APPENDIX A. General Explanation

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	· age
DATA COLLECTION	A- 1
DATA PROCESSING	
MAJOR DATA CHANGES	A-2
FOLLOW-ON SURVEYS, SPECIAL CENSUSES, AND	
RELATED PUBLICATIONS	A-2
DEFINITIONS AND EXPLANATIONS	
FARMS CLASSIFIED BY SPECIFIED CHARACTERISTICS	A-9

DATA COLLECTION

Method of Enumeration

All agriculture censuses beginning with the 1969 census primarily have used mailout/mailback data collection. Direct enumeration methods, however, continue to be used for the agriculture census in Puerto Rico, Guam, the U.S. Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Mail List

The mail list for the 1987 census was comprised of individuals, businesses, and organizations that could be readily identified as being associated with agriculture. The list was assembled from the records of the 1982 census. administrative records of the Internal Revenue Service (IRS), and the statistical records of the U.S. Department of Agriculture (USDA). In addition, lists of large or specialized operations, such as nurseries and greenhouses, specialty crop farms, poultry farms, fish farms, livestock farms, and cattle feedlot operations, were obtained from State and Federal agencies, trade associations, and similar organizations. Lists of companies having one or more establishments (or locations) producing agricultural products were obtained from the 1982 census and updated using the information from the Standard Statistical Establishment List maintained by the Census Bureau. Exhaustive record linkage, unduplication, and mathematical modeling yielded a final mail list of 4.1 million names and addresses that had a substantial probability of being a farm operation.

Report Forms

In 1987, three different report forms were used—a two-page, a four-page, and a six-page form to minimize the reporting burden, particularly for small farms and places less likely to be farms. The six-page sample form and the four-page nonsample form are the same, except sections 23 through 28 have been added to the sample form to obtain supplemental information from a sample of farms.

The information collected in these sections will give the Bureau of the Census a good basis for making estimates of these data for other farms included in the census. The two-page form does not have as many questions or as much detail as the four-page and six-page forms. The four-page form has 11 regional versions and the six-page form has 13 regional versions. Both forms have different crops prelisted. Appendix D contains copies of both the two-page and six-page forms.

The six-page form was mailed to 1,104,000 addressees on the mail list, including all those expected to be large (based on expected sales or acreage) or unique (farms operated by multiestablishment companies or nonprofit organizations), all those in Alaska and Hawaii, and a sample of other addressees. The two-page form was mailed to 906,000 addressees. These were expected to be small farms or less likely to be farms. The four-page form was mailed to the remaining 2,079,000 addressees. Further discussion of the criteria used to determine which form was mailed to an addressee is provided in the Census Sample Design section of appendix C.

Initial Mailing

The report forms were mailed in mid-December 1987 to the approximately 4,089,000 individuals, businesses, and organizations on the mail list. The mail packages included a report form, a cover letter with a description of the purposes and uses of the census on the reverse side, an information sheet containing instructions for completing the form, and a postage-paid return envelope. Additional special instructions were included with report forms sent to grazing associations; feedlot operations; institutional organizations; Indian reservations; firms with multiple farm or ranch operations; and producers of poultry under contract, bees and honey, fish, laboratory animals, and nursery and greenhouse crops.

To provide additional help to farmers in completing their reports, copies of an Agriculture Census Guide booklet were sent to vocational agriculture instructors, USDA county offices of the Agriculture Stabilization and Conservation Service, and the Cooperative Extension Service. The Guide contained descriptions and definitions of various items in more detail than the instructions included with each report form. Representatives of the above agencies graciously consented to assist farmers in completing their report forms.

Followup Procedures

A thank you/reminder card was mailed to those on the mail list in mid-January 1988. Five followup letters, three of which were accompanied by a report form, were sent to nonrespondents at 4-week intervals starting in mid-February and continuing until early June 1988.

Telephone calls were made to all large farms who had not responded. In addition, telephone calls were made to a sample of other nonrespondents in counties that had a response rate of less than 75 percent. A nonresponse adjustment procedure was used to represent the final nonrespondent farms in the census results. A description of this procedure is included in the Census Estimation section of appendix C.

DATA PROCESSING

Selected report forms were reviewed prior to keying the data. These included reports with attached correspondence and reports with remarks or no positive data on the front page.

The data from each report form were subjected to a detailed item-by-item computer edit. The edit performed comprehensive checks for consistency and reasonableness, corrected erroneous or inconsistent data, supplied missing data based on similar farms within the same county, and assigned farm classification codes necessary for tabulating the data. Substantial computer-generated changes to the data were clerically reviewed and verified.

In the computer edit, farms with sales, acreage, or commodities exceeding specified levels were tested for historical comparability. Key items, such as acreage and sales, were compared for substantial changes between 1982 and 1987. Sizeable historical differences were resolved or verified by telephone, if necessary. Respondents who reported sales or acreage above specified levels on non-sample forms were sent correspondence requesting the additional sample data. Prior to publication, tabulated totals were reviewed by statisticians to identify inconsistencies and potential coverage problems. Comparisons were made with previous census data, estimates published by the USDA, and other available data.

MAJOR DATA CHANGES

Prior to each agriculture census, the Census Bureau reviews the content of the census forms to eliminate questions no longer needed and to identify new items necessary to meet user needs and to better describe the agricultural situation in our Nation. Data requests are solicited from farmers, farm organizations, land grant colleges and universities, State and federal agencies, and members of the Census Advisory Committee on Agricultural Statistics. Each agency and organization is asked to identify and justify its specific data needs. The following data inquiries were added to the 1987 report form:

Income from farm-related sources
Acres under the Conservation Reserve Program
Payments received for participation in federal farm
programs

Grazing permits by source

Additional data on production expenses were added in 1987:

Repair and maintenance expenses Cash rent Property taxes paid All other production expenses

The following separate data inquiries were eliminated from the 1987 form:

Storage capacity for petroleum products
Number of hired farm and ranch workers
Value of agricultural products sold directly to individuals
for human consumption

Tons of commercially mixed feed Expenditures for coal, wood, and coke

Source of irrigation water

Selected machinery items: automobiles, corn heads for combines, and field forage harvesters

Chinchillas
Worms
Tropical and baitfish

FOLLOW-ON SURVEYS, SPECIAL CENSUSES, AND RELATED PUBLICATIONS

In addition to the 1987 Census of Agriculture for the 50 States, Puerto Rico, Guam, the U.S. Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands, the census of agriculture program includes the 1988 Farm and Ranch Irrigation Survey, the 1988 Agricultural Economics and Land Ownership Survey, and the 1988 Census of Horticultural Specialties.

The 1988 Farm and Ranch Irrigation Survey provides data on water use by irrigated farms and ranches. Data include: the amount of water applied by crop, method of water distribution, source of water, and energy costs for pumping water. Data from this survey will be published as volume 3, part 1.

The 1988 Agricultural Economics and Land Ownership Survey provides detailed data on debts, expenses, taxes, credits, assets, land ownership, and farm and off-farm income for farm operators. Many of these items, as well as detailed data on landlord characteristics, are being collected from the landlords of the farms involved in the survey. Data from this survey will be published as volume 3, part 2.

The 1988 Census of Horticultural Specialties covers operations growing and selling \$2,000 or more of horticultural products such as greenhouse products, outdoorgrown floricultural products, nursery products, mushrooms, and sod. These data will be published as volume 4.

Additional publications of the 1987 Census of Agriculture data include the Agricultural Atlas of the United States (previously called the Graphic Summary), Coverage Evaluation, Ranking of States and Counties, and Government Payments and Market Value of Agricultural Products Sold.

The Agricultural Atlas of the United States presents the Nation's agriculture graphically illustrated by dot and multicolor pattern maps. The maps provide displays on size and type of farm, land use, farm tenure, market value of products sold, crops harvested, livestock inventories, and other characteristics of farms. This report will be published as volume 2, part 1.

The Coverage Evaluation report provides estimates of the completeness of the 1987 Census of Agriculture for the United States, geographic regions, and selected States and groups of States. Estimates with their associated sample reliability are provided for farms not on the mail list, farms classified as nonfarms, duplicate farms, and nonfarms classified as farms. This report will be published as volume 2, part 2.

The Ranking of States and Counties report ranks the leading States and counties for selected items in the 1987 census and provides comparative data from the 1982 census. This report will be published as volume 2, part 3.

A new publication on Government Payments and Market Value of Agricultural Products Sold presents 1987 data for the United States and each State. The U.S. table has a format similar to volume 1, U.S. table 52 and presents summary data by size of farm. This report will be published as volume 2, part 5.

DEFINITIONS AND EXPLANATIONS

The following definitions and explanations provide a more detailed description of the terms used in this publication than are available in the tables or on the report form. For an exact wording of the questions on the 1987 census report forms and the information sheet which accompanied these forms, see appendix D. Most definitions of terms are the same as those used in earlier censuses. The more important exceptions are also noted here.

Farms or farms reporting—The term "farms" or "farms reporting" in the presentation of data denotes the number of farms reporting the item. For example, if there are 3,710 farms in a State and 842 of them had 28,594 cattle and calves, the data for those farms reporting cattle and calves would appear as:

Land in farms—The acreage designated in the tables as "land in farms" consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total operations. Large acreages of woodland or wasteland held for nonagricultural purposes were deleted from individual reports during the processing operations. Land in farms includes acres set aside under annual commodity acreage programs as well as acres in the Conservation Reserve Program for places meeting the farm definition.

Land in farms is an operating unit concept and includes land owned and operated as well as land rented from others. Land used rent free was to be reported as land rented from others. All grazing land, except land used under government permits on a per-head basis, was included as "land in farms" provided it was part of a farm or ranch. Land under the exclusive use of a grazing association was to be reported by the grazing association and included as land in farms. All land in Indian reservations used for growing crops or grazing livestock was to be included as land in farms. Land in reservations not reported by individual Indians or non-Indians was to be reported in the name of the cooperative group that used the land. In some instances, an entire Indian reservation was reported as one farm.

Land area—The approximate land area of counties and States represents the total land area as determined by records and calculations as of January 1, 1988. These data are updated periodically; however, the acreages shown for 1987 are essentially the same as for 1982. Any differences between the land area for 1987 and 1982 are due to annexations and other changes affecting county boundaries.

Land in two or more counties—With few exceptions. the land in each farm was tabulated as being in the operator's principal county. The principal county was defined as the one where the largest value of agricultural products was raised or produced. It was usually the county containing all or the largest proportion of the land in the farm or viewed by the respondent as his/her principal county. For a limited number of Midwest and Western States, this procedure has resulted in the allocation of more land in farms to a county than the total land area of the county. To minimize this distortion, separate reports were required for large farms identified from the 1982 census as having more than one farm unit. Other reports received showing land in more than one county were separated into two or more reports if the data would substantially affect the county totals.

Value of land and buildings—Respondents were asked to report their estimate of the current market value of land and buildings owned, rented or leased from others, and rented or leased to others. Market value refers to the value the land and buildings would sell for under current market conditions. If the value of land and buildings was not reported, it was estimated using the average value of land and buildings from a similar farm in the same geographic area.

Harvested cropland—This category includes land from which crops were harvested or hay was cut, and land in orchards, citrus groves, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once, even though there was more than one use of the land.

Cropland used only for pasture or grazing—This category includes land used only for pasture or grazing that could have been used for crops without additional improvement. Included also was all cropland used for rotation pasture and land in government diversion programs that were pastured. However, cropland that was pastured before or after crops were harvested was to be included as harvested cropland rather than cropland for pasture or grazing.

Other cropland—This category includes cropland not harvested and not grazed which was used for cover crops, soil improvement crops, land on which all crops failed, cultivated summer fallow, idle cropland, and land planted in crops that were to be harvested after the census year.

Total woodland—This category includes natural or planted woodlots or timber tracts, cutover and deforested land with young growth which has or will have value for wood products, land planted for Christmas tree production, and woodland pastured. Land covered by sagebrush or mesquite was to be reported as other pastureland and rangeland or other land.

Woodland pastured—This category includes all woodland used for pasture or grazing during the census year. Woodland or forest land pastured under a per-head grazing permit was not counted as land in farms and therefore, was not included in woodland pastured.

Cropland in annual commodity acreage adjustment programs—This category includes land diverted or set aside under the provisions of the Federal Commodity Acreage Program. These data are for the acres of cropland taken out of production by growers of wheat, cotton, rice, corn, sorghum, barley, and oats, and devoted to conservation uses. Information was not obtained as to which crops would have been grown on the acres set aside.

Cropland in the Conservation Reserve Program (CRP)—This category includes acres of "highly erodible" cropland taken out of agricultural production and planted to protective cover crops or reforested. The CRP was established through the 1985 Food Security Act and provides for annual rental payments and shared costs of conservation practices through a 10-year contract with the USDA. Appendix B presents data on places with all their cropland enrolled in the Conservation Reserve Program and which were not counted as farms in the 1987 census.

Irrigated land—This category includes all land watered by any artificial or controlled means, such as sprinklers, furrows or ditches, and spreader dikes. Included are supplemental, partial, and preplant irrigation. Each acre was to be counted only once regardless of the number of times it was irrigated or harvested.

Operator—The term "operator" designates a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, and marketing. The operator may be the owner, a member of the owner's household, a hired manager, a tenant, a renter, or a sharecropper. If a person rents land to others or has land worked on shares by others, he/she is considered the operator only of the land which is retained for his/her own operation. For partnerships, only one partner is counted as the operator. If it is not clear which partner is in charge, then the senior or oldest active partner is considered the operator. For census purposes, the number of operators is the same as the number of farms. In some cases, the operator was not the individual named on the address label of the report form, but another family member, a partner, or a hired manager who was actually in charge of the farm operation.

Operator characteristics—All operators were asked to report place of residence, principal occupation, days of off-farm work, year in which his/her operation of the farm began, age, race, sex, and Spanish origin. If race, age, sex, and principal occupation were not reported, they were imputed based on information reported by farms with similar acreage, tenure, and value of sales. No imputations were made for nonresponse to place of residence, Spanish origin, off-farm work, or year began operation. Operators of Spanish origin were tabulated by reported race.

Farm production expenses—In 1987, additional specific expense items and a category for all other farm production expenses were added to the selected farm production expenses collected in 1982. Consequently, we are publishing total farm production expenses in 1987. The expenses are limited to those incurred in the operation of the farm business. Expenses include the share of the expenditures provided by landlords, contractors, and partners in the operation of the farm business. Property taxes paid by landlords are excluded. Expenditures for nonfarm activities; farm-related activities such as providing customwork for others, the production and harvest of forest products, and recreational services; and household expenses are excluded. In 1987, as in other recent censuses, operators producing crops, livestock, or poultry under contract often were unable or unwilling to estimate the cost of production inputs furnished by the contractors. As a consequence, extensive estimation was required for contract producers.

Commercial fertilizer—The expense for commercial fertilizer is the amount spent on fertilizer during 1987

including the cost of custom application. The cost of custom application was excluded from the 1982 and 1978 data.

Agricultural chemicals—These expenses include the cost of all insecticides, herbicides, fungicides, and other pesticides, including the cost of custom application. Data exclude commercial fertilizer purchased. The cost of custom application was excluded from the 1982 and 1978 data. The cost of lime was excluded from the 1987 and 1982 data, but included in 1978.

Customwork, machine hire, and rental of machinery and equipment—These expenses include costs incurred for having customwork done on the place and for renting machines to perform agricultural operations. The cost of cotton ginning is excluded. The cost of labor involved in the customwork service is included in the customwork expense. The cost of custom application of fertilizer and chemicals was included in the 1982 and 1978 customwork data, but is included in expenditures for these items in 1987. The cost of hired labor for operating rented or hired machinery is included as a hired farm and ranch labor expense.

Interest—In 1987, separate data were collected for interest paid on debts secured by real estate and interest paid on debts not secured by real estate. In 1982, only total interest expenses were collected.

Market value of agricultural products sold—This category represents the gross market value before taxes and production expenses of all agricultural products sold or removed from the place in 1987 regardless of who received the payment. It includes sales by the operator as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. In addition, it includes receipts from placing commodities in the Commodity Credit Corporation (CCC) loan program in 1987. It does not include payments received for participation in federal farm programs nor does it include income from farm-related sources such as customwork and other agricultural services, or income from nonfarm sources.

The value of crops sold in 1987 does not necessarily represent the sales from crops harvested in 1987. Data may include sales from crops produced in earlier years and exclude some crops produced in 1987, but held in storage and not sold. For commodities, such as sugar beets and wool, sold through a co-op which made payments in several installments, respondents were requested to report the total value received in 1987.

The value of agricultural products sold was requested of all operators. If the operator failed to report this information, estimates were made based on the amount of crops harvested, livestock or poultry inventory or number sold. Extensive estimation was required for operators growing crops or livestock under contract.

Caution should be used when comparing sales in 1987 with sales reported in earlier censuses. Sales figures are expressed in current dollars and have not been adjusted for inflation or deflation.

Government payments—This category is limited to direct cash or generic commodity certificate (PIK) payments received by the farm operator in 1987. It includes deficiency and diversion payments; wool payments; payments from the Dairy Termination Program, the Conservation Reserve Program, other conservation programs, and all other federal farm programs under which payments were made directly to farm operators.

Other farm-related Income—The 1987 report form included a new inquiry on income from farm-related sources. These data consist of gross income in 1987 before taxes and expenses from the sales of farm by-products and other sales and services closely related to the principal functions of the farm business. These data are for income producing activities that are primarily a by-product or supplemental to the farm operation. They exclude income from business activities that are separate from the farm business.

Customwork and other agricultural services—This income includes gross receipts received by farm operators for providing services for others such as planting, plowing, spraying, and harvesting. Income from customwork and other agricultural services is generally included in the agriculture census if it is closely related to the farming operation. However, it is excluded if it constitutes a separate business or is conducted from another location.

Rental of farmland—This income includes gross cash rent or share payments received from renting out farmland; payments received from the lease or sale of allotments for crops such as tobacco; and payments received for livestock pastured on a per-head, permonth, or per-pound basis. It excludes rental income from nonfarm property.

Sales of forest products—This income includes gross receipts from the sales of Christmas trees, standing timber, maple products, gum for naval stores, firewood, and other forest products from the farm business. It excludes income from nonfarm timber tracts and sawmill businesses.

Other farm-related income sources—This income includes gross receipts from hunting leases, fishing fees, camping, other recreational services, patronage dividends of cooperatives, sales of farm by-products, and other sales and services closely related to the farm business. It excludes income from nonfarm businesses.

Commodity Credit Corporations loans—This category includes loans for corn, wheat, soybeans, sorghum, barley, oats, cotton, peanuts, rye, rice, tobacco, and honey.

Agricultural chemicals used, including fertilizer and lime—For each type of agricultural chemical, the acres treated were to be reported only once even if the acres were fertilized or limed more than once. If multipurpose chemicals were used, the acres treated for each purpose were to be reported.

Fish and other aquacultural products—The raising of fish and other aquacultural products in captivity is included in the agriculture census. Production in salt water is considered not to be in captivity and is excluded from the census.

Bees and honey—Bee and honey production was enumerated and tabulated in the county in which the home farm was located even though hives are often moved from farm to farm over a wide geographic area.

Citrus enumeration—In the 1987 census, reports for selected citrus caretakers in Arizona, Florida, and Texas were obtained by direct enumeration. A citrus caretaker is an organization or person caring for or managing citrus groves for others. This special enumeration has been used in recent censuses because of the difficulty in identifying and enumerating absentee grove owners who often do not know the information that is needed to adequately complete the census report. Each citrus caretaker was enumerated as a farm operator and requested to complete one report form for all groves cared for and to furnish a list of grove owners' names, addresses, and acres of citrus. The names on the lists were matched to completed grove owners' report forms to eliminate duplication. The caretaker also was requested to inform the grove owner that he had already reported for the citrus under his care and that the grove owner was not to report the citrus again. In the 1987 census, 7 caretakers in Arizona reported 175 grove owners having 12,000 acres of citrus; the 65 caretakers in Florida reported 3,000 grove owners having 170,000 acres of citrus; and 20 caretakers in Texas reported 800 grove owners having 14,500 acres of citrus.

Crop year or season covered—Acres and quantity harvested are for the calendar year 1987 except for citrus fruits, avocados, olives; vegetables in Florida; sugarcane in Florida and Texas; and pineapples and coffee in Hawaii.

Citrus fruits—The data for Florida relate to the quantity harvested in the September 1986 through July 1987 harvest season, except limes that were harvested in the April 1987 through March 1988 harvest season. The data for Texas relate to the quantity harvested in the September 1986 through May 1987 harvest season. The data for States, other than Florida and Texas, relate to the quantity harvested in the 1986-87 harvest season.

Avocados—The data for California relate to the quantity harvested in the November 1986 through November 1987 harvest season and for Florida the April 1987 through March 1988 harvest season.

Olives—The data for California relate to the quantity harvested in the September 1986 through March 1987 harvest season.

Vegetables—The data for Florida relate to the crop harvested in the September 1986 through August 1987 harvest season.

Sugarcane for sugar—The data for Florida relate to the cuttings from November 1986 through April 1987, and for Texas the cuttings from October 1986 through April 1987.

Pineapples—The data for Hawaii relate to the quantity harvested in the year ending May 31, 1987.

Coffee—The data for Hawaii relate to the 1986-87 crop.

Acres and quantity harvested—Crops were reported in whole acres, except for the following crops which were reported in 10ths of acres: Irish potatoes, sweetpotatoes, tobacco, fruit and nut crops including land in orchards, berries, vegetables, and nursery and greenhouse crops; and in Hawaii, taro, ginger root, and lotus root. Totals for crops reported in 10ths of acres were rounded to whole acres at the aggregate level during the tabulation process.

If two or more crops were harvested from the same land during the year, the acres would be counted for each crop. Therefore, the total acres of all crops harvested generally exceeds the acres of cropland harvested. An exception to this procedure is hay crops. When more than one cutting of hay was taken from the same acres, the acres are counted only once but the quantity harvested includes all cuttings. However, hay cut for both dry hay and green chop or silage would be reported for each applicable crop. For interplanted crops or "skip-row" crops, acres were to be reported according to the portion of the field occupied by each crop.

If a crop was planted but not harvested, the acres were not to be reported as harvested. These acres were to be reported in the "land use" section under the appropriate cropland items—cropland used only for pasture or grazing, cropland used for cover crops, cropland on which all crops failed, or cropland idle.

Corn and sorghum hogged or grazed were to be reported as "cropland harvested" and not as "cropland used only for pasture or grazing." Crop residue left in fields and later hogged or grazed was not reported as cropland pasture.

Quantity harvested was not obtained for crops such as vegetables; nursery and greenhouse crops; corn cut for dry fodder, hogged or grazed; and sorghum, hogged or grazed.

Acres of land in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees were to be reported as harvested cropland regardless of whether the crop was harvested or failed. However, abandoned orchards were to be reported as cropland idle, not as harvested cropland and the individual abandoned orchard crop acres were not to be reported.

Land in orchards—This category includes land in bearing and nonbearing fruit trees, citrus or other groves, vineyards, and nut trees of all ages, including land on which all fruit crops failed. Respondents were instructed not to report abandoned plantings and plantings of less than 20 total fruit, citrus, or nut trees, or grapevines.

Crop units of measure—The regional report forms allowed the operator to report the quantity of field crops harvested in a unit of measure commonly used in the region. When the operator reported in a unit of measure different than the unit of measure published, the quantity harvested was converted to the published unit of measure.

Grapes could be reported in dry weight or fresh weight; plums and prunes in fresh weight, or prunes in dry weight; and in Hawaii, coffee in pounds parchment or pounds cherry, and macadamia nuts in pounds husked, unshelled or pounds shelled. For other fruit and nut crops and citrus, the operator was given a choice of units of measure of pounds, tons, or boxes. The quantity harvested for these crops is published in pounds.

Write-in crops—To reduce the length of the report form, only the major crops for the region were prelisted. For other crops, the respondent was requested to look at a list of crops in each section and write in the crop name and its code. For crops that had no individual code listed on the report form, the respondent was to write in the crop name and code the crop into the appropriate "all other" category for that section. Write-in crops coded as "all other" were reviewed and assigned a specific code when possible. Crops not assigned a specific code were left in the appropriate "all other" category.

In some cases, the reviewers were unable to determine the specific crop reported by the respondent because of incomplete or generalized crop names. To ensure proper coding, most of these respondents were telephoned. Reports for those not telephoned were changed on the basis of other reports for the area.

Misreported or miscoded crops—In a few instances, tabulated data may be inaccurate because respondents misunderstood or misinterpreted questions on the report form. Data may have been reported on the wrong line or in the wrong section, or the wrong crop code may have been placed beside the name of a write-in crop. Some of these errors as well as some keying errors may not have been identified during processing and therefore, were not corrected. Reports with significant acres of unusual crops for the area were examined to minimize the possibility that they were in error.

"See text" References

Items in the tables which carry the note "See text" are explained or defined in this section.

Data are based on a sample of farms—For 1987, 1982, and 1978, selected data were collected from only a sample of farms. These data are subject to sampling error. For 1987, the six-page sample form was mailed to all large and specialized farms (based on expected sales, acres, or standard industrial classification), all farms in Alaska and Hawaii, and approximately 17 percent of all other farms. Sample sections 23 through 28 of the 1987 census forms included inquiries on production expenses, commercial fertilizer and lime, chemicals, machinery and equipment, value of land and buildings, and income from farm-related sources. Estimates of the reliability of county totals for selected items are shown in table F of appendix C.

Operators of Spanish origin—No imputation was made for those not responding to the question on Spanish origin.

Farms operated by Black and other races—This category includes Blacks, American Indians, Asian and Pacific Islanders, and all other racial groups other than White.

All other races—This category is primarily limited to persons native to or of ancestry from Mexico, the Caribbean, and Central and South America.

Total sales—This item represents the gross market value of all agricultural products sold before taxes and expenses in the census year including livestock, poultry, and their products; and crops, including nursery crops and hay. Respondents were asked to include landlords' and contractors' shares. The value of commodities placed in CCC loans are included as sold. In 1987, all farms including abnormal farms were tabulated by size based on reported sales. In 1982 and 1978, abnormal farms were included in the total sales figure, but excluded from the detailed size breakdowns. Abnormal farms include institutional farms, experimental and research farms, and Indian reservations.

Farms with sales of less than \$1,000—This category includes all farms with actual sales of less than \$1,000, but having the production potential for sales of \$1,000 or more. These farms normally could be expected to sell \$1,000 or more of agricultural products.

Net cash return from agricultural sales for the farm unit—This category is derived by subtracting total operating expenditures from the gross market value of agricultural products sold. Depreciation and the change in inventory values are excluded from expenditures. Production expenditures may be understated on part owner and tenant farms because property taxes paid by landlords are excluded. Other landlord expenditures, such as insurance or rent paid, which are not readily known to renters may also be omitted or understated. Gross sales include sales by the operator as well as the share of sales received by

partners, landlords, and contractors. Consequently, the net cash return is that of the farm unit rather than the net farm income of the operator.

Other livestock and livestock products—This category includes all livestock and livestock products not listed separately.

Value of livestock and poultry on farms—Data for the value of livestock and poultry on farms were obtained by multiplying the inventory of each major age and sex group by State average prices. The State average prices for cattle, hogs, sheep, Angora goats, hens and pullets of laying age, and turkeys were obtained primarily from data published by the National Agricultural Statistics Service, USDA. Prices applied to other livestock and poultry were census-derived averages based primarily on reported value of sales in the census.

Poultry hatched—This category includes all poultry hatched on the place during the year and placed or sold. Incubator egg capacity on December 31, 1987, is tabulated under the column heading "Inventory" and the number of poultry hatched and placed or sold is under the heading "Sales."

Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc.—Data shown for hay represent all hay crops, including grass silage, haylage, and hay crops cut and fed green (green chop). In production data, dry tons represent dry tonnage for the various hay categories and dry weight equivalents for grass silage and hay cut and fed green. The conversion used was 3 tons of green weight to 1 ton of dry weight.

Tame hay other than alfalfa, small grain, and wild hay—Data shown represent dry tons of hay harvested from clover, lespedeza, timothy, Bermuda grass, Sudan grass, and other types of legume and tame grasses.

Grapes—Farm operators were given the option of reporting the quantity of grapes harvested in dry weight or fresh weight. For publication purposes, all quantities of grapes harvested have been converted to pounds of fresh weight. The conversion used was 4 pounds fresh weight to 1 pound dry weight.

Plums and prunes—Farm operators were given the option of reporting the quantity of plums and prunes harvested in dry weight or fresh weight. For publication purposes, all quantities of plums and prunes harvested have been converted to pounds of fresh weight. The conversion used was 3 pounds fresh weight to 1 pound dry weight.

Cherries—For 1987, cherries were reported as "sweet cherries," "tart cherries," or "cherries" depending on the regional form the respondent completed. On regional

forms for States where cherries are an important fruit crop, "sweet cherries" and "tart cherries" were listed separately. On the other regional forms, either "cherries" were listed or could be written in. For publication purposes, "cherries, total" could be shown along with the individual breakdown of "sweet cherries," "tart cherries," or "cherries, not specified." "Cherries, not specified" is used to account for cherries where the "sweet" and "tart" breakdown was not asked or where respondents wrote in "cherries" but did not specify or code the kind of cherry. All the individual cherry items may not be shown. Data for "sweet cherries," "tart cherries," and "cherries, not specified" are not available for 1982.

Other fruits and nuts—Data shown for other fruits and nuts relate to any fruits and nuts not having a specific code on the 1987 report form.

Land used for vegetables—Data are for the total land used for vegetable crops. The acres are reported only once, even though two or more harvests of a vegetable or more than one vegetable were harvested from the same acres.

Vegetables harvested for sale—The acres of vegetables harvested is the summation of the acres of individual vegetables harvested. All of the individual vegetable items may not be shown.

Nursery and greenhouse crops grown for sale—These data are a summation of the individual items reported. All of the individual items may not be shown.

Nursery, floriculture, vegetable and flower seed crops, sod, etc., grown in the open, irrigated—Data refer to farms reporting irrigated nursery, floriculture, vegetable and flower seeds, sod, bedding plants, etc., grown in the open.

Other grains—These data are for the total market value of other grains sold including dry edible beans, dry lima beans, buckwheat, dry southern peas (cowpeas), emmer and spelt, flaxseed, mixed grains, lentils, mustard seed, dry edible peas, popcorn, proso millet, rice, rye for grain, safflower, sunflower seed, triticale, and wild rice.

Value of crop production—This item represents the estimated value of all crops harvested during the 1987 crop year. Data for the value of crops harvested were obtained by multiplying the average estimated value per unit by the reported acres or quantity harvested. Generally, harvested units of production (pounds, bushels, bales, etc.) were multiplied by State estimates of prices per unit. If only acres harvested were reported, State estimates for value of production per acre were used. The State average production price and production value per acre used in these calculations were obtained usually from publications of the National Agricultural Statistics Service, USDA. When

USDA estimates were not available, Bureau of the Census statisticians made estimates using available sources such as data from adjacent States, respondent report forms, county extension agents, and other persons knowledgeable about specific crops.

FARMS CLASSIFIED BY SPECIFIED CHARACTERISTICS

State tables 48 through 53 present detailed 1987 data for all farms classified by specified characteristics—tenure of operator, type of organization, age and principal occupation of operator, size of farm (acres), value of agricultural products sold, and standard industrial classification. Other tables include data classified by value of sales groups or other characteristics of the farm or the operator.

Farms by value of agricultural products sold or value of sales— in 1987, all farms were tabulated by size based on reported sales. In 1982 and earlier censuses, abnormal farms were not tabulated based on sales size. In the tables on market value of agricultural products sold, the sales of abnormal farms in 1982 and earlier censuses were included in the total sales figure, but excluded from the detailed size categories. Abnormal farms included institutional farms, experimental and research farms, and Indian reservations. The category "farms with sales of less than \$1,000" included all farms with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more. These farms normally could be expected to sell \$1,000 or more of agricultural products.

The sales size categories used in this report are consistent with the standard business size categories issued by Office of Management and Budget (OMB) in 1982. In State table 52, data are presented for four sales size categories between \$10,000 and \$49,999. This provides users with bridge data under both the OMB and the 1978 census classifications. For the 1992 census, data will be presented only for the OMB sales size categories of \$10,000 to \$24,999 and \$25,000 to \$49,999.

Abnormal farms—This category includes institutional farms, experimental and research farms, and Indian reservations. Institutional farms include those operated by hospitals, penitentiaries, churches, schools, grazing associations, and government agencies. In 1987 and 1982, nongovernmental units such as church farms and Future Farmers of America camps were classified as abnormal farms only when 50 percent or more of their products produced and intended for human consumption were utilized by the organization.

Farms by tenure of operator—The classifications of tenure used in the 1987 census were:

Full owners, who operate only land they own.

Part owners, who operate land they own and also land they rent from others.

Tenants, who operate only land they rent from others or work on shares for others.

Farms by type of organization—All farms were classified by type of organization in the 1987 census. The classifications used were:

Individual or family (sole proprietorship), excluding partnership and corporation.

Partnership, including family partnership.

Corporation, including family corporation.

Other, cooperative, estate or trust, institutional, etc.

Corporations were subclassified by two additional characteristics into:

- Family held
 Other than family held
- More than 10 stockholders10 or less stockholders

Farms by age and principal occupation of operator—Data on age and principal occupation were requested from all operators in 1987. The principal occupation classifications used were:

Farming—The operator spent 50 percent or more of his/her worktime in 1987 in farming or ranching.

Other—The operator spent more than 50 percent of his/her worktime in 1987 in occupations other than farming or ranching.

Farms by size—All farms were classified into selected size groups according to the total land area in the farm. The land area of a farm is an operating unit concept and includes land owned and operated as well as land rented from others. Land rented to or assigned to a tenant was considered the tenant's farm and not the owner's.

Farms by standard industrial classification—In 1987, all agricultural production establishments (farms, ranches, nurseries, greenhouses, etc.) were classified by type of activity using the standard industrial classification (SIC) system. These classifications, found in the 1987 SIC Manual¹, are used to promote uniformity and comparability in the presentation of statistical data collected by various agencies.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-003-14-2.

An establishment primarily engaged in crop production (major group 01) or production of livestock and animal specialties (major group 02) is classified in the four-digit industry and three-digit industry group which accounts for 50 percent or more of the total value of sales of its agricultural products. If the total value of sales of agricultural products of an establishment is less than 50 percent from a single four-digit industry, but 50 percent or more from the products of two or more four-digit industries within the same three-digit industry group, the establishment is classified in the miscellaneous industry of that industry group. Otherwise, it is classified as a general crop farm in industry 0191 or a general livestock farm in industry 0291. Establishments that derive 50 percent or more of the value of sales from horticultural specialties of industry group 018 are classified in industry 0181 or 0182 according to their primary activity.

Characteristics of all farms by selected SIC groupings are shown in State tables 18 and 53. The SIC groupings shown in State table 53, together with the associated products (value of sales representing 50 percent or more of the value of agricultural products sold during the year) on which the classification is based, are as follows:

Cash grains (011)—Wheat, rice, corn, soybeans, barley, buckwheat, cowpeas, dry field and seed beans and peas, flaxseed, lentils, milo, mustard seed, oats, popcorn, rye, safflower, sorghum, sunflowers, and other small grains.

Cotton (0131)—Cotton and cottonseed.

Tobacco (0132)—Tobacco.

Sugarcane, sugar beets, Irish potatoes, hay, peanuts, and other field crops (0133, 0134, 0139)—Sugarcane, sugar beets, Irish potatoes, alfalfa, broomcorn, clover, grass seed, hay, hops, mint, peanuts, sweetpotatoes, timothy, and yams.

Vegetables and melons (016)—Vegetables and melons grown in the open.

Fruits and tree nuts (017)—Berries, grapes, tree nuts, citrus fruits, deciduous tree fruits, avocados, bananas, coffee, dates, figs, olives, pineapples, and tropical fruit.

Horticultural specialties (018)—Bedding plants, bulbs, florists' greens, flower and vegetable seeds, flowers, foliage, fruit stocks, nursery stock, ornamental plants, shrubberies, sod, mushrooms, and vegetables grown under cover.

General farms, primarily crops (019)—Crops, including horticultural specialties, but less than 50 percent of sales from any single three-digit industry group.

Livestock, except dairy, poultry, and animal specialties (021)—Cattle, calves, hogs, sheep, goats, goat's milk, mohair, and wool.

Beef cattle, except feedlots (0212)—Production or feeding of beef cattle, except feedlots.

Dairy farms (024)—Production of cows' milk and other dairy products and raising of dairy heifer replacements.

Poultry and eggs (025)—Chickens, chicken eggs, turkeys, ducks, geese, pheasants, pigeons, quail, and squab.

Animal specialties (027)—Fur-bearing animals, rabbits, horses, ponies, bees, fish in captivity except fish hatcheries, worms, and laboratory animals.

General farms, primarily livestock and animal specialties (029)— Livestock and animal specialties and their products, but less than 50 percent of sales from any single three-digit industry group.

The SIC manual was revised for 1987. Animal aquaculture (0273) was established as a new industry and horticultural specialties, not elsewhere classified (0189) was deleted.

APPENDIX B. Places With All Cropland in the Conservation Reserve Program

The Food Security Act of 1985 established the Conservation Reserve Program (CRP). This program provides annual payments for highly erodible cropland enrolled in the program and meeting its conservation requirements. It also requires that the land be taken out of agricultural production for 10 years.

The 1987 Census of Agriculture includes Conservation Reserve acreage as land in farms on operations that meet the census farm definition. For census purposes, a farm is any place from which agricultural products of \$1,000 or more were produced and sold or normally would have been sold during the census year. Operations which placed all of their cropland in the CRP and did not otherwise meet the farm definition based upon sales, livestock inventories, planted crops, or other criteria for potential sales were not included as farms in the census tabulations.

The following table provides CRP data for places not meeting the census farm definition ("whole farm" CRP places). It also contains separate but corresponding CRP data for farms included in the census tabulations. In addition to State data, detailed county data are presented for counties with three or more "whole farm" CRP places reported. For counties with less than three "whole farm" CRP places reported, their data are combined and reported in "all other counties."

The data for "whole farm" CRP places are not complete for all counties. The census mail list was developed from sources which indicated the farm had agricultural production activity. It was not designed to cover all "whole farm" CRP places. Therefore, the data for these places are limited to what was reported in the census and have not been adjusted to account for nonresponse, incomplete coverage, and reporting errors.

Land in Conservation Reserve Program: 1987

[For meaning of abbreviations and symbols, see introductory text]

tural places						
turai piaces	excluded by farm de in the CRP	efinition with acres	Farms with acres in the CRP			
Number	Land in places (acres)	Land in CRP (acres)	Number	Land in farms (acres)	Land in CRP (acres)	
679	85 045	39 265	1 471	597 285	92 747	
5 9 4 4 2 3 3 2 5 6 7 5 5 1 1 9 9 4 3 3 1 2 4 4 4 8 3 5 1 4 1 8 5 4 2 6 3 6 6 3 5 5 7 10 4 10 16 9 6 7 5 5	359 578 199 2 699 915 4 308 731 289 767 681 4 409 4 555 612 3 719 683 1 540 4 559 326 4 941 5 286 1 769 6 669 5 16 5 46 3 759 2 728 1 24 1 3 647 1 014 3 647 1 014 4 683 1 886 1 123 5 929 5 929	98 280 147 1 157 216 1 415 463 245 207 200 2 867 2 771 1 797 1 797 1 385 2 906 377 1 509 1 229 95 1 229 95 1 325 532 1114 335 304 933 217 350 788 489 2 930	15 28 55 8 8 57 20 199 13 13 17 60 20 38 299 59 63 109 109 111 33 6 110 111 33 6 110 111 113 114 114 114 114 115 116 116 116 117 117 118 118 118 118 118 118 118 118	4 404 9 210 1 7953 2 781 11 281 14 662 14 463 3 630 3 996 3 630 59 591 2 330 42 188 6 602 27 308 20 937 14 215 31 735 24 504 18 366 18 605 3 244 5 166 36 051 3 245 4 185 4 20 930 1 155 4 20 930 1 155 4 20 930 1 1 135 8 208 4 27 184 4 028 6 146 29 262 5 451	800 1 852 (D) 2 576 888 2 779 841 1 955 1 400 1 312 8 106 8 1 807 2 806 2 328 2 056 7 712 4 456 2 119 3 118 5 750 6 044 949 113 (D) 8 12 1 342 7 753 (D) 1 041 8 7 596	
	679 5 9 4 28 3 32 5 6 6 7 5 18 19 9 43 3 12 24 4 4 48 5 21 41 8 5 34 26 6 3 9 6 6 3 5 7 7 10 4 10 16 6 9 6 7	Number Land in places (acres) 679 85 045 5 359 9 578 4 199 28 2 699 3 915 32 4 308 5 731 6 289 7 767 5 661 18 4 409 19 4 555 9 612 43 3 719 32 683 12 1 540 24 4 559 4 326 48 4 941 35 5 5 286 21 1 769 41 6 689 21 728 3 124 6 1 321 39 3 647 6 1 321 39 3 647 6 1 104 3 361 5 506 6 1 2130 4 4 774 10 683 16 1 885 9 1123 5 5 929 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Number Land in places (acres) Land in CRP (acres) 679 85 045 39 265 5 359 98 9 578 280 4 199 147 28 2 699 1 157 32 4 308 1 4 15 5 731 463 6 289 245 7 767 207 5 681 200 18 4 409 2 867 19 612 255 43 3 719 2 768 3 683 241 12 1 540 571 24 4 559 1 797 4 326 149 48 4 941 2 010 48 4 941 2 010 8 516 377 5 586 2 271 21 1 769 1 385 41 6 689 2 906 8 <td>Number Land in places (acres) Land in CRP (acres) Number 679 85 045 39 265 1 471 5 359 98 15 9 578 280 28 4 199 147 55 28 2 699 1 157 55 33 915 216 8 32 4 308 1 415 57 5 731 463 20 6 289 245 19 7 767 207 19 5 681 200 13 18 4 409 2 867 17 19 4 555 1 717 60 9 612 255 10 19 612 255 10 12 1 540 571 34 24 4 559 1 797 38 35 5 5 286 2 271 59 21 1 789</td> <td>Number Land in places (acres) Land in CRP (acres) Number Land in farms (acres) 679 85 045 39 265 1 471 597 285 5 359 98 15 4 404 9 578 280 28 9 210 4 199 147 5 1 799 28 2 699 1 157 55 17 053 32 4 308 1 415 57 11 281 5 731 463 20 4 682 6 289 245 19 1 453 7 767 207 19 7 505 5 681 200 13 3 905 5 681 200 13 3 905 5 681 200 13 3 905 5 681 200 13 3 905 18 4 409 2 867 17 60 59 501 19 4 555 1 717 60<</td>	Number Land in places (acres) Land in CRP (acres) Number 679 85 045 39 265 1 471 5 359 98 15 9 578 280 28 4 199 147 55 28 2 699 1 157 55 33 915 216 8 32 4 308 1 415 57 5 731 463 20 6 289 245 19 7 767 207 19 5 681 200 13 18 4 409 2 867 17 19 4 555 1 717 60 9 612 255 10 19 612 255 10 12 1 540 571 34 24 4 559 1 797 38 35 5 5 286 2 271 59 21 1 789	Number Land in places (acres) Land in CRP (acres) Number Land in farms (acres) 679 85 045 39 265 1 471 597 285 5 359 98 15 4 404 9 578 280 28 9 210 4 199 147 5 1 799 28 2 699 1 157 55 17 053 32 4 308 1 415 57 11 281 5 731 463 20 4 682 6 289 245 19 1 453 7 767 207 19 7 505 5 681 200 13 3 905 5 681 200 13 3 905 5 681 200 13 3 905 5 681 200 13 3 905 18 4 409 2 867 17 60 59 501 19 4 555 1 717 60<	

APPENDIX C. Statistical Methodology

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MAIL LIST MODEL	C-1
CENSUS SAMPLE DESIGN	C-1
CENSUS ESTIMATION	C-1
CENSUS SAMPLING ERROR	C-3
CENSUS NONSAMPLING ERROR	C-5
EDITING DATA AND IMPUTATION FOR ITEM	
NONRESPONSE	C-6

TABLES:

- A. PERCENT OF STATE TOTALS CONTRIBUTED BY WHOLE FARM NONRESPONSE ESTIMATION: 1987
- B. RELIABILITY ESTIMATES FOR NUMBER OF FARMS IN A COUNTY REPORTING A COMPLETE COUNT ITEM: 1987
- C. RELIABILITY ESTIMATES FOR NUMBER OF FARMS IN A COUNTY REPORTING A SAMPLE ITEM: 1987
- D. RELIABILITY ESTIMATES OF STATE TOTALS: 1987
- E. RELIABILITY ESTIMATES OF PERCENT CHANGE IN STATE TOTALS: 1982 TO 1987
- F. RELIABILITY ESTIMATES OF COUNTY TOTALS: 1987
- G. STATE COVERAGE EVALUATION ESTIMATES OF FARMS NOT ON THE MAIL LIST: 1987

MAIL LIST MODEL

A statistical discriminant model was developed to predict the probability that a mail list addressee operated a farm. The model was used to identify the 4.1 million records from the preliminary census mail list of 6.0 million records that would receive a census of agriculture report form. Records from the 1982 census mail list were used to build the model. Record characteristics such as the source of the mail list record (see appendix A for a description of record sources), number of source lists on which the record appeared, expected value of agricultural sales, and geographic location were used to separate mail list records into model groups. The proportion of 1982 census farm records in each group was calculated to provide an estimate of the probability that an addressee in the group operated a farm.

Using these same group definitions, the 1987 census mail list records were separated into groups, each with an associated estimate of farm probability from the model. The 4.1 million mail list records in groups with the largest estimate of farm probability were selected to receive the census report form. A large percentage of the 1.9 million records that were dropped from the 6.0 million preliminary census mail list were nonfarm records from the previous census. This procedure was used to obtain a more complete census enumeration without excessive respondent burden and data collection cost.

CENSUS SAMPLE DESIGN

Each of the 4.1 million name and address records on the census mail list was designated to receive one of three different types of census report forms. The three forms were the nonsample census form (a four-page form), the sample form (a six-page form), and the short form (a two-page form). Sections 1 through 22 of the sample form were identical to sections on the nonsample census form. However, the sample form contained additional sections on farm production expenditures, usage of fertilizers and insecticides, value of machinery and equipment, value of land and buildings, and farm-related income. The short form contained abbreviated versions of the sections on the nonsample census form. These three different forms were used to reduce the response burden of the census, while providing quality information on a large number of data items at the county level.

The sample form was mailed to all mail list records in Alaska and Hawaii and to a sample of records in other States identified when the mail list was constructed. Addresses were selected into the sample with certainty if they were expected to have large total values of agricultural products sold or large acreage, if they were firms with two or more farms, or if they had other special characteristics. When a nonsample large farm was identified during processing, a supplemental form that contained the additional data inquiries was mailed. All farms in counties with less than 100 farms in 1982 were included in the sample with certainty; counties containing 100 to 199 farms in 1982 were systematically sampled at a rate of 1 in 2; and counties containing 200 or more farms in 1982 were systematically sampled at a rate of 1 in 6. This differential sample scheme was used to provide reliable data for sections 23 through 28 of the report form for all counties.

To determine which mail list records would receive the short form, all mail list records not designated for the sample were sorted into model groups according to farm probability as specified by the mail list model. The 906,000 mail list records in the model groups with the lowest probability of being farms and with an expected total value of agricultural product sales less than \$20,000 were designated to receive the short form. The remaining mail list records were selected to receive the nonsample census form.

CENSUS ESTIMATION

The 1987 Census of Agriculture used two types of statistical estimation procedures. These estimation

procedures accounted both for nonresponse to the data collection and for the sample data collection. These procedures are used because some farm operators never respond to the census despite numerous attempts to contact them, and not all farm operators are requested to provide the sample data items.

Whole Farm Nonresponse Estimation

A statistical estimation procedure was used to account for the census farms among mail list nonrespondents that were not designated for telephone followup. A stratified systematic sample of eligible census nonrespondents were mailed a simplified report form. Five sample strata were defined based on form type, expected value of sales, and previous census status. The report form was designed to provide sufficient information to determine farm status. Additional mail and telephone contacts were made to survey nonrespondents to obtain sufficient response for survey estimates.

Estimates of the proportion of census nonrespondents that operated farms were made for each stratum in the State using survey results and applied to the total number of census nonrespondents in that stratum. A synthetic estimation procedure was used to estimate the number of census nonrespondents that operated farms for each county by stratum. This estimation procedure is based on the assumption that the distribution of farms in a stratum by county is the same for census nonrespondents as for census respondents.

Within each stratum in a county, a noninteger nonresponse weight was calculated and assigned to each eligible respondent farm record. The procedure used for calculating the nonresponse weight assumed the eligible census respondents and the nonrespondent farm operations in a county had similar characteristics within each stratum. The noninteger nonresponse weight was the ratio of the sum of the estimated number of nonrespondent farms (using nonresponse survey results) and the number of eligible census respondent farms to the number of eligible census respondent farms. Stratum controls were established to ensure that this weight was never greater than 2.0. The noninteger nonresponse weight was used in the estimation of the final weight for the sample items. It was randomly rounded to an integer weight of either 1 or 2 for each record for tabulating the complete count items.

The procedure assumed that we obtain complete response from large and unique farm operations because these cases received intensive telephone followup during census processing. In situations where addressees could not be contacted by telephone or refused to cooperate, secondary sources such as Agricultural Stabilization and Conservation Service offices or county extension agents were asked to provide information as to whether or not the addressee had agricultural activities. Data from previous census reports for the specific addressee, in conjunction with other information, were used to complete the census report form.

Table A quantifies the effect of the nonresponse estimation procedure on selected census data items. The percentage of the census value contributed by nonresponse estimation as provided in this table indicates the potential for bias in published figures resulting from this procedure. The estimates provided in these tables do not reflect the effect of nonresponse to individual data items on respondents' census report forms. The effect of this item nonresponse is discussed further under Census Nonsampling Error.

Table A. Percent of State Totals Contributed by Whole Farm Nonresponse Estimation: 1987

Item	Percent of total
Farmsnumber	12.3
Land in farmsacres	9.4
Value of land and buildings\$1,000	9.5
Market value of agricultural products sold\$1,000	5.6
Harvested croplandacres	7.5
Corn for grain or seedacres	7.5
Wheat for grainacres	5.4
Livestock and poultry inventory:	
Cattle and calvesnumber	9.6
Hogs and pigsnumber	7.4
Hens and pullets of laying agenumber	.9

Sample Estimation

All respondent sample records received a sample weight. The sample data estimates the actual figures that would have resulted from a complete census of the items in sections 23 through 28 of the report form. The estimates were obtained from an iterative ratio estimation procedure that resulted in the assignment of a weight to each record containing sample items. For any given county, a sample item total was estimated by multiplying the data items for each farm in the county by the corresponding sample weight and summing overall sample records in the county.

Each sample farm was assigned one sample weight to be used to produce estimates for all sample items. For example, if the weight given to a sample farm had the value 5, all sample data items reported by that farm would be multiplied by 5. The weight assigned a certainty farm was 1. The estimation procedure used to assign weights was performed for each county.

Within a county, the ratio estimation procedure for farms was performed in three steps using three variables. The first variable contained eight 1987 total value of agricultural production (TVP) groups. Both the second and third variables, Standard Industrial Classification (SIC) code and farm acreage, contained two groups. The variable groups were as follows:

TVP	SIC	Acres
\$1 to \$999	01 All crops	0 to 69
\$1,000 to \$ 2,499	02 All livestock	70 or more
\$2,500 to \$ 4,999		
\$5,000 to \$ 9,999		
\$10,000 to \$24,999		
\$25,000 to \$49,999		
\$50,000 to \$99,999		

\$100,000 or more

The first step in the estimation procedure was to partition the sample records into 32 mutually exclusive initial post strata formed by combining the three variable groups. This produced a three dimensional array where the cells of the array corresponded to the initial post strata groups. Each sample farm record was assigned an initial weight equal to the ratio of the total farm count to the sample farm count, expanded for nonresponse estimation, for the cell containing the sample farm. This weight was approximately equal to the inverse of the probability of selecting a farm for the census sample.

The second step in the estimation procedure was to combine, if necessary, the cells of the array (prior to the repeated ratio estimation) to increase the reliability of the ratio estimation procedure. Any cell within the array that either contained less than 10 sample farms or had a ratio of total farms to sample farms that was more than 2 times the mail sample rate was collapsed with another cell (in the same variable) according to a specified collapsing pattern. New total farm counts and sample farm counts were computed for each of the collapsed cells (final post strata) and were used in the ratio estimation procedure to calculate final sample weights.

In the third step in the ratio estimation procedure, complete counts for the three variables (TVP, SIC, acreage) were used to compute the marginals of the array defined by the final post strata. Factors were then applied to expanded sample totals in each cell of the array to obtain agreement with the row marginal (TVP) complete counts. The sample totals then had factors applied to obtain agreement with the column marginal (SIC) complete counts. Lastly, the sample totals had factors applied to obtain agreement with the depth marginal (acreage) complete counts. This procedure that requires the row totals, then the column totals, and then the depth totals to agree with the complete counts for the rows, columns, and depths, respectively, is continued iteratively until the process converges (the marginal totals agree with the complete count totals).

The ratio of the adjusted total farm count to the sample farm count obtained from the second iteration of the estimation procedure was the noninteger final post stratum sample weight assigned to the sample farm records in that post stratum. The noninteger sample weight, the product of the noninteger final post stratum sample weight and the nonresponse weight, was randomly rounded to an integer weight for tabulation. If, for example, the final weight for the

farms in a particular group was 7.2, then one-fifth of the sample farms in this group were randomly assigned a weight of 8 and the remaining four-fifths received a weight of 7.

CENSUS SAMPLING ERROR

Sampling error in the census data results from the nonresponse sample and the census sample data collection. Census items were classified as either complete count or sample data items. The complete count items were asked of all farm operators. The complete count data items included land in farms, harvested cropland, livestock inventory and sales, crop acreages, quantities harvested and crop sales, land use, irrigation, government loans and payments, conservation acreage, type of organization, and operator characteristics (sections 1 through 22 of the census report form). Variability in the complete count data items is considerably smaller than in the sample items as the variation is due only to the nonresponse sample estimation procedure. The sample items were asked of approximately 25 percent of the total census farm operators. The sample data items included farm production expenditures, fertilizer and chemical usage, farm machinery and equipment, value of land and buildings, and farm-related income (sections 23 through 28 of the census report form). Variability in the estimates of sample items is due both to the census sample selection and estimation procedure and the nonresponse sample estimation procedure.

The sample for the 1987 Census of Agriculture is one of a large number of possible samples of the same size that could have been selected using the same sample design. Estimates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible sample estimates is called the sampling deviation. The standard error or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples, and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The percent relative standard error of estimate is defined as the standard error of the estimate divided by the value being estimated multiplied by 100. If all possible samples were selected, each of the samples were surveyed under essentially the same conditions, and an estimate and its standard error were calculated from each sample, then:

- Approximately 67 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of all possible samples.
- Approximately 90 percent of the intervals from 1.65 standard errors below the estimate to 1.65 standard errors above the estimate would include the average value of all possible samples.

The computations involved to define the above confidence statements are illustrated in the following example. Assume that the estimate of number of farms for the State is 94,382 and the relative standard error of the estimate (percent) is .1 percent (0.001). Multiplying 94,382 by 0.001 yields 94, the standard error. Therefore, a 67-percent confidence interval is 94,288 to 94,476 (i.e., 94,382 plus or minus 94). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly, a 90 percent confidence interval is 94,227 to 94,538 (i.e., 94,382 plus or minus 1.65 x 94).

Tables B and C provide the reliability estimates of the estimated number of farms in a county reporting complete count and sample items, respectively. Both tables show the percent relative standard errors for selected estimated number of farms in a county reporting an item. These are derived from a regression equation. The parameters of the regression equation were estimated using the estimated number of farms in a county reporting the complete count or sample item as the independent variable and the standard error of that estimate as the dependent variable for all counties in the State.

Table B. Reliability Estimates for Number of Farms in a County Reporting a Complete Count Item: 1987

Farms	Relative standard error of estimate (percent)
Number of farms reporting:	
25	7.1
50	5.0
75	4.1
100	3.5
150	2.8
200	2.4
300	1.9
500	1.4
750	1.1
1,000	.8
1,500	.5
2,000	.3

Note: Complete count items are items in sections 1 to 22 of the report form.

To illustrate the use of these tables, assume that the estimate of the number of farms reporting hogs and pigs for a particular county, as given in county table 12, is 89. Since hogs and pigs is a complete count data item, refer to table B and select the estimated relative standard error of the estimate from the row whose value is equal to or just less than the estimated number of farms, 89. For this example, the relative standard error of the estimate comes from the row for 75 farms reporting. For sample data items, follow the same procedure using table C. In counties that had less than 100 farms in the 1982 Census of Agriculture, table C does not apply because the farms in these

counties were sampled with certainty (1 in 1), and thus, the reliability estimates for the number of farms in these counties are smaller than for counties that were sampled at lower rates (1 in 2 or 1 in 6).

Table C. Reliability Estimates for Number of Farms in a County Reporting a Sample Item: 1987

Farms	Relative standard error of estimate (percent)
Number of farms reporting:	
25	42.5
50	29.5
75	23.6
100	20.1
150	15.7
200	13.0
300	9.5
500	5.4
750	4.4
1,000	3.8
1,500	3.1
2,000	2.7

Note: Sample items are items in sections 23 to 28 of the report form.

Table D presents the relative standard error of selected State data items for all farms and for all farms with sales of \$10,000 or more. The percent relative standard error of the estimate for complete count data measures the variation associated with the sample-based adjustment for whole farm nonresponse. The percent relative standard error of the estimate for sample items measures both the sampling error due to the nonresponse sample estimation procedure and the census sample selection and estimation procedure. The reliability of State estimates may vary substantially from State to State. Generally, State estimates for a given data item are less reliable than the corresponding U.S. estimate.

Table E presents the standard error (not relative standard error) for percent change in State totals from 1982 to 1987. The general purpose of the percent change estimate is to provide a relative measure of the difference in a characteristic between censuses. The relative change for a given characteristic is defined as the ratio of the difference of the 1987 and the 1982 estimate for that characteristic to the 1982 estimate. This ratio is multiplied by 100 to obtain the percent change. The percent standard error of a percent change estimate, then, is the standard error of the ratio multiplied by 100.

Table F presents the relative standard error for county totals for 10 major complete count items and 7 sample items. The relative standard error of the estimate (percent) for the same item differs among counties in a State. Reasons for this are differences among counties in (1) the total number of farms, (2) the number of large farms included with certainty, (3) the size classifications of the farms sampled, (4) the amount of nonresponse, (5) the general agricultural characteristics, and (6) the specific characteristic being measured.

CENSUS NONSAMPLING ERROR

The accuracy of the census counts are affected by the joint effects of the sampling errors described in the previous section and nonsampling errors. Extensive efforts were made to compile a complete and accurate mail list for the census, to design an understandable report form and instructions, and to minimize processing errors through the use of quality control, verification, and check measures on specific operations. Nonsampling errors arise from incompleteness of the census mail list, duplication in the mail list, incorrect data reporting, errors in editing of reported data, and errors in imputation for missing data. These specific nonsampling errors are further discussed in this section. Evaluation studies will be conducted to measure the extent of certain nonsampling errors such as coverage error, classification error, and item imputation.

Census Coverage

The main objective of the census of agriculture is to obtain a complete and accurate enumeration of U.S. farms with accurate data on all aspects of the agricultural operation. However, the cost and availability of resources for this enumeration place restrictions on operationally feasible data collection methodologies. The past five agriculture censuses have been conducted by mail enumeration with telephone contact for selected nonrespondents. The completeness of such an enumeration thus depends to a large extent on the coverage of farm operations by the census mail list.

Historically, the census of agriculture has included approximately 90 percent of the farms in the United States and over 96 percent of the agricultural production. Complete enumeration of agricultural operations satisfying the farm definition of \$1,000 or more in agricultural sales is complicated by fluctuations in agricultural operations qualifying for enumeration, the variety of arrangements under which farms are operated, the multiplicity of names used by an operation, the number of operations in which an operator participates, the accuracy of data reporting, etc. A new mail list is compiled for each census because no current single list of agricultural operations is comprehensive.

An evaluation of census coverage has been conducted for each census of agriculture since 1945. The evaluation provides estimates of the completeness of census farm count and major census data items. In addition, the evaluation helps to identify problems in the census enumeration and provide information that can form the basis for improvements. The results of the 1987 Coverage Evaluation program will be published in volume 2, part 2.

The evaluation of coverage conducted in 1987 was designed to measure errors in the census mail list and in farm classification. Mail list error includes a measurement of farms not on the census mail list (undercount), and a measurement of farms enumerated more than once in the

census (overcount). Classification error includes a measurement of farms classified as nonfarms in the census (undercount) and of nonfarms classified as farms in the census (overcount). Classification error arises from reporting and processing errors. Mail list undercount dominates all coverage errors. Net coverage error is defined as the difference of undercounted and overcounted farms. Measurements of these errors, as well as a description of the complete coverage program, will be available in the Coverage Evaluation report.

Mail List Coverage

A major problem with the use of a mail list for the census of agriculture enumeration is the difficulties that are encountered in compiling a complete list. The percentage of farms on the census mail list varies considerably by State. Several reasons have contributed to farm operators' names not being included on the census mail list—the operation may have been started after the mail list was developed, the operation may be so small as not to appear in agricultural related source lists used in compiling the census list, or the operation may have been falsely classified as a nonfarm prior to mailout. A large proportion of the farms not included on the mail list were small in both acres and sales of agricultural products.

The 1987 Census of Agriculture Coverage Evaluation used the area segment sample of the 1987 June Enumerative Survey (JES) of the National Agricultural Statistical Service (NASS) to estimate farms not on the census mail list. The Census Bureau contracted with the NASS to augment the JES data collection and receive survey data under the confidentiality protection afforded by Title 13, U.S. Code, from all residents of area sample segments with agricultural activity. These survey records were matched to the census mail list. Records that did not match were mailed a census of agriculture report form to estimate mail list coverage. Estimates of farms not on the census mail list used the capture-recapture dual frame estimator that will be described in the Coverage Evaluation report.

Table G provides coverage evaluation estimates of the number of farms not on the mail list and selected characteristics of those farms with their percent relative standard error. The table also provides an estimate of characteristics of farms not on the mail list as a percentage of total farms in the State. The estimate of total farms in the State is based on census farm count and the estimated number of farms not on the census mail list. This estimate of total farms in the State was not adjusted for classification and list duplication errors. Estimates of these errors will be made at the regional rather than the State level and will be available in the Coverage Evaluation report. The table provides the standard error (not relative standard error) of this percent estimate.

Respondent and Enumerator Error

Incorrect or incomplete responses to the mailed census report form or to the questions posed by a telephone

enumerator introduce error into the census data. Such incorrect information can lead, in some cases, to incorrect enumeration of farms. This type of reporting error is measured by the Classification Error Study discussed later in this section. To reduce all types of reporting error, questions were phrased as clearly as possible based on tests of the census report form, and detailed instructions for completing the report form were provided to each addressee. In addition, each respondent's answers were checked for completeness and consistency.

Item Nonresponse

Nonresponse to particular questions on the census report that we would logically or statistically expect to be present may create a type of nonsampling error in both complete count and sample data. When information reported for another farm with similar characteristics is used to edit or impute for item nonresponse, the data may be biased because the characteristics of the nonrespondents have not been observed and may differ from those reported by respondents. Any attempt to correct the data for nonresponse may not completely reflect this difference either at the element level (individual farm operation) or on the average.

Processing Error

The many steps of processing of each census report form are sources for the introduction of nonsampling error. The processing of the census report forms includes clerical screening for farm activity, computerized check-in of report forms and followup of nonrespondents, keying and transmittal of completed report forms, computerized editing of inconsistent and missing data, review and correction of individual records referred from the computer edit, review and correction of tabulated data, and electronic data processing. These operations undergo a number of quality control checks to ensure as accurate an application as possible, yet some errors are not detected and corrected.

Classification Error

An evaluation study of classification errors was conducted in the 1987 Census of Agriculture as part of the census coverage evaluation program. A sample of mail list respondents was selected, and these addresses reenumerated to determine whether they were a farm or nonfarm. A farm status determination was made based on the evaluation questionnaire and compared with the status based on the data reported on the census form. Differences in status were reconciled.

In past censuses, the proportion of farms undercounted due to classification errors was higher for farms with small values of sales. The classification error rate was higher for (1) livestock farms than crop farms, (2) farms with a small number of acres than larger farms, or (3) tenant farms than full or part-owner farms. Results from the 1987 classification error study will be published in the Coverage Evaluation report.

EDITING DATA AND IMPUTATION FOR ITEM NONRESPONSE

For the 1987 Census of Agriculture, as in previous censuses, all reported data were keyed and then edited by computer. The edits were used to determine whether the reports met the minimum criteria to be counted as farms in the census. Computer edits also performed a series of complex, logical checks of consistency and completeness of item responses. They provided the basis for deciding to accept, impute (supply), delete, or alter the reported value for each data record item.

Whenever possible, edit imputations, deletions, and changes were based on component or related data on the respondent's report form. For some items, such as operator characteristics, data from the previous census were used when available. Values for other missing or unacceptable reported data items were calculated based on reported quantities and known price parameters.

When these and similar methods were not available and values had to be supplied, the imputation process used information reported for another farm operation in a geographically adjacent area with characteristics similar to those of the farm operation with incomplete data. For example, a farm operation that reported acres of corn harvested, but did not report quantity of corn harvested, was assigned the same bushels of corn per acre harvested as that of the last nearby farm with similar characteristics that reported acceptable yields during that particular execution of the computer edit. The imputation for missing items in each section of the report form was conducted separately; thus, assigned values for one operation could come from more than one respondent.

Prior to the imputation operation, a set of default values and relationships were assigned to the possible imputation variables. The relationships and values varied depending on the item being imputed. For example, different default values were assigned for several standard industrial classification and total value of sales categories when imputing hired farm labor expenses. These values and item relationships for the possible imputation variables were stored in the computer in a series of matrices. The computer records were sorted by reported State and county, where the county sequence was based on similar types of farms and agricultural practices.

Each execution of the computer edit consisted of records from only one State. For a given execution of the edit, the stored entries in the various matrices were retained in the computer only until a succeeding record having acceptable characteristics for some sections of the report form was processed by the computer. Then the acceptable responses

of the succeeding operation replaced those previously stored. When a record processed through the edit had unreported or unacceptable data, the record was assigned the last acceptable ratio or response from an operation with a similar set of characteristics. Once each execution of the computer edit for a State was completed, the possible imputation variables were reset to the default values and relationships for subsequent executions.

After the initial computer edit, keyed reports not meeting the census farm definition were reviewed to ensure that the data were keyed correctly. Edit referrals were generated for about 30 percent of the reports included as farms, and they were also reviewed for keying accuracy and to ensure that the computer edit actions were correct. If the results of the computer edit were not acceptable, corrections were made and the record was reedited. More extensive discussions of the edit and item imputation methodology with measures of the extent of imputation in the census estimates will be provided in a separate research report.

Tables D through G follow.

Table D. Reliability Estimates of State Totals: 1987

[For meaning of abbreviations and symbols, see introductory text]

Total emrit chestrate Total Emrit ch			All farms	Farms with sales	Farms with sales of \$10,000 or more		
Land in farma	Item		Total error of estimate	Total	Relative standard error of estimate (percent)		
Average atts of farm			711 (Z)	21 756 7 159 501	.1		
Average per farm			147	329			
Average per form					e		
Average per farm	doilar	dollars 146			1.0		
1 to 9 across					.9 1.0		
10 to 49 acres	r						
So to 170 acree	acre	acres 29	146 .5	3 054	1.3		
180 to 489 acree serve 12 697 3 7.712 500 to 999 acree serve 1870 to 489 acree 1870 to 489	acre	acres 640	209 .2 038 .2	1 944 57 058	8. 8.		
200 to 999 acree		acres 3 165	266 .2 940 .2	7 495 839 582	.8 .9 .3 .4		
500 to 999 acres		farms 12		7 712	.3		
1,000 to 1,999 acres		farms 2	906 .6	2 527	.4		
### 2000 acres or more					.6		
Total cropland. acres. 1 008 672 - 1 005 608 Harvested cropland acres. 7 165 903 1 4 896 212 Harvested cropland acres. 7 165 903 1 4 896 212 Harvested cropland acres. 3 654 903 1 3 086 683 Acres harvested. 1 09 acres 2 1 890 2 1 890 1 10 10 49 acres acres. 2 161 3 2 8 666 1 10 10 10 99 acres acres. 4 66 90 4 4 80 90 1 10 10 10 199 acres acres. 3 54 90 5 1 80 90 1 10 10 10 199 acres acres. 3 54 90 5 1 80 90 2 10 10 10 10 90 acres acres. 3 54 90 5 1 80 90 2 10 10 10 10 10 10 acres acres. 3 54 90 5 1 80 90 2 10 10 10 10 10 10 acres acres. 476 839 5 429 907 3 50 10 699 acres acres. 625 220 5 910 3 50 10 699 acres acres. 625 220 5 910 3 50 10 699 acres acres. 625 220 5 910 4 50 10 699 acres acres. 625 220 5 910 4 6 7 7 7 7 9 10 8 10 8 90 4 7 7 7 9 10 8 10 8 90 9 10 8 90	acre	acres 1 301	482 -	1 241 744	-		
Harvested cropland acres 7 (88 903 1 4 888 212 1870 1 188 912 1870 1 188 912 1870 1 188 912 1870 1 188 912 1870 1 188 912 1870 1 188 912 1870 1 1870	acre	acres 1 038			_		
Harvested oropland		farms 73			.1		
1 to 9 screes	fam	farms 63	754 .1	19 849	.2 .1 .2		
Company Comp							
So to 99 acres	acre	acres 74	776 .2 181 .3	1 950 8 437	.7		
So to 99 acres			613 .2	6 608 185 207	.4		
100 to 199 acres	farm	farms 7	020 .4	4 388	.7 .9 .4 .4 .5		
200 to 499 acres	s farm	farms 3	548 .6	3 151	i		
Second S	acre	farms 2	377 .6	2 334	.6 .6		
1,000 acres or more	acre	acres 731	733 .6	(D)	.6 .6 (D) .5 (D)		
Cropland used only for pasture or grazing farms	acre	acres 626	233 .5 508 -	(D) 508	(D)		
Cher cropland			1		-		
Irrigated land	acre	acres 2 472	453 .2	1 258 757	.2 .3 .3 .4		
Acres irrigated: 1 to 9 acres		acres 859			.4		
Acres Irrigated: 1 to 9 acres farms 1 468 8 717 1 to 9 acres sares 3 646 1.1 2 025 10 to 49 acres sares 3 646 1.1 2 025 50 to 99 acres sares 6 773 2.2 4 300 50 to 99 acres sares 3 646 1.1 2 025 50 to 99 acres sares 6 773 2.2 4 300 50 to 99 acres sares 3 132 50 2 587 100 to 199 acres sares 3 132 50 2 587 100 to 199 acres sares 4 771 3.6 4 771 200 to 499 acres sares 4 771 3.6 4 771 50 to 999 acres sares 7 874 - 7 874 500 to 999 acres sares 5 946 - 5 946 1,000 acres or more sares 5 946 - 5 946 1,000 acres or more sares 5 946 - 5 844 Market value of agricultural products sold 51,000 1 617 636 1 1 427 282 Average per farm dolars 20 294 2 65 605 Value of sales: sares 5 1,000 5 1,000 5 1,000 1,000 5 24,999 sares 5 1,000 1 1,000 1,000 5 24,999 sares 1 1,000 1,000 5 31,000 1 1,000 1,000		farms 1			.9		
acres				1	1.1		
Solid by acres	acre	acres 3	646 1.1	2 025	1 15		
Comparison	acre	acres 6	773 2.2	4 300	2.1 2.3 4.8		
200 to 499 acres farms 25					4.8 5.3		
200 to 499 acres					3.2		
500 to 999 acres	farm	farms	25	. 25	3.6		
1,000 acres or more acress 5 634 - 5 6	acre farm	acres 7	9 -	7 874			
Market value of agricultural products sold \$1,000 1 617 636 1 1 427 292 65 605	acre farm	acres 5	946	5 946	-		
Average per farm dollars 20 294 2 65 605 Value of sales: Less than \$2,500 farms 27 451 2 - \$1,000 31 335 2 - \$2,500 to \$4,999 farms 16 106 3 - \$5,000 to \$9,999 farms 14 398 3 - \$10,000 101 234 3 - \$10,000 175 700 3 175 700 \$25,000 to \$49,999 farms 4 127 5 4 127 \$50,000 to \$99,999 farms 2 719 7 2 719 \$1,000 144 021 6 144 021 6 144 021 \$100,000 or more \$1,000 192 146 7 192 146 7 192 146 \$1,000 915 425 2 915 425 2 915 425 2 915 425 Sales by commodity or commodity group: farms 43 079 1 15 501 63 1079 1 63 1079 63 1079 63 1079 63 1079 63 1079 63 1079 63 1079 63 1079 63 1079 <td< td=""><td>acre</td><td>acres 5</td><td>634</td><td>5 634</td><td>-</td></td<>	acre	acres 5	634	5 634	-		
Less than \$2,500 farms 27 451 2 \$2,500 to \$4,999 \$1,000 31 335 2 \$5,000 to \$9,999 \$1,000 57 775 3 \$5,000 to \$9,999 \$1,000 101 234 3 \$10,000 to \$24,999 \$1,000 102 234 3 \$10,000 to \$49,999 \$1,000 175 700 3 175 700 \$25,000 to \$49,999 \$1,000 144 021 5 144 021 \$50,000 to \$99,999 \$1,000 144 021 6 144 021 \$100,000 or more \$1,000 192 146 7 192 146 \$100,000 or more \$1,000 915 425 (2) 3 464 \$1,000 915 425 (2) 915 425 Sales by commodity or commodity group: \$1,000 701 828 1 15 501 Grains \$1,000 247 853 2 236 289 Com for grain \$1,000 72 893 4 68 210 Wheat \$1,000 31 300 3 30 169	ural products soid	\$1,000			.1		
\$1,000	form	forms 27	451	_	_		
\$10,000 to \$24,999	\$1,00	\$1,000 31	335	=	-		
\$10,000 to \$24,999	\$1.00	\$1.000 57	775 .3	=			
\$1,000 144 021 6 144 021 7 2 719 7 7 7 7 7 7 7 7 7			398 234 .3	Ξ]		
\$1,000 144 021 6 144 021 7 2 719 7 7 7 7 7 7 7 7 7)farm	farms 11	446	11 446	.2		
\$1,000 144 021 6 144 021 7 2 719 7 7 7 7 7 7 7 7 7) farm	farms 4	127 .5	4 127	,3 ,5		
\$100,000 or more) farm	farms 2	719 .7	2 719	.b .7		
Sales by commodity or commodity group: 43 079 1 15 501 Crops, including nursery and greenhouse crops \$1,000 701 828 .1 631 079 Grains \$1,000 247 853 .2 236 269 Com for grain \$1,000 72 893 .4 68 210 Wheat \$1,000 31 300 .3 30 169	farm	farms 3	146 .7 464 (Z)	192 146 3 464	2 3 5 6 7 7 7 7 (2)		
Crops, including nursery and greenhouse crops farms 43 079 .1 15 501 \$1,000 701 828 .1 631 079 Grains \$1,000 247 853 .2 236 269 Com for grain \$1,000 72 893 .4 68 210 Wheat \$1,000 31 300 .3 30 169	commodity group:						
Grains \$1,000 247 853 2 236 289 Com for grain \$1,000 72 893 4 68 210 Wheat \$1,000 31 300 3 30 169	ery and greenhouse crops farm	\$1,000 701	828 .1	631 079	.2 .1 .2 .4 .3 .3 .3		
Wheat\$1,000_ 31 300 .3 30 169	\$1,00	\$1,000 247	853 .2	236 269	.2		
		\$1,000 31	300 3	30 169	, 3		
Soybeans \$1,000 138 414 .3 132 825 Sorghum for grain \$1,000 4 046 1.1 3 931	n \$1,00	\$1,000 4	046 1.1	3 931	1.1		
Barley \$1,000 109 4.7 105 Oats \$1,000 225 3.8 182 Other grains \$1,000 866 2.6 846			225 3.8	182	4.9 4.5 2.7		

Table D. Reliability Estimates of State Totals: 1987—Con.

	1	All farms		Farms with sales of \$10,000 or more			
Item		Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent		
ales by commodity or commodity group—Con.							
Crops, including nursery and greenhouse crops – Con. Cotton and cottonseed	\$1.000	167 404	.3	165 300			
Tobacco	\$1,000	121 268 25 765	.3 .3	77 549	ن ب ن		
Hay, silage, and field seeds	\$1,000 \$1,000	25 765 23 782	.6 1.1	16 450 22 562			
Fruits, nuts, and berries	\$1,000]	4 442	2.1	3 633	2.3		
Nursery and greenhouse crops	\$1,000	108 772 2 542	.1 3.8	107 172	4.		
Livestock, poultry, and their products		57 168		2 143 17 510			
	\$1,000	915 807	.1	796 213			
Poultry and poultry products	\$1,000	136 378	.3 .3 .2	136 101			
Dairy products		248 721 372 458	.3	248 114 267 378	•		
Hogs and pigs	\$1.000	142 913	.4	133 023			
Sheep, lambs, and woolOther livestock and livestock products (see text)	\$1,000	918 14 420	1.8 1.4	645 10 952	2. 1.		
urms by standard industrial classification:							
Cash grains (011)	farms	5 516	.5	2 659	.6		
Field crops, except cash grains (013)	acres	1 940 804 20 699	.4 .2 .3	1 637 903 4 319			
· · · · · · · · · · · · · · · · · · ·	acres	2 383 899	.3	1 397 928	2. 1.5		
/egetables and melons (016)	acres	569 65 942	1.7	263 51 758	2.4		
Fruits and tree nuts (017)	1	445	2.0	71	4.4		
, <i>,</i>	acres	34 850	3.1	13 590	4.4 3.2 		
Horticultural specialties (018)	farms	847	.1	503			
General farms, primarily crop (019)	acres	73 536 2 588	.1 .8	60 478 746	(Ż 1.3		
	acres	479 728	.9	321 919	1.0		
.ivestock, except dairy, poultry, and animal specialties (021)		42 909	.1	9 745	.3		
Dairy farms (024)	acres	5 637 598 2 600	.2	2 767 922 2 472	•		
	acres	756 829	.2 .6 .4	748 456			
Poultry and eggs (025)		715 71 198	1.0 1.1	565 60 642			
Animal appointing (007)	acres	į.					
Animal specialties (027)	acres	2 193 147 403	.9 1.5	231 31 979	2.0 3.1		
General farms, primarily livestock and animal specialties (029)	farms	630	1.6	182	2.5 3.1 2.6 2.4		
	acres	139 599	1.7	66 016	2.4		
rms by type of organization: ndividual or family (sole proprietorship)	farms	71 976	.1	18 249	.1		
	acres	9 583 924	.1 [5 418 208	.2		
Partnership	acres	6 947 1 799 324	.4	3 081 1 444 530	.6		
Corporation		496	1.4	346	 1.4		
	acres	276 686	.8	244 508	.7		
Other—cooperative, estate or trust, institutional, etc.	acres	292 71 452	2.1 1.5	80 51 345	3.0 1.2		
nure of operator:							
full owners		57 161	.1	11 078	.2		
Part owners	acres	6 083 634 17 698	.2 .2	2 521 894 8 962			
	acres	4 912 421	.2	4 078 063			
Fenants	acres	4 852 735 331	.6 .7	1 716 558 634	.2 .3 .2 .2 .2		
perators by principal occupation:	ac. 65	700 001	"	333 334	•		
Farming	farms	30 745	.2	14 127	.2		
•	acres	6 989 848	.2	5 482 233	.2 .2 .3		
Other	farms acres	48 966 4 741 538	.1	7 629 1 676 358	.: .4		
perators by sex:	40.0011		-	. 5.6 555	•		
Male		73 857	.1	20 791	.1		
Female	acres	11 123 691 5 854	.1 .5	6 934 994 965	.1 1.1		
	acres	607 695	.7	223 597	1.2		
erage age of operator	years	53.8	.1	52.6	.1		
opland under federal acreage reduction programs:		0.504		4 075			
Annual commodity acreage adjustment programs	acres	6 531 294 796	.4	4 875 281 285	.4 .3		
Conservation reserve program	farms	1 471	1.0	636	1.4		
	acres	92 747	1.2	52 609	1.4		
vernment payments:	24 000	40.004		00.054			
Amount received in cash		42 331 40 121	.3	39 054 35 868	.3 .3		
t cash return from agricultural sales1:				72 72	-		
Net cash return from agricultural sales for the farm unit (see text)		79 712	.1	21 652	.2		
Assessed the form	\$1,000	324 684 4 073	1.3	356 553 16 467	1.0 1.3		
Average per farm	l l		1.4				
Farms with net gains ²	number \$1.000	45 102 451 839	.2 .7	17 433 397 617	.3 .7 .7		
Farms with net losses	number	34 610	.2	4 219	.7		
	\$1,000	127 155	1.5	41 064	2.9		
tal farm production expenses1	farms	79 712	.1	21 652	.2		
.ivestock and poultry purchased	\$1,000 farms	1 282 885 22 166	1.3	1 060 167 9 303	.4 1.6		
	\$1.000	142 988	1.3 1.2 .7	123 889	1.4		
Feed for livestock and poultry	farms	44 076	.7	15 101	9. 8.		
5 - 1 - 1 - M 1 - 1 1 - 1 -	\$1,000	237 592	.8	215 452			
Seeds, bulbs, plants, and trees	farms \$1,000	41 252 47 898	.8 .6	16 033 43 252	9. 8.		
Commercial fertilizer	farms	57 948	.5	18 707	.6		
	\$1,000	119 418	.6	95 596	.6		

Table D. Reliability Estimates of State Totals: 1987—Con.

	Ail f	arms	Farms with sales of \$10,000 or more		
ltem	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	
Total farm production expenses - Con.					
Agricultural chemicalsfarms	40 964 57 923	.8 .7	16 083 52 835	.9 .7 .3 .6 .9	
Petroleum products farms_	57 923 74 954	.2	21 163	.3	
\$1,000 Electricity farms_	72 838 40 150	.2 .6 .8	54 811 16 360	.6 9	
\$1,000	21 142	1.0	16 610	1.2	
Hired farm labor farms	30 931 117 140	1.0 .8	12 843 108 891	1.2	
Contract laborfarms	7 437	2.4	3 482	.8 2.9	
Repair and maintenance	18 478 58 590	1.9	15 919 19 168	2.0	
\$1,000	95 597	.5 .8	69 466	.6 .9	
Customwork, machine hire, and rental of machinery and equipment farms	23 093 24 789	1.3 2.0	9 488 18 839	1.6	
Interest farms_	28 034	1.1	12 115	1.3	
\$1,000 Cash rent	115 019 12 711	1.1 1.7	82 777 7 340	2.4 1.3 1.2 1.8	
\$1,000	46 052	1.4	42 453	1.4	
Property taxesfarms	75 681 47 648	.2 .8	20 558 23 026	.4 1.2 .2 .7	
All other farm production expenses farms_	67 588	.4	21 641	.2	
\$1,000	118 363	.6	96 351	.7	
Livestock and poultry: Cattle and calves inventory farms	52 965	.1	15 247	.2	
number Beef cows farms	2 008 570 43 616	.2 .1	1 254 071 11 743	.2	
number	894 348 4 781 180 390	.2 .5 .3	488 381 3 057 175 187	222 223 353 53	
Cattle and caives soldfarms	51 558	.1	15 686		
number	1 077 665	.2	724 512	.2	
Hogs and pigs inventoryfarmsnumber	8 465 774 530	.4 .4	4 062 698 415	.5	
Hogs and pigs sold farms number	7 874 1 484 049	.4 .4	4 102 1 328 118	.2 .2 .5 .4	
Sheep and lambs inventory farms_	623	1.5	217	2.3 3.8	
number Sheep and lambs soldfarms	15 303 513	2.6 1.7	7 894 192	3.8 2.5	
number	12 178	2.1	7 950	2.5 2.7	
Hens and pullets of laying age inventory farms number	5 721 2 727 252	.5 .2	1 080 2 635 736	1.1 .3	
Broilers and other meat-type chickens soldfarms	509	1.1	479	1.0	
number Horses and ponies inventoryfarms	75 974 462 14 588	.4 .3 .5	75 964 673 3 307	.4 .6	
number	62 413	.5	17 531	1.2	
Selected crops harvested:		:			
Corn for grain or seed farms	13 715	.3	7 307	.3	
acres bushels	553 943 47 899 079	.3 .3 .3	490 587 44 034 511	.3 .3 .3	
Wheat for grain farms	4 579	.5	3 596	.5	
acres_ bushels_	324 984 12 749 682	.5 .4 .4	308 400 12 236 605	.5 .4 .4	
Cotton	2 545 411 100 566 890	.6 .3	2 022 403 614	.6 .3 .3	
bales		.3	558 871		
Tobaccofarms acres	25 052 51 578	.2 .3	7 460 29 575	.3 .4	
pounds	85 715 814	.3	53 775 001	.4	
Soybeans for beans farmsacres	7 797 1 184 778	.4 .3	5 385 1 118 041	.4 .3 .3	
bushels	27 367 017	.3	26 157 550	.3	
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, etc.	44 314		40.007	_	
(see text) farms acres	1 372 674	.1 .2 .2	13 987 1 787 082	.2 .3 .3	
tons, dry	2 161 679	.2	1 391 039	.3	

¹Data are based on a sample of farms.

²Farms with total production expenses equal to market value of agricultural products sold are included as farms with gains.

Table E. Reliability Estimates of Percent Change in State Totals: 1982 to 1987

		All fa	ırms	Farms with sales	Farms with sales of \$10,000 or more		
ttem .		Percent change	Standard error of estimate (percent)	Percent change	Standard error of estimate (percent)		
Farms	. number	-12.0	.1	-14.5	.1		
Land in farmsValue of land and buildings1:	acres	-6.0	.1	-6.9	.2		
Average per farm	_dollars	5.0	1.1	2.2	1.5		
Total cropland		-13.1	.1	-15.8	.1		
Harvested cropland	acres	-5.5 -14.4	.2 .1	-7.3 -17,2	.2		
The Toolog Ground Constitution of the Constitu	acres	-15.3	.2	-18.2			
Irrigated land	_ farms	66.4	1.2	108.8	1.6		
	acres	112.9	1.6	118.4	1.€		
Market value of agricultural products sold	farms \$1,000	-12.0 -3.9	.1 .1	-14.5 -2.0	.1		
Crops, including nursery and greenhouse crops	_ farms	-24.3	.1	-26.8	.1		
Livestock, poultry, and their products	\$1,000 farms	-17.3 -8.6	.1 .1	-14.0 -10.3	:		
B. h	\$1,000	9.7	.2 .6	10.1			
Poultry and poultry products	\$1,000	-29.7 38.7	.6 .4	-13.8 39.8	.1 .2 .8 .4		
Selected farm production expenses¹: Livestock and poultry purchased	forms	-16.9	1.5	-1.9			
,	\$1.000	11.8	2.4	18.4	2.4 2.8 1.3		
Feed for livestock and poultry	\$1,000	-14.8 4.1	.8 1.5	-10.2 5.6	1.3		
Seeds, builbs, plants, and trees	farms \$1,000	-14.3 18.4	.9 1.6	-18.0 20.9	1.0		
Commercial fertilizer ²	_ farms	-9.2	.6	-15.5	.8		
Agricultural chemicals ²	\$1,000	-4.4 11.0	1.1 1.3	-9.7 -8.8	1.1		
-	\$1.000		1.3	-1.1	1.4		
Hired farm labor	_ farms \$1,000	-14.9 7.2	1.2 1.3	-16.7 17.8	1.4		
Interest ³	_ farms	-2.3	1.6	-11.9	1.4 1.4 1.5 1.7		
	\$1,000	-28.7	1.3	-37.0	1.2		
Livestock and poultry inventory: Cattle and calves	forme	-13.1	.1	-12.4			
	number	-10.4	 .2 .3	-6.6			
Hogs and pigs	_ farms	-34.7 -10.6	.3 .4	-26.2 -7.1	1		
Hens and pullets of laying age	_ farms	-40.0	.3 .2	-44.0	·.ē		
Selected crops harvested:	number	-15.0	.2	-12.3	.2		
Corn for grain or seed	_ farms	-26.7	.2 .3	-24.4	.3		
Sorghum for grain or seed	acres	-1.7 -27.9	.3	(Z) -27.2	.3		
•	acres	-31.3	.8 .7	-30.8	.7		
Wheat for grain	_ farms acres	-45.2 -54.9	.3 .2	-44.3 -54.8	3 3 9 7 2 2		
Soybeans for beans		-45.7	.2 .2	-43.1 -43.1	.2		
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, etc.	acres	-43.7					
(see text)	_ farms acres	1.3 21.8	.2 .3 .7	-6.0 21.2	.2		
Vegetables harvested for sale (see text)	_ farms	-37.2	.7	-17.3] 1.1		
Land in orchards	acres	-17.2 -14.9	1.0 .9	-12.9 3	1.1		
	acres	1	2.0	27.5	3.5		

¹Data are based on a sample of farms. ²Data for 1987 include cost of custom applications. ³Data for 1982 do not include imputation for item nonresponse.

Table F. Reliability Estimates of County Totals: 1987

	Farm	ıs	Land in	farms	Average valuand buildings	ue of land per farm ¹	Estimated ma of all machi equipm	nery and	Harvested	cropland	Irrigated	land
Geographic area	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)
Anderson Bedford Benton Biedsoe Blount	463 1 244 392 482 1 185	.6 .3 .5 .7	40 472 221 058 64 560 88 616 101 397	1.6 1.0 1.5 1.7 1.0	148 505 153 726 97 872 160 295 169 544	6.0 4.9 7.0 8.1 4.5	8 195 32 723 8 993 10 687 23 902	9.7 4.7 8.3 12.2 6.6	8 123 59 243 16 661 22 438 33 781	1.8 1.4 1.7 1.5 1.3	60 37 25 (D) 347	16.0 12.6 10.7 (D) 20.6
Bradley Campbell Cannon Carroll Carter	738 470 694 848 686	.4 .6 .4 .4	92 127 34 850 100 562 166 462 37 589	1.2 2.0 1.2 1.0 1.5	153 934 94 277 110 038 127 583 72 797	4.9 3.8 3.9 5.3 3.4	19 532 7 290 12 634 20 749 9 863	6.1 10.9 7.3 5.8 5.8	20 558 7 009 23 822 67 299 7 272	1.2 2.1 1.1 1.4 1.9	310 11 419 15 93	6.5 10.8 6.8 22.5 6.6
Cheatharn Chester Claiborne Clay Cocke	567 387 1 528 528 1 081	.5 .7 .3 .5	66 931 73 132 141 587 75 507 89 277	2.0 1.4 1.0 1.3 1.1	151 044 122 614 84 164 80 405 91 179	6.6 6.6 5.4 5.7 7.0	13 080 9 261 25 959 7 903 16 938	13.2 7.9 5.6 8.1 5.0	12 980 28 752 24 106 11 570 18 812	2.3 1.6 1.1 1.7 1.2	151 401 30 112 191	10.7 5.2 12.8 12.6 7.2
CoffeeCrockettCumberland DavidsonDecatur	887 506 622 561 474	.3 .5 .4 .6	143 496 184 140 93 994 57 917 91 591	.9 .5 1.3 1.7 1.6	161 977 345 069 131 474 229 569 93 374	4.5 5.3 6.3 6.9 4.3	23 603 27 967 14 543 11 360 9 597	6.5 2.9 8.1 5.1 8.9	57 405 113 843 22 195 10 220 19 250	1.1 .5 1.4 2.8 1.7	77 6 493 24 139 76	1.8 (Z) 13.0 15.7 21.0
De Kalb Dickson Dyer Fayette Fentress	823 1 068 603 765 454	.4.3.5.5.6	101 333 148 611 235 347 270 536 78 611	1.2 1.0 .7 .7 1.4	113 981 120 788 286 973 281 354 126 562	4.7 6.8 3.7 6.4 5.8	13 316 19 839 37 375 30 243 9 925	5.0 5.6 6.7 6.3 7.4	21 617 23 998 184 889 118 653 15 219	1.6 1.5 .8 .8 1.8	176 133 1 863 497 29	1.6 10.6 2.0 5.9 21.5
FranklinGibsonGilesGraingerGreene	1 126 1 057 1 551 1 219 3 580	.5 .3 .3 .2 .2	152 578 280 153 262 925 108 212 264 097	1.4 .6 .8 .9	151 590 180 101 135 406 91 657 95 009	4.5 4.5 4.5 4.5 3.2	30 581 42 135 32 184 18 287 67 840	4.9 5.4 5.1 6.7 4.2	70 466 179 807 49 738 16 886 74 466	1.9 .7 1.2 1.0 .7	304 261 128 322 975	4.9 12.6 26.3 6.0 2.1
GrundyHamblenHamiltonHancockHardeman	333 843 587 760 488	.7 .3 .5 .4 .7	37 501 58 434 57 708 76 724 187 313	2.2 1.5 1.5 1.5	91 575 112 133 156 092 82 913 185 133	6.0 4.9 7.7 7.6 4.4	7 932 13 402 11 356 10 745 14 063	10.8 7.2 8.3 11.4 4.7	9 861 15 573 11 624 8 230 54 230	2.3 1.7 2.1 1.6 1.1	525 183 288 75 (D)	.1 4.3 16.8 28.2 (D)
HardinHawkinsHaywoodHendersonHenry	570 1 985 527 849 805	.5 .2 .7 .6	121 098 167 866 222 142 163 685 186 659	1.3 .8 .7 1.6	142 452 98 114 339 651 123 776 152 358	7.9 5.3 6.5 4.9 3.6	13 625 37 870 31 861 18 374 23 946	8.3 7.1 3.1 4.6 3.6	40 072 31 408 151 524 50 872 74 803	1.7 1.1 .8 2.3 1.3	150 291 1 755 (D) 112	2.0 4.9 .7 (D) 7.5
Hickman Houston Humphreys Jackson Jefferson	650 245 506 732 1 326	.4 .9 .5 .5	129 661 45 691 120 570 98 512 109 592	1.1 2.2 1.1 1.5 1.2	128 663 114 245 146 881 86 111 116 181	4.4 3.3 5.5 6.6 5.7	12 438 3 709 12 354 9 869 24 034	7.2 10.9 6.8 7.6 5.5	23 108 6 738 24 182 9 385 28 966	1.4 2.8 1.7 2.9 1.4	213 29 96 47 202	13.8 19.7 30.8 23.8 17.6
Johnson Knox Lake Lauderdale Lawrence	888 1 253 85 572 1 428	.3 1.2 .6 .3	62 446 94 701 91 981 197 507 201 440	1.5 1.2 .6 .9	72 508 175 590 954 576 242 032 119 076	5.7 3.9 2.1 3.8 5.3	12 663 22 731 9 794 29 313 31 029	9.9 5.2 2.7 5.5 8.8	10 413 23 887 79 819 135 056 56 154	1.5 1.4 .5 .9 1.2	134 268 2 281 (D) 191	13.8 7.1 .8 (D) 13.1
Lewis	223 1 628 760 1 076 715	.6 .3 .4 .3 .5	38 189 279 482 77 665 137 843 149 769	1.9 .7 1.2 .8 1.2	127 395 140 281 151 299 138 580 138 761	5.0 5.8 4.3 5.7 6.8	3 481 35 316 24 306 23 403 16 746	16.1 5.1 3.1 4.3 6.3	4 256 74 705 21 320 34 112 50 490	2.5 .8 1.5 .9 1.6	(D) 328 191 211 (D)	(D) 13.8 17.9 7.8 (D)
Macon Madison Marion Marshall Maury	1 242 614 310 1 013 1 575	.4 .5 .8 .3	125 148 160 384 56 177 173 473 256 659	1.1 1.0 2.5 .8 .8	71 592 212 954 188 026 163 817 199 801	4.6 5.3 11.6 7.7 5.0	15 402 21 368 5 627 19 008 29 262	5.6 2.5 5.4 6.2 3.9	25 056 74 277 17 876 36 039 53 598	1.7 .9 3.2 1.1 1.2	70 1 557 (D) 92 91	13.0 .5 (D) 7.3 8.0
Meigs Monroe Montgomery Moore Morgan	322 930 998 427 304	.7 .4 .4 .5 .7	54 949 104 646 188 025 57 642 43 960	1.7 1.0 1.1 1.4 2.7	171 894 136 174 161 344 129 304 106 388	5.6 4.3 5.5 8.9 6.9	8 887 21 883 31 266 8 309 6 793	11.2 5.3 7.0 9.1 13.9	12 648 31 749 62 154 9 088 9 144	2.8 1.1 1.5 1.8 3.3	228 276 469 25 4	14.0 3.2 33.9 18.1 19.4
Obion Overton Perry Pickett Polk	761 842 220 369 260	.4 .5 .8 .7	258 567 110 079 58 327 36 968 37 228	.7 1.4 2.0 2.8 2.1	253 298 98 127 113 823 70 605 185 265	4.3 4.3 6.5 8.6 4.4	32 169 12 284 3 597 6 875 6 661	2.5 6.4 12.6 12.9 5.1	164 057 19 916 9 127 6 402 10 848	.7 1.7 2.9 4.9 2.1	586 138 (D) - 61	15.9 25.9 (D) - 38.7
Putnam Rhea Roane Roane Rothertson Rutherford	1 072 374 542 1 543 1 562	.4 .7 .4 .3 .3	105 420 55 956 58 739 255 126 224 910	1.3 1.8 1.3 .9 1.0	99 260 151 227 127 998 210 762 215 859	4.3 5.6 6.3 9.9 5.4	19 646 9 425 9 047 47 759 33 660	9.1 6.5 7.8 4.8 5.7	20 096 13 996 11 173 109 871 56 330	2.4 2.3 1.6 1.0 1.4	50 705 66 323 70	9.9 7.2 16.9 5.8 15.3
Scott Sequatchie Sevier Shelby Smith	239 156 953 733 1 123	.9 .8 .9 .5 .9	34 603 25 284 78 192 139 587 145 507	3.0 2.1 1.1 1.0 1.0	131 421 128 090 134 187 266 308 96 760	7.3 6.4 9.0 11.8 5.3	4 246 3 668 18 142 22 794 16 310	11.5 5.7 7.9 7.7 5.1	5 554 5 402 14 644 69 593 21 499	5.4 3.1 1.4 1.1 1.7	(D) (D) 88 1 664 298	(D) (D) 10.6 1.1 10.4
Stewart Sullivan Sumner Tipton Trousdale	371 1 432 1 864 650 439	.6 .2 .5 .6	55 703 97 537 205 681 190 772 58 550	2.4 .9 .9 .8 1.7	101 105 143 524 170 045 282 132 128 911	9.5 5.1 7.4 4.9 8.3	5 992 23 342 33 608 27 547 9 426	11.2 4.9 4.2 3.9 12.9	8 109 23 253 61 056 135 709 13 301	3.9 1.0 1.1 .8 2.6	(D) 107 329 930 121	(D) 11.5 5.0 1.2 6.9

Table F. Reliability Estimates of County Totals: 1987—Con. [For meaning of abbreviations and symbols, see introductory text]

[For meaning of abbreviations and symbols, see introductory text]												
	Farm	ns	Land in farms		Average valuand buildings	e of land per farm ¹	Estimated machi equipm	nery and	Harvested (cropland	Irrigated	land
Geographic area	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)
Unicoi Union Van Buren Warren Washington	266 612 217 1 238 1 909	.6 .4 1.0 .3 .2	10 315 53 305 30 275 165 266 123 904	3.3 1.9 2.4 .9 .7	62 139 77 975 102 184 153 871 141 365	4.8 8.8 5.0 4.6 4.1	3 161 7 029 3 474 38 780 44 606	20.4 8.0 12.2 5.6 4.0	1 483 7 795 5 235 56 466 42 755	3.6 2.0 2.2 1.2 .6	59 51 - 2 763 1 047	16.5 22.9 - .9 1.3
Wayne Weakley White Williamson Wilson	698 926 1 006 1 421 1 755	.6 .4 .4 .3 .2	135 209 208 488 133 148 219 668 216 162	1.7 .8 1.0 1.0 .8	102 903 140 283 118 590 288 145 138 348	4.7 5.6 4.3 7.9 5.9	12 597 28 746 19 492 32 941 27 853	7.3 4.9 7.3 6.0 4.8	17 727 120 184 29 026 53 017 37 183	2.3 .8 1.4 1.2 1.2	35 7 165 444 108	23.4 15.0 21.7 4.8 8.3
	Cattle and invent		Hogs and pig	s inventory	Corn for grai	n or seed	Wheat fo	r grain	Soybeans f	or beans	Market value of agricultural products sold	
Geographic area	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Anderson	10 197 48 211 7 401 19 491 32 261	3.3 1.1 2.0 2.9 1.2	2 817 9 095 10 658 2 826 3 831	2.8 3.3 3.1 8.2 7.8	182 6 587 6 937 3 743 2 789	4.2 2.4 3.2 2.5 4.5	6 714 731 1 158 3 537	2.4 7.4 2.5 3.7	11 104 3 941 2 844 2 906	3.4 2.2 2.7 3.8	5 420 42 735 4 730 10 427 13 689	2.2 .5 1.4 1.5 1.0
Bradley Campbell Cannon Carroll Carter	29 167 8 269 17 613 15 761 8 871	1.2 1.9 1.4 1.8 2.3	3 790 1 707 10 080 21 796 708	3.0 2.6 5.5 3.0 2.4	725 428 5 365 22 972 310	3.5 5.0 1.5 1.5 4.2	285 (D) 856 4 211	10.0 (D) 3.4 2.6	(D) 6 618 22 064	(D) 2.5 2.6	34 370 3 544 10 406 16 963 5 719	.4 1.9 .8 1.0 1.8
Cheatham Chester Claibome Clay Cocke	8 925 6 801 29 825 11 543 18 575	2.3 2.7 1.0 1.8 1.2	4 803 13 152 4 469 2 661 1 432	4.0 3.1 2.8 5.1 3.4	1 751 6 529 935 1 334 1 596	4.9 2.0 3.0 3.3 3.4	837 1 405 42 255 448	4.3 4.9 4.9 4.3 2.4	1 877 10 407 (D) 923 1 691	7.1 2.4 (D) 9.3 3.8	5 495 6 860 14 864 4 480 12 557	1.7 1.4 .8 1.5
Coffee Crockett Cumberland Davidson Decatur	27 335 6 624 18 671 10 667 11 022	.9 3.5 1.3 2.0 2.1	12 084 6 482 8 040 973 17 145	5.6 2.5 1.0 10.0 2.8	14 841 2 266 1 555 902 5 090	1.9 1.8 2.7 3.5 3.0	3 899 3 171 (D) 380 1 406	2.2 1.1 (D) 7.1 2.8	20 106 21 902 1 960 702 2 186	2.4 .7 3.2 2.9 4.7	21 464 40 373 10 394 8 082 6 837	.5 .3 1.0 1.2 1.7
De Kalb	16 606 24 799 9 649 26 739 11 491	1.9 1.4 2.8 1.4 2.2	2 796 5 490 9 010 27 856 5 821	10.5 3.8 3.6 1.4 3.5	2 724 1 850 9 558 8 758 2 942	3.3 5.4 2.5 1.7 3.9	1 386 391 36 944 5 159 56	3.7 2.5 1.1 5.3 10.6	4 147 899 138 048 44 254 1 419	5.0 6.2 .9 1.1 7.6	12 746 9 295 33 695 51 754 15 600	.8 1.1 .6 .4 .9
Franklin	34 437 20 986 63 109 23 112 76 556	2.3 1.3 1.0 1.3 .6	27 358 33 851 16 662 969 4 422	2.8 1.3 1.3 11.8 5.6	19 824 42 569 6 740 556 4 584	2.5 1.0 2.8 2.9 5.6	11 835 24 926 1 358 163 1 050	3.3 1.0 3.8 3.3 4.0	23 572 76 351 5 132 (D) 681	3.0 1.2 1.8 (D) 5.0	34 876 48 272 25 848 9 991 42 233	.8 .5 .7 1.0
GrundyHamblenHamblen Hamilton HancockHardeman	5 909 17 075 12 666 11 682 17 220	3.0 1.6 1.4 2.1 2.3	3 014 3 727 3 035 2 353 9 787	7.2 3.6 7.3 7.1 3.8	2 200 1 568 823 665 8 646	5.3 4.2 7.8 6.9 2.2	780 576 398 35 2 949	8.8 5.9 6.9 18.8 2.5	2 144 512 (D) (D) 15 370	6.4 8.2 (D) (D) 1.8	21 263 9 481 11 792 5 767 15 839	.9 1.5 .8 1.7 .8
Hardin Hawkins Haywood Henderson Henry	10 370 34 182 8 106 21 338 22 279	2.4 1.2 3.1 1.9 1.1	17 942 1 051 10 828 40 669 28 709	2.7 7.1 2.9 2.4 2.2	9 635 2 319 8 537 17 871 24 091	2.6 3.6 1.5 2.9 2.3	3 561 319 8 351 1 981 12 200	2.5 8.9 1.8 9.6 1.6	19 501 (D) 57 982 15 406 27 858	2.2 (D) 1.3 4.3 1.8	10 543 13 486 46 564 20 052 23 042	1.3 1.1 .5 1.2 .9
Hickman	20 128 7 479 14 905 10 900 36 688	1.3 2.7 1.5 2.2 1.3	11 619 2 676 10 443 2 232 4 376	3.5 8.6 3.3 5.9 5.7	4 498 989 6 509 1 631 1 993	2.8 5.7 3.2 6.2 4.1	771 117 623 (D) 1 222	3.2 5.8 5.0 (D) 6.4	3 546 (D) 5 163 380 660	3.1 (D) 3.5 14.5 4.6	8 257 2 562 7 579 4 739 16 670	1.2 2.5 1.6 2.1 .9
Johnson Knox Lake Lauderdale Lawrence	10 832 24 789 (D) 8 933 42 794	1.8 1.6 (D) 3.1 1.2	286 1 746 404 3 460 16 553	12.7 7.9 12.8 5.8 2.7	1 047 1 614 8 624 9 962 13 002	2.7 3.2 .5 1.3 2.1	20 304 13 705 23 298 2 963	3.5 6.9 1.2 1.8 2.5	(D) 410 59 993 85 161 11 155	(D) 16.8 .6 1.1 2.9	6 163 11 382 14 704 30 881 24 056	1.3 .9 .6 .6
Lewis Lincoln Loudon McMinn McNairy	5 174 64 243 24 640 39 415 9 403	2.5 .8 1.7 1.0 2.2	2 563 14 287 914 3 109 32 015	3.1 3.6 4.3 4.1 1.6	761 10 169 794 1 642 16 541	5.6 1.6 5.1 3.3 2.3	(D) 5 171 996 1 160 1 615	(D) 2.2 5.3 1.3 2.5	(D) 19 584 799 417 20 843	(D) 1.9 12.8 3.0 2.3	1 773 32 584 31 486 32 471 17 137	1.6 .7 .3 .5
Macon Madison Marion Marshall Maury	18 858 9 089 8 483 42 609 57 195	1.8 2.2 3.6 .9	5 392 8 826 5 405 5 735 9 312	6.0 3.2 10.4 3.1 3.6	3 508 8 613 3 805 2 569 4 192	3.8 2.0 6.0 2.9 5.0	506 3 599 1 045 1 274 4 199	7.1 2.7 5.7 4.0 3.0	3 170 22 923 7 528 1 626 8 051	6.5 1.4 4.9 5.5 3.4	9 527 23 084 5 835 20 997 22 734	1.6 .8 1.3 .7

Table F. Reliability Estimates of County Totals: 1987—Con.

	Cattle and invent		Hogs and pig	s inventory	Corn for grain	in or seed	Wheat for grain		Soybeans f	or beans	Market value of agricultural products sold	
Geographic area	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Meigs	10 550	1.7	258	25.3	576	5.7	923	12.3	1 331	12.9	5 195	2.0
Monroe	27 873	1.2	2 352	1.2	1 868	4.7	1 835	1.6	6 266	2.0	17 219	.9
Montgomery	27 473	1.5	10 140	2.8	11 768	1.6	9 049	2.0	20 769	2.1	22 398	.9
Moore	15 555	2.1	3 002	5.1	1 013	3.8	283	8.5	573	7.3	6 822	1.4
Morgan	7 273	3.8	1 563	8.0	1 474	10.3	34	16.3	574	6.2	3 894	3.1
Obion Overton Perry Pickett Polk	20 847	1.7	22 428	1.3	46 751	.9	29 747	.8	97 759	.8	41 114	.5
	22 914	1.7	5 415	5.2	2 483	3.5	395	24.6	693	13.5	9 709	1.4
	6 291	2.6	7 515	6.3	4 398	3.0	233	7.7	897	6.4	3 178	2.4
	8 415	4.8	1 331	8.4	210	8.3	(D)	(D)	(D)	(D)	3 137	3.2
	7 400	1.9	1 058	19.8	1 547	5.9	1 733	7.4	873	8.4	14 762	.5
Putnam	24 141	2.0	3 977	5.6	2 070	4.9	387	14.9	608	6.8	10 021	1.2
Rhea	10 543	2.1	6 063	4.9	1 171	4.1	662	1.4	1 229	3.1	8 687	1.4
Roane	11 612	1.6	431	6.3	237	7.7	65	14.1	144	10.6	4 377	1.3
Robertson	43 151	1.3	14 129	3.3	19 299	1.3	22 981	1.4	37 408	1.7	43 376	.7
Rutherford	45 162	1.0	7 549	2.6	5 243	5.5	3 287	4.8	10 554	3.4	21 798	.7
Scott Sequatchie Sevier Shelby Smith	(D)	(D)	249	11.9	662	6.5	(D)	(D)	(D)	(D)	4 221	1.6
	5 413	2.7	850	6.7	1 319	5.0	363	7.7	898	7.2	3 057	3.9
	19 408	1.5	931	7.8	897	5.0	155	10.6	80	7.5	8 174	1.1
	10 904	2.8	2 080	5.9	1 988	2.1	4 582	3.8	33 262	1.7	24 762	.6
	30 016	1.7	7 087	4.0	2 114	5.9	284	3.6	861	9.7	11 704	1.2
StewartSullivanSumnerTiptonTrousdale	6 305	3.8	2 063	6.5	946	7.5	203	25.6	2 322	9.3	3 028	2.3
	26 173	1.0	702	14.0	1 296	2.0	29	9.1	(D)	(D)	13 893	.5
	45 557	1.4	9 524	3.1	6 994	1.8	5 658	2.6	11 190	2.4	28 798	.8
	10 095	3.2	4 083	5.8	2 859	1.3	10 835	1.8	81 196	1.1	32 983	.6
	13 103	2.6	1 410	4.9	1 474	5.6	283	6.0	420	13.7	6 317	2.1
Unicoi Union Van Buren Warren Washington	(D) 9 493 7 066 34 519 48 588	(D) 1.6 2.6 1.5	35 544 5 892 6 614 1 124	13.9 14.5 1.8 6.1 13.9	66 154 286 7 371 1 852	8.7 6.7 9.0 2.9 1.9	120 2 486 246	- 6.5 5.4 4.7	185 8 621 (D)	- 12.9 4.4 (D)	1 125 3 674 3 704 54 988 31 073	2.2 1.8 1.0 .4 .4
WayneWhiteWilliamsonWilson	20 194	2.3	14 751	4.6	3 234	3.8	384	11.6	2 445	6.4	7 113	2.2
	18 214	1.4	71 339	.9	48 003	1.0	16 604	1.0	54 343	1.1	37 706	.5
	35 937	1.6	11 885	3.2	2 549	3.0	726	6.2	1 937	9.9	16 147	.9
	48 526	1.1	6 759	8.3	2 686	3.8	3 580	5.0	8 665	2.6	25 821	.8
	51 561	1.0	4 145	6.1	1 325	6.1	289	9.4	820	14.1	17 489	1.0

	Selected farm production expenses ¹													
Geographic area	Livestock a purch	and poultry nased	Commerci	al fertilizer	Hired fa	rm labor	Petroleum	products	Electricity for th	e farm business				
deograpiile area	Total (\$1,000)	Relative standard error of estimate (percent)	Totai (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)				
AndersonBedfordBentonBledsoeBlount	377	19.0	349	14.5	792	18.1	348	14.3	118	23.8				
	8 128	3.4	1 388	3.5	2 258	2.0	1 284	4.4	582	3.8				
	304	18.2	548	11.3	121	18.1	315	9.9	82	14.8				
	1 727	6.4	820	8.5	650	5.4	484	10.1	119	6.8				
	919	11.5	1 060	6.7	1 189	4.3	776	3.9	241	5.6				
Bradley Campbell Cannon Carroll Carter	4 253	3.9	733	7.8	1 485	2.9	678	3.5	432	5.6				
	705	40.6	341	13.7	144	24.4	160	14.5	44	24.2				
	1 730	10.3	802	4.9	443	8.4	507	9.3	172	7.5				
	1 055	5.8	2 318	4.9	807	17.6	1 019	4.9	198	8.8				
	479	8.2	372	9.3	529	8.9	288	13.6	79	8.5				
CheathamChesterClaiborneClayCocke	367	17.6	560	14.0	347	28.7	397	9.8	82	13.9				
	372	29.1	951	9.3	243	6.0	461	15.5	75	8.9				
	1 574	15.5	1 191	6.5	949	15.8	722	7.6	241	18.9				
	361	21.5	430	7.9	150	14.8	266	10.9	(D)	(D)				
	781	10.0	741	7.2	534	6.3	496	4.9	181	4.9				
Coffee Crockett Cumberland Davidson Decatur	2 690	4.8	1 723	3.4	1 764	.8	820	3.7	315	4.8				
	428	4.6	5 085	2.6	2 472	2.6	2 231	4.6	142	8.9				
	1 048	13.3	667	4.2	791	7.9	453	6.0	202	6.3				
	719	20.8	175	9.6	1 786	3.4	600	4.0	128	9.1				
	1 069	15.9	501	10.7	177	9.1	343	10.9	86	11.3				
De Kalb	419	18.5	799	9.1	1 127	8.5	529	5.4	189	5.8				
	1 179	15.8	765	7.1	579	16.0	553	8.4	178	10.4				
	817	14.5	3 030	3.5	2 010	2.1	2 130	5.2	304	5.2				
	4 322	1.1	3 572	4.9	5 742	10.3	1 894	1.8	414	11.8				
	2 740	2.6	477	9.4	714	8.1	419	5.5	134	8.8				
Franklin	3 733	5.7	2 494	5.4	2 774	4.9	1 311	3.6	443	4.9				
Gibson	3 397	3.8	5 713	1.5	2 519	1.8	2 472	2.2	397	4.0				
Giles	3 195	4.6	1 388	5.7	1 402	8.0	1 220	5.6	384	4.6				
Grainger	694	19.5	839	6.5	511	10.1	554	7.5	172	18.8				
Greene	2 700	9.3	2 952	3.2	2 513	4.1	1 740	4.4	862	7.6				
Grundy Hamblen Hamilton Hancock Hardeman	2 022	5.6	292	10.2	1 334	.4	644	4.5	247	7.7				
	1 013	8.1	541	10.5	720	3.7	374	7.6	166	7.2				
	1 199	7.1	292	9.9	1 060	6.7	541	9.0	179	9.5				
	300	34.3	495	10.6	250	13.3	305	11.0	62	16.8				
	1 114	5.7	1 632	3.2	975	2.0	787	3.1	124	4.8				

Table F. Reliability Estimates of County Totals: 1987—Con.

(FOI meaning or appreviation		<u> </u>	- 	S	elected farm pro-	duction expenses	;1			
-	Livestock a		Commerci	al fertilizer	Hired fa	rm labor	Petroleum	products	Electricity for th	e farm business
Geographic area	Total (\$1,000)	Relative standard error of estimate (percent)								
Hardin	1 146	18.5	941	8.3	562	7.8	604	6.8	147	13.0
Hawkins	819	11.5	1 300	7.4	1 042	16.2	754	8.4	232	9.8
Haywood	882	8.0	5 198	2.4	3 420	5.0	2 658	1.5	238	6.6
Henderson	4 891	3.6	1 928	5.0	594	5.3	923	6.1	203	6.7
Henry	2 480	10.9	2 469	2.5	1 158	6.2	1 035	3.6	288	4.4
Hickman	1 649	23.9	461	7.4	212	13.5	393	8.2	177	46.1
	299	14.2	288	24.5	83	30.7	150	16.4	(D)	(D)
	1 153	19.4	559	5.5	151	9.1	344	5.8	101	8.9
	282	16.5	362	11.9	92	32.4	314	14.3	111	64.6
	1 548	14.7	1 108	6.2	755	6.0	622	5.2	272	6.3
Johnson	497	6.8	425	7.5	287	8.3	257	6.1	73	15.1
	959	14.7	793	9.6	2 026	2.2	615	5.8	237	6.8
	37	13.8	1 321	2.2	1 522	.6	864	1.3	164	.7
	1 121	3.4	2 740	2.0	2 815	1.6	1 748	2.7	196	6.7
	2 299	8.6	2 351	5.9	1 251	6.3	1 085	4.8	346	5.7
Lewis	360	33.5	174	22.2	102	41.6	160	21.3	53	40.4
Lincoln	3 615	6.7	2 002	5.6	2 092	5.7	1 439	4.2	507	6.9
Loudon	904	11.9	823	5.6	(D)	(D)	851	3.5	1 020	2.4
McMinn	3 191	6.6	1 405	4.0	2 774	6.2	948	3.5	558	4.6
McNairy	1 958	3.5	1 511	5.1	650	6.8	803	4.6	192	4.9
Macon	620	19.1	908	7.9	316	8.3	529	9.2	144	11.7
	314	22.4	2 378	5.7	2 008	.7	1 265	4.1	174	6.1
	672	10.3	360	11.0	177	5.4	273	10.9	113	6.6
	2 534	10.9	972	5.1	1 446	7.6	759	6.7	330	6.3
	2 714	7.5	1 248	4.5	1 303	4.3	1 041	5.0	340	8.9
Meigs	447	26.1	390	8.1	328	6.5	289	11.6	88	9.6
Monroe	1 108	10.0	1 213	4.5	1 301	8.1	639	5.2	312	5.7
Montgomery	1 383	8.2	2 136	4.3	1 362	4.1	1 094	6.0	280	9.8
Moore	1 079	16.5	375	9.8	276	5.0	383	10.6	141	15.2
Morgan	206	27.5	215	13.7	149	32.1	243	19.3	109	45.7
Obion	4 186	5.3	4 604	2.3	1 824	.5	1 920	2.9	345	12.9
	973	11.4	640	11.5	335	6.7	456	7.6	131	6.7
	221	4.3	225	10.3	82	12.1	164	11.4	49	12.7
	536	26.0	246	14.8	145	26.8	198	18.2	35	15.9
	1 507	1.7	314	10.1	669	1.1	267	3.4	167	4.1
Putnam Rhea Roane Roane Robertson Rutherford	774	20.1	884	8.3	715	3.4	470	7.2	150	9.8
	886	14.5	439	13.6	713	13.1	298	12.8	102	8.5
	528	18.1	320	13.4	444	14.6	290	10.0	96	11.0
	3 228	5.4	3 553	3.2	3 073	8.8	1 994	3.1	495	4.7
	2 350	6.5	1 464	8.8	1 187	7.3	941	5.0	396	4.7
ScottSequatchieSevierShelbySmith	792	18.7	108	17.0	180	21.7	139	12.4	64	19.7
	295	23.8	134	12.0	142	19.6	114	6.0	57	10.4
	1 686	34.0	638	11.9	339	20.2	488	10.3	139	15.0
	1 427	17.5	1 783	2.8	3 025	1.4	1 307	3.4	225	6.4
	850	14.8	669	9.3	455	20.3	566	6.4	164	10.3
StewartSullivanTiptonTrousdale	104	35.1	285	15.1	125	17.9	172	9.6	30	23.3
	2 357	7.0	909	7.5	999	5.3	650	4.5	226	6.6
	4 331	7.7	1 821	7.4	1 650	7.5	1 353	4.1	388	5.2
	254	20.6	3 463	3.3	2 428	2.1	1 914	3.1	177	10.4
	366	28.6	442	12.2	279	14.2	287	10.8	43	22.2
Unicoi	6	46.7	91	14.3	(D)	(D)	50	18.2	9	33.4
Union	151	44.0	290	11.4	103	17.0	194	11.0	52	23.8
Van Buren	307	15.3	303	18.9	184	10.4	148	11.4	50	10.9
Warren	2 272	21.2	2 076	4.5	7 812	1.4	1 617	4.1	629	3.3
Washington	2 664	15.2	1 613	3.4	2 344	4.1	1 264	6.1	416	4.0
Wayne Weakley White Williamson	1 002	13.2	656	8.8	186	11.1	320	7.8	115	18.5
	3 193	2.4	3 798	2.7	1 766	2.1	1 439	2.8	459	4.5
	1 015	10.7	1 237	4.3	1 264	4.1	594	5.7	235	7.2
	3 753	17.1	1 135	5.3	2 248	3.9	1 165	3.9	441	6.2
	1 875	9.4	886	7.4	745	7.7	855	5.3	262	8.0

¹Data are based on a sample of farms.

Table G. State Coverage Evaluation Estimates of Farms Not on the Mail List: 1987

[Data are based on a sample of farms; see text. For meaning of abbreviations and symbols, see introductory text]

	Not on	mail list	Percent not on mail list			
item	Total number	Relative standard error of estimate (percent)	Total percent	Standard error of percent		
Farmsnumbernumberacres	9 156	5.3	10.3	.5		
	481 206	21.2	3.9	.8		
Farms by size: Less than 50 acres	5 758	3.7	15.9	.6		
	3 398	12.0	6.5	.8		
Harvested cropland	5 181	15.7	7.5	1.2		
	50 626	31.6	1.3	.4		
Farms by value of sales: Less than \$2,500 farms. \$2,500 or more tarms. \$2,500 to \$9,999 farms. \$10,000 or more farms.	7 175 1 980 1 980 -	6.1 9.2 9.2 -	20.7 3.7 6.1	1.3 .3 .6 -		
Market value of agricultural products sold\$1,000	20 512	40.8	1.3	.5		
Farms by standard industrial classification: Crops (01)	2 457	15.3	7.4	1.1		
	6 698	4.5	12.0	.5		
Farms by tenure of operator: Full owners	7 585	5.7	11.7	.7		
	1 571	7.0	6.5	.5		
Operators by principal occupation: Farming	1 023	9.0	3.2	.3		
	8 132	5.8	14.2	.8		
Average age of operatoryears_	50.3	(Z)	(×)	(X)		

Note 1: Farms classified as nonfarms, nonfarms classified as farms, and farms appearing more than once in the census are not accounted for in these estimates, but will be provided in the 1987 Coverage Evaluation publication. See appendix C for futher explanation.

Note 2: Detail may not add to total due to rounding.

APPENDIX D. Report Form and Information Sheet

DUE BY FEBRUARY 1, 1988			ОМІ	B No. 0607-0534	: Approval Expires	September 30, 1989				
FORM 87-A0204 U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS	NOTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law YOUR REPORT TO THE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by sworn Census employees and may be used only for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation. The law also provides that copies retained in your files are immune from legal process.									
UNITED STATES CENSUS	The law also p	In correspondence pertaining to this report, please refer to your Census File Number (CFN)								
AG CENSUS USA OF AGRICULTURE		_		8:	7-A0204					
Ulcostacompleted in Section 1201 East Tenth Street 1201 East Tenth S					1					
Note — If your records are not available, reasonable estimates may be used. If you cannot file by February 1, a time extension request may be sent to the above address. Include your 12-character Census File Number (CFN) as shown in your address label in all correspondence to us.										
If you received more than one report form, enter extra Census File Number(s) here and return extra copies with your completed report.										
CENSUS USE 039 040 041 042	Please co	rrect errors in name, address, and ZIP (^ode ENTER st	reet and num	ber if not show	vn.				
SECTION: ACREAGE IN 1987 Report land owned, rented, or use by you, your spouse, or by the partnership, corporation organization for which you are reporting. Include ALL L	ort your crops	in the app NOT listed	propriate se	ction. 2 through 6						
REGARDLESS OF LOCATION OR USE — cropland, pastureland, rangeland, woodland, idle land, house lot:	s, etc.	SECTION 26 Were any of the f								
1	lumber of acres	in 1987? s2 None	Acres harvested	Quantity	harvested	Acres irrigated				
1. All land owned	43	Com (field) for grain or seed (Report quantity on a dry shelled-weight basis.)	067	088	Bu.	068				
All land rented or leased FROM OTHERS, including land worked by you on shares, used rent free, in exchange for services, payment of taxes, etc. Include leased Federal, State, and railroad	44	2. Corn (field) for silage or green chop	070	071	Tons, green	072				
land. (DO NOT include land used on a per-head basis under a grazing permit.) Also complete item 5 below.	15	3. Soybeans for beans	658	657	Bu. Lbs	658				
3. All land rented or leased TO OTHERS, including land worked on shares by others and land subleased. Also complete item 6 below.		4. Peanuts for dry nuts	073	-, C	OR — — — — Tons	076				
4. Acres in "THIS PLACE" — ADD acres owned (item 1) and acres rented (item 2), then SUBTRACT acres rented	048	5. Wheat for grain	076	077	8u. Bu.	078				
TO OTHERS (item 3), and enter the result in this space		7. Barley for grain	079	080	Bu.	081				
If the entry is zero please refer to the INFORMATION SHEET, section 1 5. If you rented land FROM OTHERS (item 2), enter the following information for e		8. Cotton	082	083	Bales Bu.	084				
Name of landlord Mailing address (Include ZIP Code) N	lumber of acres	9. Sorghum for grain or seed	094	095	OR Cwt.	096				
		10. Tobacco – all types	097 /10	098	Lbs. Cwt.	/10				
List additional landlords on a separate sheet of paper.		12. Sweetpotatoes and yams	100 /10	101	Bu.	102 /10				
6. If you rented land TO OTHERS (item 3), enter the following information for Name of renter Mailing address (Include ZIP Code) N	each renter.	SECTION 8 Was any DRY HA	n "THIS PLACI	:" in 1987?						
Walling address (Include Lit Code)	Uniber of acres	Include sorghum	-euden crosses	and hay cu	t from pastur O — Go to sec					
		If cuttings were made for both dry from the same fields, report the ac HAY and also under GRASS SILAG	reage in the appro	opriate items u	inder DRY					
List additional ronters on a separate sheet of paper. a. Of the land you rented or leased to others, how many acres did you own?	Acres	DRY HAY (If two or more cut hay were made from the same at acres only once, but report total cuttings.)	cres, report	Acres harvested	Quantity harvested (Report either or green weigh indicated)	to lingated				
7. Did you have any grazing permits on a per-head basis? os4 (3) Forest Service		a. Alfalfa and alfalfa mixtures hay or dehydrating	for ·		104 T	ons,				
1 ☐ Yes — Mark (X) all boxes which apply 4 ☐ Taylor Grazing	Sec. 3 (BLM)	b. Small grain hay — oats, who barley, rye, etc	eat,		107 T d	108 ons, y				
2 No - Go to item 8 6 Other - Special	μΣ	c. Other tame dry hay — clove timothy, fescue, Bermuda g Sudangrass, etc	er, lespedeza, prass,		Tr di	ons, Y				
8. LOCATION OF AGRICULTURAL ACTIVITY FOR "THIS PLACE" a. In what county was the	lumber of acres	d. Wild hay	[112	113 To	ons.				
agricultural products raised or produced?	56	2. GRASS SILAGE, HAYLAGE GREEN CHOP (If two or more were made from the same acres	cuttings :	115	116	117				
b. If you also had agricultural	57	acres only once, but report total all cuttings.)	[ons, ean				
countrylies) enter the	59	or grass silage in 1987? (R of hay sold in section 9, item 4)	eport value	118 1 Yes	2 N	·				

SEGTION 493 Were any VEGETABLES, SWEET CORN, MELONS, etc., hervested FOR SALE from "THIS PLACE" in 1987? (Do not include those grown for home use.)					OR V	%SECTIO	<u>Widta</u> Wi	HIS PLA	TRAI	MBERRIES er O' In 1987? <i>(Do no</i>	THER BERRI I include the	IES hervest see grown fo	ed FOR SALI or home use.	E from .j			
54 _	YES	- 6	-1-4- 4	is section					<u> </u>	56							
2			section										Complete this	section			
				Ac			Acres Irrig	atad .	Į	2	□ NO	_	Go to section 7				
				Whole acre		nths V	Whole acres				1	I A	cres harvested			Acres irri	gated
Land from which ve harvested in 1987				375	į.	/10 376	В	/10	Crop	name	Code		de acres Tenths	Quantity I		Whole acres	Tenths
2. From the list below									Strawbe	rries	536		/10	537	Lbs.	038	/10
If more than one ve each crop. Report o	getabli crops g	e crop was r rown under	protec	ted from the tion in secti	same a on 5.	cres, re	port acres n	or	Blackber			T .	1	510		511	-
Crop nar			Code	Acres h	arveste		Acres irrig	ated	dewberr	ies	509	+-	/10	513	Lbs.	514	1 /10
Cucumbers and pickle	BŞ		411		— į	/10 412		/10	Blueberr	ies, tame	512	╀	/10	634	Lbs.	535	/10
Watermelons			473	 	i	/10		/10	Raspber	ries	533		/10		Lbs.		/10
				 		/10		/10	Other be Specify	rries –	539		ì	540	Î	541	-
				 		/10		/10			ļ	1	/10		Lbs.		/10
					<u></u>	/10		1 /10	If more sp.	ace is neede	d, use a s	eparati	sheet of paper.	J	LDS.		1. /10
If more space is needed, u			f paper.	1		710		1 /10	SECTIO		те апу С	THE	R CROPS harves	ted from "T	HIS PLACE	" in 1987 —	smell
Crop name Asperagus	Co 37			Comaine 4		Crop ner Southern		Code	•				is, popcom, sun rt fruit in section		mer crops	not previous	жү
Beans, snep (bush and pole)	38	1 Lima be	ans, g	reen 4	29 ;	green (d	cowpeas) - red, crowder		1	1	☐ YES	· -	Complete this	section			
Beets	38 38	3 Onlons, 5 Onlons,	dry . green	4	33 S	etc		409		_	□ NO		Go to section 8				
Cabbage, head	39	1 Okra . Peas. E	nglish,	4 green	37 5	Squesh,	alitypes om	459	For those	e crops no	t listed s	enter i	the crop name a	nd code fro	m the list b	elow.	
muskmeions 395 (Do not include green Tomatoes						463 465	Report qu	uantity har	vested in	unit	specified with cr	op name.					
Collards 40.7 Peppers, sweet 443 Turnip greens Eggplant 415 Peppers, hot 445 Turnip greens Honeydew melons 423 Pimientos 447 Cyber vegetables —							Cı	rop name		Code	Acres harveste		harvested	_1	rigated		
Kale 425 Pumpkins 449						475	Fescue s	eed		502		603	Lbs.	604			
Were any NURSERY and GREENHOUSE CROPS, MUSHROOMS, sod, builbs, flowers, flowers seeds, vegetable seeds and plants, vegetables up								Popcorn			662		663	Lbs., shelle	604		
glass	glass or other protection, GROWN FOR SALE on "THIS PLACE" in 198										_		-	687		088	
		— Camp							Rye for g	grain i for silage	07	686	 	086	Bu.	087	
2	NO	- Go to	section	6 None	Squa	Area re feet	Acres	Tenths	green ch	op (Do not					Tons,	Ì	
1. Nursery and greenh	ouse c	crops irrigate	ed in 1		477		478	/10	include so crosses)	rghum-suda	<i>n</i>	086		<u> </u>	green		
2. From the list below,	enter	the crop nar	ne and	code for ea	ch crop	grown.	1	7.0	Sunflow	er seed		734		735	Lbs.	736	
		Square		Acres in th	18 open									1		2	
Crop name	Code	lottier brot	ection	in 19	87		Sales in 19	87						1		2	
	-	in 191	B7	Whole acres	Tenths	2	Dollars	Cents						1		2	
	ļ	 		1	/10) \$ 2		00	If more spe	sce is needed	d, use a si	perate	sheet of paper.	ــــــــــــــــــــــــــــــــــــــ			
				1	/10	2 \$		00									
If more space is needed, u		- choose or		<u> </u>	/10	\$		1 00	Crop nam Bahia gras	e is seed (pou	ınds)			Prop name Red clover se	ed (pounds)		Code
Crop name		c	ode ,	Сгор лаги				Code	Com cut f	or dry fodda d (report ac	er, hogge res only)	id 	581 ;	iyegrass seed Sorghum cut i	d (pounds) . for dry forag	e	. 689
Bedding plants (include builbs (Exclude builb flow	verina r	riants) 4	182 <i>:</i>	Mushroom	15			. 494	Crimson of Dry south	dees revoluer democration	(pounds) (pounds)	(pour	593 ds) 584 1	or hay (tons Sorghum hoge	, dry)	d	
Cut flowers and cut flor Nursery crops — orname	entals. 1	frasit			and flov	ver seed	5	. 500	Grains, mi Lespedeza	xed (bushe) seed (pou	is) inds)		514	freport acres orghum for s	virup (pound:	s) <i></i>	. 704
and out trees, and vine Foliage plants	• • • • •	• • • • <u>• • • • </u>		Other — 3	Specify			. 508	Proso mill	ass seed (p et (bushels))		665 [imothy seed Other crops ()	(pounds) pounds) — \$	Specify	752
SECTION BY Was t	here a	combined to	otal of	20 or more	FRUIT	TREES,	including G	RAPEV	INES and N	UT TREES	, on "Ti	IIS PI	ACE" in 1987?	•			
		— Comp					Total	tal acres		\ 							
]		— Go to s					Whole a			Acres irriga	Tenths						1
1. TOTAL ACRES in I and nut trees on this	bearing s place	g and nonbea . <i>(Do not inc</i>	aring fi <i>Jude a</i>	ruit orchards <i>bandoned ac</i>	, vineya cres.)	ards,	121	-	/10	1	/10						
2. For those crops not											this place	e in 19	987.				
Report the requeste	d infor			·	ot harve	sted bed	cause of lov	v prices,			_						
		TREES O	MBER R VINI	OF ES OF -		es in tre 1 vines c		Quantit		it of measu Mark one	ire	_					
Crop name	Code	Nonbearin	8	Bearing	8	il ages		harveste		Tons Box			_				
Apples		age	124	age	Whole a	cres T	enths 128		127	1 -	128	\dashv	Crop name Apricots	• • • • • • • • • •	• • • • • • •	Code 129	
Apples	123		228		227		/10		1 229	1 1	230	-	Figs			166	
Peaches Peaches	225		340		341	+	/10	····-	343	1 1	344	\dashv	Grapes Nectarines Pears	- : : : : : : : :		201	
Pecans	339		1		2	1	/10		10	1	15	-	Plums and	prunes and nuts — S		243	
			-		2	-	/10		1 -	1 - 1 -	18	+	-and trutt		,,	. 222	
ļ	\vdash		+		2		/10			+	. 5	-					
If more space is needed, us	10 8 800	arate sheet of	paper			i	/10], 🗆	2 🗆 3 🗆	<u> </u>	ل					

Page 2

18	GROSS VALUE of CROPS SOLD from "THIS PL			RE	SECTION 182 Did you or enyone else have any CATTLE or CALVES on this place in 1987	7
١	Report your best estimate of the value for each of the follow	ving gro	ups of crops	sold	1 Tes - Complete this section	
l	from this place in 1987. Include the value of the landlord's estimating if necessary. Include value of Government CCC		ontractor's s	hare,	2 NO - Go to section 14 INVENTORY Number on this	
١.	Grains, soybeans and other beans sold in 1987 None		Dollars	Cents	DECEMBER 31, 1987 INVENTORY None place Dec. 31, 1987	_
١"	a. Corn for grain	773 \$	1	00	1. CATTLE AND CALVES of all ages	1
ŀ	b. Wheat	₹74	!	00	(Total of a, b, c, and d below) Total a, BEEF COWS — Include beef heliers that Beef	٦
l	c. Soybeans	775		00	had calved	
l	•	776			b. MILK COWS kept for production of milk or	
	d. Sorghum for grain	777		00	cream for sale or home use — Include dry Milk milk cows and milk helfers that had calved	
1	e. Barley	778		00	805 Heifers	
ŀ	f. Oats	\$	i	00	c. HEIFERS AND HEIFER CALVES — (Do not include heifer	
l	g . Other — rye, dry peas, sunflower seed, popcorn, etc. \Box	779 \$	<u> </u>	00	helfers that had cafved.)	_
2.	Cotton and cottonseed	780 8 781		00	d. STEERS, STEER CALVES, BULLS, Sulls of AND BULL CALVES	_
3.	Tobacco	\$		00	CATTLE AND CALVES SOLD	
4.	Hay, silage, field seeds, and grass seeds	782	i i	00	FROM THIS PLACE IN 1987 Include those fed on this place on a Number sold Gross value of sales	\dashv
5.	Vegetables, sweet corn, and melons— (Do not include Irish potatoes and sweetpotatoes, report them in item 7 below.)	783 \$	l i	00	contract or custom basis. Also report as sold cattle moved from this place None in 1987 Dollars ICen	ts
6.	Fruits, nuts, and berries — apples, peaches, pecans,	784	-	00	to a feedlot for further feeding. 808 809	7
ĺ	strawberries, etc.	\$	1	00	2. Calves weighing less than 500 pounds \$ 0	0
٦.	Other crops — peanuts, Irish potatoes, sweetpotatoes, etc. (Do not include nursery and greenhouse crops.) —	786	į		3. Cattle, including calves weighing	
	Specify	s	į	00	500 pounds or more	3
8	OTIONALU How were the ACRES in this place USED in 198			Ť	a. Of the total cattle sold, how many were FATTENED on this place on GRAIN or 812 813	
•	\$10				CONCENTRATES for 30 days or more	۱
1.	Copy acres in "THIS PLACE" from section 1, item 4, page NOTE: For items 2 to 5 below, if land was used for more than one		Acr	es	and SOLD for SLAUGHTER? \$ 00	쒸
	report it in the FIRST land use listed below that applies. For example harvested and also pastured, only as "Cropland harvested."	purpose , report	in 1987 cropland		DAIRY PRODUCTS SOLD FROM DAIRY PRODUCTS Gross value of sales	
2	CROPLAND	None	Number of	acres	THIS PLACE IN 1987 None Dollars Centa	ļ
١	a. Cropland harvested - Include all land from which crops		787		4. Gross value of sales of DAIRY PRODUCTS from this place in 1987 — Include milk, cream,	
	were harvested or hay was cut, and all land in orchards, citrus groves, vineyards, and nursery and greenhouse crops	🗆			butter, etc	
	b. Cropland used only for pasture or grazing — Include rotatio pasture and grazing land that could have been used for crops withou additional improvements.	, ,	788		Signification Did you or anyone else have any HOGS or PIGS on this place in 1987?	
	c. Cropland used for cover crops, legumes, and soil-		789		1 YES — Complete this section INVENTORY	\neg
i	improvement grasses, but NOT harvested and NOT				2 NO — Go to section 15 Number on this place Dec. 31, 1987	
	d. Cropland on which all crops failed — /Exception: Do not	Ш	780		DECEMBER 31, 1987 INVENTORY None S15	
l	report here land in orchards and vineyards on which the crop failed. Such acreage is to be reported in item 2a.)				1. HOGS and PIGS of all ages (Total of a and b below)	\dashv
	e. Cropland in cultivated summer fallow	🗀	791		a. HOGS and PIGS used or to be used for BREEDING [817	10
ŀ	f. Cropland idle		793		b.OTHER HOGS and PIGS	
,	105151	_	794		LITTERS FARROWED	ļ
3 .	woodlots and timber tracts and	Ц	795		2.1 ITTERS FARROWED on this place between - None Number of litters	1
ļ	cutover and deforested land with young timber growth. b. Woodland not pastured	🗆			a.December 1, 1986 and May 31, 1987	- 1
4.	Other pastureland and rangeland — Include any pasturelan other than cropland and woodland pasture.	<i>d</i> □	796		b. June 1, 1987 and November 30, 1987	
5.	All other land — Land in house lots, ponds, roads, wastela	∟ nd,	797		Number Gross value of sales	\dashv
l	etc. — Include any land not reported in items 2 through 4 above	🗆	L		HOGS AND PIGS SOLD None in 1987 Dollars Cen	ate
6.	TOTAL ACRES — Add the acres reported in Items 2 through (Should be the same as item 1 above .)	5	798		3. HOGS and PIGS SOLD from this	Ť
S	O HONGE Was any LAND in this place IRRIGATED at any t	me in 19	987?		place in 1987	2
	Irrigated land is all land watered by any artificial or controlled means or ditches, spreader dikes, etc. Include supplemental, partial, and p	- sprini	klers, furrows		4. Of the hogs and pigs sold, how many were sold as FEEDER PIGS for further feeding?	0
		-prosect at 181	-guerorii		SECTION 15. Did you or anyone else have any SHEEP or LAMBS on this place in 1987?	٦
	1 YES — Complete this section 2 NO — Go to section 12	None	Number of irrigate		S15	
		MOUS	880	-	1 YES — Complete this section 2 NO — Go to section 18	
1.	How many acres of harvested land were irrigated? Include land from which hay was cut and land in bearing and				INIVENTORY	긕
2	nonbearing fruit and nut crops reported in section 10, item 2s	. ப	681		Number on this NUMBER SOLU	
Z.	How many acres of pastureland, rangeland, and any other lands not included in item 1 above were irrigated?	. 🗆			824 825	\dashv
ŝ	CTION 12 Were any ACRES in this place SET ASIDE, DIVE		R IDLED		1. SHEEP and LAMBS of all ages	, J
	under FEDERAL acreage reduction programs in	987?			a.EWES 1 year old or older	綇
	1 YES — Complete this section				Number shorn Pounds of wool	- 1
	2 NO — Go to section 13	N	Moneton		None in 1987 shorn in 1987	
_		None	Number of	acres	2. SHEEP and LAMBS SHORN	-
1.	How many acres were set aside (or diverted) under ANNUA				Gross value of sales	
	commodity acreage adjustment programs?					
2	commodity acreage adjustment programs?		683		What was the gross value of sales of SHEEP.	
	commodity acreage adjustment programs? How many acres were under the CONSERVATION RESERV PROGRAM (10 year, CRP)? 187-A0204 (8-18-86)	E	683		3. What was the gross value of sales of SHEEP, LAMBS, and WOOL from this place in 1987?	

SECTION 168 Did you or anyo OTHER LIVEST	ne else have any H OCK, or ANIMAL:	ORSES, B SPECIALT	EES, FISH TES on thi	, GOATS, s place in 19	9877	SECTION,182 GOVERNMENT CCC LOANS
516	Complete this sec			— Go to s		1. Amount received in 1987 from Government CCC loans for - None Dollars Cen
	INVENTORY Number on	Total mi	entity sold	Gross va	lue of sales	Include regular and reserve loans, even if redeemed or forfeited.
None	this place		1987	Dollar	s Cents	887
1. Horses and ponies of all ages	830	831	Number	832	00	555
	839	840	Number)		d. Sorghum, barley, and oets
2. Colonies of bees	1	841	Pounds	1>	00	
a. colonics of boos	843	844		846		f. Peanuts, rye, tobacco, and honey
	•	845	Number Gallons	1	1 00	SECTIONALS Payments received for participation in FEDERAL FARM PROGRAMS
3. Milk goats		848	milk	 		m 1987 (DO NOT INCLUDE CCC loans.) Heter to INFURMATION SHEET, section 19. None Dollars Cen
	847	849	Number	12.	00	519
4. Angora goats	851	852	Pounds mohair	853	00	1. Amount received in cash
5. Other goats			Number	1	00	or commodity certificates
6.Mules, burros, and	833	834		835	i	S20
donkeys	836	837	Number	838	00	Mark (X) the one item which best describes the type of organization for
7.Mink and their pelts			Number	ļ	i 00	
8. Rabbits and their	854	855		858	1	FAMILY or INDIVIDUAL operation — (Do not include partnership and corporation.)
9. All other livestock and		 	Number	\$	00	PARTNERSHIP operation — Include family partnerships.
livestock products	857	858		859	1	INCORPORATED UNDER STATE LAW 3 Go to section 21
Specify			Number oss value o		00	OTHER, such as estate or trust, prison farm, grazing
10. Fish and other aquaculture products (Enter name and	Total quantity in 1987	sold Gro	Dollars	Cents		association, Indian reservation, etc
code from list below.) Name Code	ORP	ounds 2				Specify
) 1 = ···	ımber \$		00		SECTION 21: CORPORATE STRUCTURE (for incorporated operations only) Refer to the INFORMATION SHEET, section 21.
Name Catfish	Code 860	Name Other fist	h – <i>Specify</i>	,	Code 866	521
Trout	863	Other aq	uaculture	·		1. Is this a family-held corporation? , . Yes 2 LI No
September 1 Charles and September 1	no else have any P	OULTRY,	uch as CH	ICKENS,		2. Are there more than 10 stockholders?
TURKEYS, DUC	KS, etc., on this per contract basis.	lace in 198			grown	SECTION 22 CHARACTERISTICS AND OCCUPATION OF OPERATOR (Senior partner or person in charge) Refer to the INFORMATION SHEET, section 22.
517 1 ☐ YES —	Complete this se	ection	Numbe	eron To	tal number	522
I	Go to section 18		this place. 31,		old in 1987	person in charge) live on this place?
1. HENS and PULLETS of laying		· · · · □	892			2. PRINCIPAL OCCUPATION — At which occupation did the operator spend the majority (50 percent or 928
2. PULLETS for laying flock rep a.PULLETS 3 months old or ol		g age	894	89	15	more) of his/her worktime in 1987? For partnerships consider all members of the partnership together
b.PULLET CHICKS and PULLE	TS under 3 months	sold	896			or ranching
(Do not include commercial by 3. BROILERS, fryers, and other			898	899		3. OFF- FARM WORK — How many days did the operator (senior partner or person in charge) work at least
including capons and roaste						4 hours per day off this place in 1987? — Include work at a nontiarm job, business, or on someone else's farm for pay. (Do not include exchange farmwork.).
4. TURKEYS a.Turkeys for slaughter (Do n	oot include breeders.)	🖂	900	901		4 100-149 days
b.Turkey HENS kept for bree			902	903		
5. OTHER POULTRY raised in c	aptivity — ducks,					4. In what YEAR did the operator (or senior partner) begin 060
geese, pigeons or squab, phe (Enter poultry name and code fro		-		1		to operate any part of this place? Year
Poultry name	Code		ļ			925 5. AGE of operator (senior partner or person in charge) Years old
Poultry name	Code _		Ĺ			924 () \ \ \ White
Name Code Ducks 904	Name Pigeons or squab	Code	Nam	• 	Code 912	2 Negro or Black
Geese	Pheasants		Affoti	her pouttry —		6. RACE of operator (senior partner or person in charge) 3 American Indian
6. POULTRY HATCHED on this pl		None		Number		A Slan or Pacific Islander
placed or sold — chickens, turi Specify kind of poultry	ys, queks, etc. –		918			9 Other — Specify
7. Incubator egg capacity on D	ecember 31, 198		917			926
30 - ,	,		rose vielu-	of pales	7	7. SEX of operator (senior partner or person in charge) 1 Male 2 Fema
8. What was the gross value of sa	ales of Non	e	Dollars	Cent	ts	8. SPANISH ORIGIN — Is the operator (senior partner
poultry and poultry products (e etc.) from this place in 1987?	ggs,	918		. 00	,	or person in charge) of Spanish origin or descent (Mexican, Puerto Rican, Cuban, or other Spanish)? 1 Yes 2 No
FORM 87-A0204 (8-18-86)		1.				

SE	PRODUCTION EXPENSES paid by you and of place in 1987	hers for	this	SECTION 252 Were any INSECTICIDES, HERBICIDES, FUNGICIDES, NEMATICIDES, OTHER PESTICIDES, or OTHER CHEMICALS used on this place in 1987?							
Inc	clude your best estimates of expenses paid by you, your land	ord, cor	itractors,	1 YES — Complete this section 2 NO — Go to section 26							
in otl	yers, and others for production of crops, livestock, and other 1987. (DO NOT INCLUDE expenses connected with perforn hers; operation of nonfarm activities, businesses, or services; openses not related to the farm business.)	ning cus	tomwork for	include any materials provided by you, your landlords, or contractors. For each item listed, report acres only once. If multipurpose chemicals were used, report acreage treated for each purpose.							
1.	Livestock and poultry purchased — cattle, calves, hogs, pigs, sheep, lambs, goats, horses, chicks, poults, started pullets, etc.	None	Dollars Cents	1. Sprays, dusts, granules, fumigants, etc., (fungicids, None used used used	ch						
2	Feed purchased for livestock and poultry — grain,	. —	972	a. Insects on crops, including hay							
_	hay, silage, mixed feeds, concentrates, etc		\$ 100	b. Nematodes in crops							
	 Commercially mixed formula feeds purchased — complete, supplement, concentrates, premixes. 			smuts, rusts, etc.)	_						
	(Do not include ingredients None Dollars	Cents		d . Weeds, grass, or brush in crops and pasture —							
	purchased separately, such as 973 soybean meal, cottonseed meal, and urea.) \$	00		2. Chemicals for defoliation or for growth control	_						
3	Seed cost — for corn, other grains, soybeans, tobacco,	1 00	974	of crops or thinning of fruit	_						
	cotton, etc. — include plants and trees purchased		976	SSECTION 205 MACHINERY AND EQUIPMENT on this place on December 31, 1887 — see include only equipment used for agricultural operations in 1988 or 1987.	.						
	forms, including rock phosphate and gypsum. Include cost of custom applications.		\$ 00	Value of ALL machinery and equipment on this place, December 31, 1987							
5.	 Agricultural chemicals purchased — Insecticides, herbicides, fungicides, other pesticides, etc. — Include 	_	i i	What is the estimated market value of ALL machinery, equipment, and implements usually kept on this place	$\overline{}$						
_	cost of custom applications. (Do not include lime.)	Ш	\$ 00	and used for the farm or ranch business? — Include cars, trucks, tractors, combines, plows, disks, harrows, dryers,	nts						
ъ.	. Gasoline and other petroleum fuel and oil purchased for the farm business —		977	pumps, motors, irrigation equipment, dairy equipment including milkers and bulk tanks, livestock feeders, grinding and mixing							
	a. Gasoline and gasohol	ш	9 00	equipment, etc	00						
	b -Diesel fuel		\$ 00	SELECTED machinery and equipment on Total number Of the total, HOV	N fac-						
	c. Natural gas		979 \$ 00	this place, December 31, 1987. (Report only if used in 1986 or 1987.) None this place on December 31, 1987 were manu on this place on December 31, 1987 became 31, 1987 to 1983 - 1987).	reers						
	d. LP gas, fuel oil, kerosene, motor oil, grease, etc		\$ 00	944 945							
7.	. Electricity for the farm business (Do not		981	Motortrucks — Include pickups							
_	include household expenses.)		\$ 00	and motor tillers — a. Less than 40 horsepower (PTO)							
8.	for social security, workman's compensation, insurance	π	982 ¹	b. 40 horsepower (PTO) or more							
	premiums, pension plans, etc. (See INFORMATION SHEET)		\$ 100	4. Grain and bean combines, all types							
9.	Contract labor — Include expenditures for labor, such as harvesting of fruit, vegetables, berries, etc.,		983	5. Cotton pickers and strippers							
	performed on a contract basis by a contractor, crew leader, a cooperative, etc.		\$; 00	8. Mower conditioners	_						
10.	Repair and maintenance expenses for the		984	7. Pickup balers — Include rectangle and round balers							
	upkeep of buildings, motor vehicles, and farm equipment		\$ 100	SECTION 27 ESTIMATED CURRENT MARKET VALUE OF LAND and s27 BUILDINGS							
17.	Customwork, machine hire and rental of machinery and equipment — include expenditures for		1 1	Please give your best ESTIMATE of the CURRENT MARKET VALUE of land and buildings for all acres reported in Estimated market value of land and buildings	ue s						
	use of equipment and for customwork such as grinding and mixing feed, plowing, combining, com picking, drying, silo filling, spraying, dusting, fertilizing, etc. (Do		! 985 !	TALUE OF INTIMUM DESCRIPTION OF THE PROPERTY O	nts						
	not include cost of cotton ainning and application of	_	1	996	20						
	fertilizer and chemicals.)	L	986 1	1. All land owned	00_						
	Interest paid on debts — (See INFORMATION SHEET) a. Secured by real estate		\$ 00	2. All land rented or leased FROM OTHERS	00						
	h Not secured by real actors		987 \$ 00		00						
12	b. Not secured by real estate	ب	988	SECTIONE28 INCOME FROM FARM - RELATED SOURCES IN 1987							
. J.	(Do not include grazing fees.)		\$ 00	S28 Report amount received before taxes and expenses.	_						
14.	Property taxes paid — Include farm real estate,		989	1. Customwork and other agricultural services provided for None Dollars Ce	me ints						
	machinery, livestock, etc. for the farm business. (Do not include taxes paid by landlords.)	. 🗆 I	\$ 00	farmers and others — plowing, planting, spraying, harvesting, preparation of products for market, etc. 992							
15	All other production expenses — Include insurance,		į	If customwork is a senerate husiness, refer to INFORMATION —	00						
٠.	water, animal health costs, grazing fees, marketing charges, miscellaneous farm supplies, etc. (Do not include depreciation,		990	2. Gross cash rent or share payments received from renting							
	household expenses, and expenses not associated with the farm business.)		\$ 100	out farmland or payments received from lease or sale of							
ŜE	CTION:24% Was any COMMERCIAL FERTILIZER, Include	ng ROC	K PHOSPHATE, or	a per-head basis, per-month-basis, per-pound basis, etc	00						
	LIME used on this place during 1987?	_	-	3 Sales of forest products and Christmas trees include	00						
	1 YES — Complete this section 2		Go to section 25	4. Recreational services, patronage dividends of cooperatives,							
1.	Acres of cropland fertilized in 1987 — (Do not include cropts		932	and other income which is CLOSELY RELATED to the agricultural operation on this place -	1						
	for pastures reported in section 10, item 2b.)	[933		00						
	Acres of pastureland and rangeland fertilized in 1987 reported in section 10, items 2b and 4	[□	SECTION 29 PERSON COMPLETING THIS REPORT — Please print							
	None Ton	s of lime	a Acres limed	Name 999 Date	ł						
,	LIME — tons of lime used and acres on which applied — (Do not include land plaster or —		935	Area Code Number	\dashv						
	gypsum or lime for sanitation.)			Telephone number							

Page 6

U.S. DEPARTMENT OF COMMERCE

INFORMATION SHEET

1987 UNITED STATES CENSUS OF AGRICULTURE

Special Reporting Instructions

1. Who Should Report

WE NEED A REPLY FROM EVERYONE RECEIVING A REPORT FORM, INCLUDING individuals, landlords, tenants, partnerships, corporations, institutions, and THOSE NOT CONDUCTING AGRICULTURAL OPERATIONS. Each case included in the census has a unique Census File Number (CFN). In order to make the census results as complete and accurate as possible, we need to obtain information about every CFN.

2. If You Received More Than One Report Form for an Operation

Complete only ONE report form for an operation. Write "Duplicate" near the address label of each extra report form. Also, write the 11-digit census file number(s) of the DUPLICATE report(s) ON THE COMPLETED REPORT in the space provided to the left of the address label. Return the extra report(s) in the same envelope with your completed report form so that we can correct our records.

3. If You No Longer Farm

If you had agricultural operations **at any time during 1987**, please report all agricultural activity during the year. Report all land on your census form that you owned or rented. Also, report your 1987 crop and livestock production and 1987 sales.

Explain on the first page of the report form (or on a separate sheet of paper) that you quit farming or ranching and give the approximate date and the name and address of the present operator, if known.

4. If You Never Farmed or Have No Association With Agriculture

Please write a note on the report form near the address label explaining this and return the form so that we can correct our records. In our efforts to make the census as complete as possible, we obtained lists from various sources. We tried to eliminate duplicate and nonfarm addresses, however, it was not always possible to do so.

5. If You Have More Than One Agricultural Operation

Complete a report form for EACH SEPARATE and DISTINCT production unit, i.e., each individual farm, ranch, feedlot, greenhouse, etc., or combination of farms, etc., for which you maintain SEPARATE records of operating expenses and sales, livestock and other inventories, crop acreages, and production.

6. If You Have a Partnership Operation

Complete only ONE report for the entire partnership's agricultural operation and include all partners' shares on the one report. If members of the partnership also operate separate farms or ranches in addition to the partnership farming operation, separate report forms should be completed for each individual operation.

If two or more report forms were received for the same operation, mark each additional form as a "Duplicate." Return the duplicate report(s) in the same envelope with the completed partnership report, where possible, or write a note on the duplicate report, such as, "(Name of partner) has completed a report for the partnership (provide name and CFN of partnership.)"

7. Landlord's or Contractor's Share

If you rented or leased land from others or had a contract for the production of agricultural products, include both your share and the landlord's or contractor's share of the production, sales, and expenses so your census report form will be complete for "THIS PLACE."

If you do not know the landlord's or contractor's share, include your BEST ESTIMATE. If you do not have records available for all data items, use your best estimate.

How to Enter Your Response

Enter your replies in the proper spaces, on the correct lines, and in the units requested, i.e., dollars, bushels, tons, etc. Write any explanation outside the answer spaces or on a separate sheet of paper.

All dollar figures may be entered in whole dollars. CENTS ARE NOT REQUIRED.

Enter whole numbers except where tenths are requested, such as acres of potatoes harvested. If you have 1/2, 1/3, or 1/4 of an acre, convert to tenths. For example, convert 1/2 to 5/10, 1/3 to 3/10, 1/4 to 2/10.

The census report form will contain sections and questions which do not apply to you. When this occurs, mark the "None" or "No" box and go on to the next item or section.

Instructions For Specified Sections

➤ Section 1 - ACREAGE IN 1987

Your answers to this section will determine the land (Acres in "THIS PLACE") referred to in the rest of the report form.

When answering the acreage questions, include the lan associated with your agricultural operations in 1987 whether in production or not. Include all land that you owned or rented during 1987 even if only for part of the year. Do not include any unrelated residential or commercial land.

IF YOU QUIT FARMING DURING 1987 — Complete the report form for the portion of the year that you did farm. Explain on the report form in the space to the left of the address label (or on another sheet of paper) when you stopped farming and include the name and address of the person now using the land.

Report all land in section 1 in whole acres.

Item 1 — All Land Owned — Report all land owned in 1987 whether held under title, purchase contract or mortgage, homestead law, or as heir or trustee of an undivided estate. Include all land owned by you and/or your spouse, or by the partnership, corporation, or organization for which you are reporting.

Item 2 — All Land Rented or Lessed FROM OTHERS — Report all land rented by you or your operation even though the landlord may have supplied materials or supervision.

INCLUDE in item 2:

- a.Land for agricultural use that you rented from others for cash
- b. Land you worked on a share basis (crop or livestock)
- c.Land owned by someone else that you used rent-free
- d. Federal, State, Indian reservation, or railroad land rented or leased by the acre

DO NOT INCLUDE in item 2:

Land used on a per-head or animal unit license or permit basis, such as section 3 of the Taylor Grazing Act, National Forest, or Indian reservation permit land. If you had any of these permits, mark "yes" to item 7.

Item 3 — All Land Rented or Leased TO OTHERS — Include all land rented out for any purpose if it was part of the acreage reported in items 1 and 2. A report form will be obtained from each of your tenants to cover the operations on that land.

INCLUDE in item 3:

- a. Owned land rented to others for cash or a share of crops or livestock
- b. Land you rented from someone and then subleased to someone else
- c. Land worked for you by someone for a share of crops or livestock
- d. Land which you allowed others to use rent-free

Item 4 — Acres in "THIS PLACE" — This figure will show the total of all land you operated at any time in 1987.

If item 4, Acres in "THIS PLACE" is "O" and:

- You raised any crops or had any livestock or poultry on "THIS PLACE" in 1987, complete the report.
- b. All your land was operated by a renter or sharecropper, complete item 6 (name and address of renters), skip to and complete section 29, and explain briefly, "all land rented out," etc. Mail form in return envelope.
- You did not have any agricultural activity on owned or rented land in 1987, complete section 29 and explain briefly, such as "retired," "sold farm," and date. Give name and address of current operator if known and return form.

➤ Sections 2 through 8 — CROPS

Sections 2 through 8 provide space for reporting crops harvested during the 1987 crop year from the land shown in section 1, item 4 (Acres in "THIS PLACE") of your report. Please report your crops in the appropriate sections. Do NOT include any crops grown on land rented or leased TO OTHERS, or worked by others on shares during 1987.

Acres harvested — Enter the acres harvested in 1987. Round fractions to whole acres except where tenths are requested by "/10" in the reporting box, such as for potatoes.

Quantity harvested — If your unit of measure is different than the unit on the report form, please convert your figure for the quantity harvested to the unit requested. If the harvest was incomplete by December 31, 1987, please report the quantity harvested and estimated quantity to be harvested.

Acres irrigated — For each crop irrigated, report number of acres irrigated. Irrigation is defined as land watered by artificial or controlled means — sprinklers, furrows or ditches, spreader dikes, purposeful flooding, etc. Include acres that received supplemental, partial, and/or preplant irrigation. Do not report water applied in transplanting tobacco plants, trees, or vegetables as irrigation. Leave "Acres irrigated" blank for crops that are not irrigated.

How to Report Crops Harvested

- ▶ Sections 2 and 3 Report only for the listed crops.
- ▶ Sections 4 through 8 To report: (1) find the crop name and the code number from the list in the section; (2) enter crop name and code in the first two columns of the first available answer line in the section; (3) enter the information that is requested in the remaining columns. If you harvested a crop not listed in sections 4 through 8, use the "Other" code in the appropriate section and specify the crop name.

Double Cropping — If two or more crops were harvested from the same land (double cropping) report the total acres and production of each harvested crop in the appropriate section(s) of the report form.

Example: In 1987 you harvested 1,230 bushels of wheat from 40 acres, then on the same 40 acres planted soybeans, from which you harvested 1,550 bushels. You irrigated the soybeans but not the wheat.

Section 2* Were any or "THIS PLA	f the follow! CE" in 198	ing CROPS harve 77	sted from
None	Acres harvested	Quantity harvested	Acres irrigated
1. Cotton	091	092 Bales	093
2. Soybeans for beans	⁰⁸⁸ 40	089 1,550 Bu.	090 40
3. Wheat for grain	⁰⁷³ 40	/, 230 Bu.	075
4. Oats for grain	076	077 Bu.	078

Interplanted Crops — If two crops were grown at the same time in alternating strips in the same field, report the portion of the field used for each crop.

Example: A 60 acre field was planted in cotton and soybeans, with two rows of cotton followed by an area of the same width planted in soybeans. No irrigation was used. Thirty acres of soybeans and 30 acres of cotton would be reported in the appropriate section(s).

Skip Row Planting — If a crop is planted in an alternating pattern of planted and non-planted rows, such as two rows planted and two rows skipped (2 X 2), report the portion of the field occupied by the crop in the appropriate section for that crop, and report the skipped portion as "Cropland idle" in section 10, item 2f.

- Section 4 VEGETABLES Report acres of vegetables harvested FOR SALE or commercial processing. Do not include vegetables grown for home use. Report the total acreage of each vegetable crop harvested.
 - Example: In 1987 you harvested 10 acres of lettuce from a field, then replanted the field in lettuce and harvested the 10 acres again. Both crops of lettuce were irrigated. Enter only 10 acres of land from which vegetables were harvested and 10 acres irrigated in item 1 of section 4, but write in 20 acres of lettuce harvested and 20 acres of lettuce irrigated in item 2 of section 4.
- Section 8 FRUITS and NUTS In counting the combined total of 20 or more trees and vines, include those for home use as well as those maintained for sale of the production. Acres in trees or vines that have been abandoned should not be included; these acres should be included in section 10, item 2f "Cropland idle."

If crops other than fruit and nut trees and vines were interplanted with trees or vines, report the total acres for the orchard crop in section 8 and the total acres of the interplanted crop in the appropriate section.

➤ Section 9 — GROSS VALUE OF CROPS SOLD

Report the value of all crops sold from "THIS PLACE" in 1987, regardless of the year they were harvested or who owned the land. Be sure to report gross values before deducting expenses and taxes. Include Government CCC loans received for "THIS PLACE" in 1987. Include payments received in 1987 from cooperatives or marketing organizations for crops produced on "THIS PLACE" regardless of the year in which the crops were harvested.

Also include as sales, your estimate of the value of any crop removed from "THIS PLACE" in trade for services, such as hay cut in exchange for fence repair, clearing, or other services. If the sale price or market value is not known, give your best estimate of the crop's market value when removed from "THIS PLACE."

DO NOT INCLUDE crops or crop products purchased from others and later sold.

FORM 87-A01(I) (12-17-86)

► Section 10 - USE OF ACRES IN "THIS PLACE"

This section is used to classify the acres in "THIS PLACE" reported in section 1, item 4. (Do not include any acres you rented to others reported in section 1, item 3). The sum of the acres entered in various categories should equal total acres in "THIS PLACE."

Land Used for More Than One Purpose — Do not report the same acreage for more than one of the listed purposes. If part or all of your land was used for more than one listed purpose in 1987, report that land only in the first category listed. For example, if you plowed under a cover crop, and planted and harvested a grain crop, report the land in item 2a, "Cropland harvested," but do NOT report as "Cropland used for cover crops, legumes, etc." (item 2c).

Double Cropping — When more than one crop was harvested from the same land in 1987, report that land only ONCE as "Cropland harvested," in item 2a.

Interplanted Crops — If you interplanted crops, such as cotton in an orchard, report the total land used for both crops only ONCE, as "Cropland harvested," in item 2a.

Skip Row Planted Crops — Report the acres that represent the total nonplanted or skipped rows as "Cropland idle," item 2f. The acres that represent the planted rows should be reported as "Cropland harvested," in item 2a.

► Section 12 — ACRES SET ASIDE, DIVERTED, OR IDLED UNDER FEDERAL ACREAGE REDUCTION PROGRAMS IN 1987

Include in item 2 all acres in "THIS PLACE" retired from production and placed, by long-term contract, into the Conservation Reserve Program. Acres placed into the program during and prior to 1987 should be included.

► Sections 13 through 17 —LIVESTOCK, POULTRY, OTHER LIVESTOCK, OR ANIMAL SPECIALTIES

Animals and Poultry to Include in the Report — Report all animals, poultry, and animal specialties on "this place" (section 1, item 4) on December 31, 1987. Include all owned by you and any kept by you for others. Include animals on unfenced lands, National Forest land, district land, cooperative grazing association land, or rangeland administered by the Bureau of Land Management on a per-head or lease basis. Animals in transit on December 31, 1987, or animals on a short-term pasture (such as wheat pasture or crop residue) on a per-head or lease basis should be reported by the person who had control of the animals.

Animals and Poultry to Exclude from the Report — Do not report animals or poultry kept on land rented to others or kept under a share arrangement on land rented to others. Do not include animals quartered in feedlots which are not a part of "this place." Animals kept on a place not operated by you are to be included on the report for that place.

Animals Bought and Sold — DO NOT REPORT ANY ANIMALS BOUGHT AND THEN RESOLD WITHIN 30 DAYS. Such purchases and sales are considered "dealer" transactions, and are not included in this census.

Number Sold — Report all animals and poultry sold or removed from "this place" in 1987, without regard to ownership or who shared in the receipts. Include animals sold for a landlord or given to a landlord or others in trade or in payment for goods or services. Do NOT report number sold for any livestock or poultry kept on another place.

Dairy Termination Program or "Whole-Herd Dairy Buy-Out Program" — The amount received in 1987 from the Government under the dairy termination program should be included in section 19, item 1. Dairy animals and products sold in 1987 should be reported in section 13.

Animals Moved to Another Place — For animals moved from "this place" to another place, such as for further feeding, report animals as "sold" and give your best estimate of their market value when they left "this place."

Fat Cattle Sold — Cattle fattened on grain or concentrates for 30 days or more and sold for slaughter are reported in section 13, item 39

DO NOT INCLUDE WITH FATTENED CATTLE SOLD:

- a.Cattle and caives sold for further feeding
- b. Veal calves, or any calves weighing less than 500 pounds
- c.Dairy cows fed only the usual dairy ration before being sold

Page 2

Value of Sales — Report the total gross value of animals and poultry sold or removed from "this place" in 1987 without deducting production or marketing expenses (cost of feed, cost of livestock purchased, cost of hauling and selling, etc.). If the sale price or market value is not known, give your best estimate of their market value when they left "this place." Do NOT report the value of sales of any livestock and poultry owned by you but kept and sold from a place you did not operate.

Contract and Custom Feeding Operations — Livestock or poultry kept by you on "this place" on a contract or custom basis should be included on this report REGARDLESS OF OWNERSHIP. Report as "INVENTORY" numbers of animals or poultry on the place on December 31, 1987. Report as "SOLD" animals and poultry kept on a contract or custom basis and removed or sold from the place in 1987. If the sale price or market value is not known, give your best estimate of the market value of the animals or poultry when they left the place.

► Section 16 — HORSES, BEES, FISH, GOATS, OTHER LIVESTOCK, OR ANIMAL SPECIALTIES

Item 2 - If you owned BEES - Report all colonies or hives of bees and honey operations conducted by you, regardless of where the hives were kept most of the year. Report hives or colonies, pounds of honey sold, and value of sales.

Items 7 and 8 — Mink pelts and rabbit pelts should be included in number sold and value of sales, but not in inventory.

Item 9 — Other Livestock and Livestock Products — Include in all other livestock and livestock products manure, beeswax, and any other animal products sold from "this place" in 1987. Please indicate units used in reporting.

Item 10 — Fish and Other Aquaculture Products — Report number of pounds sold and gross value of sales for each. Enter name and code

► Section 17 — POULTRY

The person who furnished the housing and labor should report the poultry operation on his/her report form regardless of who owns the birds. Report as sold poultry that were taken or moved from the place

► Section 18 - AMOUNT RECEIVED FROM GOVERNMENT CCC LOANS

Item 1 — Report the amount received under the regular or reserve program for commodities placed under CCC loan during 1987. Include amount received even if commodity was redeemed or forfeited prior to December 31, 1987.

Do not include CCC loans received to build grop storage facilities or amount received for storage payments in the reserve program.

➤ Section 19 — FEDERAL PAYMENTS RECEIVED

Report all payments received from Federal Farm Programs in 1987 regardless of whether payment was made in cash or commodity certificates. Include cash payments in item 1. In item 2, include the value of any certificates held or the value received from sale or redemption of any certificates in 1987.

Federal payments include receipts from Federal programs such as deficiency payments, "Whole-herd dairy buy-out," support price payments, indemnity programs, disaster payments, paid land diversion, inventory reduction payments, payments received for approved soil and water conservation projects, etc.

▶ Section 20 — TYPE OF ORGANIZATION

Use the following definitions to determine the type of organization for

Family or Individual Operation — Defined as farm or business organization controlled and operated by an individual (sole proprietor). Include family operations that are not incorporated and not operated under a partnership agreement.

Partnership Operation — Defined as two or more persons who have agreed on the amount of their contribution (capital and effort) and the distribution of profits. Co-ownership of land by husband and wife or joint filing of income tex forms by husband and wife DOES NOT constitute a partnership, unless a specific agreement to share contributions, decisionmaking, profits, and liabilities exists. Production under contract or under a share rental agreement DOES NOT constitute

Incorporated Under State Law — A corporation is defined as a legal entity or artificial person created under the laws of a State to carry on a business. This definition does not include cooperatives. Information on type of corporation should be reported in section 21.

Other — Such as cooperatives (defined as an incorporated or unincorporated enterprise or an association created and formed jointly by the members), estate or trust (defined as a fund of money or property administered for the benefit of another individual or organization), prison farm, grazing association, Indian reservation, institution run by a government or religious entity, etc.

FORM 87-A01(I) (12-17-88)

► Section 21 — CORPORATE STRUCTURE

This section is to be answered by corporations only. Answer both items. A family-held corporation has more than 50 percent of its stock owned by persons related by blood or marriage.

Section 22 — CHARACTERISTICS AND OCCUPATION OF OPERATOR

This section collects information about the operator of "this place" defined as the individual owner, the operator, the senior partner, or person in charge for the type of organization reported

For Family or Individual Operation - Complete this section for the operator.

For Partnership Operations — Answer all items, except item 2, for the "Senior Partner." The "Senior Partner" is the individual who is mainly responsible for the agricultural operations on "this place," not necessarily the person senior in age. If each partner shares equally in the day-to-day management decisions, consider the oldest as the "Senior Partner." For item 2 (Principal Occupation) consider all members of the partnership together. Please including work at greenhouses, nurseries, mushroom production, ranching, feedlots, broiler feeding, etc.

For Corporations and Other Operations (Cooperatives, Estates, etc.) — Complete section 22 for the person in charge, such as a hired manager, business manager, or other person primarily responsible for the on-site, day-to-day operation of the farm or ranch business.

Item 4 -- Year Began Operation -- Report the first year the operator or senior partner began to operate any part of "this place" on a continuous basis. If the operator returned to a place previously operated, report the year operations were resumed.

➤ Section 23 — PRODUCTION EXPENSES paid by you and others for "this place" in 1987
Include farm production expenses paid by you, your landlord, contractors, or anyone else for crops, livestock, or poultry produce on "this place." Include expenses incurred in 1987 even if they were not paid for in 1987. Please estimate if exact figures are not known. Refer to the individual expenditure items below for further explanations.

Livestock and Poultry Purchased — Report the cost of cattle, calves, hogs, pigs, sheep, lambs, horses, goats, chicks, pullets, poults, etc., including breeding stock and dairy cows. Contract growers or custom feeders who did not own or purchase the livestock or poultry themselves should estimate the value of the cattle, calves, pigs, baby chicks, pullets, etc. at the time they came onto the place.

Feed Purchased for Livestock and Poultry — Report the purchase cost of corn, sorghum, oats, barley, other grains, silage, hay, mixed feed, concentrates, etc., fed to livestock and poultry on "this place." Contract livestock and poultry growers should estimate the value of feed provided by the contracting company. Custom feedyards should include feed costs for all cattle feed even if the owners of the cost of th cattle fed even if the owners of the cattle were billed for the feed. Feed raised on "this place" should not be reported as purchased.

Cost of Hired Farm and Ranch Labor — Include gross salaries and wages, commissions, dismissal pay, vacation pay, and paid bonuses paid to hired workers, family members, hired managers, administrative and clerical employees, and salaried corporate officers. Also, include supplemental cost for benefits such as employer's social security contributions, unemployment compensation, workmen's compensation insurance, life and medical insurance, pension plans, etc.

Contract Labor — includes the labor costs of workers furnished on a contract basis by a labor contractor, crew leader, or cooperative for harvesting vegetables or fruit, shearing sheep, or similiar farm activities. Do not include costs for building or repair work done by a construction contractor. Include the cost of customwork or machine hire in item 11.

Repair and Maintenance Expenses for the Upkeep of Buildings, Motor Vehicles, and Farm Equipment — Include the cost of repairs and upkeep of farm machinery, vehicles, buildings, fences, and other equipment used in the farm business. Do not include repairs to vehicles not used in the farm business or for equipment used only for performing customwork for others. Do not include expenditures for the construction of new buildings or the cost of additions to existing buildings. - Include the the cost of additions to existing buildings.

Interest Expense Paid on Debts — Report all interest expenses paid in 1987 for the farm business. Include interest on loans secured by land and buildings (real estate) in item 12a. Include all loans not secured by real estate such as for fertilizer, feed, and seed in item 12b. Include interest paid on CCC loans. Do not include interest essociated with activities not related to production of crops or livestock on "this place" such as land or buildings rented to others, packing sheds, or feed mills that provide services to others. Do not include interest on owner/operator dwelling where amount is separated from interest on other land and buildings on "this place."

Cash Rent Paid for Land and Buildings in 1987 — Report rent paid in cash during 1987 for land and buildings in "this place." Do not include rent paid for operator dwelling or other nonfarm property. Do not include the value of shares of crops or livestock paid to landlords.

Property Taxes Paid — Include real estate property taxes you paid on the acres and buildings you operated and used in the farm business.

Do not include:

- a. Property taxes on land or buildings rented to someone else
- b. Taxes paid by landlords
- Property taxes paid on other property not associated with the farm business
- d. Income and excise taxes

All Other Production Expenses — Farm production costs not previously listed should be reported here. In addition to items listed on the report form, include bookkeeping charges, tax preparation fees, postage, advertising, commission for sale of cattle, and fees paid for farm-related advice or for farm consultants. Do not include depreciation or expenditures for the purchase of land and buildings or new or used machinery.

► Section 24 — COMMERCIAL FERTILIZER AND LIME

Report acres on which commercial fertilizer (items 1 and 2) or lime (item 3) was applied during 1987. If any acreage was fertilized or limed more than once, report acres ONLY ONCE in each item. Report expense for commercial fertilizer purchased, excluding lime, in section 23, item 4.

▶ Section 26 - MACHINERY AND EQUIPMENT

The estimated market value in item 1 refers to ALL machinery and equipment kept primarily on "this place" and used for the farm business. Report the value in its present condition, not the replacement or depreciated value. Specialized equipment, which is an integral part of a building, should be included as a part of the value of land and buildings.

► Section 27 — ESTIMATED CURRENT MARKET VALUE OF LAND AND BUILDINGS

The value for each of the three listed categories should be your estimate of the value of the land and buildings if they were sold in the current market. The real estate tax assessment value should not be used unless that value represents a full market value assessment and the land and buildings could reasonably be assumed to be sold at that price. Do not deduct real estate marketing charges from your estimate. Report the total value, not the value on a per acre basis.

► Section 28 — INCOME FROM FARM—RELATED SOURCES IN 1987

Item 1 through 4 refer only to those income producing activities for which you use part of the land, machinery, equipment, labor, or capital normally used on "this place," and which you do not consider as entirely separate from your farming activities. Report gross amounts received before taxes and expenses.

Item 1 — Customwork — Do not report income for customwork or agricultural services provided to others if operated as an entirely separate business from your agricultural operations.

Item 2 — Rental Income — Do not include rental income from nonfarm property.

Item 3 — Forest Products — include only those forest products or Christmas trees cut from "this place," not items cut from other nonfarm timber acreage. Do not include income from saw mill business.

Item 4 — Other Farm-Related income — Include income from hunting leases, fishing fees, and other recreational services, sales of farm by-products, and other business or income closely related to the agricultural operation on "this place." Include dividends for business done with farmer-owned cooperatives. Do not enter previously reported farm sales or income from investments not associated with the farm. Do not include retirement pensions or social security benefits received.

DUE BY FEBRUARY 1, 1988				VIB No. 0807-0534: Approval Ex	pires September 30, 1989					
FORM 87-A0400 U.S. DEPARTMENT OF COMMERCE (3-13-87)	NOTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law YOUR REPOR THE CENSUS BUREAU IS CONFIDENTIAL, it may be seen only by sworn Census employees and may be only for statistical purposes. Your report CANNOT be used for purposes of textition, investigation, or regula									
	The law also prov	ides that copies retained in	our files are immune i	rom legal process.						
	in corresponder	nce pertaining to this repo	t, please refer to you	r Census File Number	(CFN)					
CENSUS OF AGRICULTURE				87-A0400						
AG CENSUS USA	Г			87-20-00						
				•						
Please complete this 1201 East Tenth Street Jeffersonville, IN 47133										
Note — If your records are not available, reasonable estimates may be				*						
used. If you cannot file by February 1, a time extension request may be sent to the above address. Include your 12-character Census File Number (CFN) as shown in your address label in all correspondence to us.				:						
If you received more than one				į						
report form, enter extra A Census File Number(s) here and return extra copies with				1	5.00					
your completed report. A				į	A to the					
CENSUS	-									
		orrect errors in name, addres	s, and ZIP Code. ENT	ER street and number if n	ot shown.					
SECTION 1. 1. At any time during 1987, did you plant, grow, or have any:		SECTION 4 : PART A — CROPS	HARVESTED fo	om "THIS PLACE"	' in 1987.					
Hay or tobacco? Fruit, nut, or citrus trees; grapevir Corn, wheat, or other grains? Vegetables, melons, or berries?		(Do not include crops gro			Gross value of					
Other crops? Greenhouse or nursery crops?		1. Hay crops —	Acres None harvested	Quantity harvested	crops sold					
Yes No. 2. At any time during 1987, did you raise, sell, or keep any:		a. Alfalfa and alfalfa mixtures	103	104 Tons.	Dollars Cents 782 00					
Cattle, hogs, sheep, or goats? Horses or ponies?		b. Small grain hay	106	107 Tons,						
Chickens or other poultry? Bees? Other animal specialties?		c.Wild hay	112	113 Tons, dry						
☐ Yes ☐ No		d.Other hay —	109	110	782					
If you answered YES to EITHER of these questions, go to SECTION If you answered NO to BOTH of these questions, go to SECTION 1		Specify kind	- 0 067	Tons, dry	\$ 100					
SECTION 2. ACREAGE IN 1987 Report land owned, rented, or use		2. Corn for grain or seed	088	Bu	\$ 00					
your spouse, or by the partnership, corporation, or organ which you are reporting. Include ALL LAND, REGARDLES	ization for	3. Soybeans for beans	073	Bu. Bu.	\$ 00					
LOCATION OR USE — cropland, pastureland, rangeland,		4. Wheat for grain	O94 I	95 Bu.	8 1 00					
woodland, idle land, house lots, etc. None Num		5. Tobacco — all types	O97 /1	O Lbs.	8 00					
1. All land owned	<u> </u>	6. Potatoes, Irish —(Do not include those grown								
All land rented or leased FROM OTHERS, including land worked by you on shares, used rent free, in exchange for		for home use.)		O Cwt.	\$! 00					
services, payment of taxes, etc. Include leased Federal, State, and railroad land. (DO NOT include land used on a per-head		7. All vegetables for sale	None Total a	cres Dollers Cents						
basis under a grazing permit.)		for home use.)	i U	/10 \$ 00						
3. All land rented or leased TO OTHERS, including land worked on shares by others and land subleased. Also complete item 5 below.	12 12	Specify kind(s)		/10						
4. Acres in "THIS PLACE" — ADD acres owned (item 1)	46			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
and acres rented (item 2), then SUBTRACT acres rented		B. All fruit and nut orchar			Dollars Cents					
TO OTHERS (item 3), and enter the result in this space.	Fr A. Triange	vineyards, and berries		/10 Lbs.	9 00					
If the entry is zero please refer to the information Sheet, section 2.		kindis) {		/10 3 Lbs.						
5. Of the land you rented or leased to others, how many none oss acres did you own?	Acres	9. Other crops — For addition Report quantity hervested	onel crops, enter the cr	op name and code from the	ist below.					
County name	State	TIGACITY CONTINUES OF THE VOSTOR	Acres	- Common and the comm	Gross value of					
6. In what county was the largest value of your agricultural products raised or produced?		Crop name	Code harvested	Quantity harvested	Dollars Cents					
SECTION 3. LAND USE and IRRIGATION				1	9 00					
PART A — How were the ACRES in this place used in 1987? None Num	nber of acres			1	\$ 00					
Cropland harvested — Include all land from which crops were harvested or hay was cut, and all land in orchards, ctrus		f more space is needed, use a se roo name		Crop name	Code					
groves, vineyards, and nursery and greenhouse crops. 2. Cropland on which all crops falled — (Exception: Do not		larley for grain (bushels) Corn for silage or green chop (t	079 079	Oats for grain (bushels) Sorohum for grain-mile (b	ezshels) 082					
report here land in orchards and vineyards on which the crop falled.)		onton (bales)		Other crops (pounds) — S						
or cropland in cultivated summer fallow			LACE" in 1987	Street Company						
4. Cropland used only for pasture, woodland pastured, and other pastureland and rangeland.	- F	rom the list below, enter		Acres in the open						
5. All other woodland, wasteland, houselots, etc. not		Crop name Co	Square feet under glass or	in 1987	Sales in 1987					
reported in items 1 through 4 above.	nber of acres		other protection	Whole acres Tenths	Dollars Cents					
1. How many acres of harvested land were irrigated? Include	Irrigated	f more space is needed, use a se		<u>i /10.15</u>	i_00					
fruit and nut crops.	1 8	trop name ledding plants (include vegeta	ble plants) . 479	Crop name Potted flowering plants .	Code 710					
2. How many acres of pastureland, rangeland, and any other lands not included in item 1 above were irrigated?	E.N	out flowers and cut florist gree lursery crops — omementals, and nut trees, and vines	fruit	Follage plants Greenhouse vegetables Other — Specify						
PENALTY FOR FAILURE TO REPORT		mile track deposit to the section of the	CONTINU	E ON DEVERSE SIDE .						

SECTION 56 LIVESTOCK and POULTRY								T -	PART E - HOR	RES OT	HER LIVESTOC	K ANIMAI	SPECIAL	TIES, and I	FISH
INVENTORY						1	FARI E - NON	1020, 01	INVENTORY Number on this	Total qua		es value of			
•	PART A -	CATTLE and CALVES	3	None	, N	iumber on thi	8	1		None	Number on this place Dec. 31, 1987	1		Dollars	Cents
				None	603	8 Dec. 31, 1	98/		Horses and poni of all ages	ies	53 0	831	832		00
1.	CATTLE ar	nd CALVES of all ages		🗆			Total	1	Or all ages		539	840	umber \$	1	1 00
1	a. REFE CO	WS — Include beef helfers	h	_	804		Beef	1_				841 P	umber bunds		1 00
l	had calve	ed		□	805		cows	Į 2.	Colonies of bees		843	944	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		00
		WS kept for production of r sale or home use — <i>Inclu</i>						1				N N	umber	•	i
	milk cow	rsale of nome use — inclu rs and milk helfers that hed	de ary i caived	🗖			Milk cows	з.	Milk goats		<u> </u>	1	alions ilk \$		00
							-	1			847	848 N	umber 850	,	1
			None		Dollars	of sales Cent	_	۱4.	Angora goats .			849 p	ounds ohsir		00
2.		IRY PRODUCTS sold in 19	87 – —	814	2011010	1 00	7	8.	Other livestock,	fish,					1
	Include milk	, cream, butter, etc	L			. 00	ᆜ		animal products. (Enter name/code fro						<u> </u>
		and CALVES SOLD						ı		1		1 .	2		00
1	include a	HIS PLACE IN 1987		Numbe		Gross value		Nan	ne ———Cod me/gode		Name/oode	<u></u>	uentity \$		1 00
	this place feeding.	to a feedlot for further	None	in 1		Dollars 809	Cents	Mul	les, burros, donkeva	s 233 ¹	Rabbits and their t	selts 354	Other lives	tock, fish,	857
l a.		than 500 pounds	🗆		- 1	•	. 00	223.25.0	k and their pelts .				and their	TOUCUS	. 007
		·	_		811				INT CCC LOAN		ans. <i>incl</i> u	de requier			
4.	4. Cattle - include calves 500 pounds or more \$ 00								nount received d reserve loans,	even if re	deemed or forfe	ted. No	e Do	liars	Cents
l	a. Of ALL cattle sold, how many were FATTENED on this place on GRAIN or							Son	city crop(s)			Г	886	į	00
1	CONÇEN	TRATES for 30 days or m	ore				00	Dec 17 - 17 - 17	A ME E-PROPERTY PROPERTY OF THE PERSON OF TH	ments re	ceived for part	icipation in		FARM	
-		D for SLAUGHTER? HOGS and PIGS		<u> </u>		INVENTORY	1 00	1		DGRAMS	In 1987 (DO A	OT INCLUD	CCC loan	s.)	
	FARID -	node and rige			N	lumber on thi	•	İ				No		ilars	Cents
				None	9180	e Dec. 31, 1	987	┨╻.	Amount receive	d in cash			\$	Į.	00
١,	HOGS and	PIGS of all ages		. 🗆	l		Total	2.	Value of certification	ates recei	ved - payment	-in-kind	085	i	
١"		1 100 0: an ages		. —	816		10181	Transport of the	(PIK) or commod						00
	a. HOGS and PIGS used or to be used for breeding Breeding							1833	TIONS Ach	es in this ERAL ac	piace SET ASI reage reductio	DE, DIVER n program:	ied, or it in 1987	LED unde	er
								1			•		None	Number of	facres
			None	Numbe in 1		Gross value Dollars	Of sales Cents	1.	How many acres	s were se	t aside (or divert	ed) under		682	
2.	HOGS and P	IGS SOLD from this	_	820		821	1	1	ANNUAL comm How many acres	•	• •		⊔	683	
	place in 198	37 <i>.</i>				\$ 123	00	Ľ	RESERVE PROG	RAM (10	year, CRP)?		🗆	ļ <u> </u>	
3.	Of the hogs a	and pigs sold, how many v ER PIGS for further feedir	were	822	1	523 \$	00	SE			RISTICS and C		N OF OP	ERATOR	
•	PART C — SHEEP and LAMBS INVENTORY NUMBER SOLD							1.		-	ner or person it				ı
	Number on this In 1987								RESIDENCE - place?		operator live o	11 (1115	☐ Yes	2 🗆 N	
	824 825						2.	PRINCIPAL OC	CUPATIO	N - At which					
1.	SHEEP and	HEEP and LAMBS of all ages					occupation did	the opera	ator spend the	928	_	_			
	a. EWES 1 year old or older						majority (50 percent or more) of his/her worktime in 1987? For partnerships consider all members of the partnership together								
_	•	^	ne 527		1828	*************	0000000000	i				929	orian	cning	
		LAMBS SHORN	7	Numbe	1	Pounds wooi		3.	OFF-FARM WO	RK — Ho	w many days o	lid the	☐ None		
					oss value	T	٦ .		place in 1987?	-Include	work at a nonfam	job, 2	□ 1-48	•	
3.	What was th	e gross value of sales of	None		Dollars	Cent	•		business, or on so include exchange	farmwork.)	(`	50-8		
	SHEEP, LAM	BS, and WOOL from this		829				ı					_	-149 days -199 days	
_		7?	ليا ٠٠٠٠	∤	NVENTO	00	ــــــــــــــــــــــــــــــــــــــ	1					_	ays or mo	1
•	PART D -	POOLINI		1 1	Number o	on Nur	nber 1 1987		In what YEAR d	lid sha a-	eretor besin to	200		., _ 3	-
1.	HENS and P	ULLETS	1	None De	this plac c. 31, 11	387 į	1 100/		any part of this			· · · · · · -		_ Year	1
		PULLETS of laying age .			2	893		I _	105-1			925		V	,,
	b. PULLETS	3 months old or older not	yat of	_ 65	4	895		1 ⁵ ··	AGE of operato	or	• • • • • • • • • • • • • • • • • • • •	924	□ 	_ Years o)IQ
	laying age	e for layer replacement .				 }		l					☐ White		
		S under 3 months old fonent			•	18		۱.,	BACE of occur	•				ican Indiar	.
_	•			_ =	9	800		1 "	RACE of operat					or Pacific	
2.	BRUILERS, 1	fryers, other meat-type of	chickens	90	ò	901		ı				- 1	island	ler	
3.	TURKEYS fo	or slaughter (Do not include	breeders.)					l				1.	☐ Other	— Specify	
4.	OTHER POU	JLTRY (Enter name/code fr	om below.)			1						926			
	Doubteu name		Code					7.	SEX of operato	ır		1	☐ Male	2 ☐ Fe	emale
	Poultry name_ Name/code	Name/			Nen	e/code		1	SPANISH ORIG		ne operator of S	panish 927			
	Turkey hens ke	pt Geese	or squab	. 905	Qual	ther poultry —	. 912		origin or descen	nt (Mexic	an, Puerto Rica	n,	☐ Yes	2 🗆 N	_
					. две	user poultry			Cuban, or othe	r_Spanisi	n)/	1	I Yes	2 L ∐ Ni	0
	for breeding Ducks		nts	. 910	! Spe	rcify	. 914			2011.00	MOI ETIMO TI				
	for breeding Ducks	904 Pheasar	nts	. 910	l Spe oss value	of sales]		HON10 PER	ISON CO	MPLETING TH	IIS REPOR			
8.	for breading Ducks		None	. 910	! Spe	rcify]	SEC		Area code	MPLETING TH	IIS REPOR	- Pleas		

Page 2

INFORMATION SHEET 1987 UNITED STATES CENSUS OF AGRICULTURE

Special Reporting Instructions

1. Who Should Report

WE NEED A REPLY FROM EVERYONE RECEIVING A REPORT FORM, INCLUDING individuals, landlords, tenants, partnerships, corporations, institutions, and THOSE NOT CONDUCTING AGRICULTURAL OPERATIONS. Each case included in the census has a unique Census File Number (CFN). In order to make the census results as complete and accurate as possible, we need to obtain information about every CFN.

2. If You Received More Than One Report Form for an Operation

Complete only ONE report form for an operation. Write "Duplicate" near the address label of each extra report form. Also, write the 11-digit census file number(s) of the DUPLICATE report(s) ON THE COMPLETED REPORT in the space provided to the left of the address label. Return the extra report(s) in the same envelope with your completed report form so that we can correct our records.

3. If You No Longer Farm

If you had agricultural operations at any time during 1987, please report all agricultural activity during the year. Report all land on your census form that you owned or rented. Also, report your 1987 crop and livestock production and 1987 sales.

Explain on the first page of the report form (or on a separate sheet of paper) that you quit farming or ranching and give the approximate date and the name and address of the present operator, if known.

4. If You Never Farmed or Have No Association With Agriculture

Please write a note on the report form near the address label explaining this and return the form so that we can correct our records. In our efforts to make the census as complete as possible, we obtained lists from various sources. We tried to eliminate duplicate and nonfarm addresses, however, it was not always possible to do so.

5. If You Have More Than One Agricultural Operation

Complete a report form for EACH SEPARATE and DISTINCT production unit, i.e., each individual farm, ranch, feedlot, greenhouse, etc., or combination of farms, etc., for which you maintain SEPARATE records of operating expenses and sales, livestock and other inventories, crop acreages, and production.

6. If You Have a Partnership Operation

Complete only ONE report for the entire partnership's agricultural operation and include all partners' shares on the one report. If members of the partnership also operates separate farms or ranches in addition to the partnership farming operation, separate report forms should be completed for each individual operation.

If two or more report forms were received for the same operation, mark each additional form as a "Duplicate." Return the duplicate report(s) in the same envelope with the completed partnership report, where possible, or write a note on the duplicate report, such as, "(Name of partner) has completed a report for the partnership (provide name and CFN of partnership.)"

7. Landlord's or Contractor's Share

If you rented or leased land from others or had a contract for the production of agricultural products, include both your share and the landlord's or contractor's share of the production, sales, and expenses so your census report form will be complete for "THIS PLACE."

If you do not know the landlord's or contractor's share, include your BEST ESTIMATE. If you do not have records available for all data Items, use your best estimate.

8. How to Enter Your Response

Enter your replies in the proper spaces, on the correct lines, and in the units requested, i.e., dollars, bushels, tons, etc. Write any explanation outside the answer spaces or on a separate sheet of paper. All dollar figures may be entered in whole dollars. CENTS ARE NOT REQUIRED.

Enter whole numbers except where tenths are requested, such as acres of potatoes harvested. If you have 1/2, 1/3, on 1/4 of an acre, convert to tenths. For example, convert 1/2 to 5/10, 1/3 to 3/10, 1/4 to 2/10.

The census report form will contain sections and questions which do not apply to you. When this occurs, mark the "None" or "No" box and go on to the next item or section.

Instructions For Specified Sections

Section 2 — ACREAGE IN 1987

Your answers to this section will determine the land (Acres in "THIS PLACE") referred to in the rest of the report form.

When answering the acreage questions, include the land associated with your agricultural operations in 1987 whether in production or not. Include all land that you owned or rented during 1987 even if only for part of the year. Do not include any unrelated residential or commercial land.

Report all land in section 2 in whole acres.

Item 1 — All Land Owned — Report all land owned in 1987 whether held under title, purchased contract or mortgage, homestead law, or as heir or trustee of an undivided estate. Include all land owned by you and/or your spouse, or by the partnership, corporation, or organization for which you are reporting.

Item 2 — All Land Rented or Leased FROM OTHERS — Report all land rented by you or your operation even though the landlord may have supplied materials or supervision.

INCLUDE in item 2:

- a. Land for agricultural use that you rented from others for cash
- b. Land you worked on a share basis (crop or livestock)
- c. Land owned by someone else that you used rent-free
- d. Federal, State, Indian reservation, or railroad land rented or leased by the acre

DO NOT INCLUDE in item 2:

Land used on a per-head or animal unit license or permit basis, such as section 3 of the Taylor Grazing Act, National Forest, or Indian reservation permit land.

Item 3 — All Land Rented or Leased TO OTHERS — Include all land rented out for any purpose if it was part of the acreage reported in items 1 and 2. A report form will be obtained from each of your tenants to cover the operations on that land.

INCLUDE in item 3:

- Owned land rented to others for cash or a share of crops or livestock
- Land you rented from someone and then subleased to someone else
- c. Land worked for you by someone for a share of crops or livestock
- d. Land which you allowed others to use rent-free

Item 4 — Acres in "THIS PLACE" — This figure will show the total of all land you operated at any time in 1987.

If item 4, Acres in "THIS PLACE" is "O" and:

- a. You raised any crops or had any livestock or poultry on "THIS PLACE" in 1987, complete the report.
- b. All your land was operated by a renter or sharecropper, skip to and complete section 10, and explain briefly, "All land rented out," etc. Mail form in return envelope.
- c. You did not have any agricultural activity on owned or rented land in 1987, complete section 10 and explain briefly, such as "retired," "sold farm," and date. Give name and address of current operator if known and return form.

Section 3 — LAND USE AND IRRIGATION

This section is used to classify the acres in "THIS PLACE" reported in section 2, item 4. Do not include any acres you rented to others reported in section 2, item 3. The sum of the acres entered in various categories should equal total acres in "THIS PLACE."

Land Used for More Than One Purpose — Do not report the same acreage for more than one of the listed purposes. If part or all of your land was used for more than one listed purpose in 1987, report that land only in the first category listed. For example, If you harvested a crop and later used the same land for pasture, report the land in part A, item 1, "Cropland harvested."

Double Cropping — When more than one crop was harvested from the same land in 1987, report that land only ONCE as "Cropland harvested," in part A, item 1 of this section.

Interplanted Crops — If you interplanted crops, such as cotton in an orchard, report the total land used for both crops only ONCE, as "Cropland harvested," in part A, item 1.

Skip Row Planted Crops — Report the acres that represent the total nonplanted or skipped rows as "Cropland idle," part A, item 3, the acres that represent the planted rows should be reported as "Cropland harvested," part A, item 1.

Irrigation is defined as land watered by artificial or controlled means — sprinklers, furrows or ditches, spreader dikes, purposeful flooding, etc. Include acres that receive supplemental, partial, and/or preplant irrigation. Do not report water applied in transplanting tobacco plants, trees, or vegetables as irrigation.

► Section 4 — CROPS

This section provides space for reporting crops harvested during the 1987 crop year from the land shown in section 2, item 4 (Acres in "THIS PLACE") of your report. A few crops are already listed on the form. For these crops, just report acres harvested, quantity harvested, and value of sales. If you produced crops not listed, write the name of the crop and code from the list provided and report the acres harvested, quantity harvested, and the value of sales.

DO NOT INCLUDE:

- a. Any crops grown on land rented or leased TO OTHERS, or worked by others on shares during 1987.
- b. Crops or crop products purchased from others and later sold.

Acres Harvested — Enter the acres harvested in 1987. Round fractions to whole acres except where tenths are requested by "/10" in the reporting box, such as potatoes.

Quantity Harvested — If your unit of measure is different than the unit on the report form, please convert your figure for the quantity harvested to the unit requested. If the harvest was incomplete by December 31, 1987, please report the quantity harvested and the estimated quantity to be harvested.

Gross Value of Crops Sold — Report the value of all crops sold from "THIS PLACE" in 1987, regardless of the year they were harvested or who owned the land. Be sure to report gross value before deducting expenses and taxes. Include Government CCC loans received for "THIS PLACE" in 1987. Include payments received in 1987 from cooperatives or marketing organizations for crops produced on "THIS PLACE."

Item 7 — Vegetables — Report acres of vegetables hervested FOR SALE or commercial processing. Do not include vegetables grown for home use. Report the total acreage of each vegetable crop harvested.

Item 8 — Fruit Orchards, Citrus, Vineyards, and Nut Trees — Report only if total of 20 or more trees and vines, include those for home use as well as those maintained for sale of their production. Acres in trees and vines that have been abandoned should not be included, these acres should be included in section 3, part A, item 3 "Cropland idle."

If crops other than fruit and nut trees and vines were interplanted with trees or vines, report the total acres for the orchard crop in item 8 and the total acres of the interplanted crop in the appropriate item.

Item 9 — Other Crops — To report: (1) find the crop name and the code number from the list under item 9; (2) enter crop name and code in the first two columns of the first available answer line under item 9; (3) enter the information that is requested in the remaining columns. If you harvested a crop not listed, use the "OTHER" code and specify the crop name. If you need additional space, use a separate sheet of paper to write the crop name(s), acres and quantity harvested, and gross value of crop(s) sold.

Section 5 — LIVESTOCK, POULTRY, OTHER LIVESTOCK, OR ANIMAL SPECIALTIES

Parts A, B, C, and D — LIVESTOCK AND POULTRY

Animals and Poultry to Include In the Report — Report all animals, poultry, and animal specialties on "this place" (section 2, item 4) on December 31, 1987. Include all owned by you and any kept by you for others. Include animals on unfenced lands, National Forest land, district land, cooperative grazing association land, or rangeland administered by the Bureau of Land Management on a per-head or lease basis. Animals in transit on December 31, 1987, or animals on a short-term pasture (such as wheat pasture or crop residue) on a per-head or lease basis should be reported by the person who had control of the animals.

Animals and Poultry to Exclude from the Report — Do not report animals or poultry kept on land rented to others or kept under a share arrangement on land rented to others. Do not include animals quartered in feedlots which are not a part of "this place." Animals kept on a place not operated by you are to be included on the report for that place.

Animals Bought and Sold — DO NOT REPORT ANY ANIMALS BOUGHT AND THEN RESOLD WITHIN 30 DAYS. Such purchases and sales are considered "dealer" transactions, and are not included in this census.

Number Sold — Report all animals and poultry sold or removed from "this place" in 1987, without regard to ownership or who shared in the receipts. Include animals sold for a landlord or given to a landlord or others in trade or in payment for goods or services. Do NOT report number sold for any livestock or poultry kept on another place.

Dairy Termination Program or "Whole-Herd Dairy Buy-Out Program" — The amount received in 1987 from the Government under the dairy termination program should be included in section 7 item 1. Dairy cattle and calves sold should be reported in section 5, part A.

Animals Moved to Another Place — For animals moved from "this place" to another place, such as for further feeding, report animals as "sold" and give your best estimate of their market value when they left "this place."

Fat Cattle Sold — Cattle fattened on grain or concentrates for 30 days or more and sold for slaughter are reported in section 5, part A, item 4a.

DO NOT INCLUDE WITH FATTENED CATTLE SOLD:

- a. Cattle and calves sold for further feeding
- Dairy cows fed only the usual dairy ration before being sold
- c. Veal calves, or any calves weighing less than 500 pounds

Value of Sales — Report the total gross value of animals and poultry sold or removed from "this place" in 1987 without deducting production or marketing expenses (cost of feed, cost of livestock purchase, cost of hauling and selling, etc.). If the sale price or market value is not known, give your best estimate of their market value when they left "this place." Do NOT report the value of sales of any livestock and poultry owned by you but kept and sold from a place you did not operate.

Contract and Custom Feeding Operations — Livestock or poultry kept by you on "this place" on a contract or custom basis should be included on this report REGARDLESS OF OWNERSHIP. Report as "INVENTORY" numbers of animals or poultry on the place on December 31, 1987. Report as "SOLD" animals and poultry kept on a contract or custom basis and removed or sold from the place in 1987. If the sale price or market value is not known, give your best estimate of the market value of the animals or poultry when they left the place.

The person who furnished the housing and labor should report the poultry operation on his/her report form regardless of who owned the blrds. Report as sold the number of poultry that were taken or moved from the place in 1987.

Part E — HORSES, OTHER LIVESTOCK, ANIMAL SPECIALTIES, AND FISH

If you owned BEES — Report all colonies or hives of bees and honey operations conducted by you, regardless of where the hives were kept most of the year. Report hives or colonies, pounds of honey sold, and value of sales.

Other Livestock and Livestock Products — Include in all other livestock and livestock products manure, besswax, and any other animal products sold from "this place" in 1987. Mink pelts and rabbit pelts should be included in number sold and value of sales, but not in inventory.

Fish and Other Aquaculture Products — Report quantity sold and gross value of sales for each.

Section 6 — AMOUNT RECEIVED FROM GOVERNMENT CCC LOANS

item 1 — Report the amount received under the regular or reserve program for commodities placed under CCC loan during 1987. Include amount received even if commodity was redeemed or forfeited prior to December 31, 1987.

Do not include CCC loans received to build crop storage facilities or amount received for storage payments in the reserve program.

► Section 7 - FEDERAL PAYMENTS RECEIVED

Report all payments received from Federal Farm Programs in 1987 regardless of whether payment was made in cash or commodity certificates. Include cash payments in item 1. In item 2, include the value of any certificates held or the value received from sale or redemption of any certificates in 1987.

Federal payments include receipts from Federal programs such as deficiency payments, "Whole-Herd Dairy Buy-Out," support price payments, indemnity programs, disaster payments, paid land diversion, inventory reduction payments, payments received for approved soil and water conservation projects, etc.

Section 8 — ACRES SET ASIDE, DIVERTED, OR IDLED UNDER FEDERAL ACREAGE REDUCTION PROGRAMS IN 1987

Include in item 2 all acres in "this place" retired from production and placed, by long-term contract, into the Conservation Reserve Program. Acres placed into the program during and prior to 1987 should be included.

Section 9 — CHARACTERISTICS AND OCCUPATION OF OPERATOR

This section collects information about the operator of "this place" defined as the individual owner, the operator, the senior partner, or person in charge.

For Family or Individual Operation — Complete this section for the operator.

For Partnership Operations — Answer all items, except item 2, for the "Senior Partner." The "Senior Partner" is the individual who is mainly responsible for the agricultural operations on "this place," not necessarily the person senior in age. If each partner shares equally in the day-to-day management decisions, consider the oldest as the "Senior Partner." For item 2 (Principal Occupation) consider all members of the partnership together. Please include as "farming or ranching" worktime at all types of agricultural enterprises, including work at greenhouses, nurseries, mushroom production, ranching, feedlots, broiler feeding, etc.

For Corporation and Other Operations (Cooperatives, Estates, etc.) — Complete section 9 for the person in charge, such as a hired manager, business manager, or other person primarily responsible for the on-site, day-to-day operation of the farm or ranch business.

Item 4 — Year Began Operation — Report the first year the operator or senior partner began to operate any part of "this place" on a continuous basis. If the operator returned to a place previously operated, report the year operations were resumed.