

UNITED STATES CENSUS OF AGRICULTURE: 1945

SPECIAL REPORT OF MULTIPLE-UNIT OPERATIONS IN SELECTED AREAS OF SOUTHERN STATES

Units, Subunits, Acreage, Value
Characteristics, Specified Crops and Livestock
and Value of Farm Products

Prepared under the supervision of RAY HURLEY Chief, Agriculture Division Bureau of the Census

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UNITED STATES CENSUS OF AGRICULTURE: 1945

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8. Ohio 4. Indiana 5. Illinois 6. Michigan 7. Wisconsin 8. Minnesota 9. Iowa 10. Missouri

11. North Dakota and South Dakota 12. Nebraska

Part 13. Kansas 14. Delaware, Maryland, and District of Columbia

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17. Georgia 18. Florida 19. Kentucky 20. Tennessee 21. Alabama

22. Mississippi 23. Arkansas 24. Louisiana 25. Oklahoma

26. Texas 27. Montana 28. Idaho

29. Wyoming and Colorado 80. New Mexico and Arizona 31. Utah and Nevada

32. Washington and Oregon 33. California

Volume II. - General Report-Statistics by subjects for the United States, geographic divisions, and States (one volume).

Chapter I. Farms and Farm Property II. Size of Farms III. Color and Tenure of

Farm Operator
IV. Age, Residence, Years on Farm, and Work off Farm

V. Farm Population and Farm Labor

VI. Farm Facilities, Roads, and Farm Machinery

VII. Livestock and Livestock Products

VIII. Field Crops and Vegetables

IX. Fruits and Nuts, and

Horticultural Specialties X. Value of Farm Products, and Type of Farm

SPECIAL REPORTS

Multiple-unit Operations-Units, subunits, acreage, value, characteristics, specified crops and livestock and value of products.

Ranking Agricultural Counties-The rank of the leading counties in the United States in agriculture and agricultural products, 1945 and 1944, with comparisons, 1940 and 1939.

Report for 1945 Sample Census of Agriculture-Statistics by States for items for which data were collected on a sample basis and data for farms classified by size of farm, color and tenure of farm operator, type of farm, value of products, and economic class.

LETTER OF TRANSMITTAL

DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS Washington 25, D. C. June 20, 1947

Sir:

I transmit herewith a special report for the 1945 Census of Agriculture entitled "Multiple-Unit Operations." This report covers selected areas in nine Southern States. Farm units operated by croppers and tenants in Southern States, even though these cropper and tenant units comprised a part or subunit of larger operating units, have been considered as separate tarms in the various censuses of agriculture. Requests for the tabulation of data on the basis of the actual operating units resulted in the preparation of this special report. Statistics are given in this report for some of the principal characteristics of multiple units and their component subunits.

Legal provision for the 1945 Census of Agriculture was made by the Act providing for the Fifteenth Decennial Census, approved June 18, 1929.

The compilation of these statistics was made under the supervision of Ray Hurley, Chief of the Agriculture Division, assisted by Henry G. Brown and Snider W. Skinner, Agricultural Statisticians. Acknowledgement is made of the cooperation and technical assistance in the planning and preparation of this report by Lee E. Langsford, Roscoe J. Saville, and J. J. Morgan of the Bureau of Agricultural Economics of the United States Department of Agriculture.

Respectfully,

J. C. CAPT,
Director of the Census

HON. W. AVERELL HARRIMAN, Secretary of Commerce

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MULTIPLE-UNIT OPERATIONS

Introduction. - There exists in southern agriculture a pattern of farm operation not found to any extent in other parts of the United States. It is an arrangement by Which the landlord or operator provides capital and management, and share croppers provide labor in carrying on farming operations on an integral unit. This pattern is, in part, an outgrowth of the abrupt change in the economic status of farm workers which developed immediately following the Civil War. In the shift in the status of the workers from that of slaves to that offreedmen, it became necessary for landowners to develop new arrangements in order to continue farming operations. Under the new arrangement, landowner and worker continued to farm the same land resources. In the early stages of the development of this system, plantation operators frequently did not have sufficient funds or credit to pay cash wages while the crop was being made and to meet other production expenses. Croppers did not have the funds or managerial experience to set themselves up as independent farm operators, but they and their families were able to supply labor to operate the multiple unit. They lived on the place, usually received advances for the purchase of food and other items, and obtained a share of the crop, or proceeds therefrom, as a return for their labor. Under this system, the cropper partially shared in the economic risks brought about by changing prices and fluctuating yields. In the transition to this pattern of farm operation, the working of the land has not been confined to Negroes as many white farmers are recorded as croppers in the censuses of agriculture.

Plantation agriculture in which the land is regarded as a unit for general administration, even though farmed with croppers or other classes of tenants, has continued to exist. Also, other tracts of land not locally thought of as plantations, but encompassing more than one farm, as defined for Census purposes, are operated as a unit from the standpoint of the cropping system or managerial or supervisory functions. In many cases the tenants under these arrangements are subjected to as close supervision by the owner, general lessee, or hired manager as that to which wage laborers are subjected either on the same farms, in the same local area, or in other parts of the country.

This basis of farm operation caused sharp changes in the statistics reported because the operating unit which had been enumerated as one "farm" under slavery conditions became many farms according to the Census definitions. A "farm" for Census purposes is, in brief, a tract of land on which some agricultural operations are performed by one person, either by his own labor alone or with the assistance of unpaid members of his household or hired employees. Under this definition, each tract of land operated by a tenant—whether a renter in a more restricted meaning of the word "tenant" or whether a share cropper—has been considered as a separate farm.

The tract of land operated by each cropper or other class of tenant has been recorded as a separate farm even though a part of a larger operating unit. In order to enumerate all the land that is actually associated with the operating unit (hereafter designated as multiple unit), it is necessary to record all land other than that assigned to croppers or tenants as the home farm. Sometimes no crops are grown on the home farm; in other cases, only feed crops are grown; and, in still other cases, a part or all of the cropland is used for the growing of cash crops with the help of wage hands. The cropper parts of the multiple unit often have no work stock or machinery to report as the operator of the multiple unit furnishes the work power and machinery. Such work stock and machinery, in accordance with the instructions to report these items on the schedule for the unit or farm where they are kept, are usually reported for the home farm. Thus, neither the home farm nor the other subunits of a multiple-unit operation, when enumerated individually, represent complete operating units.

Sharing in the proceeds from the crops grown provides an incentive for the croppers to follow good husbandry under the

multiple-unit operator's direction and assists in holding the croppers on the place until completion of the harvest. The usual share for the cropper is one-half of the crop, but many variations occur because of variation in the amount of the production items each participant furnishes and for other reasons. Each cropper is charged with his share, usually one-half, of the fertilizer used and, in the case of cotton, he may pay a share of the cotton-ginning cost.

Multiple units are closely associated with the production of major crops in the South that have high labor requirements. Cotton and tobacco have been important cash crops grown under the cropper system; consequently, cotton—and tobacco—growing areas are the centers of high concentration of multiple—unit operations. (See figures 1 to 4.) Machinery and work power required for these two crops have been such that they can be used effectively by croppers. Sometimes the work stock and implements are kept at the cropper farmstead, particularly when no home farm exists, but usually they are kept on the home farm and the cropper goes there to get the work stock and implements needed for each day's work.

The concept of a farm as being a tract of land on which the agricultural operations are performed by one person, either by his own labor or with the assistance of unpaid members of his family or hired labor, must be complied with under the present procedure for the taking of a census of agriculture. Statistics collected in this manner are useful in comparing the contributions of capital, management, and labor to agricultural operations; in comparing the shares of income accruing to the various tenure groups; and in comparing characteristics of farm families. However, it has long been recognized that this concept of a farm is inadequate for comparing information relative to the organization and income for complete operating units when some operating units are comprised of several subunits designated as farms under the Census definition. When subunit operations are combined into complete operating units (multipleunit operations), comparison may be made with other operating units not only within the same area but also with operating units elsewhere in the United States. It is the operating arrangement, not the size of the land holding, that furnishes the basis for the consolidation of subunits into multiple units in order to obtain over-all statistics on an operating-unit basis.

There are different degrees of management exercised by landlords, or hired managers, over their croppers or other classes of tenants. In most cases, the croppers are closely supervised in such matters as when to plant, fertilize, cultivate, or harvest their crop. In many cases, the wishes of the cropper are ascertained before the landlord sells the crop; and some croppers may have the privilege of marketing their share of the crop when and where they choose. On some plantations "renters" are supervised about as closely as croppers. However, most renters and some croppers are subjected to very little supervision at any time. Between these two extremes-on the one hand, very close supervision and direction on the part of the landlord in all or most phases of crop production and on the other hand, little or no supervision or consultation coupled with freedom in marketing-are varying degrees of direction, consultation, etc.

DEFINITIONS AND EXPLANATIONS

The descriptive terms and explanations which follow refer principally to multiple units and single units, as used in this report, and to their relation to comparable items shown in volumes I and II of the reports for the 1945 Census of Agriculture. All items for which the table descriptions are considered inadequate are discussed. The exact phrasing of the inquiries and the instructions for enumerating farms and multiple-unit operations appear in the facsimile of the 1945 Farm and Ranch Schedule shown in the Appendix to this volume.

FIGURE I

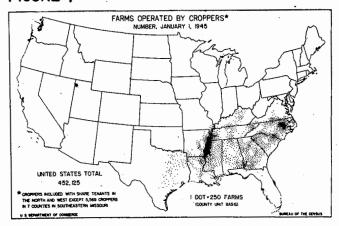


FIGURE 2

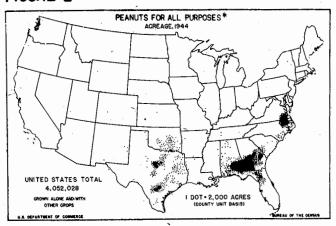


FIGURE 3

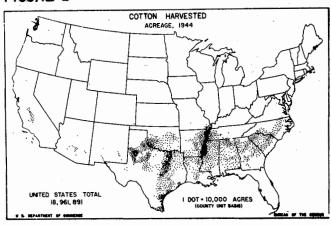
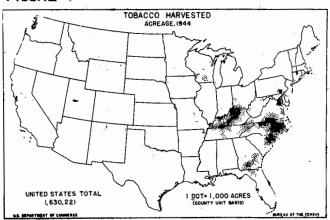


FIGURE 4



Multiple-unit operations.—For the Census of 1945, the following definition of a multiple-unit operation was decided upon after consultation of members of the Bureau of the Census with representatives of the United States Department of Agriculture, State agricultural workers, and farm operators:

"A multiple-unit operation is one in which two or more subunits are handled as a single-farm enterprise. It usually involves supervision of cropper or tenant operations and central control of such items as sale of products, work power, machinery and equipment, orop rotation, or purchase of supplies. A multiple-unit operation consists of two or more subunits, one of which must be a cropper or tenant operation under the close supervision of the multiple-unit operator. One of the subunits may consist of land worked by the operator, his family, or wage hands. Plantations should usually be reported as multiple-unit operations."

The facsimile of the schedule and accompanying instructions used in the 1945 Census of Agriculture shows that the book-type schedule contained 20 numbered lines and, at the bottom of each page, 4 lettered lines. The numbered lines were to be used for enumerating farms other than multiple-unit operations and for enumerating the subunits (each cropper, renter, and home farm) of multiple-unit operations. The lettered lines were to be used for enumerating the over-all operations of the multiple units. Under this general plan, provision was made for the enumeration of farms in accordance with the definitions used in previous censuses of agriculture and also for the enumeration of multiple-unit operations in the following States:

Alabama Louisiana South Carolina
Arkansas Mississippi Tennessee
Florida Missouri Texas
Georgia North Carolina Virginia
Kentucky Oklahoma

Several of the above States were included, not because of the widespread occurrence of multiple-unit operations, but because the Farm and Ranch Schedule for 1945 was regionalized from the standpoint of kinds of crops grown in a general area.

Based on the definition above, the term "multiple unit," as used throughout this report, relates to two or more subunits combined into one operating unit. One of the subunits is usually the "home farm."

Subunit.—The term "subunit" is used to denote a component part of a multiple-unit operation. The component parts of a multiple unit are two or more farms as defined by the Census of which one must be a cropper or tenant farm. One of these Census farms is usually the "home farm."

Home farm.—The term "home farm" refers to that part of the multiple unit handled by the multiple-unit operator with the help of family and/or hired labor. It usually contains the home of the multiple-unit operator or the headquarters where work stock and equipment are kept for the entire operation. The home farm includes all the land associated with the over-all multiple-unit operations not assigned to other subunits.

With croppers often reporting only cropland in their subunits, the home farm often represents the difference between the total land in the multiple unit and the cropland assigned to croppers or other classes of tenants. A home farm, when reported, was included as a subunit of the multiple-unit operation.

Some multiple-unit operators assign all of the land to cropper and tenant subunits. Such multiple units are without a home farm and, in most of such cases, the multiple-unit operator does not live on the farm or multiple unit. The number of home farms, therefore, is less than the number of multiple units.

Single unit. -A "single unit" is a farm which is operated as a complete farm business by the operator, his family, or hired workers.

Single units, as used in this report, represent farms according to the Census definition which are independent of multiple-unit operations. Since the operator of a single unit may be of any tenure, "croppers" who are independent of any multiple-unit operations are counted as single units.

From these definitions and explanations, it should be clear that the number of single units plus the number of multiple units does not equal the Census number of farms for any county or State. However, since a multiple unit consists of a combination of Census farms, the number of single units plus the number of subunits of multiple units equals the number of Census farms in a county or State.

**Unit.—The term "unit," as used throughout this report, relates to an operating unit. It is a complete farm business consisting of either a single unit or a multiple unit. Thus, each multiple-unit operation is counted as one unit.

A <u>multiple-unit</u> operator is the person who directs and supervises the multiple-unit operations including the operations of croppers or tenants. He usually has central control of such items as the sale of products, work power, machinery and equipment, erop rotations, or purchase of supplies. If the multiple-unit operator lives on the multiple unit, he has direct supervision of two or more subunit operations, one of which is usually the land he operates with the assistance of his family or hired labor. If the multiple-unit operator does not live on the multiple unit, he must have direct supervision of two or more cropper or tenant subunits that are handled as one operating unit.

In this report, the term "multiple-unit operator" refers to the person, regardless of residence or tenure, who directs the over-all operations of the multiple unit.

A single-unit operator is the person who operates a farm independently of any multiple operation. He directs the operations on the land worked by himself, his family, or hired laborers. This term is identical with the term "farm operator," as defined for Census purposes.

Color of operator. —For Census purposes, farm operators are classified as "white" and "norwhite." White includes Mexicans; norwhite includes Negroes, Indians, Chinese, Japanese, and all other norwhite races. The color of a multiple-unit operator relates to the person in control of the over-all operation. The color of a single-unit operator relates to the person who directs and controls a single-unit operation.

No data are presented in this report concerning the color of subunit operators. $\ \, \bullet \,$

Tenure of operator. — The Census classifies farm operators according to the tenure under which they operate their units or farms. The several tenure classes are defined as follows:

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 units or 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 \$10 per acre for the cropland or \$500 for the use of the whole farm.

Share-oash tenants pay a part of their rental in cash and a part as a share of the orop or livestock production.

Share tenants pay a share only of either the crop or the livestook production or both.

Croppers are defined as share tenants to whom their landlords furnish all the work animals, or tractor power in lieu of work animals.

Traditionally, a cropper is a hired worker who is paid a share of the crop in lieu of a cash wage. He differs from a wage hand in that his payment is not fixed but depends upon the quantity of crops he harvests and sells and upon the price he receives for the crops sold. The laws of some States define a share cropper as a tenant, others classify him as a laborer. In most States, questions as to his tenure status are decided by the courts on the basis of whether he has title to the crop and, upon harvest, pays the landlord a share, or whether the landlord retains title to the crop and, upon harvest, pays the cropper his share after deducting any advances in cash, credit, supplies, etc. In order to facilitate the coding procedure, all tenants with work power furnished, except those paying cash rental only, were classified as croppers.

Other and unspecified tenants include those whose rental agreement was unspecified and those who could not be included in one of the other subclasses.

The tenure of multiple- and single-unit operators was based on the above definitions and classifications. Multiple-unit operators are classified according to the tenure under which they handle the over-all multiple-unit operation as a single farm business. To determine the tenure of multiple-unit operators, the answers to several questions were examined from the section of the schedule in which the over-all multiple-unit data were reported. Answers for comparable home-farm questions, if there was a home farm, were considered also. The answers to these principal questions were examined: "Does this person rent land from others?" "Name of landlord," "Acres rented," "Method of rental," and "All work stock and tractor power furnished by the landlord?"

No tenure data for subunits (component parts of multiple units) are presented in the county or type-of-farming area tables. However, a summary of the tenure of the subunit operators, by States, for the area included in the study, is presented in the accompanying table. It should be noted that a subunit is identical with a farm as shown in volumes I and II. The tenure classification shown in the table is the same as that presented in the reports for the 1945 Census of Agriculture. Since a home farm is classified as a subunit, the distribution of subunit operators by tenure includes the operator of the home farm. The tenure of the home-farm operator is the same as that of the multiple-unit operator with one exception: Some multiple-unit operators own all the land in the home farm and rent from others all or a part of the land assigned to croppers or tenants. Fully owned, partly owned, and managed subunits, were generally included in multiple units, only as home farms.

Age of operator. — Figures are shown for four age groups of multiple-unit and single-unit operators. Since the age of some operators was not reported, the total number of operators for these four age groups is less than the number of multiple and single units. The data for multiple units relate only to the multiple-unit operator.

Years on unit.—The schedule question on years on farm called for the year in which the operator began to operate his farm continuously. For multiple units, the figures represent the year in which the operator of the multiple operation began to operate the unit. No figures are shown for subunit operators. The figures given for "Less than 1 year" include all operators reporting 1944 or 1945 as the year they began operations. In reporting the year when the operator began to operate

NUMBER OF SUBUNITS INCLUDED IN MULTIPLE UNITS, CLASSIFIED BY TENURE OF OPERATOR¹, BY STATES: 1945

[The data given in this table relate only to the area included in the multiple-unit study. See page XII for description of area]

TENURE OF OPERATOR OF SUBUNIT

Total Alabama Arkansas Georgia Louisiana Mississippi Missouri Garaliu

TENURE OF OPERATOR OF SUBUNIT	Total	Alabama	Arkensas	Georgia	Louisiana	Mississippi	Missouri	North Carolina	South Carolina	Virginia
All tenures. * Full owners. Part owners. Wanagers. All tenants: Cash tenants. Share-cash tenants. Share tenants. Croppers. Other and unspecified tenants.	99,185 10,848 2,237 440,954 20,688 5,729 65,855 524,695	9,896 1,754 150 41,888 6,094 225 7,285 25,546	908 512 47,148 1,527 1,085 7,512 34,628	5,587 185	6,085 701 214	146,507 21,592 2,045 750 122,120 4,695 697 15,174 94,771 6,782	647 210 26	87,141 19,051 1,758 161 86,171 984 222 11,052 49,946 3,987	66,871 15,339 1,522 207 51,604 2,866 3,500 10,500 34,790 3,298	10,084 2,399 218 5 7,462 119 8 891 6,189 255

¹ The tenure of home-farm operators is included.

the multiple unit, there was a noticeable tendency to report the year the operator first lived on the unit regardless of whether he was the operator at that time or whether he had operated the unit continuously since that date. Insofar as the results of this inouiry are used to reflect the stability of operators on particular units, this tendency has had no appreciable effect on the usefulness of the figures. Data for the number of years on unit for multiple-unit and single-unit operators are presented in four groups.

Residence of operator. — Information was obtained in 1945 as to whether or not the operator of the farm resided on the farm he operated. The question read, "Does the operator live on this farm?—(Yes or No)." This question applied to operators of multiple units as well as to operators of single units.

Work off unit.—Many unit operators supplement their farm income with odd or spare-time jobs or businesses off the farm. In some cases, the operator's principal source of income is off-farm work, with farming activities only a secondary enterprise.

The 1945 Farm and Ranch Schedule called for the number of days the operator worked off his farm in 1944 for pay or profit. The schedule was so designed that the question was applicable to multiple-unit operators as well as to single-unit operators. Enumerators were instructed that this question was intended to obtain a record of all the time spent off the farm in 1944 for pay or profit. Work of the operator in connection with a filling station, store, garage, tourist camp, or other nonfarm business conducted at the farm was considered as work off the farm. Exchange farm work was not to be reported. However, work on another farm for wages was to be reported as work off the farm. The figures on the number of operators reporting off-farm work represent the minimum number of operators working off their farms in 1944. Because a report was not secured for those operators not working off the farm, there is no accurate measure of completeness of the reports for operators reporting off-farm work.

For multiple units, data for days worked off the unit are presented only for multiple-unit operators. Since the number of days worked off the unit is not shown for subunits, days worked off single units plus days worked off multiple units will not equal the totals shown in volumes I and II of the reports for the 1945 Census of Agriculture. However, the number of days worked off the farm by all subunit operators, including the operators of home farms, of multiple units may be obtained by subtracting the data for single units from the comparable totals shown in volumes I and II.

Units reporting. — The term "units reporting," as used in this report, indicates the number of units for which the specified items shown in the particular tables were reported. If there were 250 multiple units in a county and only 175 of these reported tractors, the number of multiple units reporting this item would be 175. In the tables presenting multiple-unit and single-unit data, the term means either "multiple units reporting" or "single units reporting," depending on the column heading. The term "multiple units reporting" refers to the number of operating units for which an item was reported, regardless of the number of subunits reporting.

In the tables presenting data for "home farms" and "other subunits," the term "units reporting" is also used. The meaning of the term is essentially the same as explained above except that it relates to the number of home farms or other subunits (component parts of multiple units) reporting a particular item.

Land in units. — The acreage designated as "All land in units" includes all the land under the control of the operator (cropland, pasture land, woodland, and all other land) that was considered a part of his farming unit. However, large areas of timberland or other nonagricultural land held by an operator 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 or prairie grasses, were harvested was to be reported as part of the unit. When cattle, sheep, or other livestock was grazed or pastured on land neither owned nor leased by the operator, such land was not to be included as a part of the unit.

not to be included as a part of the unit.

For multiple units, "All land in units" includes not only all the land associated with the home farm, but also all the

land assigned to cropper or tenant subunits. In part 3, "Table I.—Multiple Units Only," "Land in subunits" is shown separately for home farms and other subunits.

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 production of each individual crop were reported separately as crops harvested.

Cropland harvested, as shown for multiple units, includes all land from which crops were harvested by the operator, his family, or hired workers plus all the land from which crops were harvested on units that were assigned to croppers or tenants. For single units it includes all the land from which crops were harvested by the operator with the assistance of his family and hired workers. In part 3, "Table I.—Multiple Units Only," "Cropland harvested" is shown separately for home farms and other subunits.

Crop failure.—The land from which no crops were harvested in 1944 because of destruction by wind, hail, drought, floods, insects, disease, or from any cause, or from failure to harvest because of low prices or lack of labor. If a crop was harvested, even though the yield was very low, the land from which the crop was actually harvested was included in the acreage for cropland harvested, not crop failure. The acreage designated as crop failure does not represent the entire acreage of crops which failed, but only that acreage of land in crops that failed which was not successfully replanted to a crop that was harvested in 1944. Correspondence with individual operators indicated that enumerators sometimes included under crop failure land which had not been planted to crops in 1944 because of floods, shortage of labor, or for other reasons.

For multiple units crop failure, as defined above, includes all such land associated with all subunits of the multiple unit.

Cropland, idle or fallow.—Cropland which was lying idle or which was in cultivated summer fallow; or land on which crops were planted for soil improvement or the prevention of erosion, and which was not pastured, or from which no crop of any kind was harvested in 1944.

Cropland, idle or fallow on multiple units, includes all of such land associated with all subunits of the multiple operation.

Cropland used only for pasture.—Cropland used only for pasture in 1944 that was plowed within the last 7 years. Although practically all such pasture is usually associated with the home farm of a multiple unit, the figures presented in this report include cropland pastured for all subunits,i.e., for the entire multiple-unit operation.

All other land.—For this report "All other land" includes all land other than cropland harvested; crop failure; cropland, idle or fallow; and cropland used only for pasture. In this category is included all other land used for pasture or grazing in 1944; all wood lots or timber tracts, natural or planted, cut-over land with young growth whether pastured or grazed or not; and all wasteland, house yards, barnyards, feed lots, lanes, roads, ditches, etc. Such land reported for multiple units includes all that associated with the home farm and all cropper and tenant subunits of a multiple-unit operation.

Farm labor. — The farm labor inquiry asked for separate data for the number of persons 14 years old and over working on the farm the equivalent of 2 or more days during the week ending January 6, 1945, for (a) operators, (b) unpaid members of the operator's family, and (c) hired farm laborers. The enumerators were instructed to report the number of persons working at farm work, including farm chores. Inmates of institutions and persons working at housework and contract construction work were not to be reported.

There was difficulty in securing accurate reports on farm labor. In some cases, enumerators did not secure answers to the inquiries and, in other cases, they included persons engaged in housework, children under 14 years old, the maximum number of persons employed during the year, or the operator with the other family workers in addition to reporting him separately. Although such errors were usually detected during the editing

process, adequate corrections could not always be made; consequently, the data on farm labor, particularly the data on unpaid members of the operator's family, are subject to considerable reporting errors.

Another inquiry on farm labor called for the total cash paid in 1944 for farm labor (wage, contract, and piece-work labor). Expenditures for machine hire and for any labor included in the cost of such machine hire, and expenditures for household and contract construction work were not to be included. The expenditures for farm labor represent the amount paid in cash. For certain types of labor, cash wages are often supplemented with the furnishing of board, housing, products of the farm for the use of the laborer's family, feed, pasture for animals, etc.

For multiple units these data relate to the totals for the labor and wages that were reported for the home farm and other component subunits. In each case, the term "units reporting" refers to the number of multiple units reporting any labor (family or hired) and the total number of persons represents all those on home farms plus all those on other component subunits. The number of unpaid workers, as shown in the tables, was obtained by totaling all those workers reported for the home farm (the operator and members of his family) and all those reported for other component subunits (cropper and tenant operators and members of their families) who did not receive wages. The number of operators shown as a subtotal of unpaid workers in part 1, county table I, relates to multiple-unit operators only; the number of unpaid members of the operator's family includes all members of the multiple-unit operator's family other than the operator and all cropper and tenant operators and members of their families who did not receive wages. Hired workers relate to the number of persons who worked on the home farm for wages during the specified period plus any who worked on component subunits for wages (hired by cropper and tenant subunit operators). The amount of cash wages paid for hired labor includes the total wages paid in 1944 for persons working on the home farm and for all those working for cropper and tenant operators of other component subunits.

Crops and livestock.—For multiple units, information is given for the major crops and classes of livestock. Corresponding information is also given for single units. Data for at least three and a maximum of four crops are presented for every State. The acreage shown in the tables represents that harvested in the crop year 1944. The acreage presented for multiple units represents the total acres harvested for the entire multiple unit. Thus, the acreage reported by the operator of the home farm plus that reported for other component cropper or tenant subunits constitutes the entire acreage harvested for the multiple-unit operation. The production for the various crops represents the quantity harvested during the 1944 crop year.

Data for only three classes of livestock (mules, horses, and all cattle) are presented for multiple units. The numbers represent inventories, as of January 1, 1945, of these classes of livestock on multiple units and single units, regardless of ownership. For multiple units, these totals represent an inventory for each of these classes of livestock on the home farm and on cropper and tenant subunits.

Value of farm products sold or used by unit households. -The total value of farm products sold or used-on the farm is a total of the individual reports of farm operators for the nine value-of-products questions on the schedule. (See facsimile of schedule shown in the Appendix.) The total value of farm products, or the sum of the value of farm products sold and the value of farm products used by farm households, gives an approximate measure of gross farm income. For all the value-of-products questions, gross receipts or values were to be reported without deductions for expenses of any kind. The enumerator was also instructed that, if the operator was a tenant, the landlord's share should be included in reporting the value of sales. The value-of-products figures do not include income from nonagricultural sources, such as work off the farm. Also, enumerators were instructed not to include any government payments, such as soil conservation or dairy production payments in the value-of-products figures.

For multiple units, the value of products represents the total for the home farm plus the totals reported for cropper

and tenant subunits. The instructions to enumerators provided for a different procedure (see facsimile of the instructions). In general, enumerators followed the plan of totaling the values for the subunits to arrive at an over-all value for the multiple unit. In constructing totals for multiple units in the editing process, it was impossible to follow a procedure other than that of totaling the values reported for the subunits.

Fruits and nuts sold.—In general, the figures reported for these items cover the value of all fruits and nuts harvested in 1944 that had been, or were to be, sold. The value figures on fruits and nuts cover all tree fruits, nuts, and grapes, as well as small fruits. There was a noticeable tendency, in many commercial fruit areas, for growers to report their net receipts instead of the gross value of all fruit sold or traded.

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

Horticultural specialties sold.—Horticultural specialties included (1) crops grown under glass and propagated mushrooms; (2) nursery products (trees, shrubs, vines, ornamentals, etc.); and (3) flower and vegetable seeds, bulbs, and flowers and plants grown in the open. The inquiry called for the value of sales in 1944.

All other crops (field crops) sold.—This question covers the value of the sales of field crops harvested in 1944, such as corn, sorghums, small grains, annual legumes, hay, clover and grass seeds, Irish potatoes and sweetpotatoes, cotton, tobacco, sugarcane, rice, etc. The enumerator was instructed to include the value of sales of byproducts, such as cottonseed, pea vines, etc., although no provision was made for reporting the production of such byproducts on the schedule. On some schedules, the value of sales of cottonseed apparently was not included in the value of field crops sold or traded.

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

Poultry and poultry products sold.— Sales of ducks, geese, guineas, pigeons, baby chicks, and poults 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 value question included the sale of horses, mules, cattle and calves, hogs and pigs, sheep and lambs, meat (except poultry), goats, goat milk, wool, mohair, fur animals in captivity and pelts, bees, and honey.

Forest products sold.—The sales of firewood, fuel wood, standing timber, sawlogs, veneer logs, pulpwood, mine props, bark, charcoal, fence posts, railroad ties, poles and piling, turpentine, resin, 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 potatoes and sweetpotatoes.

It should be made clear that for multiple units this item included the value of these products that were used by all households on the "home farm" subunit plus the value of these products used by all the households on cropper and tenant subunits.

Units with no farm products sold or used.—These are units for which there were reports of "none" for farm products sold or used by unit households. Such units include (a) new units being operated for the first time in 1945, and (b) units having a complete crop failure in 1944 with no livestock or livestock products sold and no value for farm products used by unit households. Very few multiple units (two or more subunits combined into one unit) reported no income from farm products sold or used by unit households.

Unclassified units.—When information on the farm production and value of farm products sold or used was incomplete or was not reported, the unit was designated as "unclassified."

A few single units could not be classified. However, no multiple units were unclassified, even though some component subunits were unclassified.

Classification by type of unit.—All units have been classified by type based on the source of income in 1944. The type into which a multiple unit was classified depended upon the source of income in 1944 for the home farm and the cropper and tenant subunits combined into one operating unit.

Multiple and single units were classified by type on the same basis of criteria. After eliminating "units with no farm products sold or used" and "unclassified" units, the remainder was separated into two groups: (1) units producing products primarily for sale and (2) units producing products primarily for home use. If the value of products used by unit households was greater than the total sales, the unit was classified as a "unit producing products primarily for own household use," i.e., for use by households on the multiple unit. If the value of all sales was greater than the value of products for use of the households, the unit was classified as a "unit producing products primarily for sale" and then further classified on the basis of the source of income. The type into which a unit producing products primarily for sale was subclassified was determined upon the basis of the following criteria:

Fruit-and-nut unitsMore	than 50% of sales from
frui	its and nuts.
Vegetable unitsMore	than 50% of sales from
vege	etables, exclusive of
Iris	sh and sweet potatoes.
Horticultural-specialty units More	than 50% of sales from
hort	cicultural products.
All-other-crop (field crop)	•
unitsMore	than 50% of sales from
. fiel	ld crops, including Irish
and	sweet potatoes.
Dairy unitsMore	than 50% of sales from
all	dairy products.
Poultry unitsMore	than 50% of sales from
. poul	try, eggs, etc.
Livestock units	than 50% of sales from
live	animals, meat, wool, etc.
Forest-product unitsMore	than 50% of sales from
fore	est products.
General units	ne source contributing
more	than 50% of total sales

Examples: A unit with field crop sales of \$900, livestock sales of \$700, and a value of products used by unit households of \$200 would be classified as a all-other-crop (field-crop) unit. A unit with field crop sales of \$600, livestock sales of \$400, poultry sales of \$600, and a value of products used by unit households of \$200 would be classified as a general unit.

The terms "type of unit" and "type of farm" used in the value-of-products tables are not the same as the term "type-of-farming area" used elsewhere in this report.

Size of unit.—Multiple and single units are classified by size of unit on the basis of all land in the unit. All land in multiple units includes the land in the home farm plus the land assigned to component cropper and tenant subunits.

Type-of-farming area. — Preceding the data for each State is a map delineating the type-of-farming areas used for this report. These type-of-farming areas, designated by Roman numerals, are those used by the Land Grant Colleges and the United States Department of Agriculture. The boundaries of the areas were verified by the respective Land Grant Colleges and by the United States Department of Agriculture.

Generally, the term "type-of-farming area" refers to a subdivision within a State in which there is general homogeneity of economic and physical conditions. Usually these conditions include similar characteristics of livestock, crop-production practices normally followed, and of the pattern of natural resources prevailing. For practical purposes, the boundaries for these areas follow county lines, even though natural divisions seldom follow the lines of political subdivisions.

PRESENTATION AND INTERPRETATION OF STATISTICS

Location of multiple-unit operations. — The general area in which multiple-unit operations are important is shown by

figure 5. This area includes the counties in which approximately 5 percent or more of the farm operators, as reported in the 1945 Census, were croppers. While there is a small number of multiple units outside of this area, they are relatively unimportant in relation to total units or farms.

The data presented in this report do not cover the entire area of multiple-unit operations, but, in the main, they are limited to entire States, or parts of States, in which multiple-unit operations are most important. (See figure 7.) Statistics are included for 567 counties in nine States. Data are included for all counties in Alabama, Georgia, Louisiana, Mississipp1, and South Carolina, 46 counties in Arkansas, 7 in Missouri, 80 in North Carolina, and 16 in Virginia. In the four States for which some counties were not included in the report, entire type-of-farming areas, with two exceptions, were included. In a few areas in Arkansas and in North Carolina only selected counties were included because of the high percentage of multiple units in these counties.

Presentation of multiple-unit statistics.—This report contains all of the published data on multiple units for the 1945 Census of Agriculture. State and county data are presented in part 1, a series of four county tables. All of these show comparisons for single units and for multiple units. County table I gives the general characteristics of the units. County table II presents the number of operators, all land in multiple units, cropland harvested, and value of units (land and buildings) by color and tenure of operator and also shows the acreage and production of specified crops and inventories of livestock. County table III presents the number, acreage, value, and cropland harvested by size of unit based on the total acreage in the unit. County table IV shows the value of farm products by source of income.

Two groups of tables present statistics by type-of-farming areas. One group of five tables (comprising part 2) shows comparisons for single and multiple units; the other group of three tables (comprising part 3), presents data for multiple units only.

The tables presenting statistics by type-of-farming areas include data for all of the items shown in county tables I to IV except the data for unpaid farm workers. In addition, these tables show data for age, residence, and work off farm for single- and multiple-unit operators. The tables also contain data showing the frequency distributions for various items, such as value of land and buildings, cash wages paid, etc. Such data are not presented by counties because in many counties the number of units was too small to justify the publication of the figures by counties.

Type-of-farming area tables I, II, III, and IV contain the data for general characteristics of the units, tenure of operator, size, type of unit, and value of farm products. Type-of-farming table V presents a distribution of multiple units according to the number of subunits in the multiple unit; i.e., 2, 3, 4, 5-9, 10-19, and 20 and over subunits. The items shown in table V include-acreage, value of land and buildings, number of dwellings, number of specified livestock, acreage and production of specified crops, and value of farm products by source of income.

"Table I.—Multiple Units Only" presents a comparison of the data for the "home farm" and "other subunits." Information is given for such items as total acreage, acres of cropland harvested, value of implements and machinery, dwellings, population, hired workers, cash wages, motor equipment, specified livestock and crops, and value of farm products sold or used by households. "Table II.—Multiple Units Only" gives information, by color and tenure of the multiple-unit operator, for tractors, work stock, cattle, acreage and production of specified crops, value of farm products sold or used by households, and value of farm products used by households. "Table III.—Multiple Units Only" presents a distribution, by size, of the same items listed for "Table II.—Multiple Units Only."

Not all the material tabulated for multiple units and the component subunits are presented in this report. For example, data were tabulated separately for the characteristics of the home farm and for the other subunits according to the distribution of the multiple units by the number of subunits as shown in part 2, Type-of-farming area table V. Copies of the available, but unpublished, tabulated material may be obtained from the Bureau of the Census for the cost of preparing the necessary tables and making photostatic copies thereof.

The distribution of multiple units, according to the number of subunits per multiple unit, is shown by figure 6. The relative importance of multiple units, as reflected by the number of component subunits, is shown by figures 8 and 9. Other measures of the relative importance of multiple-unit operations are portrayed for type-of-farming areas by figures 10 to 17. These maps show the proportion of the total farm land area in multiple units, the proportions of the total corn, cotton, to-bacco, and peanut acreages that were harvested on multiple units, and the proportions of the number of tractors, work stock, and cattle on multiple units.

Interpretation of data for multiple units.—In interpreting the data for multiple units, consideration must be given to the definitions used in connection with the 1945 Census of Agriculture, how these definitions were applied by Census enumerators, and to the procedures used in the compilation of the

The definition of multiple units was not clearly understood by all Census enumerators in the multiple-unit area. In some areas, enumerators associated multiple units with the size of land holdings rather than with the operating criteria used for determining the existence of multiple units. In other areas, either because of lack of understanding of the definition of a multiple unit or for other reasons, some Census enumerators did not enumerate any multiple units.

In order to insure that data for multiple units were consistent with data for component subunits and that the subunits of multiple units were all properly identified, it was -necessary to examine the reports for all farms in the multiple-unit areas. This examination involved the identifying of component parts of multiple units and determining the correct over-all totals for the multiple unit. To determine whether or not a Census farm was a component part of a multiple unit, the answers to several questions on the schedule were examined. These included (1) the multiple-unit questions on page 1, columns a, b, c, and (2) the name of the person from whom the land was rented for subunits other than the home farm, as reported on page 1, column 3; (3) the name of the operator of the home farm, page 1, column 1 (which should be the same as the name of the person from whom the subunit operators rented land if there was a home farm); (4) the method of rental (cash, share, share-cash, other), page 2, column 16; and (5) whether all work stock and tractor power were furnished by the landlord, page 2, column 17.

In the editing procedure individual farm reports enumerated as component parts of multiple units were retained or excluded from the multiple-unit operations. Editing clerks identified and combined into multiple units other individual farm reports that had not been listed by the enumerators as component parts of multiple units. These clerks were instructed to adhere to the established definition of a multiple unit and also to consider the answers to the questions listed in the preceding paragraph. Some tenant operations, other than cropper operations, were included in the multiple units. When the components for a multiple unit included such tenant operations, and there was no clear indication that these were independent operating units, they were retained as a part of the multiple unit.

In case the enumerator had not properly identified or had not considered subunits as parts of multiple units, it was necessary first to identify all subunits comprising the multiple units and to prepare a consolidated report for the multiple unit. For two or more Census farms to be consolidated into a multiple unit, it was necessary for at least one of the subunits to represent a cropper operation. If the management conditions for a tehant appeared to be in much the same relationship to the "home farm" as those for a cropper, the tenant operation was included as a part of the multiple unit. Some croppers were not included in multiple units because no such arrangement was evident. If it was evident that a cropper operated a unit which was not a part of a larger operating unit, this cropper farm was considered a single unit. If a landlord had more than one cropper apparently located on separate units, each cropper unit considered a single operating unit. It is probable that some multiple units, as well as some subunits of other multiple units, were omitted under this procedure.

This procedure resulted in the preparation of reports for 37,827 multiple units not enumerated by Census enumerators. These constructed multiple units represented 27 percent of all multiple units included in the tabulations for this report. The number of multiple units enumerated and constructed is shown by States in the following table:

NUMBER OF MULTIPLE UNITS WITH THE NUMBER FIELD ENUMERATED AND THE NUMBER OFFICE CONSTRUCTED, BY STATES: 1945

ENUMERATED AND CONSTRUCTED	Total	Alabama	Arkanses	Georgia	Louisi- ana
Total	141,316	15,431	9,098	26,610	8,065
Enumerated	103,489 37,827	8,089 7,342	7,201 1,897	18,484 8,126	6,242 1,828
ENUMERATED AND CONSTRUCTED	Missis- sippí	Missouri	North Carolina	South Carolina	Virginia
Total	28,886	2,194	27,579	20,201	3,752

The proportion of all multiple units, that were enumerated, varied among supervisors' districts, counties, and enumeration districts, as well as among States. For the area as a whole, the number of multiple units constructed contained an average of 2.7 subunits us compared with an average of 4.4 subunits for multiple units enumerated and an average of 3.9 subunits for all multiple units.

Caution should be exercised in the interpretation of data in type-of-farming area table V. Averages obtained by dividing totals by the number of subunits may be misleading because home farms are included in the number of subunits. Preliminary analysis of the data indicates that the composition of cropper and tenant subunits does not vary materially, regardless of the number of subunits. However, the size of home farms tends to increase as the number of subunits increases.

While most of the tables in this report show a comparison of the characteristics of single units with those of multiple units, no data are presented for the characteristics of subunits except in "Table I.—Multiple Units Only" which presents limited information on the characteristics of the "home farm" and "other subunits." However, additional information, such as age of subunit operators, years on unit, work off unit, number of subunits reporting specified items, etc., can be obtained for subunits (including the home farm) by subtracting the statistics shown for single units from comparable data published in volumes I and II.

Comparability of multiple-unit statistics with those for prior censuses.— This is the first report of Census data on multiple units based on the definition used herein, i.e., two or more subunits one or more of which is a cropper or tenant.

or more subunits, one or more of which is a cropper or tenant.

Multiple-unit operations have received attention in each census of agriculture. However, the only other published reports are chapter XII, "Plantations in the South" included in volume V of the 1910 Census reports and a monograph based on this and other statistical material issued by the Bureau of the Census in 1916 entitled "Plantation Farming in the United States." In the 1910 report the Bureau of the Census adopted the following definition of a tenant plantation:

"A tenant plantation is a continuous tract of land of considerable area under the general supervision or control of a single individual or firm, all or a pent of such tract being divided into at least five smaller tracts, which are leased to tenants."

Since each plantation contained a home farm, the multiple unit included six or more subunits. In view of the definition used at that time there are few, if any, comparisons that can be made with the present report.

For the 1940 Census, a compilation of data, for plantations (multiple-farm units) was made. The following definition of a plantation was used:

"A plantation (as here used) comprises a continuous tract or closely adjacent tracts of land on which five or more farm families (including at least one cropper or tenent family) are regularly employed, and which tracts are operated as a single working unit in respect to a central farm headquarters and to the control of labor, cropping systems, and farming operations. Thus, a plantation should include all the land worked from a central farm headquarters with croppers, wage labor, or the operator's family labor, plus any additional land, worked by share or other tenants, that may be part of the operation of the unit or plantation as a whole."

The 1940 tabulations for plantations (multiple-farm units) included many of the items covered in the present study. In addition, statistical tables were made for such items as rental agreements, mortgages, taxes and credit and supplies furnished. Photostatic copies of the available, but unpublished, 1940 statistics for plantations may be obtained from the Bureau of the Census by paying the cost of preparing a photostatic copy.

FIGURE 5

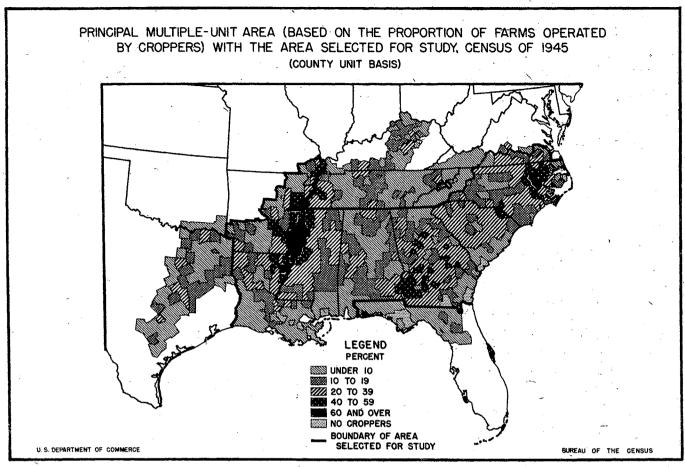


FIGURE 6

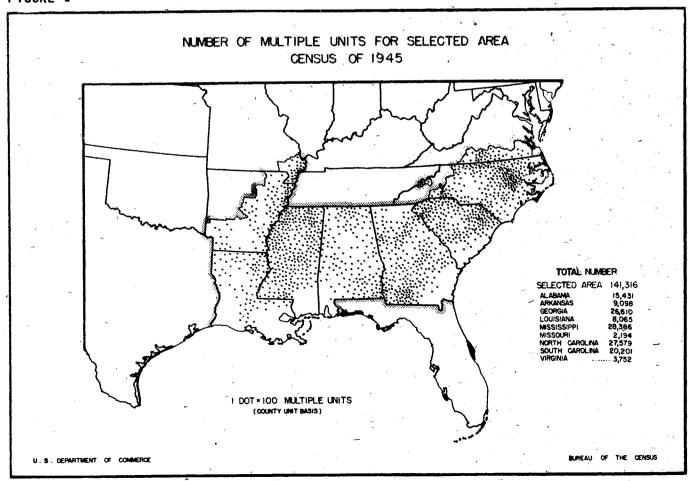


FIGURE 7

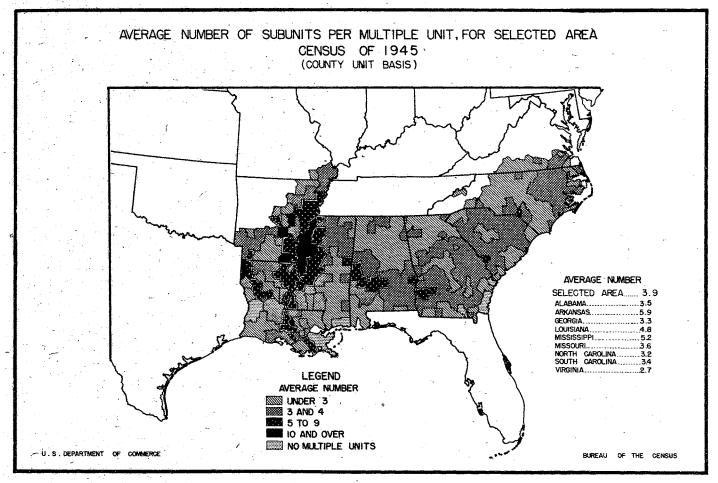


FIGURE 8

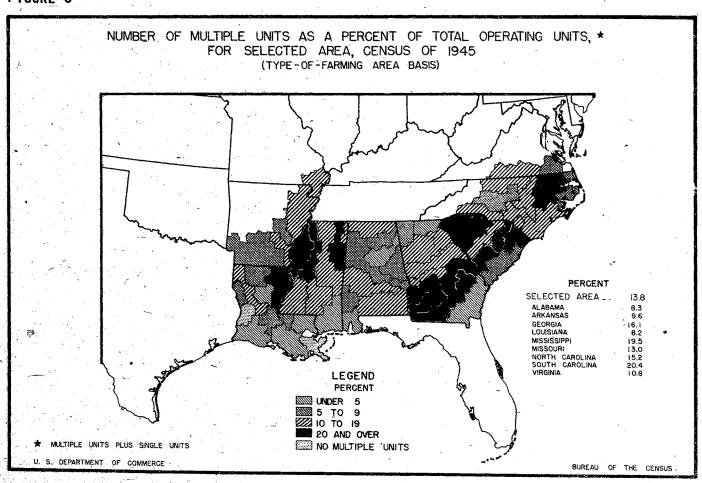
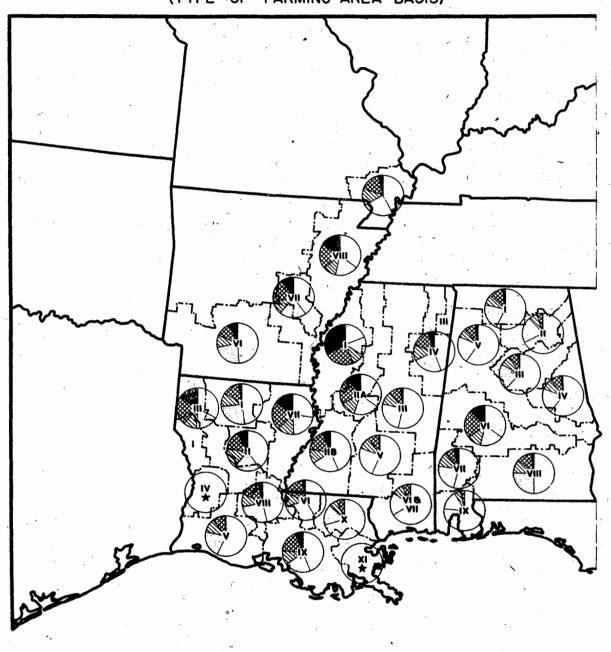


FIGURE 9
PERCENT DISTRIBUTION OF MULTIPLE UNITS BY NUMBER
OF SUBUNITS, FOR SELECTED AREA - WESTERN PART,
CENSUS OF 1945

(TYPE-OF-FARMING AREA BASIS)



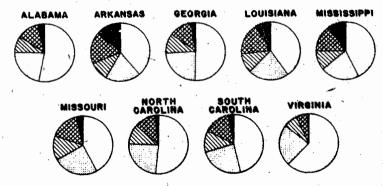


FIGURE 9—Continued

PERCENT DISTRIBUTION OF MULTIPLE UNITS BY NUMBER

OF SUBUNITS, FOR SELECTED AREA - EASTERN PART,

CENSUS OF 1945

(TYPE-OF-FARMING AREA BASIS)

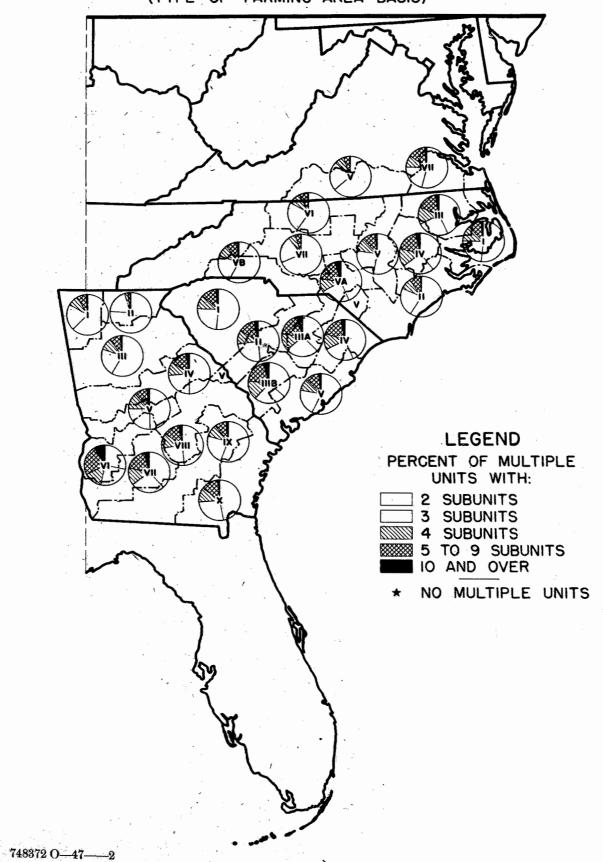


FIGURE 10

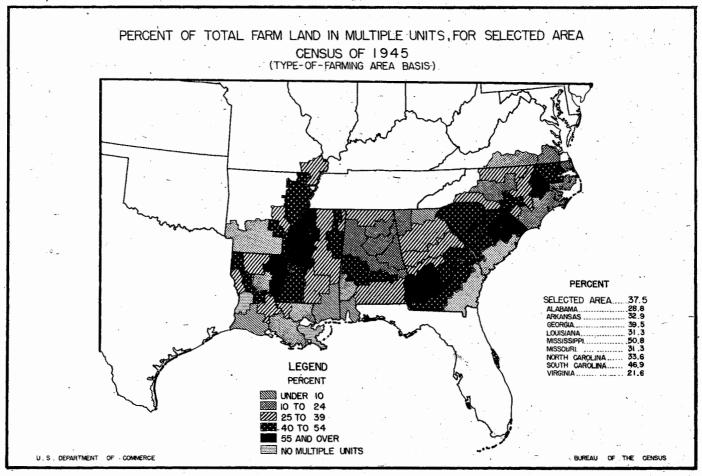


FIGURE !!

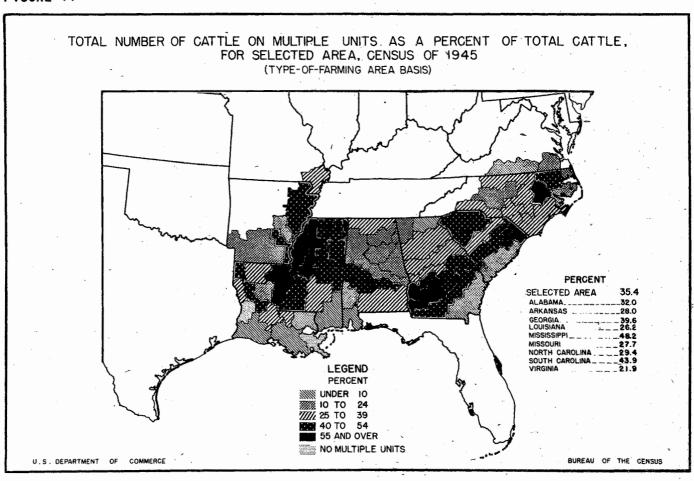


FIGURE 12

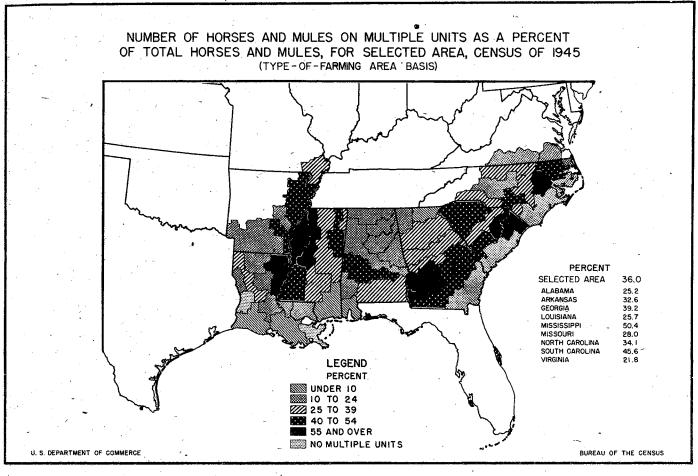


FIGURE 13

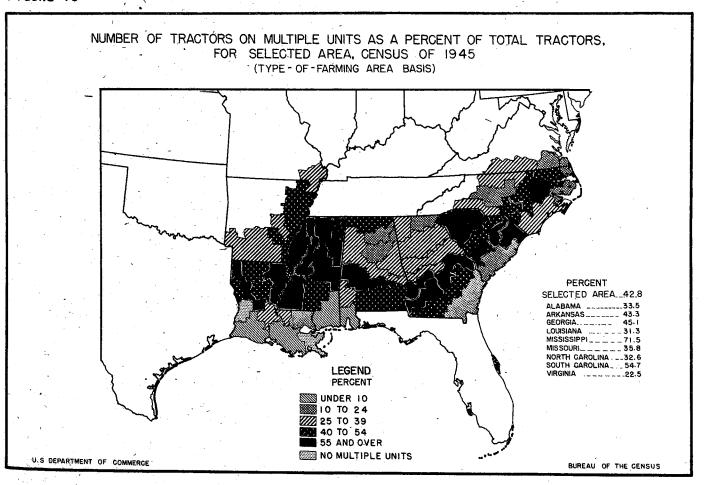
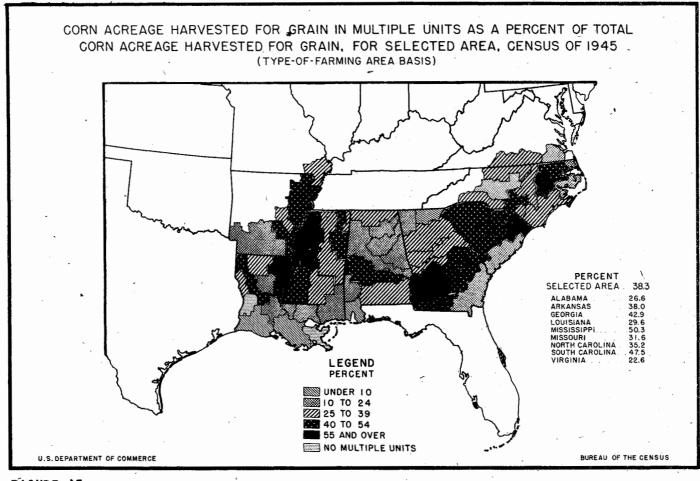


FIGURE 14



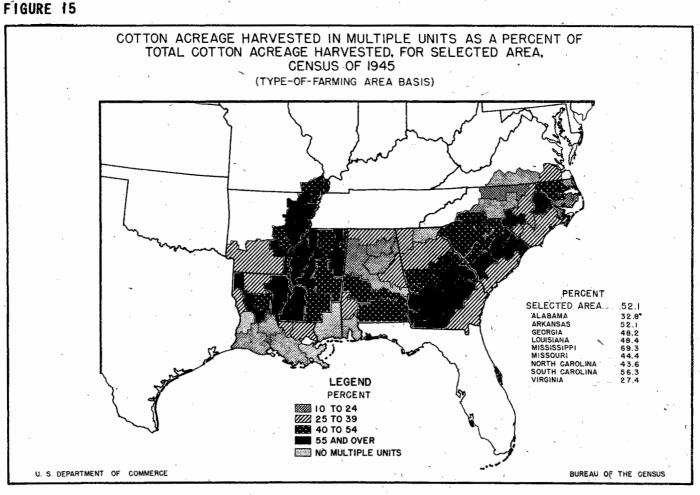


FIGURE 16

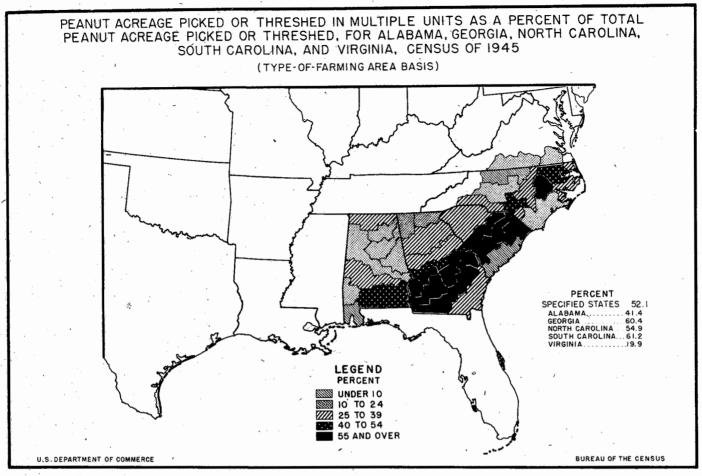


FIGURE 17

