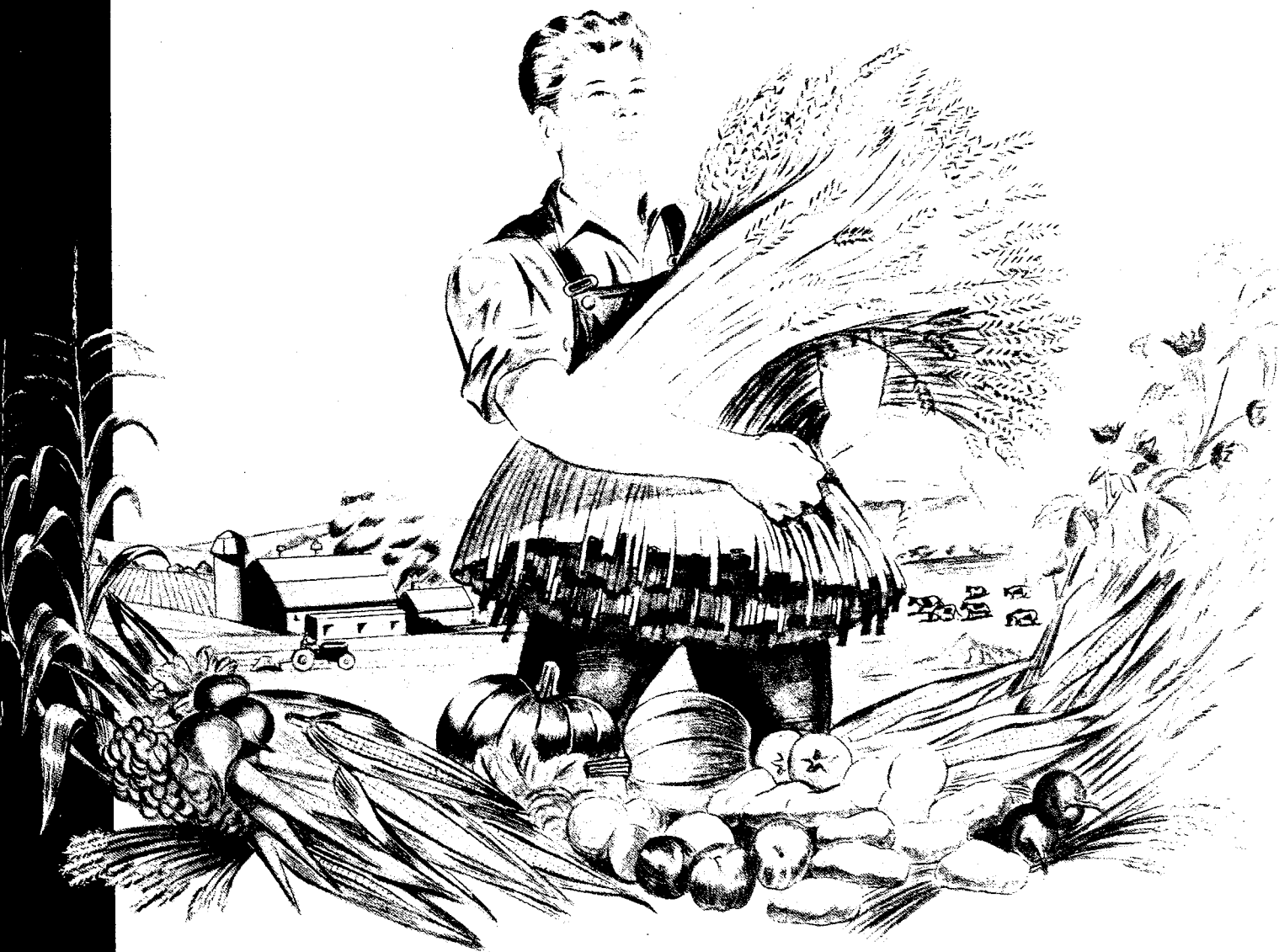


UNITED STATES CENSUS OF **AGRICULTURE** 1945



DEPARTMENT OF COMMERCE

Charles Sawyer, Secretary

BUREAU OF THE CENSUS

J. C. Capt, Director

**FARMS AND
FARM CHARACTERISTICS
BY
COLOR AND TENURE
OF OPERATOR**

UNITED STATES CENSUS OF AGRICULTURE: 1945

SPECIAL REPORT FARMS AND FARM CHARACTERISTICS BY COLOR AND TENURE OF OPERATOR

Farms, Farm Acreage, Facilities in Farm Dwellings, Farm Equipment,
Farm Population, Number of Principal Kinds of Livestock,
Production of Important Livestock Products,
Acreage and Production of Principal Crops,
and Value of Farm Products Sold
or Used by Farm Households
By Color and Tenure
of Operator

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UNITED STATES CENSUS OF AGRICULTURE: 1945

REPORTS¹ ON AGRICULTURE

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State reports, with statistics by counties for farms, acreage, value, livestock, livestock products, crops, fruits, and value of farm products, 33 parts. Prices vary. (Price list for Volume I, Final Reports, U. S. Census of Agriculture available upon request.)

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Statistics by subjects for the United States, geographic divisions, and States. One volume, buckram, 1,000 p., il., \$5.00. Volume II is comprised of 10 subject-matter chapters, each available separately, paper, as follows:

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| I. Farms and farm property. 174 p. \$0.65. | VI. Farm facilities, roads, and farm machinery. 153 p. \$0.60. |
| II. Size of farm. 196 p. \$0.70. | VII. Livestock and livestock products. 204 p. \$0.75. |
| III. Color and tenure of farm operator. 223 p. \$1.00. | VIII. Field crops and vegetables. 235 p. \$1.00. |
| IV. Age, residence, years on farm, and work off farm. 170 p. \$0.65. | IX. Fruits and nuts, and horticultural specialties. 155 p. \$0.60. |
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BY COLOR AND TENURE OF OPERATOR. 366 pages, paper, (\$1.25).

Four separate reports with statistics by States for items for which data were collected on a sample basis, and with data classified by size of farm, by value of products, by type of farm, or by color and tenure of operator, as specified in titles above.

COOPERATIVE REPORTS¹

(Bureau of the Census of the U. S. Department of Commerce and the Bureau of Agricultural Economics of the U. S. Department of Agriculture. Basic data primarily from the Censuses of Agriculture.)

LAND UTILIZATION—GRAPHIC SUMMARY

Presenting graphically the uses being made of the agricultural land resources, both inside and outside farm boundaries. Attention has been given to factors contributing to record volumes of crop and livestock production with little expansion in physical area. 41 p., il., paper, \$0.20.

FARM TENURE—GRAPHIC SUMMARY

A graphic presentation of the extent and general nature of the various forms of tenure under which farms are held or operated. The factors contributing to trends and changes in farm tenure since 1880 are analyzed. 40 p., il., paper, \$0.25.

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LETTER OF TRANSMITTAL

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Washington, D. C.

January 1, 1949

SIR:

I transmit herewith a special report of the 1945 Census of Agriculture. This report presents statistics compiled for a sample of all farms included in the 1945 Census of Agriculture. It includes data by color and tenure of operator for farms, farm acreage, facilities in farm dwellings, farm equipment, farm population, the number of principal kinds of livestock, the production of important livestock products, the acreage and production of principal crops, and the value of farm products sold or used by farm households.

The making of tabulations for a sample of all farms made it possible to present, in this special report, data that could not be tabulated for all farms because of the cost. The mass of detailed information provided by this report will help students and agricultural workers generally to become more familiar with the characteristics of our agriculture and to better understand the agricultural problems of our Nation.

The 1945 Census of Agriculture was taken in conformity with the Act of Congress providing for the Fifteenth Decennial Census and subsequent censuses, approved June 18, 1929. The collection of data was performed by Census enumerators under the direction of supervisors appointed by the Director of the Census. The compilation of the statistics in this special report was made under the supervision of Ray Hurley, Chief, Agriculture Division, and Warder B. Jenkins, Assistant Chief, with the assistance of Hilton E. Robison, John A. Burroughs, Carl R. Nyman, Harold Nisselson, Lois Hutchison, Orville M. Slye, Gladys L. Eagle, Elmer O. Rea, and Henry A. Tucker. The mechanical tabulation, by electrical machines, was made under the supervision of C. F. Van Aken. The maps and charts were prepared under the supervision of Clarence F. Batschelet, Geographer.

Acknowledgment is made of the technical assistance and of the loan of technical personnel by the United States Department of Agriculture in the planning, the enumeration, and the compilation of the 1945 Census of Agriculture.

Respectfully,

J. C. CAPT,
Director of the Census.

HON. CHARLES SAWYER,
Secretary of Commerce.

Page

MAPS

CHARTS

TABLES

A. Indicated level of sampling reliability of estimated State totals by tenure class for specified items-----	XII
B. Sampling reliability of estimated item totals for States by tenure class for specified numbers of farms reporting, by levels-----	XII
C. Farms, farm characteristics, and value of farm products, by tenure of operator, for the United States: 1945 Census of Agriculture-----	XVII
1. Number of farms, farm land classified by principal uses, value of farms and of farm implements and machinery, and farms reporting cropland harvested by acres harvested; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	1
2. Number of farms classified by value of land and buildings and farms reporting value of farm implements and machinery classified by amount reported; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	15
3. Farm operators classified by age and by years on farm, and work off farm; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	29
4. Farm population and cash wages paid for farm labor, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture----	43
5. Specified farm expenditures, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	57
6. Resident farm operators, specified farm facilities in farm dwelling, farms classified by distance to an all-weather road, number of combines, and farms reporting milking machines; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	71
7. Motortrucks on farms, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture-----	85

	Page		Page
8. Tractors on farms and farms classified by class of work power, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	99	13. Farm slaughter, chickens on hand, eggs produced, chickens raised, and turkeys raised; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	169
9. Automobiles on farms, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	113	14. Corn for all purposes; oats, barley, and wheat threshed; and hay cut; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	183
10. Electric motors and stationary gasoline engines on farms, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	127	15. Tobacco, cotton, Irish and sweet potatoes, vegetables grown for home use, and vegetables harvested for sale; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	197
11. Livestock on farms, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	141	16. Land in fruit orchards, and specified fruits; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	211
12. Cows milked, milk produced, dairy products sold, and number of livestock sold; by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	155	17. Value of all farm products sold or used by farm households, by tenure of operator (by color and tenure in the South), by States: 1945 Census of Agriculture.....	225

Special Report — Farms and Farm Characteristics by Color and Tenure of Farm Operator

Introduction.—The data included in this special report provide the first opportunity in recent years to analyze many of the characteristics of farms and farm operators in their relationship to tenure of farm operator. This report has been designed to supplement other reports in order to give a detailed picture of our agricultural resources and their utilization by different producing groups. This report provides a mass of information which will be of much value to students and agricultural workers generally in becoming more familiar with the characteristics of our agriculture. The material presented herein should be helpful in providing a better understanding of the agricultural problems of our Nation.

Source of data.—The statistics in this special report are estimates prepared on the basis of tabulations for a cross section, or a sample, of all farms included in the 1945 Census of Agriculture. This sample included approximately 50,000 designated large farms and a sample of approximately 323,000, or about 6 percent, of all other farms.

Description of sample.—In the sampling plan a cross section of small areas throughout the country was selected in such manner that the farms in those sample areas might represent all farms in the United States; as well as all farms in each State, for the items to be included in the enumeration. For this purpose, every county in the United States was completely subdivided into small areas or segments which averaged about 5 farms each and 2.5 square miles in area. A sample of 1 out of every 18 of these segments or sample areas was drawn. Every county in the United States was represented in the sample, with the exception of a few counties containing only a very small number of farms. Provision was made to insure the proper representation of farms in incorporated places and thickly settled unincorporated areas, as well as in open country areas. A detailed statement of the specific methods used in selecting this sample and for evaluating the precision of results may be obtained by writing to the Bureau of the Census. The sample was developed jointly by the Bureau of the Census and the Bureau of Agricultural Economics, with the cooperation of the Statistical Laboratory of Iowa State College, for use in connection with the 1945 Census of Agriculture and for general use in sample surveys in the field of agriculture.

All farms having their headquarters (farm dwellings, farm buildings, or farm entrance) within the selected areas were designated as sample farms. In addition, the sampling plan provided for the inclusion of approximately 50,000 of the largest farms in the United States, regardless of whether or not these were located in sample segments. For many items these large farms, although few in number, accounted for a considerable part of the State and national totals, and efficient sampling called for their inclusion in the sample. The criteria for selection of these large farms varied from State to State but were such as to insure the inclusion of most of the farming operations making large individual contributions to the total agriculture of the State. Lists of these specified large farms, prepared by the district supervisors, were provided the enumerator in advance of his canvass.

The sample, by including all the larger farms in addition to 1 in 18 of the remaining farms, covered about one-fourteenth of the farms in the United States and a much larger proportion of the acreage and production. This size of sample, except for a few of the smaller States and some of the more detailed tabulations, provided an adequate basis for State and national estimates.

Comparisons with other published data.—When data are tabulated for a sample, exact agreement with the results that would have been obtained from a tabulation of all farms is not, in general, expected. The differences in such cases are partly due to sampling variation, and partly to possible differences between the enumeration and the processing of sample farms and other farms.

State totals based on all farms enumerated in the 1945 Census of Agriculture are published in both volume I (Statistics by Counties) and volume II (General Report, Statistics by Subjects) for all items presented in this report except the following:

- * Expenditures for:
 - Purchase of livestock and poultry
 - Commercial fertilizer
 - Lime and other liming materials
 - Seeds, bulbs, plants, and trees
- * Stationary gasoline engines, farms reporting by horsepower of largest engine and total number of engines
- * Combines (harvester-threshers), farms reporting and number
- * Milking machines, farms reporting
- * Farms by class of work power
- * Farms by value of land and buildings
- * Farms reporting specified facilities in farm operator's dwelling:
 - Kitchen sink with drain
 - Mechanical refrigeration
 - Power-driven washing machine
- * Farms reporting by year of newest model:
 - Motortrucks
 - Automobiles
- * Electric motors, total and by horsepower, farms reporting and number
- * Number of tractors by kind

Items marked with an asterisk are among those for which information was obtained for only a sample of the farms enumerated in the 1945 Census of Agriculture. Information for those items not marked with an asterisk was obtained for all farms, but the data were tabulated for only those farms included in the sample.

Comparison of the State totals of the estimates, presented here by tenure of farm operator, with the corresponding published State totals for all farms, provides a measure of the sampling and other variations to which the estimates are subject. Measures of sampling reliability for all statistics in this report are given in the section called "Sampling Reliability of Estimates."

Tabulations based on all farms classified by tenure of farm operator are also published by States, in both volume I and volume II, for the following items:

- Total number of farms
- All land in farms, acres
- Specified classes of land in farms according to use, acres
- Value of farms (land and buildings), dollars
- Cropland harvested, number of farms reporting by acres harvested

Comparisons with the estimated numbers presented in this report, however, would lead to an underestimate of the variations to which the data as a whole are subject, because, in processing the sample, adjustments based on the known total numbers of farms by tenure class were introduced.

Definitions and explanations.—Definitions and explanations are given below for the various items for which data are included in this report.

Farm.—The schedule book for the 1945 Census of Agriculture was called "Farm and Ranch Schedule." The following definition appeared in each schedule book:

A farm, for Census purposes, is all the land on which some agricultural operations are performed by one person, either by his own labor alone or with the assistance of members of his household, or hired employees. The land operated by a partnership is likewise considered a farm. A "farm" may consist of a single tract of land, or a number of separate tracts, and the several tracts may be held under different tenures, as when one tract is owned by the farmer and another tract is rented by him. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a farm. Thus, on a plantation the land operated by each cropper, renter, or tenant should be reported as a separate farm, and the land operated by the owner or manager by means of wage hands should likewise be reported as a separate farm.

Include dry-lot or barn dairies, nurseries, greenhouses, hatcheries, fur farms, mushroom cellars, apiaries, cranberry bogs, etc.

Do not include "fish farms," "fish hatcheries," "oyster farms," and "frog farms." Do not report as a farm any tract of land of less than 3 acres, unless its agricultural products in 1944 were valued at \$250 or more.

Farming, or agricultural operations, consists of the production of crops or plants, vines, and trees (excluding forestry operations) or of the keeping, grazing, or feeding of livestock for animal products (including serums), animal increase, or value increase. Livestock, as here used, includes poultry of all kinds, rabbits, bees, and fur-bearing animals in captivity, in addition to mules, asses, burros, horses, cattle, sheep, goats, and hogs. Frequently, certain operations are not generally recognized as farming. This is especially true where no crops are grown or where the establishments are not commonly considered as farms.

There was provided a partial list of types of specialized agriculture and of operations not generally recognized 'as farming but for which a report was required. This list included such operations as apiaries (bee farms), feed lots, greenhouses, hatcheries, mushroom cellars, etc.

Farms reporting.—The term "farms reporting," as used in the tables, denotes the estimated number of farms for which the specified items would have been reported in a complete enumeration, based on the number of farms reporting the item in the sample.

Land in farms.—The acreage designated as "all land in farms" includes considerable areas of land not actually under cultivation and some land not even used for pasture or grazing, but all such land must have been under the control of the operator and considered a part of his farm. However, large areas of timberland or other nonagricultural land held by an operator of a farm as a separate business, and not used for pasture or grazing, or for any other farm purpose, were to be excluded. Land neither owned nor leased but from which crops, including wild hay, were harvested was to be reported as part of the farm. When cattle, sheep, or other livestock were grazed or pastured on land neither owned nor leased by the operator, such land was not to be included as a part of the farm. Operations limited to livestock grazing on open range and reported as having no land owned or leased were given "0" acres and were included with farms of under 3 acres.

The 1945 Census also includes in farm acreage more Indian grazing land than prior censuses because of changes in the method of enumerating agricultural activities on Indian reservations. In 1945, if land in an Indian reservation was used by the Indians on a cooperative basis, the entire acreage in the reservation was reported as a single farm. In such cases, much grazing land, not included in farms in previous censuses, was included as land in farms in 1945.

In 1945, data were obtained for eight classes of land based upon the use made of the land in 1944. Data are presented in this report for only cropland harvested and total land pastured.

Cropland harvested.—The land from which cultivated crops were harvested; land from which hay (including wild hay) was cut; and land in small fruits, orchards, vineyards, nurseries, and greenhouses. When two or more crops were harvested in 1944 from the same acreage, such acreage was included only once in the acreage for cropland harvested. However, the acreage and the quantity of each individual crop were reported separately as crops harvested.

Total land pastured.—Total land pastured represents the sum of the acreages reported for three separate classes of land in farms, namely, cropland used only for pasture, woodland pastured, and pasture other than woodland and cropland. Cropland used only for pasture comprises land used only for pasture in 1944 that had been plowed within the last 7 years. Woodland pastured comprises all farm wood lots or timber tracts, natural or planted, and cut-over land with young growth that had or would have value as wood or timber which were used for pasture or grazing in 1944. Pasture other than cropland and woodland includes nonwooded land that was not suitable for cropping or had not been plowed within 7 years which was used for pasture or grazing in 1944.

Farm values.—The enumerators were instructed to obtain from each farm operator the value of the farm (land and buildings) owned by the operator and, also, the value of that part of the farm rented from others. The value to be reported was the market value.

The operator was asked to place an over-all value on the farm implements and machinery used in operating the farm. This was to represent the present market value and was to include not only the farm implements but also the tools, tractors, motortrucks, wagons, harnesses, dairy equipment, Gins, threshing machines, combines, and all other farm machinery. However, the values of automobiles, commercial mills and factories, and, also, permanently installed irrigation and drainage equipment were to be omitted.

The difference in the number of farms reporting value of implements and machinery and the total number of farms indicates that this item may be incompletely reported, as it is not likely that the number of farms not having implements and machinery is as great as this difference indicates.

Farm operator.—A "farm operator," according to the Census definition, is a person who operates a farm, either performing the labor himself or directly supervising it. The number of farm operators is identical with the number of farms.

Years on farm.—The data on years on farm were secured on the basis of the answer to the question "Year the operator began to

operate this farm (continuously)." The data will reflect the stability or the instability of operators on particular farms. They do not necessarily represent the total years of farm experience.

Work off farm.—Many farm operators obtain additional income from personal services performed off their farms. In some cases the operator supplements his farm income with work at odd or spare-time jobs or businesses. In many other cases, his off-farm job provides the principal source of his income, and his farm activities are only secondary. The figures on the number of farm operators reporting work off their farms represent the minimum number of farm operators working off their farms in 1944 as reports were not secured for a considerable number of farm operators.

Farm population.—The inquiries on farm population called for the number of persons in each of four age-sex groups. Farm population was defined as all persons living in specified occupied dwellings on farms. Enumerators were instructed not to report, as persons living on farms, inmates of institutions, persons living in dwellings rented to others (other than the farm operator), and those living in tourist camps. The figures for farm population, as given in volume I and volume II of the reports of the 1945 Census of Agriculture, represent an understatement of not more than 850,000 of the farm population because of the failure of Census enumerators to report all persons living in the second, third, fourth, etc., dwellings on farms. However, for farms included in the sample, the enumerator was instructed to list by name each person living on the farm. This procedure apparently resulted in a more complete enumeration of persons living on farms. Therefore, the figures given in this special report by total farm population might more nearly represent actual farm population than the data given for all farms in volumes I and II of the reports of the 1945 Census of Agriculture.

Specified farm expenditures.—Data are presented in this report for only six items of farm expenditure, namely, cash wages paid for hired labor; feed for livestock, including dairy cattle and poultry; purchases of livestock and poultry; commercial fertilizer; lime and other liming materials; and seeds, bulbs, plants, and trees. The value of lime and other liming materials includes the value of lime, etc., furnished by the Agricultural Conservation Programs but excludes the cost of lime used in sprays, disinfectants, etc.

Specified facilities in farm operator's dwelling.—The number of farms reporting running water, electricity, radio, and telephone was obtained by means of the inquiry "Does the farm dwelling have—Running water? Electricity? Radio? Telephone?" The data given in this report represent the number of farms with occupied and unoccupied dwellings reporting "Yes" for these inquiries. On those farms included in the sample, the head of each household living on the farm was asked, in addition, whether or not there was on the farm—

1. Kitchen sink with drain.
2. Mechanical refrigeration.
3. Power-driven washing machine.

The figures on the number of farms reporting kitchen sink with drain, mechanical refrigeration, and power-driven washing machines relate only to those farms that have resident farm operators. However, the figures include estimates made for resident farm operators for whom Census enumerators failed to obtain all the household information. These estimates were made on the basis of the reports for resident operators for whom the information was obtained by enumerators.

Distance to all-weather roads.—The Census enumerator was instructed to indicate the distance from the farm to the nearest all-weather road, that is, to the nearest road that is passable at all times and all seasons. If the main farm entrance was on an all-weather road, the enumerator was asked to report "0" miles; if not, to give the distance along the highway to the nearest road that was passable at all times and all seasons. Data are presented in this report for farms located less than 0.3 of a mile from an all-weather road and for those located 0.3 of a mile or more from an all-weather road.

Specified farm machinery and equipment.—Data were secured regarding the number of motortrucks, tractors, automobiles, combines, electric motors, and stationary gasoline engines on farms and the number of farms reporting milking machines. In general, the data for these items represent minimum numbers as occasionally enumerators failed to obtain the information for every farm. In addition to the total number of tractors, the number of garden

tractors, crawler tractors, and tractors other than garden and crawler was obtained. For tractors other than garden and crawler, a classification was obtained according to type, that is, whether they had rubber tires on all wheels, rubber tires on rear wheels only, or no rubber tires. Garden tractors were not defined. The inquiries regarding the type of tractors were answered for only about 90 percent of the farms that reported tractors. Occasionally, these reports were inconsistent with the total number of tractors reported for that farm. After the tabulations were made, the tractors on those farms for which the type of tractor was not reported were distributed on the basis of the distribution of tractors on those farms which reported the type.

Data were also secured on the year of model of the newest automobile and motortruck. Approximately 90 percent of the farms that reported automobiles on farms reported the year of model of the newest automobile and about 85 percent of the farms that reported motortrucks reported the year of the newest model. After the tabulations were made, farms reporting automobiles and motortrucks, but not reporting the year of newest model, were distributed according to the year of newest model in the same proportions as shown for those farms for which the year of model was reported. For farms with two or more automobiles and motortrucks, the year of model was obtained only for the newest automobile and motortruck; therefore, it was not possible to classify all automobiles and motortrucks on farms as to the year of model.

The questionnaire contained two inquiries on electric motors. One of these inquiries called for the number of electric motors under one horsepower but at least one-third horsepower and the other called for the number of electric motors of one horsepower and over. The enumerators were not given any instructions regarding the exclusion of household motors as it was believed that the exclusion of electric motors under one-third horsepower would eliminate household electric motors, such as those used for vacuum cleaners, electric refrigerators, etc. The inquiries on stationary gasoline engines on farms called for the number of such engines that were not self-propelled. The second inquiry regarding stationary gasoline engines called for the horsepower of the largest engine on the farm. The horsepower of the largest stationary gasoline engine was reported for approximately 74 percent of the farms reporting engines. Farms reporting gasoline engines but not reporting horsepower were distributed by horsepower of the largest engine in the same proportion as indicated for those farms reporting both gasoline engines and horsepower of the largest engine.

Horses and mules.—Inquiries on horses and mules called for total number of all ages on the farm on January 1, 1945. The number of horses was to include horses, colts, and ponies.

Cattle and calves.—The data given in this report for cattle and calves represent the sum of the number reported for each of the following sex and age groups: Cows and heifers 2 years old and over kept for milk, cows and heifers 2 years old and over not kept for milk, heifers 1 year old and under 2 kept for milk, heifers 1 year old and under 2 not kept for milk, steers 1 year old and over, bulls 1 year old and over, 1944 heifer calves, and 1944 bull calves and steer calves. The inquiries for the sex and age groups of cattle were made for only those farms included in the sample. Census enumerators failed to give the number by sex and age groups for some farms for which the total number of cattle and calves was reported. Since the figures given for cattle and calves in this special report represent a sum of the number reported for each of the eight sex and age groups and not the total number of cattle and calves reported, the figures represent an understatement of the farms reporting and total number of cattle and calves of all ages on farms and for cows and heifers 2 years old and over.

The understatement for farms reporting cattle and calves for the United States is 4.8 percent and for cows and heifers 2 years old and over, 4.3 percent. Likewise, the number given for the United States for cattle and calves represents a 2.5 percent understatement and for cows and heifers 2 years old and over, a 3.2 percent understatement. These understatements result in the average number per farm reporting being 2.4 percent too large in the case of cattle and calves and 1.2 percent in the case of cows and heifers 2 years old and over.

Hogs and pigs.—Figures are given in this report for hogs and pigs of all ages and also for sows and gilts kept for spring farrowing.

Sheep and lambs and goats and kids.—Inquiries on sheep and lambs and on goats and kids called for the total number of animals of all ages on January 1, 1945.

Cows milked and dairy products.—"Cows milked" includes cows and heifers of all kinds reported as having been milked any time during 1944. The inquiry following the one on cows milked called for the number of gallons of milk produced in 1944. Several inquiries were made concerning the utilization of milk produced in 1944, namely, gallons of whole milk sold, pounds of butterfat sold as cream, and pounds of butter sold. The information for butter sold was more completely reported for farms included in the sample than for all farms; therefore, the data given in this special report for butter sold probably more nearly represent the total amount of butter sold than the data given for all farms in volumes I and II of the reports for the 1945 Census of Agriculture.

Farm slaughter and sales of livestock.—The inquiry on farm slaughter called for the number of animals butchered for use on the particular farm, as well as those for sale as dressed meat from that farm. Animals butchered off the farm on a custom basis, or otherwise, for use on the farm were to be reported by the operator of the farm for which the animals were butchered.

Animals sold alive were reported for the farm from which sold whether produced on that farm or purchased from others. However, enumerators were instructed not to report animals purchased and resold immediately.

Chickens on hand, eggs produced, and chickens raised.—The inquiry on chickens called for the number over 4 months old on hand January 1, 1945. The question on eggs produced called for the number of dozens produced in 1944. The enumerators were instructed to report the total number of chickens raised regardless of whether or not they were still on the farm at the time of the census. However, some of the enumerators did not always provide reports on chickens raised. Other enumerators failed to report chickens raised from baby chicks purchased from hatcheries or those that were sold or consumed before they reached 4 months of age. In the editing process for those farms included in the tabulations for this special report, adequate adjustments for the underreporting of chickens raised were not made; thus, the totals given for chickens raised represent an understatement of approximately 4 percent for the United States.

Turkeys raised.—The only inquiry made in the 1945 Census of Agriculture regarding turkeys called for the number raised in 1944. The number of turkeys raised as shown in this report represents an understatement of the actual number as enumerators failed to obtain a report for every farm on which turkeys were raised.

Selected crops harvested.—Data are given in this report for only selected crops. The acreage of the crops for which data are presented represents approximately 85 percent of the acreage of all crops. The acreage or area given in the tables for these crops represents the acreage harvested in the crop year of 1944, except that the acreage given for land in fruit orchards and vineyards and planted nut trees represents the land in bearing and nonbearing orchards on January 1, 1945. The production for the various crops represents the quantity harvested during the crop year of 1944. Totals for "all hay" include all kinds of hay cut except sorghums saved for hay or dry forage, cowpeas for hay, soybeans for hay, and peanut vines saved for hay.

Vegetables harvested for sale.—Figures were obtained for all States for fresh beans, cabbages, tomatoes, green peas, and all other vegetables and melons harvested for sale. The acreage for all vegetables harvested for sale other than fresh beans, cabbages, tomatoes, and peas has been included as a total for all other vegetables and melons. Vegetables sold to canneries, as well as vegetables harvested for the fresh market, were to be reported as vegetables harvested for sale. "Vegetables harvested for sale" does not include Irish or sweet potatoes.

Land in fruit orchards.—Enumerators were instructed to report all land in bearing and nonbearing fruit orchards, vineyards, and planted nut trees. On many farms, there were a few fruit or planted nut trees or grapevines which were not a part of a well-defined orchard or vineyard. In many such cases, reports were secured for the number of trees or vines with or without production, but no acreage was reported. Unless there were sufficient trees to equal the number of trees usually planted on two acres, the acreage was not supplied during the editing process. For this reason, the number of farms reporting specified fruits may exceed the number of farms reporting the acreage in orchards, vineyards, and planted nut trees.

Selected fruits.—The inquiries on tree fruits call for the number of trees of all ages and the production during the crop year of 1944. Data are given in this report for only apples, peaches, and pears.

Value of farm products sold or used by farm households.—The values presented in this report as "Value of farm products sold or used by farm households" were obtained by the enumerators from farm operators. The 1945 Farm and Ranch Schedule contained nine questions relating to the value of farm products sold, traded, or used by farm households. The total value of farm products sold or used by farm households represents the sum of the individual reports of farm operators for the nine value-of-products questions on the schedule. The arrangement on the schedule of these nine questions was such that each question immediately followed the production reports on the items to which the value questions related; for example, the inquiry on the value of field crops sold immediately followed the inquiries on the acreage and production of field crops. The total value of farm products, or the value of farm products sold plus the value of farm products used by farm households, gives an approximate measure of gross farm income. For tenants who rent on a share basis, this gross farm income includes both the landlord's and the tenant's shares. This should be taken into account in comparing income levels of the various tenures.

The value questions relating to livestock and livestock products, horticultural products, and forest products apply, in general, to sales during the calendar year 1944; whereas, those relating to fruit and nut crops, vegetables harvested for sale, all other crops (field crops), and farm products used by farm households are for the crop year immediately preceding the census.

Since the individual farm is the unit of enumeration, the value-of-products figures necessarily include duplications because of interfarm sales. For example, feed crops produced on Farm A may be sold to Farm B; in this case, their value will be reflected in the gross livestock income for Farm B. Similarly, a Texas ranch may show sales of feeder cattle, and the same cattle may be fattened and sold from an Illinois farm.

The value-of-products figures do not include income from nonagricultural sources, such as work off the farm by the farm operator or members of his family.

Enumerators were instructed not to include in the value of farm products any government payments, such as soil conservation and dairy feed or dairy production payments.

Fruits and nuts sold.—In general, the figures reported for this question cover the value of all fruits and nuts harvested in 1944 that had been or were to be sold at the time of the census enumeration. However, the information on citrus fruit applies to the 1943-1944 season, that is, to the crop harvested from the bloom of 1943. The value figures on fruit cover all tree fruits, nuts, and grapes, as well as small fruits. Sales of wild fruits and nuts are excluded with two exceptions: wild blueberries were to be reported on the Census schedule if the land was used primarily for their production; and wild or seedling pecans were also reported whether grown in orchards, farmyards, pastures, or elsewhere on the farm or ranch. The enumerator was instructed that, for all the value-of-products questions, gross receipts or values were desired without deductions for expenses of any kind. However, in many commercial fruit areas there was a noticeable tendency for growers to report their net receipts instead of the gross value of all fruit sold or traded. This was particularly true in sections where certain marketing costs were commonly deducted from the payments to the grower. Another factor which may have contributed to the tendency to report net receipts for fruit crops was the absence of any questions on the schedule regarding expenditures for such items as spray materials, orchard cultivation, irrigation water, containers, and other production and marketing costs.

Vegetables sold.—The values reported for this item represent the total value of vegetable crops harvested in 1944 for sale. Irish and sweet potatoes were not included under vegetables but were included under field crops.

Horticultural specialties sold.—The values reported for this item include the value of sales for crops grown under glass and propagated mushrooms; nursery products; and flower and vegetable seeds, bulbs, and flowers and plants grown in the open.

All other crops (field crops) sold.—This question covers the value of the sales of field crops, such as corn, sorghums, small grains, annual legumes, hay, clover and grass seeds, and miscellaneous crops, including Irish and sweet potatoes, cotton (lint), tobacco, sugarcane, sugar beets, hops, etc. In addition, the enumerator was instructed to include the value of sales of by-products, such as cottonseed, beet pulp and tops, pea vines, etc., although no provision was made on the schedule for reporting the production of such byproducts. On some schedules, the value of

sales of cottonseed apparently was not included in the value of field crops sold or traded. The enumerator was also instructed that, if the farm operator was a tenant, the landlord's share should be included in reporting the value of sales not only for this item, but also for all other value-of-products questions. Receipts for the grazing of livestock on a per-head basis were also included under this question.

Dairy products sold.—This question called for the value of all dairy products sold or traded in 1944, including sales of cheese, buttermilk, and skimmed milk, as well as sales of whole milk, butterfat, and butter. The value of sales of dairy products purchased was to be excluded.

Poultry and poultry products sold.—Sales of ducks, geese, guineas, pigeons, baby chicks, poults, etc., were included, as well as sales of eggs, broilers, fryers, other chickens, and turkeys.

Livestock and livestock products sold (other than dairy and poultry).—This question included the value of animals sold alive, such as horses, mules, cattle and calves, hogs and pigs, sheep and lambs, goats, fur animals in captivity, and bees; and livestock products not included with dairy and poultry, such as meat, goat milk, wool, mohair, hides and pelts, and honey.

Forest products sold.—The values reported for this question include sales of firewood, fuel wood, standing timber, sawlogs, veneer logs, pulpwood, mine props, bark, charcoal, fence posts, railroad ties, poles and piling, turpentine, resin, maple sirup and sugar, etc.

Farm products used by farm households.—This question called for the value of products of the farm in 1944 that were or were to be used by all households on the farm. The following items were to be included in this question if consumed on the farm where produced: meat, milk, cream, butter, poultry, eggs, honey, vegetables, fruit, firewood, fuel wood, and Irish and sweet potatoes. Farm products of institutional farms which were used by inmates of the institution were considered as sold, and the values were included under the other value-of-products questions. The same procedure was followed with respect to products of community victory gardens.

Classification of farms by size.—Farms have been classified by size according to the total land area of each farm. In establishing groupings for farms classified according to their total land area, consideration has been given to the natural groupings which have resulted from the use of our land-survey system. Accordingly, the limits for the several size groups, with the exception of the extremely small and the extremely large farms, have been selected so that each would include a common multiple or fraction of a quarter-section.

Classification of farms by value of products.—The value group into which an individual farm has been placed was determined by obtaining a total for the amounts reported for the eight inquiries on the value of farm products sold plus the amount reported for the inquiry on the value of farm products used by farm households.

Classification of farms by type.—In the 1945 Census, all farms were classified mechanically by type of farm, based on the principal source of income in 1944. The procedure was as follows: After eliminating "farms with no products" and "unclassified" farms, which could not be classified by type on the basis of the value of products, the remaining farms were sorted into two groups: (1) farms producing products primarily for sale and (2) farms producing products primarily for use by farm households. If the value of farm products used by farm households exceeded the total value of all farm products sold, the farm was classified as a "farm producing products primarily for own household use." On the other hand, if the value of all farm products sold equaled or exceeded the value of farm products used by farm households, the farm was classified as a "farm producing products primarily for sale." Farms producing products primarily for sale were further classified into the following nine major types on the basis of source of income: fruit-and-nut farms, vegetable farms, horticultural-specialty farms, all-other-crop (field crop) farms, dairy farms, poultry farms, livestock farms, forest-products farms, and general farms. If the value of products sold from one source of income was more than 50 percent of the total value of all farm products sold, the farm was classified as the type corresponding to that source of income. Farms for which the value of products from any one of the eight sources of income did not exceed 50 percent of the total value of all farm products sold were classified as "general" farms.

Farms not classified by type include two groups of farms. The first group consists of farms on which no farm products were sold or used during 1944. Farms included in this group represented (a) new farms being operated for the first time in 1945 and (b) farms having a complete crop failure in 1944 with no livestock or livestock products sold and no farm products used by farm households. The second group of farms includes a number of farms designated "unclassified farms" for which the information on value of products sold or used was incomplete or was not reported. In the tables giving data for farms classified by value of products, generally, unclassified farms have been included in the value-of-product group \$0-\$249.

Sampling reliability of estimates.—Approximate measures of the sampling reliability of estimates presented by tenure classes, by States, are given below.

These measures indicate the general level of sampling reliability of the estimates, but they do not include any allowance for sources of error other than sampling variation—for example, underreporting or errors in the original data furnished by farmers. Adjustments made for underreporting, differences in reporting between the farms in the sample and other farms in the census, and other problems in reporting that affect both the sample and the complete census are discussed above, in connection with the definitions of the items, as they apply. It should be borne in mind that for estimates for the United States, and for geographic regions and the larger States, sources of error other than sampling may become relatively more important than sampling variation.

It will be noted in the tables below that estimated numbers of farms and estimated item totals are subject to relatively large sampling errors when the number of farms reporting is small. Nevertheless, the complete detail for all tenure classes in each State is presented for every item in this report. This method of presentation insures maximum flexibility for obtaining estimates for desired combinations of States or tenure classes. Moreover, percentage figures derived from the tables will have greater reliability than the estimated totals involved, and significant patterns of relationships may sometimes be observed even though the individual data are subject to relatively large sampling errors. Also, it is for this latter purpose, that is, to facilitate the study of relationships, that many items are shown for the sample farms in this report, even though complete totals based on all farms in the census have previously been published.

In general, the measures of sampling reliability presented tend to overestimate the variation in the sample estimates. For example, in Arizona and Nevada, about 80 percent of all sheep reported were on large farms. Consequently, the sampling error of this item for most of the tenure classes in these States is only about one-fifth of the value indicated in the tables below. This factor, of course, varies in importance from item to item and differently among the tenure classes. The relative importance of large farms in each of the four broad tenure classes is shown in the following table:

Tenure class	Percent of farms in class that meet large farm criteria
Full owners.....	0.4
Part owners.....	2.5
Managers.....	18.8
Tenants.....	0.7
All farms.....	0.9

Source: Special Report, 1945 Sample Census of Agriculture, table 28.

The percentage of the class total for any given item accounted for by large farms would be at least several times as large as the figure for percent of farms. Tenant classes are affected least by this factor, since fully half of the large tenant farms are concentrated in four States: Florida, Missouri, Tennessee, and Texas.

The estimated sampling reliability of the number of farms in any tenure class given as reporting a specified item is shown in the following table. This table shows percentage limits, such that the chances are about 95 in 100 that the difference between the sample estimate and the number of farms reporting that would have been obtained from a tabulation for all farms would be less than the limit specified. However, most of the items would be expected to show a difference of less than one-half the percentage limit given in the table below:

If the estimated number of farms reporting in the tenure class is —	Then the chances are about 95 in 100 that the estimated number would differ from the results of a complete tabulation by less than ¹ 2 —
	Percent
100.....	110.0
500.....	51.0
1,000.....	36.0
2,500.....	23.0
5,000.....	16.0
10,000.....	11.0
25,000.....	7.2
50,000.....	5.2
100,000.....	3.6
500,000.....	1.6

¹For estimated number of resident operators reporting kitchen sink with drain, mechanical refrigeration, and power-driven washing machine in the following States, the percent differences given should be multiplied by 7/4:

California	Iowa	North Carolina	Pennsylvania
Indiana	Kansas	Ohio	

²In the case of items for which the estimated number of farms reporting constitutes more than 50 percent of all farms in the class, more precise limits may be obtained by multiplying the percent difference given in the table by an appropriate factor as follows:

When farms reporting constitute (percent)—	Multiply given limit by—
50.....	0.75
75.....	.50
90.....	.30
95.....	.20

The magnitude of sampling errors in the estimated farm population figures by age group, for tenure classes, by States, may be determined from the following table:

If the estimated farm population in the age-tenure class is—	Then the chances are about 95 in 100 that the estimated farm population in the age-tenure class would differ from the results of a complete tabulation by less than—
	Percent
100.....	100.0
500.....	45.0
1,000.....	32.0
2,500.....	20.0
5,000.....	14.0
10,000.....	10.0
25,000.....	6.4
50,000.....	4.5
100,000.....	3.2
500,000.....	1.4

A majority of the estimated population figures would be expected to show a difference of less than one-half the percentage limit given in the table. Estimates of total population by tenure class have somewhat greater sampling reliability than the estimates by age group, and similarly for percentages derived from the data presented by age group.

Two tables are given below to assist in determining the general level of sampling reliability of estimated totals by tenure class for other items presented in this report. In table A, a list of the items is given, and the level of sampling reliability as shown in table B is indicated. By referring to table B, in the column for the level of sampling reliability designated in table A, percent limits according to the number of farms reporting may be obtained. As pointed out above, the percent limits indicated represent maximum figures intended to serve for all groups, and a majority of the estimates would be expected to show differences of less than one-half the stated limits. In using tables A and B, it should be noted that, in general, for States in which an item is reported relatively frequently the level of reliability in table B will tend to overestimate the sampling variation to a greater extent than when the item is reported relatively infrequently.

FARMS AND FARM CHARACTERISTICS

Table A.—INDICATED LEVEL OF SAMPLING RELIABILITY OF ESTIMATED STATE TOTALS BY TENURE CLASS FOR SPECIFIED ITEMS

Item	Level of sampling reliability (refer to corresponding numbered column in table B)	
	Owned and managed classes	Tenant classes
Value of implements and machinery, dollars.....	3	2
Work off farm, days.....	2	2
Cash wages paid, dollars.....	5	3
Expenditures, dollars:		
Purchase of livestock and poultry.....	6	6
Commercial fertilizer.....	4	2
Lime and other liming materials.....	5	2
Seeds, plants, bulbs, and trees.....	6	2
Feed bought for livestock, including dairy and poultry feed.....	4	2
Combines (harvester-threshers), number.....	2	2
Milking machines.....	2	2
Motortrucks, number.....	2	2
Tractors, number:		
Total.....	2	2
Garden.....	1 7	7
Crawler.....	1 7	1 7
Other:		
With rubber tires on all wheels.....	2	2
With rubber tires on rear wheels only.....	7	7
With no rubber tires.....	4	4
Automobiles, number.....	2	2
Electric motors, number:		
Total.....	2	2
1 horsepower and over.....	2	2
Under 1 horsepower but at least 1/3 horsepower.....	2	2
Stationary gasoline engines, number.....	2	2
All mules and mule colts, number.....	2	2
All horses and colts, including ponies, number.....	2	2
All cattle and calves, number.....	3	3
Cows and heifers 2 years old and over, number.....	3	3
All hogs and pigs, number.....	3	3
Sows and gilts for spring farrowing, number.....	2	2
All sheep and lambs, number.....	3	2
All goats and kids, number.....	3	2
Cows and heifers milked, number.....	3	2
Milk produced, gallons.....	3	2
Whole milk sold, gallons.....	2	2
Cream sold, pounds of butterfat.....	2	2
Butter sold, pounds.....	2	2
Chickens on hand, number.....	3	2
Eggs produced, dozens.....	4	2
Chickens raised, number.....	3	2
Turkeys raised, number.....	5	5
Number of animals sold alive:		
Cattle.....	3	3
Hogs.....	3	3
Sheep.....	4	2
Number of animals butchered:		
Cattle.....	2	2
Calves.....	2	2
Hogs.....	2	2
Corn for all purposes, acres.....	2	2
Corn harvested for grain:		
Acres.....	2	2
Bushels.....	2	2
Oats threshed:		
Acres.....	2	2
Bushels.....	2	2
Barley threshed:		
Acres.....	2	2
Bushels.....	2	2
All wheat threshed:		
Acres.....	2	2
Bushels.....	2	2
All hay cut:		
Acres.....	2	2
Tons.....	2	2
Cotton:		
Acres.....	3	2
Production (running square bales).....	3	2
Tobacco:		
Acres.....	3	2
Production (pounds).....	3	2
Irish potatoes:		
Acres.....	5	5
Production (bushels).....	5	5

Table A.—INDICATED LEVEL OF SAMPLING RELIABILITY OF ESTIMATED STATE TOTALS BY TENURE CLASS FOR SPECIFIED ITEMS—Continued

Item	Level of sampling reliability (refer to corresponding numbered column in table B)	
	Owned and managed classes	Tenant classes
Sweetpotatoes and yams:		
Acres.....	5	5
Production (bushels).....	5	5
Value of vegetables grown for farm household(s) use, dollars.....	1	1
Vegetables harvested for sale, acres:		
Fresh beans.....	3	3
Cabbage.....	3	3
Tomatoes.....	3	3
Green peas.....	3	3
All other vegetables and melons.....	3	3
Land in fruit orchards, vineyards, and planted nut trees, acres.....	6	6
Apples:		
Trees of all ages, number.....	6	3
Quantity harvested (bushels).....	6	4
Peaches:		
Trees of all ages, number.....	6	3
Quantity harvested (bushels).....	4	3
Pears:		
Trees of all ages, number.....	5	3
Quantity harvested (bushels).....	4	3
Value of all farm products sold or used by farm households, dollars.....	2	2
Value of all farm products sold, dollars.....	2	2
Fruits and nuts, dollars.....	6	6
Vegetables, dollars.....	5	5
Horticultural specialties, dollars.....	5	5
All other crops (field crops), dollars.....	3	3
Dairy products, dollars.....	4	4
Poultry and poultry products, dollars.....	6	6
Livestock and livestock products (other than dairy and poultry), dollars.....	6	6
Forest products, dollars.....	3	3
Value of farm products used by farm households, dollars.....	2	2

¹ Five for groups in which the given type constitutes more than 10 percent of all tractors.

² Six for Western States.

Table B.—SAMPLING RELIABILITY OF ESTIMATED ITEM TOTALS FOR STATES BY TENURE CLASS FOR SPECIFIED NUMBERS OF FARMS REPORTING, BY LEVELS

[See table A for designation of level for any item]

If the estimated total number of farms reporting in the tenure class is—	Then the chances are about 95 in 100 that the estimated item total would differ from the results of a complete tabulation of the item for all farms by less than—						
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
100.....	82.0	117.0	143.0	165.0	200.0	280.0	450.0
500.....	37.0	52.0	64.0	73.0	90.0	117.0	200.0
1,000.....	26.0	37.0	45.0	52.0	64.0	82.0	143.0
2,500.....	16.0	23.0	28.0	33.0	40.0	52.0	90.0
5,000.....	12.0	16.0	20.0	23.0	29.0	37.0	64.0
10,000.....	8.2	12.0	14.0	16.0	20.0	26.0	45.0
25,000.....	5.2	7.4	9.0	10.0	13.0	17.0	29.0
50,000.....	3.7	5.2	6.4	7.4	9.0	12.0	20.0
100,000.....	2.6	3.7	4.5	5.2	6.4	8.2	14.0
500,000.....	1.2	1.6	2.0	2.3	2.9	3.7	6.4

Color of operator.—Farm operators are classified as "white" and "nonwhite." White includes Mexicans and "nonwhite" includes Negroes, Indians, Chinese, Japanese, and all other nonwhite races. Data by color of operator are shown only for the South.

Tenure of operator.—Farm operators are classified according to the tenure under which they operate their farms.

Full owners own all the land they operate.

Part owners own a part and rent from others the remaining part of the land they operate.

Managers operate farms for others and are paid wages or salaries for their services. Persons acting merely as caretakers or hired as laborers are not classified as managers.

Tenants operate hired or rented land only. Cash tenants pay a cash rental, such as \$4.50 per acre for the cropland, \$500 for the use of the whole farm, etc. Share-cash tenants pay a part of their rental in cash and part as a share of the crop or livestock production. Share tenants pay a share only of either the crop or livestock production or both. Croppers have been defined as share tenants to whom their landlords furnish all the work animals or tractor power in lieu of work animals. In some of the cropper areas, tenants pay cash rent for noncash crops and a share of the crop for the cash crop. These tenants, as well as those for whom the method of rental was not reported, were classified as croppers if the work power was furnished by the landlord. Other and unspecified tenants include those whose rental agreement was unspecified and those who could not be included in one of the other subclasses.

If a person has croppers or other tenants, the land assigned each cropper or tenant is a separate farm even though the landlord may handle the entire holding essentially as one farm in respect to supervision, equipment, rotation practices, purchase of supplies, or sale of products. In such a multiple-unit operation, the pasture land, woodland, wasteland, etc., which normally would be associated with the cash-cropland is retained by the landlord. The expenditures, work power, and implements and machinery for the entire multiple unit are also frequently included in the report for the "home farm."

Presentation of data.—A State is the smallest geographic area for which the data given in this special report are available. Table C presents summary statistics for the United States and gives many of the significant averages and percentages needed for an appraisal and analysis of the data. Maps and charts showing some of the important characteristics and relationships for various tenure classes are presented on pages XIV to XVI. Data by States are given in tables 1 to 17, inclusive. The States have been arranged in groups, by geographic divisions, in order to facilitate comparisons among States in the same general area.

The discussion which follows relates only to the United States. Since the farms in various States differ from those of the United States, the conclusions for the United States would not apply to an individual State. The characteristics of farms in each tenure class and the relative contribution of farms in each tenure class differ from State to State.

Owner-operated farms.—Approximately two out of three farms in the United States are operated by full owners and part owners. The average size and the average value of land and buildings per farm for these owner-operated farms are approximately the same as for all farms. The average acres of cropland harvested, 57 acres, and the average value of farm products sold, \$2,691, are slightly less for owner-operated farms than for all farms. A larger proportion of owner-operated farms than of all farms have facilities in the farm dwelling, such as running water, electricity, telephone, radio, kitchen sink with drain, mechanical refrigerator, and power-driven washing machine.

One in six of the owner-operators rents additional land. These part-owner farms are much larger than full-owner farms, averaging 565 acres as compared with 124 acres for full owners. On an average, they have nearly four times as many acres of cropland harvested and account for a value of farm products sold or used by farm households approximately two and one-half times as great as full owners. Approximately two-thirds of the part owners have tractors as compared with less than one-third of the full owners. Part owners are, on the average, considerably younger than full owners. Seventy-one percent of all part owners are under 55 years of age, as compared with 55 percent of all full owners.

More than one-third of the full-owner farms report less than \$600 value of farm products sold or used by farm households. No

other tenure group, except cash tenants, reports such a high proportion of low income farms. For croppers, the proportion reporting under \$600 gross farm income is 1 in 7. More than one-third of the full-owner farms either do not report cropland harvested or report less than ten acres. These full-owner farms account for three-fourths of all farms not reporting cropland harvested, as well as three-fourths of all farms reporting 1 to 9 acres of cropland harvested. About 30 percent of the full-owner farms do not report horses, mules, or tractors.

Less than one-third of the operators under 25 years of age are owners. Approximately 3 out of 5 operators between 35 and 44 have attained the goal of farm ownership. Over 4 out of 5 farm operators 55 years old and over and more than 5 out of 6 of those 65 years old and over are owners.

Nearly 1 owner operator out of every 4 works 100 or more days a year at jobs, businesses, or professions not connected with his farming operations. Among the other tenures, only the cash tenants have as high a proportion of part-time farmers. For tenants other than cash tenants, the ratio is less than 1 in 10.

Manager-operated farms.—Managed farms represent less than one percent of all farms, but they contain about 10 percent of all land in farms, have 15 percent of the pasture and grazing lands, and account for more than 5 percent of the cattle and over 9 percent of the sheep and goats. Over one-fifth of the total value of fruits and nuts sold, approximately one-seventh of the total value of vegetables sold, and nearly one-third of the total sales of greenhouse and nursery products are reported by manager-operated farms. More than one-fifth of all farms reporting a value of \$40,000 and over for farm products sold or used by farm households are manager-operated.

Tenant-operated farms.—Less than one-third of the farms reported in the 1945 Census of Agriculture were tenant-operated. Tenant-operated farms are, on the average, somewhat smaller than all farms, but they have a slightly larger average acreage of land used for crops. Although the per-farm value of land and buildings is below the average for all farms, the per-acre value is about 20 percent above the average for all farms. The average value of farm products sold and used by farm households for tenant-operated farms is somewhat smaller than for all farms; however, it exceeds the average for full owners. Under one-third of the tenant-operated farms have a value of less than \$1,000 for farm products sold or used by farm households, as compared with nearly two-fifths for all farms. Tenants have older automobiles and have fewer facilities in their dwellings than owner-operators. Nearly 36 percent of the automobiles on farms of tenants are 10 years old or over as compared with 27 percent for owner-operators. Only 1 in 7 tenant farms has running water in the farm dwelling as compared with over 1 in 3 for owner-operated farms.

The characteristics of tenant-operated farms vary greatly from one part of the country to another. Within the same part of the country the characteristics are quite different for the different classes of tenants.

Cash-tenant farms.—Cash-tenant farms, like full-owner farms, include a high proportion of small places, some of which are rented primarily for the dwelling. Many cash-tenant farms have either a very small acreage of cropland harvested or none. The proportion with a relatively small value of farm products is very high. Nearly 36 percent report a value of farm products of less than \$600 and more than one-half report a value of farm products of less than \$1,000. A higher proportion of cash tenants than of full owners are nonfarmers by occupation. Twenty-seven percent of the cash tenants report 100 or more days of off-farm work as compared with 25 percent of the full owners.

Share-cash-tenant farms.—Most of the share-cash-tenant farms are in the Western Corn Belt and have many of the characteristics of the agriculture of that area. The farms are large, averaging 249 acres as compared with 137 acres for all tenant farms and 196 acres for all farms. Nearly two-thirds of these share-cash tenants have 100 or more acres of cropland harvested; the corresponding proportion for all farms is only a little more than one-sixth. Seventy percent of the cropland harvested on share-cash-tenant farms is used for corn, oats, wheat, and barley. Cattle and hogs represent a major source of income. Sales of livestock and livestock products, other than dairy cattle and poultry, account for 33.5 percent of the total value of farm products sold or used by farm households; dairy and poultry products account for 15.9 percent; and sales of crops, 42.6 percent.

FARMS AND FARM CHARACTERISTICS

Share-tenant farms.—Share-tenant farms are distributed more widely throughout the United States than share-cash-tenant farms. These share-tenant farms are predominantly crop farms, over one-half (54 percent) of them being "all other crop" farms. Corn, small grains, cotton, and tobacco make up the principal cash crops on such farms. Livestock farms operated by share tenants are important in some areas, particularly in the Corn Belt. Approximately one-third (35 percent) of the total share-tenant farms are general, livestock, dairy, or poultry farms.

Cropper farms.—Cropper farms are predominantly cotton or tobacco farms. More than nine-tenths of the total value of farm

products sold from cropper farms is from the sale of crops, principally cotton and tobacco. Only 1 cropper farm out of every 4 reports the sale of poultry or poultry products and less than 1 out of every 5 reports the sale of livestock. The proportion of croppers having cows and chickens is also generally less than that for the other tenure classes. In general, cropper farms tend to be located in areas of better land. The average value per acre for all cropper farms in the South is \$46.84 as compared with \$35.41 for owner-operated farms. The average yield of cotton per acre on cropper farms is 0.75 bales as compared with 0.61 for cash-tenant farms, 0.56 for share-tenant farms, and 0.62 for full-owner farms.

