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Final Report—Vol. V—Part 7—Special Reports

Large-Scale Farming in the United States

SPECIAL REPORTS

Prepared under the supervision of
RAY HURLEY, Chief
Agriculture Division



U.S. DEPARTMENT OF COMMERCE

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PREFACE

Very little information regarding large-scale farming has been published. This report has been prepared for the purpose of presenting data for the 19,979 farms with a value of farm products sold of \$100,000 or more in 1959. A knowledge of how extensive large-scale farming is, the distribution and relative importance of large-scale farms in each State, the kinds and amounts of resources used, and the kinds and amounts of important farm products produced will be helpful in understanding the structure of American agriculture, the kind of changes that have occurred, and in analyzing the kind and extent of future changes.

The data in this report were assembled by tabulating data for all farms with a value of farm products sold of \$100,000 or more in 1959. The preparation of this report was supervised by Ray Hurley, Chief of the Agriculture Division, Bureau of the Census, assisted by Thomas D. Monroe, Robert S. Boyle, and Helen M. Davenport.

May 1963

III

UNITED STATES CENSUS OF AGRICULTURE: 1959

FINAL REPORTS

Volume I—Counties—A separate part for each State, Puerto Rico, Guam, Virgin Islands, and American Samoa. Statistics on number of farms; farm characteristics; acreage in farms; cropland and other uses of land; land-use practices; irrigation; farm facilities and equipment; farm labor; farm expenditures; use of commercial fertilizer; number and kind of livestock; acres and production of crops; value of farm products; characteristics of commercial farms, farms classified by tenure, size, type, and economic class; and comparative data from the 1954 Census.

Part	State or States	Part	State or States	Part	State or States	Part	State or States
1	New England States:	15	West North Central:	30	East South Central:	44	Mountain—Con.
2	Maine.	16	Minnesota.	31	Kentucky.	45	Utah.
3	New Hampshire.	17	Iowa.	32	Tennessee.		Nevada.
4	Vermont.	18	Missouri.	33	Alabama.		Pacific:
5	Massachusetts.	19	North Dakota.		Mississippi.	46	Washington.
6	Rhode Island.	20	South Dakota.		West South Central:	47	Oregon.
	Connecticut.	21	Nebraska.	34	Arkansas.	48	California.
	Middle Atlantic States:		Kansas.	35	Louisiana.	49	Alaska.
7	New York.		South Atlantic:	36	Oklahoma.	50	Hawaii.
8	New Jersey.	22	Delaware.	37	Texas.		Other Areas:
9	Pennsylvania.	23	Maryland.		Mountain:	51	American Samoa.
	East North Central:	24	Virginia.	38	Montana.	52	Guam.
10	Ohio.	25	West Virginia.	39	Idaho.	53	Puerto Rico.
11	Indiana.	26	North Carolina.	40	Wyoming.	54	Virgin Islands.
12	Illinois.	27	South Carolina.	41	Colorado.		
13	Michigan.	28	Georgia.	42	New Mexico.		
14	Wisconsin.	29	Florida.	43	Arizona.		

Volume II—General Report—In 1 volume and also as 13 separates (for the Introduction and for each chapter). Statistics by subjects for 1959 and prior censuses. Statistics are presented for the United States, geographic regions, and divisions, and for the States.

Chapter	Title	Chapter	Title
I	Introduction.	VII	Field Crops and Vegetables.
II	Farms and Land in Farms.	VIII	Fruits and Nuts, Horticultural Specialties, Forest Products.
III	Age, Residence, Years on Farm, Work Off Farm.	IX	Value of Farm Products.
IV	Farm Facilities, Farm Equipment.	X	Color, Race, and Tenure of Farm Operator.
	Farm Labor, Use of Fertilizer, Farm Expenditures, and Cash Rent.	XI	Economic Class of Farm.
V	Size of Farm.	XII	Type of Farm.
VI	Livestock and Livestock Products.		

Volume III—Irrigation of Agricultural Lands—Data from the Irrigation Censuses of 1959 and 1950, by drainage basins, for the conterminous United States and for each of the 17 western States and Louisiana. Separate maps are available. Report also includes data from the 1959 Census of Agriculture for land irrigated and acres and production of crops on irrigated land in the 18 conterminous States and Hawaii.

Volume IV—Drainage of Agricultural Lands—Statistics for States and counties and for the conterminous United States, presenting 1960 data on number, area, physical works, and costs for drainage projects of 500 or more acres by size, type, and year organized. Maps are included.

Volume V—Special Reports

Part 1.—Special Census of Horticultural Specialties—Statistics for States, except Alaska and Hawaii, and for the conterminous United States, presenting 1959 data on number and kinds of operations, gross receipts and/or sales, sales of specified products, inventories, employment, and structures and equipment.

Part 2.—Irrigation in Humid Areas—Statistics for 30 eastern States showing 1960 data on acres irrigated, number of constructed ponds and reservoirs, source and method of applying water, type of pumping power, acreage of individual crops irrigated, and frequency of irrigation by States and counties.

Part 3.—Ranking Agricultural Counties—Statistics for selected items of inventory and agricultural production for the leading counties in the United States.

Part 4.—Farm Taxes and Farm Mortgage—A cooperative report by the Economic Research Science, U.S. Department of

Agriculture and the Bureau of the Census, U.S. Department of Commerce, presenting 1961 data by States on taxes on farms, number of mortgaged farms operated by full owners and part owners, amount of mortgage debt held by principal lending agencies, and amount of interest paid.

Part 5.—1960 Sample Survey of Agriculture—Statistics by economic class and type of farm, showing 1960 data on farm-operator-family income from farm and off-farm sources; inventory and use of selected types of farm equipment, tractors by year made and fuel used; number, size, and materials used for new buildings constructed 1958 to 1960; number of farmers having contracts with dealers, processors, or others for the production and marketing of 15 farm products; and real estate and non-real-estate debts of farm operators and farm landlords by lending agencies.

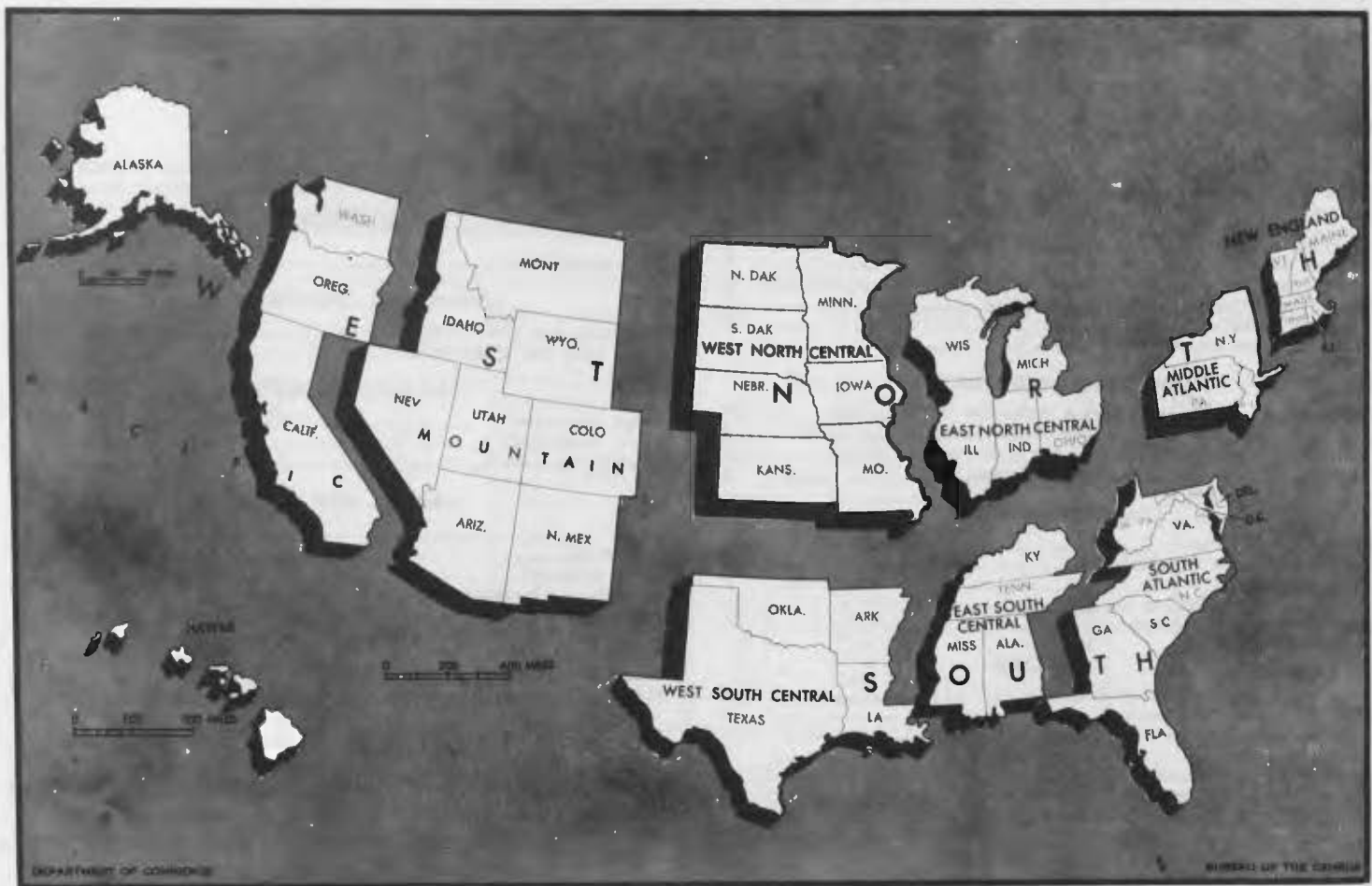
Part 6.—A Graphic Summary of Agriculture, 1959—A cooperative report by the Economic Research Service, U.S. Department of Agriculture and the Bureau of the Census, U.S. Department of Commerce, presenting graphically for 1959 and prior census years some of the significant uses of agricultural land; the extent and nature of the various kinds of tenure under which farms are held and operated; and changes and developments in the use of agricultural resources and production of agricultural products.

Special Publication—Principal Data-Collection Forms and Procedures: United States Census of Agriculture, 1959, and Related Surveys—Facsimiles of the enumeration forms used, showing variations for the 50 States, Puerto Rico, American Samoa, Guam, and the Virgin Islands, together with brief descriptions of the census field procedures for the census and the related surveys.

INTRODUCTION

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INTRODUCTION

Purpose of report.—The purpose of this report is to present data from the 1959 Census of Agriculture regarding the number, distribution, resources, production, and importance of farms with a value of farm products sold of \$100,000 or more in 1959. These data are for the large-scale farms in the United States. There are many measures of size of farm. Acres in the farm is one measure. However, for this report, value of farm products sold is used as the measure of size or scale of operations.

Census definition of a farm.—For the 1959 Census of Agriculture the definition of a farm was based primarily on a combination of "acres in this place" and the estimated value of agricultural products sold.

The word "place" was defined to include all land under the control or supervision of one person or partnership at the time of enumeration and on which agricultural operations were conducted at any time in 1959. Control may have been exercised through ownership or management; or through a lease, rental, or cropping arrangement.

Places of 10 or more acres in 1959 were counted as farms if the estimated sales of agricultural products for the year amounted to at least \$50. Places of less than 10 acres in 1959 were counted as farms if the estimated sales of agricultural products for the year amounted to at least \$250. Places not meeting the minimum estimated level of sales in 1959 were nevertheless counted as farms if they could normally be expected to produce agricultural products in sufficient quantity to meet the requirements of the definition. This additional qualification resulted in the inclusion as farms of some places that were engaged in farming operations for the first time in 1959, as well as places affected by crop failure or other unusual conditions.

Farm operator.—The term "farm operator" is used to designate a person who operates a farm, either doing the work himself or directly supervising the work. He may be the owner; a member of the owner's household; a hired manager; or a tenant, renter, or sharecropper. If he rents land to others or has land worked on shares by others, he is considered as operator only of the land which he retains for his own operation. In the case of a partnership, only one partner is counted as the operator. The number of farm operators is considered to be the same as the number of farms.

Farms reporting or operators reporting.—Figures for farms reporting or operators reporting, based on a tabulation of all farms, represent the number of farms, or farm operators, for which the specified item was reported. For example, the total number of farms with a value of farm products sold of \$100,000 or more in California was 5,339, but only 4,222 of these farms reported cropland harvested. The difference represents the number of farms from which no crops were harvested in 1959, provided a correct report was received for all farms.

Land in farms.—The acreage designated as "land in farms" consists primarily of "agricultural" land—that is, land used for crops

and pasture or grazing. It also includes considerable areas of land not actually under cultivation nor used for pasture or grazing. For example, the entire acreage of woodland and wasteland owned or rented by farm operators is included as land in farms unless it was being held for nonagricultural purposes or unless the acreage was unusually large. If a place had 1,000 or more acres of woodland not pastured and wasteland, and if less than 10 percent of the total acreage in the place was used for agricultural purposes, the acreage of woodland not pastured and wasteland was reduced to equal the acreage used for agriculture.

All grazing land was to be included as land in farms provided the place of which it was a part was a farm. Grazing lands administered by the U.S. Forest Service and used under permits were not included as land in farms. These lands total about 64 million acres. Likewise, rangelands, administered by the Bureau of Land Management of the U.S. Department of the Interior, used under permit are not included as land in farms. These grazing lands totaled approximately 161 million acres in 1959. Grazing lands leased to farm and ranch operators by the Bureau of Land Management and grazing lands owned by State agencies are included. Grazing land operated by grazing associations was to be reported in the name of the person chiefly responsible for conducting the business of the association. Land used rent free was to be reported as land rented from others. All land in Indian reservations that was used for growing crops or grazing livestock was to be included. Land in Indian reservations that was not reported by individual Indians and that was not rented to non-Indians was to be reported in the name of the cooperative group that used the land. In some instances, an entire Indian reservation was reported as one farm.

Land in farms according to use.—Land in farms was classified according to its use in 1959. The classes of land are mutually exclusive; i.e., each acre of land was included only once even though it may have had more than one use during the year.

Cropland harvested.—This includes land from which crops were harvested; land from which hay (including wild hay) was cut; and land in small fruits, orchards, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was to be counted only once. The entry for cropland harvested was obtained directly from the farm operator and then verified by the census enumerator by adding the acreages of each crop reported and subtracting from this total the acres of land from which two or more crops were harvested. This checking was repeated during the office processing for farms with 100 or more acres of cropland harvested. The enumerator was directed to list under "Cropland harvested" only any acreage that had additional uses during the year. For instance, any land from which hay was cut was classified as cropland harvested, regardless of the use of land for grazing later in the year.

Cropland used only for pasture.—The enumerator was instructed to include all land used only for pasture or grazing that

could have been used for crops without additional improvement and all land planted to crops that were hogged off, pastured, or grazed before reaching maturity.

Cropland not harvested and not pastured.—This class includes cultivated summer fallow, cropland used only for soil-improvement crops, land on which crops failed, land planted to crops for harvest after the year covered by the census, and idle cropland. The data for this class were obtained through the use of two inquiries in some States and three in other States as follows:

Cultivated summer fallow.—This land use was obtained for the 17 Western States in the conterminous United States. The acreage of cultivated summer fallow is negligible in those States where the inquiry was not included on the questionnaire. Cultivated summer fallow was defined as cropland that was plowed and cultivated but left unseeded to control weeds and conserve moisture.

Cropland used only for soil-improvement crops.—Only land used for cover crops to control erosion or to be plowed under for green manure and planted to another crop fell into this category. A large proportion of this land was covered by contracts of the soil bank. The enumerator was cautioned not to include land from which crops were harvested in the census year or land that was pastured or grazed. There was no separate inquiry for Alaska and Hawaii. In these two States cropland used only for soil-improvement purposes was included under other cropland not harvested and not pastured.

Other cropland not harvested and not pastured.—All cropland except cropland harvested, cropland in cultivated summer fallow, cropland pastured, and land used only for soil-improvement crops was included in this land-use class. This total included all acreage on which crops failed because of drought, floods, insects, etc.; acreage not harvested because of low prices or labor shortage; acreage not harvested but occupied by growing crops intended for harvest in later years; acreage which had been plowed, and could be plowed again without first clearing away brush, but which had been idle for one or more years.

Woodland pastured.—This includes all woodland that was used for pasture or grazing during the census year. According to instructions, woodland refers to woodlots and timber tracts, natural or planted.

Woodland not pastured.—The enumerator was instructed to include in this category land in the soil bank planted to trees.

Other pasture.—All land other than woodland and cropland used for pasture or grazing was designated other pasture.

Improved pasture.—A pasture that had been limed, fertilized, seeded, irrigated, drained, or cleared of weeds and brush was to be considered improved pasture. Information on improved pasture is not available for Alaska.

All other land.—This item refers to all land not included in any of the preceding land-use items and includes land occupied by a house or other buildings; lanes, roads, and ditches; and land area of ponds and wasteland. Unusually large tracts of other land held primarily for purposes other than agriculture were excluded from the tabulations.

Irrigation.—Irrigated land is defined as land watered by artificial means for agricultural purposes. These means included subirrigation as well as systems whereby water was applied to the ground surface, either directly or by sprinklers.

SOIL-CONSERVATION PRACTICES

The census of agriculture obtained information on soil-conservation practices.

Cropland in cover crops turned under for green manure.—A cover crop is grown as a means of enriching and protecting soil resources. The land on which the cover crop was turned under for green manure was to be then planted to another crop. The entire acreage of cover crops sowed was to be reported even if the crop planted following the cover crops failed.

Cropland used for grain or row crops farmed on the contour.—The inquiry regarding cropland used for grain or row crops farmed on the contour was included (except for Florida) for all States in the conterminous United States. Crops are planted on the contour when the rows or strips are laid out at right angles to the natural slope of the land. Generally, alternate strips or rows of different crops are used to retard soil and water losses. The usual arrangement is to alternate row crops with close-seeded crops.

Land in stripcropping systems for soil-erosion control.—Stripcropping was defined as a practice of alternating close-grown crops with strips or bands of row crops or of alternating either close-grown crops or row crops with bands of cultivated fallow land. Wind stripcropping, stubble mulching, and other conservation practices help control soil blowing. Wind stripcropping involves the planting of crops in strips of uniform width which are arranged at right angles to the direction of prevailing winds. Small-grain crops and cultivated summer fallow often occupy alternating strips.

Systems of terraces on crop and pasture land.—This item relates to the acreage in ridge-type or channel-type terraces constructed on sloping cropland and pastureland. Terraced land was concentrated in the southern part of the Great Plains and in the Southern States.

CLASSIFICATION OF FARMS

The farm classifications by size of farm, tenure of operator, type of farm, and economic class of farm were made on the basis of data reported on the questionnaire.

Farms by size.—Farms were classified by size according to the total land area established for each farm. The same classification was used for all States.

Users of size-of-farm statistics should give consideration to the definition of a farm for census purposes. By definition, a farm is essentially an operating unit, not an ownership tract. All land operated by one person or partnership represents one farm. In the case of a landlord with land assigned to croppers or other tenants, the land assigned to each cropper or tenant is considered a separate farm even though the landlord may operate the entire landholding as one unit in respect to supervision, equipment, rotation practices, purchase of supplies, or sale of products.

Farms by tenure of operator.—The classification of farms by tenure of operator was based on data reported for land owned, land rented from others or worked on shares for others, land managed for others, and (except for Alaska) land rented to others or worked on shares by others.

Each questionnaire was coded, during the editing process, to indicate whether it represented a farm operated by a full owner, part owner, manager, or tenant.

The various classifications of tenure, as used for the 1959 census, are defined below:

- a. **Full owners** operate only land they own.
- b. **Part owners** operate both land they own and land rented from others.
- c. **Managers** operate land for others and are paid a wage or salary for their services. Persons acting merely as caretakers or hired as laborers are not classified as managers. If a farm operator managed land for others and also operated land on his own account, the land operated on his own account was considered as one farm and the land managed for others, a second farm. If, however, he managed land for two or more employers, all the managed land was considered to be one farm. Generally, all farms operated by corporations, institutions, governmental agencies, and Indian reservations were considered as managed. Farms, other than those operated by a corporation or institution, etc., reported as managed, were classified as manager-operated only when—

1. The acres in the farm were 1,000 or more;
or
2. There were 10 or more acres in vegetables harvested for sale; small fruits; or land in fruit orchards, vineyards, groves, and planted nut trees;
or
3. The sale of nursery and greenhouse products totaled \$5,000 or more;
or
4. There were 5 or more cattle and calves, or 25 or more milk cows, or 1,000 or more poultry on the farm;
or
5. The acres of land from which crops were harvested plus the acres of land rented to others equaled 200 acres or more.

- d. **Tenants** rent from others or work on shares for others all the land they operate.

Farms by type.—The data for farms by type are estimates based on data tabulated for the commercial farms. The type represents a description of the major source of income from estimated farm sales. To be classified as a particular type, a farm had to have sales of a particular product or group of products amounting in value to 50 percent or more of the total value of all products sold during the year.

The types of farms, together with the products on which type classification is based, are as follows:

<i>Type of farm</i>	<i>Source of sales of farm products</i>
	[Products with sales value representing 50 percent or more of total value of all farm products sold]
Cash-grain.....	Corn, sorghums, small grains, soybeans for beans, cowpeas for peas, dry field and seed beans and peas. (Not used in Hawaii.)
Tobacco.....	Tobacco.
Cotton	Cotton.

Other field-crop.....Peanuts, potatoes (Irish and sweet), sugarcane for sugar or sirup, sweet sorghums for sirup, broomcorn, popcorn, sugar beets, mint, hops, and sugar beet seed. (For Hawaii, potatoes (Irish and sweet), rice, taro, peanuts, lotus roots, etc.) Data for sugarcane and pineapple farms for Hawaii have been included with "other field-crop farms" in this report.

Vegetable.....Vegetables.

Fruit-and-nut.....Berries, other small fruits, tree fruits, grapes, and nuts. Data for coffee farms in Hawaii have been included as "fruit-and-nut farms" in this report.

Poultry.....Chickens, chicken eggs, turkeys, ducks, and other poultry products.

Dairy.....Milk and cream. The criterion of 50 percent of total sales was modified in the case of dairy farms. A farm having value of sales of dairy products amounting to less than 50 percent of the total value of farm products sold was classified as a dairy farm if—

- (a) Milk and cream sold accounted for more than 30 percent of the total value of products sold and
- (b) Milk cows represented 50 percent or more of total cows and
- (c) The value of milk and cream sold plus the value of cattle and calves sold amounted to 50 percent or more of the total value of all farm products sold.

Livestock other than

dairy and poultry.....Cattle, calves, hogs, sheep, goats, wool, and mohair (except for farms in the 17 conterminous Western States, Louisiana, Florida, Alaska, and Hawaii that qualified as livestock ranches).

Livestock ranchesFarms in the 17 conterminous Western States, Louisiana, Florida, Alaska, and Hawaii were classified as livestock ranches if the sales of livestock, wool, and mohair represented 50 percent or more of the total value of farm products sold and if pastureland or grazing land amounted to 100 or more acres and was 10 or more times the acreage of cropland harvested.

General.....Field seed crops, hay, silage, and forage. A farm was classified as general also if it had cash income from three or more sources and did not meet the criteria for any other type.

Miscellaneous.....Nursery and greenhouse products, forest products, mules, horses, colts, and ponies.

LARGE-SCALE FARMING

Value of farm products sold.—Data were obtained for the value of farm products sold in 1959 in Alaska by enumeration and in the other 49 States by enumeration for some products and by estimation for others. The questionnaire used for the 1959 census provided for farm operators to report value of sales for the following products:

Vegetables	Milk and cream*
Flowers, trees, and ornamental plants (Hawaii)	Cattle
Nursery and greenhouse products	Calves
Forest products (Hawaii)	Hogs and pigs (Hawaii)
Standing timber*	Sheep and lambs (Hawaii)
Miscellaneous forest products*	Goats and kids (Hawaii)
Miscellaneous poultry products	Horses, colts, and ponies (Hawaii)
	Horses, mules, colts, and ponies*

*48 conterminous States.

For all other agricultural products, the value of sales was estimated during the office processing. The State average prices used for calculating the value of farm products sold in Hawaii were furnished by the University of Hawaii, and for the 48 conterminous States were furnished by the Agricultural Marketing Service of the U.S. Department of Agriculture. One of three following procedures was used for estimating the value of farm products sold.

1. For the products for which data on quantities sold were obtained during enumeration, the State average prices were multiplied by the county 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	Fenceposts
Sorghums for grain, seed, sirup, or dry forage*	Sawlogs and veneer logs
All small grains	Christmas trees*
Hay crops*	Chickens (broilers and others)
All berries and small fruits*	Chicken eggs
Firewood and fuelwood	Hogs and pigs*
Pulpwood	Sheep and lambs*
	Goats and kids*

*48 conterminous States

2. For most of the agricultural products which are customarily raised for sale, the entire quantity produced was considered to be sold. The State average prices were, accordingly, multiplied by the county total production. The following farm products were covered by this procedure:

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

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 Agricultural Marketing Service, or on the basis of data reported in questions for "other crops" on the 1959 questionnaire.

For all tree fruits, nuts, and grapes (except in Hawaii), the entire quantity produced was considered as sold, except for apples, apricots, sour and sweet cherries, peaches, plums, prunes, tangerines, and oranges in States where a portion of the

crop was not harvested or was subjected to excess cullage as indicated by data obtained from the Agricultural Marketing 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 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. For institutional farms, all agricultural items produced on land operated by the institution and consumed by the inmates were to be reported 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 and livestock 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.

Enumerators were instructed to record gross values of quantities sold, with no deductions for feed, seed, fertilizer, water, labor, or marketing costs. For some products, however, net values may have been reported. In the case of milk, particularly, some farm operators may have reported the payments they received as the gross value of sales, even though the buyer had deducted handling and hauling charges before making payment. Adjustments were made in the data reported only in cases of obvious error. The value of farm products sold does not include government payments for soil conservation, lime and fertilizer furnished, and subsidy payments.

Farms by economic class.—The economic classifications represent groupings of farms that are similar in characteristics and size of operation. The economic classes were established on the basis of one or more of four factors: (1) Total value of all farm products sold, (2) number of days the farm operator worked off the farm, (3) the age of the farm operator, and (4) the relationship of income received by the operator and members of his household from nonfarm sources to the value of all farm products sold. Institutional farms, Indian reservations, agricultural experiment stations, and grazing associations were always classified as "abnormal."

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. Farms with a value of sales of \$50 to \$2,499 were classified as commercial if the farm operator was under 65 years of age and (1) he did not work off the farm 100 or more days during the year and (2) the income received by the operator and members of his family from sources other than the farm operated was less than the value of all farm products sold. The remaining farms with a value of sales of \$50 to \$2,499, institutional farms, and Indian reservations were included in "other farms."

Commercial farms include all farms with a value of farm products sold of \$2,500 or more and farms with a value of farm products sold of less than \$2,500 provided the farm operator was under 65 years of age, and (1) he did not work off the farm 100 or more days, and (2) the income that he and members of his household received from sources other than the farm operated was less than the total value of farm products sold.

FARM LABOR

Farmworkers include farm operators, unpaid family labor, and hired workers. Hired workers comprise both regular workers (those employed for 150 or more days during the year) and seasonal workers (those employed for less than 150 days during the year). Data on hired workers include the number of workers paid on a monthly, weekly, daily, hourly, and piece-rate basis.

The specified farm labor workweek.—Data on farm labor relate to the number of workers for the week prior to the enumeration in the fall of 1959. For individual farms, "last week" varied from the first week in October to the last week in December in 1959.

Definition of farm labor.—The enumerator was instructed to include as farm labor—

- a. Labor in fields, orchards, or home gardens.
- b. The care and feeding of livestock and poultry.
- c. Irrigation of crops.
- d. Transportation of farm products from his farm to market by the farm operator.
- e. Transportation of feed, fertilizer, and other supplies to the farm by the farm operator.
- f. Care and cleaning of milk pails and separators.
- g. Maintenance and repair of farm machinery and equipment.
- h. Regular farm help used in constructing or repairing farm buildings and fences.
- i. Contract farmwork for which labor is hired, but for which machines and equipment are furnished by the farm operator.
- j. Contract work done by persons supplied by a labor contractor or by cooperative organizations such as a citrus cooperative.
- k. Planning farmwork.
- l. Keeping farm records.
- m. Supervision of hired farm employees.
- n. Cutting firewood, fenceposts, timber, pulpwood, etc. except by persons specifically hired for this purpose.

Examples of the type of work not to be included were—

- a. Housework.
- b. Contract construction work.
- c. Customwork for which equipment and operating labor are hired, such as custom combining, hay baling, etc.
- d. Repair, installation, or construction work by persons employed specifically for such work.

For 1959, enumerators were instructed to include as hired workers, workers employed by a labor contractor, a cooperative organization, a processor, etc., to perform farmwork, such as harvesting of vegetable crops, picking fruit, etc. However, a review of available data indicates that farm operators and census enumerators usually did not report such workers as hired farmworkers. Farm operators do not consider such contract workers as hired farm labor as they do not employ them directly. Very often such contract workers are employed to harvest crops that were sold by the farm operator in the field or on the tree, or to perform farmwork for which the farm operator pays a fixed charge. Moreover, in the case of large-scale operations involving such contract workers, the farm operator may not know how many contract persons worked on his farm during a selected week.

The operator.—The typical farm operator not only plans the farm operations, but is also a part of the farm labor force. He has the dual role of planning and execution.

The advent of modern machinery, electricity, etc. has permitted the farm operator to dispense with much of the hired labor that was necessary in the past.

Some farmers operate their farms without any assistance, some use family or hired labor, and some use a combination of family and hired labor. While most operators both plan and execute farm operations, a few, such as hired managers, plan and supervise only. Other operators may provide only the labor and leave most of the planning to the landlord.

Hired workers.—For census purposes, hired workers are divided into two groups; those working 150 days or more (regular workers) and those working less than 150 days (seasonal workers).

Fertilizer and lime.—The enumerators were instructed to include all commercial fertilizer and lime used in 1959, regardless of when it was purchased, whether purchased by the landlord, the tenant, or both, jointly. Regardless of who purchased the fertilizer, it was to be reported on the questionnaire of the person who was operating the land on which it was applied. If the landlord was the purchaser but the tenant used the fertilizer on his crops, he (the tenant) was to report the fertilizer on his questionnaire. Manure, straw, gypsum, and refuse materials were not to be reported as fertilizer. Lime included ground limestone, hydrated and burnt lime, marl, oyster shells, and other forms of lime. Lime used for spray or sanitation purposes was excluded.

The fertilizer and lime may have been purchased in 1958, and may have been used in 1959 on crops planted in 1958 for harvest in 1959, or on crops planted in 1959 for harvest in 1960. If several applications were made during the year, the total amounts of fertilizer and lime were reported, but the acreage was counted only once.

The number of tons applied is the only measure of the quantity of fertilizer used obtained in the census.

Commercial fertilizer and lime used in 1959 under soil-conservation programs were to be reported.

The fertilizer inquiries on the questionnaire contained six parts listing the crops to which fertilizer might be applied. Only three parts were uniform for all States:

- (a) Hay and cropland pasture.
- (b) Other pasture (not cropland).
- (f) All other crops.

The other three parts, which varied by State, related to specified crops.

FARM EXPENDITURES

The expenditure items included in the census for the conterminous United States in 1959 include feed for livestock and poultry; machine hire; hired labor; seeds, bulbs, plants, and trees; gasoline and other petroleum fuel and oil for the farm business; and the purchase of livestock and poultry. In Alaska and Hawaii, the census included, in addition, the expenditures for the purchase of commercial fertilizer; the cost of land clearing, breaking, and draining for Alaska; and the cost of lime and insecticides and fungicides purchased for Hawaii.

The expenditures were for the calendar year and were to be reported for each farm whether incurred by the operator or the landlord. For a farm operator who also rented land to others, only expenditures for the land he operated were to be reported.

For tenant-operated farms the expenditures reported were to include the amount spent by both the tenant and the landlord. In

some cases, tenants may not have reported the landlord's share of expenditures, and landlords who operated their own farms may have reported expenditures made for their entire holdings including the land they rented to tenants.

Expenditures for feed for livestock and poultry include payments for pasture, salt, condiments, concentrates, and mineral supplements as well as for grain, hay, and millfeeds made either by the farm operator or by his landlords, or by contractors where livestock or poultry was fed under contract. The amount spent for grinding and mixing feed was also to be included. Payments made by a tenant to his landlord for feed grown on the place were not to be included.

The purchase of livestock and poultry includes all kinds of livestock and poultry purchased. Livestock purchases were to include the cost of livestock fed under a contract arrangement except when the livestock was fed less than 30 days. Poultry purchases were to include baby and broiler chicks and turkey poults, whether purchased by the operator or by others under a contract arrangement. The farm operator raising broilers under contract was asked to estimate the value of chicks purchased by the person with whom he had a contract.

The expenditures for hired labor include only cash expenditures. The cost of perquisites furnished hired labor such as room, board, house, milk, meat, or other farm produced products were not to be included. Payments for housework, contract construction work, and labor connected with custom machine work were to be excluded.

Machine hire refers to custom farmwork, such as tractor hire, combining, cotton ginning, silo filling, plowing, spraying, fruit picking, etc. Expenditures for machine hire were to include the cost of labor as well as the cost for machines used by the labor. Expenditures for hauling, trucking, freight, etc. were not to be included.

The expenditures for seeds, bulbs, plants, and trees do not include the value or cost of seeds or plants produced on the farm nor of florist and nursery products purchased for resale without further growth.

LIVESTOCK AND LIVESTOCK PRODUCTS

The counting of the number of livestock on the place at the time the agriculture questionnaire was filled was specified for 1959. To insure that all livestock would be counted in the census, the farm operator was instructed to include all poultry and animals on the place whether owned by him or by others. A further instruction was given, for those areas where applicable, to include livestock grazing on land used under a permit.

The number of milk cows was obtained by an inquiry in connection with milk production at the time of enumeration. Farm operators were asked first for the number of cows and heifers milked the day preceding the enumeration and then the question, "How many milk cows were on this place yesterday? (Include dry milk cows and milk heifers that have calved.)"

All cows milked were considered to be milk cows regardless of whether kept only for the production of milk used on the place or of milk for sale.

All sales of animals and poultry were to be reported for the farm from which they were sold regardless of whether the sale was made by the farm operator or by someone else. Special emphasis was placed on the inclusion of broilers sold and turkeys raised when those kinds of poultry were grown under contract.

Sales of livestock and livestock products were to be reported for the calendar year. In the 1959 census, farm operators were asked to report separately the number of live animals already sold and the number estimated to be sold between the time of enumeration and the end of the year. This separation of reports for the number sold and to be sold was designed to assure more complete reporting of all sales made during the year.

Whole milk and cream sold.—Data for whole milk and cream relate to the entire calendar year 1959. All milk and cream sold from the farm (except quantities purchased from some other place and then resold) was to be included, regardless of who shared the receipts.

The questionnaire provided alternative units of measure for reporting the quantity of whole milk sold for all States except Hawaii. The units of measure specified were: Pounds, gallons, and pounds of butterfat for States in the conterminous United States; pounds and gallons for Alaska; and quarts for Hawaii.

The quantity of whole milk sold is published in pounds. Conversion from gallons to pounds was made by multiplying the number of gallons by 8.6. Pounds of butterfat in whole milk sold were converted into pounds of milk on the basis of the average butterfat content of milk in each State as furnished by the Agricultural Marketing Service of the U.S. Department of Agriculture.

Cream sold was enumerated in pounds of butterfat in 49 States. The inquiry regarding cream sold was not made in Hawaii. In tables showing total pounds of milk sold, cream was converted into equivalent pounds of whole milk sold.

FIELD CROPS AND VEGETABLES

Data for each crop usually include the number of farms on which the crop was harvested, the acreage harvested, the quantity harvested, the quantity sold—if enumerated—and the value of both production and sales. No information on quantity harvested is given for vegetables. Units of measure are so varied for vegetables that it is difficult or impossible to obtain from farm operators satisfactory figures on vegetable production.

Crops harvested.—The 1959 agriculture questionnaire provided for the collection of detailed information for each crop harvested on each farm. The variation in the crops listed on the questionnaires used in different States made possible the separate reporting of all important crops grown in a State. Each State questionnaire contained several "all other crops" questions for reporting crops not specifically listed in separate questions.

Acres harvested.—In most instances, the acres reported for individual crops represent the area harvested during 1959. The area harvested may be less than the area planted. The acreage for vegetables includes the acreage harvested for sale and excludes the area of small plots and gardens for home use.

Because of drought and other climatic conditions, crops are not always harvested for the purpose for which they were planted. As drought conditions resulted in heavy abandonment of crops in some areas, many farmers let their livestock graze on much of this acreage. Acres pastured would not appear with census statistics for a grain crop harvested but would be included under "root and grain crops hogged or grazed." If the crop were completely abandoned, i.e., not harvested for grain, cut for hay, or pastured, the acreage would not appear in the data for any crop. Land planted to a crop that completely failed and not replanted to another crop during the same calendar year would not be included

in the data for cropland harvested, but under the land-use classification "cropland not harvested and not pastured."

The acreage of land from which crops were harvested is not always the same as the total acres of all crops harvested, as more than one crop may have been harvested from the same land during the same crop year. Farm operators were asked, "How many acres of land were in fields and tracts from which crops were harvested (including hay cut) this year?" The land for this question has been termed "cropland harvested."

Quantity harvested.—The quantity harvested represents the total production, including amounts for home use; the amount sold; and the amount belonging to or delivered to the landlords. For vegetables and Irish potato crops in southern Florida, the data for quantity harvested relate to the crop year 1959. For vegetables, the quantity sold and not the quantity harvested was obtained. Generally, the enumeration was made at the end of the harvest season. However, farm operators and census enumerators were asked to estimate the quantity of any crop not harvested at the time of the enumeration and to include this in the total quantity harvested.

The unit of measure in which quantity harvested or quantity sold was to be reported varied for some crops, not only from State to State, but also from census to census. The purpose of varying units of measure has been to permit reporting in the units of measure currently in use by farm operators. The quantities harvested for each crop are published in the unit of measure most commonly given in the 1959 agriculture questionnaire.

SPECIFIED CROPS HARVESTED

Corn.—The 1959 agriculture questionnaire provided for the reporting of corn according to use. The total acreage was classified into (1) corn for grain, (2) corn for silage, and (3) corn hogged or grazed or cut for green or dry fodder. The questions were uniform for all States in the conterminous United States.

The value of corn sold represents only the value of the corn sold for grain. The amount of corn silage and fodder sold is very small except in a few counties in some Western States (primarily California). Even in these few Western States, the value of corn silage and fodder sold comprised only a relatively small part of the value of the corn crop sold. The value of corn sold for 1959 was calculated by multiplying the bushels sold by an estimated State average price per bushel.

Hay crops.—Separate questions reporting one or more kinds of hay appeared on the questionnaire for each State. The acreage harvested, tons harvested, and tons sold were to be reported. Specific questions for each important kind of hay were included on the questionnaire for each State.

For most States, separate questions were on the questionnaire for alfalfa and alfalfa mixtures for hay; clover, timothy, and mixtures of clover and grasses for hay; oats, wheat, barley, rye, or other small grains cut for hay; and all other hay. Separate questions for lespedeza hay, wild hay, and grass silage were not listed on the questionnaires for all States.

The data for all hay does not include the acreage, production, or value of sorghum, soybean, cowpea, or peanut hay. These hays were reported separately and are published with the other data on crops. The quantity of hay harvested was to be reported on a dry-weight basis. Green silage was reported on a green-weight basis. If two or more cuttings of hay were made from the same acreage,

the acres were to be reported only once, but the total production was to be reported from all cuttings.

Grass silage was defined as silage made from grasses, alfalfa, clover, or small grains, including silage made from crops cut from land used primarily for pasture. It did not include silage made from corn or sorghums. Separate questions for grass silage were included on the questionnaire for 28 States. In the other States grass silage was included in the "catchall" question provided for reporting crops not listed elsewhere on the questionnaire. Data were tabulated and published for those States also. A considerable proportion of grass silage was cut from the same acreage from which a hay crop was cut. If both hay and grass silage were cut from the same land, the acres from which hay was cut and the acres from which grass silage was cut were to be included for each crop.

Irish potatoes.—The total quantity harvested was reported in all cases whether harvested for home use or for sale. However, the acreage harvested was to be reported only when the quantity amounted to 20 or more bushels (or the approximate equivalent in terms of hundredweights or barrels as specified on the different State questionnaires). The procedure of not reporting acres or fractions of an acre when the quantity harvested was less than 20 bushels, was designed to facilitate the enumeration of potatoes harvested on small plots or gardens for home consumption.

The unit of measure for reporting quantity harvested varied by State in order to provide for the use of the unit most commonly used in each State. In 27 States, the questionnaire provided for reporting in one of two units of measure, i.e., bushels or hundredweights. "Barrels" was used as the unit of measure for Maine (barrel=165 lb. or 2¾ bushels). Quantities published in this report are in bushels.

The quantities sold were estimated on the basis of data supplied by the Agricultural Marketing Service of the U.S. Department of Agriculture.

Vegetables harvested for sale.—The agriculture questionnaire contained questions asking for the whole acres and tenths of an acre for each vegetable crop harvested for sale in 1959. Separate questions were provided for the most important vegetables for each State and space was provided for writing in the names and acres of other vegetables harvested for sale. Vegetables grown for human consumption; for sale on the fresh market; and for sale to canners, freezers, dehydrators, or other processors were to be reported. Enumerators were required to include vegetables sold from home gardens and all vegetables grown under contract.

The value of vegetables sold was obtained for all the vegetables harvested for sale for each farm, but not for each vegetable crop harvested. In Alaska and Hawaii, the value of sales for each vegetable crop was enumerated.

Land in fruit orchards, groves, vineyards, planted nut trees, and coffee plantations.—The total acres of land in planted orchards, groves, nut trees, vineyards, and coffee were obtained for all States.

In 1959, the acreage of land in farms, the number of trees or vines, the quantity harvested, etc., for fruit trees, nut trees, grapevines, and coffee trees were not obtained for farms having a combined total of less than 20 trees and vines at the time of enumeration. Both bearing and nonbearing trees and vines were to be included.

Importance of large-scale farms.—Farms with sales of \$100,000 or more represented only four-fifths of 1 percent of all commercial

LARGE-SCALE FARMING

farms yet they accounted for nearly one-fifth of all the farm products sold in 1959. The 19,979 large-scale farms accounted for 12 percent of the fertilizer used; 16 percent of all feed expenditures; 29 percent of all expenditures for purchase of livestock and poultry; almost 16 percent of all expenditures for machine hire; 31 percent of the expenditures for hired labor; 16 percent of the expenditures for seeds, bulbs, plants, and trees; and 8 percent of the expenditures for gasoline and other petroleum fuel and oil for the farm business. They employed more than 20 percent of all hired farmworkers, and almost 29 percent of all regular hired farmworkers. This group of farms accounted for 5 percent of cropland harvested; 18 percent of all crops sold; and about three-tenths of all livestock and livestock products sold.

About 2 percent of all acreage in corn for grain; 5 percent of hay acreage; about 23 percent of the acreage for Irish potatoes; 51 percent of the value of vegetables harvested for sale; and almost 19 percent of land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees were on farms with a value of farm products sold of \$100,000 or more.

These farms had about 11 percent of total cattle and calves on hand, about 4 percent of milk cows, 2 percent of all hogs and pigs, almost 13 percent of all sheep and lambs, and 7 percent of chickens 4 months old and over.

Table 1.—SELECTED FARM RESOURCES FOR ALL COMMERCIAL FARMS AND FOR FARMS WITH A VALUE OF FARM PRODUCTS SOLD OF \$100,000 OR MORE FOR THE UNITED STATES: 1959

Item	All commercial farms	Farms with a value of farm products sold of \$100,000 or more	
		Total	Percent of total for all commercial farms
Number of farms.....	2,416,017	19,979	0.8
Land in farms.....acres...	977,275,507	113,592,662	11.6
Cropland harvested.....acres...	295,477,889	14,983,367	5.1
Irrigated land in farms.....acres...	32,238,377	7,472,133	23.2
Regular hired farmworkers.....persons...	674,917	192,588	28.5
Tractors other than garden.....number...	3,946,920	121,338	3.1
Fertilizer used.....tons...	18,143,681	2,023,925	11.9

Table 2.—SELECTED ITEMS OF LIVESTOCK AND LIVESTOCK PRODUCTS FOR ALL COMMERCIAL FARMS AND FOR FARMS WITH A VALUE OF FARM PRODUCTS SOLD OF \$100,000 OR MORE, FOR THE UNITED STATES: 1959

Item	All commercial farms (1,000)	Farms with a value of farm products sold of \$100,000 or more	
		Total (1,000)	Percent of total for all commercial farms
Livestock on hand:			
Cattle and calves.....number...	85,532	9,311	10.9
Milk cows.....number...	15,387	600	3.9
Hogs and pigs.....number...	63,778	1,045	1.6
Sheep and lambs.....number...	31,236	4,036	12.9
Chickens 4 months old and over.....number...	329,953	23,421	7.1
Livestock and livestock products sold:			
Cattle and calves sold alive.....number...	48,161	8,546	17.7
value, dollars...	7,507,202	1,779,198	23.7
Hogs and pigs sold alive.....number...	76,603	1,482	1.9
Milk and cream sold.....pounds...	101,711,171	5,639,588	5.5
value, dollars...	3,918,461	297,211	7.6
Chicken eggs sold.....dozens...	3,425,535	326,003	9.5
Broilers sold.....number...	1,410,129	209,877	14.9
Turkeys raised.....number...	79,456	34,366	43.3
Sheep and lambs sold alive.....number...	23,781	4,049	17.0

Table 3.—SELECTED FARM EXPENDITURES FOR ALL COMMERCIAL FARMS AND FOR FARMS WITH A VALUE OF FARM PRODUCTS SOLD OF \$100,000 OR MORE, FOR THE UNITED STATES: 1959

Item	All commercial farms (\$1,000)	Farms with a value of farm products sold of \$100,000 or more	
		Total (\$1,000)	Percent of total for all commercial farms
Feed for livestock and poultry.....	4,481,682	736,548	16.4
Purchase of livestock and poultry.....	3,738,663	1,094,875	29.3
Machine hire.....	748,004	118,441	15.8
Hired labor.....	2,531,251	788,981	31.2
Seeds, bulbs, plants, and trees.....	462,286	73,163	15.8
Gasoline and other petroleum fuel and oil for the farm business.....	1,443,593	116,051	8.0

Table 4.—PERCENT OF TOTAL FOR ALL COMMERCIAL FARMS REPRESENTED BY TOTALS FOR FARMS WITH A VALUE OF FARM PRODUCTS SOLD OF \$100,000 OR MORE, FOR SELECTED FARM PRODUCTS, FOR THE UNITED STATES: 1959

Farm products sold	Percent of total value of farm products sold for all commercial farms represented by total for farms with a value of farm products sold of \$100,000 or more
All farm products.....	16.9
Cash-grain crops:	
Corn.....	1.8
Rice.....	25.1
Wheat.....	8.3
Cotton.....	24.4
Fruits and nuts.....	32.1
Irish potatoes.....	29.6
Sugar beets.....	5.1
Sugarcane.....	58.4
Tobacco.....	2.5
Vegetables.....	47.4
Field crops and cash-grain crops other than the above.....	8.8
Poultry products.....	17.3
Dairy products.....	7.6
Cattle and calves.....	23.7
Hogs and pigs.....	2.0
Sheep and lambs.....	16.8
Livestock products other than poultry and dairy.....	18.5
Forest products and horticultural specialty crops.....	40.3

Kinds of large-scale farms.—Large-scale farms vary greatly in size of operation and other characteristics. The following data indicate the distribution of these farms by selected size of operation as measured by the value of farm products sold in 1959.

Value of farm products sold	Number of farms
\$1,000,000 or more.....	408
\$500,000 to \$999,999.....	800
\$200,000 to \$499,999.....	4,570
\$100,000 to \$199,999.....	14,201

Large-scale farms vary greatly in land area. Some, such as feedlots, "drylot" dairies, poultry farms, greenhouses, etc., are less than 10 acres in size. The distribution of large-scale farms, by size of farm, as measured by land area was as follows:

Size of farm	Number of farms
Under 10 acres	514
10 to 49 acres	1,446
50 to 69 acres	264
70 to 99 acres	387
100 to 139 acres	467
140 to 179 acres	510
180 to 219 acres	466
220 to 259 acres	473
260 to 499 acres	2,430
500 to 999 acres	3,424
1,000 to 1,999 acres	3,579
2,000 or more acres	6,019

The distribution by tenure of the operator of large-scale commercial farms differs significantly from that of all commercial farms.

Tenure of farm operator	Percent distribution	
	All commercial farms	Large-scale farms
Total	100.0	100.0
Full owners	45.3	29.9
Part owners	29.2	44.4
Managers	0.7	13.1
Tenants	24.8	12.6

Approximately one out of every 6 farms operated by farm managers in the United States is a large-scale farm.

In most cases, large-scale farms are specialized farms. The distribution of all commercial farms and large-scale farms, by type of farm, was as follows:

Type of farm	All commercial farms		Farms with a value of farm products sold of \$100,000 or more	
	Number	Percent distribution	Number	Percent distribution
Cash-grain	398,047	16.5	1,179	5.9
Tobacco	190,057	7.9	68	0.3
Cotton	241,849	10.0	2,990	15.0
Other field-crop	38,332	1.6	888	4.4
Vegetable	21,912	0.9	1,049	5.3
Fruit-and-nut	61,419	2.5	1,693	8.5
Poultry	103,279	4.3	2,000	10.0
Dairy	428,293	17.7	1,755	8.8
Livestock farms other than poultry and dairy and livestock ranches...	616,902	25.5	4,171	20.9
Livestock ranches	67,159	2.8	1,985	9.9
General	211,613	8.8	931	4.7
Miscellaneous	37,155	1.5	1,270	6.3

COMPARISON OF LARGE-SCALE FARMS AND ALL COMMERCIAL FARMS

The resources used and production per farm for large-scale farms were several times those for all commercial farms. For ex-

ample, the average acreage of land in farms for large-scale farms was 14 times that for all commercial farms. Because the large-scale farms are more specialized than all commercial farms, differences in averages between large-scale and all commercial farms per farm reporting were very large both for resources used and production of each farm product.

Item	Average per farm	
	All commercial farms	Farms with a value of farm products sold of \$100,000 or more
Land in farms	405	5,686
Cropland harvested	122	750
Hired farmworkers	0.6	15.2
Tractors, other than garden	2	6
Fertilizer used	8	101
Expenditures for 6 items ¹	6	147
Value of all farm products sold	12	249
Value of land and buildings:		
United States	44	557
average per acre, dollars ..	118	92
The North	44	281
average per acre, dollars ..	145	97
The South	33	693
average per acre, dollars ..	108	100
The West	92	640
average per acre, dollars ..	85	85
Cattle and calves	35	466
Milk cows	6	30
Hogs and pigs	26	52
Sheep and lambs	13	202
Chickens 4 months old and over	137	1,172
Livestock and livestock products sold:		
Cattle and calves sold alive	20	428
Hogs and pigs sold alive	32	74
Milk and cream sold	42,098	282,276
Chicken eggs sold	1,418	16,317
Broilers sold	584	10,505
Turkeys raised	33	1,720
Sheep and lambs sold alive	10	203

¹Includes feed for livestock and poultry; purchase of livestock and poultry; machine hire; hired labor; seeds, bulbs, plants, and trees; and gasoline and other petroleum fuel and oil for the farm business.

There were significant differences between all commercial farms and large-scale farms in the average acres of selected crops harvested per unit of various kinds of equipment and in the use of purchased inputs and the production or sales per animal or per acre.

LARGE-SCALE FARMING

Item	All commercial farms				Farms with a value of farm products sold of \$100,000 or more			
	United States	The North	The South	The West	United States	The North	The South	The West
Acres of cropland harvested per tractor (other than garden).....	75	77	67	82	124	128	117	127
Average acres of corn harvested for grain per corn picker.....	89	83	137	86	201	225	160	370
Average tons of hay harvested per pickup baler.....	158	142	118	350	782	479	268	1,349
Average regular hired workers.....	0.3	0.2	0.3	0.7	9.6	6.5	11.5	10.2
Percent of farms reporting—								
Use of commercial fertilizer.....	72	70	80	52	72	70	75	70
Wheel tractors.....	81	92	65	80	91	90	92	90
Pounds of fertilizer used per acre fertilized.....	292	228	405	299	485	351	565	474
Value of milk and cream sold per milk cow.....dollars..	255	251	218	348	495	455	413	540
Value of eggs sold per chicken 4 months old and over.....dollars..	3.33	3.10	3.33	4.27	5.01	5.44	5.03	4.67
Yield per acre of—								
Corn for grain.....bushels..	54	58	35	61	65	71	45	74
Alfalfa and alfalfa mixtures for hay and for dehydrating.....tons..	2.4	2.2	2.3	3.1	4.0	2.6	2.9	4.6
Clover, timothy, and mixtures of clover and grasses cut for hay.....tons..	1.6	1.7	1.4	1.6	1.6	1.8	1.6	1.4
Irish potatoes.....bushels..	313	295	216	366	352	294	262	432

Change in the number of large-scale farms.—Few data on large-scale farming are available for prior censuses. A special report for the 1930 Census of Agriculture, "Large-Scale Farming in the United States, 1929," presents data for 7,875 large-scale farms. However, 1,546 of these large farms had a value of farm products sold or used by the operator's household of under \$30,000 and only 1,008 had a value of farm products of \$100,000 or more. The minimum value of farm products sold used for selecting large-scale farms for 1929 differed from that used for 1959. Moreover, the values of farm products sold in 1929 and 1959 are not comparable because of changes in the price level of farm products. (The index number of prices received by farmers (1910-14=100) published by the United States Department of Agriculture was 148 for 1929 and 240 for 1959.)

The classification of farms by type of farm for 1929 was made on the basis of principal source of income. While the basis of the type of farm classification for 1929 and 1959 differed somewhat, the number of farms by type of farm is reasonably comparable because large-scale farms in 1929 were also highly specialized. Hence the classification of large-scale farms by type of farm for 1929 would not have been significantly different from that which would have been obtained by the use of the 1959 criteria for the type of farm classification. The distribution of these large-scale farms in 1929 by type of farm and value of farm products sold or used by the operator's family was as follows:

With changes in price level, most farms with value of farm products of \$60,000 or more in 1929 would have had a value of farm products sold equivalent to approximately \$100,000 or more in 1959. If adjustments are made because of the change in the level of farm prices, the comparable number of large-scale farms (in farms with a value of farm products sold equal to approximately \$100,000 at 1959 prices), by type of farm for 1929 and 1959 would be as follows:

Type of farm	Number of large-scale farms	
	1929 ¹	1959
Total.....	2,420	19,979
Cash-grain.....	100	1,179
Tobacco.....	54	68
Cotton.....	102	2,990
Other field-crop.....	142	888
Vegetable.....	231	1,049
Fruit-and-nut.....	376	1,693
Poultry.....	43	2,000
Dairy.....	200	1,755
Livestock other than poultry and dairy.....	1,081	6,156
General.....	12	931
All other.....	79	1,270

¹Does not include data for Alaska and Hawaii.

Value of products sold or used by the operator's family (dollars)	Number of farms by type										
	Total	Cash-grain	Tobacco	Cotton	Other field-crop	Vegetable	Fruit-and-nut	Poultry	Dairy	Livestock other than poultry and dairy	All other
Total.....	7,875	486	128	441	571	785	1,924	225	882	2,237	146
Under 30,000.....	1,546	100	12	69	49	117	780	95	147	154	14
30,000 to 49,999.....	3,145	242	50	228	309	352	636	76	452	730	47
50,000 to 59,999.....	764	44	12	42	71	85	132	11	83	272	6
60,000 to 79,999.....	908	45	18	42	71	95	153	19	90	356	13
80,000 to 99,999.....	504	23	5	26	26	45	73	7	46	240	11
100,000 to 149,999.....	536	21	13	16	29	45	78	8	34	270	20
150,000 to 199,999.....	202	4	10	9	6	16	37	3	14	91	11
200,000 to 299,999.....	154	6	7	5	6	19	19	4	7	67	14
300,000 to 399,999.....	56	1	1	3	2	6	7	1	5	28	2
400,000 to 499,999.....	16	...	...	...	...	4	1	...	...	7	4
500,000 to 749,999.....	26	...	...	1	1	...	2	1	3	16	2
750,000 to 999,999.....	8	...	...	...	...	...	2	...	1	3	1
1,000,000 or more.....	10	...	...	...	1	1	4	...	...	3	1