APPENDIX A. General Explanation

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POTENTIAL USES OF DATA

This report provides a comparison of combined government payments and value of sales data by the value of sales size categories used in State table 52, volume 1. Although not all government payments issued by USDA are included as government payments received, the relative distribution of census payments collected should be a valuable tool for analyzing which types and sizes of farms received the payments. The data also allows the opportunity to examine other farm characteristics relative to shifts in farm size when payments are added to sales. Data users can observe the inclusion of payments at the U.S. and the State levels.

A large percentage of government payments can be treated as rent for resources idled to meet national production and conservation policy goals. Payments under the Conservation Reserve Program and Voluntary Diversion Program were issued as direct rent for eligible cropland idled. Crop deficiency payments and other commodity program supports were issued as indirect rent for acres idled and production foregone to meet program requirements. Conservation program payments may also be viewed as an indirect rent for complying with the environmental restrictions on the land enrolled in the program.

LIMITATIONS OF DATA

Data on government payments should not be used as universe totals and are not directly comparable to data published by USDA. Reasons for the differences that exist are discussed in Comparability and Completeness of Data. As a result of the differences, certain limitations apply to the data presented.

A "farm", as it is counted in the Census, is not necessarily comparable to the same "farm" as it participated in USDA programs administered by the Agricultural Stabilization and Conservation Service (ASCS). Farm operators may have restructured or divided their farms to collect multiples of the \$50,000/\$250,000 maximum on deficiency and diversion programs.

In most cases, government payments combined with the value of agricultural products sold, provide a better measure of true economic size than sales alone. This is true as long as the payments received compensate for idle capacity that normally would be brought back into production in the future. Payments for some programs, however, may distort the economic size of farms. The Dairy Termination Program, for example, provided payments for the capital liquidation of entire dairy herds. Many recipients chose to accept most of the resulting payments in a single year. Large lump sum payments received in 1987 overstated the size of those farms, especially since the dairy enterprises on those farms had ceased and the milk cow assets were gone.

The National Wool Act Program also inflated economic size because it often added substantially to sales income without requiring reduced wool production. Its actual intent was to increase production of wool by U.S. farmers. Similarly, storage program payments were made for the use of storage facilities and were not directly related to the size or potential production of the farm.

These and similar programs weaken the concept that government payments are equivalent to rent and that their inclusion in income provides a better measure of farm size. Because reported payments were a composite of payments from all programs, the data from specific programs were generally not identifiable, and all data were processed and published uniformly. Although government payment data which tend to inflate economic farm size are included with the rest, their relative importance in terms of total disbursements appears to be small. Payments for the National Wool Act, Dairy Termination Program, and crop storage programs amounted to only 8.8 percent of all payments issued by USDA in 1987. Nevertheless, users of the data should be aware of their presence and potential impact on some farms and/or for certain States.

1985 FOOD SECURITY ACT

Agricultural programs in effect during 1987 were authorized under the 1985 Food Security Act (1985 Farm Bill). The 5-year legislation succeeds the Agriculture and Food Act of 1981 and is in effect until September 30, 1990.

The changes enacted by the 1985 Food Security Act resulted in higher levels of direct government payments issued to eligible recipients. During the period between censuses, direct government payments issued and reported by the U. S. Department of Agriculture (USDA) grew from \$3.5 billion in 1982 to \$16.7 billion in 1987. The direct payments consequently represented a much larger share of cash farm income than ever before.

Direct payments to farmers were available in 1987 under several programs. For the purpose of analyzing government payments in this publication, these programs are grouped as follows:

Commodity Programs (feed grains, wheat, cotton, and rice)

- · Deficiency Program
- Voluntary Diversion Program
- · Disaster Program
- · Loan Deficiency Program
- · Marketing Expense Program
- Inventory Reduction Program

Conservation Programs

- · Conservation Reserve Program
- Conservation Bonus Program
- Agricultural Conservation Program
- Forestry Incentive Program
- Emergency Conservation Program
- Water Bank Program
- · Colorado River Salinity Program
- · Rural Clean Water Program
- · Clean Lakes Program

Other Programs

- Dairy Termination Program
- Extended Farm Storage Program
- Extended Warehouse Storage Program
- PIK Storage Program
- · National Wool Act Program
- · Disaster Program for Crops
- Disaster Program for Noncrops
- Emergency Feed Program
- Animal Waste Management Program
- Milk Diversion Program
- Dairy Indemnity Program

According to the U. S. Department of Agriculture, commodity programs accounted for 78 percent of the total payments issued, and nearly all of the commodity payments were for deficiency and voluntary diversion programs. Under these programs, participating producers of feed grains (corn, grain, sorghum, barley and oats), wheat, cotton, and rice idled or "set aside" 15 to 35 percent of their established acres of these crops. The farmers were

then eligible for deficiency payments that were based on the difference between the market price for their crop and a typically higher target price. Falling crop prices in 1987 widened this difference and led to much higher deficiency payments. Feed grain producers could also set aside an additional 1 to 15 percent of their feed grain acres as a paid land diversion. These voluntarily idled acres were essentially rented by the government to be removed from production and converted to a conservation use.

The Conservation Reserve Program (CRP) was first offered under the 1985 Food Security Act and was designed to encourage conservation of fragile soil and water resources. Eligible landowners could enter bids to idle their highly erodible cropland for 10 years in exchange for annual rental payments. Additional payments were issued for half of the cost of establishing a permanent vegetative cover on the enrolled acres. Conservation Reserve payments accounted for 8 percent of the total payments issued in 1987, according to USDA.

Another new program in the 1985 Farm Bill was the Dairy Termination Program (whole-herd buy-out). Participants agreed to liquidate their dairy herd and refrain from producing milk for 5 years. The dairy cattle were sold for slaughter or export, and the payments were issued under four options over a 5-year period. Dairy Termination payments, based on USDA figures for 1987 represented 3 percent of the total direct payments for the year.

Government payments for commodity programs were limited to \$50,000 per qualified recipient for deficiency and diversion payments. Certain payments such as disaster and loan deficiency payments were exempt from the limit, but the total limitation per recipient was \$250,000. Payments for noncommodity programs such as Dairy Termination, National Wool Act, and Conservation Reserve were not included in the \$250,000 total limitation. Government agencies and Indian tribes were eligible for payments under most programs but were exempt from the limitation rules.

PAYMENTS DATA REQUESTED FROM RESPONDENTS

Respondents to the census of agriculture were requested to report all cash and commodity certificates received in calendar year 1987 as direct payments for federal farm program participation (see section 19 of the Information Sheet, app. D). Operators were to report the face value of any commodity certificates held as well as the value received from sale or redemption of any certificates received in 1987. They were not to include certificates bought or sold other than those received as direct federal farm program payments. The reported payments were not to include Commodity Credit Corporation loans.

COMPARABILITY AND COMPLETENESS OF DATA

The published data are not and should not be construed as an absolute measure of direct payments made under

the 1985 Food Security Act. The government payments published in the 1987 Census of Agriculture were lower than the payments issued by USDA in 1987. Payments published in the census included only about 60 percent of the total direct payments actually paid by USDA that year.

The major reason for the difference is that government payments published in census reports were essentially limited to those payments received by farm operators (an operator of a place selling \$1,000, or normally expected to sell \$1,000 of agricultural products). Most federal farm programs were open to qualified participants who were not farm operators. The 1987 Census of Agriculture did not attempt to collect government payments data from nonoperators.

There were many kinds of nonoperator recipients who were not counted in the census of agriculture. Many of these recipients were landlords and nonoperating investors who did not take an active role in the operation of the farm but were still eligible for government payments. Other nonoperators included "whole-farm" CRP participants, institutional recipients, Dairy Termination participants, and other eligible nonfarm operator recipients.

Places with all cropland enrolled in the Conservation Reserve Program and not otherwise meeting the farm definition were excluded from the 1987 Census of Agriculture as nonoperators and are excluded from this report. For respondents who were on the census mail list and enrolled all cropland in CRP, their land in farms and CRP acres appear in appendix B, volume 1. Because these places did not meet the established farm definition, no attempt was made to fully cover them in the census. For the same reason, government payments received by these places for participating in CRP and other programs are not included in any of the published operator data.

Institutional recipients such as Indian tribes or federal, State, and local governmental agencies were eligible for government payments but were frequently nonoperator landlords. Their payments were not included in the farm operator data, although institutional recipients received some of the largest payments issued by USDA in 1987.

Some nonoperator recipients collected payments from programs not primarily producer-oriented. Benefits under the Clean Lakes, Rural Clean Water, Forestry Incentive, and other programs were available to eligible farm and nonfarm landowners. The recipients of these payments, who were not engaged in a farming operation, were not included in the census of agriculture. Recipients of 1987 payments from the Dairy Termination Program who left farming prior to 1987 were also excluded because of nonfarm status.

The census of agriculture considers a farm to be a complete economic unit that encompasses all contractors, partners, and landlords. The person in charge of the operation typically responded to the census as the farm operator and was expected to report items including value of sales and expenditures for all parties engaged in the operation. The instructions for reporting government payments may not have been uniformly understood, and it is

probable that the operator (respondent) reported only payments he or she received. The primary reason for this was the respondent's lack of information regarding payments issued to landlords and nonoperating investors. Because of the variety of programs open to farm operators and the various options for receiving payments, it was also difficult to determine whether or not the payments reported represented payments received by all parties associated with the farming operation.

Although the government payment totals were less than the actual disbursements by USDA, there is no evidence that the data lack comparability among subsets of the recipients. The regional distribution of payments reported to the census closely parallels the actual distribution pattern of USDA payments issued. Detail may not add to 100 percent due to rounding (see table).

Percent Distribution of Government Payments by Regions and Divisions

Geographic area	Census	USDA (ASCS)
Northeast	1.4 .1 1.3	1.4 .2 1.2
North Central East North Central West North Central	65.6 21.7 43.9	62.8 20.2 42.6
South	20.4 3.5 4.2 12.7	23.5 4.5 4.6 14.4
West	12.6 7.4 5.2	12.5 7.2 5.3

^{*} Less Alaska and Hawaii.

EDITING AND ITEM IMPUTATION

For the 1987 Census of Agriculture, as in previous censuses, all reported data were keyed and then edited by computer. Government payments were generally accepted as reported within a broad range of acceptable values. Known program rules, limitations, and payment formulas were used to guide data editing. However, the parameters used to judge acceptable data had to be broader than the rules dictate for several reasons. Most programs provide for payments split between fiscal years with various options for receipt of the payments. Because the respondents were reporting for calendar year 1987, the payments reported may have come from one or more program years for which payments were issued in 1987.

Conversely, not all payments due from program participation in 1987 were received in that year. There was no way of knowing when an operator began or stopped participating in a particular program or what their level of participation was for previous or subsequent years.

In addition, large edit tolerances were needed to accommodate the many types of program payments that were not commodity or acre related. Participation in other programs could not be known unless the operator noted it on the report form. Large payments for capital liquidation such as the Dairy Termination Program may have been combined with commodity or other payments. When the total payments appeared to be far too large, they were verified or corrected during telephone followup. Adequate tolerances also accommodated respondents who reported payments received but provided no evidence of participation in programs related to land or commodities.

Imputation for government payments nonresponse was made only if other related entries on the report form or presence on a dairy termination special list indicated participation in government programs. If set aside acres, CRP acres, or CCC loans were reported, or if a list code for dairy termination was present, payments based on estimated crop bases, deficiency payment formulas, average CRP rent, number of milk cows last reported, etc., were used to impute payments. The payments were apportioned between cash and certificates based on stored ratios from acceptable reports previously edited.

No attempt was made to impute payments for programs not related to commodities, acres, or milk cows. Imputation was not made for reports that contained no related data to show that the farm was participating in federal farm programs. For a general explanation of editing data and imputation for item nonresponse, see Volume1, *State and County Data*, appendix C.

APPENDIX B. Census Methodology

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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 vielded 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 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.

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:

Cattle and calves-----farms- 842 number- 28,594

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.

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.

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.

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.

"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 State 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. Frequencies designated in column headings in all tables include government payments as part of market value of agricultural products sold.

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 and government payments. 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.

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.

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.

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

The tables 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.

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.

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.

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.

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, sweet-potatoes, 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.

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.

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APPENDIX C. Statistical Methodology

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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 B 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.

Tables A and B quantify 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 these tables 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.

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 \$1,000 to \$ 2,499	01 All crops 02 All live- stock	0 to 69 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.

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 F 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 United States. The estimate of total farms in the United States 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 United States was not adjusted for classification and list duplication errors. Estimates of these errors will be available in the Coverage Evaluation report at the regional and U.S. levels. 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.

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

		All fa	arms	Farms with sales of \$10,000 or more		
item		Total (number)	Whole farm nonresponse estimation (percent)	Total (number)	Whole farm nonresponse estimation (percent)	
Farms		2 087 759	12.6	1 059 573	11.6	
Land in farms Value of land and buildings¹	acres \$1,000	964 470 625 604 167 607	6.2 9.5	829 021 612 481 982 810	5.4 6.3	
Total cropland	farms	1 848 574	12.4	990 696	11.6	
Harvested cropland	acres farms	443 318 233 1 643 633	8.6 12.3	393 245 402 950 974	7.9 11.6	
	acres	282 223 880	8,0	263 656 877	7.6	
Irrigated land	farms acres	291 628 46 386 201	9.7 4.5	195 956 44 528 259	10.0 4.1	
Market value of agricultural products sold		2 087 759	12.5	1 059 573	11.6	
Crops, including nursery and greenhouse crops	\$1,000 farms	136 048 516 1 223 929	4.3 12.2	132 644 656 789 194	4.1 11.5	
Livestock, poultry, and their products	\$1,000	58 931 085 1 379 070	4.8 12.5	57 583 620 729 648	4.6 11.6	
	\$1,000	77 117 431	3.9	75 061 036	3.7 10.6	
Poultry and poultry products	\$1,000	86 005 12 758 270	11.3 .5	53 385 12 742 735	.5	
Livestock and poultry inventory:						
Cattle and calves	farms number	1 176 346	12.4 7.0	604 650 84 103 391	11.6 6.1	
Hogs and pigs	farms	95 847 299 243 398	12.6	172 903	11.3	
Hens and pullets of laying age	number farms	52 271 120 141 880	6.3 12.8	50 989 702 51 537	6.1 11.2	
7 3 3	number	316 503 065	.7	314 188 809	.6	
Livestock and poultry sales:				212 271	44.0	
Cattle and calves	number	1 150 523 72 603 841	12.4 5.0	618 274 67 359 378	11.6 4.3	
Hogs and pigs	farms number	238 819 96 569 359	12.5 6.1	177 586 94 669 837	11.4 5.9	
Broilers and other meat-type chickens		27 645 4 361 975 630	6.0	23 382 4 361 037 533	10.7	
Selected crops harvested:						
Corn for grain or seed	farms acres	627 602 58 701 505	12.5 8.0	487 801 56 701 959	11.6 7.8	
Ann and the second seco	bushels	6 725 001 837	7.6	6 570 214 669	7.4	
Wheat for grain	acres	352 237 53 224 174	12.2 7.7	290 499 51 065 276	11.4 7.4	
	bushels	1 887 103 964	6.8	1 831 284 430	6.5	
Sorghum for grain or seed		89 642	12.6	74 790	11.3	
	acres bushels	9 760 574 633 174 972	8.8 8.6	9 355 929 613 452 427	8.5 8.4	
Soybeans for beans	acres	441 899 55 291 205	12.3 8.2	360 626 53 318 294	11.4 7.9	
	bushels	1 838 053 979	8.0	1 790 124 759	7.8	
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, etc.	_					
(see text)	acres	994 551 57 967 530	12.3 9.1	549 943 47 466 354	11.6 8.4	
Vegetables harvested for sale (see text)	farms acres	60 819 3 467 563	11.9 4.5	39 884 3 385 892	10.9	
Land in orchards		120 434 4 560 163	11.5 4.6	54 168 4 054 131	10.7 3.5	
Selected farm production expenses ¹ : Livestock and poultry purchased	farms	675 677	11.6	429 049	10.8	
Feed for livestock and poultry	\$1,000 farms	19 344 645 1 180 744	2.3 12.1	18 917 000 651 414	2.1 11.4	
Seeds, bulbs, plants, and trees	\$1,000	19 163 364 1 176 932	3.0 12.3	18 650 075 800 331	2.7	
Geeus, buibs, piants, and nees	\$1,000	3 390 762	6.2	3 267 476	11.8 5.9	
Commercial fertilizer	farms	1 379 441	12.1	850 176	11.5	
Agricultural chemicals	\$1,000 farms	6 684 944 1 262 680	6.4 12.1	6 317 661 833 838	6.0 11.5	
Hired farm labor	\$1,000	4 690 243 818 347	5.7 10.6	4 505 094 584 161	5.3 9.7	
	\$1,000	10 866 236	1.8	10 711 299	1.7	
Petroleum products		1 964 062	12.4	1 035 938	11.7	
Interest expense		5 277 227 1 014 945	7.2 11.6	4 822 678 691 815	6.5 10.8	
Estimated market value of all machinery and equipment on place1	\$1,000 farms	8 158 268 2 081 218	6.0 12.5	7 462 028 1 056 937	5.3 11.7	
The state of the s	\$1,000	85 801 360	8.8	71 613 289	7.8	

¹Data are based on a sample of farms.

Table B. Percent of U.S. and State Totals Contributed by Whole Farm Nonresponse Estimation: 1987

Geographic area	Farms (number)	Land in farms (acres)	Value of land and buildings ¹ (\$1,000)	Market value of agricultural products sold (\$1,000)	Harvested cropland (acres)	Corn for grain or seed (acres)	Wheat for grain (acres)	Cattle and calves inventory (number)	Hogs and pigs inventory (number)	Hens and pullets of laying age inventory (number)
United States _	12.57	6.18	9.52	4.31	7.99	8.03	7.75	6.97	6.33	.74
Alabama Alaska Arizona Arkansas California	14.4 - 10.7 12.4 9.3	9.5 - .2 7.0 2.3	10.3 - 1.5 7.4 4.1	3.3 .5 2.5 1.1	8.3 1.1 4.7 2.4	8.8 - 2.6 3.6 1.7	6.3 - .2 3.8 1.7	10.6 1.2 9.7 1.7	8.6 - .4 3.1 4.7	1.2 - .9 1.4 .1
Colorado Connecticut Delaware Florida Georgia	8.5	2.4	4.5	1.2	3.9	2.7	3.5	2.1	3.5	.3
	13.7	9.5	11.4	1.6	7.5	5.8	14.6	5.2	12.4	.2
	12.7	6.3	6.7	1.2	5.6	4.7	6.0	3.4	3.0	2.4
	13.8	4.0	5.1	1.2	3.3	7.7	7.4	5.1	9.1	.5
	13.5	8.1	8.2	2.8	6.4	7.2	5.5	8.6	6.5	.5
Hawaii Idaho Illinois Indiana Iowa	16.3 9.9 13.5 10.6 10.9	1.1 2.5 9.5 7.3 7.9	4.9 3.9 9.1 7.8 7.6	1.6 1.9 7.4 5.0 5.7	2.1 3.4 9.1 6.8 7.5	5.4 8.5 6.3 7.1	2.4 10.6 7.1 7.9	2.6 3.4 9.2 7.3 6.8	11.3 5.8 6.7 4.7 5.7	.6 .4 2.3 .3 2.2
Kansas Kentucky Louisiana Maine Maryland	12.4 12.5 14.4 13.2 15.0	8.6 10.2 7.0 9.7 8.7	8.2 9.3 7.5 10.8 10.0	3.6 7.0 4.0 3.0 2.6	8.7 8.5 5.8 8.0 6.8	5.7 6.6 4.7 3.9 5.8	9.0 5.7 5.4 5.4 6.5	5.3 10.3 10.7 8.3 6.7	6.3 5.8 8.5 16.8 4.8	1.5 .9 1.8 .1
Massachusetts Michigan Minnesota Mississippi Missouri	17.4	13.2	12.8	3.6	11.1	6.8	12.7	8.5	10.7	1.2
	9.4	6.9	6.9	4.1	6.4	5.8	6.5	5.8	4.5	.7
	15.5	11.6	10.5	8.3	10.8	10.3	9.7	11.8	8.0	1.5
	13.9	7.8	7.7	2.8	5.2	7.8	5.1	10.7	6.1	.6
	11.1	10.1	9.3	7.6	9.5	8.7	8.2	10.1	7.3	1.3
Montana	10.9	2.7	4.3	3.4	4.6	4.5	4.7	3.2	4.5	.7
Nebraska	15.0	7.6	9.0	5.8	10.3	10.4	9.8	5.9	8.8	1.1
Nevada	14.5	1.0	4.4	2.0	3.0	1.5	3.4	2.1	4.9	4.5
New Hampshire	10.1	8.0	8.8	2.3	6.4	.9	13.5	4.4	7.0	.9
New Jersey	13.1	8.6	8.1	2.6	7.2	6.5	8.2	7.9	11.7	.7
New Mexico	11.3	.9	2.8	1.3	4.0	2.4	3.4	1.9	3.0	.4
New York	13.1	9.1	9.1	4.5	7.5	4.4	5.3	6.9	8.9	.9
North Carolina	12.1	8.1	8.2	3.1	6.7	6.5	5.6	8.0	1.7	.9
North Dakota	17.1	11.5	10.2	9.2	10.9	7.1	11.0	13.7	11.6	7.0
Ohio	14.0	10.5	10.4	7.1	9.8	8.9	10.2	10.0	7.9	.7
Oklahoma	15.2	9.8	11.0	5.2	9.9	5.5	9.7	8.6	8.0	1.0
	10.3	1.7	5.1	1.8	2.7	2.3	1.4	3.1	5.3	.3
	11.4	9.0	8.4	4.1	7.9	6.6	7.5	7.7	4.4	.4
	15.4	12.4	9.8	2.9	9.6	4.0	–	11.5	7.5	1.3
	14.8	8.2	8.6	3.6	6.9	7.4	6.0	8.6	6.4	.7
South Dakota Tennessee Texas Utah Vermont	16.6	7.6	8.0	8.0	10.5	11.5	8.9	9.4	9.9	2.5
	12.3	9.4	9.5	5.6	7.5	7.5	5.4	9.6	7.4	.9
	13.6	6.1	8.6	3.8	8.9	5.8	8.6	7.1	7.0	.6
	10.4	1.8	5.2	3.0	5.6	4.6	3.1	4.2	8.8	.2
	13.2	9.5	9.9	5.0	7.6	3.1	6.8	6.5	14.6	1.1
Virginia	9.6	6.7	6.5	2.9	5.9	4.8	5.6	6.0	3.2	.8
Washington	7.0	1.3	2.8	1.0	1.7	1.1	1.0	2.0	4.0	.1
West Virginia	8.8	7.6	8.1	4.1	7.6	5.5	6.9	7.5	6.6	3.3
Wisconsin	14.1	11.6	10.7	8.9	10.7	9.1	7.6	11.0	7.3	1.3
Wyoming	8.6	.8	2.8	1.9	3.6	4.5	3.5	2.0	6.8	8.2

¹Data are based on a sample of farms.

Table C. Reliability Estimates of U.S. Totals: 1987

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

		All farm	s	Farms with sales of \$10,000 or more		
Item		Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standar error of estimat (percen	
FarmsLand in farms	acres	2 087 759 964 470 625	.01 .02	1 059 573 829 021 612	.0 0.	
Average size of farm		462	.02	782	.0.	
Value of land and buildings¹ Average per farm Average per acre	dollars	604 167 607 289 387 627	.13 1.42 1.42	481 982 810 455 522 583	.1 1.5 1.5	
Estimated market value of all machinery and equipment1 Average per farm	\$1,000	85 801 360 41 227	.12	71 613 289 67 755	.1 .1	
Farms by size: 1 to 9 acres		183 257	.08	44 642	.1	
10 to 49 acres	acres	673 676 412 437	.11	138 525 73 465	.1 .2 .1	
50 to 179 acres	acres	11 060 844 644 849	.06	1 990 654 244 068	.1 .0	
	acres	67 794 074	.04	28 400 209	.0	
180 to 499 acres	acres	478 294 1 144 420 478	.05 .05	356 450 111 035 593	0. 0. 0.	
500 to 999 acres	acres	200 058 138 540 671	.07 .07	181 018 125 906 324	.0.	
1,000 to 1,999 acres	acres	102 078 138 809 554 66 786	.08 .08	96 399 131 256 283	0. 0. 0.	
2,000 acres or more	acres	463 171 328	.05 .02	63 531 430 294 024	.0	
Total cropland	acres	1 848 574 443 318 233	.01 .02	990 696 393 245 402	.0 0.	
Harvested cropland	acres	1 643 633 282 223 880	.02 .02	950 974 263 656 877	.0 .0	
Acres harvested: 1 to 9 acres	farms	251 578	.07	38 472	.1	
10 to 49 acres	acres	1 056 788 515 651	.08	163 032 142 989	.2	
50 to 99 acres		12 632 558 240 572	.05 .08	4 031 852 158 577	.1 .0	
100 to 199 acres	acres farms	16 784 941 236 389	.08	11 417 897 215 253	.0 0.	
200 to 499 acres	acres	33 159 526 253 322	.07	30 498 661 249 733	.0.	
500 to 999 acres	acres	79 431 652 104 993	.06	78 510 143 104 844	0. 0.	
1,000 acres or more		71 663 136 41 128 67 495 279	.07 (Z) (Z) (Z)	71 572 202 41 106	.0 .0 .0 .0 (2	
Cropland used only for pasture or grazing	acres farms	818 137	.03	67 463 090 392 238	.0	
Other cropland	acres farms acres	64 979 914 794 743 96 114 439	.06 .03 .04	44 273 810 552 081 85 314 715	0. 0. 0.	
rrigated land	farms	291 628	.05	195 956	.0	
Acres irrigated: 1 to 9 acres	acres	46 386 201 81 551	.04	44 528 259 27 342	.0	
10 to 49 acres	acres	295 653 76 149	.11 .15 .12	99 340 42 578	.1 .2 .1	
50 to 99 acres	acres	1 815 521 33 993	.13	1 103 211 28 639	 1. 1.	
	acres	2 378 681	.19	2 024 643	.2	
100 to 199 acres	acres farms	37 235 5 176 452	.16 .16	35 377 4 938 806	.1 .1	
500 to 999 acres	acres	12 579 955 15 389	.12	40 081 12 431 725 15 291	.1 .1 .1	
1,000 acres or more	acres	10 398 151 6 697	.11	10 333 580 6 648	.1 .1 .0	
	acres	13 741 788	.03	13 596 954	.0	
Aarket value of agricultural products sold Average per farm		136 048 516 65 165	.01 .01	132 644 656 125 187	.0 .0	
Value of sales: Less than \$2,500		490 296	.04	-		
\$2,500 to \$4,999		497 957 262 918	.06 .07	-		
\$5,000 to \$9,999	\$1,000 farms \$1,000	945 867 274 972 1 960 036	.07 .07 .07	-		
\$10,000 to \$24,999		326 166	.05	326 166	.0	
\$25,000 to \$49,999	\$1,000 farms	5 244 416 219 636	.06 .08	5 244 416 219 636	.0	
\$50,000 to \$99,999	\$1,000 farms	7 868 658 218 050	.08 .07	7 868 658 218 050	.0 .0 .0	
\$100,000 or more	\$1,000 farms \$1,000	15 661 379 295 721 103 870 203	.07 .03 .61	15 661 379 295 721 103 870 203	.0 .0 .0	
sales by commodity or commodity group:						
Crops, including nursery and greenhouse crops	\$1.000	1 223 929 58 931 085	.02 .02	789 194 57 583 620	0. 0.	
Grains Corn for grain	\$1,000	28 340 524 10 671 890	.03 .04	27 732 246 10 466 826	0: 0: 0: 0: 0: 0: 0: 11: 0: 10:	
WheatSoybeans	\$1,000	4 827 887 9 125 434	.04	4 706 425 8 908 491	.0. .0.	
Sorghum for grainBarley	\$1,000	943 684 711 241	.12	917 966 700 947	.1: .0	
OatsOther grains	\$1,000	223 134 1 837 254	.16 .09	204 679 1 826 912	.11	

See footnotes at end of table.

Table C. Reliability Estimates of U.S. Totals: 1987—Con.

[For meaning of appreviations and symbols, see introductory text]		Ali fa	rms	Farms with sales of	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)		
Sales by commodity or commodity group—Con. Crops, including nursery and greenhouse crops—Con.							
Cotton and cottonseed	\$1.000	4 207 891	.06	4 190 452	.06		
TobaccoHay, silage, and field seeds	\$1,000	1 745 417 2 598 615	.09 .07	1 531 902 2 320 199	.10 .07		
Vegetables, sweet corn, and melons	\$1.000	4 698 083	.04	4 646 363	.04		
Fruits, nuts, and berries	\$1,000 \$1.000	7 084 018 5 774 391	.05 (Z)	6 969 093 5 729 148	.05 .01		
Other crops	\$1,000	4 482 146	.04	4 464 217	.04		
Livestock, poultry, and their products		1 379 070	.02	729 648	.02		
Poultry and poultry products	\$1,000 \$1,000	77 117 431 12 758 270	.01 .02	75 061 036 12 742 735	.01 .02		
Dairy products	\$1,000	16 029 195	.04	16 013 249	.04 .02		
Cattle and calvesHogs and pigs	\$1,000	35 876 720 9 890 644	.02 .05	34 192 002 9 749 261	.06		
Sheep, lambs, and woolOther livestock and livestock products (see text)	\$1,000	791 219 1 771 383	.09 .16	724 709 1 639 080	.10 .18		
	41,000	1 771 500	.10	1 000 000			
Farms by standard industrial classification: Cash grains (011)		458 396	.04	323 368	.05		
Field crops, except cash grains (013)	acres	247 333 797 243 628	.04 .07	231 239 819 96 322	.04 .10		
	acres	73 141 922	.07	58 137 118	.07		
Vegetables and melons (016)	acres	28 801 5 691 805	.22 i .15	16 212 5 141 453	.26 .15		
Fruits and tree nuts (017)	farms	88 323	.10	41 499	.12		
	acres	9 713 039	.12	7 825 072	.11		
Horticultural specialties (018)	acres	31 469 1 976 364	.01 .01	20 710 1 729 272	.01 .02		
General farms, primarily crop (019)		57 888 20 582 262	.16 .15	22 186 16 516 304	.23 .17		
Livestock, except dairy, poultry, and animal specialties (021)	l l	892 267		j j	.05		
	acres	520 675 461	.03 .03	350 061 451 992 893	.03		
Dairy farms (024)	acres	138 311 44 006 857	.08 .08	135 087 43 718 588	.08 80.		
Poultry and eggs (025)	farms	38 494	.12	32 085	.10		
	acres	4 941 114	.14	4 571 411	.12		
Animal specialties (027)	acres	87 855 8 917 131	.13 .22	12 544 1 2 369 407	.34 .36		
General farms, primarily livestock and animal specialties (029)		22 327 27 490 873	.26	9 499 5 780 275	.37 .33		
Farms by type of organization:							
Individual or family (sole proprietorship)		1 809 324	.01	861 293	.02 .03		
Partnership	acres farms	627 559 205 199 559	.02 .08	524 553 455 135 901	.09		
Corporation	acres	153 283 239 66 969	.05	143 085 735 56 354	.05 .10		
	acres	119 375 386	.03	115 661 788	.03		
Other—cooperative, estate or trust, institutional, etc.	acres	11 907 64 252 795	.33 .03	6 025 45 720 634	.43 .03		
Tenure of operator:							
Full owners		1 238 547	.02	444 843	.04		
Part owners	acres farms	317 787 149 609 012	.03 .04	228 380 626 453 887	.04 .04		
	acres	519 814 523	.03	486 557 442 160 843	.03 .09		
Tenants	acres	240 200 126 868 953	.08 .07	114 083 544	.07		
Operators by principal occupation:							
Farming		1 138 179 763 059 909	.02 .02	811 303 703 877 151	.02 .02		
Other	acres farms	949 580	.03	248 270	.07		
	acres	201 410 716	.05	125 144 461	.06		
Operators by sex: Male	farms	1 956 118	.01	1 017 271	.01		
	acres	924 579 864	.02	799 927 092	.02		
Female	acres	131 641 39 890 761	.11 .11	42 302 29 094 520	.18 .13		
Average age of operator		52.0	.01	50.6	.01		
Cropland under federal acreage reduction programs:		1					
Annual commodity acreage adjustment programs	acres	557 726 43 152 685	.04 .04	487 565 42 081 703	.03 .04		
Conservation reserve program	farms	66 105	.14	44 854	.16		
	acres	9 870 669	.18	7 683 340	.18		
Government payments: Amount received in cash	\$1,000	4 678 917	.04	4 528 615	.04		
Value of certificates received	\$1,000	4 967 656	.04	4 741 629	.04		
Net cash return from agricultural sales1:				-			
Net cash return from agricultural sales for the farm unit (see text)		2 087 750 26 430 535	.02	1 058 090 28 199 560	.03 .15		
Average per farm	\$1,000 dollars	26 430 535 12 660	.17 .17	28 199 560 26 651	.15		
Farms with net gains²	1	1 185 467	.03	817 378	.04		
	\$1,000	32 130 850	.11	31 410 548	.11		
Farms with net losses	number \$1,000	902 283 5 700 315	.03 .26	240 712 3 210 987	.08 .34		
Total form production oursesses	1	ł		1			
Total farm production expenses ¹	\$1,000	2 087 734 108 138 053	.02 .05	1 058 087 102 949 351	.03 .05		
Livestock and poultry purchased		675 677 19 344 645	.22 .10	429 049 18 917 000	.24 .10		
Feed for livestock and poultry	farms	1 180 744	.13	651 414	.15		
	\$1,000	19 163 364	.09	18 650 075	.09		

See footnotes at end of table.

Table C. Reliability Estimates of U.S. Totals: 1987—Con.

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

		All fa	rms	Farms with sales of \$10,000 or more		
!tem		Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	
Total farm production expenses1-Con.	4	4 470 000		202 204		
Seeds, bulbs, plants, and trees	\$1.000 \	1 176 932 3 390 762	.12 .14	800 331 3 267 476	.11	
Commercial fertilizer	farms \$1,000	1 379 441 6 684 944	.11 .12	850 176 6 317 661	.10	
Agricultural chemicals	farms	1 262 680	.12	833 838	11	
Petroleum products	\$1,000 farms	4 690 243 1 964 062	.14 l .05	4 505 094 1 035 938	.14 .05 .10	
Electricity	\$1,000	5 277 227 1 436 732	.10 .10	4 822 678 895 430	.10 .10	
Electricity	\$1,000	2 225 206	.13	2 066 448	.13	
Hired farm labor	farms	818 347	.18	584 161	.19	
Contract labor	\$1,000 farms	10 866 236 272 094	.10 .38	10 711 299 180 434	.10 .41	
Repair and maintenance	\$1,000	1 842 984 1 699 949	.31 .08	1 767 730 959 854	.32	
nepair and maintenance	\$1,000	6 361 980	.12	5 754 376	.12	
Customwork, machine hire, and rental of machinery and equipment	farms	767 414	.20	518 400	.21 .32	
Interest	\$1,000 farms	2 176 467 1 014 945	.31 .16	2 033 646 691 815	.32 .16	
Cash rent	\$1,000	8 158 268	.16	7 462 028	.16	
Cash rent	\$1,000	564 136 4 689 455	.23 .24	444 278 4 570 135	.24 .24	
Property taxes paid	farms	1 906 813	.05	949 762	.08	
All other farm production expenses	\$1,000 farms	3 120 405 1 902 916	.14 .06	2 467 724 1 057 580	.16 .03	
, , ,	\$1,000	10 145 866	.10	9 635 981	.10	
_ivestock and poultry: Cattle and calves inventory	farms	1 176 346	.02	604 650	.03	
Beef cows	number	95 847 299 841 778	.02	84 103 391 378 254	.02 .04	
	number	31 652 593	.04	25 489 686	.04	
Milk cows	number	202 068 10 084 697	.07 .05	168 068 9 977 455	.07 .05	
Cattle and caives sold		1 150 523	.02	618 274	.03	
Hogs and pigs inventory	number farms	72 603 841 243 398	.02 .07	67 359 378 172 903	.02 .08	
Hogs and pigs sold	number	52 271 120 238 819	.06 .07	50 989 702 177 586	.06 .08	
riogs and pigs sold	number	96 569 359	.06	94 669 837	.06	
Sheep and lambs inventory		92 489	.12	44 944	.16	
Sheep and lambs sold	number farms	11 059 397 87 856	.10 .12	9 646 324 44 263	.11 .16	
Hens and pullets of laying age inventory	number	9 965 563 141 880	.10 .10	9 010 504 51 537	.10 .16	
Tions and panets of taying age inventory	number	316 503 065	.04	314 188 809	.05	
Broilers and other meat-type chickens sold		27 645	.15	23 382	.14	
Horses and ponies inventory	number farms	4 361 975 630 415 565	.03 .05	4 361 037 533 161 015	.03 .08	
•	number	2 456 951	.09	1 102 283	.13	
Selected crops harvested:	for	607 600	00	487 801	00	
Corn for grain or seed	acres	627 602 58 701 505	.03 .04	56 701 959	.03 .03	
Wheat for grain	bushels farms	6 725 001 837 352 237	.04 .05	6 570 214 669 290 499	.04 .05	
• • • • • • • • • • • • • • • • • • •	acres bushels	53 224 174 1 887 103 964	.05	51 065 276 1 831 284 430	.05 .04	
Cotton		43 046	14			
O((0)	acres	9 826 081	.14 .10	38 371 9 731 859	.12 .10	
Soybeans for beans	bales farms	13 280 143 441 899	.07 .04	13 214 862 360 626	.07 .04	
,	acres bushels	55 291 205 1 838 053 979	.04 .04	53 318 294 1 1 790 124 759	.04 .04	
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, et						
(see text)	farms	994 551	.03	549 943	.03	
	acres tons, dry	57 967 530 128 816 054	.04 .04	47 466 354 112 416 337	.04 .04 .16	
Vegetables harvested for sale (see text)	farms acres	60 819 3 467 563	.14 .08	39 884 3 385 892	.16	
Land in orchards	farms	120 434	.09	54 168	.08	
	acres	4 560 163	.08	4 054 131	.07	

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 D. Reliability Estimates of Percent Change in U.S. Totals: 1982 to 1987

		All farm	ns	Farms with sales of \$10,000 or more		
ltem	;	Percent change	Standard error of estimate (percent)	Percent change	Standard error o estimate (percent	
Farms	number	-6.8	.02	-7.3	.02	
Land in farms	acres	-2.3	.03	2.2	.00	
Value cf land and buildings1: Average per farm	dollars	-16.3	1.19	-18.3	1.2	
Total cropland	farms	-8.1	.02	-8.6	.0.	
Harvested cropland	acres	5	.03	7	.0	
narvesteu cropianu	acres	-9.2 -13.5	.02 .03	-9.6 -13.9	• .0. .0	
rrigated land	farms	4.8	.06	6.8	.0	
	acres	-5.3	.05	-5.0	.0.	
Market value of agricultural products sold		-6.8	.02	-7.3	.0.	
	\$1,000	3.1	.02	3.6	.0:	
Crops, including nursery and greenhouse crops		-9.8	.03	-10.9	.0.	
Livestock, poultry, and their products	\$1,000	-5.3 -9.1	.02 .03	-5.0 -8.4	.0. :0.	
	\$1.000	10.7	.03	11.4	.0. 0.	
Poultry and poultry products	farms \$1,000	-24.6 30.2	.02 .04	-18.2 30.5	.0.	
Colooted form and dusting purposes.	V 1,1212					
Selected farm production expenses1: Livestock and poultry purchased	farms	-10.6	.28	-1.7	.3	
. , , ,	\$1,000	12.6	.19	14.0	.1	
Feed for livestock and poultry	farms \$1,000	-13.2 3.1	.15 .15	-8.2 4.2	.2· .1	
Seeds, builbs, plants, and trees	farms	-7.1	.16	-8.8	.1	
	\$1,000	6.9	.22	7.2	.2	
Commercial fertilizer ²		-4.5	.15	-5.6	.1	
Agricultural chemicals ²	\$1,000 farms	-13.1 12.2	.16 .20	-13.7 2.2	.1 .1	
•	\$1.000	9.5	.22	8.4	.2	
Hired farm labor		-5.9	.25	-3.6	.2	
Interest ³	\$1,000	28.7 -3.3	.21 .22	31.3 -8.1	.2 .2	
mojost	\$1,000	-30.1	.16	-31.8	.1	
Livestock and poultry inventory:	_					
Cattle and calves	number	-13.2 -8.3	.03	-10.5 -5.6	.0. .0:	
Hogs and pigs		-26.2	.05	-21.1	.0.	
Hens and pullets of laying age	number	-5.6 -33.3	.06 .07	-4.6 -32.0	.0i .1:	
Selected crops harvested:	number	1.9	.05	2.7	.0:	
Corn for grain or seed		-12.2	.04	-10.8	.0.	
Sorghum for grain or seed	acres farms	-16.0 -4.3	.03	-16.1 -7.0	.0: .1	
NATIONAL SAN ANNIA	acres	-23.0	.09	-23.7	.0	
Wheat for grain	acres	-21.0 -24.9	.04 .05	-20.9 -25.4	.0. .0.	
Soybeans for beans	farms	-13.6	.04	-12.1	.0	
·	acres	-14.7	.04	-14.4	.0.	
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop etc. (see text)	farms	-5.4	.03	-7.3	.0:	
Vegetables harvested for sale (see text)	acres	2.2 -12.0	.04 .13	2.3	.0: .1:	
	acres	4.1	.09	5.7	0.	
Land in orchards	farms	-2.6	.11	5.3	.1	
	acres	-4.0	.08	-2.3).	

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 E. Reliability Estimates of U.S. and State Totals: 1987

	Farms		Land in	farms	Average value buildings p	e of land and per farm ¹	Estimated marke machinery and		Market value o	of agricultural s sold
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 (\$1,000)	Relative standard error of estimate (percent)
United States -	2 087 759 43 318	.01 .1	964 470 625 9 145 753	. 02 .1	289 387 168 161	. 13	85 801 360 1 115 106	. 12 1.0	136 048 516 1 908 303	.01
Alaska Arizona Arkansas California	574 7 669 48 242 83 217	.1 .1 (Z)	1 026 732 36 287 794 14 355 611 30 598 178	.1 .1 .1	553 000 1 317 765 225 604 583 668	1.3 .8 1.0	22 290 425 285 1 661 321 4 081 738	1.3 .8 .6	17 972 1 628 544 3 320 258 13 922 234	(Z) (Z) (Z)
Colorado Connecticut Delaware Florida Georgia	27 284 3 580 2 966 36 556 43 552	.1 .2 .3 .1 .1	34 048 433 398 400 608 245 11 194 090 10 744 718	.1 .6 .5 .1	458 906 467 677 369 751 543 830 226 217	1.1 3.5 2.8 .8 .7	1 347 073 132 445 158 043 1 243 530 1 409 250	1.1 2.4 2.2 1.1 .8	3 143 131 357 702 443 575 4 351 383 2 814 592	(Z) .1 .1 (Z) .1
Hawaii Idaho Illinois Indiana Iowa	4 870 24 142 88 786 70 506 105 180	.5 .1 (Z) (Z) (Z)	1 721 521 13 931 875 28 526 664 16 170 895 31 638 130	.1 .1 .1 .1	603 435 336 615 402 970 265 446 283 597	.2 1.2 1.3 .6	199 280 1 330 607 5 392 170 3 129 398 5 543 375	.1 1.2 .6 .6 .5	609 740 2 269 404 6 376 801 4 067 684 8 926 799	.1 (Z) .1 .1
Kansas Kentucky Louisiana Maine Maryland	68 579 92 453 27 350 6 269 14 776	(Z) (Z) .1 .2 .1	46 628 519 14 012 700 8 007 173 1 342 588 2 396 629	.1 .1 .3 .2	278 047 135 696 268 630 210 777 366 788	.6 .6 .8 2.4 2.1	3 447 663 2 091 558 1 046 373 240 068 657 693	.7 .6 .9 2.2 1.7	6 476 669 2 075 571 1 340 162 405 484 989 061	(Z) .1 .1 .1
Massachusetts Michigan Minnesota Mississippi Missouri	6 216 51 172 85 079 34 074 106 105	.2 (Z) (Z) .1 (Z)	615 185 10 316 861 26 573 819 10 746 190 29 209 187	.6 .1 .1 .1	346 530 196 065 218 808 215 209 175 612	1.8 .6 .5 .8	198 868 2 347 585 4 736 828 1 187 399 3 007 852	2.4 .7 .5 .9 .7	340 464 2 545 078 5 676 376 1 862 903 3 644 988	.2 .1 .1 .1
Montana Nebraska Nevada New Hampshire New Jersey	24 568 60 502 3 027 2 515 9 032	.1 (Z) .2 .2 .2	60 203 993 45 305 441 9 988 520 426 237 894 426	.1 .1 .7 .6 .4	505 526 344 253 749 936 358 279 396 198	1.0 .6 .7 3.6 2.2	1 488 238 3 549 159 158 576 85 168 340 478	.9 .7 2.0 2.9 1.6	1 547 286 6 667 132 250 458 107 102 496 003	
New Mexico New York North Carolina North Dakota Ohio	14 249 37 743 59 284 35 289 79 277	.1 (Z) .1 (Z)	46 018 005 8 416 228 9 447 705 40 336 869 14 997 381	(Z) .1 .1 .1	582 012 218 934 199 781 366 475 227 341	1.5 1.0 .7 .7	468 262 1 849 206 1 799 492 2 734 073 3 159 112	1.2 .7 .7 .7 .7	1 060 112 2 441 860 3 541 419 2 188 158 3 434 064	.1 .1 (Z) .1
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	70 228 32 014 51 549 701 20 517	(Z) .1 (Z) .6 .1	31 541 977 17 809 165 7 866 289 58 685 4 758 631	.1 (Z) .1 1.7 .2	215 024 299 755 239 333 420 279 201 169	.7 1.3 1.0 2.7 1.3	2 063 371 1 211 480 2 144 508 25 178 639 734	.8 1.1 .7 2.7 1.3	2 714 892 1 846 067 3 077 523 37 786 878 683	.1 .1 .1 .6
South Dakota Tennessee Texas Utah Vermont	36 376 79 711 188 788 14 066 5 877	.1 (Z) (Z) .1 .2	44 157 503 11 731 386 130 502 792 9 989 073 1 407 868	.1 .1 .1 .1	326 333 146 126 374 742 302 838 258 713	1.2 .8 .5 1.4 2.0	1 996 230 1 803 541 5 702 706 499 126 270 641	.8 .7 .5 1.3 1.8	2 719 498 1 617 636 10 548 907 617 882 375 537	.1 .1 (Z) .1 .2
Virginia	44 799 33 559 17 237 75 131 9 205	(Z) (Z) .1 (2) .1	8 676 336 16 115 568 3 372 955 16 606 567 33 595 135	.1 (Z) .2 .1 (Z)	232 374 355 976 130 802 182 950 533 284	1.0 1.2 1.1 .5 1.4	1 350 875 1 537 272 299 941 4 053 360 418 833	.8 .9 1.6 .5	1 588 770 2 919 634 270 639 4 909 869 676 721	.1 (Z) .2 .1 .1
	Harvested	cropland	Irrigat	ed land	Cattle and	calves inventory	Hogs and p	igs inventory	Hens and pulle inver	
Geographic area	Total (acres)	Relative standard error of estimate (percent)	Total (acres)		d of e Tota		of Total	Relative standard error of estimate (percent)	Total	Relative standard error of estimate (percent)
United States	282 223 880 2 231 623	.02	46 386 201 84 054	Į.	ľ	1	1	.06		.04
Alabama Alaska Arizona Arkansas California	28 949 865 817 6 477 365 7 676 287	.2 .2 .1 .1	913 841 2 406 338 7 596 091		9 43 1 1 110 91 1 1 562 24	3 2 . 3 .	2 353 062 573 1 135 414 2 452 930 1 150 931	.5 .2 .5 1.0	2 173 329 318 19 537 876	.3 - .2 .3 (Z)
Colorado Connecticut Delaware Florida Georgia	5 522 216 153 715 441 502 2 240 831 3 298 268	.1 .6 .5 .2 .1	3 013 773 7 245 60 812 1 622 750 640 256		8 89 30 5 31 19	6 . 1 . 4 .	1 258 725 5 5 429 6 49 714 2 156 137 2 1 060 377	.7 5.4 1.0 .9	4 092 767 644 628 10 987 243	.1 .1 1.7 .1 .1
Hawaii Idaho Illinois Indiana Iowa	152 719 4 349 122 20 102 388 10 706 298 20 484 178	.2 .1 .1 .1	148 884 3 219 192 208 105 169 703 92 247		1 1 772 75 7 1 885 44 7 1 236 48	6 . 4 . 0 .	4 47 564 1 76 882 2 5 642 991 2 4 372 294 1 12 983 074	2.8 1.1 .2 .2 .1	1 283 198 3 771 217 23 215 449	.4 .1 .7 .1 .4
Kansas	17 729 394 4 250 284 3 599 678 410 891 1 346 913	.1 .1 .2 .4 .2	2 463 073 37 693 646 677 6 065 50 762	1.0	0 2 343 54 3 813 29 8 119 47	1 . 5 . 5 .	1 1 516 878 2 838 452 3 51 857 5 8 999 3 197 214	.3 .4 1.8 3.9 .8	1 875 912 1 118 839 5 665 233	.5 .2 1.5 (Z) .5
Massachusetts Michigan Minnesota Mississippi Missouri	194 874 6 172 468 16 635 264 4 272 651 11 655 304	.6 .1 .1 .1	20 158 314 953 353 504 636 842 534 795			2 5 9	7 25 816 2 1 227 069 2 4 236 500 179 063 1 2 581 954	2.8 .4 .2 .8 .3	7 152 993 10 255 437 5 883 378	.5 .3 .3 .2 .4

See footnotes at end of table.

Table E. Reliability Estimates of U.S. and State Totals: 1987—Con.

[For meaning of abbreviations and symbols, see introduct		, see introductory	/ texti						Hens and pullets of laving age			
	Harvested	cropland	frrigate	ed land	Cattle and ca	alves inventory	Hogs and	pigs inventory		Hens and pullets of laying age inventory		
Geographic area	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (number)		f Tota		d of the Total	Relative standard error of estimate (percent)		
Montana	9 128 013 15 276 151 526 067 106 629 484 805	.1 .1 .3 .6 .4	1 996 882 5 681 835 778 977 2 948 91 208	.2 .2 .2 1.5 .5	2 591 391 5 838 806 575 608 54 012 77 581	.2	3 944 227 2 16 505 5 040	3. 3. 3.	7 860 334 3 476 360 9 17 312 2 309 546 (D)	.1 .2 19.1 1.0 (D)		
New Mexico	989 214 3 899 819 3 779 164 18 363 910 9 297 596	.3 .1 .1 .1	718 449 50 920 137 858 168 013 32 472	.3 .4 .3 .9 1.0	1 445 062 1 603 390 784 136 1 873 839 1 469 662	.1 .2 .3 .2	99 560 2 2 547 127 3 294 427 2 2 059 174	1.	3 4 688 275 1 15 887 006 0 247 731 4 17 203 261	(D) .2 .2 1.7 .2		
Oklahoma	7 319 193 2 832 663 4 080 153 18 498 1 589 636	.1 .1 .1 1.4 .2	478 437 1 648 205 29 505 3 494 80 689	.4 .1 .8 1.3 .7	4 537 774 1 503 625 1 745 617 6 930 428 491	2.5	86 293 919 755 5 4 719 3 352 413	7.	5 6 414 275	. (Z) . (Z) .1 (D)		
South Dakota Tennessee Texas Utah Vermont	12 982 611 3 854 302 16 521 315 1 076 886 488 253	.1 .1 .1 .2 .3	361 796 37 776 4 271 043 1 161 207 1 823	.6 .7 .2 .3 4.5	855 338 320 189	.1	774 530 527 942 2 33 643 3 5 133	2. 2. 6.	8 358 595	.4 .2 .2 .2 (Z)		
Virginia Washington West Virginia Wisconsin Wyoming	2 406 976 4 597 476 553 517 9 335 007 1 717 027	.1 .1 .3 .1 .2	78 681 1 518 684 3 132 284 637 1 517 891	3 1 2.4 .4 .2	1 510 920 1 304 673 408 129 4 138 221 1 412 901	.1	59 195 30 759 1 1 312 818	5 1. 3 1.	7 534 923 4 4 172 501	.2 (Z) 1.1 .3 2.0		
	Corn for gra	in or seed	Wheat fo	or grain	Soybeans t	for beans	Land in o	rchards	Net cash return f			
Geographic area	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 (acres)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)		
United States	58 701 505	.04	53 224 174	.05	55 291 205	.04	4 560 163	.08	26 430 535	.17		
Alabama Alaska Arizona Arkansas California	234 669 12 794 53 672 156 323	.4 - 1.6 .7 .5	156 466 119 97 407 859 405 562 302	.5 -2 -2 -2 -2	575 370 - - 3 160 746 156	.5 - - .1 3.3	37 595 74 921 16 471 2 152 664	1.3 - .6 2.0 .1	223 741 2 198 306 975 643 726 2 927 279	1.8 - 1.6 .9 .5		
Colorado Connecticut Selaware Florida Georgia	685 568 3 953 130 234 95 874 548 498	.2 3.4 .6 .7 .2	2 421 603 86 43 573 44 977 416 997	.2 20.9 1.0 1.1 .3	6 247 (D) 219 941 89 938 759 582	1.2 (D) .7 .9	11 339 5 122 1 378 762 068 149 014	1.3 2.7 .6 .2	422 200 97 787 65 300 1 087 317 390 427	1.5 1.2 2.1 .6 1.2		
Hawaii Idaho Illinois Indiana Iowa	47 493 9 162 711 4 884 114 10 147 051	.8 .1 .1 .1	1 239 480 954 990 590 920 31 047	.1 .2 .2 .8	713 8 768 833 4 397 253 7 903 395	2.4 2.4 .1 .1 .1	33 564 13 195 11 804 7 528 2 740	.7 1.2 1.6 2.1 2.0	113 904 387 910 1 730 879 883 642 2 146 997	.1 1.7 .8 .8 .7		
Kansas Kentucky Louisiana Maine Maryland	1 243 969 1 048 809 189 772 5 342 432 409	.2 .2 .6 .2 .3	8 679 588 283 742 151 251 533 146 081	.1 .4 .8 5.0 .5	1 878 978 1 021 903 1 540 372 - 405 170	.3 .3 .3 -	5 999 4 896 16 180 7 405 7 997	3.9 2.9 2.3 1.2	922 225 579 635 288 943 74 252 135 200	.8 .8 1.5 2.6 3.1		
Massachusetts Michigan Minnesota Mississippi Missouri	5 681 1 982 401 4 756 348 120 361 2 069 238	2.4 .2 .1 .7 .2	143 356 073 2 444 294 283 477 750 208	27.0 .3 .2 .5	1 023 599 4 384 981 2 006 263 4 827 272	.3 .1 .2 .2	9 379 161 567 4 926 17 982 16 401	2.0 .5 3.3 1.7 2.6	84 172 319 953 1 233 896 332 280 829 853	3.0 1.7 .7 1.2 1.0		
Montana	14 824 6 090 669 1 260 1 042 74 938	1.3 .2 1.1 .8 .7	4 703 455 1 962 051 15 052 (D) 21 070	.1 .2 1.4 (D) 1.6	(D) 2 291 803 - (D) 106 296	(D) .2 (D) 1.1	1 815 726 485 3 863 20 924	3.3 8.1 10.6 1.5	260 131 1 229 040 42 975 13 954 102 318	1.9 1.0 4.3 5.6 2.6		
New Mexico New York North Carolina North Dakota Ohio	37 540 598 815 1 056 000 533 379 3 107 822	.8 .2 .2 .4 .1	309 184 86 345 378 744 8 778 869 838 496	.5 .5 .3 .1	(D) 25 059 1 273 278 495 457 3 713 340	(D) .9 .2 .4	28 529 124 432 25 390 77 19 298	1.0 .5 1.1 15.0 1.4	165 007 516 679 688 217 332 673 685 358	1.9 1.1 .8 2.0 1.0		
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	75 971 17 273 1 070 293 99 309 791	1.0 .6 .2 5.2 .3	4 276 344 838 849 186 100 (D) 213 374	.2 .1 .3 (D)	229 887 (D) 177 803 597 258	.9 (D) .5	49 011 91 101 66 537 856 49 565	1.4 .5 .6 7.7 .7	295 955 300 742 661 804 7 443 123 915	2.1 1.7 .8 5.9 2.6		
South Dakota Tennessee Texas Utah Vermont	2 573 567 553 943 1 227 335 18 930 11 191	.2 .3 .3 .9 1.5	3 229 384 324 984 3 649 104 191 384 399	.2 .4 .2 .4 9.0	1 289 276 1 184 778 172 361 (D) (D)	.3 1.0 (D) (D)	351 7 423 208 568 15 113 4 797	10.2 2.0 .6 1.8 1.7	573 997 324 684 1 552 158 118 167 83 417	1.2 1.3 .8 2.3 2.6		
Virginia Washington West Virginia Wisconsin Wyoming	341 412 91 470 48 953 2 787 734 39 970	.3 .4 .7 .1 1.0	188 428 2 160 641 7 339 97 030 252 784	.4 .1 1.7 .6 .6	459 924 (D) 6 219 297 226	.3 (D) 3.3 .5	34 027 241 423 19 513 14 165 41	.5 .2 .9 1.8 8.4	214 860 478 484 38 395 1 253 108 136 366	1.9 1.5 3.9 .6		

Table E. Reliability Estimates of U.S. and State Totals: 1987—Con.

· <u> </u>												
	Selected farm production expenses¹											
	Livestock and poul	try purchased	Commercial f	ertilizer	Hired farm	labor	Petroleum	oroducts	Electricity for the	farm business		
Geographic area	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)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)		
United States	19 344 645	.10	6 684 944	.12	10 866 236	.10	5 277 227	.10	2 225 206	.13		
Alabama Alaska Arizona Arkansas California	290 518 386 244 484 368 424 776 540	.6 -6 .5 .5	86 491 1 413 51 672 123 230 427 924	1.0 - .9 .7 .5	123 018 2 647 207 689 198 167 2 385 242	.6 -7 .5 .2	64 535 1 140 44 554 136 284 332 166	.8 - 1.2 .6 .4		.9 1.0 .8 .4		
Colorado Connecticut Delaware Florida Georgia	1 084 325 16 647 53 522 148 405 307 677	.3 2.4 .6 1.1 .5	72 666 7 333 15 802 209 617 156 412	1.4 1.9 2.6 .7	172 070 65 657 22 788 721 540 209 647	1.0 .6 1.5 .4	99 575 9 300 8 787 104 591 102 026	.9 1.5 1.5 .8 .6	6 516 4 862	1.6 1.0 1.3 .9		
Hawaiildaholllinoislndianalowa	15 230 394 684 460 761 328 366 1 358 161	(Z) .6 1.2 1.0	30 717 148 396 564 393 354 501 467 355	.1 1.0 .6 .6	193 230 181 790 275 128 196 231 282 515	(Z) .9 .8 .8	17 197 83 022 299 486 171 786 315 061	.1 .9 .5 .5	62 563	(Z) 1.1 .7 .6		
Kansas Kentucky Louisiana Maine Maryland	2 426 149 209 357 55 167 21 876 102 147	.2 .8 1.9 1.1 1.3	216 166 129 356 86 079 16 437 50 516	.6 .6 .9 1.7 1.7	226 075 158 130 121 984 51 613 81 230	.5 .5 .6 1.2 1.5	243 568 86 777 74 326 12 827 30 365	.5 .6 .8 1.4 1.5	27 880	.6 .7 1.2 1.2 1.2		
Massachusetts Michigan Minnesota Mississippi Missouri	11 441 190 386 541 852 138 882 397 299	3.9 1.0 .8 1.0 1.2	8 953 194 526 328 661 90 795 239 254	2.3 .7 .5 .9	66 579 242 445 244 055 142 341 163 868	1.4 .7 .6 .6	12 042 120 621 249 831 86 016 176 852	1.7 .5 .4 .6 .6	105 534 20 614	2.2 .6 .5 .9		
Montana Nebraska Nevada New Hampshire New Jersey	191 557 1 904 830 34 208 3 647 15 067	.9 .3 2.1 7.4 4.4	79 449 269 359 5 562 2 834 23 767	1.1 .8 1 1.7 2.6 1.7	102 470 261 094 33 775 18 040 87 608	1.0 .8 1.2 1.3	100 191 267 854 12 556 3 979 19 961	.7 .6 2.1 2.1 1.2	23 779 92 622 8 615 3 141 8 921	1.1 .9 1.6 1.8		
New Mexico New York North Carolina North Dakota Ohio	268 175 98 770 323 978 128 202 285 542	.8 1.6 .4 1.9 1.1	20 913 94 811 179 396 178 957 276 272	1.5 .7 .6 .6	98 309 277 463 287 037 92 847 218 106	.8 .6 .5 1.1	41 585 91 096 143 686 176 838 150 404	1.0 .6 .5 .5	65 189 49 161 32 508	1.4 .5 .6 .8		
Oklahoma Oregon Pennsylvania Rhode Island South Carolina	745 844 195 278 273 817 1 146 62 818	.5 1.0 .9 5.3 1.0	102 292 97 839 115 061 1 335 68 222	.9 1.1 .7 2.5 1.1	124 732 257 760 292 030 9 536 92 317	.9 .8 .5 .2 .8	128 203 65 914 98 275 1 390 41 808	.7 .8 .6 2.2 1.1	72 342	1.0 1.0 .5 5.0		
South Dakota Tennessee Texas Utah Vermont	519 803 142 988 3 134 939 84 657 19 702	.7 1.2 .2 1.4 4.1	96 748 119 418 339 641 13 229 9 015	.9 .6 .6 2.1 1.5	94 911 117 140 630 271 51 365 31 704	1.0 .8 .4 1.0 1.7	144 494 72 838 416 266 29 726 10 935	.7 .6 .4 1.2 1.7	130 998	.9 1.0 .6 1.5		
Virginia Washington West Virginia Wisconsin Wyoming	169 333 320 026 37 921 294 202 145 511	1.1 .6 1.9 1.0	92 982 153 949 10 779 236 568 17 878	.8 .9 1.8 .5 2.0	145 364 420 768 23 244 312 325 50 342	.6 .7 .9 .5 1.2	64 261 90 991 12 787 175 966 32 490	.7 .7 1.3 .4 1.0	22 321 56 270 4 179 119 498 10 576	.7 .9 1.7 .3 1.2		

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 F. U.S. 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 no	t on mail list
ltem	Total number	Relative standard error of estimate (percent)	Total percent	Standard error of percent
Farmsnumber Land in farmsacres	249 529 14 268 757	1.70 6.72	10.68 1.46	.18
Farms by size: Less than 50 acres	177 934 71 592	2.03 2.80	23.00 4.58	.47
Harvested cropland farmsacres	119 969 3 704 082	3.40 14.36	6.80 1.30	.23
Farms by value of sales: Less than \$2,500	187 127 62 400 45 425 232 554 16 973	2.02 2.78 3.28 1.77 5.03	27.62 3.76 7.79 18.45 1.58	.56 .10 .26 .33 .08
Market value of agricultural products sold \$1,000	931 419	8.75	.68	.06
Farms by standard industrial classification: Crops (01)	72 165 177 361	2.71 2.04	7.36 13.07	.20 .27
Farms by tenure of operator: farms_ Full owners farms_ Part owners farms_ Tenants farms_	201 102 30 791 17 638	1.83 4.52 7.33	13.97 4.81 6.84	.26 .22 .50
Operators by principal occupation: Farming	57 009 192 515	3.38 1.91	4.77 16.86	.16 .32
Average age of operatoryears	48.1	(Z)	(X)	(X)

Note: 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.

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APPENDIX D. Report Form and Information Sheet

			_						CIVID	<u> </u>	OT. MUDICIPAL CAPI	es sebre	
FORM 87-A0214 (9-16-86)	only for statis	OTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law YOUR REPORT TO HE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by sworn Census employees and may be used hely for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation he law also provides that copies retained in your files are immune from legal process.											
AG CENSUS USA	C	TED STATI CENSUS SRICULTU			dence pertaining t					Census Fil		FN)	
Please complete this	1201 East Te	THE CENSUS		-	_					•	7-20214		
		e, IN 47133		4									
Note — If your records are n used. If you cannot file by Fe sent to the above address. Number (CFN) as shown in y us.	bruary 1, a time Include your	extension reques 12-character Ce	st may be nsus File										
If you received more than one report form, enter extra Census File Number(s) here and return extra copies with your completed report.													
CENSUS 035 036	037	038		1									
USE 039 040	041	042		Please co	orrect errors in name	, address, an	d ZIP	Code. EN	TER stre	eet and nur	nber if not sho	wn.	
by you, your s organization f REGARDLESS	spouse, or by th or which you a of LOCATION	t land owned, re ne partnership, c re reporting. Incl N OR USE — crop odland, idle land,	orporatio ude ALL pland,	on, or LAND,	INSTRUCTION Use section 7 to and section 8.	o report O	ICLU	hose CR DE crop	OPS I	NOT liste vn on lan	d in section d rented to	s 2 th other	rough 6 s.
If the acres you operated in	•		nouse to	ts, etc.	SECTION 23	Were any of in 1987?	f the f	ollowing	CROPS	S harveste	d from "THIS	PLA	CE"
refer to the INFORMATION	SHEET, section	on 1.		Number of acres	S2		None		sted		harvested		Acres rigated
1 - All land owned			🗆 🔓		1. Corn (field) f seed (Report of dry shelled-wei	uantity on a		O67	{	1	— OR — Bu. Lbs.	069	
2. All land rented or leased FRO by you on shares, used rent f	M OTHERS, inclu ree, in exchange	uding land worked for services,		044	2. Com (field) f	or silage		070		071	Tons.	072	-
payment of taxes, etc. Include land. (DO NOT include land up			d _	,44	or green cho	•		073		074	green	075	
grazing permit.) Also comple	ete item 5 below		□	045	3. Wheat for g			076		077	Bu.	078	
3. All land rented or leased TO (shares by others and land sul			<u> </u>		4. Oats for grai			079		080	Bu.	081	
4. Acres in "THIS PLACE		•	2	046	5. Barley for gr	ain	ш	082	_ (083	Bu.	084	
and acres rented (item 2), TO OTHERS (item 3), and	then SUBTRA	CT acres rented	} ▮		6. Sorghum for or seed, incl	uding milo			Ų	1	OR Bu. Lbs.	}	
For this census report thes If the entry is zero please re				1.	7. Sorghum for a green chop (E sorghum-sudan	o not include		O85		086	Tons, green	087	
5. If you rented land FROM OTHE					8. Soybeans fo	r beans		088		089	Bu.	090	
Name of landlord	Mailing add	dress (Include ZIP	Code) I	Number of acres	9. Cotton			091	1	092	Bales	093	
	-				10. Tobacco — a	all types		094	/10	095	Lbs.	096	/10
					11. Potatoes, Iri	sh		097	/10	098	Cwt.	099	/10
List additional landlords on a sepa	arate sheet of paper	r	<u></u>		12. Sweetpotatoe	es and yams		100	/10	101	Bu.	102	/10
6. If you rented land TO OTHER Name of renter		the following infor dress (Include ZIP)		r each renter. Number of acres		or harveste	d fron ghum	n ''THIS F -sudan cı	PLACE	" in 1987? <i>and hay c</i> i	AGE, or GRE It from pastu O — Go to se	res.	
	-				If cuttings wer from the same	e made for bo fields, report	th dry the ac	hay and gri reage in the	ass silag e approp	je, haylage, oriate items	under DRY		
List additional renters on a separa	te sheet of paper.				HAY and also						OP. Quantity		
a-Of the land you rented or le acres did you own?		Ц	053	Acres	1. DRY HAY hay were mad acres only one cuttings.)	le from the sa	ame ac	cres, repor	all I	Acres narvested	harveste (Report either or green weig indicated)	di drv	Acres irrigated
7. Did you have any grazing pers	nits on a per-hea	id basis? ∫ ₃ ☐ Forest	Service		a. Alfalfa and	d alfalfa mix			10	93	104	ons,	105
1 ☐ Yes — Mark (X) all box	es which apply .	. ↓ 4 ☐ Taylor	Grazing	Sec. 3 (BLM)	b. Small grain	n hay — oat	s, whe	eat,	10	06	107	ons,	108
₂ ☐ No — Go to item 8		∫ 5 ☐ Indian 6 ☐ Other		ify,	c. Other tam	e, etc e dry hay — Sermuda gra:	clove	r, lespede		9	110	lry .	111
8 LOCATION OF ACRICULTUR	AL ACTIVITY FO	AD VITUIC DI ACEV								12	113	ons, Iry	114
8. LOCATION OF AGRICULTUR a. In what county was the	AL ACTIVITY FC		Tec - T-		d. Wild hay		· · · · ·		- 1		7	ons, Iry	
largest value of your agricultural products raised or produced?	Principal county	County name		Number of acres	2. GRASS SIL GREEN CH were made from	OP (If two o	r more	cuttings	11	5	116		117
b. If you also had agricultural			1	057	acres only on all cuttings.)	ce, but repor	t total	tons from			g	ons, reen	
operations in any other county(ies), enter the	Other counties			58	3. HAY SOLE or grass sile	Did yo	u sel	i any hay	y	18			
county name(s), etc			C	059	of hay sold in	section 9, ite	m 4)			ı 🗌 Yes	2 🔲 N	0	
PENALTY FOR FAILURE TO RE	PORT												

SALE home	from ' use.)	GETABLES, SWI 'THIS PLACE'' in	1987? (Do no:				FOR				NBERRIES, or OTHE in 1987? (Do not inclu		
1 2		Complete to Go to section] YES] NO	-		section		
Note: For Florida report	87 har	vest season; for	Acre	s	Acres irri	gated					de. Report quantity ha	vested	
all other States, report 1. Land from which ve	getabl	es were	Whole acres		Whole acres		in unit specified with c	rop nam	e.		1		igated
harvested in 1987	·	• • • • • • • • • • • • • • • • • • • •	L	/10	1	/10	Crop name	Code	Acres han Whole acres		Quantity harvested	Whole acres	
2. From the list below, If more than one ve- each crop. Report of	getable	crop was harves	ted from the sa	me acres	vested in 198. , report acres	l. for				/10	1	2	/10
Crop nan	ne	Code	Acres han	vested	Acres irrig	gated				/10	1	2	/10
				/10	1	/10				/10	1	2	/10
			 	1 /10	 	/10	If more space is needed.	usc a sc	parate sheet of				<u> </u>
			+	1 /10	1	/10	Crop name Blackberries and dewb	erries (p	ounds) 50)9 i f	Crop name Raspberries (pounds)		Code 533
				1 /10	1	/10	Blueberries, tame (pour Blueberries, wild (pour Cranberries (100-lb. b	unds)	51	5 6	Strawberries (pounds) Other berries (pounds)		. 536
If more space is needed, u	co n 500	avata chant of page		/10	1	/10	Section 1				ted from "THIS PLAC	F'' in 1987 —	small
Crop name Asparagus	Coc	le Crop name	Code		name ern peas, green	Code	grai	ins, field		er crops	not previously repor		-
Beans, snap (bush and po Beets	e) 38	1 'Lettuce and ro 3 Lima beans, g	maine 427 reen 429	crow	peas) – blacke der, etc	yed,	\$7	_	— Comp				
Broccoli	38	1 I Unions, dry .	ns 431 433	Squas	ch sh t corn	459] NO	- Go to s		saction		
Cantaloups and muskmelons	39	5 I Okra	437	7 Toma	toes	463	From the list below	enter ti	he cron name	and co	de. Report quantity h	arvested	
Cauliflower	39	9 ' (Do not inclu 1 southern pea	ide as) 441	Turni; Water	greens rmelons	467	in unit specified with	crop na	me.		Teport quantity in		
Collards	41	1 Peppers, hot	et 443 445 449	Spec	vegetables –	475	Crop name	C	ode Acres f	arveste	d Quantity harveste	d Acres in	rigated
Garlic SECTION 5 Were	42	1 Radishes	451		CUROOMS .						ļ ·		
bulbs	, flowe	rs, flower seeds, er protection, GR	vegetable seed	ls and pla	ints, vegetable	es under					1	2	
1		- Complete ti		EON IN	IS PLACE III	15071							
2 🗆		— Go to section	F		Area irrigated		_				1	2	
1. Nursery and greenh	ouse o	rons irrigated in 1	None 43	Square fe	et Acres	Tenths					1	2	
2. From the list below,				crop gro	wn	/10					1	2	
		Square feet	Acres in the		_		If more space is needed,	use a ser					Codo
Crop name	Code	former protection	in 1987	'	Sales in 1	987	Crop name Alfalfa seed (pounds)		54	12 F	Crop name Copcorn (pounds, shelle	d)	Code
		in 1987	Whole acres 1	2^	Dollars	Cents	Beans, dry edible (Do r dry limas) (hundredw Beans, dry lima (hundr	veight) .	55	14 ' F	Proso millet (bushels) Red clover seed (pound Rice (hundredweight)	s)	. 671
		-	1	/10 \$		00	Buckwheat (bushels) Corn cut for dry fodder	r, hogged	57 d	75 1	Rye for grain (bushels) Ryegrass seed (pounds)	. 689
			1	/10 \$		00	or grazed (report acre Dry southern peas (co	wpeas) ((bushels) 58	4 5	Safflower (pounds) . Sorghum cut for dry for	age	
If more space is needed, us	se a sep			/10 \$		00	Emmer and spelt (bush Fescue seed (pounds) Flaxseed (bushels)		60	15.	or hay (tons, dry)		701
Crop name Bedding plants (Include	vegetal	Code ple plants) 479			s		Grains, mixed (bushels Kentucky bluegrass se	ed (poun	61 nds) 62	9 5	Sugar beets for sugar (1 Sugarcane for sugar (10	tons) ins)	. 719 . 722
Bulbs (Exclude bulb flow Cut flowers and cut flor Nursery crops — orname	ist gree	ns 485	Mushrooms Sod harvest	ted	seeds	494	Lentils (pounds) Lespedeza seed (poun Mint for oil (pounds of	nds)	63	18 [5	Sugarcane for seed (ton Sunflower seed (pound Firmothy seed (pounds)	s)	. 734
and nut trees, and vine	s	488	Greenhouse	vegetable	S	503	Peanuts for nuts (poun Peas, dry edible (poun	nds)	65	6 1 (Other crops (pounds)	Specify	752
SECTION 8 Was the	tere a	combined total of	20 or more FR	UIT TRE	ES, including	GRAPEV	INES, CITRUS, and NU	IT TREE	S, on "THIS	PLACE"	' in 1987?		
_		- Complete ti			г	Tota	l acres Acres	irrianta					
1		— Go to section		.: .		Whole acr	es Tenths Whole acr	irrigated	nths Apples	rus crops	123 (Report	quantity harves	
TOTAL ACRES in I vineyards, and nut t	rees or	n this place. (Do n	ot include abar	ndoned ac	cres.)		/10		/10 Avoca	aot	135 season,		
From the list at the requested information	ight, e	nter the name and each crop even if	I code for fruit to not harvested b	trees, gra ecause o	pevines, and r	nut trees o	on this place in 1987. R	eport the	Cherrie Grapes	s, tart . , dry wei	587 Lemons ight 171 Limes	uit	279
		NUMBER	OF	Acres in	n trees	<u>-</u>	Unit of measur	re	Grapes Nectar	, fresh w	eight 177 Orange 201 Tangelo	s	303
Crop name	Code	TREES OR VIN	Bearing	and vir	nes of	Quantit	ed l	Lbs.	¬ for Se	ept. 1986 gh March	Other c	nesitrus —	
		age		Vhole acre	s Tenths		Lbs. Tons Boxe	es per box	harve Peache	st seaso	n)207 225 Nut Car		Code
			2		/10		1 🗆 2 🗆 3 🗆] i •	Plums	and prune		ds (Report ry in meats)	
			2		/10		1 2 3 4	5	Prunes Other r	, dry wei ioncitrus	ight 249 (Report	t quantity in sh	ell)
- · · · ·		1	2		/10		1 2 3 4	15	Speci	fy	261 Filberts	and hazelnuts	339
		1	2		/10	-	1	15	-		Other r	ut trees —	
		1	2		/10		1 2 3	. 5	1		2-11		
If more space is needed, us	e a sep	arate sheet of paper			/10		1 2 3 3	<u>'i </u>	<u>.</u>				
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GROSS VALUE of CROPS SOLD from "THIS PLACE" in 1987, BEFORE taxes and expenses (Refer to the INFORMATION SHEET, section 9.)							3	SECTION 13篇 Did	you or anyo	ne else have any (CATTLE of	CAL	/ES on this pl	lace in 1987?
	Report your best estima	ate of the value for each of the	followir	ng group	s of crops sol	id	1 YES Complete this section							
	from this place in 1987	. Include the value of the landid . Include value of Government	rd's an	d/or con	tractor's sha	re,	l	2	-	- Go to section			INVEN	
1.	Grains, soybeans and o		None	Dol	llars Ce	nts	1	• DECEMBER 3	31, 1987 IN	IVENTORY	No		Number place Dec.	
				•	0	0] 1	CATTLE AND CA	ALVES of al	l ages	Г	80	13	Tract
	b. Wheat			774 \$	0	0	1	a.BEEF COWS				80	04	Total Beef
			+	775 \$ 776	0	0		had calved		· · · · · · · · · · · · · · · · · · ·	[] [15	cows
		• • • • • • • • • • • • • • • • • • • •	ير ب	\$		0	ı	b. MILK COWS k			•			L 4:13-
			ta	777 \$	0	0	1	milk cows and n	nilk heifers th	se — Include dry nat had calved	[]		Milk cows
				779	0	0	1					80	16	Heifers and
	g. Other — rice, dry bea popcorn, safflower,	ans, dry peas, haxseed, sunflower seed, rye, etc		\$ 780	0	0		c. HEIFERS AND heifers that had c		ALVES — (Do not		3 80		heifer calves
	Cotton and cottonseed			\$ 781		0	ł	d.STEERS, STEE	ER CALVES	, BULLS,	Г	٦ ١٠٠		Steers and bulls of
-		• • • • • • • • • • • • • • • • • • • •	ᆜ별	\$ 782		0	ł	AND BULL CA	LVES					all ages
		, and grass seeds		\$ 783	- 0	0	l	CATTLE AND FROM THIS P						
5.	. Vegetables, sweet corr Irish potatoes and sweetpot	n, and melons— (Do not include atoes, report them in item 7 below.)			0	0		Include those fe	d on this plan	ce on a	Number		Gross va	lue of sales
6.	Fruits, nuts, and berries	apples, peaches, grapes,		784				as sold cattle me to a feedlot for i	oved from th	is place None	in 19	87	Dollar 809	rs Cents
7		ries, etc		\$ 785	0	0	١,	. Calves weighing		_	808		Š	. 00
-		mint for oil, etc. (Do not include	ļ		i		1	L. Cattle, including		•	810		811	100
		ops.) —				_	ľ	500 pounds or m					\$	00
a c	Specify	the ACRES in this place USED in	10073		1 0	0	ł	a. Of the total cat FATTENED on			812		813	
7. ~	S10	the ACRES in this place USED in	150/1				ı	CONCENTRAT	ES for 30 da	ays or more	1812			į
1.	Copy acres in "THIS PL	ACE" from section 1, item 4, p	age 1_		Acres	1	ı	and SOLD for S	SLAUGHTER	₹?	L		\$	00
	report it in the FIRST land t	elow, if land was used for more tha use listed below that applies. For ex ed, only as "Cropland harvested."	n one pu ample, i	irpose in report cro	1987 opland		l	DAIRY PROD		D FROM			RY PRODUCT	
2.	CROPLAND	au, omy as Cropiano narvesteo.		None	Number of acr	es	ł	THIS PLACE I			None	D		Cents
	a. Cropland harvested	- Include all land from which crops		7	87		14	Gross value of sa from this place in			81	4	i	
	groves, vineyards, and	was cut, and all land in orchards, ch nursery and greenhouse crops			'88		100 No.	butter, etc						00
	 Cropland used only f pasture and grazing land 	or pasture or grazing — Include in that could have been used for crops with a could have been used for crops with the crops with the could have been used for crops with the crops wi	otation vithout		00			ECHONAL Did	you or anyo	ne else have any l	HOGS or P	IGS o	n this place is	n 1987?
		over crops, legumes, and soil-		7	89	_	ł		YES -	 Complete this 	section		INVE	NTORY
	improvement grasse	s, but NOT harvested and NOT						2	J NO -	 Go to section 			nlace Dec	er on this c. 31, 1987
	d. Cropland on which a	Il crops failed — (Exception: Do i	not		90		ł	DECEMBER 3	-			None	815	
	report here land in orch	ards and vineyards on which the cro to be reported in item 2a.)	p	. 🗆 L			1	. HOGS and PIGS	of all ages (Total of a and b be	low)	\Box	816	Total
	e. Cropland in cultivate	d summer fallow		. 🗆 📅	91		ı	a. HOGS and PiG	SS used or t	to be used for BR	EEDING		817	Breeding
	f. Cropland idle			. 🗆 🏻	93			b. OTHER HOGS	and PIGS			Ш	L	Other
з.	Woodland Include all	s and a. Woodland pastured.		. 🗆 🂆	94		1	• LITTERS FAR						
			od.		95		1 2	LITTERS FARRO				Num 818	ber of litters	-
4.	with young timber growth. Other pactureland and	i rangeland — Include any pastu			96		ł	a December 1, 1		•		819		-
	other than cropland and w	oodland pasture		. 🗆 [b. June 1, 1987	and Noven	nber 30, 1987 .		<u> </u>		J
5.		in house lots, ponds, roads, wa ot reported in items 2 through 4 abo			97						Numb			ue of sales
6.	TOTAL ACRES - Add	the acres reported in items 2 th		_	798		1 .	• HOGS AND P		None	in 198		Dollars 321	S Cents
ŔŚ	(Should be the same as it	AND in this place IRRIGATED at	any tim	→ e in 1QQ	77	-	l ³	I. HOGS and PIGS S place in 1987	OLD from th	nis 		,	\$	00
(4 -	Irrigated land is all land wa	tered by any artificial or controlled i	neans	~ sprinkle	ers, furrows		4	. Of the hogs and p	igs sold, ho	w many were	822		823	
	e11	etc. Include supplemental, partial,	and prep	olant irriga	ation.		13.00°	sold as FEEDER PI			NEED 1		\$ C abis wise	00
	1 ∐ YE	S — Complete this section			Number of acr	es		S15 C	7			LAMB	on this plat	ce in 130/1
_				None 6	irrigated 80		ı	1 L 2 [」YES -]NO -	 Complete this Go to section 				
τ.	Include land from which ha	vested land were irrigated? By was cut and land in bearing and					ı	2 1	- ON -	— GO to section		ENTO	RY	
2.		ops reported in section 10, item 2a tureland, rangeland, and any ot			81	_	ł			None	Numb	er on	this NU	MBER SOLD in 1987
		m 1 above were irrigated?					١.	CUEED	DC at =11 -		824		825	
∮S	ECHON 12 Were any A	CRES in this place SET ASIDE,	DIVERT	ED, OR	IDLED		i '	. SHEEP and LAM		_	826		*****	
	s12	ERAL acreage reduction program	ısın 19	0/1				a.EWES 1 year o	uid or older	ال	L		1 -	·····
	1 YE	Complete and Common								None	Number : in 198			of wool in 1987
	2 📙 NO	— Go to section 13			Number of acr	es	١,	. SHEEP and LAM	BS SHORN	18	27		828	
1.	How many acres were s	set aside (or diverted) under AN	NUAL	6:	82		<u>ו</u>		-5 0,10101	<u>L</u>		Γ,	Gross value o	feales
		justment programs?		L 6i	83		l				None	e	Dollars	Cents
2.		under the CONSERVATION RES					3	. What was the gre LAMBS, and WO			D	829 \$		00

SECTION(16) Did you or anyone else have any HORSES, BEES, FISH, GOATS, OTHER LIVESTOCK, or ANIMAL SPECIALTIES on this place in 1987?								SECTION 188 GOVERNMENT CCC LOANS						
	S16	•			•			S18						
	ILI YES —	Complete this section	tion	2 NO	— Go to	section	17 	1. Amount received in 1987 from Government CCC loans for — None Dollars Cents Include regular and reserve loans, even if redeemed or forfeited.						
		Number on		antity sold	Gross	value of s	sales	a.Com						
_	None			1987	Dol	lars	Cents	b. Wheat						
1	. Horses and ponies of all ages	830	831	Number	832 \$	1	00	c.Soybeans						
	-	839	840	B1	842			889						
_	<u> </u>	\ \ \	841	Number Pounds) (s		00	d. Sorghum, barley, and oats						
2	Colonies of bees		844	honey	<u> </u>			e. Cotton						
		843		Number	846	i	i	f. Peanuts, rye, rice, tobacco, and honey						
3	Milk goats	}	845	Gallons milk	\$	1	00	Payments received for participation in FEDERAL FARM PROGRAMS in 1987 (DO NOT INCLUDE CCC loans.) Refer to INFORMATION						
		847	848		850			SHEET, section 19. None Dollars Cents						
		{	849	Number	} \$	1	00	1. Amount received in cash						
4.	.Angora goats □	851	852	mohair	853			2. Value of certificates received — payment-in-kind (PIK)						
5.	Other goats			Number	\$	i	00	or commodity certificates						
_		833	834		835	I		SECTION 20 TYPE OF ORGANIZATION						
	donkeys		<u> </u>	Number			00	S20						
7	.Mink and their	836	837	}	838	!		Mark (X) the one item which best describes the type of organization for this place in 1987. Refer to the INFORMATION SHEET, section 20.						
_	_	854	855	Number	\$ 856		00	FAMILY or INDIVIDUAL operation — 921						
8	Rabbits and their pelts			Number	\$	1	00	(Do not include partnership and corporation.)						
9.	All other livestock and	857	858		859			partnerships						
	ivestock products	437		Number		i 1	00	INCORPORATED UNDER STATE LAW						
	Specify		Gr	oss value of			- 00	OTHER, such as estate or trust, prison farm, grazing association, Indian reservation, etc.						
10	Fish and other aquaculture products (Enter name and	Total quantity in 1987	sold G	Dollars	Cents			go to section 22						
	code from list below.)	Po	unds 2					Specify						
	Name Code	[on	mber \$		00			SECTION 218 CORPORATE STRUCTURE (for incorporated operations only)						
		Code	Name			Code		Refer to the INFORMATION SHEET, section 21.						
	Catfish	860 863		sh — <i>Specify</i> . Juaculture		866		1. Is this a family-held corporation?						
	If more space is needed, use a sepa			ts — Specify.		869		2. Are there more than 10 stockholders?						
έS.		ne else have any PC KS, etc., on this pl					,	SECTION 222 CHARACTERISTICS AND OCCUPATION OF OPERATOR (Senior partner						
	for others on a c	ontract basis.		INVENT	ORY			or person in charge) Refer to the INFORMATION SHEET, section 22.						
	1 🔲 YES 🕒	Complete this se		Number this pla	ace	Total nur sold in 19		1. RESIDENCE — Does the operator (senior partner or 923						
_	2 ∐ NO —	Go to section 18	None	e Dec. 31,		93		posterior single participation and participation						
	HENS and PULLETS of laying PULLETS for laying flock repl	_	[_]	-				2. PRINCIPAL OCCUPATION — At which occupation did the operator spend the majority (50 percent or 928						
	a.PULLETS 3 months old or old		age 🔲	894		895		more) of his/her worktime in 1987? For partnerships consider all members of the partnership together						
	b.PULLET CHICKS and PULLET	TS under 3 months	old	896				or ranching						
_	(Do not include commercial bro							3. OFF- FARM WORK — How many days did the operator (senior partner or person in charge) work at least						
	BROILERS, fryers, and other r including capons and roaster			898	89	9		4 hours per day off this place in 1987? — Include work at a nonfarm job, business, or on someone else's farm for 3 50—99 days						
4.	TURKEYS		_	900	90	01		pay. (Do not include exchange farmwork.)						
	a.Turkeys for slaughter (Do no			902	90	3		₅ ☐ 150—199 days						
_	b.Turkey HENS kept for bree	-	Ц			<u> </u>		6 ☐ 200 days or more						
5.	OTHER POULTRY raised in ca geese, pigeons or squab, phe							4. In what YEAR did the operator (or senior partner) begin to operate any part of this place?						
	(Enter poultry name and code from				1			925						
	Poultry name	Code			1			5. AGE of operator (senior partner or person in charge) Years old						
	Poultry name	Code		L				924						
	Name Code	Name Pigeons or squab	Code 908					2 🔲 Negro or Black						
	Geese 906	Pheasants	910	All oth	er poultry			6. RACE of operator (senior partner or person in charge) 3 Asian as Parific						
8.	POULTRY HATCHED on this plant	ace in 1987 and	None		Number			A Sian or Pacific Islander						
	placed or sold — chickens, turk	eys, ducks, etc. —		916				9 🔲 Other — Specify						
	Specify kind of poultry			917				\						
1.	Incubator egg capacity on De	ecember 31, 198	ا لــا ٠.٠	L		<u> </u>		7. SEX of operator (senior partner or person in charge) 1 Male 2 Female						
				ross value o				8. SPANISH ORIGIN — Is the operator (senior partner						
	What was the gross value of sa poultry and poultry products (e)		918	Dollars	i Ci	ents		or person in charge) of Spanish origin or descent						
	etc.) from this place in 1987?		\$			00 '		(Mexican, Puerto Rican, Cuban, or other Spanish)? 1 Yes 2 No						

SECTION 234 PRODUCTION EXPENSES paid by you and off place in 1987	hers fo	r this		SECTION 25 Were any INSECTICIDES, HERBICIDES, FUNGICIDES, NEMATICIDES, OTHER PESTICIDES, or OTHER CHEMICALS used on this place in 1987?							
Include your best estimates of expenses paid by you, your landle buyers, and others for production of crops, livestock, and other and the state of t	agricult	tural products		1 NO — Go to section 2 NO — Go to section 26							
in 1987. (DO NOT INCLUDE expenses connected with perform others; operation of nonfarm activities, businesses, or services; expenses not related to the farm business.)	or hou	sehold	_	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.							
Livestock and poultry purchased — cattle, calves, hogs, pigs, sheep, lambs, goats, horses, chicks, poults,	None	971	ents	Sprays, dusts, granules, fumigants, etc., (fungicide, herbicide, insecticide, nematicide) to control — None used Acres on which used							
started pullets, etc. 2. Feed purchased for livestock and poultry — grain,		972	00	a. Insects on crops, including hay							
hay, silage, mixed feeds, concentrates, etc		\$ 1	00	c. Diseases in crops and orchards (blights, smuts, rusts, etc.)							
purchased separately, such as	Cents			d. Weeds, grass, or brush in crops and pasture – Include both pre-emergence and post emergence.							
soybean meal, cottonseed meal, and urea.) \$	00	974		2. Chemicals for defoliation or for growth control of crops or thinning of fruit							
3. Seed cost — for corn, other grains, soybeans, tobacco, cotton, etc. — Include plants and trees purchased		\$ 1 (00	SECTION OF MACHINERY AND EQUIPMENT on this place on December 31, 1987— See Include only equipment used for agricultural operations in 1986 or 1987.							
4. Commercial fartilizer purchased — all 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,	_	976		What is the estimated market value of ALL machinery, Stimated market value Stimated market value							
herbicides, fungicides, other pesticides, etc. — Include cost of custom applications. (Do not include lime.) 6. Gasoline and other petroleum fuel and oil		\$ (00	equipment, and implements usually kept on this place and used for the farm or ranch business? — Include cars, trucks, tractors, combines, plows, disks, harrows, dryers,							
purchased for the farm business — a. Gasoline and gasohol			00	pumps, motors, irrigation equipment, dairy equipment including milkers and bulk tanks, livestock feeders, grinding and mixing equipment, etc. \$							
b. Diesel fuel		978 \$ (00	SELECTED machinery and equipment on this place, December 31, 1987. (Report on this place on MANY were manufactors)							
c. Natural gas	_	\$ (00	only if used in 1986 or 1987.] None None 944 945							
d. LP gas, fuel oil, kerosene, motor oil, grease, etc		981		Motortrucks — Include pickups							
include household expenses.) 8. Hired farm and ranch labor — also include employer's cost	Ш	982	00	and motor tillers — 946 947 a. Less than 40 horsepower (PTO)							
for social security, workman's compensation, insurance premiums, pension plans, etc. (See INFORMATION SHEET)		1	00	b. 40 horsepower (PTO) or more							
9. Contract labor — Include expenditures for labor, such as harvesting of fruit, vegetables, berries, etc., performed on a contract basis by a contractor, crew		983		5. Cotton pickers and strippers							
leader, a cooperative, etc. 10. Repair and maintenance expenses for the		984	^^	7. Pickup balers — Include rectangle and round balers —							
upkeep of buildings, motor vehicles, and farm equipment		\$ (00	SECTION 22 ESTIMATED CURRENT MARKET VALUE OF LAND and							
11. 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							
use of equipment and for customwork such as grinding and mixing feed, plowing, combining, corn picking, drying, silo filling, spraying, dusting, fertilizing, etc. (Do		985 1	I	section 1, items 1, 2, and 3, page 1. None Dollars Cents							
not include cost of cotton ginning and application of fertilizer and chemicals.)		\$ (00	1. Alf land owned							
12. Interest paid on debts — (See INFORMATION SHEET) a. Secured by real estate		\$, 0	00	2. All land rented or leased FROM OTHERS							
b. Not secured by real estate		\$ 0	<u> </u>	3. All land rented or leased TO OTHERS							
13. Cash rent paid for land and buildings in 1987— (Do not include grazing fees.)		\$.0	00	S28 Report amount received before taxes and expenses. Farm-related income							
14. Property taxes peid — Include farm real estate, machinery, livestock, etc. for the farm business. (Do not include taxes paid by landlords.)		989	00	Customwork and other agricultural services provided for None Dollars Cents farmers and others — plowing, planting, spraying.							
15. All other production expenses —include insurance.				harvesting, preparation of products for market, etc. (If customwork is a separate business, refer to INFORMATION SHEET, section 28 \$ 00							
water, animal health costs, grazing fees, marketing charges, miscellaneous farm supplies, etc. (Do not include depreciation, household expenses, and expenses not associated with the	П	990		Gross cash rent or share payments received from renting out farmland or payments received from lease or sale of							
farm business.) SECTION 24% Was any COMMERCIAL FERTILIZER, including				allotments — Include payments for livestock pastured on a per-head basis, per-month basis, per-pound basis, etc							
S24 LIME used on this place during 1987? 1 YES — Complete this section 2 N	10 –	Go to section 25	- 1	3. Sales of forest products and Christmas trees — Include maple products, nevel stores, firewood, etc							
1. Acres of cropland fertilized in 1987— (Do not include croplan	nd _	one Acres fertilize	ed	4. Recreational services, patronage dividends of cooperatives, and other income which is CLOSELY RELATED to the agricultural operation on this place – 995							
for pastures reported in section 10, item 2b.)	L	933		Specify \$ 00							
reported in section 10, items 2b and 4	of time	Acres limed	- Ti	Name PERSON COMPLETING THIS REPORT — Please print 999 Date							
3. LIME — tons of lime used and acres on which applied — (Do not include land plaster or gypsum or lime for sanitation.)		935	1	Telephone number Area Code Number _							
FORM 87-A0214 (9-16-86)			L								

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 QNE report form for an operation. Write "Duplicate" complete only UNE report form for an operation. Write Luplicate 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.

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 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.

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.

All Land Rented or Leased FROM OTHERS Report all land rented by Lease Tracing over 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 "0" 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, 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.
- c. 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 28 W	Were any of the following CROPS harvested from "THIS PLACE" in 1987?												
	None	Acres harvested	Quantity harvested	Acres irrigated									
1 . Cotton	🖂	091	092 Bales	093									
2. Soybeans for bear	ns 🗌	088 40	⁰⁸⁹ /,550 Bu.	090 40									
3. Wheat for grain	□	073 40	7,230 Bu.	075									
4. Oats for grain	<u> </u>	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.

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➤ 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 3a.

DO NOT INCLUDE WITH FATTENED CATTLE SOLD:

- a. Cattle and calves 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

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 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

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

► 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 crop 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 tax 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 a partnership.

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.

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► 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 in section 20.

For Family or Individual Operation — Complete this section for

For Partnership Operations — Answer all items, except item 2, for the "Senior Partner." The "Senior Partner" is the individual 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" worktime at all types of agricultural enterprises, 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 produced 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

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 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 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 similar 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 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 associated 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

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

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.

- 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

- Other Farm-Related Income - Include income from 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.

Page 4

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

DUE BY FEBRUARY 1, 1988				OMB No. 0607-0534: Approv	al Expires September 30, 1989
FORM 87-A0400 U.S. DEPARTMENT OF COMMERC (3-13-97) U.S. DEPARTMENT OF COMMERC	S THE CENSUS	esponse to this inquiry is requested. BUREAU IS CONFIDENTIAL tical purposes. Your report Corovides that copies retained	It may be seen or ANNOT be used for	3, U.S. Code). By the same nly by sworn Census emplor purposes of taxation, inve	law YOUR REPORT TO
UNITED STATES		dence pertaining to this rep			oer (CFN)
CENSUS OF AGRICULTURE				87-A046	00
ag census usa	_	_		_	7
BUREAU OF THE CENSUS 1201 East Tenth Street 1201 Erst Tenth Street 1207 Erst Tenth Street 1207 Erst Tenth Street					
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 sen to the above address. Include your 12-character Census File Number (CFN as shown in your address label in all correspondence to us.	it				
If you received more than one report form, enter extra A Census File Number(s) here	1				
and return extra copies with your completed report. O36 O37 O38 O37 O38 O38	4				
USE 039 040 041 042	Pleas	e correct errors in name, addi	ress, and ZIP Code.	ENTER street and number	if not shown.
SECTION 12		SECTIONAL			2007
At any time during 1987, did you plant, grow, or have any: Hay or tobacco? Corn, wheat, or other grains? Vegetables, melons, or berrie.		(Do not include crops g		D from "THIS PLAC od to others.)	Gross value of
Other crops? Greenhouse or nursery crops?		1. Hay crops —	None harve		
Yes No 2. At any time during 1987, did you raise, sell, or keep any:		a - Alfalfa and alfalfa mixtures		104 T.	ons. 782 ry \$ 00
 Cattle, hogs, sheep, or goats? Chickens or other poultry? Horses or ponies? Fish in captivity? 		b. Small grain hay .		d	ons. 782
Bees? Other animal specialties? Yes No		c. Wild hay			ons, 782 ry \$ 100
If you answered YES to EITHER of these questions, go to SECT If you answered NO to BOTH of these questions, go to SECTIO	10N 2.	d. Other hay — Specify kind			ons, \$ 00
SECTION 2 ACREAGE IN 1987 Report land owned, rented, or		2. Corn for grain or see	ed	089 B	u. \$ 00
your spouse, or by the partnership, corporation, or or which you are reporting. Include ALL LAND, REGARD	ganization for	3. Soybeans for beans	073	074	u. \$ 00
LOCATION OR USE — cropland, pastureland, rangela	and, Number of acres	4. Wheat for grain 5. Tobacco — all types	094	9095 1 10 U	u. \$ 00
	043	6. Potatoes, Irish –(Do	097	098	785
2. All land rented or leased FROM OTHERS, including land		not include those grown for home use.)		/10 c	wt. \$ 00
services, payment of taxes, etc. Include leased Federal, State, and railroad land. (DO NOT include land used on a per-head basis under a grazing permit.)	044	7. All vegetables for sa (Do not include those grofor home use.)		/10 \$	ents 00
3. All land rented or leased TO OTHERS, including land worked on shares by others and land subleased. Also complete item 5 below.	045	Specify kind(s)		/10	
4. Acres in "THIS PLACE" — ADD acres owned (item 1) and acres rented (item 2), then SUBTRACT acres rented TO OTHERS (item 3), and enter the result in this space.	048	8. All fruit and nut orch vineyards, and berri	ards,	Total acres Quantity harves	osted Dollars Cents
If the entry is zero please refer to the Information Sheet, section 2		Specify {		/10 B	
5. Of the land you rented or leased to others, how many acres did you own?	Acres	9. Other crops — For ad	ditional crops, enter	the crop name and code from ed with crop name.	the list below.
6. In what county was the largest value of your agricultural products raised or produced?	me State	Crop name	Code Acre	es Ouantity harvest	Gross value of
SECTIONS LAND USE and IRRIGATION • PART A — How were the ACRES in this place used in 1987?	•			1	\$ 00
	Number of acres	If more space is needed, use a	segarate sheet of par	l l	\$ 00
groves, vineyards, and nursery and greenhouse crops	790	Crop name Barley for grain (bushels) Corn for silage or green chos		de Crop name 79 , Oats for grain (bushel:	S)
Cropland on which all crops failed — (Exception: Do not report here land in orchards and vineyards on which the crop failed.) Cropland idle, cropland used for cover crops.	793	Cotton (bales)	09	Other crops (pounds)	- Specify 752
or cropland in cultivated summer fallow	796	on "THIS	S PLACE" in 198		
and other pastureland and rangeland	797		Square fer Code under glass	et Acres in the open	Sales in 1987
reported in items 1 through 4 above	Number of acres		other protec	tion Whole acres Tenths	Dollars Cents
1. How many acres of harvested land were irrigated? Include	irrigated 680	If more space is needed, use a			1 00
fand from which hay was cut and land in bearing and nonbearing fruit and nut crops.	681	Crop name Bedding plants (include vego Cut flowers and cut florist go	reens 48	79 Potted flowering plant	Code ts
2. How many acres of pastureland, rangeland, and any other lands not included in item 1 above were irrigated?		Nursery crops — omamenta and nut trees, and vines .	ls, fruit 48	38 Other - Specify	506
- ENALIT FOR FAILURE TO REPORT			CON	TINUE ON REVERSE SIL	>E

STONOUS LIVESTOCK and POULTRY		PART E - HORSES, GTHER LIVESTOCK, ANIMAL SPECIALTIES, and FISH
PART A — CATTLE and CALVES	INVENTORY	None INVENTORY Number on this and in 1997 Gross value of sales
Nor		place Dec. 31, 1987 Sold in 1987 Dollars Cents
4 CATTLE and CALVED 15 -11 - 11	803	of all ages
1. CATTLE and CALVES of all ages	804	839
a. BEEF COWS — Include beef heifers that had calved	Beef cows	2. Colonies of bees
b. MILK COWS kept for production of milk or	805	844 Number 846
cream for sale or home use — Include dry milk cows and milk heifers that had calved	Milk cows	3. Milk goats
	Communication 1	847 848 Number 850
None	Gross value of sales Dollars Cents	4. Angora goats
2. Value of DAIRY PRODUCTS sold in 1987 – Include milk, cream, butter, etc	!	5. Other livestock, fish,
	00	animal products. (Enter neme/code from below.)
CATTLE and CALVES SOLD FROM THIS PLACE IN 1987		Neme Code Quentity \$ 00
Include as sold cattle moved from this place to a feedlot for further None in	ber sold Gross value of sales 1987 Dollars Cents	Name/code Name/c
feeding.	809	Mink and their pelts
3. Calves less than 500 pounds	\$ 00	Sadiume Government CCC Loans
4. Cattle - Include calves 500 pounds or more	\$ 00	Amount received in 1987 from Government CCC loans. Include regular and reserve loans, even if redeemed or forfeited. None Dollars Cents
a. Of ALL cattle sold, how many were FATTENED on this place on GRAIN or	813	880
CONCENTRATES for 30 days or more		Specify crop(s) \$ 00
and SOLD for SLAUGHTER?	9 00	PROGRAMS In 1937 (DO NOT INCLUDE CCC lorne.)
	Number on this	None Dollars Cents
Non	e place Dec. 31, 1987	1. Amount received in cash
1. HOGS and PIGS of all ages	Total	2. Value of certificates received — payment-in-kind (PIK) or commodity certificates
_	818	SECULOUS Acres in this piece SET ASIDE, DIVERTED, or IDLED under
a. HOGS and PIGS used or to be used for breeding	Breeding	FEDERAL acrosse reduction programs in 1987
Num	ber sold Gross value of sales	None Number of acres 1. How many acres were set aside (or diverted) under
I	1987 Dollars Cents	ANNUAL commodity acreage adjustment programs?
2. HOGS and PIGS SOLD from this place in 1987	9 00	2. How many acres were under the CONSERVATION RESERVE PROGRAM (10 year, CRP)?
3. Of the hogs and pigs sold, how many were	823	SECRETE STATE OF STAT
sold as FEEDER PIGS for further feeding?	NTORY NUMBER COLD	(Senior pertner or person in charge)
Numbe	ron this NUMBER SULD	1. RESIDENCE — Does the operator live on this 923 place?
None place Dec	s. 31, 1987 11 1987 1	2. PRINCIPAL OCCUPATION — At which
1. SHEEP and LAMBS of all ages		occupation did the operator spend the
a. EWES 1 year old or older		majority (50 percent or more) of his/her worktime in 1987? For pertnerships consider
No.	1828	all members of the partnership together or ranching
2. SHEEP and LAMBS SHORN None 827	Pounds 3	3. OFF-FARM WORK — How many days did the operator work at least 4 hours per day off this None
	Gross value of sales	place in 1987? —Include work at a ponfarm job. 2 1-49 days
3. What was the gross value of sales of None	Dollars Cents	business, or on someons else's farm for pay. (Do not include exchange farmwork.)
SHEEP, LAMBS, and WOOL from this place in 1987?	00	₅ ☐ 150—199 days
• PART D - POULTRY	INVENTORY	₀ ☐ 200 days or more
<u>.</u> .	Number on Number this place sold in 1987	4. In what YEAR did the operator begin to operate page
** TENES GIRC I OCCUPA	Dec. 31, 1987	any part of this place?
a. HENS and PULLETS of laying age	894 895	5. AGE of operator Years old
b. PULLETS 3 months old or older not yet of laying age for layer replacement		⁹²⁴
C. FOLLETS BILLIES SHOTELIS ON TOT REVEL	996	₂ ☐ Negro or Black
replacement	999 B99	6. RACE of operator
2. BROILERS, fryers, other meat-type chickens	900 901	Islander
3. TURKEYS for slaughter (Do not include breeders.)	901	∫ g ☐ Other — Specify
4. OTHER POULTRY (Enter name/code from below.)	,	926
Poultry nameCode		7. SEX of operator
Name/code Name/code	Name/code	8. SPANISH ORIGIN — Is the operator of Spanish 927
Turkey hans kept Geese 906 for breeding 902 Pigeons or squab 908	Quall	origin or descent (Mexican, Puerto Rican,
Ducks	Specify 914	Cuben, or other Spanish)?1 Yes 2 No
5. Value of POULTRY and POULTRY None	Gross value of sales Dollars Cents	Name 999 Date
PRODUCTS (eggs, etc.) sold from this place	1	Area code Number
in 1987?	00	Telephone number

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.

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, 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 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 Lend 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
- 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 reports 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
- Land worked for you by someone for a share of crops or livestock
- 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 "0" and:

- You raised any crops or had any livestock or poultry on "THIS PLACE" in 1987, complete the report.
- 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.
- 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:

- 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 harvested 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 tem 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 angeland 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
- b. 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 birds. 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, beeswax, 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.

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