

1964 ^{OF} UNITED STATES CENSUS AGRICULTURE

FARMS
FARM CHARACTERISTICS
LIVESTOCK AND PRODUCTS
CROPS
FRUITS
VALUES



VOLUME II CHAPTER 6

Value of Farm Products Sold and Economic Class of Farm

U.S. DEPARTMENT OF COMMERCE
Alexander B. Trowbridge, Secretary

BUREAU OF THE CENSUS
A. Ross Eckler, Director

1964 UNITED STATES CENSUS OF AGRICULTURE

Volume II—Chapter 6

CONTENTS

	page
Introduction.....	593
Areas for which statistics are presented.....	593
Other published data for 1964.....	593

DEFINITIONS AND EXPLANATIONS

Period of time covered.....	593
Checking during office processing for quantity and value of farm products sold...	594
Crops.....	594
Livestock and livestock products.....	594
Livestock sold alive.....	594
Poultry sold.....	594
Milk sold.....	595
Government payments and loans.....	595
Value of sales for farms with new operators.....	595
Farm products purchased for resale.....	595
Gross income of farm operators.....	595
Value of farm products sold.....	595
Recreation income.....	599
Classification of farms.....	599
Commercial farms.....	599
Other farms.....	599
Large-scale farms.....	600
Data based upon reports for a sample of farms.....	600
Differences in estimates based on reports for a sample of farms and totals for all farms.....	601
Changes in the values of farm products sold for the United States, 1959 and 1964.	601
All crops.....	601
Cotton.....	601
Corn.....	601
Soybeans.....	602
Wheat.....	602
Vegetables.....	602
Fruits and nuts.....	602
Horticultural specialty crops.....	602
Forest products sold.....	602
Livestock and poultry and livestock and poultry products sold.....	602
Cattle and calves.....	602
Hogs and pigs.....	602
Sheep and lambs.....	602
Dairy products.....	603
Broilers.....	603
Chicken eggs.....	603

CONTENTS—Continued

DEFINITIONS AND EXPLANATIONS--Continued

	page
Comparison of the value of farm products sold and estimates of cash receipts from farm marketings by the U.S. Department of Agriculture	603
Changes in the value of crops produced, 1959 to 1964	603
Importance of commercial farms	604
Large-scale farms	606
Class I farms	610
Class II and class III farms	610
Class IV and class V farms	610
Class VI farms	611
Characteristics of other farms	611
Part-time farms	612
Part-retirement farms	613
Farms with a value of farm products sold of less than \$2,500	613

CHANGES IN THE NUMBER OF FARMS BY ECONOMIC CLASS, 1950 to 1964

Changes in the number of farms by economic class, 1950 to 1964	614
--	-----

TABLES

TABLE 1. Method of Obtaining Data on Value of Farm Products Sold: 1940 to 1964 ...	597
2. Value of Production for Principal Crops Harvested for the United States: 1964, 1959, and 1954	604
3. Comparisons of all Commercial Farms and Large-scale Farms, for the United States: 1964 and 1959	607
4. Changes in Resources Used and Production for Farms with a Value of Farm Products Sold of Less Than \$2,500, for the United States: 1950 to 1964 ..	617
5. Changes in Resources Used and Production for Farms with a Value of Farm Products Sold, for Farms with a Value of Farm Products Sold of \$2,500 or more, by Value of Sales Groups, for the United States: 1950 to 1964	618
6. Unit Prices Used for Computing Value of Farm Products Sold, by States: 1964 and 1959	619
7. Value of Specified Classes of Livestock and Poultry on Farms, by Regions and States: 1964 and 1959	624
8. Income Other Than Farm Operated--Households and Amount of Income Received by all Members of Farm Operator's Household, for Farms Classified by Amounts Received per Household, by Regions and States: 1964	626
9. Value of Principal Farm Products Sold, by Regions and States: 1964 and 1959	627
10. Value of Major Groups of Farm Products Sold, by Regions and States: 1964 and 1959	629
11. Value of Livestock and Livestock and Poultry Products Sold, by Regions and States: 1964 and 1959	631
12. Farms by Economic Class--Number of Farms by Economic Class of Farm, by Regions and States: 1964 and 1959	633
13. Percent Distribution of Farms and Value of Farm Products Sold, by Economic Class of Farm, by Regions and States: 1964	635
14. Number of Farms by Value of Farm Products Sold, by Regions and States: 1964	637
15. Farm Characteristics, by Economic Class, for the United States: 1964	638
16. Characteristics of Large-scale Farms, by Type, for the United States: 1964 and 1959	654

Chapter 6. Value of Farm Products Sold and Economic Class of Farm

Introduction—This chapter presents data from the 1964 Census of Agriculture regarding the value of farm products sold and data showing characteristics of farms and farm operators by economic class of farm. For comparative purposes, some data are presented for the 1959 census.

The data for farms grouped by economic class supplement those for other classifications which were made on the basis of size of farm (as measured by total area in the farm) presented in chapter 3, tenure of farm operator presented in chapter 8, and type of farm presented in chapter 10.

Areas for which statistics are presented—The statistics regarding value of farm products sold are presented for the United States, 3 major regions, and for each of the 50 States. An outline map showing the regions and the States for which data are presented appears in the introduction of this volume. Data relative to the economic class of farm are presented only for the United States.

Other published data for 1964—Value of sales and production, and the number of farms reporting various items of sales and production, are available in other chapters of this volume and in other published reports for the 1964 Census of Agriculture. Available data for livestock and livestock products appear in chapter 2; for crops, including fruits and nuts, horticultural specialties, and forest products, in chapter 4.

A considerable amount of data for the quantity and for the value of farm products sold by various classifications of farms is given in chapter 3 for farms by size as measured by acres, in chapter 8, for farms classified by tenure of operator, and in chapter 10, for farms by type of farm.

Detailed statistics on the value of farm products sold, by counties, are presented in county tables 5, 6, 11, 12, 13, and 15 of volume I of the reports for the 1964 Census of Agriculture. Data on the quantity and value of various products sold in each State are given in State tables 8, 9, and 11, and data on the value of livestock on farms, in State table 7 of volume

I of the reports for the 1964 Census of Agriculture.

DEFINITIONS AND EXPLANATIONS

Definitions having general application, such as those for "a farm," "farms," etc., are given in the introduction to this volume.

Most of the data presented for 1964 represent totals for all farms. Statistics on equipment; use of fertilizer and lime; use of pesticides, insecticides, and herbicides; the characteristics of persons in the farm operator's household; farm expenditures; and the value of farmland and buildings are estimates for all farms based upon data for a sample consisting of all farms of 1,000 acres or more or with a value of farm products sold of \$100,000 or more, and 20 percent of the remaining farms.

Period of time covered—Except for vegetable and potato crops in south Florida, and citrus fruits, olives, and avocados, data for value of crops sold for the 1964 census relate to crops produced in the crop year 1964. For citrus fruits, the data relate to the crops harvested from the bloom of 1963 for the 1963-64 marketing season. Data for olives relate to the crop harvested in 1964 for all States except California and Arizona. In those two States, the olives harvested from the bloom of 1963 during the 1963-64 harvesting season, September 15, 1963 to about February 28, 1964, were to be reported. For avocados, the data for California relate to the quantity harvested from the bloom of 1963 for the marketing season that extended from October 1, 1963, to September 30, 1964; the data for Florida relate to the crop harvested for the marketing season that extended from July 1, 1964, to February 28, 1965. In south Florida, the data for vegetables and Irish potato crops relate to a full year beginning November 1, 1963, and ending October 31, 1964.

The market movement for some crops had not been completed at the time of the enumeration for the 1964 Census of Agriculture. The farm operator was asked, by questionnaire inquiries and notes, and enumerators by in-

structions, to include both the quantities that had been sold and those that would be sold regardless of the date of sale.

Data for sales of livestock and poultry and their products are for the calendar year 1964. For many livestock products, such as milk, cream, and eggs, sales take place almost immediately after production. For other products, such as wool and mohair, the sales may be delayed for some time after production. The sales data shown in the tables of this chapter generally represent the values as reported by farm operators for the calendar year 1964 and were to include the estimated amounts that would be sold by December 31, 1964.

Checking during office processing for quantity and value of farm products sold—A check was made for each farm product sold to insure that the quantity and value of sales were consistent with production or inventory and reasonable in relation to other data reported on the individual agriculture questionnaires.

Crops—For a number of crops, the checking of individual questionnaires was limited to ascertaining that the quantity harvested was reasonable, as it was assumed that all or nearly all, of the crop harvested was sold. These crops included cotton; tobacco; sugar beets for sugar; sugarcane for sugar; hops; all berries and small fruits; and tree fruits, nuts, and grapes.

It was assumed that nearly all of the crop was sold for the following: Irish potatoes, sweetpotatoes, dry field and seed peas, dry lima beans, maple sirup, and all field seed crops. Crop-disposition estimates made by the Statistical Reporting Service of the U.S. Department of Agriculture were used to calculate the quantity sold or the value of the estimated quantity sold for this group of crops.

For vegetables harvested for sale, farm operators were asked to report the value of all vegetables sold. The office verification consisted of review by electronic computer to insure that reasonable values were reported for the acreages of the various vegetables harvested. Computer changes which affected county totals significantly were reviewed and corrected, when necessary, by an agricultural statistician.

For corn, sorghums, small grains, and hays, farm operators were asked to report the quantity sold or to be sold. Most of these crops are

grown for feed and seed on the farm and for sale. For the grain crops usually sold (wheat, rye, buckwheat, rice, and flaxseed), a check was made to see that the quantity sold was reported. If not reported, the quantity sold was estimated by subtracting from the quantity harvested an allowance per acre for seed and a percentage of the crop harvested for use on the farm. If the quantity sold was reported, a check was made to see that the quantity sold did not exceed the quantity harvested.

Corn, grain sorghums, oats, and barley are feed grains, most of which are fed on the farm on which harvested. If there were reports of these feed grains harvested and none were reported sold and there were no livestock or poultry on the farm, the entire quantity harvested (after making a specified allowance per acre for seed) was considered as sold. If there were livestock or poultry on the farm, the questionnaire entries were reviewed by an electronic computer to determine how much, if any, of these feeds should be considered as sold. For details regarding the determination of quantity sold, see the introduction to this volume.

Livestock and livestock products—The checking of information on each questionnaire on the sale of livestock and livestock products was performed by an electronic computer. The checking was essentially of two kinds: (1) to determine if the value of sales represented a reasonable amount for the number sold, and (2) that quantities reported sold were reasonable when compared with the number on the farm, etc.

Livestock sold alive—The data for value of animals sold alive in 1964 represent totals obtained by adding the reports for all farms. The data for 1959 are estimates for all farms based on reports for only a sample of farms. For 1964, the dollar value of sales for all animals sold alive was obtained from the farm operator. For 1959, the value of cattle, calves, and horses and mules sold was obtained from the farm operator, while the values of sheep and lambs sold, hogs and pigs sold, and goats and kids sold were computed by using average prices for each State.

Poultry sold—For the 1964 census, the number of chickens sold was obtained for two groups: (1) broilers and other meat-type chickens sold for slaughter, and (2) hens and roosters sold for slaughter. The two groups for the 1959

census were (1) broilers, and (2) other chickens. The other questions relating to the value of sales were the same in 1964 as in 1959. The questionnaires for both censuses contained instructions that the value of poultry raised or produced under contract were to be reported as sold.

Milk sold—Data for whole milk and cream sold were obtained by adding the reports for all farms. For 1959, the data were estimates for all farms based on reports obtained for farms in the sample. All milk and cream sold from the farm (except quantities purchased from some other place and then resold) were to be included. The values of milk and cream were calculated by using average prices received by farmers at delivery points for each milk marketing area for 1964. For 1959 the values of milk and cream sold were obtained from the farm operator and frequently represented the amount received by the farmer after hauling and other marketing costs had been deducted.

Government payments and loans—The income from Government payments is not included in the value of sales for any farm product. Crops such as corn, wheat, and cotton that had been sealed and placed under Government loan were to be reported as sold.

Value of sales for farms with new operators—Data for both quantity harvested and sales were to relate to the farm, not to the operator. When a farm operator left a farm during 1964 and had disposed of his crops and livestock before the date of enumeration, information regarding production and sales was usually obtained from the new operator who usually could ascertain the kinds and acreages of crops that had been harvested.

Farm products purchased for resale—The instructions to enumerators stated that items purchased for resale were not to be included in the value of sales.

Sales of animals were to be included only when the animals had been on the farm or ranch or in the feedlot for 30 days or more. In processing the questionnaires, the sales figures for feedlots and apparent livestock dealers were compared with the number of livestock on hand. When there was any question as to whether or not the reported sales were correct, letters were written or telephone calls were made to determine the correct figures.

Gross income of farm operators—Value of sales, as computed for the census of agriculture, does not represent the gross income of farm operators. The principal omissions in respect to gross income of farm operators and their families are: (a) income received from nonfarm sources such as off-farm work, interest on investments, payments of Social Security and old-age assistance, veterans' allowances, and unemployment compensation; (b) Government benefit payments, cash or other rentals from farm and nonfarm property, and income from businesses conducted on or off the farm; and (c) changes in the values of farm inventories of crops, livestock, and equipment.

Value of farm products sold—Data were obtained for the value of farm products sold in 1964 by enumeration for some products and by estimation for others. The questionnaire used for the 1964 census provided for farm operators to report value of sales for the following products:

Miscellaneous field crops for which a separate inquiry did not appear on questionnaire	Sheep and lambs Horses, mules, colts, and ponies Goats and kids Turkeys
Vegetables	Ducks
Nursery and greenhouse products	Geese
Standing timber	Turkey eggs
Poles, piling, bark, bolts, mine timbers	Duck eggs
Cattle, excluding calves	Miscellaneous poultry such as started pullets, guineas, etc.
Calves	Mink, chinchillas
Hogs and pigs	Bees
	Honey

For all other agricultural products, the value of sales was calculated during the office processing. The State average prices used for calculating the value of farm products sold were compiled for the Bureau of the Census by the Statistical Reporting Service of the U.S. Department of Agriculture.

In the calculation of the value of farm products sold for 1964 one of the following three procedures was used:

(1) For the products for which data for quantities sold were obtained on the agriculture questionnaire, the State average prices were multiplied by the totals of the quantities reported as sold or the quantities reported as

produced for sale. The following products were covered by this procedure:

Corn for grain	Sawlogs and veneer
Corn for silage	logs
Sorghums for grain,	Christmas trees
seed, silage, sirup,	Gum for Naval stores
and dry forage	Maple sap
All small grains	Broilers and other
All hay crops	meat-type chickens
All berries and	Hens and roosters
small fruits	sold for slaughter
Firewood and	Chicken eggs
fuelwood	Milk
Pulpwood	Cream
Fence posts	

(2) For most of the agricultural products which are customarily produced for sale, the entire quantity produced was considered as sold. The State average prices were multiplied by the total production. The following products were covered by this procedure:

Cotton	Safflower
Popcorn	Sugarcane for sugar
Sugar beets for	Tobacco
sugar	Wool
Broomcorn	Mohair

(3) For "all other crops," the State average prices were multiplied by the quantities sold as estimated on the basis of crop-disposition data furnished by the Statistical Reporting Service of the U.S. Department of Agriculture, or on the basis of data reported for the questions for "other crops" on the agriculture questionnaire, or on the basis of data available from earlier censuses.

For all tree fruits, nuts, and grapes, the entire quantity harvested was considered as sold, except for some fruits in States where a portion of the crop was not marketed or was subjected to excess cullage as indicated by data obtained from the Statistical Reporting Service of the U.S. Department of Agriculture.

Data for the sales of farm products represent total sales for the entire farm, regardless of who shared the receipts. For tenant-operated farms, the landlord's share of the agricultural products was considered as sold provided the products were moved off the tenant farm. All crops, livestock, and poultry raised under a contract arrangement were considered as sold from the farm where they were raised or produced. For institutional farms, all agricultural products produced on land operated

by the institution and consumed by the inmates were considered as sold.

All sales data relate to one year's farm operations. Crop sales are for crops harvested during the crop year whether the crops were actually sold immediately after harvest or placed in storage for later sale. Sales of livestock, livestock products, poultry, and poultry products relate to the calendar year, regardless of when the livestock or products were raised or produced. All wool and mohair reported as shorn or clipped was considered as sold.

The total value of farm products sold for 1964 includes income which the farm operator and members of his family received from boarders or lodgers, or from providing hunting, fishing, or other recreational services.

The data for the 1959 Census of Agriculture for the value of farm products sold are not fully comparable with those for 1964. The comparability of the data for the two censuses was affected by the following:

(1) The values of milk, cream, and butterfat for 1959, were obtained from the farm operator but were calculated for 1964 by using average prices received by farmers at the delivery point for each milk marketing area. The values reported by farmers for milk and cream for 1959 frequently represented the amount received by the farmer after hauling and other marketing costs had been deducted.

(2) Data on the quantity of milk and cream sold, and the number and value of cattle and calves sold, hogs and pigs sold, sheep and lambs sold, and goats and kids sold, represent totals for all farms for 1964, but are estimates for all farms based upon reports for a sample of farms for 1959. Since the data for 1959 are subject to sampling errors, the difference between the totals for 1964 and 1959 may not always indicate the change accurately, especially if the number of farms reporting the item is small.

(3) The value of farm products sold includes the sales of gum for naval stores, mink, other fur-bearing animals, goat milk, bees and honey, and income received from boarders and lodgers, and from hunting, fishing, and other recreational services for the 1964, but not for the 1959, census.

Recreation income—Recreation income includes gross cash receipts obtained from fees, permits, and rentals; privileges of hunting, fishing, swimming, boating, camping, picnicking, horseback riding, skiing, and hiking; gross receipts from boarding and lodging vacationers and others; and rental of cabins and lodges located on the farm or ranch.

Classification of farms—Farms were grouped

into two major categories, commercial farms and other farms, mainly on the basis of total value of products sold. In general, all farms with a value of sales amounting to \$2,500 or more were classified as commercial if the farm operator was under 65 years of age and he did not work off the farm 100 or more days during the year. The remaining farms with a value of sales of \$50 to \$2,499 were included in one of the three groups of "other farms."

Class	Number of farms		Criteria		Farms excluded
	1964	1959	Value of farms products sold	Other	
United States, total.....	3,157,857	3,707,973	(X).....	(X).....	(X).
Commercial farms, total.....	2,165,712	2,416,017	(X).....	(X).....	(X).
Class I.....	141,914	102,099	\$40,000 and over.....	None.....	Abnormal.
Class II.....	259,898	210,402	\$20,000 to \$39,999.....	None.....	Abnormal.
Class III.....	467,096	483,004	\$10,000 to \$19,999.....	None.....	Abnormal.
Class IV.....	504,614	659,881	\$5,000 to \$9,999.....	None.....	Abnormal.
Class V.....	443,918	617,677	\$2,500 to \$4,999.....	None.....	Abnormal.
Class VI.....	348,272	348,954	\$50 to \$2,499.....	For 1964 and 1959: operators under 65 years of age; For 1964 only: operators worked off the farm less than 100 days; For 1959 only: operators worked off the farm less than 100 days and the income from off-the-farm sources was less than the total value of farm products sold.	Abnormal.
Other farms, total.....	992,145	1,291,956	(X).....	(X).....	(X).
Part-time.....	639,409	884,785	\$50 to \$2,499.....	For 1964 and 1959: operators under 65 years of age; For 1964 only: operators worked off the farm 100 days or more; For 1959 only: farm operators worked off the farm 100 days or more, or income of farm operator and members of his family was greater than value of farm products sold.	Abnormal.
Part-retirement.....	350,538	404,110	\$50 to \$2,499.....	Farm operator 65 years old or over.....	Abnormal.
Abnormal.....	2,178	3,061	Not a criterion.....	Institutional farms, Indian reservations, experimental farms, grazing associations, etc.	(X).

X Not applicable.

Commercial farms—Commercial farms were divided into six economic classes on the basis of the total value of all farm products sold as follows:

Class of farm	Value of farm products sold
I.....	\$40,000 or more
II.....	\$20,000 to \$39,999
III.....	\$10,000 to \$19,999
IV.....	\$ 5,000 to \$ 9,999
V.....	\$ 2,500 to \$ 4,999
VI*.....	\$50 to \$2,499

*Provided the farm operator was under 65 years of age and he did not work off the farm 100 or more days.

Other farms—Other farms were divided into three economic classes as follows:

- Part-time—Farms with a value of sales of farm products of \$50 to \$2,499 were classified as "part-time" if the operator was under 65 years of age and he worked off the farm 100 or more days.
- Part-retirement—Farms with a value of sales of farm products of \$50 to \$2,499 were classified as "part-retirement" if the farm operator was 65 years old or over. Most of these are farms on which the income from nonfarm sources was

greater than the value of sales of agricultural products.

- Abnormal—All institutional farms and Indian reservations were classified as "abnormal" regardless of the value of sales. Institutional farms include those operated by hospitals, penitentiaries, schools, grazing associations, government agencies, etc.

The classification of farms by economic class of farm for 1964 was made on the same basis as for 1959 for farms with the sale of farm products of \$2,500 or more. Changes in the criteria used for classifying farms with a value of farm products sold of \$50 to \$2,499 as commercial and part-time differ for the 1964 and the 1959 censuses. In 1959, farms with a value of farm products sold of \$50 to \$2,499 were classified as part-time farms when the farm operator worked off the farm 100 days or more; or when the farm operator stated that the income he and members of his family received from sources other than the farm operated exceeded the value of farm products sold. Information was not available for all farms regarding the relationship of income of the farm operator and members of his family from sources other than the farm operated to the total value of farm products sold for 1964,

and this criterion was not used in 1964. Thus, the number of part-time farms for 1964 includes only those farms on which the farm operator worked off the farm 100 days or more. It is estimated on the basis of data available for a sample of approximately 20 percent of the farms that the number of 1964 farms for which the income received by the farm operator and members of his family from sources other than the farm operated, exceeded the value of farm products sold for 158,000 farms classified as Class VI commercial farms.

The following data show the number of part-time and class VI farms for 1964, on the basis of the criteria used for the 1964 census.

Subject	Number of farms
Part-time.....	639,409
Class VI.....	348,272

The grouping of farms by economic class into commercial and other farms represents an arbitrary separation of census farms into two groups. Since data are given in table 13 for each of the eight economic classes of farms, the user may make other groupings by combining classes of farms if he so desires. Data in table 11 give counts for 15 groups of farms classified on the basis of the total value of farm products sold. Table also provides detailed frequency distribution data regarding sources and amounts of income received by the farm operator and members of his household from sources other than the farm operated. Characteristics of farm operators and members of farm operator's family, as well as other characteristics of the farm producing units and their component major enterprises are also provided.

Detailed comparative data for the 1959 census for farms classified by economic class may be obtained from table 5, chapter XI of volume II of the reports for the 1959 census.

The classification of farms by economic class was first made for the census of 1945. It has become increasingly difficult to collect and publish meaningful data about farms because of their increasing size and the increasing diversity of the size and kinds of agricultural producing units. The variety of production processes used in agriculture, and the scale of operations have increased greatly in

20 years. In any one year, there are wide ranges among farms in crop yields and production per animal. There is substantial variation in the inherent productive capacity of farmland from one farm to another, even in the same community. Moreover, some farmers are more skilled in managing agricultural operations even when the identical production techniques are used. The land area and labor supply of many farms are fixed and are often used regardless of other factors. The 20 years from 1945 to 1964 were years of rapid, widespread, and large scale changes on farms. Technological advances in plant and animal breeding, plant and animal disease prevention and control, feeds and feeding practices, water control and usage, the development and use of new larger and more efficient equipment for soil preparation, crop and animal handling equipment, increasing availability and use of inputs from sources off farms, the great improvement in the management skills of farmers and increasing regional specialization of many farm products have made the differences among farms greater and greater. Moreover, the improved practices and new technology have bypassed many farms during the last two decades. On the other hand, new technology has been used on other farms so that the kind and scale of their operations are far beyond those existing on any farm in 1945. The classification of farms by economic class and economic class by type of farm, have been continued for four censuses in order to provide not only a more accurate description of farms in various groups, but also to provide more meaningful measures of size and change from census to census, and from area to area.

Large-scale farms—Farms with a value of farm products sold of \$100,000 or more have been designated arbitrarily as large-scale farms. Data for these farms are presented in table 14. Data for individual States appear in State table 23 of volume I.

Data based upon reports for a sample of farms—Data for farm equipment; use of fertilizer and lime; use of insecticides, pesticides, and herbicides; characteristics of persons in the farm operator's household; farm expenditures; and value of farmland and buildings, questions 307 to 354, sections 9, 10, 11, 12, and 13 of the agriculture questionnaire (see facsimile in the introduction) were collected for a sample con-

sisting of (1) all farms having 1,000 acres or more in the place, (2) all farms with a value of farm products sold of \$100,000 or more, but with less than 1,000 acres in the place, and (3) a sample of one-fifth of the remaining farms.

The data published for these items are estimates for all farms based upon data for farms in the sample.

Differences in estimates based on reports for a sample of farms and totals for all farms—Data representing estimates based on a sample and given in table 13 for farms classified by economic class of farm; for the characteristics of farm operators; equipment and facilities; use of fertilizer and lime, and use of agricultural chemicals; land-use practices; persons living in farm-operator households; expenditures; and value of land and buildings will not always agree exactly with the data obtained by the tabulation of data collected for all farms. For a detailed statement regarding these differences, see the introduction to this volume.

Changes in the values of farm products sold for the United States, 1959 and 1964—The values of farm products sold for 1964 and 1959 are given in the table below. The value of all farm products sold for 1964 totaled \$35,294 million, an increase of \$4,801 million, or about 16 percent over the \$30,493 million in 1959.

Year	Total value of all farm products sold (million dollars)	Value of crops (million dollars)	Value of livestock and products (million dollars)
1964.....	35,294	16,412	18,841
1959.....	30,493	13,434	17,059
1954 ²	24,645	12,352	12,292
1949.....	22,217	10,081	12,136
1944 ²	16,231	7,586	8,645
1939 ³	6,734	3,180	3,554

¹Includes recreation income. ²Data for Alaska and Hawaii are not included. ³Data for Alaska are not included.

Part of the increase from 1959 to 1964 in value of farm products sold represents changes in prices and part from changes in quantities sold. The following table shows the unit price for the most important farm products for the three most recent censuses. Quantities sold may be obtained from chapter 2 for livestock and livestock products, and from chapter 4 for crops.

Farm product	Quantity sold (million units)			Average price per unit sold			Value of sales (million dollars)	
	1964	1959	1954	1964	1959	1954	1964	1959
Cattle (excluding calves) sold alive.....number..	35	30	24	174.25	204.16	136.94	6,030	5,952
Hogs and pigs sold alive.....number..	84	81	57	27.95	30.10	39.70	2,334	2,435
Whole milk and cream.....hundredweight..	1,076	979	823	4.31	4.11	4.05	4,637	4,022
Cotton.....bales..	15	14	13	162.23	168.37	169.25	2,390	2,343
Calves sold alive.....number..	28	22	20	75.22	86.50	48.01	2,132	1,880
Corn for grain.....bushels..	1,807	1,697	1,009	1.16	1.05	1.44	2,099	1,780
Wheat.....bushels..	1,163	980	804	1.37	1.77	2.13	1,597	1,736
Soybeans for beans.....bushels..	632	(NA)	308	2.66	(NA)	2.52	1,679	981
Chicken eggs.....dozens..	4,282	3,330	2,654	.34	.32	.36	1,462	1,061
Tobacco.....pounds..	1,988	1,647	1,922	.59	.58	.51	1,168	948
Broilers.....number..	1,915	1,414	792	.49	.53	.70	944	750
Turkeys, ducks, geese, and their eggs sold.....number..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	564	340
Alfalfa and alfalfa mixtures cut for hay.....tons..	21	12	9	24.45	23.51	22.86	523	278
Sheep and lambs sold alive.....number..	22	25	22	16.04	13.31	14.67	354	338
Sorghums for grain.....bushels..	387	382	178	(NA)	.87	1.26	(NA)	333
Barley.....bushels..	298	276	237	(NA)	.87	1.09	(NA)	241
Sugar beets for sugar.....tons..	23	17	14	11.94	11.14	11.17	277	187
Apples.....pounds..	5,776	5,789	5,234	.04	.04	.05	222	207
Oats for grain.....bushels..	342	279	348	(NA)	.64	.71	(NA)	179
Grapes.....pounds..	6,865	6,042	4,836	.031	.027	.025	215	165

NA Not available.

Five crops and five livestock and livestock product items accounted for about 80 percent of the value of all farm products sold in the United States in 1964.

All crops—The value of all crops sold—field crops, vegetables, fruits, nuts, forest products, and horticultural specialty crops—totaled \$16,412 million for the 50 States for 1964. This total was 22 percent above the \$13,434 million for 1959. The total value of all crops sold represented 46.5 percent of the total value of all agricultural products sold in 1964 compared to 44.1 percent for 1959.

Cotton—Cotton (including cottonseed) was the most important single crop sold on the basis

of the value of sales. The value of sales for 1964 was \$2,390 million and represented 6.8 percent of the total value of all farm products sold and 14.6 percent of the total value of all crops sold. Although the production of cotton increased by 821 thousand bales the total value of cotton in 1964 was about the same as that for 1959 because of a decrease in average price per bale.

Corn—Corn was the second most important single crop item from the standpoint of total value of sales. The 1964 value of the portion sold as grain was \$2,099 million and represented 5.9 percent of the total value of sales of all farm products. The 1964 value of sales comprised 12.8 percent of the total value of

the sales of all crops. The value of corn sold as grain in 1964 was \$319 million higher than the \$1,780 million for 1959. The change in value of corn sold resulted partly from the increase in the quantity sold and partly from an increase in the average price per bushel. The quantity sold for 1964 was 1,807 million bushels as compared with 1,697 million bushels in 1959. The average price per bushel increased from \$1.05 in 1959 to \$1.16 in 1964.

Soybeans—Soybeans harvested for beans was the third most important crop on the basis of the value of sales. The value of sales of the 1964 crop was \$1,679 million and represented 4.8 percent of the total value of farm products sold and 10.2 percent of the total value of all crops sold. The average value per bushel for the 1964 crop was \$2.66 as compared with \$1.97 for 1959.

Wheat—Wheat was the fourth most important crop on the basis of the value of sales. The value of sales for the 1964 crop was \$1,597 million and represented 4.5 percent of the total value of farm products sold and 9.7 percent of the total value of all crops sold. The quantity of wheat sold represented 95.5 percent of the quantity harvested in 1964 as compared with 92.8 percent in 1959. The average value per bushel for the 1964 crop was \$1.37 as compared with \$1.77 for 1959.

Vegetables—The total value of vegetables sold in 1964 was \$987 million, or 33.5 percent above the \$740 million for 1959. For 1964, vegetables sold represented 2.8 percent of the total value of all farm products sold, as compared with 2.4 percent for 1959. The value of vegetables sold was 6.0 percent of the total value of all crops for 1964, as compared with 5.5 percent for 1959.

Fruits and nuts—The total value of fruits and nuts sold for 1964 was calculated to be \$1,674 million, or 19.7 percent above the total of \$1,398 million for 1959. The value of fruits and nuts sold represented 4.7 percent of the value of all farm products sold in 1964 as compared with 4.6 percent for 1959. The 1964 total represents 10.2 percent of the total value of all crops sold, as compared with 10.4 percent for 1959. In 1964, as in 1959, the value of sales was computed by multiplying the quantity harvested by a State average price per unit.

Horticultural specialty crops—The total value of horticultural specialty crops sold in 1964 totaled \$705 million and was 14.6 percent above the \$615 million reported for 1959. For 1964 the value of sales represented 4.3 percent of the total value of all crops sold as compared with 4.6 percent for 1959.

Forest products sold—The value of forest products sold for 1964 was \$174 million, or 6.9 percent less than the \$187 million for 1959. The value represented 0.5 percent of the total value of all farm products sold in 1964 as compared with 0.6 percent for 1959.

Livestock and poultry and livestock and poultry products sold—The total value of sales of livestock and poultry and their products for 1964 was \$18,841 million, or 10.4 percent greater than \$17,059 million reported in 1959. Livestock, poultry and their products comprised 53.4 percent of the total value of all products sold in 1964 as compared with 55.9 percent in 1959.

Cattle and calves—The value of sales of cattle and calves totaled \$8,162 million for 1964 and was 4.2 percent greater than the total of \$7,832 million for 1959. Cattle and calves sold represented 23.1 percent of the total value of all farm products sold for 1964 as compared with 25.7 percent for 1959.

The cattle and calves sold alive totaled 63 million head in 1964, as compared with 51.3 million head sold in 1959. The number of cattle and calves sold includes the number sold for further fattening and growth by other farm operators, as well as those sold for slaughter.

Hogs and pigs—The 1964 value of sales for hogs and pigs was \$2,334 million. This is 4.1 percent below the \$2,435 million sales for 1959.

The value of hogs and pigs sold comprised 6.6 percent of all farm products sold for 1964 as compared with 8.0 percent for 1959. Because the number of hogs and pigs sold was under reported, the value of hogs and pigs sold may be understated by about 15 percent for 1964.

Sheep and lambs—For 1964, the value of sheep and lambs sold totaled \$354 million, or about 4.8 percent above the \$338 million for 1959.

The total sales shown by the census include not only sheep and lambs sold for slaughter, but also those sold to other farmers as well as those shipped to stockyards and auction yards for further sale to farm operators for further growth or fattening.

Dairy products—The total value of dairy products, milk and cream, sold was \$4,637 million for 1964, compared with the \$4,022 million reported for all dairy products sold for 1959. Sales of milk and cream in 1964 represented 24.6 percent of the total value of all livestock and poultry and their products sold, and 13.1 percent of the value of all farm products sold.

Broilers—The value of broilers sold for 1964 totaled \$944 million, or 25.9 percent more than the total of \$750 million for 1959. The value of broilers sold represented 2.7 percent of the value of all farm products sold in 1964.

Chicken eggs—The value of sales for chicken eggs in 1964 totaled \$1,462 million, or 37.7

percent above the \$1,061 million total for 1959. The value of chicken eggs sold represented 4.1 percent of the value of all farm products sold in 1964.

Comparison of the Value of Farm Products Sold and Estimates of Cash Receipts from Farm Marketings by the U.S. Department of Agriculture—The estimates made by the U.S.

Department of Agriculture of cash receipts from farm marketings and the data on the value of farm products sold are not directly comparable because of differences in definitions used and the time period to which the data relate. For cash receipts from farm marketings from livestock and livestock products, both census data and U.S. Department of Agriculture estimates relate to the calendar year, but census data for livestock sold alive include sales to the operator of other farms both within the State, and also outside of the State in which the farm is located, while the U.S. Department of Agriculture estimates relate only to sales of livestock made to operators of farms in other States.

Farm products	Farm products marketed				Value of farm products sold, 1964 census (million dollars)	USDA estimates of cash receipts from marketing (million dollars)	
	Unit of measure	1964 census (million units)	USDA estimates (million units)			Calendar year	Crop year
			Calendar year, 1964	Crop year, 1964			
All farm products.....	(X)	(X)	(X)	(X)	135,253	37,233	(X)
All livestock and products.....	(X)	(X)	(X)	(X)	18,841	19,856	(X)
All crops.....	(X)	(X)	(X)	(X)	16,412	17,377	(X)
Cattle and calves.....	Number.....	63	53	(X)	8,162	7,785	(X)
Dairy products.....	Pounds of whole milk equivalent	110,973	120,478	(X)	4,637	5,027	(X)
Cotton including seed.....	Bales.....	15	(X)	15	2,390	2,521	2,537
Hogs and pigs.....	Number.....	84	86	(X)	2,334	3,034	(X)
Corn for grain.....	Bushels.....	1,807	(X)	1,703	2,099	2,017	1,986
Soybeans for beans.....	Bushels.....	632	(X)	679	1,679	1,833	1,779
Wheat.....	Bushels.....	1,163	(X)	1,211	1,597	1,617	1,659
Eggs.....	Dozens.....	4,282	5,231	(X)	1,462	1,770	(X)
Tobacco.....	Pounds.....	1,988	(X)	2,228	1,168	1,414	1,318
Broilers.....	Number.....	1,915	2,161	(X)	944	1,070	(X)

X Not applicable.

¹Does not include value of recreation income.

For crops, the census data on the sales of crops relate to sales for the crop year, regardless of whether the sales were made during the calendar year or a later year. In the case of the U.S. Department of Agriculture, the cash receipts from farm marketings relate to the calendar year and the sales quite often include sales of crops produced in 2 or more crop years.

The following table provides totals for census values of farm products sold and estimates of the U.S. Department of Agriculture for cash receipts from farm marketings. The table also shows quantities of farm products sold as shown for the 1964 census and by U.S. Department of Agriculture estimates.

The data given for quantities of crops sold relate to the sale of crops produced during the 1964 crop year.

Changes in the value of crops produced, 1959 to 1964—The following table presents comparative data on the value of crops produced for 1964 and 1959.

For the United States, the value of crops produced in 1964 was \$21,958 million as compared with \$19,109 million in 1959. Part of the increase from 1959 to 1964 represents changes in prices, and part, the increase in production. The following table shows for the United

States, the value of the 20 crops comprising about 80 percent of the value of all crops

harvested, calculated at 1964 prices for both 1964 and 1959.

TABLE 2. Value of Production for Principal Crops Harvested for the United States: 1964, 1959, and 1954

Subject	Quantity harvested (million units)			Unit of measure	Average price per unit			Value of production (million dollars)		
	1964	1959	1954		1964	1959	1954	1964	1959 at 1964 prices	1959 at 1959 prices
Total all crops (including forest products).....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	21,958	(X)	19,109
Total 20 crops.....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	17,367	16,720	15,411
Corn for grain.....	3,361	3,697	2,613	Bushels.....	1.16	1.05	1.44	3,898	4,289	3,871
Cotton.....	15	14	13	Bales.....	162.23	168.37	194.62	2,390	2,257	2,343
Wheat.....	1,218	1,056	909	Bushels.....	1.37	1.77	2.13	1,672	1,447	1,872
Alfalfa and alfalfa mixture for hay.....	68	60	55	Tons.....	24.18	21.21	22.90	1,654	1,448	1,270
Soybeans for beans.....	670	516	324	Bushels.....	2.66	1.97	2.52	1,780	1,372	1,018
Tobacco.....	1,988	1,647	1,922	Pounds.....	0.59	0.58	0.51	1,168	971	948
Oats for grain.....	808	1,001	1,314	Bushels.....	0.63	0.64	0.71	510	631	639
Irish potatoes.....	222	224	204	Hundredweight.....	3.43	2.14	2.16	761	769	480
Sorghums for grain.....	463	508	224	Bushels.....	1.06	0.86	1.26	490	539	439
Clover, timothy and mixture of clover and grasses for hay.....	20	22	24	Tons.....	24.84	19.82	22.61	486	548	437
Oranges.....	8,529	10,702	10,652	Pounds.....	0.055	0.037	0.025	472	589	396
Barley.....	362	398	355	Bushels.....	0.93	0.86	1.08	338	370	343
Rice.....	7,482	5,440	6,528	Pounds.....	0.05	0.05	0.05	369	272	249
Apples.....	5,776	5,789	5,234	Tons.....	0.038	0.036	0.046	222	202	207
Sugar Beets for sugar.....	23	17	14	Pounds.....	11.94	11.14	11.17	277	220	187
Grapes.....	6,865	6,042	4,836	Tons.....	0.031	0.027	0.025	215	187	165
Wild hay.....	9	9	10	Pounds.....	18.15	16.65	15.62	166	157	144
Dry field and seed beans.....	1,766	1,909	1,713	Pounds.....	0.08	0.07	0.08	136	153	138
Peanuts for nuts.....	2,004	1,413	885	Pounds.....	0.112	0.100	0.122	225	155	135
Peaches.....	3,160	3,300	2,666	Pounds.....	0.044	0.040	0.041	138	145	130

X Not applicable.

Importance of commercial farms—Commercial farms were divided into six groups on the basis of only one criterion—the value of farm products sold. The variation for 1964 in the value of farm products sold for commercial farms was very great—from \$50 to more than \$5,000,000. There are also great differences in

the contribution of farms of each economic class to total agricultural production. For example, the sale of farm products from the 142,000 class I farms was greater than from the 1,764,000 farms in economic classes III, IV, V, and VI.

Subject and year	Percent distribution by economic class of farm						
	All commercial farms	Class I	Class II	Class III	Class IV	Class V	Class VI
Number of farms.....1964..	100.0	6.6	12.0	21.6	23.3	20.5	16.1
.....1959..	100.0	4.2	8.7	20.0	27.1	25.6	14.4
Land in farm.....1964..	100.0	28.0	19.2	22.5	16.4	9.5	4.4
.....1959..	100.0	25.8	17.0	22.0	19.3	12.1	3.8
Cropland harvested.....1964..	100.0	21.2	22.3	27.7	18.3	8.3	2.2
.....1959..	100.0	15.0	17.3	27.9	24.3	12.4	3.0
Regular hired farm workers.....1964..	100.0	59.2	19.3	13.2	5.7	2.1	0.5
.....1959..	100.0	48.7	20.4	17.1	9.3	4.0	0.6
Tractors other than garden.....1964..	100.0	13.9	17.7	26.0	22.5	14.0	5.9
.....1959..	100.0	10.0	13.8	25.8	27.1	18.1	5.2
Fertilizer used, tons.....1964..	100.0	34.1	21.9	20.8	13.3	7.2	2.6
.....1959..	100.0	23.4	17.3	23.5	19.3	12.5	4.2
Expenditures, total.....1964..	100.0	51.4	18.8	15.6	8.7	4.1	1.3
.....1959..	100.0	39.3	19.3	19.9	13.5	6.7	1.4
Feed for livestock and poultry.....1964..	100.0	49.8	20.2	16.7	8.4	3.6	1.3
.....1959..	100.0	32.2	20.2	23.5	15.7	7.1	1.3
Purchase of livestock and poultry.....1964..	100.0	61.2	18.0	11.6	5.6	2.7	0.8
.....1959..	100.0	50.2	20.2	15.9	8.8	4.2	0.7
Hired farm labor.....1964..	100.0	62.4	16.4	11.6	6.1	2.8	0.7
.....1959..	100.0	51.7	19.1	15.3	8.9	4.3	0.8
Machine hire and custom work.....1964..	100.0	40.6	16.9	19.0	14.2	7.6	1.8
.....1959..	100.0	30.4	16.0	20.2	18.3	12.0	3.1
Purchase of seeds, bulbs, plants, and trees.....1964..	100.0	34.6	20.1	22.0	13.9	7.1	2.3
.....1959..	100.0	29.4	17.5	23.0	18.1	9.5	2.4
Gasoline and other petroleum fuel.....1964..	100.0	26.6	20.8	24.2	17.0	8.6	2.7
.....1959..	100.0	19.5	17.1	25.8	22.6	12.1	2.9
Value of all farm products sold.....1964..	100.0	43.7	20.7	19.2	10.6	4.7	1.1
.....1959..	100.0	32.8	19.2	22.8	16.0	7.7	1.6
Value of land and buildings.....1964..	100.0	29.3	20.6	22.2	15.3	8.7	4.0
.....1959..	100.0	19.5	18.6	26.1	20.8	11.8	3.1

There were significant differences in the extent that farm operators owned all or part of

the land in the farms they operated.

Economic class of farm	Percent of commercial farms operated by--							
	Full owners		Part owners		Managers		Tenants	
	1964	1959	1964	1959	1964	1959	1964	1959
Commercial farms, total.....	47.1	45.3	31.2	29.2	0.7	0.7	21.0	24.8
Class I.....	30.0	31.4	48.0	44.0	4.8	5.5	17.3	19.1
Class II.....	29.6	32.4	45.2	41.2	1.1	1.6	24.2	24.8
Class III.....	35.8	35.6	39.6	37.2	0.6	0.7	24.1	26.6
Class IV.....	47.0	44.5	31.2	30.6	0.3	0.4	21.5	24.5
Class V.....	58.3	54.1	22.6	22.8	0.2	0.3	18.8	22.8
Class VI.....	68.0	56.5	13.8	15.5	0.2	0.2	18.0	27.9

The quantities of resources used differed greatly among the various economic classes of

farms as shown by the following averages per farm.

Subject and year	Average per farm						
	All commercial farms	Class I	Class II	Class III	Class IV	Class V	Class VI
All land in farms.....acres 1964..	445.8	1,905.6	714.6	465.3	313.0	206.2	122.0
1959..	404.5	2,465.7	791.1	444.9	288.3	191.9	106.3
Cropland harvested.....acres 1964..	136.8	453.8	247.0	168.5	103.7	55.3	21.4
1959..	130.4	483.7	259.7	178.5	114.9	63.7	28.4
Tractors other than garden.....number 1964..	2.2	4.2	2.9	2.4	2.0	1.6	1.3
1959..	2.0	4.2	2.8	2.3	1.8	1.5	1.3
Fertilizer.....tons 1964..	13.4	64.1	21.3	11.8	7.4	5.0	2.9
1959..	10.5	56.5	19.7	11.7	7.5	5.3	3.1
Lime.....tons 1964..	56.6	133.3	78.1	56.7	41.9	33.4	22.1
1959..	47.8	126.4	74.5	53.8	39.4	30.4	20.6
Number of regular hired workers.....persons 1964..	2.6	5.1	1.7	1.4	1.3	1.2	1.2
1959..	2.2	4.8	1.7	1.4	1.3	1.3	1.3
Expenditure, total.....dollars 1964..	7,039	54,937	10,881	5,109	2,588	1,445	572
1959..	5,550	51,626	12,318	5,514	2,759	1,446	526
Feed for livestock and poultry.....dollars 1964..	3,329	25,261	5,014	2,347	1,159	649	309
1959..	2,327	19,014	5,190	2,508	1,271	665	269
Purchase of livestock and poultry.....dollars 1964..	3,988	28,870	4,571	1,822	935	630	346
1959..	3,013	30,305	5,622	1,980	908	560	248
Hired farm labor.....dollars 1964..	2,081	12,939	2,084	967	538	336	196
1959..	1,734	13,267	2,593	1,109	568	342	190
Machine hire and custom work.....dollars 1964..	648	3,613	789	502	357	249	131
1959..	498	3,556	913	494	327	239	121
Purchase of seeds, plants, trees.....dollars 1964..	353	1,898	547	335	197	126	63
1959..	315	2,101	585	326	197	123	72
Gasoline and other petroleum fuel.....dollars 1964..	804	3,161	1,338	883	564	341	157
1959..	616	2,763	1,181	776	504	290	139
Cattle and calves.....number 1964..	60.3	282.0	92.7	61.2	42.3	29.0	15.1
1959..	46.7	285.3	90.6	53.2	34.7	23.1	9.9
Hogs and pigs.....number 1964..	61.2	209.4	127.4	76.6	42.3	22.6	9.1
1959..	49.4	160.8	114.4	76.6	46.1	24.5	10.2
Chickens 4 months old and over.....number 1964..	386.4	5,184.6	699.2	276.8	148.1	84.4	39.2
1959..	227.1	1,727.0	584.0	288.3	178.5	108.7	52.7
Value of land and buildings.....dollars 1964..	65,360	290,503	110,607	67,521	42,000	28,030	16,522
1959..	44,441	220,683	93,526	56,846	33,791	20,739	9,849

There were large variations among farms in the six economic classes in the frequency of

use and rate of use of resources and in the production and sales per unit of resource used.

Subject	All commercial farms		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
Acres of cropland harvested per tractor (other than garden).....	68	75	104	112	85	94	72	81	55	67	40	51	25	43
Average acres of corn harvested for grain per corn picker.....	80	89	159	163	105	121	76	90	56	72	49	71	68	118
Percent of farms reporting—														
Regular hired workers.....	15.7	12.5	71.1	67.7	37.2	37.6	17.5	17.0	7.6	7.3	3.6	3.5	1.1	0.8
More than 1 regular hired worker.....	6.4	4.5	48.5	43.5	14.5	14.0	4.7	4.1	1.5	1.4	0.5	0.7	0.1	0.2
Expenditure of \$100 or more for gasoline and other petroleum fuel and oil for the farm business.....	86.8	81.9	99.1	98.0	98.8	96.9	98.5	96.1	95.6	92.1	86.7	76.9	43.7	38.2
Use of commercial fertilizer.....	75.8	71.7	82.4	73.5	86.1	75.5	83.1	75.5	76.8	71.0	72.2	69.0	58.0	70.1
Tractors (other than garden).....	84.7	81.4	93.9	91.9	95.1	92.6	94.7	93.1	90.6	89.0	82.3	77.9	53.9	47.1
Purchase of \$200 or more for feed for livestock and poultry ¹	58.1	70.0	70.2	72.6	76.0	80.2	72.8	83.1	60.7	77.7	47.3	65.0	29.0	39.2
Expenditure of \$500 or more for hired labor.....	26.4	25.5	82.6	88.8	55.2	66.6	33.8	37.2	19.4	20.4	10.3	10.6	2.1	2.3
Pounds of fertilizer used per acre fertilized:														
Total.....	306	292	375	357	278	274	257	255	279	270	330	321	402	369
Hay and cropland pasture.....	311	322	314	312	307	333	293	319	305	312	340	335	382	355
Corn for all purposes.....	306	260	350	280	307	263	279	244	287	252	323	283	363	304
Sorghums for all purposes.....	154	131	185	143	153	129	130	115	125	115	135	135	178	147
Wheat.....	146	156	146	114	143	149	139	159	149	164	181	192	199	226
Irish potatoes.....	1,017	1,033	1,076	1,043	889	1,088	655	976	705	901	787	931	1,035	968
Tobacco.....	1,822	1,602	2,220	2,382	1,928	1,691	1,878	1,659	1,757	1,584	1,676	1,531	1,731	1,534
Cotton.....	387	375	376	325	368	336	362	379	423	436	449	448	472	456
Value of milk and cream sold per milk cow.....dollars..	328	255	501	433	397	340	317	279	234	208	164	144	60	69
Value of eggs sold per chicken 4 months old and over.....dollars..	4.39	3.33	5.28	4.81	4.24	4.09	3.48	3.25	2.89	2.58	2.39	2.13	1.13	1.19
Yield per acre of—														
Corn for grain.....bushels..	63.5	54.3	78.0	67.0	72.4	63.9	61.7	58.0	51.4	49.4	44.4	41.8	32.3	30.3
Alfalfa and alfalfa mixtures cut for hay and for dehydrating.....tons..	2.5	2.4	3.5	3.4	2.6	2.5	2.3	2.3	2.1	2.1	1.9	1.9	1.6	1.6
Clover and timothy, and mixtures of clover and grasses cut for hay.....tons..	1.5	1.6	1.7	1.7	1.7	1.8	1.6	1.8	1.5	1.6	1.3	1.5	1.1	1.3
Irish potatoes.....hundredweight..	190	188	205	209	155	184	130	166	113	138	109	120	107	109
Cotton.....bales..	1.1	1.0	1.4	1.3	0.9	0.9	0.8	0.8	0.7	0.7	0.8	0.7	0.8	0.7

¹For 1959, purchase of \$100 or more for feed for livestock and poultry.

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
Number of farms.....(1,000)...	3,158	2,160	142	263	465	513	436	342	643	353	2
Value of all farm products sold.....(1,000) dollars...	35,293,530	34,368,586	15,012,444	7,114,120	6,613,894	3,653,346	1,611,028	363,755	495,114	283,994	145,835
Average value of farm products sold per farm.....	11,176	15,869	105,786	27,373	14,160	7,240	3,629	1,044	774	810	66,958
Income of all persons in farm operator's household from sources other than the farm operated:											
Total, all sources.....1,000 households... (1,000) dollars...	2,564	1,597	89	179	331	387	357	255	643	323	1
Percent of all households with income.....	10,053,167	5,460,035	483,962	648,376	1,062,700	1,330,222	1,365,015	569,761	3,853,556	734,102	5,473
Average per farm (based on all farms).....dollars...	81.2	73.9	62.7	68.1	71.2	75.4	81.9	74.6	100.0	91.5	50.0
Wages and salaries.....1,000 households... (1,000) dollars...	3,921	2,528	3,403	2,465	2,288	2,595	3,133	1,668	5,991	2,081	2,513
Nonfarm business or profession.....1,000 households... (1,000) dollars...	1,708	1,021	49	107	207	257	244	158	597	89	1
Social Security, pensions, veteran and welfare payments.....1,000 households... (1,000) dollars...	6,450,996	3,016,124	154,527	273,599	550,627	820,519	915,869	300,982	3,209,900	221,298	3,674
Rent from farm and nonfarm property, interest, dividends, etc.....1,000 households... (1,000) dollars...	311	188	12	21	38	47	44	26	102	21	(1)
Percent distribution of income by source:											
All sources.....	100.0	54.3	4.8	6.4	10.6	13.2	13.6	5.7	38.3	7.3	0.1
Wages and salaries.....	100.0	46.8	2.4	4.2	8.5	12.7	14.2	4.7	49.8	3.4	0.1
Nonfarm business or profession.....	100.0	56.4	5.9	7.2	11.0	13.6	14.0	4.7	39.9	3.6	0.1
Social Security, pensions, veterans and welfare payments.....	100.0	51.3	1.8	3.3	6.8	10.7	14.2	14.5	7.3	41.3	(1)
Rent from farm and nonfarm property, interest, dividends, etc.....	100.0	84.7	15.3	16.4	20.4	16.4	10.5	5.8	7.5	7.6	0.1
By amounts per household:											
\$1 to \$499.....1,000 households... (1,000) dollars...	323	274	13	31	59	63	48	60	10	39	(1)
\$500 to \$999.....1,000 households... (1,000) dollars...	79,850	68,069	3,286	7,754	14,091	15,597	11,726	15,015	2,187	9,564	30
\$1,000 to \$1,499.....1,000 households... (1,000) dollars...	283	209	9	21	43	49	41	46	12	63	(1)
\$1,500 to \$1,999.....1,000 households... (1,000) dollars...	208,939	152,113	6,165	15,154	31,527	35,850	30,027	33,989	8,433	48,329	64
\$2,000 to \$2,999.....1,000 households... (1,000) dollars...	249	171	8	18	37	41	35	33	17	61	(1)
\$3,000 to \$3,999.....1,000 households... (1,000) dollars...	303,309	208,488	9,118	21,896	44,602	49,766	42,965	40,143	20,096	74,659	6.7
\$4,000 to \$4,999.....1,000 households... (1,000) dollars...	190	127	6	15	29	31	26	21	19	44	(1)
\$5,000 to \$5,999.....1,000 households... (1,000) dollars...	326,890	217,621	9,619	25,577	49,610	52,203	44,327	36,285	32,228	76,940	102
\$6,000 to \$6,999.....1,000 households... (1,000) dollars...	296	192	10	23	42	46	40	31	58	46	(1)
\$7,000 to \$7,999.....1,000 households... (1,000) dollars...	718,481	465,617	23,375	54,867	102,530	111,602	97,958	75,285	140,806	111,822	236
\$8,000 to \$8,999.....1,000 households... (1,000) dollars...	251	147	9	17	30	36	34	21	80	23	(1)
\$9,000 to \$9,999.....1,000 households... (1,000) dollars...	856,994	502,993	29,035	58,914	103,645	122,029	117,031	72,338	274,479	78,771	351
\$10,000 to \$14,999.....1,000 households... (1,000) dollars...	222	116	7	14	23	29	30	14	91	14	(1)
\$15,000 to \$19,999.....1,000 households... (1,000) dollars...	981,012	515,601	30,654	60,341	102,840	128,377	132,959	60,430	401,307	63,384	721
\$20,000 and over.....1,000 households... (1,000) dollars...	749	360	28	41	67	92	102	29	397	32	(1)
Total.....	6,578,091	3,329,534	372,710	403,872	613,256	814,798	888,024	236,875	2,974,021	270,634	3,902

¹Less than 500 or less than 0.05 percent.

Large-scale farms—Farms with a total value of farm products sold of \$100,000 or more have been designated large-scale farms. These large-scale farms do not include all farms that might be considered large on the basis of acreage of land in the farm, acres of cropland, number of cattle, total expenditures, number of hired employees, value of land and buildings, etc. Moreover, some of the farms are large because they purchased considerable quantities of farm products produced by other farm operators and used these farm products

as inputs in their farm operations. For example, farms may purchase cattle, calves, hogs, pigs, turkeys, etc., for further growth or fattening; or they may purchase feed for use in the fattening of livestock; or for producing milk, eggs, broilers, turkeys, etc. In such cases, the value of farm products sold may be relatively large because of the use by the farm operator of purchased farm products rather than because of the value added on the farm.

Large-scale farms in 1964 represented only 1.4 percent of all commercial farms, but they accounted for one-fourth of the value of all farm products sold from commercial farms. Large-scale farms accounted for an important proportion of some farm products sold in 1964. Large-scale farms accounted for 25 percent of the cattle and calves sold, 27 percent of the sheep and lambs sold, 21 percent of the broilers sold, 36 percent of the eggs sold, 62 percent of the vegetables sold, 47 percent of all fruits and nuts sold, 43 percent of rice harvested, 54 percent of the Irish potato crop, 30 percent of the cotton production, 80 percent of the production of the sugarcane crop, and 34 percent of the sugar beet crop. The quantities of farm inputs used by large-scale farms are proportionately smaller than the percentages of farm products produced. While large-scale farms produced one-fourth of all farm products sold, they used only one-eighth of the land, one-twelfth of the cropland harvested, and had 4.1 percent of the tractors other than garden tractors and motor tillers, and less than 5 percent of most types of farm equipment counted in the census. On the other hand, large-scale farms used a significant proportion of some purchased inputs—30 percent of the feed purchased for livestock and poultry, 41 percent of the hired farm labor, 40 percent of livestock and poultry purchased, 16 percent of fertilizer, and 30 percent of the irrigated land.

Large-scale farms vary greatly in size measured by acres of land in the farm. One out of ten contain less than 50 acres and two out of five have 1,000 acres or more.

One-fourth of the commercial farms operated by managers in 1964 were large-scale farms and manager-operated farms comprised one out of every twelve large-scale farms.

Table 14 presents data for large-scale farms classified by type of farm (see chapter 10 of this report for detailed specifications for classifying farms by type). However, it should be pointed out that many large-scale farms have more than one important farm enterprise and that many of the large farms are important producers of more than a single farm product as the three following examples indicate: Of the 2,141 large-scale cash-grain farms, 655, or 31 percent, had 100 cattle or more; 119 had 100 hogs or more; 104 had an average of 720 sheep per farm; 28 had sales of milk and cream with an average per farm of over \$19,000; and 497 harvested cotton with an aver-

age per farm of 267 bales. Of the 3,465 large-scale cotton farms, 885, or 26 percent, had 100 cattle or more; 68 had 100 hogs or more; 1,368 had wheat harvested with an average per farm of 187 acres; 207 had rice harvested with an average of 162 acres per farm; 170 had sugar beets with an average of 201 acres per farm; and 233 had vegetables sold with an average value per farm of \$48,983. Of the 2,576 large-scale dairy farms, 24 reported the farrowing of 50 or more litters of pigs; 81 had sales of chicken eggs with an average of 49,467 dozen per farm; 302 produced cotton with an average of 188 bales per farm; and 71 produced vegetables for sale, with average sales of vegetables of \$25,353 per farm.

The level of education of the operators of large-scale farms differs significantly from that of the operators of all commercial farms. Of the 31,401 operators of large-scale farms, 32 percent had completed one or more years of college. The corresponding figure for all operators of commercial farms was 10 percent.

The number of large-scale farms in 1964 was 57 percent greater than the number in 1959. Part of the increase resulted from the increase in the number of feedlots and in the number of poultry and turkey farms. The number of large-scale livestock farms other than dairy and poultry farms and livestock ranches, increased from 4,171 in 1959 to 6,692 in 1964 and the number of large-scale poultry farms, from 2,000 to 4,744. While farms of these two types made up only one-third of all large-scale farms in 1959, the increase in the numbers accounted for almost half the increase in the number of large-scale farms from 1959 to 1964.

The proportion of all farm products sold by large-scale farms increased from 16.9 percent in 1959 to 24.8 percent in 1964. However, the proportionate increase in many of the resources used was larger than the increase in the percentage of farm products sold: the proportion of cropland harvested increased from 5.1 percent to 7.6 percent; irrigated land, from 23.2 percent to 30.1 percent; commercial fertilizer used, from 11.2 percent to 16.6 percent; lime applied, from 3.5 percent to 5.9 percent; expenditures for feed for livestock and poultry, from 16.4 percent to 29.9 percent, expenditures for purchase of livestock and poultry, from 29.3 percent to 39.8 percent; and expenditures for machine hire, custom and contract work, from 15.8 percent to 25.3 percent. Moreover, significant increases occurred between 1959 and 1964 in the proportion of the sales of

some farm products from all commercial farms coming from large-scale farms. The share of large-scale farms increased from 1959 to 1964, from 50 percent to 62 percent for vegetables, from 32 percent to 47 percent for fruits and nuts, from 17 percent to 36 percent for poultry and poultry products, from 18 percent to 25 percent for cattle and calves sold alive, from 17 percent to 27 percent for sheep and lambs sold alive, from 10 percent to 36 percent for chicken eggs sold, and from 25 percent to 54 percent for Irish potatoes.

Class I farms—The data for the 142,000 class I farms with sales of \$40,000 or more in 1964 included those for the 31,000 large-scale farms with sales of \$100,000 or more. Class I farms represented only 4.5 percent of all farms and 6.6 percent of all commercial farms in 1964, yet they accounted for 43 percent of the value of all farm products sold. They had 28 percent of the land in commercial farms, 29 percent of the value of farmland and buildings, 21 percent of the cropland from which crops were harvested, 14 percent of the tractors other than garden tractors and motor tillers, and 59 percent of the regular hired farm workers. They accounted for 50 percent of the expenditures for feed for livestock and poultry, 61 percent of the expenditures for the purchase of livestock and poultry, 62 percent of the expenditures for hired farm labor, 41 percent of the expenditures for machine hire, contract and custom work, and 27 percent of the expenditures for gasoline and other petroleum fuel and oil for the farm business in 1964.

Class I farms are concentrated in the Corn Belt States—Iowa, Illinois, and Indiana—in California, Texas, and Nebraska; and in the Mississippi Delta States of Mississippi and Arkansas. These eight States had 47 percent of all class I farms in 1964. The class I farms included many large-scale and specialized farms—vegetable, fruit, cotton, and livestock farms other than dairy and poultry farms in the West; livestock ranches, wheat farms, livestock farms other than dairy and poultry farms, and cash-grain farms in the Great Plains and Corn Belt States.

Class II and class III farms—Class II and class III farms, with a value of farm products sold of \$10,000 to \$39,999, accounted for one-third of all commercial farms and almost 40 percent of all farm products sold in 1964. They had a significant part of the resources used on all commercial farms: 42 percent of the land in farms, one-half of the land from which crops

were harvested, 43 percent of the value of farmland and buildings, a third of the regular hired farm workers, and more than two-fifths of tractors other than garden. Their share of the total for all commercial farms for fertilizer used and expenditures was also significant: tons of fertilizer used, 43 percent; expenditures for feed for livestock and poultry, 37 percent; expenditures for purchase of livestock and poultry, 30 percent; expenditures for hired farm labor, 28 percent; expenditures for machine hire, contract and custom work, 36 percent; expenditures for seed, plants, bulbs, and trees, 42 percent; and expenditures for gasoline and other petroleum fuel and oil for the farm business, 45 percent.

Class II and class III farms are widely distributed throughout the United States. They account for more than a third of the commercial farms in more than half the States.

Class IV and class V farms—These farms with a value of farm products sold of \$2,500 to \$9,999, totaled \$949,000 and comprised 44 percent of all commercial farms. They accounted for 15 percent of the value of all farm products sold from all commercial farms in 1964. The share of resources of all commercial farms on class IV and class V farms was: land in farms, 26 percent; land from which crops were harvested, 27 percent; value of farmland and buildings, 24 percent; and tractors other than garden, 37 percent. For expenditures, and fertilizers used, the proportion of the total for all commercial farms represented by the total for class IV and class V farms was: fertilizer used, 21 percent; feed for livestock and poultry, 12 percent; purchase of livestock and poultry, 8 percent; expenditures for hired farm labor, 9 percent; expenditures for machine hire, contract and custom work, 22 percent; purchase of seeds, bulbs, plants, and trees, 21 percent; and expenditures for gasoline and other petroleum fuel and oil for the farm business, 26 percent.

Class IV and class V farms had agricultural operations of relatively small scale—approximately 70 percent of them had less than 100 acres of land from which crops were harvested. More than 70 percent of the farms had a value of land and buildings of less than \$40,000. The operators—about 1 out of 7 is 65 years old and over and 2 out of 5 of the operators are 55 years old and over.

The operators of 1 out of 4 of class IV and class V farms worked off the farm 100 days or

more in 1964. The income of the operator and members of his household was greater than the value of farm products sold on more than one-fifth of the farms and was equal to one-half the value of farm products sold from all class IV and class V farms. While class IV and class V farms existed in every State, 38 percent were in the South and class IV and class V farms accounted for a third or more of all commercial farms in three-fourths of the States.

Class VI farms—Class VI farms totaled 348,000 and comprised 1 out of every 6 commercial farms. They accounted for only 1 percent of the value of all farm products sold. The smallness of the scale of agricultural operations on these farms is indicated by the quantities of the various resources and materials used per farm.

Most of the farms were small in size. One-half were less than 70 acres in size and one-half had less than 20 acres of land from which crops were harvested. The value of farmland and buildings was less than \$20,000 on 8 out of 10 of these farms.

Farms by size	Class VI farms	
	Number	Percent distribution
Total.....	348,272	100.0
Under 10 acres.....	37,025	10.6
10 to 49 acres.....	116,691	33.5
50 to 69 acres.....	35,129	10.1
70 to 99 acres.....	46,491	13.3
100 to 139 acres.....	36,715	10.5
140 to 179 acres.....	26,166	7.5
180 acres or more.....	50,055	14.4
CROPLAND		
Farms with acreage of cropland harvested of:		
Total.....	348,272	100.0
None.....	67,605	19.4
1 to 9 acres.....	109,429	31.4
10 to 19 acres.....	71,732	20.6
20 to 29 acres.....	37,283	10.7
30 to 49 acres.....	34,643	9.9
50 to 99 acres.....	21,313	6.1
100 acres or more.....	6,267	1.8

More than 8 out of 10 of the operators of class VI farms owned all or part of the land they operated. However, 63,000 are operated by tenants and 12 percent of all commercial farms operated by crop-share and share-cash tenants were in class VI.

More than 67 percent of class VI farms were in the South. They comprised one-fifth or more of all commercial farms in the States of South Carolina, Georgia, Florida, Virginia, West Virginia, Kentucky, Tennessee, Alabama, Missis-

issippi, Arkansas, Louisiana, Oklahoma, Texas, New Mexico, Alaska, and Hawaii.

The statistics for class VI farms for the 1964 and 1959 censuses are not fully comparable because of the change in criteria used for making the classification. For the 1959 census, farms were classified as part-time if they had a value of sales of farm products of \$50 to \$2,499, and the income of the farm operator and members of his family from sources other than the farm operated was greater than the value of farm products sold, and days worked off the farm by the farm operator was less than 100. In 1964, farms meeting these criteria were classified as class VI farms. There were approximately 158,000 farms meeting these criteria in 1964 and these are included in the total of 342,000 class VI farms. If the criteria used for the 1959 census had been used for the 1964 census, the number of class VI farms would have been 184,000 as compared with 349,000 class VI farms in 1959.

Characteristics of other farms—The classification of farms as commercial and other, separates a large number of farms and places that are operated by persons having other jobs in addition to that of farm operators, and farms with semi-retired operators with relatively low gross farm income from farms operated largely as businesses.

Other farms do not include all farms with operators having greater income from sources other than the farm operated than from the sale of farm products, nor all the farms with operators in the process of retiring from farming as only farm operators with gross sales of farm products of less than \$2,500 are included.

There were 346,000 farms with sales of farm products of \$2,500 or more in 1964 with the operator working off the farm 100 days or more in 1964. There were 362,000 commercial farms with the operator and members of his family having income from sources other than the farm operated greater than the value of farm products sold.

In addition to the operators of 351,000 part-retirement farms, there were 198,000 farm operators 65 years old and over, with a total value of farm products sold of \$2,500 or more.

Other farms, as a group, do not provide a significant part of all farm products sold. In 1964, only 2.6 percent of all farm products sold came from other farms. However, the propor-

tion of resources on or used on other farms is considerably greater than the share of other farms in the value of farm products sold. Other farms have 13 percent of the land, 5 percent of the total cropland, and 9 percent of the cattle, 5 percent of the hogs and pigs, and 18 percent of the tractors on all farms. Other farms accounted for 6 percent of the fertilizer used, and 9 percent of the lime applied, 4 percent of the feed purchased, and 3 percent of the livestock and poultry purchased in 1964.

Part-time farms—The combining of farm and nonfarm work into a dual earning activity has become a widespread practice. The incidence of part-time farms is high near urban centers and in the South. The existence of farms with limited labor requirements and with very limited resources of land, equipment, capital, and low incomes have provided incentives for farm operators to increase their earnings by working off their farms.

Some operators of part-time farms have acquired an off-the-farm job as a way of getting out of farming, others have worked off their farms to obtain additional capital so that they can enlarge their farm operations, and some have worked off their farms to obtain additional income. Most operators of part-time farms have a full-time off-farm job. Almost 87 percent of the operators of part-time farms worked off their farms 200 days or more in 1964.

The average income from all sources other than the farm operated averaged almost \$6,000 for households of part-time farm operators in 1964. More than 82 percent of the households had income from sources other than the farm operated of \$3,000 or more in 1964. The average value of farm products sold from part-time farms was less than \$800. More than 95 percent of the income from sources other than the farm operated came from wages, salaries, and the operation of nonfarm businesses or professions.

The resources used by operators of part-time farms comprised a very small part of the total of all farms. Farms of part-time farm operators contain 5.3 percent of all land in farms; 2.7 percent of the acreage from which crops were harvested in 1964; 6.1 percent of the cattle and calves; 2.9 percent of the hogs and pigs; 2 percent of the chickens 4 months old and over; 0.8 percent of the hired regular

farm workers; and 10.7 percent of the tractors other than garden. Operators of part-time farms used 3.6 percent of the fertilizer; 6.5 percent of the lime; and accounted for 2.4 percent of the total expenditures of all farms for the expenditures for feed for livestock and poultry; purchase of livestock and poultry; machine hire; hired farm labor; fertilizer and fertilizing materials; gasoline and other petroleum fuel and oil for the farm business; and seeds, plants, bulbs, and trees in 1964.

Almost half of the farms operated by part-time operators are under 50 acres in size and 1 out of 10 is less than 10 acres in size. Approximately 30 percent of the farms have no cropland harvested and about 1 out of 3 had less than 10 acres of cropland harvested. Approximately 5 percent of the part-time farms had 50 acres or more of cropland harvested in 1964. About 64 percent of the part-time farms had a tractor other than garden; and 87 percent had an automobile.

In 1964, about half of the part-time farm operators used commercial fertilizer or fertilizing materials, and about 11 percent used lime. However, the amount of fertilizer used per farm reporting was about 2.7 tons and the amount of lime applied per farm reporting was about 22 tons.

Cattle were kept on 72 percent of the part-time farms, milk cows on 26 percent, hogs on 25 percent, and chickens on 30 percent.

Over 60 percent of the land used for harvested crops was used for corn and hay. The sale of cattle and calves accounted for more than one-third of all the farm products sold and the sale of cattle, calves, hogs, pigs, and dairy products accounted for almost one-half of the value of all farm products sold.

The distribution by age of the farm operators of part-time farms and that of the operators of all commercial farms was as follows:

Age group	Operators of all commercial farms		Operators of part-time farms	
	Number (1,000)	Percent distribution	Number (1,000)	Percent distribution
Total operators...	2,166	100.0	639	100.0
Under 25 years.....	41	1.9	12	1.9
25 to 34 years.....	223	10.3	86	13.5
35 to 44 years.....	469	21.7	184	28.7
45 to 54 years.....	635	29.3	216	33.7
55 to 64 years.....	600	27.7	142	22.2
65 years and over....	198	9.1	-	-

More than 89 percent of the operators own all or part of the farms they operate. Over 65 percent of the part-time farms operated by tenants are rented for cash or under some rental arrangement other than a share of the crops and livestock. The average value of part-time farms was \$18,094.

The data for part-time farms for 1964 are not fully comparable with those for the 1959 census because of a change in the criteria used for making the classification. For 1964, three criteria were used for segregating part-time farms from all other farms:

1. Age of operator—under 65 years.
2. Value of farm products sold—\$50 to \$2,499.
3. Days worked off the farm by the farm operator—100 days or more.

For the 1959 census criterion of 100 days or more of work off the farm, there was an alternate criterion of "income he and members of his household received from sources other than the farm operated was greater than the total value of farm products sold." Of the 885,000 part-time farms, for the 1959 census, there were 161,000 working off their farms less than 100 days, but with the income from sources other than the farm operated, greater than the value of farm products sold. If the criteria used for the 1959 census had been the same as those for the 1964 census, the number of part-time farms for 1959 would be 724,000 compared with 643,000 for 1964. On the other hand, if the criteria used for the 1964 census had been the same as those for the 1959 census, the number of part-time farms for 1964 would have been 801,000 compared with 885,000 for 1959.

Part-retirement farms—Part-retirement farms comprised 11.1 percent of all farms in 1964. However, in terms of total resources used and production they were relatively unimportant for the nation as a whole. Part-retirement farms accounted for 3.3 percent of all land in farms; 1.6 percent of cropland harvested; 2.9 percent of cattle and calves; 1.3 percent of hogs and pigs; 4.5 percent of tractors, other than garden; and 0.8 percent of the value of all farm products sold in 1964. Part-retirement farms were heavily concentrated in the Appalachian Mountain area and in the southern and eastern half of the United States.

The average value of farm products sold per part-retirement farm was \$810 in 1964. How-

ever, the income from sources other than the farm operated exceeded the value of farm products sold on 68 percent of these farms.

Over 90 percent of the operators of part-retirement farms had income from sources other than the farm operated and the average amount of this income per farm was \$2,081. Almost half of the income from sources other than the farm operated was from Social Security, pensions, veteran and welfare payments, and one-sixth was from rent from farm and nonfarm property, interest, and dividends.

The scale of operations of part-retirement farms was small in 1964. Over one-fourth had no cropland harvested and about one-half had less than 20 acres of cropland harvested. Only 5 percent of the farms had 50 acres or more of cropland harvested. Less than 50 percent of the farms had tractors other than garden. About half of the farms used some commercial fertilizer and the average amount used per farm reporting was 2.3 tons. Almost all of the farms reported one or more of the seven items for farm expenditures, and the average expenditure for feed for livestock and poultry; purchase of livestock and poultry; hired farm labor; fertilizer and fertilizing materials; gasoline and other petroleum fuel and oil for the farm business; machine hire; and seeds, bulbs, plants, and trees was \$516. Cattle were reported on 68 percent of the farms; milk cows, on 31 percent; hogs and pigs, on 23 percent; and chickens on 49 percent.

Corn and hay comprised almost 60 percent of the total acreage of cropland harvested. The sale of cattle and calves accounted for over a third of the total value of farm products sold, and the sale of hogs, dairy products, and eggs accounted for about one-sixth of total sales.

Almost 95 percent of the part-retirement operators own all or part of the farms they operate. The average value of farmland and buildings per farm was \$16,056. The average value of farmland and buildings operated was \$2,000 less than that for the operators of part-time farms.

Farms with a value of farm products sold of less than \$2,500—Farms with sales of farm products with a value of less than \$2,500 comprised more than one-fourth of all farms in 1964. However, these farms had one-seventh of all the land in farms, one-seventh of all the cropland, and 46.5 million out of 434 million

acres of all cropland in the United States. The value of land and buildings for these farms represented 16 percent of the value of land and buildings for all farms. They had 13 percent of the cattle and 6 percent of the hogs on farms in 1964 and almost one-fourth of all tractors other than garden tractors and motor tillers, over 27 percent of the motor-trucks, 9 percent of the grain and corn combines, and 14 percent of the pickup balers.

These farms had 13 percent of the acreage in orchards, vineyards, and planted nut trees and 12 percent of the acreage of tobacco harvested. They accounted for 8 percent of all the gasoline and other petroleum fuel and oil purchased for the farm business. The operators and members of the operators' families on these farms provided almost half of the man-days of work on other farms by all farm operators and members of these families.

Subject	Unit	Total	
		All farms	Farms with value of farm products sold of less than \$2,500
Number of farms.....	Number (1,000)....	3,158	1,338
Land in farms.....	Acres (1,000).....	1,110,187	137,605
Cropland harvested.....	Acres (1,000).....	286,892	18,354
Total cropland.....	Acres (1,000).....	434,232	44,001
Total pastureland.....	Acres (1,000).....	629,936	77,969
Total woodland.....	Acres (1,000).....	145,976	42,973
Value of farmland and buildings.....	Dollars (1,000)....	159,934,974	22,945,845
Cattle and calves.....	Head (1,000).....	105,558	13,018
Hogs and pigs.....	Head (1,000).....	54,080	3,363
Tractors except garden and motor tillers.....	Number (1,000)....	4,787	968
Motortrucks.....	Number (1,000)....	3,030	815
Grain and bean combines.....	Number (1,000)....	910	85
Pickup balers.....	Number (1,000)....	751	104
Land in orchards, vineyards, and planted nut trees.....	Acres (1,000).....	4,251	535
Acres of corn for all purposes.....	Acres (1,000).....	63,515	3,464
Acres of tobacco.....	Acres (1,000).....	1,025	128
Acres of vegetables harvested for sale.....	Acres (1,000).....	3,334	151
Expenditures for—			
Feed for livestock and poultry.....	Dollars (1,000)....	5,511,813	278,937
Purchase of livestock and poultry.....	Dollars (1,000)....	4,177,410	136,962
Fertilizer.....	Dollars (1,000)....	1,771,617	113,998
Seeds, plants, and trees.....	Dollars (1,000)....	660,671	45,084
Hired farm labor.....	Dollars (1,000)....	2,798,571	68,150
Machine hire, contract and custom work.....	Dollars (1,000)....	869,780	62,038
Gasoline and other petroleum fuel and oil for the farm business.....	Dollars (1,000)....	1,786,796	140,540
Work on other farms in 1964.....	Days (1,000).....	21,562	10,002
By farm operator.....	Days (1,000).....	10,360	5,499
By members of farm operators' family.....	Days (1,000).....	11,202	4,503

These farms with a value of farm products of less than \$2,500 contained a significant part of the total cropland in the United States. They had 14 percent of the land in soil-improvement crops and grasses, and much of their cropland was in the Soil Bank and in the Feed Grain and other government programs. These farms had a significant amount of land in fruit orchards. Part of this acreage was newly planted and part was acreage on which there was crop failure in 1964.

CHANGES IN THE NUMBER OF FARMS BY ECONOMIC CLASS, 1950 to 1964

Because of a change in criteria for classifying farms by economic class after the 1954 census, it is possible to make comparisons of the 1950, 1954, 1959, and 1964 censuses for only four groups of economic classes of farms, i.e., farms with sales of farm products of \$10,000 or more, farms with sales of farm products of \$5,000 to \$9,999, farms with sales

Value of farm products sold	Number of farms						
	Total				Percent change		
	1964	1959	1954 ¹	1950 ¹	1959-1964	1954-1964	1950-1964
Farms with value of farm products sold of—							
Total.....	3,157,857	3,707,973	4,783,021	5,379,250	-14.8	-34.0	-41.3
Less than \$2,500.....	1,338,239	1,637,849	2,678,486	3,287,139	-18.3	-50.0	-59.3
\$2,500 to \$4,999.....	443,918	617,677	811,965	882,302	-28.1	-45.3	-49.7
\$5,000 to \$9,999.....	504,614	653,881	706,929	721,211	-22.8	-28.6	-30.0
\$10,000 or more.....	868,908	795,505	582,948	484,582	9.2	49.1	79.4

¹Data for Alaska and Hawaii not included.

of farm products of \$2,500 to \$4,999 and farms with sales of farm products of less than \$2,500.

From 1950 to 1964, the number of farms declined by almost 2,228,000. During this 15-year period, the number of farms with a value of farm products sold of less than \$2,500 declined by 1,955,000. The number of farms with a value of farm products sold of \$2,500 or more decreased 273,000, or 13 percent, during the 15-year period. The decrease of 439,000 in the number of farms with a value of farm products sold of \$2,500 to \$4,999 and the decrease of 217,000 in the number of farms with sales of \$5,000 to \$9,999 was offset, in part, by an increase of 384,000 in the number of farms with a value of farm products sold of \$10,000 or more. From 1959 to 1964, farms with sales of \$10,000 or more increased 73,000, or 9 percent. There were 40,000 more farms with sales of farm products of \$40,000 or more, and 49,000 more farms with sales of \$20,000 to \$39,999 in 1964 than in 1959.

Subject and value of farm products sold	1964	1959	1954 ¹	1950 ¹
Number (1,000)				
Number of farms:				
\$2,500 or more, total	1,817	2,067	2,102	2,088
\$2,500 to \$4,999..	444	618	812	882
\$5,000 to \$9,999..	505	654	707	721
\$10,000 or more...	869	796	583	484
Percent distribution				
Number of farms:				
\$2,500 or more, total	100.0	100.0	100.0	100.0
\$2,500 to \$4,999..	24.4	29.9	38.6	42.3
\$5,000 to \$9,999..	27.8	31.6	33.6	34.5
\$10,000 or more...	47.8	38.5	27.8	23.2
Value (\$1,000)				
Value of farm products sold:				
\$2,500 or more, total	34,004,832	29,002,111	22,544,712	19,562,688
\$2,500 to \$4,999..	1,611,028	2,274,793	3,008,511	3,198,161
\$5,000 to \$9,999..	3,653,346	4,723,110	5,084,640	5,060,529
\$10,000 or more...	28,740,457	22,004,208	14,451,561	11,303,998
Average per farm (dollars)				
Average value of farm products sold:				
\$2,500 or more, total	18,710	14,031	10,726	9,370
\$2,500 to \$4,999..	3,629	3,683	3,705	3,625
\$5,000 to \$9,999..	7,240	7,223	7,193	7,017
\$10,000 or more...	33,077	27,661	24,790	23,337

¹Does not include Alaska and Hawaii.

Subject	All farms	Farms with value of farm products sold of less than \$2,500	Farms with value of farm products sold of \$2,500 or more
Number of farms.....			
1964..	3,157,857	1,338,239	1,817,440
1959..	3,707,973	1,637,849	2,067,063
1954 ¹ .	4,783,021	2,678,486	2,101,842
1950 ¹ .	5,379,250	3,287,139	2,087,895
Change in number of farms.....			
1959-1964..	-550,116	-299,610	-249,623
1954-1964..	-1,625,164	-1,340,247	-284,402
1950-1964..	-2,221,393	-1,948,900	-270,455
Average size of farm.....acres			
1964..	351.6	102.8	507.8
1959..	303.0	85.7	454.8
1954 ¹ .	242.5	88.1	421.1
1950 ¹ .	215.6	82.5	407.0
Value of farm products sold per farm.....dollars			
1964..	11,176	854	18,710
1959..	8,259	925	14,031
1954 ¹ .	5,188	815	10,726
1950 ¹ .	4,142	799	9,370

¹Data for Alaska and Hawaii are not included.

The average size of farms with sales of farm products of less than \$2,500 increased 48 percent from 1950 to 1964, and the value of all farm products sold per farm increased 20 percent. For farms with a value of farm products sold of \$2,500 or more, the average size of farm increased only 24 percent, while the value of all farm products sold increased about 50 percent.

Small farms, where size is measured by acres in the farm, have been disappearing rapidly. Farms with less than 100 acres declined 1,646,000, or 55 percent, from 1950 to 1964. Decreases in number of farms with sales of farm products of less than \$2,500, were equal to 92 percent of the decreases of all farms with less than 100 acres.

