

APPENDIX A.

General Explanation

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TAKING THE CENSUS

Method of Enumeration

All censuses beginning with the 1969 census have been conducted primarily by mail. The 1978 census was the only census to include a mailout/mailback enumeration supplemented by the direct interview of all households in a sample of area segments. This combination of the mailout/mailback enumeration plus the area sample was used in 1978 to improve completeness of coverage for U.S., regional, and State level agriculture census statistics. Due to budget reductions, the area sample was eliminated in 1982.

In censuses prior to the 1969 census, enumerators were assigned to specific areas and called on all farm operators within each area. Beginning with the 1950 census, copies of the report form were mailed prior to the enumeration date to each boxholder served by post offices in predominantly rural areas and farmers were asked to complete the forms and have them ready for the enumerator to pick up.

The mailout/mailback enumeration procedure was not used in taking the agriculture census in Puerto Rico, Guam, and the Virgin Islands. A discussion of the direct enumeration methods used there appears in the reports for these outlying areas. A description of the special direct enumeration of citrus caretakers is included in the **Definitions and Explanations** section.

Mail List

The mail list for the 1982 census was comprised of all individuals, businesses, and organizations that could be readily identified as being associated with agriculture. The list was assembled from the records of the 1978 census and administrative records of various government agencies, primarily the Internal Revenue Service and the U.S. Department of Agriculture (USDA).

Lists of large or specialized operations, such as nurseries, specialty crop farms, broiler growers, fish farms, livestock farms, and cattle feedlot operations, were obtained from State and Federal agencies, trade associations, and similar organizations. Lists of multiestablishment companies having one or more establishments (or locations) producing agricultural products were obtained from the 1978 census and updated using

information from the Standard Statistical Establishment List maintained by the Census Bureau.

A preliminary census mail list was assembled using names and addresses from the 1978 census and administrative source lists available in September 1981. Those records which were less likely to be farms were included in the 1982 Farm and Ranch Identification Survey. Approximately 3 million farm and ranch forms were mailed in March 1982 to names which appeared on only one source list or selected combinations of lists which had yielded a low percentage of farm operators in the 1978 census. As a result of this survey, nonfarm names and addresses were deleted from the census mail list, new tenant and successor operations were added, and the names, addresses, and size information were updated for the identified active farm operators.

The final census mail list was developed using results of the 1982 Farm and Ranch Identification Survey, names and addresses from the unduplicated preliminary list that were retained without precensus verification, and new or updated source lists acquired after the preliminary unduplication. The preliminary and final census mail lists were both constructed by merging and unduplicating the names and addresses from the various source lists on the basis of Employer Identification numbers, Social Security numbers, and names and addresses. To facilitate processing, each name on the administrative source lists was assigned a geographic code indicating the State and county location of the operation and a size code indicating an estimated value of sales. Most duplicates were identified and resolved prior to mailing. Other duplicate names were either reported by respondents or located during office processing.

Report Forms

In 1982, 12 regional report form versions were used. These forms were tailored primarily in sections 2 through 8 to list crops commonly produced in one or more States, and in section 15 to list livestock specialties produced. These modifications were made to enhance reporting of crop and livestock data and to reduce respondent burden.

Two report form versions were used to minimize the reporting burden, particularly for small farms. Approximately 75 percent of all farms received the 4-page nonsample form covering major items such as land use, crops, livestock and poultry, market value of agricultural products sold, and operator characteristics. The 5-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. The sample form contained all the items asked on the nonsample form plus the sample items (sections 22 through 28).

The sample form and the information sheet appear in appendix C. The **Statistical Adjustments** section of this appendix includes a discussion of the criteria used to determine whether the sample or nonsample form was to be mailed to addressees.

Initial Mailing

The report forms were mailed in late December 1982 to the approximately 3,653,000 individuals, businesses, and organizations on the mail list. The information sheet containing instructions for completing the form and a brochure explaining the uses of the census data were included with each report form. Additional special instructions were included with report forms sent to grazing associations; feedlot operations; institutional organizations; and producers of poultry under contract, bees and honey, fish, laboratory animals, worms, and nursery and greenhouse products.

In an effort to provide additional help to farmers in completing their reports, copies of an Agriculture Census Guide booklet were sent to county agricultural agencies, institutions, or businesses to whom farmers might turn for help. Included were vocational agriculture instructors, and USDA county offices—Agricultural Stabilization and Conservation Service, Farmers Home Administration, Soil Conservation Service, and Cooperative Extension Service. This guide contained descriptions and definitions for 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 if requested.

Followup Procedures

The data collection effort included a reminder card and five followup letters, two of which were accompanied by a report form. Followup reminders were sent to nonrespondents on a flow basis at 3- to 4-week intervals starting in late February and continuing until late June 1983. In early April 1983, an additional followup letter was sent to nonrespondents in low response counties in 14 States.

Telephone calls were made to nonrespondents who were expected to have large operations (those with expected sales of \$100,000 or more) or who were located in low response counties. 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 **Statistical Adjustments** section.

DATA PROCESSING

Selected report forms were reviewed prior to keying the data onto magnetic tape. These included reports with attached correspondence, and reports with remarks or no positive data on the front page. All new successors reported by former operators were researched to see if they had already been included in the census mailing. Report forms were mailed to successor addresses not located on the mail file. This processing improved the coverage of the census.

The data for 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. Significant computer-generated changes to the data were 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 significant changes between 1978 and 1982. Sizeable

historical differences were resolved or verified, by telephone if necessary.

Respondents who reported sales or acreage above specified levels on nonsample forms were sent correspondence requesting the additional sample data. Report forms with reported sales of \$1,000,000 or more or 30,000 acres or more, and other selected problem reports were reviewed by statisticians in the Agriculture Division. Problems that could not be resolved by reference to other information on the report were resolved by contacting the respondents by telephone or correspondence.

Prior to publication, tabulated totals were reviewed by statisticians to identify any inconsistencies and potential coverage problems. Comparisons were made with previous census data, estimates published by the USDA and other available check data. Selected report forms were reviewed and problem entries were either verified as being correct or the data were corrected.

MAJOR DATA CHANGES

The content of the 1982 census report form is similar to that of the 1978 form. To limit respondent burden, the 1978 and 1982 forms included only data items needed at the county level, either on a complete or sample basis. The 1978 census data items which were eliminated from the 1982 form include:

- Land held under foreign ownership
- Gallons purchased of gasoline; diesel fuel; LP gas, butane and propane; and fuel oil
- Animal health costs for livestock and poultry

The following new data items were added to the 1982 report form:

- Interest expense for the farm business
- Source of irrigation water
- Year in which the operator began to operate the farm

More extensive data on Commodity Credit Corporation (CCC) loans were collected in 1982.

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 1982 census report forms and the information sheet which accompanied these forms, see appendix C.

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 operation. Large acreages of woodland or wasteland held for nonagricultural purposes were deleted from individual reports during the processing operations.

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. Grazing land operated by grazing associations was to be reported by the person chiefly responsible for conducting the business of the association. All land in Indian reservations used for growing crops or grazing livestock was to be included as land in farms. Land in reservations not reported by individual Indians or non-Indians was to be reported in the name of the cooperative group that used the land. In some instances, an entire Indian reservation was reported as one farm.

Land area—The approximate land area of counties and States shown for 1982 represents the total land area as determined by records and calculations updated as of January 1, 1983. The county land areas were remeasured in 1980. The previous county measurements were done in 1940. Any differences between the land area in 1982 and 1978 are due to these new measurements, annexations, and other changes affecting county boundaries.

Land in two or more counties—With few exceptions, the land in each farm was tabulated as being in the operator's principal county. The principal county was defined as the one where the largest value of agricultural products was raised or produced. It was usually the county containing all or the largest proportion of the land in the farm or viewed by the respondent as his/her principal county. For a limited number of Midwest and Western States, this procedure has resulted in the allocation of more land in farms to a county than the total land area of the county. To minimize this distortion, separate reports were required for large farms identified from the 1978 census as having more than one farm unit. Other reports received showing land in more than one county were separated into two or more reports if the data would significantly affect the county totals.

Value of land and buildings—Respondents were asked to report their estimate of the current market value of land and buildings owned, rented or leased from others, and rented or leased to others. Market value refers to the respondent's estimate of what 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, and all

land planted in crops that were grazed before the crops reached maturity. Also included was all cropland used for rotation pasture and land in government diversion programs that were pastured. However, cropland that was pastured after crops were harvested was not to be included.

Other cropland—This category includes cropland used only for 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, and land planted for Christmas tree production. 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.

Other land—This category includes land in house lots, barn lots, ponds, roads, wasteland, etc. In 1974, for farms with sales of less than \$2,500, this category included pastureland and rangeland other than cropland and woodland pastured in addition to land in house lots, barn lots, ponds, roads, and wasteland.

Land set aside in federal farm programs—This land includes land diverted or set aside under the provisions of the Federal Commodity Acreage Reduction 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. No information was obtained as to which crops would have been grown on the acres set aside.

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

Operator—The term "operator" designates a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, marketing, etc. The operator may be the owner, a member of the owner's household, a salaried 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 an operator. If there is no clear-cut partner 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 operations.

Operator characteristics—Data on characteristics such as residence, race, Spanish origin, age, sex, principal occupation, and off-farm work were collected from all operators in 1982. If

operator characteristics of race, age, sex, and principal occupation were not reported, they were derived based on information reported by farms with similar acreage size, tenure, and sales size. No imputations were made for nonresponse to place of residence, Spanish origin, off-farm work, or year began operation. For the 1982 and 1978 censuses, operators of Spanish origin were tabulated by reported race. Prior censuses included Spanish origin as "White" whenever separate data for the White race were shown.

Selected farm production expenses—Since only selected production expenses incurred in 1982 were requested, the expense data cannot be used in combination with gross sales to calculate net cash farm income. The **1979 Farm Finance Survey** provided estimates on net cash farm income.

In 1982, as in other recent censuses, operators producing crops, livestock, or poultry under contract frequently failed to report certain expenditure data. They often were unable or unwilling to estimate the cost of production inputs furnished by the contractors. As a consequence, the rate of imputation of expenditure data for these operations is considerably higher than it is for noncontract producers.

Commercial fertilizer—The expense for commercial fertilizer is the amount spent on fertilizer during 1982, excluding the cost of application. Some fertilizer purchased in 1982 may not have been applied during the year. If the fertilizer was applied by someone other than the operator, respondents were requested to report the cost of application as an expense for customwork, machine hire, and rental of machinery and equipment.

Other agricultural chemicals—These expenses include the cost of all insecticides, herbicides, fungicides, and other pesticides, excluding costs of application. Data exclude commercial fertilizer purchased. The cost of lime is included in the 1978 data, but excluded from 1982.

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 labor for operating rented or hired machinery is included as a hired farm and ranch labor expense.

Interest expense—Only the interest expense for the farm business was to be reported. Although instructions requested that interest on the owner/operator dwelling be excluded when separate records were available, it is probable that an undetermined amount of such nonfarm business interest was also reported.

Energy and petroleum products—Respondents were asked to report only those expenses pertaining to the operation of the farm business.

Storage capacity—This category applies to those farms reporting expenditures for the specific kind of fuel. The storage capacity was to be reported even if not used during the census year.

Farms with storage capacity reported as "no"—This category includes farm operators with expenditures for a specific kind of fuel who also checked the "none" box for storage capacity. See appendix C, section 26, **Expenditures for Energy**.

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 1982 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 the loan value received in 1982 for placing commodities in the CCC loan program. This ensures comparability with prior census years for market value of agricultural products sold.

The value of agricultural products sold represents total sales of all crops, including nursery products sold, and livestock, poultry, and their products sold. It does not include income from farm-related sources such as customwork or agricultural services, or income from nonfarm sources. Sales of forest products were not included in 1978 or 1982; but were included in 1974.

The value of crops sold in 1982 does not necessarily represent the sales from crops harvested in 1982. Data may include sales from crops produced in earlier years and exclude some crops produced in 1982, 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 only the total value received in 1982.

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

Caution should be used when comparing sales in 1982 with sales reported in earlier censuses due to the fluctuations in per-unit prices between census years.

Income from machine work, customwork, and other agricultural services—This category consists of gross income received during 1982 by farm operators for providing services for others such as planting, plowing, spraying, harvesting, etc. Income from machine work and other agricultural services is generally included in the agriculture census if it is supplemental to the farming operation. However, it is excluded if it constitutes a separate establishment or is conducted from another location. The agricultural services part of a farming operation was generally considered a separate establishment when income from agricultural services was \$10,000 or more and greater than the value of agricultural products sold. Due to legislative restrictions, data for establishments primarily engaged in agricultural services were not collected in 1982.

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

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

sold is included in the category "other livestock and livestock products."

Bees and honey—Bee and honey production was enumerated and tabulated in the county in which the home farm was located even though hives are often moved from farm to farm over a wide geographic area. The completeness and accuracy of these data are affected by the fact that some bee operations may not have been on the mail list and some operators on the mail list may not have considered beekeeping to be an agricultural operation, and therefore did not report.

Citrus enumeration—In the 1982 census, reports for selected citrus caretakers in Arizona, Florida, and Texas were obtained by direct enumeration. A citrus caretaker is an organization or person caring for or managing citrus groves for others. This special enumeration has been used in recent censuses because of the difficulty in identifying and enumerating absentee grove owners who often do not know the information that is needed to adequately complete the census report. Each citrus caretaker was enumerated as a farm operator and requested to complete one report form for all groves cared for and to furnish a list of grove owners' names, addresses, and acres of citrus. The names on the lists were matched to completed grove owners' report forms to eliminate duplication. The caretaker was also requested to inform the grove owner that he had already reported for the citrus under his care and that the grove owner was not to report the citrus again. In the 1982 census, 8 caretakers in Arizona reported 210 grove owners having 13,000 acres of citrus; the 99 caretakers in Florida reported 5,900 grove owners having 250,000 acres of citrus; and 21 caretakers in Texas reported 1,500 grove owners having 30,000 acres of citrus.

Crop year or season covered—Acres and quantity harvested are for the calendar year 1982 except for citrus fruits, avocados, olives; vegetables in Florida; sugarcane in Florida and Texas; and pineapples and coffee in Hawaii.

Citrus fruits—The data for Florida relate to the quantity harvested in the September 1981 through July 1982 harvest season, except limes that were harvested in the April 1982 through March 1983 harvest season. The data for Texas relate to the quantity harvested in the September 1981 through May 1982 harvest season. The data for States, other than Florida and Texas, relate to the quantity harvested in the 1981-82 harvest season.

Avocados—The data for California relate to the quantity harvested in the November 1981 through November 1982 harvest season and for Florida the April 1982 through March 1983 harvest season.

Olives—The data for California relate to the quantity harvested in the September 1981 through March 1982 harvest season.

Vegetables—The data for Florida relate to the crop harvested in the September 1981 through August 1982 harvest season.

Sugarcane for sugar—The data for Florida relate to the cuttings from November 1981 through April 1982, and for Texas the cuttings from October 1981 through April 1982.

Pineapples—The data for Hawaii relate to the quantity harvested in the year ending May 31, 1982.

Coffee—The data for Hawaii relate to the 1981-82 crop.

Acres and quantity harvested—Crops were reported in whole acres, except for the following crops which were reported in 10ths of acres: Irish potatoes, sweetpotatoes, tobacco, fruit and nut crops including land in orchards, berries, vegetables, and nursery and greenhouse products; 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. The 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 crop 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 to be reported as cropland pasture.

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

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

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

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

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

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

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

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

Changes in crop wording—Changes were made to the wording of selected crop items on the 1982 census forms. These items are listed with the wording used in 1978. The 1982 and 1978 data are comparable for all items, except improved pecans and wild and seedling pecans which were combined.

Dry edible beans, excluding dry limas—The 1978 wording was "dry field and seed beans."

Dry edible peas—The 1978 wording was "dry field and seed peas". Dry edible peas exclude Austrian winter peas, wrinkled seed peas, and southern peas or cowpeas.

Green cowpeas and green southern peas; cowpeas and southern peas for dry peas—The wording for these items was changed for 1982 to include the term "southern peas," a more common term for cowpeas.

Honey tangerines—The 1978 wording was "murcotts."

Other tangerines—The 1978 wording was "tangerines and mandarins."

Pecans—The 1978 categories "improved pecans" and "wild and seedling pecans" have been combined into "pecans" for 1982.

"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 1982 and 1978, selected data were collected from only a sample of farms. These data are subject to sampling error. For 1982, the 5-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 22 through 28 of the 1982 census forms include inquiries on commercial fertilizer and lime, chemicals, interest expense, machinery and equipment, expenditures for energy and petroleum products, selected production expenses, and value of land and buildings.

Principal source of irrigation water—The acres irrigated by principal source were derived based on reported percentages of water obtained by source. See appendix C for an example of section 11, **Land Irrigated**. When irrigation water was obtained from two or more sources, the acres irrigated were included only once under the source from which the largest percentage of water was obtained.

1974 data apply only to individual or family operations (sole proprietorships) and partnerships—For 1974, farm operator characteristics were not collected from corporations, cooperatives, prison farms, grazing associations, and Indian reservations. For 1982 and 1978, characteristics and occupation of the senior partner or person in charge were collected from all farms.

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.

Farms reporting no interest expense—This category includes only reports without dollars reported and the "no" box checked for the yes/no screening question in section 24. See appendix C for an example of section 24, **Interest Expense**.

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 products, and hay. Respondents were asked to include landlords' and contractors' shares. As in prior census years, the value of commodities placed in CCC loans are included as sold. Sales of forest products were not included in 1978 or 1982. The 1974 data included sales of forest products from those places qualifying as farms through other agricultural production.

Farms with sales of less than \$2,500—In 1982 and 1978, this category included all farms, except abnormal farms, with actual sales of less than \$2,500. In 1974, farms with sales of less than \$2,500 but having the production potential for sales of \$2,500 and over are included in the category "\$2,500 to \$4,999."

Farms with sales of less than \$1,000—This category includes all farms, except abnormal farms, with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more.

Abnormal farms—This category includes institutional farms, experimental and research farms, and Indian reservations. Institutional farms include those operated by hospitals, peni-

tentiaries, churches, schools, grazing associations, government agencies, etc. In prior censuses, a number of nongovernmental units such as church farms and FFA camps were classified as abnormal farms. In 1982, such nongovernmental units 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.

Value of agricultural products sold directly to individuals for human consumption—This category represents the value of agricultural products produced and sold directly to individuals for human consumption from roadside stands, farmers' markets, pick-your-own sites, etc. It excludes nonedible products such as nursery products, cut flowers, wool, etc. Sales of agricultural products by vertically integrated operations through their own processing and marketing operations were excluded.

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 Statistical Reporting Service, USDA. Prices applied to other livestock and poultry were census-derived averages based primarily on reported value of sales in the census.

Poultry hatched—This category includes all poultry hatched during the year and placed or sold. Incubator egg capacity on December 31, 1982, is tabulated under the column heading Inventory and the number of poultry hatched is under the heading Sales.

Worms—Worm inventory consists of the number of standard worm beds in production. A standard worm bed is considered to be 24 cubic feet. Sales of worms are shown in pounds. Sales of worm castings are included in other livestock products sold.

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

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

Grass silage, haylage, and green chop hay—The 1978 categories "grass silage and haylage" and "hay crops cut and fed green (green chop)" have been combined into "grass silage, haylage, and green chop hay" in 1982.

Grapes—Farm operators were given the option of reporting the quantity of grapes harvested in dry weight or fresh weight. For publication purposes, all quantities of grapes harvested

have been converted to pounds fresh weight. The conversion used was 4.3 pounds fresh weight to 1 pound dry weight.

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

Almonds—In 1982, the quantity of almonds harvested was reported in pounds of meats. For 1978, the quantity harvested was reported in the shell.

Other fruits and nuts—Data shown for other fruits and nuts relate to any fruits and nuts not having a specific code on the 1982 report form.

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

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

Nursery and greenhouse products 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, cowpeas and southern peas for dry peas, 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 1982 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 in most part from publications of the Statistical Reporting 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

U.S. tables 44 through 50 present detailed 1982 data for all farms classified by specified characteristics—tenure of operator, type of organization, age and principal occupation of operator, size of farm (acres), value of agricultural products sold, and standard industrial classification. Other tables include data classified by value of sales groups, or other characteristics of the farm or the operator.

Farms by value of agricultural products sold or value of sales—In 1982, all farms except abnormal farms were tabulated by size based on reported sales. Thus, the category "farms with sales of \$2,500 to \$4,999" included only farms with actual sales of \$2,500 to \$4,999. Abnormal farms were not tabulated based on actual or potential sales. The category "farms with sales of less than \$1,000" included all farms, except abnormal farms, with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more.

The sales size categories have been changed to be consistent with the standard business size categories issued by the Office of Management and Budget in 1982. Sales size categories "\$100,000 to \$249,999" and "\$250,000 to \$499,999" are used in this report; whereas, sales size categories "\$100,000 to \$199,999" and "\$200,000 to \$499,999" were used in prior censuses. In U.S. table 11 and State table 3, the 1978 census data have been retabulated into the new sales size categories.

Farms by tenure of operator—The classifications of tenure used in the 1982 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 1982 census. The classifications used were:

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

Partnership operation, including family partnership.

Corporation, including family corporation.

Other, such as cooperative, estate or trust, institutional farm, etc.

Corporations were subclassified by two additional characteristics into:

- a. Family held
Other than family held
- b. More than 10 stockholders
10 or less stockholders

Farms by age and principal occupation of operator—Data on age and principal occupation were obtained from all operators in 1982. The principal occupation classifications used were:

Farming—The operator spent 50 percent or more of his/her worktime in 1982 in farming or ranching.

Other—The operator spent more than 50 percent of his/her worktime in 1982 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 1982, all agricultural production establishments (farms, ranches, nurseries, greenhouses, etc.) were classified by type of activity or activities using the standard industrial classification (SIC) system. These classifications, found in the 1972 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 livestock production (major group 02) is classified in the 4-digit industry and 3-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 4-digit industry, but 50 percent or more from the products of two or more 4-digit industries within the same 3-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.

Characteristics of all farms by selected SIC groupings are shown in U.S. tables 15 and 50. The SIC groupings shown in U.S. table 50, together with the associated products (value of sales representing 50 percent or more of the value of agricultural products sold during the year) on which the classification is based, are as follows:

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

Cotton (0131)—Cotton and cottonseed.

Tobacco (0132)—Tobacco.

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

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, dates, figs, olives, pineapples, and tropical fruit.

Horticultural specialties (018)—Ornamental plants; nursery products, such as bulbs, florists' greens, flowers, shrubbery, flower and vegetable seeds and plants, and 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 3-digit industry group. Includes farms with no agricultural products sold reporting cropland harvested or cropland on which all crops failed.

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

¹ **Standard Industrial Classification Manual: 1972.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. **1977 Supplement.** Stock No. 003-005-00176-0.

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, duck, geese, pheasants, pigeons, and quail.

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

General farms, primarily livestock (029)—Livestock and livestock products, including animal specialties, but less than 50 percent of sales from any single 3-digit industry group. Includes farms with no agricultural products sold reporting livestock or pasture.

STATISTICAL ADJUSTMENTS

The 1982 Census of Agriculture used two types of statistical adjustments—nonresponse and sample. These adjustments were necessary because, as noted previously, not all farms were surveyed for all items and some farms failed to respond to the numerous attempts to contact them.

Nonresponse

Farms for which no response was obtained from the mailout/mailback self-enumeration procedure were classified as "large" or "small" based on expected sales being above or below \$100,000. The small nonrespondents were classified even further using other mail list characteristics.

A short report form was then sent to a sample selected from the various classifications of small farms to obtain information needed to develop a State estimate of the number of nonrespondents that were in fact farms. If this second report form was not returned, then a telephone follow-up was attempted.

For all large farms, a telephone follow-up was conducted. Some operators could not be contacted or they refused to cooperate. In these cases, secondary sources such as ASCS county offices, extension agents, and previous census reports were utilized whenever possible to provide reports for tabulation.

State estimates of the percentage of nonrespondent farms were made for several strata. These estimates were then used to make estimates at the county level for each stratum. Respondent farms were then randomly selected within county stratum to represent the nonrespondent farms by having a nonresponse weight of two. All other respondent farms had a nonresponse weight of one.

The nonresponse adjustment procedure makes the assumption that the respondents and the nonrespondents have similar statistical properties. Also, the use of secondary sources for some large farms and the fact that a percentage of the sampled farms were not contacted by either mail or telephone is assumed not to affect the estimates for nonrespondents.

Tables A and B partially measure the effect of nonresponse on selected major items at the U.S. and State levels. This estimate

of the nonresponse rate measures only the effect of small whole farm nonresponse. The effect of the adjustment for nonresponse due to complete nonresponse among large farms and item nonresponse among all farms is not included in tables A and B. The percentages in tables A and B indicate the potential for bias in published figures resulting from small farm nonresponse. However, large farm nonresponse does not necessarily indicate bias.

Sample

Report forms containing additional sample inquiries (sections 22 through 28) were mailed to all farms in Alaska and Hawaii and to a sample of farms identified when the mail list was constructed. Other farms were selected into the sample with certainty because they were expected to be "large," to have a complex organizational structure, or to have special characteristics. The definition of large varied by State, from a low of 1,000 acres or \$100,000 sales to a high of 10,000 acres or \$500,000 sales. The median State level for the continental United States was 1,800 for acres and \$150,000 for sales. Large farms identified during processing also were included with certainty by sending the respondents a supplemental form containing only sample questions. In addition to large farms, all farms in counties containing less than 100 farms in 1978 and all farms in SIC groups with a small number of farms at the State level in 1978 were included in the sample with certainty. Farms in counties containing 100 to 199 farms in 1978 were sampled at a rate of 1 in 2. Farms in counties containing 200 or more farms in 1978 were sampled at a rate of 1 in 6.

The noncertainty samples were stratified into 128 strata formed by the 8 sales groups, 8 SIC groups, and 2 acre groups.

Sales	SIC	Acres
\$1 to \$999	011	0 to 69
\$1,000 to \$2,499	013	70 or more
\$2,500 to \$4,999	016, 018	
\$5,000 to \$9,999	017, 019	
\$10,000 to \$19,999	024, 021, except 0212	
\$20,000 to \$39,999	0212, 027	
\$40,000 to \$99,999	025	
\$100,000 or more	029	

This post-stratification was done to improve precision and to reduce the bias in all estimates by weighting the sample farms within stratum by the ratio of total farms to sample farms. If the calculated weight was greater than 12 in counties sampled at a rate of 1 in 6, or greater than 4 in counties sampled at a rate of 1 in 2, then the post-stratum was collapsed into another post-stratum. Collapsing of post-stratum also occurred if the stratum contained fewer than 10 sample farms.

Estimates were prepared for items in sections 22 through 28 of the report form by multiplying the data item for each farm in the sample by the sample weight assigned the farm. The weight for a certainty farm was 1. Sample weights for the final post-strata ranged from 1 to 24 because all exact weights (census total number of farms divided by the number of sample farms in the stratum) were converted to integers by a simple algorithm and then multiplied by 1 or 2 (the nonresponse weight).

Table A. Percent of U.S. Total Represented by Adjustment of Whole Farm Nonresponse: 1982

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

Item	All farms		Farms with sales of \$10,000 or more	
	Total (number)	Adjustment for whole farm nonresponse (percent)	Total (number)	Adjustment for whole farm nonresponse (percent)
Farms number	2,240,976	9.7	1,142,963	9.1
Land in farms acres	986,796,579	4.6	811,280,541	4.2
Value of land and buildings ¹ \$1,000	774,158,465	5.1	636,881,196	4.5
Total cropland farms	2,010,609	9.5	1,083,508	9.0
acres	445,362,028	6.3	396,148,576	5.9
Harvested cropland farms	1,809,756	9.5	1,051,417	9.0
acres	326,306,462	5.9	306,242,220	5.6
Irrigated land farms	278,277	7.9	183,412	6.9
acres	49,002,433	3.3	46,860,434	3.1
Market value of agricultural products sold farms	2,240,976	9.7	1,142,963	9.1
\$1,000	131,900,223	3.7	128,023,778	3.5
Crops, including nursery and greenhouse products farms	1,357,443	9.6	886,215	9.1
\$1,000	62,256,087	4.1	60,642,654	3.9
Livestock, poultry, and their products farms	1,516,853	9.2	796,728	8.8
\$1,000	69,644,136	3.3	67,381,124	3.1
Poultry and poultry products farms	114,071	8.2	65,242	6.5
\$1,000	9,796,927	1.2	9,767,260	1.2
Livestock and poultry inventory:				
Cattle and calves farms	1,354,992	9.2	675,509	8.8
number	104,475,827	5.3	89,103,524	4.7
Hogs and pigs farms	329,833	9.9	219,088	9.1
number	55,366,205	5.4	53,442,310	5.1
Hens and pullets of laying age farms	212,608	9.9	75,833	9.2
number	310,515,367	1.4	306,031,698	1.2
Livestock and poultry sales:				
Cattle and calves farms	1,278,609	9.0	678,726	8.7
number	71,216,727	3.8	64,946,730	3.4
Hogs and pigs farms	315,095	9.8	224,940	9.2
number	94,783,598	5.2	92,055,157	5.1
Broilers and other meat-type chickens farms	30,100	6.4	24,114	5.2
number	3,516,622,889	2.1	3,512,326,522	2.1
Crops:				
Corn for grain or seed farms	715,171	9.1	546,581	8.8
acres	69,857,993	5.5	67,603,094	5.3
bushels	7,508,721,493	5.0	7,341,316,392	4.9
Wheat for grain farms	446,075	9.5	367,277	9.1
acres	70,910,293	6.3	68,478,845	6.0
bushels	2,373,246,659	5.6	2,314,386,644	5.5
Sorghum for grain or seed farms	93,696	9.9	80,402	9.6
acres	12,678,843	6.5	12,266,450	6.3
bushels	725,959,104	6.0	710,350,908	5.8
Soybeans for beans farms	511,229	9.5	410,441	9.0
acres	64,832,842	6.0	62,275,679	5.8
bushels	1,989,993,158	5.7	1,931,390,306	5.5
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) farms	1,050,992	8.8	593,535	8.6
acres	56,743,836	6.9	46,420,100	6.4
Vegetables harvested for sale (see text) farms	69,109	9.0	40,051	7.7
acres	3,330,637	2.7	3,202,559	2.4
Land in orchards farms	123,663	8.3	51,437	6.8
acres	4,750,667	3.3	4,148,243	2.4
Selected farm production expenses ¹ :				
Livestock and poultry purchased farms	755,431	8.8	436,356	7.9
\$1,000	17,174,334	2.1	16,598,865	1.8
Feed for livestock and poultry farms	1,360,243	8.7	709,719	8.1
\$1,000	18,591,985	2.7	17,894,560	2.4
Seeds, bulbs, plants, and trees farms	1,267,129	9.0	877,336	8.5
\$1,000	3,171,752	4.7	3,048,400	4.5
Commercial fertilizer farms	1,443,766	8.7	900,740	8.2
\$1,000	7,689,365	4.2	7,320,340	4.0
Other agricultural chemicals farms	1,125,436	8.7	815,919	8.2
\$1,000	4,282,213	3.8	4,155,137	3.6
Hired farm labor farms	869,837	7.6	606,221	6.9
\$1,000	8,441,180	1.9	8,155,828	1.7
Energy and petroleum products farms	2,224,624	9.1	1,139,759	8.5
\$1,000	9,973,865	4.9	9,286,502	4.6
Interest expense farms	1,050,104	9.0	752,584	8.2
\$1,000	11,668,942	4.3	10,947,898	3.9
Estimated market value of all machinery and equipment on place ¹ farms	2,234,365	9.1	1,141,005	8.5
\$1,000	93,662,947	6.2	79,451,157	5.5

¹Data are based on a sample of farms.

Table B. Percent of U.S. and State Totals Represented by Adjustment of Whole Farm Nonresponse: 1982

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

Geographic area	Farms (number)	Land in farms (acres)	Value of land and buildings ¹	Harvested cropland (acres)	Market value of agricultural products sold	Cattle and calves inventory (number)	Hogs and pigs inventory (number)	Hens and pullets of laying age inventory (number)	Corn for grain or seed (acres)	Wheat for grain (acres)
United States	9.7	4.6	5.1	5.9	3.7	5.3	5.4	1.4	5.5	6.3
Alabama	8.8	6.1	5.4	6.4	4.0	6.1	7.2	2.3	6.5	5.9
Alaska	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(D)	0.0	0.0
Arizona	10.0	0.3	2.5	1.6	0.7	1.3	1.3	0.8	2.0	0.8
Arkansas	7.3	4.7	4.2	3.9	3.2	5.9	3.1	2.9	3.0	3.6
California	6.5	1.1	2.1	1.3	0.7	1.1	4.6	0.2	0.6	0.8
Colorado	6.7	2.0	2.9	3.2	1.2	1.8	3.8	0.3	1.7	2.9
Connecticut	9.3	6.0	8.2	4.7	1.5	2.9	7.9	0.1	5.0	0.0
Delaware	11.5	6.1	7.3	5.6	1.9	3.6	4.8	2.5	4.9	5.5
Florida	7.0	2.0	2.4	2.8	1.3	2.6	7.1	0.7	5.3	4.9
Georgia	10.3	6.0	5.5	5.7	3.5	6.1	6.2	1.6	5.9	5.4
Hawaii	8.7	0.5	2.3	0.7	0.6	1.2	3.4	(D)	0.2	0.0
Idaho	6.6	2.9	3.4	3.6	2.1	3.9	6.6	0.4	4.7	3.0
Illinois	10.6	6.0	5.3	5.6	4.6	5.8	5.0	2.5	5.0	7.6
Indiana	7.9	5.1	4.5	4.7	3.7	5.1	3.6	0.5	4.3	5.2
Iowa	8.5	5.3	4.5	4.9	3.8	4.6	4.3	2.4	4.7	7.0
Kansas	12.5	8.1	7.7	8.4	4.3	5.7	6.7	3.1	4.9	8.9
Kentucky	10.6	8.2	7.6	7.1	6.4	7.9	5.2	1.1	6.5	5.8
Louisiana	12.2	6.0	6.6	5.9	4.5	8.1	9.8	3.2	4.8	6.3
Maine	7.8	5.3	4.4	4.3	1.8	3.7	10.5	(Z)	0.5	7.6
Maryland	11.8	6.7	6.7	5.3	3.0	5.8	3.3	1.1	4.6	4.6
Massachusetts	10.7	6.5	7.0	5.7	3.0	4.5	10.7	0.7	2.7	0.0
Michigan	10.1	7.1	6.4	6.7	4.7	6.1	5.3	1.3	6.1	7.0
Minnesota	12.8	8.9	7.5	8.4	7.2	9.7	7.9	2.6	8.2	7.1
Mississippi	10.6	5.8	5.2	4.5	3.0	7.5	7.1	4.0	7.1	4.2
Missouri	9.6	7.2	6.7	6.9	5.9	7.1	6.6	1.9	6.1	6.5
Montana	7.8	3.1	4.2	4.6	3.6	3.8	4.3	0.7	5.8	4.8
Nebraska	10.0	4.5	4.8	5.9	3.5	3.8	5.8	1.2	5.2	6.9
Nevada	10.2	0.8	2.7	2.9	2.3	2.8	2.1	7.8	0.0	1.3
New Hampshire	7.7	4.9	5.4	4.0	1.9	2.9	14.7	0.3	1.7	(D)
New Jersey	9.5	5.7	6.8	4.9	2.8	5.5	6.5	1.5	4.5	4.3
New Mexico	10.7	1.6	3.3	6.2	2.1	2.8	4.3	(D)	2.5	7.1
New York	10.8	7.6	6.6	6.6	4.8	6.6	8.8	0.9	4.7	5.1
North Carolina	7.3	5.0	4.6	4.9	3.4	4.4	2.8	1.9	4.6	4.8
North Dakota	10.1	6.3	5.2	6.3	5.5	7.3	6.7	4.5	3.4	6.6
Ohio	10.1	7.3	6.5	6.9	5.5	6.9	6.5	1.4	6.5	7.1
Oklahoma	10.3	7.2	7.0	8.2	5.3	6.9	8.2	2.6	2.6	8.3
Oregon	10.6	2.1	4.8	3.4	2.8	3.9	6.6	0.5	2.1	2.2
Pennsylvania	9.4	7.5	6.7	6.9	4.4	6.8	5.2	0.8	5.8	6.4
Rhode Island	11.0	7.1	5.7	5.4	3.0	7.2	13.1	(D)	7.9	(D)
South Carolina	8.8	5.3	5.1	5.4	3.5	5.3	4.5	0.4	5.0	5.1
South Dakota	11.8	5.0	5.7	7.5	6.1	6.5	8.8	3.6	8.2	6.4
Tennessee	10.9	7.9	7.5	6.8	5.7	7.7	7.0	2.2	7.3	5.7
Texas	10.6	3.8	5.5	5.9	2.5	4.8	5.0	1.0	3.2	6.7
Utah	9.5	2.5	4.4	5.0	3.1	4.2	6.3	0.2	3.6	3.5
Vermont	5.1	3.1	2.4	2.4	1.3	1.8	9.2	0.4	1.2	0.0
Virginia	9.4	6.5	6.4	5.9	3.8	5.8	4.6	3.0	5.1	5.9
Washington	8.5	1.9	3.4	2.4	1.7	3.4	7.1	0.2	1.1	1.6
West Virginia	7.2	6.3	5.9	6.2	3.9	6.5	5.8	3.5	5.4	11.2
Wisconsin	9.5	7.5	6.3	7.0	6.2	7.7	5.8	1.6	6.1	4.6
Wyoming	8.5	1.8	3.7	5.3	3.0	3.5	4.7	6.7	4.3	6.2

¹Data are based on a sample of farms.

NONSAMPLING ERRORS

Each census or survey is subject to error. In addition to sampling variability, errors arise from nonsample sources such as incorrect or incomplete reporting, processing, and the inability to obtain a report from each eligible reporting unit. For example, an operator may report the number of hogs and pigs sold but may not report the value of the sale. In other cases, the respondent indicated the presence of an item but not the quantity. The accuracy of a census count is determined by the joint effects of sampling and nonsampling errors. Thus, extensive efforts were made to keep errors introduced during clerical and electronic processing to a minimum level through the use of quality control, verification, and check measures on specific operations.

CENSUS COVERAGE

Although a complete and accurate count of farms, land in farms, and farm production is the aim of each nationwide census of agriculture, the complex structure of America's agriculture makes this difficult to achieve. Among the complexities are the many places to be included, the variety of arrangements under which farms are operated, the continuing changes in the relationship of operators to the farm operated, the expiration of leases and the initiation or renewal of leases, the problem of obtaining a complete list of agricultural operations, the difficulty of locating and identifying some types of farms, the operator's absence from the farm during the data collection period, and the operator's opinion that part or all of the operation does not qualify and should not be included in the census.

An evaluation of coverage has been conducted for each census of agriculture since 1945. Although the primary purpose of these evaluations is to identify problem areas and supply evidence as a basis for improvements, they also provide users of census data with estimates of the completeness of the census counts. The results of the coverage evaluation study were published for the 1978 census in Volume 5, Special Reports, part 3. An evaluation of coverage was conducted in 1982 to measure the extent of the undercount and overcount of farms in the census. A description of this evaluation will be in a separate **Coverage Evaluation** report. This report includes estimates of the percentage of all farms, acres, and sales missed in the census.

Classification Problems

In 1982, the proportion of farms missed due to misclassification (about 3 percent) was higher for farms with small values of sales. The rate of misclassification was higher on (1) livestock farms than crop farms, (2) farms with a small number of acres than larger farms, or (3) full-owner farms than tenant or part-owner farms. Full owners were misclassified more often than part owners. Farm operators over 55 years of age were misclassified more often than younger operators.

An evaluation study of classification errors was conducted in the 1982 Census of Agriculture and will be reported in **Coverage Evaluation**. A sample of mail list respondents was selected, and these addresses reenumerated to determine whether they were a farm or nonfarm. Two types of errors were identified; misclassified farms and overcounted farms. Misclassified farms were farm operations included on the mail list but classified in the census as nonfarms. Overcounted operations were nonfarm operations classified in the census as farms.

Mail List Problems

A major problem with the use of a mail list is the failure to include all farms on the list. In 1982, approximately 10 percent of all farms were not included on the census mail list. There were several reasons for the farm operator's names not being included on the mail list—the operation may have been started after the mail list source was developed; the operation may not have been included on any source list used to construct the mail list; or the operation may have been removed from the list because of incorrectly identifying duplicates or falsely classifying it as a nonfarm prior to mailout.

A great many of the farms not included on the mail list were small in both acres and sales. The operator in many cases had a full time off-farm job and farmed part time. In 1982, the average size of farms and sales for census published farms and farms not on the mail list is given below. These figures are subject to final review for the **Coverage Evaluation** report.

	Average size	
	Census published farms	Farms not on mail list
Land (acres)	439	58
Sales (dollars)	\$58,816	\$5,774

RELIABILITY OF CENSUS ESTIMATES

The sources of possible sampling and nonsampling errors have been previously discussed. Some sources affected all the data; others affected only certain items or geographic levels. The results of these errors, bias and increased variability, are difficult to measure.

Census items were classified as either 100-percent or sample items. The 100-percent items were those asked of all farm operators. These included land in farms, harvested cropland, livestock inventory and sales, and crop acreages and quantities (sections 1 to 21 of the census report form). Variability in the 100-percent items is due to the variation associated with non-response imputation and response error. Estimation of this variation results in a standard error of an estimate originating in the selection of the sample of small nonrespondents at the State level. Sample items were items asked of approximately 1 in 4 farm operators and include value of land and building, value of farm machinery, energy expenses, and selected farm production expenses, such as hired farm labor and interest expense (sections 22 to 28 of the census report form). Variability in estimates of sample items is the effect of the sample selection and estimation procedure and all the factors affecting the variability of 100-percent items.

In the 1982 Census of Agriculture, the sample used is one of a large number of all possible samples of the same size that could have been selected using the same sample design. Estimates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible samples is called the sampling deviation. The standard or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples, and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error of estimate (percent) is defined as the standard error of the estimate divided by the value being estimated.

As calculated for this report, the standard error of the estimate (percent) partially measures the effect of certain non-sampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples, between the estimate and the desired value. The accuracy of a survey result depends on both the sampling and nonsampling errors measured by the relative standard error of the estimate (percent) and the bias and other types of non-sampling error not measured.

If all possible samples were selected, each of those surveyed under essentially the same conditions, and an estimate and its estimated standard error were calculated from each sample then:

- a. Approximately 67 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of all possible samples.
- b. Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average value of all possible samples.

To illustrate the computations involved in the above confidence statements as related to average value of land and building estimates, assume that an estimate of a average value of land and buildings published for a particular State is \$276,741 and the relative standard error of the estimate (percent) for this estimate, as given in table D, is 2.8 percent, or 0.028. Multiplying \$276,741 by 0.028 yields \$7,749. Therefore, a 67-percent confidence interval is \$268,992 to \$284,490 (i.e., \$276,741 plus or minus \$7,749). If corresponding confidence

intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly, a 95-percent confidence interval is \$261,243 to \$292,239 (i.e., \$276,741 plus or minus $2 \times \$7,749$).

Table C presents U.S. estimates of major items for all farms and for all farms with sales of \$10,000 or more and measures of their reliability. The estimate and the relative standard error of the estimate (percent) is given for selected 100-percent and sample items. The relative standard error of the estimate (percent) measures the variation associated with the small whole farm nonresponse adjustment. It does not measure census variability associated with complete nonresponse among large farms, partial or item nonresponse among all farms, response error or content error. The relative standard error of estimate (percent) for sample items measures both nonsampling and sampling error. It measures the variation associated with selecting a sample to estimate sample items as well as variability associated with adjustment for small farm nonresponse. The reliability of State estimates may vary substantially from each other and will usually be larger than the U.S. estimate.

Table D presents the estimate of reliability at the State level for nine major 100-percent items and six sample items. The relative standard error of the estimate (percent) for the same item differs among States. Reasons for this are: (1) differences among States in the total number of farms, (2) the number of large farms included with certainty, (3) the size classifications of farms sampled, (4) the amount of nonresponse, (5) the general agricultural characteristics, and (6) the specific characteristic being measured.

Table C. Estimates of Reliability of U.S. Totals for Selected Items: 1982

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

Item	All farms		Farms with sales of \$10,000 or more	
	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)
Farms number	2,240,976	0.02	1,142,963	0.02
Land in farms acres	986,796,579	0.03	811,280,541	0.02
Value of land and buildings ¹ , average per farm dollars	345,869	0.13	557,636	0.14
Total cropland farms	2,010,609	0.02	1,083,508	0.02
Harvested cropland acres	445,362,028	0.02	396,148,576	0.02
Irrigated land farms	1,809,756	0.02	1,051,417	0.02
. acres	326,306,462	0.02	306,242,220	0.02
. farms	278,277	0.04	183,412	0.04
. acres	49,002,433	0.03	46,860,434	0.03
Market value of agricultural products sold farms	2,240,976	0.02	1,142,963	0.02
\$1,000	131,900,223	0.02	128,023,778	0.01
Crops, including nursery and greenhouse products farms	1,357,443	0.02	886,215	0.02
\$1,000	62,256,087	0.02	60,642,654	0.01
Livestock, poultry, and their products farms	1,516,853	0.02	796,728	0.02
\$1,000	69,644,136	0.02	67,381,124	0.01
Poultry and poultry products farms	114,071	0.02	65,242	0.03
\$1,000	9,796,927	0.02	9,767,260	0.02
Livestock and poultry inventory:				
Cattle and calves farms	1,354,992	0.02	675,509	0.02
. number	104,475,827	0.02	89,103,524	0.02
Hogs and pigs farms	329,833	0.02	219,088	0.03
. number	55,366,205	0.02	53,442,310	0.02
Hens and pullets of laying age farms	212,608	0.02	75,833	0.02
. number	310,515,367	0.02	306,031,698	0.02
Livestock and poultry sales:				
Cattle and calves farms	1,278,609	0.02	678,726	0.02
. number	71,216,727	0.02	64,946,730	0.01
Hogs and pigs farms	315,095	0.02	224,940	0.03
. number	94,783,598	0.02	92,055,157	0.02
Broilers and other meat-type chickens farms	30,100	0.04	24,114	0.04
. number	3,516,622,889	0.04	3,512,326,522	0.04
Crops:				
Corn for grain or seed farms	715,171	0.03	546,581	0.03
. acres	69,857,993	0.02	67,603,094	0.02
. bushels	7,508,721,493	0.02	7,341,316,392	0.02
Wheat for grain farms	446,075	0.03	367,277	0.03
. acres	70,910,293	0.04	68,478,845	0.04
. bushels	2,373,246,659	0.03	2,314,386,644	0.03
Sorghum for grain or seed farms	93,696	0.06	80,402	0.06
. acres	12,678,843	0.05	12,266,450	0.05
. bushels	725,959,104	0.05	710,350,908	0.05
Soybeans for beans farms	511,229	0.03	410,441	0.03
. acres	64,832,842	0.03	62,275,679	0.02
. bushels	1,989,993,158	0.02	1,931,390,306	0.02
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text) farm	1,050,992	0.02	593,535	0.02
. acres	56,743,836	0.02	46,420,100	0.03
Vegetables harvested for sale (see text) farms	69,109	0.03	40,051	0.03
. acres	3,330,637	0.02	3,202,559	0.02
Land in orchards farms	123,663	0.06	51,437	0.06
. acres	4,750,667	0.04	4,148,243	0.03
Selected farm production expenses ¹ :				
Livestock and poultry purchased farms	755,431	0.22	436,356	0.26
\$1,000	17,174,334	0.13	16,598,865	0.13
Feed for livestock and poultry farms	1,360,243	0.12	709,719	0.16
\$1,000	18,591,985	0.12	17,894,560	0.12
Seeds, bulbs, plants, and trees farms	1,267,129	0.12	877,336	0.12
\$1,000	3,171,752	0.15	3,048,400	0.16
Commercial fertilizer farms	1,443,766	0.11	900,740	0.12
\$1,000	7,689,365	0.14	7,320,340	0.15
Other agricultural chemicals farms	1,125,436	0.14	815,919	0.14
\$1,000	4,282,213	0.15	4,155,137	0.16
Hired farm labor farms	869,837	0.19	606,221	0.20
\$1,000	8,441,180	0.13	8,155,828	0.13
Energy and petroleum products farms	2,224,624	0.05	1,139,759	0.06
\$1,000	9,973,865	0.10	9,286,502	0.10
Interest expense farms	1,050,104	0.16	752,584	0.16
\$1,000	11,668,942	0.17	10,947,898	0.18
Estimated market value of all machinery and equipment on place ¹ farms	2,234,365	0.04	1,141,005	0.06
\$1,000	93,662,947	0.13	79,451,157	0.14

¹Data are based on a sample of farms.

Table D. Estimates of Reliability for U.S. and State Totals for Selected Items: 1982

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

Geographic area	Farms		Land in farms		Average value of land and buildings per farm ¹		Harvested cropland		Market value of agricultural products sold	
	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 (acres)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
United States . . .	2,240,976	0.02	986,796,579	0.03	345,869	0.13	326,306,462	0.02	131,900,223	0.02
Alabama	48,448	0.2	10,200,547	0.2	171,210	0.9	3,265,361	0.2	1,704,160	0.1
Alaska	570	0.0	1,323,953	0.0	463,849	0.0	25,694	0.0	11,399	0.0
Arizona	7,334	0.5	37,752,534	0.2	1,496,334	1.5	1,047,213	0.1	1,526,915	0.1
Arkansas	50,525	0.1	14,682,960	0.1	286,402	0.8	7,484,316	0.1	2,826,497	0.1
California	82,463	0.1	32,156,894	0.2	746,577	0.7	8,764,808	0.1	12,491,442	(Z)
Colorado	27,111	0.2	33,537,998	0.2	562,479	1.3	6,036,679	0.1	2,940,897	0.1
Connecticut	3,754	0.5	444,242	0.4	316,317	2.7	171,229	0.3	285,324	0.2
Delaware	3,338	0.7	655,465	0.4	364,843	3.9	499,986	0.4	370,562	0.3
Florida	36,352	0.2	12,814,216	0.2	552,586	0.9	2,643,147	0.1	3,522,103	0.1
Georgia	49,630	0.1	12,291,885	0.1	225,092	0.8	4,761,260	0.1	2,767,679	0.1
Hawaii	4,595	0.7	1,957,501	2.2	778,471	1.2	155,960	0.1	558,608	0.2
Idaho	24,714	0.2	13,921,639	0.2	459,965	1.1	4,887,805	0.1	2,231,605	0.1
Illinois	98,483	0.1	28,726,114	0.1	538,886	0.5	23,008,244	0.1	7,313,529	0.1
Indiana	77,180	0.1	16,294,268	0.1	338,549	0.5	12,136,310	0.1	4,226,930	0.1
Iowa	115,413	0.1	32,611,964	0.1	471,011	0.4	24,137,670	(Z)	9,828,932	(Z)
Kansas	73,315	0.2	47,052,213	0.1	384,197	0.5	20,186,974	0.1	6,190,861	0.1
Kentucky	101,642	0.1	14,179,284	0.1	144,427	0.8	4,835,631	0.1	2,376,882	0.1
Louisiana	31,628	0.2	8,928,827	0.2	381,817	0.9	4,699,323	0.2	1,406,458	0.1
Maine	7,003	0.3	1,468,674	0.3	150,487	1.7	457,076	0.3	399,412	0.2
Maryland	16,183	0.3	2,557,728	0.2	332,301	1.4	1,528,994	0.2	1,029,244	0.2
Massachusetts	5,401	0.5	612,819	0.4	205,677	2.2	197,769	0.3	281,436	0.2
Michigan	58,661	0.1	10,942,172	0.1	228,238	0.7	7,255,909	0.1	2,588,317	0.1
Minnesota	94,382	0.1	27,708,456	0.1	342,593	0.5	19,722,645	0.1	5,939,629	0.1
Mississippi	42,415	0.2	12,421,651	0.1	257,819	0.7	5,799,772	0.1	1,918,486	0.1
Missouri	112,447	0.1	29,266,609	0.1	223,247	0.6	12,725,378	0.1	3,606,856	0.1
Montana	23,570	0.2	60,539,209	0.2	677,995	0.8	9,365,775	0.2	1,547,160	0.1
Nebraska	60,243	0.1	44,961,371	0.1	532,741	0.6	17,075,625	0.1	6,625,742	0.1
Nevada	2,719	0.6	9,980,201	0.9	925,540	1.6	605,082	0.5	202,581	0.3
New Hampshire	2,757	0.5	469,582	0.4	201,171	3.3	116,613	0.3	102,520	0.3
New Jersey	8,277	0.4	916,331	0.4	343,137	2.0	570,031	0.4	435,966	0.3
New Mexico	13,484	0.3	47,096,085	0.3	618,708	1.0	1,297,305	0.4	850,562	0.1
New York	42,207	0.2	9,189,559	0.1	177,988	0.8	4,430,198	0.1	2,426,936	0.1
North Carolina	72,792	0.1	10,320,832	0.1	187,840	0.8	4,659,283	0.1	3,500,750	0.1
North Dakota	36,431	0.2	40,206,005	0.1	486,939	0.6	20,308,135	0.1	2,294,326	0.1
Ohio	86,934	0.1	15,404,054	0.1	267,899	0.5	10,396,323	0.1	3,387,461	0.1
Oklahoma	72,523	0.1	32,369,206	0.1	311,642	0.7	8,961,353	0.1	2,530,061	0.1
Oregon	34,087	0.2	17,739,782	0.3	371,644	1.4	3,305,714	0.1	1,640,590	0.1
Pennsylvania	55,535	0.1	8,297,713	0.1	225,794	0.8	4,363,789	0.1	2,848,207	0.1
Rhode Island	728	1.2	62,466	1.5	237,141	3.4	21,252	0.8	30,376	0.5
South Carolina	24,929	0.2	5,589,799	0.2	208,524	1.1	2,474,025	0.2	968,554	0.2
South Dakota	37,148	0.2	43,810,988	0.1	418,940	0.7	14,433,490	0.1	2,478,111	0.1
Tennessee	90,565	0.1	12,474,931	0.1	139,141	0.7	4,548,895	0.1	1,683,852	0.1
Texas	185,020	0.1	131,310,306	0.1	386,138	0.5	20,761,160	0.1	8,936,363	(Z)
Utah	13,984	0.3	9,772,942	0.4	389,678	1.8	1,118,486	0.3	555,428	0.2
Vermont	6,315	0.3	1,574,441	0.2	206,616	1.7	547,848	0.2	369,402	0.1
Virginia	51,859	0.1	9,436,854	0.1	205,034	0.8	2,779,282	0.1	1,606,915	0.1
Washington	36,080	0.2	16,469,678	0.2	423,352	1.1	5,278,772	0.1	2,831,159	0.1
West Virginia	18,742	0.2	3,559,051	0.2	129,390	1.4	576,889	0.3	242,127	0.3
Wisconsin	82,199	0.1	17,234,127	0.1	232,606	0.4	10,062,154	0.1	4,854,582	0.1
Wyoming	8,861	0.3	33,500,453	0.4	732,875	1.5	1,813,830	0.3	606,327	0.2

See footnotes at end of table.

Table D. Estimates of Reliability for U.S. and State Totals for Selected Items: 1982—Con.

(For meaning of abbreviations and symbols, see introductory text)

Geographic area	Cattle and calves inventory		Hogs and pigs inventory		Hens and pullets of laying age inventory		Corn for grain or seed		Wheat for grain	
	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)
United States	104,475,827	0.02	55,366,205	0.02	310,515,367	0.02	69,857,993	0.02	70,910,293	0.04
Alabama	1,652,524	0.1	463,840	0.2	14,787,281	0.1	310,680	0.2	474,467	0.2
Alaska	8,729	0.0	3,741	0.0	(D)	—	0	—	97	0.0
Arizona	1,139,377	0.1	160,816	0.2	500,547	(Z)	13,414	0.1	133,681	0.1
Arkansas	1,718,315	0.1	388,388	0.1	19,998,930	0.1	25,330	0.1	1,667,522	0.1
California	4,612,967	(Z)	184,577	0.2	39,456,033	(Z)	302,084	(Z)	928,713	(Z)
Colorado	2,944,702	0.1	333,370	0.2	2,394,995	(Z)	759,680	0.1	2,856,126	0.2
Connecticut	110,029	0.2	6,915	0.7	4,818,335	(Z)	6,017	0.2	242	0.0
Delaware	33,360	0.3	54,411	0.4	742,284	0.3	150,676	0.3	56,867	0.4
Florida	2,178,552	0.1	203,231	0.3	13,504,800	0.1	190,254	0.2	94,639	0.2
Georgia	1,578,250	0.1	1,317,396	0.2	23,762,446	0.1	788,306	0.1	995,962	0.2
Hawaii	241,969	0.2	49,029	0.4	(D)	—	648	0.2	0	—
Idaho	1,925,419	0.1	80,957	0.3	1,047,182	(Z)	69,652	0.3	1,507,775	0.1
Illinois	2,315,397	0.1	5,988,994	0.1	4,848,464	0.1	11,383,178	0.1	1,452,686	0.1
Indiana	1,437,618	0.1	4,298,027	0.1	18,229,149	(Z)	5,975,300	0.1	892,929	0.1
Iowa	5,822,488	(Z)	14,332,644	(Z)	8,234,227	0.1	12,880,050	(Z)	98,688	0.1
Kansas	5,800,138	0.1	1,708,770	0.1	1,794,673	0.2	1,161,875	0.1	11,664,008	0.1
Kentucky	2,524,964	0.1	869,727	0.1	2,034,313	0.1	1,342,981	0.1	527,423	0.1
Louisiana	1,003,833	0.2	55,657	0.4	2,278,429	0.3	33,792	0.2	379,289	0.2
Maine	141,206	0.3	8,586	0.8	5,765,315	0.1	8,020	0.1	805	0.5
Maryland	355,418	0.2	179,149	0.2	3,827,483	0.1	620,198	0.2	138,204	0.2
Massachusetts	102,366	0.2	39,570	0.6	1,183,226	0.1	6,077	0.2	33	0.0
Michigan	1,345,793	0.1	1,064,073	0.1	6,604,657	0.1	2,568,541	0.1	513,445	0.1
Minnesota	3,377,956	0.1	4,473,181	0.1	11,086,345	0.1	5,904,579	0.1	2,972,376	0.1
Mississippi	1,488,148	0.2	223,274	0.3	6,008,172	0.2	80,914	0.2	809,015	0.1
Missouri	4,664,498	0.1	3,186,443	0.1	5,965,825	0.2	1,892,882	0.1	2,044,839	0.1
Montana	2,918,599	0.1	195,949	0.2	864,277	0.1	20,897	0.4	5,215,965	0.2
Nebraska	6,530,561	0.1	3,963,364	0.1	3,303,657	(Z)	6,519,250	0.1	2,585,111	0.2
Nevada	559,909	0.6	15,254	0.1	22,112	3.0	11	0.0	20,536	0.2
New Hampshire	69,006	0.3	6,339	2.2	506,506	0.1	1,505	0.2	(D)	—
New Jersey	94,999	0.3	53,767	0.5	869,592	0.2	103,998	0.3	37,901	0.2
New Mexico	1,535,348	0.2	39,485	0.2	(D)	—	57,161	0.2	480,418	0.6
New York	1,781,748	0.1	118,378	0.2	6,942,781	0.1	749,492	0.1	116,994	0.1
North Carolina	890,480	0.1	2,047,098	0.1	15,250,598	0.1	1,393,496	0.1	597,539	0.1
North Dakota	1,886,961	0.2	260,160	0.2	350,323	0.2	522,122	0.2	9,818,946	0.1
Ohio	1,619,488	0.1	2,076,768	0.1	12,015,184	0.2	3,862,625	0.1	1,151,219	0.1
Oklahoma	4,673,900	0.1	212,510	0.2	4,220,459	0.2	40,838	0.1	5,972,135	0.2
Oregon	1,618,005	0.2	105,174	0.2	2,852,549	0.2	44,887	0.2	1,179,942	0.2
Pennsylvania	1,848,087	0.1	869,389	0.2	20,908,636	0.1	1,282,084	0.1	221,454	0.1
Rhode Island	8,997	0.9	3,030	2.8	(D)	—	151	1.4	(D)	—
South Carolina	507,279	0.2	399,810	0.2	6,800,218	(Z)	384,966	0.2	426,528	0.2
South Dakota	3,925,131	0.1	1,764,654	0.2	1,621,458	0.1	2,583,209	0.1	3,332,487	0.2
Tennessee	2,242,905	0.1	866,226	0.2	3,206,863	0.1	563,467	0.1	720,123	0.1
Texas	12,611,712	0.1	559,590	0.1	12,822,362	0.1	1,097,305	0.1	5,087,248	0.1
Utah	855,997	0.2	38,748	0.4	1,841,317	(Z)	15,118	0.2	237,229	0.3
Vermont	355,104	0.1	4,233	1.0	460,820	0.7	12,428	0.2	424	0.0
Virginia	1,672,006	0.1	474,393	0.2	3,695,188	0.2	611,032	0.2	296,840	0.2
Washington	1,321,820	0.1	73,836	0.3	5,748,750	(Z)	131,474	0.1	2,716,305	0.1
West Virginia	455,173	0.2	33,881	0.4	487,807	0.4	82,176	0.4	7,141	1.2
Wisconsin	4,458,683	0.1	1,479,028	0.1	4,347,340	0.1	3,257,104	0.1	122,029	0.1
Wyoming	1,509,913	0.2	30,375	0.3	54,751	1.0	46,069	0.4	355,938	0.4

See footnotes at end of table.

Table D. Estimates of Reliability for U.S. and State Totals for Selected Items: 1982—Con.

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

Geographic area	Selected farm production expenses ¹								Estimated market value of all machinery and equipment ¹	
	Livestock and poultry purchased		Commercial fertilizer		Hired farm labor		Energy and petroleum products			
	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	17,174,334	0.13	7,689,365	0.14	8,441,180	0.13	9,973,865	0.10	93,662,947	0.13
Alabama	203,688	0.9	110,580	1.2	87,505	0.7	113,393	0.7	1,167,165	0.9
Alaska	507	0.0	1,118	0.0	1,925	0.0	1,559	0.0	18,562	0.0
Arizona	250,356	0.5	60,308	0.8	156,401	0.5	110,215	0.9	407,289	1.4
Arkansas	272,441	0.9	131,022	1.1	164,885	0.9	230,684	0.7	1,790,270	0.9
California	855,311	0.5	427,823	0.5	1,819,323	0.3	740,089	0.4	3,873,341	0.6
Colorado	987,614	0.4	77,644	1.5	129,180	1.1	182,864	0.8	1,390,665	1.1
Connecticut	24,973	2.2	7,547	1.3	44,278	0.7	20,636	1.5	127,424	1.8
Delaware	37,202	1.2	19,993	3.1	17,893	5.5	18,092	1.9	153,587	2.6
Florida	165,018	1.4	217,332	0.8	480,444	0.5	173,453	0.7	1,084,678	0.9
Georgia	251,478	0.7	199,916	0.9	149,524	0.8	188,261	0.7	1,535,877	0.9
Hawaii	17,581	0.1	33,477	0.1	146,277	(Z)	24,155	0.2	190,230	0.2
Idaho	326,442	0.8	160,602	1.2	147,584	1.1	171,675	0.9	1,454,150	1.1
Illinois	447,023	1.2	712,705	0.6	225,820	1.0	566,906	0.4	6,092,937	0.5
Indiana	300,350	1.2	453,678	0.7	152,061	1.0	329,608	0.5	3,464,195	0.7
Iowa	1,536,601	0.6	562,767	0.6	222,146	1.1	668,410	0.4	6,731,271	0.5
Kansas	1,900,272	0.3	254,590	0.7	153,404	0.7	412,767	0.5	3,830,616	0.7
Kentucky	210,696	1.6	135,693	1.0	166,518	1.0	164,611	0.6	2,233,182	0.7
Louisiana	64,469	2.1	95,050	1.0	107,345	0.9	139,294	0.8	1,373,382	1.0
Maine	20,717	1.4	18,719	1.7	44,906	1.3	26,422	1.1	236,527	2.0
Maryland	98,291	2.3	72,146	1.7	68,545	1.4	61,336	1.1	660,519	1.5
Massachusetts	11,468	5.7	7,155	1.9	43,109	1.1	22,993	2.0	153,346	2.2
Michigan	170,034	1.4	242,091	0.7	186,312	0.8	228,553	0.5	2,676,343	0.7
Minnesota	557,597	1.1	374,854	0.6	207,615	1.0	533,461	0.4	5,719,009	0.6
Mississippi	134,197	1.4	114,525	1.0	137,400	0.6	163,781	0.6	1,485,514	0.8
Missouri	383,293	1.1	255,645	0.8	141,232	1.0	307,035	0.5	3,418,269	0.6
Montana	165,312	1.6	79,823	1.2	84,462	1.3	157,696	0.8	1,567,780	1.0
Nebraska	1,760,168	0.4	325,124	0.7	167,515	0.9	473,263	0.5	4,088,785	0.7
Nevada	28,749	2.9	5,587	3.3	20,438	1.8	23,055	1.1	143,648	3.3
New Hampshire	4,013	8.4	2,767	2.5	13,626	3.4	9,114	1.2	77,239	2.4
New Jersey	13,577	4.5	26,140	1.8	62,380	0.8	37,127	1.3	300,165	1.7
New Mexico	227,193	1.3	18,245	1.8	61,178	0.8	66,893	0.9	430,983	1.8
New York	95,488	1.6	109,479	0.8	246,022	0.7	201,876	0.6	2,006,892	0.7
North Carolina	229,516	0.8	238,315	1.0	245,364	0.8	278,039	0.6	2,097,628	0.8
North Dakota	103,704	2.3	159,111	0.7	76,864	1.1	285,435	0.5	3,063,883	0.7
Ohio	244,491	1.2	357,480	0.6	166,229	0.8	282,743	0.5	3,419,931	0.6
Oklahoma	626,108	0.6	116,377	1.1	98,335	0.9	209,642	0.6	2,323,995	0.8
Oregon	159,787	1.7	104,674	1.2	179,512	0.9	121,046	0.7	1,256,603	1.1
Pennsylvania	261,842	1.1	127,808	0.8	224,174	0.6	201,054	0.5	2,141,296	0.8
Rhode Island	1,271	5.8	1,125	2.0	5,559	0.4	2,375	1.4	18,824	2.1
South Carolina	53,566	1.6	97,736	1.2	79,734	1.0	85,396	1.0	761,038	1.1
South Dakota	446,010	1.0	79,742	1.1	67,414	1.2	256,668	0.6	2,248,595	0.8
Tennessee	127,847	1.7	124,921	1.0	109,251	0.9	128,069	0.6	1,870,910	0.7
Texas	2,356,028	0.3	367,989	0.8	480,462	0.6	730,472	0.5	5,603,585	0.6
Utah	80,313	2.0	10,327	2.3	42,066	1.8	48,661	1.1	472,803	1.4
Vermont	16,157	2.0	8,919	1.2	28,865	1.3	25,344	1.0	274,844	1.2
Virginia	161,849	1.2	116,005	0.9	126,893	0.9	121,473	0.7	1,396,216	0.9
Washington	347,434	0.6	174,198	1.0	313,100	0.8	171,793	0.7	1,652,940	0.8
West Virginia	30,135	3.1	10,226	1.7	20,340	1.3	20,226	1.1	301,305	1.4
Wisconsin	261,923	1.5	262,517	0.6	279,154	0.7	382,519	0.4	4,410,681	0.5
Wyoming	144,233	1.5	17,752	2.5	40,613	2.0	53,636	1.1	464,030	1.6

¹Data are based on a sample of farms.

APPENDIX B.

Effect of the Area Sample on Census Comparability

The 1982 and 1978 Censuses were conducted primarily by mail. Despite every effort to assemble a complete list, a small portion of the Nation's farms were not included on the census mail list. To improve the coverage of the 1978 Census, especially in counting the number of small farms, the mail-out/mail-back enumeration was supplemented by the direct enumeration of all households in a sample of areas in all States, except Alaska and Hawaii. Due to budget reductions, the direct enumeration sample was eliminated in the 1982 Census.

In late 1978, enumerators visited all households in approximately 6,400 segments in rural areas (areas with less than 2,500 population) and completed a census form for each agricultural operation. These forms were then matched to the census mail list. Data from those cases which were not matched to the mail list were used to estimate the number and characteristics of farms not on the mail list at the State, regional, and national levels. No county-level estimates were developed because the area sample size was insufficient for reliable estimates at that level.

The U.S., region, and State data for 1978 shown in the 1978 Census of Agriculture publications included data for farms represented on the mail list plus estimates from the area sample for farms not on the mail list. To provide comparable data for 1982 and 1978, estimates from the area sample have been subtracted from the 1978 data. Thus, all 1978 data presented in the 1982 Census of Agriculture publications include data only for farms on the 1978 mail list.

In 1978, the area sample farms accounted for 9 percent of all farms in the United States, but only 1 percent of the total value of agricultural products sold and 1 percent of the land in farms. The area sample farms represented 25 percent of all farms with sales of less than \$2,500. The contribution of the area sample farms to the total farm count varied widely by State, from a low of 2.0 percent in North Dakota to a high of 23.8 percent in New Hampshire.

The following table shows the 1982 results and adjusted 1978 data for farms on the mail list, as well as 1978 data which include estimates for farms not on the mail list.

Effect of 1978 Area Sample on Census Comparability: 1982 and 1978

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

Item	Data published in 1982 Census of Agriculture		Data published in 1978 Census of Agriculture		Percent of 1978 total represented by area sample portion
	1982	1978 adjusted ¹	1978 total ²	Portion of total from 1978 area sample ³	
Farms.....number.....	2 240 976	2 257 775	2 478 642	220 867	8.9
Land in farms.....acres.....	986 796 579	1 014 777 234	1 029 694 535	14 917 301	1.4
Value of land and buildings ⁴ , average per farm.....dollars.....	345 869	279 672	262 252	84 177	(X)
Total cropland.....farms.....	2 010 609	2 081 604	2 258 856	177 252	7.8
Harvested cropland.....acres.....	445 362 028	453 874 133	461 340 542	7 466 409	1.6
.....farms.....	1 809 756	1 904 602	2 033 057	128 455	6.3
Irrigated land.....acres.....	326 306 462	317 145 955	320 666 222	3 520 267	1.1
.....farms.....	278 277	280 779	302 674	21 895	7.2
.....acres.....	49 002 433	50 349 906	50 837 940	488 034	1.0
Farms by size:					
1 to 9 acres.....	187 665	151 233	215 088	63 855	29.7
10 to 49 acres.....	449 252	391 554	475 241	83 687	17.6
50 to 69 acres.....	142 545	141 778	156 359	14 581	9.3
70 to 99 acres.....	201 230	213 977	230 663	16 686	7.2
100 to 139 acres.....	195 336	209 765	225 233	15 468	6.9
140 to 179 acres.....	172 541	193 527	202 434	8 907	4.4
180 to 219 acres.....	114 392	125 789	130 959	5 170	3.9
220 to 259 acres.....	97 093	108 065	110 970	2 905	2.6
260 to 499 acres.....	315 025	347 777	354 427	6 650	1.9
500 to 999 acres.....	203 925	213 209	215 112	1 903	.9
1,000 to 1,999 acres.....	97 395	97 800	98 521	721	.7
2,000 acres or more.....	64 577	63 301	63 635	334	.5
Market value of agricultural products sold.....\$1,000.....	131 900 223	107 073 458	108 113 519	1 040 061	1.0
Crops, including nursery and greenhouse products.....\$1,000.....	62 256 087	48 203 200	48 617 400	414 200	.9
Livestock, poultry, and their products.....\$1,000.....	69 644 136	58 870 258	59 496 118	625 861	1.1
Farms by value of sales:					
Less than \$2,500.....	536 327	460 535	611 653	151 118	24.7
\$2,500 to \$4,999.....	278 208	300 699	331 874	31 175	9.4
\$5,000 to \$9,999.....	281 802	314 088	331 042	16 954	5.1
\$10,000 to \$19,999.....	259 007	299 215	309 594	10 379	3.4
\$20,000 to \$39,999.....	248 825	259 175	306 112	6 937	2.3
\$40,000 to \$99,999.....	332 751	360 093	363 383	3 290	.9
\$100,000 to \$249,999 ⁵	215 912	165 493	166 442	949	.6
\$250,000 to \$499,999 ⁵	58 668	38 202	38 264	62	.2
\$500,000 or more.....	27 800	17 973	17 976	3	(Z)
Abnormal farms.....	1 676	2 302	2 302	—	—

See footnotes at end of table.

Effect of 1978 Area Sample on Census Comparability: 1982 and 1978—Con.

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

Item	Data published in 1982 Census of Agriculture		Data published in 1978 Census of Agriculture		Percent of 1978 total represented by area sample portion
	1982	1978 adjusted ¹	1978 total ²	Portion of total from 1978 area sample ³	
Farms by type of organization:					
Individual or family	1 945 639	1 965 860	2 175 437	209 577	9.6
Partnership	223 274	232 538	241 290	8 752	3.6
Corporation	59 792	50 231	51 270	1 039	2.0
Other—cooperative, estate or trust, institutional, etc.	12 271	9 146	10 645	1 499	14.1
Tenure of operator:					
Full owners	1 325 773	1 297 902	1 451 446	153 544	10.6
Part owners	656 249	681 112	713 548	32 436	4.5
Tenants	258 954	278 761	313 648	34 887	11.1
Operators by principal occupation:					
Farming	1 234 787	1 269 305	1 326 785	57 480	4.3
Other than farming	1 006 189	988 470	1 151 857	163 387	14.2
Female operators:					
Farms	121 599	112 799	128 170	15 371	12.0
Land in farms	35 358 675	35 342 860	36 566 562	1 223 702	3.3
Operators by race:					
White	2 186 609	2 199 787	2 398 726	198 939	8.3
Black and other races	54 367	57 988	79 916	21 928	27.4
Corn for grain or seed	715 171	810 577	842 908	32 331	3.8
Wheat for grain	69 857 993	70 043 480	70 734 094	690 614	1.0
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	446 075	378 574	383 367	4 793	1.3
Vegetables harvested for sale	70 910 293	54 155 168	54 457 876	302 708	.6
Land in orchards	1 050 992	1 132 997	1 200 551	67 554	5.6
Cattle and calves inventory	56 743 836	60 241 391	61 757 610	1 516 219	2.5
Hogs and pigs inventory	69 109	73 183	82 250	9 067	11.0
Chickens 3 months old or older inventory	3 330 637	3 534 142	3 569 304	35 162	1.0
Estimated market value of all machinery and equipment ⁴	123 663	121 852	139 765	17 913	12.8
Energy and petroleum products ⁴	4 750 667	4 463 627	4 546 138	82 511	1.8
Hired farm labor, workers working 150 days or more ⁴	1 354 992	1 346 106	1 461 944	115 838	7.9
Land in farms	104 475 827	103 865 109	105 715 399	1 850 290	1.8
Land in orchards	329 833	445 117	512 292	67 175	13.1
Land in farms	55 366 205	57 697 318	58 809 991	1 112 673	1.9
Land in orchards	215 812	240 891	315 287	74 396	23.6
Land in orchards	362 464 997	354 357 427	359 064 123	4 706 696	1.3
Estimated market value of all machinery and equipment ⁴	\$1,000..	77 600 689	79 482 285	1 881 596	2.4
Energy and petroleum products ⁴	\$1,000..	6 025 704	6 123 760	98 056	1.6
Hired farm labor, workers working 150 days or more ⁴	312 610	317 161	320 132	2 971	.9
Land in farms	949 481	953 694	957 918	4 224	.4

¹Includes data only for farms on 1978 mail list—excludes area sample data.

²Includes mail list enumeration and area sample data.

³Data from farms not on mail list.

⁴Data are based on a sample of farms.

⁵Retabulated 1978 data for 1982 comparability.

APPENDIX C.

Report Form and Information Sheet

DUE BY FEBRUARY 15, 1983

O.M.B. APPROVAL NO. 0607 0408 EXPIRES 12/84

FORM **82-A0213**
(2-12-82)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

**UNITED STATES
CENSUS
OF AGRICULTURE**

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47133

Please complete this form and RETURN TO

Note — If your records are not available, reasonable estimates may be used. If you cannot file by February 15, a time extension request may be sent to the above address. Include your 12-character Census File Number (CFN) as shown in your address label in all correspondence to us.

If you received more than one report form, enter extra Census File Number(s) here and return extra copies with your completed report.

CENSUS USE ONLY	035	036	037	038
	039	040	041	042

NOTICE — Response to this inquiry is required by law (title 13, U.S. Code). By the same law YOUR REPORT TO THE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by sworn Census employees and may be used only for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report, please refer to your Census File Number (CFN)

82-A0213

(Please correct errors in name, address, and ZIP code.)

SECTION 1 ACREAGE IN 1982

If the acres you operated in 1982 changed during the year, refer to the INFORMATION SHEET, Section 1.

Report land owned, rented, or used by you, your spouse, or by the partnership, corporation, or organization for which you are reporting. Include ALL LAND, REGARDLESS OF LOCATION OR USE — cropland, pastureland, rangeland, woodland, idle land, house lots, etc.

	None	Number of acres
1. All land owned.....	<input type="checkbox"/>	043
2. All land rented or leased FROM OTHERS, including land worked by you on shares, used rent free, in exchange for services, payment of taxes, etc. Include leased Federal, State, and railroad land. (DO NOT include land used on a per-head basis under a grazing permit.) Also complete item 5 below.....	<input type="checkbox"/>	044
3. All land rented or leased TO OTHERS, including land worked on shares by others and land subleased. Also complete item 6 below.....	<input type="checkbox"/>	045
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.		046

For this census report these are the "ACRES IN THIS PLACE."

If the entry is zero please refer to the INFORMATION SHEET, Section 1.

5. If you rented land FROM OTHERS (item 2) enter the following information for each landlord.

Name of landlord	Mailing address (Include ZIP code)	Number of acres

List additional landlords on a separate sheet of paper.

6. If you rented land TO OTHERS (item 3), enter the following information for each renter.

Name of renter	Mailing address (Include ZIP code)	Number of acres

List additional renters on a separate sheet of paper.

a. Of the land you rented or leased to others, how many acres did you own?..... ☐ 053 Acres

7. During 1982, did you have any Federal or state grazing permits on a per-head basis, such as Forest Service, Taylor Grazing, Indian Reservations, etc.?..... 1 ☐ Yes 2 ☐ No 054

8. How many acres were diverted (or set-aside) under Federal commodity acreage reduction programs in 1982?..... ☐ 055 Acres

9. LOCATION OF AGRICULTURAL ACTIVITY FOR THIS PLACE

a. In what county was the largest value of your agricultural products raised or produced?.....

County name	State	Number of acres
Principal county →		056
Other counties		057
		058
		059

b. If you also have agricultural operations in any other county(ies), enter the county name(s), etc.

INSTRUCTIONS — Please report your crops in the appropriate section. Use section 7 to report ONLY those crops NOT listed in sections 2 through 6 and section 8. DO NOT INCLUDE crops grown on land rented to others.

SECTION 2 Were any of the FOLLOWING CROPS harvested from this place in 1982?

S2	Acres harvested	Quantity harvested	Acres irrigated
1. Corn (field) for grain or seed (Report quantity on a dry shelled-weight basis).....	067	068 Bu. OR Lbs.	069
2. Corn (field) for silage or green chop.....	070	071 Tons, green	072
3. Wheat for grain, including durum.....	073	074 Bu.	075
4. Oats for grain.....	076	077 Bu.	078
5. Barley for grain.....	079	080 Bu.	081
6. Sorghum for grain or seed, including milo.....	082	083 Bu. OR Lbs.	084
7. Sorghum for silage or green chop (Exclude sorghum-sudan crosses).....	085	086 Tons, green	087
8. Soybeans for beans.....	088	089 Bu.	090
9. Cotton.....	091	092 Bales	093
10. Tobacco — all types.....	094 /10	095 Lbs.	096 /10
11. Potatoes, Irish.....	097 /10	098 Cwt.	099 /10
12. Sweetpotatoes and yams.....	100 /10	101 Bu.	102 /10

SECTION 3 Was any DRY HAY, GRASS SILAGE, HAYLAGE, or GREEN CHOP cut or harvested from this place in 1982?

Include sorghum-sudan crosses and hay cut from pastures.

S3 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 4

If cuttings were made for both dry hay and grass silage, haylage, or green chop from the same fields, report the acreage in the appropriate items under DRY HAY and also under GRASS SILAGE, HAYLAGE, and GREEN CHOP.

1. DRY HAY (If two or more cuttings of dry hay were made from the same acres, report acres only once, but report total tons from all cuttings.)

Acres harvested	Quantity harvested (Report either dry or green weight as indicated)	Acres irrigated
103	104 Tons, dry	105
106	107 Tons, dry	108
109	110 Tons, dry	111
112	113 Tons, dry	114
115	116 Tons, green	117

a. Alfalfa and alfalfa mixtures for hay or dehydrating.....

b. Small grain hay — oats, wheat, barley, rye, etc.

c. Other tame dry hay — clover, lespedeza, timothy, Bermuda grass, Sudan grass, etc.

d. Wild hay.....

2. GRASS SILAGE, HAYLAGE, AND GREEN CHOP (hay crops cut and fed green) (If two or more cuttings were made from the same acres, report acres only once, but report total tons from all cuttings.).....

3. HAY SOLD — Did you sell any hay or grass silage in 1982? (Report value of hay sold in section 9, item 4)..... 118 1 ☐ Yes 2 ☐ No

PENALTY FOR FAILURE TO REPORT

SECTION 4 Were any **VEGETABLES, SWEET CORN, MELONS, etc.,** harvested FOR SALE from this place in 1982? (Exclude those grown for home use.)

- S4
1 ☐ YES — Complete this section
2 ☐ NO — Go to section 5

NOTE: For Florida report for September 1, 1981 through August 31, 1982 harvest season; for all other States report for calendar year 1982.

1. Land from which vegetables were harvested in 1982.....

Acres		Acres irrigated	
Whole acres	Tenths	Whole acres	Tenths
375	/10	376	/10

2. From the list below, enter the crop name and code for each crop harvested in 1982. If more than one vegetable crop was harvested from the same acres, report acres for each crop. Report crops grown under protection in section 5.

Crop name	Code	Acres harvested	Acres irrigated
		/10	/10
		/10	/10
		/10	/10
		/10	/10
		/10	/10
		/10	/10

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code	Crop name	Code
Asparagus	379	Eggplant	415	Pumpkins	449
Beans, snap (bush and pole)	381	Garlic	421	Radishes	451
Beets	383	Honeydew melons	423	Southern peas, green (cowpeas) — blackeyed, crowder, etc.	409
Broccoli	385	Lettuce and romaine	427	Spinach	457
Cabbage, head	391	Lima beans, green	429	Squash	459
Cantaloups and muskmelons	395	Mustard greens	431	Sweet corn	461
Carrots	397	Onions, dry	433	Tomatoes	463
Cauliflower	399	Onions, green	435	Turrips	465
Celery	401	Okra	437	Turnip greens	467
Collards	407	Peas, English, green (Exclude green southern peas)	441	Watermelons	473
Cucumbers and pickles	411	Peppers, sweet	443	Other vegetables	475
		Peppers, hot	445	Specify	

SECTION 5 Were any **NURSERY AND GREENHOUSE PRODUCTS, MUSHROOMS, sod, bulbs, flowers, flower seeds, vegetable seeds and plants, vegetables under glass or other protection, GROWN FOR SALE** on this place in 1982?

- S5
1 ☐ YES — Complete this section
2 ☐ NO — Go to section 6

1. Nursery and greenhouse products irrigated in 1982.....

Area irrigated		
Square feet	Acres	Tenths
477	478	/10

Product name	Code	Square feet under glass or other protection in 1982	Acres in the open in 1982	Sales in 1982	
			Whole acres	Tenths	Dollars
			/10	2	/10
			/10	2	/10
			/10	2	/10

Product name	Code	Product name	Code
Bedding plants (include vegetable plants)	479	Mushrooms	494
Bulbs	482	Sod harvested	497
Cut flowers and cut florist greens	485	Vegetable and flower seeds	500
Nursery products — ornamentals, fruit and nut trees, and vines	488	Greenhouse vegetables	503
Foliage and flowering plants	491	Other — Specify	506

SECTION 8 Was there a combined total of 20 or more **FRUIT TREES, including GRAPEVINES, CITRUS, and NUT TREES ON THIS PLACE** in 1982?

- S8
1 ☐ YES — Complete this section
2 ☐ NO — Go to section 9

1. **TOTAL ACRES** in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees on this place. (Do not include abandoned acres.)

Total acres		Acres irrigated	
Whole acres	Tenths	Whole acres	Tenths
121	/10	122	/10

2. From the list at the right, enter name and code for the fruit trees, grapevines, and nut trees on this place in 1982. Report the requested information for each crop even if not harvested because of low prices, damage from hail, frost, etc.

Crop name	Code	NUMBER OF TREES OR VINES OF —		Acres in trees and vines of all ages		Quantity harvested	Unit of measure Mark one				Lbs per box
		Nonbearing age	Bearing age	Whole acres	Tenths		Lbs	Tons	Boxes		
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	
		1	2		/10	3	4	2	3	5	

If more space is needed, use separate sheet of paper.

SECTION 6 Were any **STRAWBERRIES, CRANBERRIES, or OTHER BERRIES** harvested FOR SALE from this place in 1982? (Exclude those grown for home use.)

- S6
1 ☐ YES — Complete this section
2 ☐ NO — Go to section 7

From the list below, enter crop name and code. Report quantity harvested in unit specified with crop name.

Crop name	Code	Acres harvested		Quantity harvested	Acres irrigated	
		Whole acres	Tenths		Whole acres	Tenths
		/10	1	2	/10	
		/10	1	2	/10	
		/10	1	2	/10	

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code
Blackberries and dewberries (pounds)	509	Raspberries (pounds)	533
Blueberries, tame (pounds)	512	Strawberries (pounds)	536
Blueberries, wild (pounds)	515	All other berries (pounds) —	
Cranberries (100-lb. barrels)	521	Specify	539

SECTION 7 Were any **OTHER CROPS** harvested from this place in 1982 — small grains, field seeds, or other crops not previously reported? (Report fruit in section 8.)

- S7
1 ☐ YES — Complete this section
2 ☐ NO — Go to section 8

From the list below, enter crop name and code. Report quantity harvested in unit specified with crop name.

Crop name	Code	Acres harvested	Quantity harvested	Acres irrigated
			1	2
			1	2
			1	2
			1	2
			1	2

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code
Alfalfa seed (pounds)	542	Popcorn (pounds, shelled)	662
Beans, dry edible (excluding dry limas) (hundredweight)	554	Proso millet (bushels)	665
Beans, dry lima (hundredweight)	557	Red clover seed (pounds)	671
Buckwheat (bushels)	575	Rice (hundredweight)	677
Corn cut for dry fodder, hogged or grazed (report acres only)	581	Rye for grain (bushels)	686
Dry southern peas (cowpeas) (bushels)	584	Ryegrass seed (pounds)	689
Emmer and spelt (bushels)	599	Safflower (pounds)	692
Fescue seed (pounds)	602	Sorghum cut for dry forage or hay (tons, dry)	698
Flaxseed (bushels)	605	Sorghum hogged or grazed (report acres only)	701
Grains, mixed (bushels)	614	Sugar beets for sugar (tons)	719
Kentucky bluegrass seed (pounds)	629	Sugarcane for sugar (tons)	722
Lepesedea seed (pounds)	638	Sugarcane for seed (tons)	725
Mint for oil (pounds of oil)	644	Sunflower seed (pounds)	734
Peanuts for nuts (pounds)	656	Timothy seed (pounds)	746
Peas, dry edible (pounds)	659	Other crops (pounds) —	
		Specify	752

Noncitrus crops	Code	Citrus crop	Code
Apples	123	(Report quantity harvested for the 1981–82 harvest season)	
Apricots	129	Grapefruit	267
Avocados	135	Lemons	279
Cherries	147	Limes	285
Grapes, dry weight	171	Oranges	297
Grapes, fresh weight	177	Tangelos	303
Olives (Report quantity for Sept. 1981 through March 1982 harvest season)	207	Tangerines	309
Peaches	225	Other citrus —	
Pears	231	Specify	315
Plums and prunes, fresh weight	243		
Prunes, dry weight	249	Nut crops	Code
Other noncitrus —		Almonds (Report quantity in meats)	321
Specify	261		
		(Report quantity in shell)	
		Filberts and hazelnuts	327
		Pecans	339
		Walnuts, English	367
		Other nut trees —	
		Specify	363

SECTION 9 GROSS VALUE OF CROPS SOLD from this place in 1982, BEFORE taxes and expenses (Refer to the INFORMATION SHEET, Section 9.)

Report your best estimate of the value for each of the following groups of crops sold from this place in 1982. Include the value of the landlord's and/or contractor's share, estimating if necessary. Exclude value of Government CCC loans.

	Dollars	Cents
1. Grains, soybeans and other beans sold in 1982	None	
a. Corn for grain.....	774	
b. Wheat.....	775	
c. Soybeans.....	776	
d. Sorghum for grain.....	777	
e. Oats.....	778	
f. Other — barley, rice, dry beans, dry peas, flaxseed, popcorn, safflower, sunflower seed, rye, etc.	779	
2. Cotton and cottonseed.....	780	
3. Tobacco.....	781	
4. Hay, silage, field seeds, and grass seeds.....	782	
5. Vegetables, sweet corn, and melons — Do not include Irish potatoes and sweetpotatoes, report them in item 7 below.....	783	
6. Fruits, nuts, berries — apples, peaches, grapes, citrus, pecans, strawberries, etc.	784	
7. Other crops — Irish potatoes, sweetpotatoes, peanuts, sugar beets, sugarcane, mint for oil, etc. (Exclude nursery and greenhouse products) — Specify.....	785	

SECTION 10 LAND USE IN 1982

NOTE: If the same land had more than one use in 1982, REPORT THAT LAND ONLY ONCE — in the use first listed below that applies. For example, cropland harvested and also pastured is to be reported only as "Cropland harvested."

	Number of acres
1. CROPLAND	None
a. Cropland harvested — Include all land from which crops were harvested or hay was cut, and all land in orchards, citrus groves, vineyards, and nursery and greenhouse products.....	787
b. Cropland used only for pasture or grazing — Include rotation pasture and grazing land that could have been used for crops without additional improvements.....	788
c. Cropland used for cover crops, legumes, and soil-improvement grasses, but NOT harvested and NOT pastured.....	789
d. Cropland on which all crops failed (Exception: Do not report here land in orchards and vineyards on which the crop failed. Such acreage is to be reported in item 1a.).....	790
e. Cropland in cultivated summer fallow.....	791
f. Cropland idle.....	793
2. Woodland — Include all woodlots and timber tracts and cutover and deforested land with young timber growth. { a. Woodland pastured..... b. Woodland not pastured.....	794
3. Other pastureland and rangeland — Include any pastureland other than cropland and woodland pasture.....	795
4. All other land — Land in house lots, ponds, roads, wasteland, etc. — Include any land not reported in items 1 through 3 above.....	797
5. TOTAL ACRES — Add the acres reported in items 1 through 4 (Should be the same as section 1, item 4, page 1.).....	798

SECTION 11 Was any LAND in this place IRRIGATED at any time in 1982?

Irrigated land is all land watered by any artificial or controlled means — sprinklers, furrows or ditches, spreader dikes, etc. Include supplemental, partial, and preplant irrigation.

	Number of acres irrigated
1. How many acres of harvested land were irrigated?.....	None
2. How many acres of pastureland, rangeland, and any other lands not included in item 1 above were irrigated?.....	680
3. What percent of the irrigation water used on this place in 1982 was obtained —	Percent
a. From a well or wells located on this farm or another farm?.....	682
b. From an on-farm surface supply not controlled by a water supply organization (stream, drainage ditch, lake, pond, spring, or reservoir on or adjacent to this farm)?.....	683
c. From off-farm water suppliers (U.S. Reclamation projects; irrigation district; mutual, cooperative, or neighborhood ditches; or other irrigation organizations)?.....	684
d. TOTAL — Sum of a, b, and c should equal 100%.....	100%

SECTION 12 Did you or anyone else have any CATTLE or CALVES on this place in 1982?

S12 1 ☐ YES — Complete this section
2 ☐ NO — Go to section 13

• DECEMBER 31, 1982 INVENTORY

	None	INVENTORY Number on this place Dec. 31, 1982
1. CATTLE AND CALVES of all ages (Total of a, b, c, and d below).....		803
a. BEEF COWS — Include beef heifers that had calved.....		804
b. MILK COWS kept for production of milk or cream for sale or home use — Include dry milk cows and milk heifers that had calved.....		805
c. HEIFERS AND HEIFER CALVES (Exclude heifers that had calved).....		806
d. STEERS, STEER CALVES, BULLS, AND BULL CALVES.....		807

• CATTLE AND CALVES SOLD FROM THIS PLACE IN 1982
Include those fed on this place on a contract or custom basis. Also report as sold cattle moved from this place to a feedlot for further feeding.

	Number sold in 1982	Gross value of sales
		Dollars Cents
2. Calves weighing less than 500 pounds.....	808	809
3. Cattle, including calves weighing 500 pounds or more.....	810	811
a. Of the total cattle sold, how many were FATTENED on this place on GRAIN or CONCENTRATES for 30 days or more AND SOLD for SLAUGHTER?.....	812	813

• DAIRY PRODUCTS SOLD FROM THIS PLACE IN 1982

	None	DAIRY PRODUCTS Gross value of sales
		Dollars Cents
4. Gross value of sales of DAIRY PRODUCTS from this place in 1982 — Include milk, cream, butter, etc.		814

SECTION 13 Did you or anyone else have any HOGS or PIGS on this place in 1982?

S13 1 ☐ YES — Complete this section
2 ☐ NO — Go to section 14

• DECEMBER 31, 1982 INVENTORY

	None	INVENTORY Number on this place Dec. 31, 1982
1. HOGS and PIGS of all ages (Total of a and b below).....		815
a. HOGS and PIGS used or to be used for BREEDING.....		816
b. OTHER HOGS and PIGS.....		817

• LITTERS FARROWED

	None	Number of litters
2. LITTERS FARROWED on this place between —		818
a. December 1, 1981 and May 31, 1982.....		819
b. June 1, 1982 and November 30, 1982.....		

• HOGS AND PIGS SOLD

	None	Number sold in 1982	Gross value of sales
			Dollars Cents
3. HOGS and PIGS SOLD from this place in 1982.....		820	821
4. Of the hogs and pigs sold, how many were sold as FEEDER PIGS for further feeding? ..		822	823

SECTION 14 Did you or anyone else have any SHEEP or LAMBS on this place in 1982?

S14 1 ☐ YES — Complete this section
2 ☐ NO — Go to section 15

INVENTORY

	None	INVENTORY Number on this place Dec. 31, 1982	NUMBER SOLD in 1982
1. SHEEP and LAMBS of all ages.....		824	825
a. EWES 1 year old or older.....		826	

2. SHEEP and LAMBS SHORN.....

	None	Number shorn in 1982	Pounds of wool shorn in 1982
		827	828

3. What was the gross value of sales of SHEEP, LAMBS, and WOOL from this place in 1982?

	None	Gross value of sales
		Dollars Cents
		829

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SECTION 15 Did you or anyone else have any HORSES, BEES, FISH, GOATS, OTHER LIVESTOCK, or ANIMAL SPECIALTIES in 1982?

S15 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 16

	None	INVENTORY Number on this place Dec. 31, 1982	Total number sold in 1982	Gross value of sales	
				Dollars	Cents
1. Horses and ponies of all ages.....	<input type="checkbox"/>	830	831	832	
2. Colonies of bees.....	<input type="checkbox"/>	839	840	841	
3. Milk goats.....	<input type="checkbox"/>	845	846	847	
4. Other livestock or animal specialties in captivity (Enter name and code from "List A" below.)			1	2	

Name _____ Code _____

List A

Name	Code	Name	Code	Name	Code
Angora goats.....	842	Mink and their pelts.....	836	Worms — Refer to information sheet.....	857
Other goats.....	848	Rabbits and their pelts.....	851	All other livestock — Specify.....	860
Mules, burros, and donkeys.....	833	Chinchillas and their pelts.....	854		

5. Livestock or animal products (Enter name and code from "List B" below.)

Name	Code	Total quantity sold in 1982	Gross value of sales	
			Dollars	Cents
		1 Pounds		
		2 OR Gallons		

List B

Name	Code	Name	Code
Mohair sold.....	864	Honey sold.....	868
Goat milk sold.....	866	Other livestock products — Specify.....	870

6. Fish and other aquaculture products (Enter name and code from "List C" below.)

Name	Code	Water surface acres for aquaculture	Total quantity sold in 1982	Gross value of sales	
				Dollars	Cents
		1 Pounds	2		
		3 OR Number			

List C

Name	Code	Name	Code	Name	Code
Catfish.....	872	Tropical and Other fish —		Other aquaculture	
Trout.....	876	Baitfish.....	880	Specify.....	884
				products — Specify.....	888

If more space is needed, use separate sheet of paper.

SECTION 16 Did you or anyone else have any POULTRY such as CHICKENS, TURKEYS, DUCKS, etc., on this place in 1982? (Include poultry grown for others on a contract basis.)

S16 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 17

	None	INVENTORY Number on this place Dec. 31, 1982	Total number sold in 1982
1. HENS and PULLETS of laying age.....	<input type="checkbox"/>	892	893
2. Pullets for laying flock replacement	<input type="checkbox"/>	894	895
a. PULLETS 3 months old or older not yet of laying age	<input type="checkbox"/>	896	897
b. PULLET CHICKS and PULLETS under 3 months old (Exclude commercial broilers).....	<input type="checkbox"/>		
3. BROILERS, fryers, and other meat type chickens including capons and roasters.....	<input type="checkbox"/>	898	899
4. TURKEYS			
a. Turkeys for slaughter (Exclude breeders).....	<input type="checkbox"/>	900	901
b. Turkey HENS kept for breeding.....	<input type="checkbox"/>	902	903
5. OTHER POULTRY raised in captivity — ducks, geese, pigeons or squab, pheasants, quail, etc. (Enter poultry name and code from the list below.)			1
Poultry name _____ Code _____			1
Poultry name _____ Code _____			

List A

Name	Code	Name	Code	Name	Code
Ducks.....	904	Pigeons or squab.....	908	Quail.....	912
Geese.....	906	Pheasants.....	910	All other poultry — Specify.....	914

6. POULTRY HATCHED on this place in 1982 and placed or sold — chickens, turkeys, ducks, etc. — Specify kind of poultry.....

7. Incubator egg capacity on December 31, 1982.....

8. What was the gross value of sales of poultry and poultry products (eggs, etc.) from this place in 1982?.....

None	Gross value of sales	
	Dollars	Cents
<input type="checkbox"/>	918	
<input type="checkbox"/>		

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SECTION 17 S17

GOVERNMENT CCC LOANS

1. Amount received in 1982 from Government CCC loans for — (Include regular and reserve loans, even if redeemed or forfeited)

	Dollars	Cents
a. Corn, sorghum, barley, and oats.....	799	
b. Wheat.....	800	
c. Cotton.....	801	
d. Soybeans, peanuts, rye, rice, tobacco, and honey.....	802	

MACHINE WORK, CUSTOMWORK, and OTHER AGRICULTURAL SERVICES

2. Gross amount received from machine work, customwork, and other agricultural services PROVIDED FOR OTHERS in 1982 — planting, plowing, spraying, harvesting, etc.

Dollars	Cents
919	

Specify kind of work done.....

SECTION 18 During 1982 did you SELL any crops, livestock, or livestock products DIRECTLY to individuals FOR HUMAN CONSUMPTION — roadside stands, farmers markets, pick your own, etc.?

S18 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 19

	Dollars	Cents
1. What was the gross value of these direct sales?	920	

Specify products sold — vegetables, eggs, etc.

SECTION 19 TYPE OF ORGANIZATION

S19 Mark (X) the one item which best describes the type of organization for this place in 1982. Refer to the INFORMATION SHEET, Section 19.

- ☐ FAMILY or INDIVIDUAL operation — (Exclude partnership and corporation)..... 921
- ☐ PARTNERSHIP operation — Include family partnerships 922
- ☐ INCORPORATED UNDER STATE LAW 923
- ☐ OTHER, such as estate or trust, prison farm, grazing association, Indian reservation, etc. 924

Specify.....

SECTION 20 CORPORATE STRUCTURE (for incorporated operations only)

S20 Refer to the INFORMATION SHEET, Section 20.

1. Is this a family-held corporation? 922 1 ☐ Yes 2 ☐ No

2. Are there more than 10 stockholders? 923 3 ☐ Yes 4 ☐ No

SECTION 21 CHARACTERISTICS AND OCCUPATION OF OPERATOR (Senior partner or person in charge) Refer to the INFORMATION SHEET, Section 21.

S21

1. RESIDENCE — Does the operator (senior partner or person in charge) live on this place? 923 1 ☐ Yes 2 ☐ No

2. PRINCIPAL OCCUPATION — At which occupation did the operator spend the majority (50 percent or more) of his/her work time in 1982? For partnerships consider all members of the partnership together 926 1 ☐ Farming 2 ☐ Other or ranching

3. OFF FARM WORK — How many days did the operator (senior partner or person in charge) work at least 4 hours per day off this place in 1982? Include work at a nonfarm job, business, or on someone else's farm. (Exclude exchange farm work) 929 1 ☐ None 2 ☐ 1–49 days 3 ☐ 50–99 days 4 ☐ 100–149 days 5 ☐ 150–199 days 6 ☐ 200 days or more

4. In what year did the operator (or senior partner) begin to operate any part of this place? 929 Year

5. AGE of operator (senior partner or person in charge) 925 Years old

6. RACE of operator (senior partner or person in charge) 924 1 ☐ White 2 ☐ Negro or Black 3 ☐ American Indian 4 ☐ Asian or Pacific Islander 5 ☐ Other — Specify.....

7. SEX of operator (senior partner or person in charge) 926 1 ☐ Male 2 ☐ Female

8. SPANISH ORIGIN — Is the operator (senior partner or person in charge) of Spanish origin or descent (Mexican, Puerto Rican, Cuban, or other Spanish)? 927 1 ☐ Yes 2 ☐ No

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(Sections 22 through 28 were collected from approximately 20 percent of the farms, see text)

SECTION 22 Was any COMMERCIAL FERTILIZER , including ROCK PHOSPHATE , or LIME used on this place during 1982? S22 1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 23 1. Acres of cropland fertilized in 1982, other than cropland used only for pastures reported in section 10, item 1b 2. Acres of pastureland and rangeland fertilized in 1982 reported in section 10, items 1b and 3 3. Expenditures for commercial fertilizer purchased — all forms, including rock phosphate and gypsum (exclude lime) Report cost of custom application in section 27, item 6. 4. LIME — tons of lime used and acres on which applied (Do not include land plaster or gypsum or lime for sanitation) SECTION 23 Were any INSECTICIDES, HERBICIDES, FUNGICIDES, NEMATOCIDES, OTHER PESTICIDES, or OTHER CHEMICALS used on this place in 1982? S23 1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 24 Include any materials provided by you, your landlords, or contractors. For each item listed, report acres only once. If multipurpose chemicals were used, report acreage treated for each purpose. 1. Sprays, dusts, granules, fumigants, etc., (fungicide, herbicide, insecticide, nematocide) to control — a. Insects on crops, including hay b. Nematodes in crops c. Diseases in crops and orchards (blights, smuts, rusts, etc.) d. Weeds, grass, or brush in crops and pasture Include both pre-emergence and post emergence 2. Chemicals for defoliation or for growth control of crops or thinning of fruit 3. Agricultural chemicals purchased—insecticides, herbicides, fungicides, other pesticides, etc. Report cost of custom applications in section 27, item 6. SECTION 24 Was there any INTEREST EXPENSE for the farm business in 1982? Refer to the INFORMATION SHEET, Section 24. S24 1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 25 1. How much interest was paid on all debts for the farm business in 1982? SECTION 25 MACHINERY AND EQUIPMENT on this place on December 31, 1982 (Include only equipment used for agricultural operations in 1981 or 1982.) S25 • Value of ALL machinery and equipment on this place, December 31, 1982 1. What is the estimated market value of ALL machinery, 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, pumps, motors, irrigation equipment, dairy equipment including milkers and bulk tanks, livestock feeders, grinding and mixing equipment, etc. • SELECTED machinery and equipment on this place, December 31, 1982. (Report only if used in 1981 or 1982.) 2. Automobiles 3. Motortrucks — Include pickups 4. Wheel tractors other than garden tractors and motor tillers 5. Grain and bean combines, self-propelled only 6. Corn heads for combines 7. Cotton pickers and strippers 8. Mower conditioners 9. Pickup balers — Include rectangle and round balers 10. Field forage harvesters, shear bar or flywheel type SECTION 26 EXPENDITURES FOR ENERGY and petroleum products for the farm business during 1982 S26 Include expenditures paid by you and others for production of crops, livestock, and other agricultural products on this place in 1982. 1. Gasoline and gasohol for the farm business 2. Diesel fuel for the farm business 3. LP gas, butane, propane for the farm business (4.5 lbs. = 1 gallon) 4. Fuel oil and kerosene for the farm business 5. Natural gas for the farm business 6. Motor oil and grease for the farm business 7. Electricity for the farm business 8. Other — coal, wood, coke, etc. SECTION 27 SELECTED PRODUCTION EXPENSES paid by you and others for this place in 1982 S27 Include your best estimates of expenses paid by you, your landlord, contractors, buyers, and others for production of crops, livestock, and other agricultural products in 1982. DO NOT INCLUDE expenses connected with performing customwork for others; operation of nonfarm activities, businesses, or services; or household expenses not related to the farm business. 1. Livestock and poultry purchased — cattle, calves, hogs, pigs, sheep, lambs, goats, horses, chicks, poult, started pullets, etc. 2. Total feed purchased for livestock and poultry — grain, hay, silage, mixed feeds, concentrates, etc. a. Commercially mixed formula feeds purchased — complete, supplement, concentrates, premixes. (Exclude ingredients purchased separately, such as soybean meal, cottonseed meal, and urea) 3. Seed cost — for corn, other grains, soybeans, tobacco, cotton, etc. — Include plants and trees purchased 4. Hired farm or ranch labor (See Information Sheet) a. Of the hired workers, including paid family workers, how many — (1) Worked 150 days or more? (2) Worked less than 150 days? 5. Contract labor — Include expenditures primarily for labor, such as harvesting of fruit, vegetables, berries, etc., performed on a contract basis by a contractor, crew leader, a cooperative, etc. 6. Customwork, machine hire and rental of machinery and equipment — Include expenditures for use of equipment and for customwork such as grinding and mixing feed, plowing, combining, corn picking, drying, silo filling, spraying, dusting, fertilizing, etc. (Exclude cost of cotton ginning). SECTION 28 ESTIMATED CURRENT MARKET VALUE OF LAND and BUILDINGS S28 Please give your best ESTIMATE of the CURRENT MARKET VALUE of land and buildings for the acres reported in section 1, items 1, 2, and 3, page 1. 1. All land owned 2. All land rented or leased FROM OTHERS 3. All land rented or leased TO OTHERS SECTION 29 PERSON COMPLETING THIS REPORT — Please print Name Telephone Area code Number Date
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U.S. GOVERNMENT PRINTING OFFICE: 1982-561-532

INFORMATION SHEET

1982 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 census file number.

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 1982, please report all agricultural activity during the year. Report all land on your census form that you owned or rented. Also, report your 1982 crop and livestock production and 1982 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 and return it 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, that is, 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 reports in the same envelope with the completed partnership report, if possible, or write a note on the duplicate report, such as, "Partner (provide name) has completed a report for the partnership (provide partnership name)."

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.

How to Enter Your Response

If you do not have exact figures, give your best estimate.

Enter your replies in the proper spaces, on the correct line, 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 is being used throughout the entire United States. Because it is meant for use in all parts of the country, it may 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 1982

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 1982 whether in production or not. Include all land that you owned or rented during 1982 even if only for part of the year. Exclude any unrelated residential or commercial land.

IF YOU QUIT FARMING DURING 1982 — Complete the report form for the portion of the year that you did farm. Explain on the report form or another sheet when you stopped farming and 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 1982 whether held under title, purchase contract or mortgage, homestead law, or as heir or trustee of an undivided estate. Include all land owned by you and/or your spouse, or by the partnership, corporation, or organization for which you are reporting.

Item 2 — All Land Rented or 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:

- Land for agricultural use that you rented from others for cash
- Land you worked on a share basis (crop or livestock)
- 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, 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:

- Owned land rented to others for cash or a share of crops or livestock
- Land you rented from someone and then subleased to someone else
- 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 1982. To determine "Acres In This Place" ADD the land you owned and the land you rented or leased from others, then SUBTRACT the land you rented or leased to others: item 1 + item 2 - item 3 - item 4. It is important to report item 4 correctly (even if "0" acres) since the remainder of your report should cover only operations on the "Acres In This Place."

If item 4 ("Acres In This Place") is "0" and:

- You raised any crops or had any livestock or poultry on this place in 1982, complete the report.
- All your land was operated by a renter or sharecropper, complete item 6 (name and address of renters), skip to and complete section 29, and explain briefly, "All land rented out," etc. Mail form in return envelope.
- You did not have any agricultural activity on owned or rented land in 1982, 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.

Item 7 — Grazing Permits — In some states, government lands and Indian lands are used for grazing livestock under permit or special license, with payments on a per-head or animal unit basis. This land should NOT be included as part of item 2, "Land rented or leased from others," or item 4, "Acres In This Place," but you should report any of your livestock located on this permit land in 1982.

► Sections 2 through 8 — CROPS

Sections 2 through 8 provide space for reporting crops harvested during the 1982 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 1982.

Acres harvested — Enter the acres harvested in 1982. Round fractions to whole acres except where tenths are requested by "/10" in the reporting box, such as for potatoes.

Quantity harvested — The units of measure on the report form are those most commonly used in your state. If you use a different unit of measure, please convert your figure for quantity harvested to the unit requested. If the harvest was incomplete by December 31, 1982, please estimate the total quantity harvested or to be harvested.

Crop irrigation — 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 preplant irrigation. For any crop not irrigated, leave "Acres irrigated" blank.

How to Report Crops Harvested:

► **Sections 2 and 3** — In these two sections, separate lines are provided for reporting each of several crops most commonly grown in your state. Do not write in figures or information for any other crops in these two sections.

► **Sections 4 through 8** — Report the information requested for any crops prelisted in the sections. To report for crops not prelisted in these sections, (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 a crop is not listed, use the "Other" code in the appropriate section and specify the crop name.

Example: You harvested 20 acres of alfalfa seed, yielding 6,000 pounds, and 30 acres of red clover seed, yielding 8,400 pounds. Neither crop was irrigated. You would enter the following in section 7:

Section 7 — Were any OTHER CROPS harvested from this place in 1982 — small grains, field seeds, or other crops not previously reported?					
57	<input checked="" type="checkbox"/> YES — Complete this section <input type="checkbox"/> NO — Go to section 8				
From the list below, enter crop name and code. Report quantity harvested in unit specified with crop name.					
Crop name	Code	Acres harvested	Quantity harvested	Acres irrigated	
Alfalfa seed	542	20	6,000 Lbs		
Red clover	671	30	8,400		

Two or More Crops 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 1982 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.

Crop name	Acres harvested	Quantity harvested	Acres irrigated
Wheat	40	1,230	—
Soybeans	40	1,550	40

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 their 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 (Land Use).

► **Section 4 — Vegetables** — Report acres of vegetables harvested FOR SALE or commercial processing. Do not report acres of vegetables for home use only. Report the total acreage of each vegetable crop harvested.

Example: In 1982 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 f "Cropland idle."

If crops other than fruit and nut trees and vines were interplanted with trees or vines, report the total acres for BOTH the orchard and the interplanted crops harvested.

► **Section 9 — GROSS VALUE OF CROPS SOLD**

Report the value of all crops sold from "this place" in 1982, regardless of the year they were harvested or who owned the land. Be sure to give gross values (before deducting expenses and taxes). Include payments received in 1982 from cooperatives or marketing organizations for crops produced on this place regardless of the year in which the crops were harvested.

Include the landlord's or contractor's share of crops removed from this place in 1982 in the value of crops sold. If the sale price or market value is not known, give your best estimate of the crops' market value when removed from "this place."

Include in the value of crops sold from "this place" any cost of harvesting, tilling, fertilizer, chemicals, etc., furnished under a contract arrangement. Also include as sales your estimate of the value of any crops removed from this place in trade for services, such as hay cut in exchange for fence repair, clearing, or other services.

DO NOT INCLUDE:

- a. Amount of government CCC loans received in 1982 in this section. Report government CCC loans in section 17.
- b. Crops or crop products purchased from others and later resold.

► **Section 10 — LAND USE**

The purpose of this section is to classify the "Acres in This Place" you reported in section 1, item 4, by principal use in 1982. Do NOT include any acres you rented TO others (reported in section 1, item 3).

Land Used for More Than One Purpose — If part of your land was used for more than one purpose in 1982, report that land on the line for the use first listed, and NOT on the line for the second use. For example, if you plowed under a cover crop, and planted and harvested a grain crop, report the land in item 1a, "Cropland harvested," but NOT as "Cropland used for cover crop, legumes, . . . etc." (item 1c).

Double Cropping — When more than one crop was harvested from the same land in 1982, report that land only ONCE as "Cropland harvested," item 1a 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," item 1a.

Skip Row Planted Crops — Report the acres that represent the total non-planted or skipped rows as "Cropland idle," item 1f. The acres that represent the planted rows should be reported as "Cropland harvested," item 1a.

► **Sections 12 through 16 — LIVESTOCK, POULTRY, AND 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, 1982, include all owned by you and any kept by you for others. Include animals on fenced 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, 1982, or animals on 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 any 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 if the animals were located on the place 30 days or more and were sold or removed from this place in 1982, 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.

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 12.

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 1982 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, 1982. Report as "SOLD" animals and poultry which were kept on a contract or custom basis and were removed or sold from the place in 1982. 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 this place.

► **Section 15 — HORSES, PONIES, BEES, FISH, GOATS, ANIMAL SPECIALTIES, OTHER LIVESTOCK**

Items 1 through 4 — Report the inventory number of animals, bee colonies, or animal specialties on the place on December 31, 1982. Indicate number sold and the gross value of sales for the number sold in 1982. In item 4, specify the name and code from List A of any livestock or animal specialties on "this place" which are not covered in items 1 through 3, or 6 (fish and aquaculture products), or sections 12 through 14, or 16.

If "Inventory" or "Sold" is in units other than "Number" (such as pounds, packages, etc.), indicate the unit.

If you own colonies or hives of BEES — report all bee and honey operations conducted by you regardless of where the hives were kept most of the year. (Report hives in item 2 and honey, beeswax, or pollen in item 5).

MINK PELTS, RABBIT PELTS, and CHINCHILLA PELTS should be included in number sold and value of sales, but NOT in inventory. WORMS raised for sale should be reported in beds (24 cubic feet per bed) in item 4, "Inventory" and in pounds in item 4, "Number sold."

Item 5 — Sales of Animal Specialty Products — If any semen, manure, honey, beeswax, or other animal products were sold from this place in 1982, specify the products, the code from list B, the quantity sold, and the gross value of sales in 1982. If sold in units other than pounds or gallons, please indicate unit.

Item 6 — Fish and Aquaculture Products — Report water surface acres (estimate, if necessary) used for raising fish or other aquaculture products FOR SALE.

► **Section 16 — POULTRY**

Roosters and turkey toms used or to be used for BREEDING should be specified and reported in item 5, code 914 (All other poultry).

Item 8 — Gross Value of Sales — Include an estimated value of poultry and poultry products moved from this place by contractors and others.

► **Section 17 — AMOUNT RECEIVED FROM GOVERNMENT CCC LOANS AND AGRICULTURAL SERVICES**

Item 1 — Report the amount received under the regular or reserve program for commodities placed under CCC loan during 1982. Include amount received even if commodity was redeemed or forfeited prior to December 31, 1982. Do not include CCC loans received to build crop storage facilities, or amount received for storage payments in the reserve program.

► **Section 19 — TYPE OF ORGANIZATION**

Use the following definitions to help you determine the type of organization for your operation:

Individual or Family Operation — Defined as a farm or business organization controlled and operated by an individual. Includes 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. Also complete section 20.

Other — Such as cooperative (defined as an incorporated or unincorporated enterprise or 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 governmental or religious entity, etc.

► **Section 20 — 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 21 — OPERATOR CHARACTERISTICS AND OCCUPATION**

This section applies to the characteristics and occupation of the individual owner, operator, senior partner, or person in charge for the type of organization reported in section 19 of the form.

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

For Partnership Operations — Answer all items except 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" 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 21 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 22 — COMMERCIAL FERTILIZER AND LIME**

Report acres on which commercial fertilizer (items 1 and 2) or lime (item 4) was applied during 1982. 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 item 3.

► **Section 24 — INTEREST EXPENSE**

Report all interest expenses paid in 1982 for the farm business.

INCLUDE interest or finance charges on:

- a. Mortgage loans for land and buildings in "this place"
- b. Machinery, tractors, trucks, and other equipment
- c. Fertilizer, feed, seed, etc.
- d. Livestock, poultry, breeding stock
- e. Funds borrowed to replenish or provide working capital
- f. Interest paid on CCC loans

DO NOT INCLUDE:

- a. Interest on debts associated with activities not related to the production of crops or livestock on "this place," such as land or buildings rented to others, packing sheds, or feed mills providing services to others
- b. Interest on owner/operator dwelling where amount is separated from interest on other land and buildings in this place.

► **Section 25 — 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. The value should be an estimate of what the machinery and equipment would sell for in its present condition, not the replacement or depreciated value.

► **Section 27 — SELECTED PRODUCTION EXPENSES**

Include expenses paid by you and by anyone else for the production of crops, poultry, livestock, and other agricultural products on this place. Also include expenses incurred even if payment was not made in 1982. Please give estimates if you do not know the exact figures. For livestock or poultry grown under contract or fed on a custom basis on "this place," report their value (estimate, if necessary) in item 1 (Livestock and poultry purchased), at the time they came on this place. Also, include in item 2, the value and amount of feed purchased by you or someone else for use on this place. Do not include expenses related to nonfarm activities (trading and speculation, livestock, or dealer activities).

Hired Labor — Include in expenses for hired labor gross wages or salaries, commissions, paid bonuses, and leave pay before deductions. Social Security taxes, health, life, or employment insurance and any other benefits paid by you should be included. Be sure any salary paid to a hired manager is part of your total figure.

Contract Labor — Applies to expenditures primarily for labor in harvesting of crops, shearing sheep, etc. Exclude money paid to contractors for capital improvements such as putting up fences, repair or maintenance of buildings or machinery, land clearing, etc. Include the expense of items considered primarily machine work in customwork, item 6.