

1964 UNITED STATES CENSUS OF AGRICULTURE

FARMS
FARM CHARACTERISTICS
LIVESTOCK AND PRODUCTS
CROPS
FRUITS
VALUES

VOLUME II CHAPTER 10

Type of Farm



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CONTENTS

	page
Introduction	961
Source of data	961
Presentation of statistics	961
Farms classified by type	961
Basis of classification by type	961
The use of value of farm products sold for classifying farms by type.....	961
Comparability of type-of-farm classification for various censuses	962
Censuses of 1964, 1959, 1954, and 1950	964
1945 and 1950 to 1964	964
1940 and 1950 to 1964	964
1930 and 1950 to 1964	964
Type of farm and farm product specialization, 1964	964
Farms by type, 1964	965
Cash-grain farms	965
Tobacco farms.....	967
Cotton farms	968
Other field-crop farms	969
Vegetable farms.....	970
Fruit and nut farms	971
Poultry farms	972
Dairy farms	973
Livestock farms (other than poultry and dairy farms and livestock ranches).....	974
Livestock ranches	975
General farms	976
Miscellaneous farms	977

CHANGES IN THE NUMBER OF FARMS BY TYPE

Changes in number of farms by type 1950-1964	977
Changes in farms by type from 1959 to 1964	979

TABLES

TABLE 1. Criteria Used for Classification of Farms by Type: Censuses of 1964, 1959, 1954, 1950, 1945, 1940, and 1930	962
2. Farms by Type—Number of Commercial Farms by Type of Farm, by Regions and States: 1964 and 1959.....	982

CONTENTS—Continued

page

TABLES—Continued

TABLE 3.	Farms by Type—Percent Distribution of Commercial Farms by Type of Farm, by Regions and States: 1964 and 1959	984
4.	Land in Farms—Land in Farms by Type of Farm, by Regions and States: 1964 and 1959	986
5.	Cropland Harvested—Cropland Harvested by Type of Farm, by Regions and States: 1964 and 1959.....	988
6.	Farms by Type—Average Value of Farm Products Sold per Farm, by Type of Farm, by Regions and States: 1964 and 1959	990
7.	Farms by Type—Percent Distribution of all Farm Products Sold by Type of Farm, by Regions and States: 1964 and 1959	992
8.	Characteristics of Commercial Farms, by Type, for the United States: 1964.....	994
9.	Farm Characteristics of Cash-Grain Farms, by Economic Class, for the United States: 1964	1012
10.	Farm Characteristics of Tobacco Farms, by Economic Class, for the United States: 1964	1030
11.	Farm Characteristics of Cotton Farms, by Economic Class, for the United States: 1964.....	1048
12.	Farm Characteristics of Other Field-Crop Farms, by Economic Class, for the United States: 1964	1066
13.	Farm Characteristics of Vegetable Farms, by Economic Class, for the United States: 1964	1084
14.	Farm Characteristics of Fruit and Nut Farms, by Economic Class, for the United States: 1964	1102
15.	Farm Characteristics of Poultry Farms, by Economic Class, for the United States: 1964	1122
16.	Farm Characteristics of Dairy Farms, by Economic Class, for the United States: 1964.....	1140
17.	Farm Characteristics of Livestock Farms Other Than Poultry and Dairy, by Economic Class, for the United States: 1964.....	1158
18.	Farm Characteristics of Livestock Ranches, by Economic Class, for the United States: 1964	1178
19.	Farm Characteristics of General Farms, by Economic Class, for the United States: 1964.....	1196

Chapter 10. Type of Farm

Introduction—The information in this chapter is for 1964 only, except for the limited information for the earlier censuses presented in the text. The data for the 1964 census show characteristics of farms and farm operators, by type of farm, for the farms that were classified as "commercial."

United States agriculture is exceedingly heterogeneous. Farm operators and their families obtain their income by producing a large variety of farm products under a very large variety of conditions of soil, climate, resource combinations, management, etc., as well as from sources other than the farm operated. The organization of farms according to size of farm, methods of production, type of farming, productivity, use of resources, and combination of resources, vary greatly.

The purpose of a classification of farms by type is to show (a) the kinds of farms in the various parts of the Nation; (b) the variation in the use of resources, production, value of farm products sold, and combinations of resources among farms of various types; and (c) the characteristics of the operators for the different types of farms. The classification of farms by type groups together farms having a relatively high degree of uniformity in the kinds and amounts (or proportions) of crops and livestock products and in the practices followed in production. This kind of classification shows the degree of agricultural specialization and the pattern of agricultural production. Census data, thus classified, provide a basis for the study and analysis of agricultural problems, such as those relating to the development of land-use programs, farm-adjustment programs and plans, soil-conservation programs, and problems dealing with the production and marketing of agricultural commodities. The data are also of value to those who provide products for production purposes and services for farms and farm people.

Information for farms grouped by other classifications supplement the data provided by the type-of-farm classification. These classifications include size of farm (as measured by total acres in the farm) which is reported in chapter 3; tenure of farm operator, reported in chapter 8; and economic class of farm, reported in chapter 6.

Source of data—The data presented in this chapter are from the 1964 Census of Agriculture. Detailed comparable figures are not given for the prior censuses because of space limitations.

Data presented for characteristics of persons in farm operator's household, specified equipment and facilities, hired workers, use of agricultural chemicals, use of commercial fertilizer and lime, farm expenditures, and value of farmland and buildings are estimates for all farms made on the basis of reports for a sample comprising (1) all farms of 1,000 acres or more, (2) farms of less than 1,000 acres and with a value of farm products sold of \$100,000 or more, and (3) one-fifth of the remaining farms. A description of the sample and procedures for making the estimates, as well as a statement of the reliability of the estimates, are given in the introduction of this volume.

Presentation of statistics—Most of the statistics are presented only for the 1964 census for the United States. Data for each type of farm appear for each State in

State table 22 and for each important type of farm in the State, by economic class of farm, in State table 21 in volume I of the reports for the 1964 Census of Agriculture. Comparable data for the United States for the 1959 census are given in chapter 11, volume II, and comparable data by States are given in State tables 18 and 19 of volume I, of the reports for the 1959 Census of Agriculture.

Farms classified by type—In making the classification of farms by type for the 1964 census, the farms were classified or divided into two groups, "commercial farms" and "other farms."

Commercial farms comprise those, except abnormal farms, with (1) a total value of sales of farm products of \$2,500 or more in 1964 plus (2) those with a total value of sales of farm products of \$50 to \$2,499, provided the operator of the farm was under 65 years of age, and worked off the farm less than 100 days during the year. Reference should be made to Chapter 6, "Value of Farm Products Sold and Economic Class of Farm," for a more complete description of commercial farms and other farms.

Other farms comprise part-time, part-retirement, and abnormal farms.

Basis of classification by type—The classification of commercial farms by type was made on the basis of the relationship of the value of sales from one source, or a number of sources, to the total value of sales of all farm products sold from the farm. The value of sales of farm products was obtained by adding the value for all products sold from the farm. The value of sales for a part of the products was reported on the agriculture questionnaire as obtained from the operator during the enumeration. For the remaining products with sales, the quantity sold or produced was obtained during enumeration. The value of sales for these products was obtained by multiplying the quantity sold by State average prices. (For methods used in calculating value of farm products sold, see Chapter 6, "Value of Farm Products Sold and Economic Class of Farm.") In cases such as cotton or tobacco farms, the type was determined on the basis of sales from an individual source. In cases such as dairy or fruit and nut farms, it was determined on the basis of sales from closely related products. In other cases such as cash-grain farms, the type was determined on the basis of sales from a broader group of products (corn, sorghums, all small grains, dry field seed beans and peas, soybeans, and cowpeas). In order for a farm to be classified as a particular type, the value of sales from a product or a group of products had to represent 50 percent or more of the total value of sales of farm products.

The use of value of farm products sold for classifying farms by type—The value of sales of farm products has been used for several censuses as a basis for making a classification of farms by type. It provides a common denominator for relating the importance of the enterprises on the farm. In general, it reflects the physical resources and productivity of the farm. However, the use of income data has some limitations in making a type classification of farms. These limitations relate to farms where crop failure curtailed production during a year, to farms where livestock or other inventories were expanding or contracting at a

rate greater than the usual annual rate for the farm, and to farms on which a considerable part of the products sold is represented by purchased items. (For example, a farm with purchased feeder cattle may be classified as a livestock farm even though the net income from crops may exceed the net income from livestock.)

Changes in prices of several farm products at different rates or an increase or decrease in prices for products or groups of products directly related to type of farm, may cause a farm to be classified differently from one census to another. This is especially true for farms on which more than one

product or group of products supply important sources of sales. However, for farms on which one product provides a large part or the major part of the total sales, changes in prices will have little or no influence in classifying the farm by type.

Comparability of type-of-farm classification for various censuses—Farms have been classified by type of farm for seven censuses starting with the 1930 census. The criteria used for classifying farms by type have not been uniform. Table 1 presents a general description of the criteria used for determining the various types of farm for each census since 1930.

Table 1. CRITERIA USED FOR CLASSIFICATION OF FARMS BY TYPE: CENSUSES OF 1964, 1959, 1954, 1950, 1945, 1940, AND 1930

Type of farm	1964 and 1959	1954	1950	1945	1940	1930
Cash-grain farms....	Combined sales of corn, sorghums (except for sirup), small grains, dry field and seed beans and peas, soybeans for beans, cowpeas for peas accounted for 50 percent or more of total sales.	Same as 1959.....	Combined sales of corn, sorghums (except for sirup), small grains and grain straw, dry field and seed beans and peas, soybeans, cowpeas, and velvet beans accounted for 50 percent or more of total sales.	Included with field-crop farms.	Included with field-crop farms.	Combined value of corn, sorghums (except for sirup), and small grains available for sale accounted for 40 percent or more of the total value of farm products sold and used by operator's family.
Tobacco farms.....	Sales of tobacco accounted for 50 percent or more of total sales.	Included with other field-crop farms.	Included with other field-crop farms.	Included with field-crop farms.	Included with field-crop farms.	Included with field-crop farms.
Cotton farms.....	Sales of cotton (lint and seed) accounted for 50 percent or more of total sales.	Same as 1959.	Same as 1959.	Included with field-crop farms.	Included with field-crop farms.	Value of cotton (lint and seed) accounted for 40 percent or more of the total value of farm products sold and used by operator's family.
Other field-crop farms. (Field-crop farms 1945, 1940, and 1930).	Combined sales of peanuts, Irish potatoes, sweetpotatoes, sugarcane for sugar and for sirup, sweet sorghums for sirup, broomcorn, popcorn, sugar beets for sugar, mint, hops, and sugar beet seed accounted for 50 percent or more of total sales.	Combined sales of peanuts, Irish potatoes, sweetpotatoes, tobacco, sugarcane for sugar and for sirup, sweet sorghums for sirup, broomcorn, popcorn, sugar beets for sugar, raint, hops, and sugar beet seed accounted for 50 percent or more of total sales.	Combined sales of peanuts, Irish potatoes, sweetpotatoes, tobacco, sugarcane for sugar and for sirup, sweet sorghums for sirup, sugar beets for sugar, and other miscellaneous crops accounted for 50 percent or more of total sales.	Combined sales of all crops except vegetables, berries, fruits, nuts, and horticultural specialties accounted for 50 percent or more of total sales.	Combined sales of all crops except vegetables, berries, fruits, nuts, and horticultural specialties greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households.	Combined value of sweet sorghums for sirup, sugarcane, sugar beets, maple sirup and sugar, soybeans, cowpeas, velvetbeans, dry field seed beans and peas, tobacco, hay, peanuts, Irish potatoes, sweetpotatoes, mushrooms, hops, broomcorn, and other field crops available for sale accounted for 40 percent or more of the total value of farm products sold and used by operator's family.
Vegetable farms....	Sales of vegetables accounted for 50 percent or more of total sales.	Same as 1959.	Same as 1959.	Same as 1959.	Sales of vegetables greater than any one of the other seven groups of farm products sold or the value of products of farm used by farm households.	Value of vegetables sold accounted for 40 percent or more of the total value of farm products sold and used by operator's family (called "truck farms").
Fruit-and-nut farms.	Combined sales of berries, and other small fruits, grapes, tree fruits, and nuts accounted for 50 percent or more of total sales.	Same as 1959.	Same as 1959.	Same as 1959.	Sales of berries, fruits, and nuts greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households.	Value of berries, fruits, and nuts available for sale accounted for 40 percent or more of the total value of farm products sold and used by operator's family.
Poultry farms.....	Sales of chickens, chicken eggs, and all other poultry and poultry products accounted for 50 percent or more of total sales.	Same as 1959.	Same as 1959.	Sales of poultry and poultry products (including baby chicks) accounted for 50 percent or more of total sales.	Sales of poultry and poultry products (including baby chicks) greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households.	Value of poultry and poultry products available for sale accounted for 40 percent or more of the total value of farm products sold and used by operator's family.
Dairy farms.....	Sales of milk and cream accounted for 50 percent or more of total sales. Also farms with 30 percent or more of total sales from milk and cream; provided one-half of the cows were milk cows and the addition of sales of cattle and calves to the sales of milk and cream accounted for 50 percent or more of total sales.	Same as 1959.	Same as 1959.	Sales of dairy products accounted for 50 percent or more of total sales.	Sales of dairy products greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households.	Value of dairy products available for sale, together with sales of dairy cattle and calves, accounted for 40 percent or more of the total value of farm products sold and used by operator's family.

Table 1. CRITERIA USED FOR CLASSIFICATION OF FARMS BY TYPE: CENSUSES OF 1964, 1959, 1954, 1950, 1945, 1940, AND 1930
Continued

Type of farm	1964 and 1959	1954	1950	1945	1940	1930
Livestock farms other than poultry and dairy.	Sales of cattle, calves, hogs, sheep, goats, wool, and mohair accounted for 50 percent or more of total sales. Livestock ranches were classified separately in the 17 Western States, Florida, Louisiana, Hawaii, and Alaska.	Sales of cattle, calves, hogs, sheep, goats, wool, and mohair accounted for 50 percent or more of total sales.	Sales of livestock and livestock products (other than dairy products, poultry and poultry products, horses and mules sold alive, and bees and honey) accounted for 50 percent or more of total sales.	Sales of all livestock and livestock products, other dairy products and poultry and poultry products accounted for 50 percent or more of total sales. (Horses, mules, fur animals, and bees included.)	Sales of livestock other than poultry, bees, and fur animals greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households. (Horses and mules included.)	Value of all classes of meat animals, such as beef cattle, sheep, and hogs; also wool, mohair, and slaughtered animals; accounted for 40 percent or more of the total value of farm products sold and used by operator's family. These were divided into two groups: (a) Animal specialty, and (b) stock ranches, depending upon the ratio of crop acreage to pasture acreage. Livestock dealers and feedlot farms were separated. (See below.)
Livestock ranches...	Sales of cattle, calves, hogs, sheep, goats, wool, and mohair accounted for 50 percent or more of total sales; provided the pastureland or grazing land amounted to 100 or more acres and was 10 or more times the acreage of cropland harvested. (For the 17 Western States, Florida, Louisiana, Alaska, and Hawaii.)	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Value of beef cattle, sheep, hogs, wool and mohair, and animals slaughtered accounted for 40 percent or more of the total value of products sold and used by operator's family; provided the acreage in pasture was 5 times the acreage in crops in the Eastern States and 10 times the crop acreage in the Western States.
Other livestock products farms.	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Included with livestock farms other than poultry and dairy.	Sales of wool, mohair, meat, hides, bees, honey, wax, and fur animals greater than any one of the other seven groups of farm products sold or the value of products of the farm used by farm households.	Included with animal specialty, stock ranch, or unclassified farms.
General farms.....	Sales of field seed crops, hay, and silage accounted for 50 percent or more of total sales; or sales from 3 or more sources and none qualified for any other type.	Same as 1959.	Same as 1959.	No single sales group accounted for as much as 50 percent of total sales.	No general farm type. The use of the largest single of eight sources of farm products sold or the value of products of the farm used by farm household left no farms for such a type.	Value of products available for sale from each of the sales groups less than 40 percent of the total value of farm products sold and used by operator's family.
Primarily crop....	Included with general farms.	Less than 50 percent of total sales from any one group of products sold; but sales of all crops accounted for 70 percent or more of total sales.	Same as 1954.	Not classified separately.		Not classified separately.
Primarily livestock.	Included with general farms	Less than 50 percent of total sales from any one group of products sold; but sales of livestock and poultry and their products accounted for 70 percent or more of total sales.	Same as 1954.	Not classified separately.		Not classified separately.
Crop-and-livestock.	Included with general farms.	Less than 50 percent of total sales from any one group of products sold; sales of all crops amounted to at least 30 percent of total sales, but less than 70 percent of total sales.	Same as 1954.	Not classified separately.		Not classified separately.
Miscellaneous farms	Included farms with 50 percent or more of total sales from (a) sales of forest products, or (b) sales of nursery and greenhouse products; or (c) sales of horses, mules, colts, ponies, and sales of fur animals.	Included farms with 50 percent or more of total sales from (a) sales of forest products; or (b) sales of nursery and greenhouse products; or (c) sales of horses, mules, colts, and ponies.	Included farms with 50 percent or more of total sales from (a) sales of forest products; or (b) sales of nursery and greenhouse products; or (c) sales of horses, mules, colts, and ponies or (d) sales of fur animals; or (e) sales of bees, wax, and honey.	Farms not classified separately, except "forest-products farms" and "horticultural-specialty farms." Information for these two types was reported separately for the 1945 census.	Farms not classified separately; the source of value or value-of-product group with the largest value for all farm products determined the grouping of farms for this group.	This group was designated as abnormal farms. These abnormal farms were subdivided into five subtypes: (a) institution or country estate, (b) part-time, (c) boarding and lodging, (d) forest products, and (e) horse farm, feedlot, or livestock dealer. (Farms operated by a public or semi-public agency such as schools, etc., were classified as institutional farms.)

Censuses of 1964, 1959, 1954, and 1950—The data by type of farm for 1964, 1959, 1954, and 1950 for farms with a value of farm products sold of less than \$2,500 are not comparable because of differences in the classification. For 1964 and 1959, farms with sales of \$50 to \$2,499 were not published by type, when (a) the operator worked off the farm 100 days or more, (b) the value of income from sources other than the farm operated exceeded the value of agricultural products sold for 1959, or (c) the farm operator was 65 years old or over. For the 1954 and 1950 censuses, all farms with sales of \$1,200 to \$2,499 were classified by type of farm. There were approximately 763,000 and 901,000 such farms in 1954 and 1950, respectively.

Data by type of farm for farms with \$2,500 or more value of products sold are comparable for the 1964, 1959, 1954, and 1950 censuses. Separate data for tobacco farms and for livestock ranches are not available for 1954 and 1950.

1945 and 1950 to 1964—The classification of farms by type for 1945 differed significantly from the classification for other years. In 1945, all farms on which the value of farm products used by farm households exceeded the value of farm products sold were not classified by type of farm. These farms (referred to as subsistence farms) totaled 1,289,206.

1940 and 1950 to 1964—The classification by type of farm used for 1940 differed significantly from the classification used for other censuses. The value of nine groups of farm products sold and the value of farm products used by the farm operator and members of his family were obtained separately and farms were classified by type on the basis of the group of farm products having the largest value. The value of the group of farm products sold which determined the type of farm could have represented as low as 12 percent of the total value of all farm products sold.

1930 and 1950 to 1964—The basis of the classification of farms by type for 1930 differed significantly from the classification used for subsequent censuses. In 1930, the value of farm products used by the farm operator and members of his family was added to the value of all farm products sold to provide a total as a basis for determining type of farm. Farms with sales from a single specified product or group of products equal to 40 percent or more of the total value of farm products sold and used by farm operators' families were classified as type of farm indicated by the source.

The classification of farms in Hawaii and Alaska have been made on essentially the same basis as for

the conterminous United States. For a detailed description of the classification of farms in Hawaii and Alaska for the 1940 through the 1959 censuses, reference should be made to pages 1252 and 1253 of chapter XII of volume II of the reports for the 1959 Census of Agriculture.

For 1964, as in 1959, 1954, and 1950 the classification of farms by type was made on the basis of sales for a single year. The number and distribution of farms by type may have been influenced in areas affected by abnormal conditions of weather; disease, etc., and by shift in the relative prices of various farm products. The average price for the important farm products for each census from 1950 to 1964 is given in the following table.

Farm product	Unit	Average price, per unit (dollars)			
		1964	1959	1954	1949
Corn for grain.....	Bushel.....	1.16	1.05	1.44	1.24
Wheat.....	Bushel.....	1.37	1.77	2.13	1.86
Sorghums for grain.....	Bushel.....	1.06	0.86	1.26	0.98
Oats.....	Bushel.....	0.63	0.64	0.71	0.65
Barley.....	Bushel.....	0.93	0.86	1.08	1.05
Soybeans for beans.....	Bushel.....	2.66	1.97	2.52	2.12
Rice.....	Pound.....	0.05	0.05	0.05	0.04
Rye.....	Bushel.....	1.04	1.02	1.22	1.22
Cotton and cottonseed...	Bale.....	162.23	168.37	194.62	161.37
Tobacco.....	Pound.....	0.59	0.58	0.51	0.46
Irish potatoes.....	Hundredweight	3.43	2.14	2.16	2.13
Sugarcane for sugar.....	Ton.....	8.15	7.32	6.70	(NA)
Sugar beets for sugar.....	Ton.....	11.94	11.14	11.17	10.82
Peanuts for nuts.....	Pound.....	0.11	0.10	0.12	0.10
Eggs.....	Duzen.....	0.34	0.32	0.36	0.42
Broilers.....	Each.....	0.49	0.53	0.70	(NA)
Other chickens.....	Each.....	0.47	0.52	0.80	(NA)
Whole milk.....	Hundredweight	4.25	3.97	3.76	3.97
Cream.....	Pounds of butterfat...	0.59	0.59	0.57	0.61
Cattle excluding calves.	Each.....	174.25	204.16	136.94	163.11
Calves.....	Each.....	75.22	86.50	48.01	59.09
Hogs and pigs.....	Each.....	27.95	30.10	39.70	36.41
Sheep and lambs.....	Each.....	16.04	13.31	14.67	17.06
Wool.....	Pound.....	0.53	0.42	0.54	0.50
Apples.....	Pound.....	0.04	0.04	0.05	0.03
Peaches.....	Pound.....	0.04	0.04	0.04	0.03
Oranges.....	Pound.....	0.06	0.04	0.03	0.03

NA Not available.

Type of farm and farm product specialization, 1964—

The farms in each type-of-farm group account for a large part of the farm products or the group of farm products specified as the important source of gross sales for the type of farm. For example, fruit and nut farms accounted for 93 percent of the value of all berries, fruits and nuts sold and poultry farms for 90 percent of the value of all poultry and poultry products sold.

Type of farm	All farm products sold		Field crops other than fruits and vegetables sold		Vegetables sold		Fruits and nuts sold		Forest products and horticultural specialty products sold		Poultry and poultry products sold		Dairy products sold		Cattle and calves sold		All other livestock and livestock products sold	
	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959
Total, all commercial farms.....	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
Cash grain.....	16.0	15.0	36.7	35.5	2.0	2.7	0.4	0.5	0.6	0.6	1.2	2.6	1.7	2.3	6.1	5.7	9.6	8.9
Tobacco.....	3.3	3.0	8.2	7.6	0.4	0.4	0.1	0.1	0.7	0.6	0.1	0.2	0.3	0.5	0.5	0.5	0.9	1.4
Cotton.....	7.1	8.3	18.3	22.5	2.3	3.5	0.4	0.7	0.4	0.4	0.1	0.3	0.1	0.3	1.0	1.3	0.6	1.2
Other field crops.....	3.7	2.7	9.5	7.2	3.1	3.4	0.3	0.3	0.3	0.3	0.1	0.2	0.2	0.2	0.5	0.3	0.5	0.4
Vegetable.....	2.5	2.2	0.8	0.7	74.1	71.6	1.2	1.3	0.7	0.7	(¹)	0.1	(¹)	0.1	0.2	0.2	0.1	0.1
Fruit and nut.....	4.7	4.5	0.3	0.3	2.4	2.4	92.7	91.1	0.7	1.0	0.1	0.3	0.1	0.1	0.2	0.2	0.1	0.1
Poultry.....	8.5	6.8	0.6	0.6	0.5	0.6	0.5	0.8	0.6	0.7	89.9	80.1	0.6	0.6	0.7	0.6	1.2	1.0
Dairy.....	15.6	15.7	3.4	3.5	1.7	2.4	0.6	0.8	2.6	3.0	2.1	4.4	89.7	85.6	6.9	7.3	6.4	7.7
Livestock farms other than poultry, dairy, and livestock ranches.....	24.1	27.4	9.4	10.9	1.6	2.8	0.6	1.1	1.6	2.5	3.3	6.5	2.9	5.2	64.6	64.3	61.2	62.7
Livestock ranches.....	4.1	4.8	0.3	0.4	0.1	0.2	0.3	0.4	0.4	0.7	0.1	0.2	0.1	0.1	14.5	15.4	7.3	7.1
General.....	7.6	7.0	12.5	10.7	11.2	9.4	2.6	2.5	3.8	3.6	3.0	5.0	4.2	5.0	4.6	4.0	7.5	8.3
Miscellaneous.....	2.8	2.5	0.1	0.1	0.5	0.6	0.4	0.4	87.5	86.0	(¹)	0.1	0.1	0.1	0.2	0.2	4.7	1.0

¹Less than 0.05 percent.

Farms by type, 1964—The distribution of farms by type in 1964 was as follows:

Type of farm	Number of farms		Percent distribution	
	1964	1959	1964	1959
Total, commercial farms.....	2,165,712	2,416,017	100.0	100.0
Cash grain.....	404,253	398,047	18.7	16.5
Tobacco.....	171,384	190,057	7.9	7.9
Cotton.....	164,076	241,849	7.6	10.0
Other field crops.....	35,130	38,332	1.6	1.6
Vegetable.....	23,207	21,912	1.1	0.9
Fruit and nut.....	57,256	61,419	2.6	2.5
Poultry.....	82,120	103,279	3.8	4.3
Dairy.....	366,967	428,293	16.9	17.7
Livestock farms other than poultry, dairy, and livestock ranches.....	514,529	616,902	23.8	25.5
Livestock ranches.....	66,282	67,159	3.1	2.8
General.....	201,980	211,613	9.3	8.8
Miscellaneous.....	78,528	37,155	3.6	1.5

Cash-grain farms—Out of the 2.2 million commercial farms, almost one-fifth were cash-grain farms. The greatest concentration of cash-grain farms was in the Corn Belt where corn and soybeans are the principal cash-grain crops sold. In the Dakotas, Nebraska, Kansas, Oklahoma, Montana, Washington, and Oregon, wheat is the principal cash-grain crop and the cash-grain farms there were mostly wheat farms. Cash-grain farms in Arkansas, Mississippi, Louisiana, California, and on the Gulf Coast of Texas were rice farms. In some scattered areas, grain sorghums, dry field beans and peas, and small grains other than wheat and rice, were the principal source of income of the cash-grain farms, but such farms comprised a relatively small percentage of all cash-grain farms. Cash-grain farms were principally wheat farms, corn and soybean farms, or rice farms. By using data for cash-grain farms for selected areas, the importance and characteristics of commercial wheat, corn, and soybean, and rice farms can be obtained.

Commercial cash-grain farms accounted for 63 percent of the value of wheat sold, 59 percent of the value of soybeans sold, and 68 percent of the value of corn sold from commercial farms in 1964. The sales of these three crops comprised almost two-thirds of all farm products sold from cash-grain farms.

Cash-grain farms contained one-third of the cropland on commercial farms in the United States. They

had 35 percent of the acreage of land from which crops were harvested and 65 percent of the land in cultivated summer fallow in 1964. They accounted for one-third of all farms having 100 acres or more of cropland harvested and almost three-fourths of the cash-grain farms had 100 acres or more of cropland harvested. The 39,000 cash-grain farms with 500 acres or more of cropland harvested are largely wheat farms.

Cash-grain farms were highly mechanized. Ninety-five percent had tractors other than garden, 66 percent had grain combines, 45 percent had corn-pickers, and 81 percent had motortrucks, in 1964. However, the degree of mechanization was much greater for the farms with \$10,000 or more value of farm products sold than for farms with less than \$10,000 value of farm products sold.

Over one-half of the cash-grain farms had a value of farm products sold of less than \$10,000. Nearly two-thirds of these farms contained less than 220 acres and more than 83 percent had less than 200 acres of cropland harvested. On more than one-fourth of these farms the income from sources other than the farm operated exceeded the value of farm products sold. Over two-fifths of the operators worked off their farms, over one-third had income from sources other than the farm operated, and more than one-fourth reported other members of the family working off the farm in 1964.

Cash-grain farms had about a third of the total acreage fertilized on commercial farms, more than one-third of the acreage of corn fertilized, and about three-fifths of the acreage of wheat and soybeans fertilized.

About one-half of all the farm products sold from cash-grain farms came from the 77,000 farms with a value of farm products sold of \$20,000 or more. These farms with \$20,000 or more sales were large farms with an average size of 957 acres and an average acreage of total cropland of 725 acres. The average value of farm products sold was \$37,421 per farm. All of these farms used hired labor and/or machine hire and the average expenditure per farm for hired labor and machine hire was \$2,825. The average expenditure for gasoline and other petroleum fuel and oil for the farm business was \$2,211. The data in the following table indicate some of the significant differences between the economic classes of cash-grain farms in 1964.

Subject	All cash-grain farms	Economic class					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	4.8	14.2	26.8	26.1	19.3	8.8
All land in farms.....percent..	100.0	15.8	23.3	30.3	19.5	8.7	2.4
Cropland harvested.....percent..	100.0	15.9	24.8	31.0	19.0	7.8	1.4
Total cropland.....percent..	100.0	15.9	24.2	30.7	19.2	8.2	1.9
Value of land and buildings.....percent..	100.0	19.3	26.2	28.1	17.0	7.5	2.0
Total value of all farm products sold.....percent..	100.0	23.9	28.3	27.9	14.0	5.2	0.7
Value of field crops other than fruits and vegetables sold.....percent..	100.0	25.2	28.0	27.1	13.8	5.3	0.8
Acres of corn harvested for all purposes.....percent..	100.0	13.7	28.7	31.5	17.3	7.2	1.6
Bushels of corn harvested for grain.....percent..	100.0	17.3	32.9	30.0	13.8	5.1	0.9
Acres of wheat harvested.....percent..	100.0	14.3	24.1	32.1	20.2	8.0	1.3
Bushels of wheat harvested.....percent..	100.0	18.0	26.6	30.9	17.3	6.4	0.8
Percent of farms with land in diversion programs:							
Wheat.....percent..	32.4	33.1	35.7	36.5	36.6	27.1	13.6
Feed grain.....percent..	43.4	39.1	51.0	50.0	46.3	35.8	21.5
Average per farm:							
Land in farms.....acres..	465	1,539	762	526	347	210	126
Cropland harvested.....acres..	237	790	414	275	173	96	39
Total cropland.....acres..	343	1,142	585	394	252	145	73
Land irrigated.....acres..	16	181	27	10	4	2	1
Value of land and buildings.....dollars..	86,685	342,204	154,829	91,326	55,162	34,358	20,542
Corn for all purposes.....acres..	70	144	102	59	33	19	9
Wheat for grain.....acres..	50	212	119	85	55	29	10
Oats for grain.....acres..	12	21	17	16	12	7	3
Barley for grain.....acres..	15	58	28	18	10	4	1
All hay crops.....acres..	18	30	25	23	17	10	5
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	375	1,740	655	383	234	150	68
Fertilizer and fertilizing materials.....dollars..	1,039	5,305	2,136	1,007	540	310	130
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	1,005	3,856	1,710	1,079	722	428	207
Tractors other than garden and motor tillers.....number..	2	5	3	2	2	2	1
Grain and bean combines.....number..	1	2	1	1	1	1	(1)
Regular hired workers.....persons..	(1)	2	(1)	(1)	(1)	(1)	(1)
Percent of acreage of crops fertilized:							
Corn.....percent..	82.7	94.1	90.8	79.4	74.3	67.9	61.8
Wheat.....percent..	48.4	56.1	56.5	47.6	41.0	35.9	26.5
Percent of farms with—							
Grain crops sprayed or dusted for control of insects and diseases.....percent..	17.3	35.9	28.4	20.2	14.2	9.7	4.1
Fertilizer used.....percent..	80.6	95.5	92.1	85.3	77.6	73.2	63.2
Corn treated for control of weeds, grasses, etc.....percent..	34.0	40.2	50.8	41.5	31.5	22.8	9.7
Grain crops treated for control of weeds, grasses, etc.....percent..	17.5	31.5	21.0	21.4	17.8	10.9	4.9
Average per acre:							
Corn for grain.....bushels..	71	89	81	68	58	50	38
Wheat for grain.....bushels..	26	33	29	25	23	21	17
Oats for grain.....bushels..	44	55	50	44	39	36	31
Barley for grain.....bushels..	34	41	35	32	29	26	22
Fertilizer per acre of corn fertilized.....pounds..	296	360	304	269	263	291	347
Fertilizer per acre of wheat fertilized.....pounds..	125	122	122	119	130	164	178
Percent of farms operated by—							
Full owners.....percent..	32.5	9.8	11.0	19.4	35.2	53.2	66.0
Part owners.....percent..	39.3	62.2	53.8	47.5	37.4	24.9	16.2
Managers.....percent..	0.4	2.0	0.6	0.3	0.2	0.1	0.1
Tenants.....percent..	27.8	26.1	34.6	32.8	27.3	21.7	17.7
Cash.....percent..	1.9	1.5	1.4	1.7	2.3	2.1	2.3
Share-cash.....percent..	9.8	8.8	15.4	14.0	9.3	4.8	1.4
Crop-share.....percent..	11.0	11.3	11.8	11.4	11.7	10.3	8.0
Livestock-share.....percent..	2.7	3.9	4.6	3.6	2.2	1.2	0.6
Other and unspecified.....percent..	1.5	1.1	1.2	1.3	1.5	1.8	2.2

¹Less than 0.05.

Tobacco farms—Tobacco farms comprised 8 percent of the 2.2 million commercial farms in 1964. Nearly all of the tobacco farms are in the South. Five States—North Carolina, South Carolina, Virginia, Kentucky, and Tennessee—had more than 90 percent of the tobacco farms. Tobacco farms accounted for more than three-fourths of the value of tobacco sold from all commercial farms in 1964. Tobacco farms had about 2 percent of the cropland in commercial farms. Tobacco accounted for one-sixth of the acreage of crops harvested on tobacco farms. Corn and hay crops comprised almost three-fifths of the acreage of all crops harvested on tobacco farms.

Tobacco farms were relatively small. More than two-thirds contained less than 100 acres and more than two-fifths contained less than 50 acres. About 88 percent had less than 50 acres of cropland harvested. More than one-third were operated by tenants, renting mostly for a share of the crop. About one-fifth of the tobacco farms were operated by nonwhite operators. Tobacco farms operated by nonwhite operators represented one-fourth of all commercial farms operated by nonwhite operators. The labor on tobacco farms was furnished largely by the farm operator and members of his family. An expenditure of \$2,500 or more for hired labor was reported for approximately 4.8 percent

of the tobacco farms, and an expenditure of less than \$500 for two-fifths of the farms. Operators of tobacco farms depended primarily upon their farm operations for the main source of income for their families. For more than 85 percent of the farm operators, the income from the sale of agricultural products exceeded the income of the farm operator and his household from sources other than the farm operated.

Tobacco farms were highly specialized. The sale of tobacco provided for 78 percent of the value of all farm products sold. There were approximately 6,800 tobacco farms with a value of farm products sold of \$20,000 or more. These were largely farms on which shade-grown and cigar types of tobacco were grown. Although these farms accounted for only 4 percent of all tobacco farms, they accounted for almost one-fifth of the value of all tobacco sold.

More than one-half of the tobacco farms had a value of farm products sold of less than \$5,000. The average value of farm products sold per farm for these farms was less than \$2,600. Almost a third of these farms were operated by tenants. There were significant differences in 1964 between economic class of tobacco farms as the data in the following table indicates.

Subject	All tobacco farms	Economic class of farms					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	0.6	3.4	13.3	26.8	29.2	26.7
All land in farms.....percent..	100.0	4.4	9.8	20.7	27.4	23.3	14.3
Cropland harvested.....percent..	100.0	5.3	12.9	25.6	29.1	19.1	7.9
Total cropland.....percent..	100.0	4.6	10.8	22.4	28.3	22.3	11.6
Value of land and buildings.....percent..	100.0	5.6	12.1	25.6	28.4	18.7	9.7
Total value of farm products sold.....percent..	100.0	8.2	13.6	27.6	29.0	16.2	5.3
Value of field crops other than fruits and vegetables sold.....percent..	100.0	8.3	13.7	27.9	29.0	15.9	5.2
Acres of tobacco harvested.....percent..	100.0	5.2	11.7	26.0	30.6	19.3	7.2
Average per farm:							
Land in farms.....acres..	97	732	279	150	98	77	52
Cropland harvested.....acres..	24	220	91	46	26	16	7
Total cropland.....acres..	45	351	143	76	48	34	20
Land irrigated.....acres..	1	21	6	2	1	(¹)	(¹)
Value of land and buildings.....dollars..	22,554	214,880	81,688	42,578	23,265	14,890	8,197
Tobacco harvested.....acres..	4	38	15	8	5	3	1
Corn harvested for all purposes.....acres..	9	83	37	18	10	5	2
All hay crops.....acres..	5	21	8	6	5	5	3
Value of all farm products sold.....dollars..	6,527	92,029	26,196	13,525	7,055	3,631	1,301
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	79	858	300	154	81	50	25
Fertilizer and fertilizing materials.....dollars..	539	7,627	2,282	1,151	572	276	111
Gasoline and other petroleum fuel and oil for farm business.....dollars..	427	5,269	1,710	905	461	242	88
Regular hired workers.....persons..	(¹)	9	1	(¹)	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	1,558	4,032	2,303	1,640	1,636	1,801	1,025
Percent of farms with—							
Tobacco fertilized.....percent..	97.8	100.0	100.0	100.0	100.0	100.0	92.4
Tractors other than garden and motor tiller.....percent..	65.7	99.4	97.9	89.9	76.7	66.3	36.4
Income from sources other than the farm operated.....percent..	67.7	69.2	68.9	65.0	65.2	72.3	66.8
Average per acre:							
Tobacco harvested.....pounds..	2,022	2,069	2,296	2,198	1,995	1,798	1,621
Corn for grain.....bushels..	49	53	56	54	48	42	37
Fertilizer per acre of tobacco fertilized.....pounds..	1,850	2,498	2,001	1,914	1,779	1,679	1,723
Percent of farms operated by—							
Full owners.....percent..	35.0	19.7	15.3	16.8	23.9	37.2	55.8
Part owners.....percent..	27.8	58.6	53.1	38.1	28.9	27.0	18.7
Managers.....percent..	0.2	6.2	1.1	0.4	0.1	(¹)	(¹)
Tenants.....percent..	36.9	15.5	30.4	44.7	47.1	35.7	25.5
Cash.....percent..	1.9	1.1	3.2	2.6	2.2	2.0	1.2
Share cash.....percent..	2.1	2.7	4.5	4.1	2.6	1.6	1.0
Crop share.....percent..	27.5	8.8	17.9	32.5	37.2	26.4	17.9
Livestock share.....percent..	2.2	3.3	2.6	3.8	2.9	1.9	0.9
Other and unspecified.....percent..	2.6	0.3	0.6	1.6	2.3	2.5	3.8

¹Less than 0.05.

Cotton farms—One out of 13 commercial farms in 1964 was classified as a cotton farm. Only cash-grain; tobacco; dairy; livestock farms, other than dairy and poultry farms; and general farms exceeded the number of cotton farms. Cotton farms were located almost entirely in the South and in irrigated areas of the West. The greatest concentration was in the Mississippi Delta. Operators of cotton farms accounted for 60 percent of the farm operators growing cotton in 1964 and 75 percent of all cotton harvested. Cotton farms had 7 percent of the total cropland on commercial farms. Many of the cotton farms were small. Thirty-six percent contained less than 50 acres of land in farms and 52 percent contained less than 100 acres. Approximately three-fifths contained less than 50 acres of cropland harvested and less than one-third had 100 acres or more of cropland harvested.

More than 1 out of 4 acres of cropland harvested on cotton farms was irrigated, and 16 percent of all

irrigated land was on cotton farms. However, more than 85 percent of the irrigated land on cotton farms was on the 27,000 cotton farms with a value of farm products sold of \$20,000 or more. The same 27,000 farms produced almost two-thirds of all cotton sold in 1964.

The sale of cotton accounted for 78 percent of all crops sold, and for 74 percent of all farm products sold from cotton farms. Almost half of the cotton farms were tenant operated under a crop-share arrangement. More than 35 percent of the cotton farms were operated by nonwhite operators, and almost one-half of all commercial farms operated by nonwhite operators were cotton farms. The data in the following table show differences among economic classes of cotton farms in 1964.

Subject	All cotton farms	Economic class of farm					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	7.9	8.6	12.0	17.6	25.4	28.5
All land in farms.....percent..	100.0	41.6	17.2	15.2	12.0	8.6	5.3
Cropland harvested.....percent..	100.0	44.3	18.6	15.2	11.1	7.3	3.6
Total cropland.....percent..	100.0	42.7	18.4	15.7	11.7	7.7	3.9
Value of land and buildings.....percent..	100.0	50.2	17.7	13.5	9.3	6.0	3.3
Total value of all farm products sold.....percent..	100.0	55.2	16.3	11.4	8.3	6.1	2.6
Value of field crop other than fruits and vegetables sold.....percent..	100.0	55.6	16.2	11.3	8.1	6.0	2.6
Cotton harvested.....percent..	100.0	40.0	18.7	16.4	12.4	8.5	4.1
Quantity of cotton harvested.....percent..	100.0	53.2	16.5	11.7	8.8	6.8	3.0
Average per farm:							
Land in farms.....acres..	256	1,340	514	326	175	87	47
Cropland harvested.....acres..	126	703	273	160	79	36	16
Total cropland.....acres..	172	921	369	225	114	52	23
Value of land and buildings.....dollars..	63,012	396,416	128,507	71,236	32,767	15,100	7,254
Cotton harvested.....acres..	62	313	136	89	44	21	9
Quantity harvested.....bales..	68	456	131	67	34	18	7
Tractors other than garden and motor tillers.....number..	2	6	3	2	1	1	(¹)
Corn harvested for all purposes.....acres..	8	19	12	11	9	7	5
All hay crop harvested.....acres..	6	37	12	7	4	2	1
Value of all farm products sold.....dollars..	14,835	103,106	28,212	14,196	7,043	3,569	1,354
Land irrigated.....acres..	34	296	80	25	5	1	(¹)
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	284	1,642	564	342	165	92	44
Fertilizer and fertilizing materials.....dollars..	1,002	6,337	1,996	979	538	294	145
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	935	5,752	2,043	1,060	496	253	88
Hired farm labor.....dollars..	1,630	13,213	2,967	1,306	546	222	63
Machine hire, custom and contract work.....dollars..	640	4,002	1,170	745	437	175	40
Regular hired workers.....persons..	1	5	1	(¹)	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	1,611	3,307	2,267	1,984	1,830	1,467	781
Percent of farms with—							
Cotton fertilized.....percent..	89.1	96.2	90.5	84.2	84.0	89.4	91.6
Cotton sprayed or dusted for control of insects and diseases.....percent..	53.9	77.3	61.9	56.7	55.3	52.6	43.8
Cotton treated for control of weeds, grasses, etc.....percent..	25.4	50.6	37.3	32.1	28.5	23.3	11.9
Tractors other than garden and motor tillers.....percent..	67.4	99.0	98.4	96.8	84.0	61.3	31.6
Income from sources other than the farm operated.....percent..	65.8	53.8	59.6	65.6	68.5	69.5	66.4
Average per acre:							
Cotton harvested.....bales..	1.1	1.5	1.0	0.8	0.8	0.9	0.8
Cotton fertilized.....pounds..	356	345	331	321	386	435	469
Percent of farms operated by—							
Full owners.....percent..	24.9	13.2	13.7	17.5	22.5	26.9	34.4
Part owners.....percent..	30.0	59.9	52.8	45.1	34.2	21.1	14.0
Managers.....percent..	0.4	4.1	0.6	0.3	0.1	(¹)	(¹)
Tenants.....percent..	44.6	22.9	32.9	37.1	43.2	51.9	51.7
Cash.....percent..	51.1	4.3	3.4	3.0	3.8	4.1	8.4
Share cash.....percent..	31.3	4.5	5.9	6.3	3.8	2.3	1.4
Crop share.....percent..	0.8	0.6	1.5	0.8	1.2	0.8	0.5
Livestock share.....percent..	0.8	1.1	1.4	2.1	2.2	3.8	6.1
Other and unspecified.....percent..	3.6	1.1	1.4	2.1	2.2	3.8	6.1

¹Less than 0.05.

Other field-crop farms:—Other field-crop farms comprised only 1.6 percent of all commercial farms in 1964 and accounted for 2.1 percent of the acreage of cropland harvested. Other field-crop farms represented different kinds of farms in the various areas. In most areas, it was possible to identify other field-crop farms with a specific crop. In Maine, New York, New Jersey, North Dakota, Minnesota, Idaho, and California they were principally potato farms; in North Carolina, Virginia, Georgia, Alabama, and Texas they were primarily peanut farms; and in Louisiana and Hawaii, they were sugarcane farms.

The characteristics of the different kinds of specialized farms included in other field-crop farms have a significant effect on the totals for the farms in the various economic classes. Other field-crop farms include 7,334 farms with sales of farm products of \$40,000 or more. These 7,334 farms accounted for almost three-fourths of the value of all farm products sold from other field-crop farms. Approximately 2,237 of these farms were large-scale potato farms

(average production of potatoes per farm reporting of 57,892 hundred-weight). These 2,237 farms accounted for more than half of the fertilizer used and approximately three-fifths of the regular hired workers and cash expenditures for hired labor on all other field-crop farms. The average amount of fertilizer used per farm reporting was 273 tons and the average expenditure for hired labor per farm reporting was \$58,508.

Almost one-fourth of the other field-crop farms had a value of farm products sold of less than \$5,000. These 8,740 farms accounted for less than 2 percent of the total value of farm products sold from other field-crop farms. They were predominantly peanut farms and almost one-third were tenant operated. The average value of farm products sold per farm was \$2,520, the average amount of fertilizer used per farm reporting was 5.2 tons, and the expenditure for hired labor per farm reporting was \$293. The data in the following table show some of the significant differences between economic classes of other field-crop farms in 1964.

Subject	All other field-crop farms	Economic class of farms					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	20.9	17.5	19.5	17.2	14.0	10.9
All land in farms.....percent..	100.0	52.1	17.8	14.1	8.9	4.8	2.3
Cropland harvested.....percent..	100.0	55.3	19.1	14.0	7.2	3.3	1.1
Total cropland.....percent..	100.0	54.2	18.8	14.1	7.6	3.7	1.5
Value of land and buildings.....percent..	100.0	61.1	16.8	11.6	6.2	3.0	1.2
Total value of all farm products sold.....percent..	100.0	73.7	13.5	7.7	3.4	1.4	0.3
Value of field crops other than fruits and vegetables sold.....percent..	100.0	74.6	13.1	7.4	3.2	1.3	0.3
Irish potatoes harvested.....percent..	100.0	80.1	13.1	4.8	1.4	0.4	0.1
Average per farm—							
Land in farms.....acres..	359	897	366	259	185	125	76
Cropland harvested.....acres..	167	443	184	120	70	39	17
Total cropland.....acres..	221	574	238	159	98	59	30
Value of land and buildings.....dollars..	86,682	244,466	81,122	53,782	29,908	19,509	10,609
Irish potatoes harvested.....acres..	27	105	21	7	2	1	(¹)
Tractors other than garden and motor tillers.....number..	3	5	3	2	2	1	1
Value of all farm products sold.....dollars..	36,677	129,462	28,301	14,466	7,272	3,635	1,091
Land irrigated.....acres..	74	236	77	41	14	3	1
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	1,318	4,320	1,180	592	359	186	62
Fertilizer and fertilizing materials.....dollars..	2,302	9,529	2,633	1,302	762	371	138
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	1,512	4,276	1,597	967	566	301	106
Hired farm labor.....dollars..	5,584	22,660	2,886	1,163	527	201	42
Machine hire, custom and contract work.....dollars..	998	3,030	936	541	380	183	49
Regular hired workers.....persons..	1	6	1	(¹)	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	2,037	2,395	2,012	1,711	2,507	2,103	1,151
Percent of farms with—							
Fertilizer used.....percent..	95.2	99.6	99.2	97.8	95.1	91.0	79.5
Tractors other than garden and motor tillers.....percent..	88.4	98.5	96.5	94.4	89.3	80.1	50.5
Income from sources other than the farm operated.....percent..	65.2	29.7	63.1	64.2	66.8	71.0	72.0
Average per acre:							
Irish potatoes harvested.....hundredweight..	194	205	162	140	131	123	85
Fertilizer per acre fertilized.....pounds..	552	637	466	384	394	403	432
Percent of farms operated by—							
Full owners.....percent..	32.8	25.6	27.1	28.9	32.1	41.0	52.8
Part owners.....percent..	41.0	56.0	49.2	43.8	36.5	27.5	18.2
Managers.....percent..	1.1	4.5	0.5	0.3	0.1	(¹)	0.1
Tenants.....percent..	25.1	13.9	23.1	27.0	31.2	31.5	28.9
Cash.....percent..	5.5	4.6	4.2	4.3	7.7	5.7	7.2
Share-cash.....percent..	2.8	2.0	4.2	4.2	2.8	2.1	0.9
Crop-share.....percent..	11.7	4.3	10.4	12.7	16.0	16.8	12.6
Livestock-share.....percent..	1.3	0.8	1.6	1.6	1.9	1.3	0.4
Other and unspecified.....percent..	1.9	1.0	0.6	1.3	2.5	3.1	4.4

¹Less than 0.05.

Vegetable farms—Vegetable farms comprised about 1 percent of all commercial farms and contained less than 1 percent of the total cropland in commercial farms. However, vegetable farms accounted for 2.5 percent of the value of all farm products sold, 74.1 percent of the value of all vegetables sold in 1964, and about 56.3 percent of the total acreage of vegetables harvested for sale in 1964.

Vegetable farms were highly specialized. The sale of vegetables accounted for 83.8 percent of the value of all farm products sold, and the acreage of vegetables harvested for sale was equivalent to almost three-fourths of the acreage from which crops were harvested. Fertilizer was used on 89 percent of the farms and the acreage fertilized was equivalent to 88 percent of the acreage from which crops were harvested. The average amount of fertilizer used per acre fertilized was 825 pounds.

Vegetable farms are widely scattered with the greatest concentrations in California, Texas, Florida, New Jersey, New York, Michigan, and Wisconsin. Production of vegetables was concentrated on a relatively small number of large highly specialized farms. The 3,577 vegetable farms with a value of farm products sold of \$40,000 or more, accounted for 82 percent of the value of all vegetables sold on vegetable farms and for 60 percent of the value of all vegetables harvested for sale in the United States. More than half of the land used for crops was irrigated and the average acreage of irrigated land per farm was about 309 acres. The average value of farm products sold from these farms was \$195,000, and the average expenditure for hired labor was more than \$54,000 per farm. Data in the following table indicate differences in characteristics among economic classes in 1964.

Subject	All vegetable farms	Economic class of farms					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	15.4	10.6	13.3	16.1	19.3	25.3
All land in farms.....percent..	100.0	57.8	10.7	9.5	8.0	7.5	6.5
Cropland harvested.....percent..	100.0	65.8	11.2	9.0	6.5	4.9	2.6
Total cropland.....percent..	100.0	61.5	11.0	9.5	7.3	6.3	4.3
Value of land and buildings.....percent..	100.0	70.3	9.3	7.5	5.6	4.5	2.9
Total value of all farm products sold.....percent..	100.0	81.4	8.0	5.1	3.1	1.8	0.7
Value of vegetables sold.....percent..	100.0	82.0	7.7	4.9	3.0	1.8	0.7
Acres of vegetables harvested for sale.....percent..	100.0	71.3	9.8	7.5	5.6	4.0	1.8
Expenditure for hired farm labor.....percent..	100.0	86.3	7.1	3.9	1.7	0.7	0.2
Average per farm:							
Land in farms.....acres..	202	755	205	144	100	78	52
Cropland harvested.....acres..	105	449	111	71	42	27	11
Total cropland.....acres..	129	513	135	92	58	42	22
Value of land and buildings.....dollars..	117,412	537,457	101,944	65,226	41,254	27,113	13,453
Acres of vegetables harvested for sale.....acres..	78	360	72	44	27	16	6
Tractors other than garden and motor tillers.....number..	3	7	4	3	2	1	1
Value of all farm products sold.....dollars..	36,946	195,015	27,959	14,026	7,040	3,513	1,007
Value of all vegetables harvested for sale.....dollars..	30,943	164,630	22,680	11,340	5,706	2,805	797
Land irrigated.....acres..	57	309	42	20	9	4	1
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	1,090	5,112	1,006	678	338	178	68
Fertilizer and fertilizing.....dollars..	2,879	14,392	2,580	1,426	634	338	125
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	1,272	5,643	1,332	794	447	277	119
Hired farm labor.....dollars..	9,692	54,280	6,555	2,848	1,003	373	80
Machine hire, contract and custom work.....dollars..	1,977	11,363	1,058	466	163	94	28
Regular hired workers.....persons..	3	14	2	1	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	2,434	2,943	1,977	2,687	2,613	3,130	1,534
Percent of farms with—							
Fertilizer used.....percent..	89.4	99.0	97.6	95.1	90.3	87.1	78.3
Tractors other than garden and motor tillers.....percent..	83.1	98.5	97.7	95.6	93.0	86.7	52.0
Income from sources other than the farm operated.....percent..	68.8	49.7	60.7	66.6	67.1	81.3	76.7
Average per acre:							
Value of vegetables harvested for sale per acre.....dollars..	397	457	314	257	211	174	142
Fertilizer and fertilizing materials used per acre fertilized.....pound..	825	917	679	663	593	483	490
Farms operated by—							
Full owners.....percent..	46.3	14.8	28.2	39.6	51.2	59.6	63.3
Part owners.....percent..	35.0	55.0	53.9	43.8	33.5	26.0	18.0
Managers.....percent..	1.4	7.1	1.0	0.7	0.3	0.2	0.1
Tenants.....percent..	17.3	23.1	16.9	15.8	14.9	14.1	18.5

¹Less than 0.05.

Fruit and nut farms—Fruit and nut farms represented 2.6 percent of all commercial farms; had 1.1 percent of the total cropland; 78.3 percent of the land in small fruits, fruit orchards, groves, vineyards, and planted nut trees; 4.7 percent of the value of all farm products sold; and 92.7 percent of all fruits and nuts sold in 1964. Fruit and nut farms were highly concentrated in a few localities. More than two-thirds of these farms were in four States—California, Florida, Michigan, and Washington.

The kinds of fruits and nuts grown in the various localities differ greatly. In western New York, apples and grapes were the principal crops; apples, cherries, peaches, grapes, pears, and berries were the principal fruits in Michigan. In Washington and northern California, there was a large variety of fruits grown separately and in combination—apples, pears, plums and prunes, cherries, grapes, walnuts, strawberries, and raspberries. In southern California, citrus fruits principally oranges and lemons; olives; grapes; walnuts; almonds; peaches; and apricots were grown separately and in combination. Oranges and grapefruit were the predominant fruits in Florida and the Rio Grande Valley of Texas. In Georgia and South Carolina, peaches were the principal fruit grown. Apples were the important fruit crop along the

Appalachian Mountains and parts of Arkansas and Missouri. Strawberries represented an important fruit crop in Arkansas and Louisiana.

Fruit and nut farms were highly specialized. The sales of fruits and nuts accounted for 94 percent of all farm products sold on fruit and nut farms. The acreage of land in fruit orchards, groves, vineyards, and planted nut trees was equivalent to 82 percent of the acreage of cropland harvested on these farms.

Approximately 16,000 large and highly specialized fruit farms accounted for more than 76 percent of the value of all fruits and nuts sold on commercial farms. These large specialized farms with a value of farm products sold of \$20,000 or more had an average acreage of more than 134 acres of land in fruit orchards, groves, vineyards, and planted nut trees. The average value of all farm products sold on these farms was \$80,759 and the average value of fruits and nuts sold was \$76,154. They had an average of 3.1 tractors other than garden per farm, an average expenditure for machine hire and hired labor of \$24,559, and used an average of 58 tons of commercial fertilizer per farm. The data in the following table indicate the differences in fruit and nut farms by economic classes in 1964.

Subject	All fruit and nut farms	Economic class of farms					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	14.2	14.6	19.0	20.6	19.2	12.5
All land in farms.....percent..	100.0	53.6	13.9	12.6	9.3	6.7	3.9
Cropland harvested.....percent..	100.0	56.1	15.7	12.5	8.5	5.2	1.9
Total cropland.....percent..	100.0	52.6	15.5	13.0	9.4	6.4	3.1
Value of land and buildings.....percent..	100.0	37.9	14.4	11.3	8.3	5.4	2.6
Total value of farm products sold.....percent..	100.0	67.6	14.6	9.7	5.2	2.4	0.4
Value of fruits and nuts sold.....percent..	100.0	67.7	14.6	9.7	5.2	2.4	0.4
Land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees.....percent..	100.0	58.1	15.3	11.9	8.0	4.8	1.8
Average per farm:							
Land in farms.....acres..	754	581	146	101	70	54	49
Cropland harvested.....acres..	64	254	69	42	27	18	10
Total cropland.....acres..	78	290	83	53	36	26	20
Value of land and buildings.....dollars..	143,145	574,007	143,426	86,668	55,731	41,729	30,167
Land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees.....acres..	53	216	55	33	21	13	8
Value of all farm products sold.....dollars..	28,231	134,936	28,216	14,343	7,194	3,608	938
Value of fruits and nuts sold.....dollars..	26,601	127,244	26,605	13,508	6,749	3,368	858
Tractors other than garden and motor tillers.....number..	2	4	2	2	1	1	1
Land irrigated.....acres..	37	169	38	21	12	7	3
Expenditures for—							
Seeds, bulbs, plants, and trees.....dollars..	302	1,287	291	190	105	72	42
Fertilizer and fertilizing materials.....dollars..	1,403	6,506	1,205	725	481	281	124
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	794	3,103	891	530	339	206	118
Hired farm labor.....dollars..	6,262	31,166	5,943	2,828	1,458	638	191
Machine hire, contract and custom work.....dollars..	2,165	10,887	1,647	1,023	594	291	91
Regular hired workers.....persons..	1	7	1	1	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	4,432	4,401	4,305	4,130	5,157	5,215	2,682
Percent of farms with—							
Fertilizer used.....percent..	93.4	99.8	99.6	99.3	98.5	96.9	55.8
Tractors other than garden and motor tillers.....percent..	80.4	92.9	90.0	86.2	81.2	73.8	54.4
Income from sources other than the farm operated.....percent..	77.3	61.9	68.7	75.5	84.5	89.2	77.3
Percent of farms operated by—							
Full owners.....percent..	75.5	49.4	65.7	75.9	82.6	86.4	87.4
Part owners.....percent..	15.1	29.4	23.7	16.3	11.3	7.2	5.6
Managers.....percent..	4.1	17.0	4.7	2.3	1.3	0.9	0.8
Tenants.....percent..	5.3	4.2	5.9	5.5	4.8	5.4	6.3

¹Less than 0.05.

Poultry farms—Poultry farms comprised 82,000 of the 2.2 million commercial farms. They had 72 percent of the chickens 4 months old and over on hand on all farms. These farms accounted for 79 percent of the chicken eggs and 90 percent of the chickens including broilers sold, and 96 percent of the value of poultry and poultry products sold from all commercial farms. More than three-fourths of the poultry farms were located east of the Mississippi River. The greatest concentration of poultry farms was in the broiler-producing areas in Georgia, Alabama, Mississippi, Arkansas, Delaware, and Maryland. Nine out of 10 poultry farms were owner operated.

The 19,000 poultry farms with sales of farm products with a value of \$40,000 or more were distinctly different from the poultry farms with a smaller value of farm products sold. The average value of farm products sold per farm of these large-scale poultry farms was \$103,000 as compared with \$15,000 of all other commercial poultry farms. These 19,000 farms accounted for 68 percent of all farm products sold by poultry farms and 62 percent of all poultry and poultry products sold from all commercial farms. The expenditures for feed on these farms were equivalent to 67 percent of the feed expenditures for all poultry

farms and 31 percent of the feed expenditures for all commercial farms. The average per farm of the various items of expenditure was:

Item	Dollars
Feed	57,482
Purchase of livestock and poultry,	15,416
Hired labor	540

Poultry farms also included many farms with relatively small operations. There were about 25,700 poultry farms with a value of farm products sold of less than \$10,000. These farms comprised 31 percent of all commercial poultry farms but accounted for only 4 percent of all farm products sold and 4 percent of all poultry products sold from poultry farms. More than half the operators of these small-scale poultry farms were 55 years old or over. Over two-fifths of the operators worked off their farms and almost a third worked off their farms 100 days or more. The operator and members of his household on 2 out of 5 of these farms obtained more income from sources off the farm operated than from the sale of agricultural products. Statistics in the following table provide a comparison of the characteristics and importance of poultry farms by economic class in 1964.

Subject	All poultry farms	Economic class of farm					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms percent..	100.0	23.4	23.4	21.8	14.6	9.6	7.1
Land in farms percent..	100.0	40.2	23.8	17.5	9.5	5.5	3.6
Cropland harvested percent..	100.0	41.3	25.0	17.2	9.4	5.3	1.8
Value of land and buildings percent..	100.0	46.3	22.0	15.0	8.6	5.1	3.1
Total value of all farm products sold percent..	100.0	67.9	18.8	9.1	3.0	1.0	0.2
Value of poultry and poultry products sold percent..	100.0	68.8	18.4	8.8	2.9	0.9	0.2
Chickens 4 months old and over percent..	100.0	68.0	17.0	8.9	3.8	1.7	0.5
Chicken eggs percent..	100.0	71.8	15.7	7.6	3.2	1.4	0.3
Turkeys and turkey fryers raised percent..	100.0	38.1	9.2	2.1	0.5	0.1	(¹)
Average per farm:							
Land in farms acres..	116	139	119	93	76	66	58
Value of land and buildings dollars..	32,917	65,073	30,314	23,131	19,430	17,631	13,763
Chickens 4 months old and over number..	2,853	8,281	2,074	1,164	748	499	202
Total value of all farm products sold dollars..	35,540	103,002	28,481	14,737	7,427	3,661	944
Value of poultry and poultry products sold dollars..	33,119	97,275	26,037	13,324	6,543	3,077	775
Broilers and other meat type chickens sold dollars..	11,331	27,095	12,655	6,970	2,845	758	56
Chicken eggs sold dollars..	14,338	44,285	9,514	4,841	2,986	1,979	625
Turkeys and turkey fryers raised number..	1,219	4,579	477	116	41	17	6
Expenditures for—							
Feed for livestock and poultry dollars..	19,997	57,394	16,396	8,376	4,370	1,968	635
Purchase of livestock and poultry dollars..	5,720	15,406	5,376	2,700	1,348	546	148
Gasoline and other petroleum fuel and oil for the farm business dollars..	635	1,409	631	401	284	207	110
Hired farm labor dollars..	1,514	5,396	663	282	155	74	34
Regular hired workers persons..	1	2	(¹)	(¹)	(¹)	(¹)	(¹)
Income from sources other than farm operated dollars..	2,788	2,744	73.1	78.8	83.8	89.4	75.8
Percent of farms:							
Selling only broilers and other meat type chickens farms..	36.5	31.9	46.0	48.1	38.2	20.0	3.1
Selling only started pullets, turkeys, ducks, geese and other poultry and their eggs farms..	9.0	16.1	9.8	7.0	6.0	4.2	2.1
Having only turkeys and turkey fryers raised farms..	4.9	11.7	5.4	2.4	1.7	1.4	0.9
Income from sources other than the farm operated farms..	76.0	66.1	74.4	77.0	83.6	88.0	79.2
Percent of farms operated by—							
Full owners percent..	78.0	69.1	75.3	80.4	83.5	86.0	86.3
Part owners percent..	15.0	21.2	18.0	15.8	13.8	8.7	5.3
Managers percent..	1.2	3.8	0.8	0.3	0.2	0.1	0.1
Tenants percent..	5.8	5.9	5.9	5.5	5.5	5.1	8.3

¹Less than 0.05.

Dairy farms—Dairy farms represented the second largest group of specialized farms in 1964. They contained 8.6 percent of all land in commercial farms, 12.8 percent of cropland harvested, accounted for 15.6 percent of all farm products sold and 89.7 percent of all dairy products sold from all commercial farms in 1964. Dairy farms comprised only 17 percent of all commercial farms, and they had 15 percent of all regular hired workers in 1964. They were most heavily concentrated in the New England States, New York, Pennsylvania, New Jersey, Delaware, Maryland, Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, and along the Pacific coast. There were also concentrations of dairy farms around urban centers. In the eastern part of the country, in Ohio, northern Indiana, Illinois, and southeastern Wisconsin, and along the Pacific coast and around urban centers, dairy farms principally were those producing milk for sale as fluid milk, while in other parts of the country dairy farms were primarily those producing milk for processing into butter, cheese, and other dairy products.

There were large differences in the size of operations of dairy farms. There were 15,463 dairy farms with a value of farm products sold of \$40,000 or more. These farms accounted for 25 percent of all dairy products sold on dairy farms and 23 percent of dairy products sold from all commercial farms. About 50 percent of these farms had 100 or more milk cows. The expenditures for feed for these farms represented over 32 percent of the expenditures for feed for all dairy farms and 7 percent for the feed expenditures for all commercial farms. There were 77,000 commercial dairy farms with a value of farm products sold of less than \$5,000. Over 35 percent of these farms had fewer than 10 milk cows. They accounted for less than 4 percent of all dairy products sold from all commercial dairy farms. A comparison of the importance and characteristics of the dairy farms in the various economic classes may be obtained from the data in the following table.

Subject	All dairy farms	Economic class of farm					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	4.2	14.5	32.0	28.3	16.2	4.8
All land in farms.....percent..	100.0	10.5	21.0	33.2	22.9	10.2	2.3
Cropland harvested.....percent..	100.0	9.5	23.3	36.4	21.9	7.7	1.2
Total cropland.....percent..	100.0	9.9	22.4	35.2	22.2	8.7	1.7
Total pastureland.....percent..	100.0	11.8	19.0	30.4	23.7	12.0	3.1
Value of land and buildings.....percent..	100.0	18.7	24.7	31.6	17.5	6.3	1.3
Total value of all farm products sold.....percent..	100.0	23.4	26.5	31.1	14.3	4.1	0.5
Value of dairy products sold.....percent..	100.0	25.3	26.3	30.4	13.7	3.9	0.4
Value of cattle and calves sold.....percent..	100.0	19.9	24.6	31.3	17.1	6.1	0.9
Average per farm:							
Land in farms.....acres..	227	564	328	236	183	143	109
Cropland harvested.....acres..	96	216	155	110	74	46	24
Total cropland.....acres..	130	305	201	143	102	70	45
Total pastureland.....acres..	87	243	114	82	72	64	55
Hay harvested.....acres..	44	100	67	48	35	24	15
Value of land and buildings.....dollars..	42,972	188,808	73,305	42,795	26,088	16,903	11,269
Cattle and calves.....number..	54	211	86	56	37	24	14
Milk cows.....number..	30	128	48	31	20	13	7
Value of all farm products sold.....dollars..	14,593	80,970	26,690	14,211	7,385	3,747	1,499
Value of dairy products sold.....dollars..	11,140	66,884	20,232	10,584	5,392	2,657	1,018
Value of cattle and calves sold.....dollars..	1,469	6,954	2,493	1,440	889	551	277
Tractors other than garden and motor tillers.....number..	2	4	3	2	2	1	1
Land irrigated.....acres..	5	42	8	2	2	2	1
Expenditures for—							
Feed for livestock and poultry.....dollars..	3,309	25,160	5,733	2,755	1,409	732	411
Purchase of livestock and poultry.....dollars..	639	4,754	1,133	518	277	160	87
Seeds, bulbs, plants, and trees.....dollars..	211	619	366	239	145	79	42
Fertilizer and fertilizing materials.....dollars..	552	2,502	1,195	550	259	129	62
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	663	2,096	1,063	706	490	294	174
Hired farm labor.....dollars..	878	9,442	1,674	521	198	81	28
Machine hire, contract and custom work.....dollars..	205	712	322	209	151	102	51
Regular hired workers.....persons..	(¹)	3	1	(¹)	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	1,908	2,683	1,853	1,705	1,976	2,194	1,389
Percent of farms with—							
Milking machines.....percent..	89.6	98.1	97.5	97.3	92.3	76.0	37.9
Bulk milk tank.....percent..	46.3	93.4	84.1	63.0	29.8	9.2	2.0
Fertilizer used.....percent..	79.4	81.1	92.1	88.2	77.5	63.9	43.7
Tractors other than garden and motor tillers.....percent..	94.8	96.8	85.3	97.7	95.7	91.1	71.6
Percent of farms operated by—							
Full owners.....percent..	53.9	29.7	34.7	46.3	60.8	72.5	79.2
Part owners.....percent..	32.7	52.3	47.2	37.4	27.9	19.7	12.9
Managers.....percent..	0.4	3.1	0.7	0.4	0.1	(¹)	0.1
Tenants.....percent..	13.1	15.0	17.4	15.9	11.2	7.7	7.8
Cash.....percent..	4.5	8.9	6.5	4.9	3.7	2.4	3.0
Share cash.....percent..	2.2	1.3	2.8	2.9	2.1	0.9	0.8
Crop share.....percent..	1.1	0.4	1.1	1.4	1.1	1.0	1.3
Livestock share.....percent..	3.5	2.5	5.3	4.9	2.9	1.4	0.7
Other and unspecified.....percent..	1.5	1.7	1.3	1.6	1.3	1.6	2.7

¹Less than 0.05.

Livestock farms (other than poultry and dairy farms and livestock ranches)—Livestock farms represented the largest group of commercial farms, accounting for 24 percent of all commercial farms in 1964. They contained 22 percent of land in farms and 25 percent of cropland harvested, accounted for 24 percent of all farm products sold, and 64 percent of all livestock and livestock products (except dairy and poultry products) sold from all commercial farms in 1964. Marketings from these farms represented 52 percent of all cattle and calves, 66 percent of all hogs and pigs, and 43 percent of all sheep and lambs sold from all commercial farms. While sales of all farm products averaged more than \$16,000 per farm, only 12 percent of the farms had regular hired workers.

Livestock farms were concentrated in the Corn Belt of the Middle West. The heaviest concentration occurred in Ohio, Indiana, Illinois, Iowa, northern Missouri, northeastern Kansas and Nebraska, southeastern South Dakota, and southeastern Minnesota. More than 80 percent of the income of livestock farms was from the sale of cattle, hogs, and sheep. Generally, hogs are raised on the farms from which marketed,

but cattle and sheep are obtained as feeders largely from livestock ranching and grazing areas of the West. Corn and hay were the important crops. However, considerable quantities of feed were purchased—the expenditures for feed on livestock farms accounted for 30 percent of the feed expenditures on all commercial farms.

There were 35,000 livestock farms with a value of farm products of \$40,000 or more. These 35,000 farms accounted for a significant part of farm production not only on livestock farms but also on all farms. The value of all farm products sold from these farms was equivalent to 11 percent of the value of farm products sold from all farms and 47 percent of all farm products sold from livestock farms. These 35,000 farms included a considerable number of feedlots and the sales from such farms overstate the relative importance of these farms as producing units.

The data in the following table indicate the use of major resources and the characteristics of livestock farms with different size of operations.

Subject	All livestock farms	Economic class of farm					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	6.8	12.0	19.4	21.5	21.2	19.0
Land in farms.....percent..	100.0	19.8	19.2	23.9	19.0	12.0	6.1
Cropland harvested.....percent..	100.0	21.4	22.8	26.4	18.2	8.7	2.5
Total cropland.....percent..	100.0	20.1	21.1	25.2	18.7	10.5	4.4
Total pastureland.....percent..	100.0	19.7	17.8	23.1	19.4	13.1	6.9
Value of land and buildings.....percent..	100.0	22.6	21.1	22.6	16.7	11.1	5.9
Total value of farm products sold.....percent..	100.0	46.8	20.6	17.1	9.6	4.7	1.1
Total value of all livestock products other than dairy and poultry products sold.....percent..	100.0	50.5	19.4	15.5	8.9	4.6	1.2
Value of cattle and calves sold.....percent..	100.0	58.8	16.7	12.0	7.1	4.2	1.2
Value of hogs and pigs sold.....percent..	100.0	24.2	28.6	26.9	13.9	5.5	1.0
Acres in corn for all purposes.....percent..	100.0	24.2	26.0	26.5	15.6	6.1	1.6
Acres in sorghums harvested for grain.....percent..	100.0	26.4	22.8	26.3	17.2	6.2	1.0
Acres in all hay crops.....percent..	100.0	17.7	18.3	25.0	21.1	13.0	4.9
Average per farm:							
Land in farms.....acres..	411	1,190	656	504	364	232	131
Cropland harvested.....acres..	133	418	253	181	113	54	18
Total cropland.....acres..	201	594	353	261	175	100	47
Total pastureland.....acres..	206	596	305	245	187	127	75
Land irrigated.....acres..	13	77	22	32	8	4	1
Value of land and buildings.....dollars..	58,211	194,470	100,839	67,662	44,782	30,925	18,050
Cattle and calves.....number..	74	342	109	75	53	36	19
Cows including heifers that have calved.....number..	24	47	33	31	25	18	10
Hogs and pigs.....number..	64	192	145	92	47	20	6
Litters farrowed, December 1, 1963 to November 30, 1964.....number..	13	33	29	19	10	5	1
Cattle and calves sold.....number..	60	430	84	45	30	20	8
Hogs and pigs sold.....number..	103	336	233	143	73	33	9
Sheep and lambs sold.....number..	18	116	23	14	10	6	2
Value of all farm products sold.....dollars..	16,122	110,377	27,650	14,170	7,222	3,590	946
Cattle and calves sold.....dollars..	9,872	85,095	13,710	6,077	3,286	1,938	610
Hogs and pigs sold.....dollars..	3,040	10,761	7,221	4,210	1,970	780	155
Sheep and lambs sold.....dollars..	309	2,275	404	232	158	96	29
Expenditures for—							
Feed for livestock and poultry.....dollars..	3,125	23,744	4,744	2,411	1,230	680	300
Purchase of livestock and poultry.....dollars..	4,783	46,919	6,685	2,252	934	497	171
Seeds, bulbs, plants, and trees.....dollars..	220	766	427	279	169	91	36
Fertilizer and fertilizing materials.....dollars..	601	2,542	1,208	674	388	232	96
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	711	2,261	1,247	892	605	352	152
Hired farm labor.....dollars..	582	4,156	947	452	253	153	52
Machine hire, contract and custom work.....dollars..	253	913	408	297	213	140	46
Regular hired workers.....persons..	(1)	1	(1)	(1)	(1)	(1)	(1)
Income from sources other than the farm operated.....dollars..	2,819	3,213	2,437	2,428	2,977	3,801	2,041
Percent of farms with—							
Fertilizer used.....percent..	67.8	87.9	86.5	78.7	68.8	62.1	42.9
Tractors other than garden and motor tillers.....percent..	86.5	97.8	97.9	96.9	94.4	88.2	64.3
Income from sources other than the farm operated.....percent..	78.1	68.6	71.7	74.4	78.4	86.9	79.4
Percent of farms operated by—							
Full owners.....percent..	53.9	24.9	28.2	38.2	54.0	69.2	79.4
Part owners.....percent..	29.0	48.0	42.1	37.7	30.2	21.1	12.6
Managers.....percent..	0.6	3.1	1.0	0.7	0.4	0.3	0.2
Tenants.....percent..	16.4	24.1	28.7	23.4	15.4	9.4	7.7
Cash.....percent..	3.0	2.6	3.4	3.6	3.1	2.7	2.5
Share cash.....percent..	5.4	8.2	11.6	9.3	5.3	1.9	0.5
Crop share.....percent..	2.0	2.3	2.8	2.6	2.2	1.4	1.0
Livestock share.....percent..	4.3	9.8	10.1	6.6	3.2	1.4	0.6
Other and unspecified.....percent..	1.7	1.5	1.2	1.2	1.3	1.5	3.2

¹ Less than 0.05.

Livestock ranches—The classification "livestock ranches" was used only in the 17 Western States, Florida, Louisiana, Hawaii, and Alaska. Livestock operations of this type represent those farms or ranches on which the chief emphasis is placed upon the production of livestock by grazing. The classification was not used in the remaining 29 States as livestock farms consist almost entirely of farms on which livestock products are produced primarily by the feeding of crops produced on the farm or by the feeding of purchased feed.

Livestock ranches comprised only 3 percent of all commercial farms. They contained 31 percent of the land in commercial farms, 2 percent of the cropland harvested, they had 55 percent of all land used for pasture and grazing, 15 percent of all the cattle and calves, and 45 percent of the sheep and lambs. They accounted for 4 percent of the value of all farm products sold from commercial farms, and 40 percent of the number of sheep and lambs sold in 1964. Livestock ranches are located mainly in grazing areas of the western half of the United States. Areas of concentration include the Edwards Plateau of Texas, the Flint Hills of Kansas, the Sand Hills of Nebraska, western South Dakota, western North Dakota, Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, and Florida.

Other areas of concentration were in the grazing areas of Washington, Oregon, and California.

The characteristics of the livestock ranches differ in various parts of the country. About three-fourths of the livestock ranches sold only one kind of livestock. Both cattle and sheep ranches are found in the western part of the country. Goat ranches are limited almost entirely to Texas. The livestock ranches in Florida, Louisiana, and Hawaii are cattle ranches. Livestock ranches are highly specialized. The sale of livestock and livestock products (other than dairy and poultry products) accounted for 96 percent of all farm products sold from the farms. Almost 90 percent of the livestock ranches are owner or manager operated. Only 1 out of 4 had regular hired workers.

The 5,900 large ranches, those with sales of all farm products of \$40,000 or more, accounted for a large part of the production on livestock ranches. These large-scale ranches accounted for 64 percent of the sales of livestock and livestock products (other than dairy and poultry products), 54 percent of the cattle and calves, and 60 percent of the sheep and lambs sold from livestock ranches.

The figures in the following table show some of the important characteristics of ranches of various sizes of operation.

Subject	All livestock ranches	Economic class of farm					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	8.9	10.2	15.8	21.0	25.3	18.8
Land in farms.....percent..	100.0	45.8	18.6	15.9	10.4	6.5	2.8
Cropland harvested.....percent..	100.0	39.1	19.5	12.9	7.0	2.3	2.3
Total cropland.....percent..	100.0	28.7	16.6	18.3	16.5	13.2	6.8
Total pastureland.....percent..	100.0	46.2	18.7	15.8	10.3	6.3	2.7
Value of land and buildings.....percent..	100.0	38.7	16.8	16.4	13.2	10.0	4.8
Total value of all farm products sold.....percent..	100.0	64.0	13.3	10.4	7.0	4.2	1.0
Value of cattle and calves sold.....percent..	100.0	65.5	12.4	9.8	6.9	4.3	1.1
Value of sheep and lambs sold.....percent..	100.0	66.3	16.2	10.3	4.8	2.1	0.4
Average per farm:							
Land in farm.....acres..	4,571	23,438	8,316	4,618	2,269	1,167	680
Cropland harvested.....acres..	71	309	135	86	43	20	9
Total cropland.....acres..	207	664	337	240	163	108	75
Total pastureland.....acres..	4,376	22,648	8,002	4,389	2,142	1,087	629
Value of land and buildings.....dollars..	203,691	865,484	330,916	211,326	126,256	82,088	53,130
Cattle and calves.....number..	220	1,982	337	215	125	75	42
Cows including heifers that have calved.....number..	113	462	198	125	75	45	25
Sheep and lambs.....number..	159	998	304	137	51	20	6
Ewes 1 year old and over.....number..	116	708	232	104	39	14	4
Cattle and calves sold.....number..	140	855	200	113	65	37	14
Sheep and lambs sold.....number..	125	846	225	98	35	13	3
Value of all farm products sold.....dollars..	21,270	152,409	27,797	14,063	7,075	3,545	1,144
Cattle and calves sold.....dollars..	17,233	126,402	20,903	10,725	5,629	2,949	989
Sheep and lambs sold.....dollars..	1,849	13,717	2,938	1,204	420	154	35
Expenditures for—							
Feed for livestock and poultry.....dollars..	4,253	30,919	4,307	2,395	1,308	962	601
Purchase of livestock and poultry.....dollars..	6,397	54,526	5,380	2,534	1,324	710	312
Seeds, bulbs, plants, and trees.....dollars..	88	403	130	82	59	38	20
Fertilizer and fertilizing materials.....dollars..	278	1,301	390	241	175	132	75
Gasoline and other petroleum fuel and oil for the farm business.....dollars..	887	3,520	1,530	1,021	612	360	187
Hired farm labor.....dollars..	1,898	12,979	3,029	1,344	590	284	113
Machine hire, contract and custom work.....dollars..	385	1,954	602	366	223	132	55
Regular hired workers.....persons..	1	4	1	1	(1)	(1)	(1)
Income from sources other than the farm operated.....dollars..	4,034	7,383	4,067	3,727	4,023	4,448	2,135
Percent of farms with—							
Fertilizer used.....percent..	28.3	36.0	30.0	27.7	28.1	28.9	23.4
Tractors other than garden and motor tillers.....percent..	75.6	85.0	82.4	80.7	77.6	73.4	63.5
Income from sources other than the farm operated.....percent..	76.7	62.8	65.0	69.6	76.8	85.3	73.5
Percent of farms operated by—							
Full owners.....percent..	39.3	16.9	23.7	28.7	38.7	47.5	57.1
Part owners.....percent..	46.9	64.0	61.1	57.1	47.7	40.7	30.0
Managers.....percent..	2.9	11.6	5.5	3.3	1.7	0.9	0.8
Tenants.....percent..	10.9	7.5	9.7	11.0	11.9	10.9	12.0
Cash.....percent..	6.7	5.7	6.9	7.6	7.5	7.0	5.2
Share cash.....percent..	0.6	0.3	0.7	0.8	1.0	0.6	0.3
Crop share.....percent..	0.2	0.1	0.1	0.2	0.3	0.2	0.3
Livestock share.....percent..	0.7	0.5	0.9	1.0	0.9	0.4	0.7
Other and unspecified.....percent..	2.0	1.0	1.1	1.0	2.0	2.0	3.5

¹Less than 0.05.

General farms—Farms on which one source of products did not provide 50 percent or more of the total value of all farm products sold were classified as general farms. There were wide differences in the sources of value of farm products sold from general farms in various parts of the country. In some areas the sources of sales were only three or four farm products, while in other areas many farm products contributed to the sales of farm products. In the Midwest, cash grains and two or more kinds of livestock and livestock products were the principal sources of sales. In the Southern States, cotton, tobacco, peanuts, livestock, and poultry and poultry products were the principal sources of

sales. The sales of all crops including vegetables, fruits and nuts, forest products, and horticultural specialties provided 67 percent of all farm products sold in 1964 on general farms.

About 14 percent of the general farms had a total value of farm products sold of \$20,000 or more. More than two-fifths of all general farms had sales of all farm products of less than \$5,000.

As indicated by the data in the following table the use of resources and the characteristics of general farms vary widely.

Subject	All general farms	Economic class of farms					
		Class I	Class II	Class III	Class IV	Class V	Class VI
Percent distribution:							
Number of farms.....percent..	100.0	4.3	9.7	21.5	26.5	24.7	13.3
All land in farms.....percent..	100.0	17.8	15.8	24.8	22.1	14.5	5.1
Cropland harvested.....percent..	100.0	18.6	18.1	27.2	21.8	11.4	2.9
Total cropland.....percent..	100.0	17.4	17.2	26.6	22.2	12.7	3.8
Value of land and buildings.....percent..	100.0	26.6	17.5	22.8	17.9	11.2	3.9
Total value of farm products sold.....percent..	100.0	33.6	20.3	23.2	14.7	6.9	1.3
Value of all crops sold.....percent..	100.0	40.0	19.2	19.8	12.9	6.6	1.4
Value of all livestock, poultry and their products sold.....percent..	100.0	20.5	22.7	29.9	18.3	7.4	1.2
Average per farm:							
Land in farms.....acres..	348	1,425	564	402	291	204	133
Cropland harvested.....acres..	146	625	270	185	120	67	32
Total cropland.....acres..	198	789	350	245	166	102	57
Value of land and buildings.....dollars..	64,341	398,177	113,246	68,883	43,040	29,300	19,259
Value of all farm products sold.....dollars..	12,975	100,250	27,068	14,003	7,206	3,629	1,283
Value of all crops sold.....dollars..	8,695	30,064	17,096	8,032	4,249	2,341	910
Value of all livestock, poultry and their products sold.....dollars..	4,266	20,097	9,941	5,954	2,947	1,281	371
Tractors other than garden and motor tillers.....number..	2	5	3	3	2	2	96
Land irrigated.....acres..	26	298	49	20	9	5	2
Expenditures for—							
Seeds, bulbs, plants and trees.....dollars..	319	2,085	623	351	207	121	56
Fertilizer and fertilizing materials.....dollars..	965	7,297	2,125	965	531	343	64
Gasoline and other petroleum fuel and oil for farm business.....dollars..	852	4,540	1,657	975	631	378	177
Hired farm labor.....dollars..	1,046	13,648	1,870	647	307	170	62
Machine hire, contract and custom work.....dollars..	461	4,163	743	415	269	162	57
Feed for livestock and poultry.....dollars..	976	4,633	2,212	1,317	654	334	156
Purchase of livestock and poultry.....dollars..	846	6,522	1,903	892	437	238	84
Regular hired workers.....persons..	(¹)	4	1	(¹)	(¹)	(¹)	(¹)
Income from sources other than the farm operated.....dollars..	2,594	3,807	2,517	2,249	2,534	3,172	1,856
Percent of farms with—							
Fertilizer used.....percent..	80.7	97.1	94.1	88.0	81.4	75.4	61.7
Tractors other than garden and motor tillers.....percent..	30.9	98.6	98.4	96.8	94.2	89.0	69.9
Income from sources other than the farm operated.....percent..	76.3	62.4	69.5	72.5	76.9	83.5	77.5
Percent of farms operated by—							
Full owners.....percent..	45.6	16.5	21.0	28.6	44.0	61.8	73.5
Part owners.....percent..	34.5	61.9	52.2	43.5	34.8	24.4	15.7
Managers.....percent..	0.6	4.3	1.1	0.5	0.3	0.2	0.2
Tenants.....percent..	19.4	17.2	25.7	27.3	20.9	13.6	10.6
Cash.....percent..	3.1	3.0	3.0	3.4	3.1	3.0	2.8
Share cash.....percent..	6.1	4.9	10.7	11.1	6.6	2.6	0.6
Crop share.....percent..	6.1	6.4	7.4	6.9	6.7	5.7	3.6
Livestock share.....percent..	2.7	2.3	4.6	4.7	3.0	1.3	0.5
Other and unspecified.....percent..	1.4	1.0	1.0	1.1	1.4	1.3	2.5

¹Less than 0.05.

Miscellaneous farms—Detailed data by economic class of farm are not presented separately for miscellaneous farms. The most important group of commercial farms included in miscellaneous farms are farms producing nursery and greenhouse products. This group of farms also included a considerable number of farms with no value of farm products sold in 1964, and also some farms on which the sale of forest products, or horses and mules, or mink, or other miscellaneous livestock products were the principal farm products sold. The following table presents selected data for miscellaneous commercial farms by economic class.

Forest products and horticultural specialty products provided 78 percent of the value of all farm products sold from miscellaneous farms in 1964. More than 61 percent of the miscellaneous commercial farms had 1 or more acres of cropland harvested. However, the acreage of irrigated land in miscellaneous farms was equal to more than one-fourth of the acreage of cropland harvested in 1964.

Subject	Total all farms	Commercial farms							Other farms		
		Total	Class I	Class II	Class III	Class IV	Class V	Class VI	Part time	Part retirement	Abnormal
FARMS, ACREAGE, AND VALUE											
Farms.....Number..	3,157,857	78,528	5,034	4,823	6,597	8,731	10,767	42,576	116,883	56,359	254
Land in farms.....acres..	1,110,187,000	15,490,867	2,908,574	1,454,802	1,800,197	1,984,080	1,984,699	5,358,515	7,701,716	5,550,688	4,208,265
Average size of farm.....acres..	351.6	197.3	577.8	301.6	272.9	227.2	184.3	125.9	65.9	98.5	16,568.0
Land in farms according to use:											
Cropland harvested.....farms..	2,701,694	47,990	4,171	3,635	5,002	6,586	8,106	20,490	51,647	26,755	62
acres..	286,891,974	997,154	323,342	123,526	132,513	130,848	117,991	168,934	365,594	174,755	7,366
1 to 9 acres.....farms..	489,036	30,494	1,965	1,907	2,588	3,541	4,620	15,873	39,934	21,456	23
10 to 19 acres.....farms..	342,938	6,544	369	394	669	927	1,317	2,868	8,152	3,784	4
20 to 29 acres.....farms..	231,378	3,196	226	285	385	375	834	891	2,124	924	4
30 to 49 acres.....farms..	311,906	3,225	293	302	486	759	846	548	1,027	418	11
50 to 99 acres.....farms..	462,698	2,652	492	393	539	611	410	207	319	131	8
100 to 199 acres.....farms..	454,885	1,198	388	248	273	161	68	60	70	33	5
200 to 499 acres.....farms..	329,726	534	316	95	59	19	10	35	17	7	3
500 to 999 acres.....farms..	64,010	115	91	10	3	2	1	8	2	1	1
1,000 acres or more.....farms..	15,117	32	31	1	-	-	-	-	2	1	3
Irrigated land in farms.....farms..	297,387	9,626	2,111	1,233	1,333	1,369	1,296	2,284	6,868	2,268	32
acres..	37,056,083	258,478	122,343	26,019	22,127	18,992	13,749	55,248	78,074	25,495	4,263
All farm products sold.....	35,293,529,931	947,693,768	618,751,233	130,754,948	89,573,205	59,893,976	37,625,361	11,095,045	19,309,534	9,750,325	10,439,506
Average per farm.....	11,176	12,068	122,914	27,111	13,578	6,860	3,495	261	165	173	41,100
Forest products and horticultural specialty products.....	879,749,901	740,484,818	511,178,083	91,822,276	61,746,036	41,829,327	26,213,376	7,695,720	11,322,013	6,622,656	7,812,763

CHANGES IN THE NUMBER OF FARMS BY TYPE

Changes in number of farms by type 1950-1964—Because of changes in the criteria for classifying farms by economic class of farm and type of farm, after the 1954 census, a direct comparison of the number of farms by type of farm for all farms cannot be made for the 1950 and 1954 censuses with the 1959 and 1964

censuses. However, comparisons can be made for farms with a value of products sold of \$2,500 or more, for farms in the 48 States comprising the conterminous United States. The following table presents comparative data for the conterminous United States for the number of farms by type of farm for the 1950, 1954, 1959, and 1964 censuses for three value-of-farm-products-sold groups.

Value of farms products sold and year	Total, all commercial farms	Cash-grain farms	Cotton farms	Tobacco farms	Other field-crop farms	Vegetable farms	Fruit and nut farms	Poultry farms	Dairy farms	Livestock farms other than poultry, dairy, and livestock ranches	Livestock ranches	General farms	Miscellaneous farms
All commercial farms.....1964..	2,162,678	404,244	164,076	171,384	34,457	22,787	56,567	81,956	366,839	514,149	66,062	201,930	78,227
.....1959..	2,412,917	398,037	241,849	190,057	37,435	21,551	60,709	103,046	428,152	616,544	66,979	211,584	36,974
Farms with a value of farm products sold of—													
\$2,500 or more.....1964..	1,815,044	368,509	117,241	125,593	30,710	16,981	49,616	76,170	349,124	416,618	53,666	175,065	35,751
.....1959..	2,064,444	365,697	158,647	133,298	31,700	17,221	55,470	94,154	397,811	533,736	60,544	185,521	30,645
.....1954..	2,101,871	421,971	204,000	(¹)	182,927	19,709	59,248	97,878	397,977	456,607	(²)	238,590	22,964
.....1950..	2,087,895	325,424	174,837	(¹)	169,551	23,923	50,691	93,636	405,129	525,425	(²)	293,382	25,897
\$2,500 to \$4,999....1964..	443,192	77,996	41,700	49,989	4,800	4,379	10,725	7,902	59,276	109,235	16,700	49,789	10,701
.....1959..	616,819	92,160	67,058	73,166	6,481	4,430	12,927	17,640	97,315	156,638	19,027	61,134	8,843
.....1954..	812,108	129,042	116,163	(¹)	114,222	6,384	16,876	27,605	153,690	143,072	(²)	297,932	7,122
.....1950..	882,302	109,815	91,377	(¹)	114,317	9,248	18,929	34,030	179,935	176,580	(²)	213,840	9,131
\$5,000 to \$9,999....1964..	503,996	105,583	28,828	45,969	5,890	3,648	11,638	11,963	104,011	110,425	13,888	53,488	8,665
.....1959..	653,150	124,559	37,961	46,357	7,640	4,090	14,357	22,254	145,963	160,698	15,548	65,819	7,904
.....1954..	706,852	160,337	47,013	(¹)	247,706	5,094	16,367	28,582	150,506	152,413	(²)	287,301	5,533
.....1950..	721,211	127,744	44,972	(¹)	137,316	6,743	15,491	28,427	153,980	189,087	(²)	2110,854	6,597
\$10,000 or more....1964..	867,856	184,930	46,713	29,635	20,020	8,954	27,253	56,305	185,837	190,958	23,078	71,788	16,385
.....1959..	794,475	148,978	53,628	13,775	17,579	8,701	28,186	54,260	154,533	216,400	25,969	58,568	13,898
.....1954..	582,911	132,592	40,824	(¹)	120,999	8,231	26,005	41,691	87,781	161,122	(²)	253,357	10,309
.....1950..	484,382	87,865	38,488	(¹)	117,918	7,932	16,271	31,179	71,214	159,758	(²)	243,588	10,169

¹In 1954 and 1950, tobacco farms were included with other field crop farms.

²In 1954 and 1950, livestock ranches were included with livestock farms other than poultry and dairy.

Changes in the 15-year period 1950 to 1964 had different impacts upon the several types and sizes of farms. Improved techniques to increase yields and to decrease labor requirements in farming have varied in their adaptability to different crop and livestock enterprises and to different sizes of farms. Differential rates of progress have occurred in the invention and putting into actual use farm machinery to mechanize completely the production of major cash crops and major types of livestock and poultry. Mechanization has been more feasible for farm operators on larger units and for those with agricultural land in larger tracts. Moreover, the high capital requirements and the financial and credit positions of farm operators have been important factors influencing the rate of mechanization, the adoption of new and improved practices, and the use of purchased inputs. Some crops have been benefited more than others by the development of improved or new varieties. Changes in transportation cost, in the relative increase in population in various areas, in the relative demand for various farm products, in government programs, in farm managerial requirements, in the improvement in the management of farms, and other factors have influenced significantly the number of farms by type and by value of farm products sold.

In the last 15 years, commercial farms have become fewer, but they are much larger whether size is measured in terms of value of farm products sold, acres of cropland, or acres of land in the farm. The larger farms have become more numerous and there are fewer small farms. However, there continues to exist a large number of small farms, with low production, low utilization of resources, low levels of gross income from farm operations and without recent changes in enterprise combinations, production practices, land use, use of new technology, management, or without any more land, livestock, machinery, fertilizer, or other capital items per farm than 15 years ago.

Changing conditions have had their effect upon types of farming, the kinds of farm products produced, the number of producers, and the combination of farm enterprises. Data indicate that most major farm products are now produced by fewer farms and by a small proportion of the farms. The need for efficient use of machinery and other capital equipment has brought about greater farm specialization. Increased investments in farm machinery and in improved housing and facilities for livestock and poultry have required increases in the size of livestock farm enterprises. To utilize new technology satisfactorily many farmers have found it necessary to concentrate on one or a few enterprises rather than several.

The number of commercial farms with a value of farm products sold of \$2,500 or more varied less than 2 percent for the census years 1950 to 1959. However, the number in 1964 was 12 percent less than the number in 1959 and 14 percent less than the number in 1954. The decrease of 273,000 in the number of commercial farms from 1950 to 1964, resulted largely from a decline of 58,000 in the number of cotton farms, 17,000 in the number of poultry farms, 56,000 in the number of dairy farms, 55,000 in the number of livestock farms other than poultry and dairy farms, and 118,000 in the number of general farms. The decrease in the number of these five types of farms was partially offset by an increase of 43,000 in the number of cash-grain farms. The decrease in the number of cotton, poultry, and dairy farms reflects to a large extent farm operators quitting these types of farming. The decline in the number of livestock farms other than poultry and dairy, and in the number of general farms, reflects, in part, shift of farms producing livestock to the production of cash grains, as well as the decline in the number of farm operators engaged in farming.

Type of farm	Number of all commercial farms		All commercial farms with sales of all farm products of \$2,500 and more			
	1964	1959	1964	1959	1954	1950
Total, commercial farms.....	2,162,678	2,412,917	1,815,044	2,064,444	2,101,871	2,087,895
Cash grain farms.....	404,244	398,037	368,509	365,697	421,971	325,424
Tobacco farms.....	171,384	190,057	125,593	133,298	(¹)	(¹)
Cotton farms.....	164,076	241,849	117,241	158,647	204,000	174,837
Other field crop farms.....	34,457	37,435	30,710	31,700	182,927	169,551
Vegetable farms.....	22,787	21,551	16,981	17,221	19,709	23,923
Fruit and nut farms.....	56,567	60,709	49,616	55,470	59,248	50,691
Poultry farms.....	81,956	103,046	76,170	94,154	97,878	93,636
Dairy farms.....	366,839	428,152	349,124	397,811	397,977	405,129
Livestock farms other than poultry, dairy and livestock ranches..	514,149	616,544	416,618	533,736	2456,607	2525,425
Livestock ranches.....	66,062	66,979	53,666	60,544	(²)	(²)
General farms.....	201,930	211,584	175,065	185,521	238,590	293,382
Miscellaneous farms.....	78,227	36,974	35,751	30,645	22,964	25,897

¹In 1954 and 1950, tobacco farms were included with other field crop farms.

²In 1954 and 1950, livestock ranches were included with livestock farms other than poultry and dairy.

The number of commercial farms with a value of farm products sold of \$2,500 to \$4,999 decreased 439,000, almost 50 percent from 1950 to 1964. The number of farms of every type except miscellaneous farms, in 1964, was at least 29 percent less than in 1950. The largest proportion of decline from 1950 to 1964 occurred in the number of poultry, dairy, and general farms.

Commercial farms with a value of farm products sold of \$5,000 to \$9,999 declined 217,000 or 30 percent from 1950 to 1964. Except for other field crop farms, including tobacco farms and miscellaneous farms, the number of farms of each type was less in 1964 than in

1950. The decrease of 50,000 in the number of dairy farms, 65,000 in the number of livestock farms other than poultry and dairy, and 57,000 in the number of general farms accounted for four-fifths of the 217,000 decrease in the number of commercial farms from 1950 to 1964.

There were 383,000 or 79 percent more commercial farms with a value of farm products sold of \$10,000 or more in 1964 than in 1950. There were more farms with a value of farm products sold of \$10,000 or more in 1964 than in 1950 for each type of farm. The number of farms with a value of farm products sold of \$10,000 or more in 1964 exceeded the number in 1959 by 97,000

for cash-grain farms, 11,000 for fruit and nut farms, 25,000 for poultry farms, 115,000 for dairy farms, 60,000 for livestock farms other than poultry and dairy, and 28,000 for general farms.

Changes in farms by type from 1959 to 1964—The total number of commercial farms in 1964 was 2,166,000 compared with 2,416,000 in 1959. The decrease of 250,000 in the number of commercial farms actually

understates the decline in the number of commercial farms, because the change between 1959 and 1964 in criteria for distinguishing between farms in economic class VI and part-time farms resulted in an overstatement of the number of class VI farms by 158,000. On the basis of the use of the same criteria for class VI and part-time farms in 1964 as in 1959, the decline in the number of commercial farms was from 2,416,000 to 2,008,000 or a decrease of more than 16 percent.

Subject and type of farm	Total		Economic class of farm											
			Class I		Class II		Class III		Class IV		Class V		Class VI	
	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959
Number of farms.....	2,165,712	2,416,017	141,914	102,099	259,898	210,402	467,096	483,004	504,614	653,881	443,913	617,677	348,272	348,954
Cash grain.....	404,253	398,047	19,301	10,828	57,480	36,884	108,151	101,267	105,588	124,563	77,998	92,163	35,735	32,342
Tobacco.....	171,384	190,057	1,000	322	5,828	1,806	22,807	11,647	45,969	46,357	49,989	73,166	45,791	56,759
Cotton.....	164,076	241,849	13,033	13,171	14,050	15,984	19,630	24,473	28,828	37,961	41,700	67,058	46,835	83,202
Other field crop.....	35,130	38,332	7,334	4,011	6,133	5,389	6,866	8,533	6,057	7,910	4,909	6,673	3,831	5,811
Vegetables.....	23,207	21,912	3,577	2,700	2,449	2,537	3,090	3,531	3,747	4,190	4,482	4,541	5,862	4,383
Fruit and nut.....	57,256	61,419	8,103	6,547	8,355	8,923	10,885	12,763	11,791	14,488	10,974	13,228	7,148	5,465
Poultry.....	82,120	103,279	19,249	11,151	19,250	18,299	17,928	24,948	11,974	22,303	7,921	17,673	5,798	8,900
Dairy.....	366,967	428,293	15,463	8,538	53,171	32,624	117,315	113,496	104,018	145,972	59,277	97,321	17,723	30,342
Livestock farms other than dairy, poultry, and livestock ranches.....	514,529	616,902	35,116	29,439	61,909	63,246	100,036	123,839	110,476	160,764	109,329	156,728	97,663	82,886
Livestock ranches.....	66,232	67,159	5,921	6,737	6,766	7,815	10,462	11,475	13,933	15,603	16,767	19,068	12,433	6,441
General farms.....	201,980	211,613	8,783	4,775	19,684	12,826	43,329	40,974	53,502	65,825	49,805	61,145	26,877	26,068
Miscellaneous farms.....	78,528	37,155	5,034	3,830	4,823	4,064	6,597	6,058	8,731	7,945	10,767	8,903	42,576	6,355
Average size of farm.....(acres)..	445.8	404.5	1905.6	2465.7	714.6	791.1	465.3	444.9	313.0	288.3	206.2	191.9	122.0	106.3
Cash grain.....	464.9	440.9	1539.3	2155.6	761.6	906.6	525.9	509.2	347.4	338.6	210.3	219.4	126.0	147.7
Tobacco.....	96.5	89.6	731.7	868.1	278.7	378.6	150.3	194.5	98.4	104.6	77.2	78.8	51.8	56.3
Cotton.....	255.8	197.9	1340.2	1238.7	513.5	488.0	325.8	305.2	175.4	171.2	87.0	86.5	47.2	47.8
Other field crop.....	359.2	272.0	897.0	998.2	365.6	326.6	258.7	237.7	185.1	173.0	124.6	123.5	76.0	75.7
Vegetable.....	201.5	186.9	755.0	818.7	205.0	193.0	144.3	122.1	100.3	92.3	78.1	71.3	51.6	50.4
Fruit and nut.....	153.6	140.4	581.4	594.6	146.4	163.2	101.4	100.3	69.6	70.1	53.5	53.1	48.6	50.4
Poultry.....	116.0	96.5	198.8	191.8	117.6	115.9	93.1	92.4	75.5	78.2	66.3	62.0	58.4	62.9
Dairy.....	227.0	208.2	564.2	639.5	328.3	360.0	235.7	241.1	193.4	192.1	142.7	148.8	108.8	116.5
Livestock farms other than poultry, dairy, and livestock ranches.....	410.6	385.7	1189.8	1286.0	656.0	639.3	504.4	470.0	363.8	339.3	232.2	230.2	131.3	130.2
Livestock ranches.....	4,571.2	4,584.8	23,437.7	21,728.6	8,315.8	7,451.7	4,617.9	4,019.4	2,268.8	1,997.4	1,167.4	1,083.0	679.8	763.7
General farms.....	348.3	281.2	1425.2	1444.8	563.6	554.1	402.4	348.9	291.0	251.9	204.3	181.7	132.5	134.3
Miscellaneous farms.....	197.3	249.0	577.8	654.5	301.6	288.2	272.9	260.8	227.2	203.4	194.3	166.2	125.9	141.3
Average value of all farm products sold per farm.(dollars)..	15,869	12,195	105,786	94,536	27,373	26,842	14,160	13,882	7,240	7,223	3,629	3,683	1,044	1,321
Cash grain.....	13,621	11,132	68,223	68,570	27,078	26,541	14,199	13,884	7,309	7,328	3,667	3,761	1,114	1,367
Tobacco.....	6,527	4,623	92,029	105,530	26,196	24,346	13,525	12,890	7,055	6,703	3,631	3,565	1,301	1,393
Cotton.....	14,835	10,150	103,106	87,158	28,212	25,044	14,196	12,864	7,043	6,574	3,569	3,419	1,354	1,357
Other field crop.....	36,677	21,088	129,462	112,480	28,302	27,235	14,466	14,434	7,272	7,216	3,635	3,538	1,091	1,126
Vegetable.....	36,946	29,417	195,015	173,127	27,959	27,901	14,026	14,047	7,040	7,222	3,513	3,621	1,007	1,111
Fruit and nut.....	28,231	21,661	134,936	110,492	28,216	27,791	14,343	14,666	7,194	7,729	3,608	3,992	938	1,259
Poultry.....	35,540	19,507	103,002	81,426	28,481	27,475	14,737	14,426	7,427	7,460	3,661	3,847	944	1,087
Dairy.....	14,593	10,796	80,970	83,036	26,690	26,292	14,211	13,792	7,385	7,349	3,747	3,805	1,499	1,603
Livestock farms other than poultry, dairy, and livestock ranches.....	16,122	13,086	110,577	92,912	27,650	27,465	14,170	14,130	7,222	7,317	3,590	3,698	946	1,143
Livestock ranches.....	21,271	20,989	152,409	124,786	27,797	27,836	14,063	14,149	7,075	7,075	3,545	3,587	1,144	1,203
General farms.....	12,975	9,714	100,250	89,198	27,068	26,343	14,003	13,548	7,206	7,148	3,629	3,724	1,283	1,474
Miscellaneous farms.....	12,968	19,881	122,914	119,749	27,111	26,042	13,578	13,471	6,860	6,844	3,495	3,488	261	1,126
Cropland harvested (1,000 acres) total.	273,841	295,478	58,146	44,375	60,936	51,209	75,802	82,478	50,131	71,865	22,827	36,628	6,000	8,924
Cash grain.....	95,843	96,485	15,239	10,755	23,797	17,959	29,741	30,398	18,210	24,493	7,471	10,839	1,385	2,040
Tobacco.....	4,117	5,080	220	83	530	218	1,054	797	1,198	1,681	788	1,634	326	668
Cotton.....	20,691	25,219	9,166	8,937	3,838	4,559	3,144	4,112	2,288	3,242	1,509	2,729	745	1,639
Other field crop.....	5,881	4,935	3,251	1,816	1,126	1,002	822	1,032	424	622	193	320	65	144
Vegetable.....	2,441	2,251	1,606	1,326	273	291	221	251	159	189	120	130	64	63
Fruit and nut.....	3,666	3,563	2,057	1,594	575	685	458	569	312	410	192	246	71	59
Poultry.....	2,315	2,565	956	573	579	606	397	616	218	422	123	258	42	91
Dairy.....	35,244	37,042	3,332	1,674	8,215	5,097	12,845	12,692	7,725	11,466	2,698	5,175	430	938
Livestock farms other than poultry, dairy, and livestock ranches.....	68,492	84,380	14,676	12,395	15,646	16,175	18,070	23,414	12,424	20,109	5,931	10,115	1,744	2,172
Livestock ranches.....	4,681	4,713	1,831	1,990	913	943	898	850	605	576	328	297	107	57
General farms.....	29,473	28,451	5,488	2,969	5,322	3,569	8,018	7,625	6,437	8,527	3,355	4,761	853	1,001
Miscellaneous farms.....	997	794	323	264	124	106	133	122	131	127	118	123	169	52

The decreases in the number of farms by type as shown by the published data and as adjusted to make the

criteria for class VI and part-time farms for 1964 the same as the criteria for 1959 are as follows:

Type of farm	Number of farms, 1964 (1,000)		Decrease in number of farms 1959 to 1964 (1,000)	
	As indicated by published data	As adjusted to make 1964 comparable with 1959	As indicated by published data	As adjusted to make 1964 comparable with 1959
Total, all commercial farms.....	2,166	2,008	250	408
Cash grain.....	404	388	+6	10
Tobacco.....	171	153	19	32
Cotton.....	164	153	78	88
Other-field crop.....	35	34	3	5
Vegetable.....	23	21	+1	1
Fruit and nut.....	57	53	4	8
Poultry.....	82	79	21	24
Dairy.....	367	361	61	67
Livestock other than poultry, dairy, and live- stock ranches.....	515	460	102	157
Livestock ranches.....	66	60	1	7
General.....	202	190	10	21
Miscellaneous.....	79	50	+41	+13

The data in the following table indicate significant decreases in the number of cotton farms, poultry farms, dairy farms, and livestock farms other than poultry, dairy, and livestock ranches. The decrease in the number of farms of these four types of farm groups accounted for approximately all the decline in the number of commercial farms from 1959 to 1964. If the criteria for part-time farms and class VI farms used in 1959 are applied to the 1964 census, then the decline in the number of commercial farms from 1959 to 1964 would have been approximately 408,000. Again, the decrease in cotton farms, poultry farms, dairy farms, and livestock farms other than poultry, dairy, and livestock ranches would have accounted for 83 percent of the decrease in the number of commercial farms. The decline in the number of farms of these types has accompanied the decrease in the number of farms producing the products which determine these types of farms as indicated by the following data.

All farms	Farms producing (1,000)	
	1964	1959
Cotton.....	324	510
Chicken eggs.....	527	1,068
Milk for sale.....	545	770
Cattle and calves for sale.....	1,991	2,304
Hogs and pigs for sale.....	803	1,273

The number of cash grain farms with a value of farm products sold of \$2,500 or more in 1964 exceeded the number in 1959 by 43,000; most of this increase resulted from the shift of livestock farms other than poultry and dairy farms and general farms to cash grain farms because of changes in relative prices of cash grain crops and livestock and livestock products, shifts in the relative importance of cash grain and livestock and livestock products on individual farms, and because of the increasing specialization in farm production. The number of cash-grain farms with a value of farm products sold of \$2,500 to \$9,999 declined 54,000 or 23 percent from 1959 to 1964, while the number of cash-grain farms with a value of farm products sold of \$10,000 or more increased 97,000 or 110 percent during the same period. During the 15-year period, the operators of many cash grain farms moved from the group of farm operators with a value of farm products sold of less than \$10,000 to the group of farm operators with a value of farm products sold of \$10,000

or more, by increasing the size of their farm and by obtaining high yields and greater production through the use of new and improved varieties, more fertilizer, and improved cultural practices.

From 1950 to 1964, the number of cotton farms with a value of farm products sold of \$2,500 or more decreased 58,000 or one-third. This change resulted largely from the decrease in the number of farms growing cotton. The number of cotton farms with a value of farm products sold of \$2,500 to \$9,999 declined 66,000 from 1950 to 1964, while the number of cotton farms with a value of farm products sold of \$10,000 and over increased 8,000 or 21 percent during the same period.

The number of tobacco and other field crop farms with a value of farm products of \$2,500 or more declined 8 percent from 1950 to 1964. However, the number of tobacco and other field crop farms with a value of farm products sold of \$2,500 to \$4,999 declined more than 50 percent, while the number of these farms with a value of farm products sold of \$5,000 to \$9,999 increased 15,000 or 39 percent, and the number of farms with a value of \$10,000 or more of farm products sold more than doubled from 1950 to 1964.

The number of vegetable farms with a value of farm products sold of \$2,500 or more decreased 7,000 or one-third from 1950 to 1964. This decrease was a result of the decrease in the number of vegetable farms with a value of farm products sold of less than \$10,000. Vegetable farms with a value of farm products sold of \$10,000 or more increased 1,000 or 13 percent from 1950 to 1964.

There was very little change in the number of fruit and nut farms with a value of farm products sold of \$2,500 or more from 1950 to 1964. However, an increase of 11,000 or 67 percent of the number of fruit and nut farms with a value of farm products sold of \$10,000 or more was offset by a decrease in the number of farms with a value of farm products sold of less than \$10,000.

The number of poultry farms with a value of farm products sold of \$2,500 or more declined 17,000 or 19 percent from 1950 to 1964. More than 42,000 or 68 percent of the poultry farms with a value of farm products sold of less than \$10,000 either disappeared

or shifted to the group of poultry farms with a value of farm products sold of \$10,000 or more in the 15-year period. There were almost twice as many poultry farms with a value of farm products sold of \$10,000 or more in 1964 as in 1950.

Over 56,000 dairy farms with a value of farm products sold of \$2,500 or more disappeared from 1950 to 1964. The number of dairy farms with a value of farm products sold of \$10,000 or more increased more

than 2 1/2 times from 1950 to 1964 as dairy farm operators enlarged their farming operations.

There was a decline of 55,000 or 10 percent in the number of livestock farms other than poultry and dairy farms and livestock ranches from 1950 to 1964. The number of farms of these types with a value of farm products sold of \$10,000 or more increased 60,000 from 1950 to 1964, as the level of agricultural production increased significantly on many livestock farms.

Value of farm products sold and year	Land in farms by type of farm (1,000 acres)												
	All com- mercial farms	Cash- grain farms	Tobacco farms	Cotton farms	Other field- crop farms	Vege- table farms	Fruit and nut farms	Poultry farms	Dairy farms	Livestock farms other than poultry, dairy, and livestock ranches	Live- stock ranches	General farms	Miscel- laneous farms
All commerical farms.....1964..	961,482	187,946	16,539	41,972	11,869	4,669	8,775	9,520	83,222	211,202	300,409	70,044	15,316
.....1959..	974,172	175,523	17,033	47,866	9,607	4,086	8,606	9,962	89,097	237,919	305,736	59,493	9,244
Farms with a value of farm products sold of—													
\$2,500 or more.....1964..	919,436	183,444	14,169	39,760	11,579	4,367	8,430	9,184	81,299	198,385	292,342	66,485	9,992
.....1959..	937,158	170,746	13,838	43,885	9,167	3,857	8,336	9,403	85,563	227,104	300,920	55,993	8,347
.....1954..	885,036	186,535	(¹)	46,151	² 22,306	4,007	8,787	9,023	79,544	449,224	(²)	² 71,380	8,078
\$2,500 to \$4,999.....1964..	91,023	16,401	3,860	3,627	610	349	583	525	8,459	25,382	19,441	9,871	1,914
.....1959..	118,470	20,222	5,764	5,801	822	322	698	1,096	14,479	36,080	20,597	11,110	1,479
.....1954..	163,242	33,565	(¹)	11,536	¹ 9,021	498	908	1,896	23,437	59,761	(²)	20,992	1,628
\$5,000 to \$9,999.....1964..	157,756	36,677	4,525	5,056	1,117	374	818	904	19,076	40,190	31,466	15,569	1,983
.....1959..	188,403	42,179	4,847	6,499	1,363	385	1,013	1,744	26,585	54,537	31,056	16,581	1,616
.....1954..	220,525	58,280	(¹)	9,249	¹ 5,910	500	1,188	2,278	29,637	87,792	(²)	² 24,161	1,530
\$10,000 or more.....1964..	670,657	130,365	5,784	31,077	9,853	3,644	7,028	7,755	53,764	132,813	241,434	41,045	6,095
.....1959..	630,286	108,345	3,227	31,585	6,983	3,151	6,624	6,563	44,499	136,487	249,267	28,303	5,253
.....1954..	501,268	94,690	(¹)	25,366	¹ 7,374	3,010	6,691	4,849	26,471	301,671	(²)	² 26,228	4,920

¹In 1954, tobacco farms were included with other field crop farms.

²In 1954, livestock ranches were included with livestock farms other than poultry and dairy.