21,046	67,749	1,913	65,836	70,293
Louisiana.....	161,445	152,450	1,498	1,489	19	299	530	495	162	52,813	31,816	37,904	681	37,223	38,592
Oklahoma.....	203,866	197,218	3,209	3,124	85	1,222	494	85	175	10,741	3,760	103,074	1,809	101,205	91,369
Texas.....	455,489	465,646	6,563	6,489	74	2,373	12,941	3,930	5,080	53,833	55,952	211,801	9,407	202,394	204,531
MOUNTAIN:															
Montana.....	47,495	46,904	47	47	-----	34	70	27	5,656	2,391	17,657	40	17,617	18,075	
Idaho.....	41,674	40,592	174	172	2	182	267	1,270	341	14,997	10,025	9,686	832	9,353	18,242
Wyoming.....	16,011	15,512	35	33	-----	63	9	62	15	1,428	680	5,227	4	5,223	4,165
Colorado.....	59,856	58,020	840	839	1	800	28	149	71	14,262	8,049	22,763	161	22,602	24,960
New Mexico.....	31,404	31,687	307	307	-----	333	10	222	66	8,382	2,455	6,401	254	6,147	5,053
Arizona.....	14,173	10,892	1,187	1,187	-----	1,384	150	75	72	1,759	650	3,452	10	3,442	3,305
Utah.....	27,159	26,992	1,708	1,703	-----	1,764	292	812	220	9,824	5,604	5,100	96	5,004	7,136
Nevada.....	3,442	3,883	71	71	-----	113	8	98	19	478	550	992	15	977	1,181
PACIFIC:															
Washington.....	70,904	73,267	5,038	4,957	81	5,312	790	1,792	1,664	38,222	32,216	7,039	72	6,967	10,301
Oregon.....	55,153	55,911	1,370	1,368	2	1,762	2,870	6,175	6,633	25,620	20,763				

SELECTED FARM EXPENDITURES, COOPERATION, FARM FACILITIES 543

TABLE 24.—KIND OF ROAD—FARMS CLASSIFIED BY KIND OF ROAD ON WHICH LOCATED, WITH PER CENT DISTRIBUTION, BY DIVISIONS AND STATES: 1930 AND 1925—Continued

[Statistics for 1930 relate to April 1, and for 1925 to January 1]

DIVISION AND STATE	NUMBER OF FARMS LOCATED ON—continued				PER CENT OF ALL FARMS LOCATED ON—																		
	Unimproved dirt road		All other (including not reported)		Concrete or brick road			Asphalt road, 1930	Macadam road		Gravel road		Sand-clay and improved dirt road			Unimproved dirt road		All other (including not reported)					
	1930	1925	1930	1925	Total	Concrete	Brick		1930	1925	1930	1925	Total	Sand-clay	Improved	1925	1930	1925	1930	1925			
United States.....	2,279,989	2,747,732	339,879	206,186	3.4	8.2	0.2	2.5	1.1	4.9	5.0	20.3	14.8	28.6	2.5	36.1	31.4	36.3	43.1	5.4	3.2		
GEOGRAPHIC DIVISIONS:																							
New England.....	45,588	60,808	4,994	2,049	2.6	2.5	(*)	1.3	1.5	15.1	12.0	25.2	24.4	15.1	0.4	14.8	22.4	36.5	38.1	4.0	1.8		
Middle Atlantic.....	180,903	208,958	14,258	10,877	10.4	9.9	0.5	6.2	1.3	18.1	16.0	10.0	8.1	11.2	0.4	10.8	15.1	45.0	49.9	4.0	4.7		
East North Central.....	231,416	337,794	37,580	32,651	7.1	6.2	0.9	5.0	0.6	9.5	9.6	40.9	32.2	14.1	0.5	13.6	17.9	23.9	32.1	3.9	3.1		
West North Central.....	401,860	450,338	42,226	34,505	2.0	1.9	0.1	0.8	0.1	0.7	0.6	18.8	10.4	38.5	0.5	31.1	44.6	36.1	40.5	3.8	3.1		
South Atlantic.....	457,086	589,343	66,131	34,705	3.1	2.9	0.1	2.2	2.1	3.5	2.8	6.1	3.9	35.7	10.4	25.3	34.8	43.2	53.2	6.2	3.1		
East South Central.....	419,195	472,522	61,127	28,891	1.1	1.1	(*)	0.6	0.8	4.5	6.4	23.5	15.2	24.7	1.9	22.9	28.0	39.5	47.0	5.8	2.9		
West South Central.....	422,303	452,117	71,823	26,529	1.3	1.3	(*)	0.7	1.6	0.4	0.8	13.8	11.1	38.1	1.3	36.9	40.4	38.3	44.4	6.5	2.6		
Mountain.....	92,007	102,245	18,200	11,752	1.8	1.8	(*)	2.1	0.4	1.1	0.4	21.5	13.3	29.5	0.4	20.2	35.5	38.1	43.8	7.5	5.0		
Pacific.....	49,831	73,607	24,031	14,327	8.4	8.4	(*)	8.9	3.2	11.8	7.3	33.6	29.9	14.8	0.1	14.6	20.7	19.0	27.7	9.2	5.4		
NEW ENGLAND:																							
Maine.....	15,904	20,885	1,949	852	0.9	0.9	(*)	0.3	0.6	7.4	3.3	32.1	28.3	13.2	0.5	12.7	24.8	40.8	41.6	5.0	1.7		
New Hampshire.....	6,007	9,281	654	143	1.9	1.9	.....	0.5	3.1	19.5	13.2	14.6	23.2	12.1	0.1	12.0	18.4	44.3	44.1	4.4	0.7	
Vermont.....	8,739	10,725	546	209	2.7	2.7	.....	0.3	0.1	2.2	0.7	37.6	36.6	20.1	0.3	19.8	23.0	35.1	38.6	2.2	0.8	
Massachusetts.....	6,575	8,619	1,062	294	2.4	2.4	(*)	2.4	3.6	30.0	26.4	20.4	21.5	13.8	0.5	18.3	23.1	25.7	25.8	4.1	0.9		
Rhode Island.....	909	1,005	130	64	4.6	4.6	.....	1.5	4.5	29.5	31.5	12.0	6.1	10.4	(*)	16.3	33.6	29.2	25.7	3.9	1.6	
Connecticut.....	6,704	10,343	654	1,387	6.4	6.4	.....	3.8	0.7	22.5	18.7	10.5	9.9	16.6	0.3	16.3	17.0	39.5	44.5	3.8	6.0	
MIDDLE ATLANTIC:																							
New York.....	63,190	80,846	6,184	5,106	11.6	11.0	0.5	6.5	1.8	24.3	22.7	9.0	8.9	10.0	0.2	9.9	16.4	39.5	42.8	3.9	2.7		
New Jersey.....	6,472	10,310	1,025	2,169	12.0	12.0	(*)	8.0	3.7	17.9	15.5	26.8	26.2	10.0	0.7	9.3	8.2	25.5	34.7	4.0	7.3		
Pennsylvania.....	91,241	117,802	7,049	12,542	9.0	8.5	0.5	5.7	0.6	12.5	9.7	5.5	4.6	12.4	0.5	11.9	14.9	52.9	58.8	4.1	6.3		
EAST NORTH CENTRAL:																							
Ohio.....	45,538	77,463	8,806	10,924	8.3	5.0	3.2	7.3	1.3	25.1	22.6	35.8	27.2	4.6	0.3	4.4	6.7	20.8	31.7	4.1	4.5		
Indiana.....	27,740	39,778	7,630	5,054	5.3	5.0	0.3	3.0	0.8	12.1	15.2	58.3	54.1	3.9	0.2	3.7	4.8	15.3	20.3	4.2	2.6		
Illinois.....	79,175	90,470	9,483	5,030	9.2	8.9	0.3	5.8	0.1	1.7	1.5	20.9	14.4	26.8	0.2	26.6	36.0	36.0	40.1	4.4	2.2		
Michigan.....	41,006	66,210	6,162	3,883	5.7	5.6	(*)	3.8	0.7	3.8	3.8	46.8	37.8	15.2	1.3	13.9	18.1	24.2	34.4	3.6	2.0		
Wisconsin.....	37,951	63,804	5,418	7,700	6.2	6.2	(*)	4.2	0.1	2.4	2.8	47.7	31.7	19.8	0.8	19.0	24.2	20.9	33.1	3.0	4.0		
WEST NORTH CENTRAL:																							
Minnesota.....	46,835	54,951	6,037	4,686	1.2	1.2	(*)	0.6	0.1	0.7	0.1	41.0	29.2	28.1	0.7	27.4	38.3	25.3	29.2	3.6	2.5		
Iowa.....	85,027	99,623	6,048	4,539	3.8	3.6	0.1	1.1	0.1	0.3	0.2	22.3	9.9	30.6	0.2	36.4	40.0	39.8	46.7	3.1	2.1		
Missouri.....	120,733	122,658	11,547	8,079	2.7	2.7	(*)	0.9	0.2	1.5	1.7	15.7	10.9	28.2	0.2	28.0	36.1	47.2	47.1	4.5	3.3		
North Dakota.....	30,002	31,107	3,090	4,726	(*)	(*)	.....	(*)	(*)	0.1	0.1	50.0	0.1	(*)	49.9	51.2	38.6	40.9	4.7	6.2	.....	
South Dakota.....	25,594	32,048	3,074	2,406	0.1	0.1	(*)	(*)	(*)	0.1	13.6	5.3	51.1	51.1	51.1	36.8	40.3	4.4	3.0	.....	.....
Nebraska.....	36,194	46,559	4,802	2,661	0.6	0.5	0.1	0.4	(*)	(*)	11.8	1.8	55.8	0.4	55.4	59.3	28.0	36.4	3.7	2.1	
Kansas.....	56,565	63,392	5,219	6,808	2.2	1.8	0.4	1.4	0.1	0.8	0.7	8.3	2.3	51.4	1.4	50.0	53.3	34.1	38.2	3.1	4.1
SOUTH ATLANTIC:																							
Delaware.....	3,042	4,643	386	373	20.1	20.1	(*)	14.6	1.0	9.4	6.6	7.1	1.2	17.8	1.2	16.8	28.7	40.6	45.3	4.0	3.6		
Maryland.....	17,752	20,741	1,752	1,810	11.2	11.2	(*)	7.5	0.4	16.4	13.0	11.9	8.7	14.9	0.5	14.4	12.6	41.1	54.6	4.1	3.7		
Dist. of Columbia.....	13	23	1	9	12.5	12.5	.....	8.6	27.9	27.0	37.4	15.4	20.1	2.9	.....	2.9	10.8	12.5	16.5	1.0	6.5
Virginia.....	81,709	119,575	9,063	6,042	1.4	1.4	(*)	1.0	1.6	8.5	6.6	9.6	5.8	25.7	7.4	18.1	21.7	47.9	61.7	5.3	3.1		
West Virginia.....	51,002	65,573	5,980	4,968	3.8	3.3	0.5	3.3	2.2	5.7	3.7	5.7	1.3	12.9	0.6	12.3	13.6	62.4	72.6	7.2	5.5		
North Carolina.....	101,305	130,990	21,208	9,360	4.1	4.0	0.1	3.1	2.2	1.8	0.9	6.3	4.3	41.8	15.3	26.5	42.2	36.2	46.2	7.0	3.3		
South Carolina.....	68,188	98,970	7,311	2,607	2.8	2.8	(*)	0.9	1.2	0.5	(*)	3.6	2.5	44.1	16.1	28.0	40.7	43.2	54.4	4.6	1.5		
Georgia.....	109,565	118,752	14,172	5,698	1.1	1.1	(*)	0.7	1.1	0.4	0.2	4.7	2.8	44.2	9.1	35.2	46.3	42.9	47.7	5.5	2.3		
Florida.....	22,050	29,070	6,258	3,838	2.3	1.1	1.2	4.4	11.7	5.7	6.9	3.9	4.0	26.7	8.4	18.4	29.1	38.9	49.1	10.6	5.5		
EAST SOUTH CENTRAL:																							
Kentucky.....	117,256	127,861	20,411	9,863	0.7	0.7	(*)	0.5	1.0	13.5	16.3	16.1	10.0	12.9	0.3	12.6	20.0	47.6	49.5	8.3	3.8		
Tennessee.....	104,724	114,015	14,831	5,599	2.0	2.0	(*)	0.7	1.8	5.7	7.2	23.1	15.4	18.6	0.4	18.3	29.4	42.6	45.1	6.0	2.2		
Alabama.....	101,316	128,315	12,694	9,810	0.7	0.7	(*)	0.1	0.7	0.4	0.9	16.8	10.5	37.1	5.0	32.1	30.3	39.4	54.0	5.0	4.1		
Mississippi.....	95,899	102,331	12,901	3,019	1.1	1.1	(*)	1.2	0.1	0.7	0.7	35.3	24.4	28.7	1.7	26.9	32.4	30.7	39.6	4.2	1.4		
WEST SOUTH CENTRAL:																							
Arkansas.....	113,687	112,666	19,040	5,987	1.2	1.2	(*)	1.6	1.4	0.1	1.1	14.5	9.5	28.0	0.8	27.2	34.4	46.9	50.8	7.9	2.7		
Louisiana.....	60,807	60,126	7,408	1,465	0.9	0.9	(*)	0.2	0.3	0.3	0.1	22.7	24.0	23.5	0.4	23.1	29.1	37.7	45.4	4			