# Appendix A. General Explanation

#### DATA COLLECTION

## Method of Enumeration

All agriculture censuses beginning with the 1969 census primarily have used mailout/mailback data collection. Direct enumeration methods, however, continue to be used for the agriculture censuses in Guam and the U.S. Virgin Islands, and parts of Puerto Rico. The report for each area includes a discussion of the method of enumeration.

## **Mail List**

The mail list for the 1992 census was comprised of individuals, businesses, and organizations that could be readily identified as being associated with agriculture. The list was assembled from the records of the 1987 census, administrative records of the Internal Revenue Service (IRS), and the statistical records of the U.S. Department of Agriculture (USDA). In addition, lists of large or specialized operations, such as nurseries and greenhouses, poultry farms, fish farms, livestock farms, and cattle feedlot operations were obtained from State and Federal agencies, trade associations, and similar organizations. Lists of companies having one or more establishments or locations producing agricultural products were obtained from the 1987 census and updated using the information from the Standard Statistical Establishment List maintained by the Census Bureau. Exhaustive record linkage, unduplication, and mathematical modeling yielded a final mail list of 3.55 million names and addresses which had a substantial probability of being farm operations.

## Report Forms

In 1992, three different report forms were used—a sample form, a nonsample form, and a screener form—to minimize the reporting burden, particularly for small farms and places less likely to be farms. The screener form was the same as the nonsample form except section 1 of the screener form listed crop and livestock items, asked if the respondent had any of the items at any time in 1992, and omitted a question on grazing permits. The sample form contained all the questions asked on the nonsample form plus additional questions in sections 21 through 26 on commercial fertilizer, chemicals, production expenses, machinery and equipment, value of land and buildings, and

income from farm-related sources. The information collected in the sample sections gave the Bureau of the Census a good basis for making estimates of these data for other farms included in the census. There were 11 regional versions of the nonsample and screener forms and 13 regional versions of the sample form with the listings of crops varying by region. Appendix D contains copies of the sample form and the information sheet.

The sample form was mailed to 1,030,000 addresses on the mail list, including all those expected to be large (based on expected sales or acreage); all farms operated by multiestablishment companies or nonprofit organizations, all those in Alaska, Hawaii, and Rhode Island; and a sample of other addressees. The screener form was mailed to 412,000 addressees. These were less likely to be farms or expected to be small farms. The nonsample form was mailed to the remaining 2,112,000 addressees. Further discussion of the criteria used to determine which form was mailed to an addressee is provided in the Census Sample Design section of appendix C.

# **INITIAL MAILING**

The report forms were mailed in mid-December 1992 to approximately 3,554,000 individuals, businesses, and organizations on the mail list. The mail packages included a report form with a description of the purposes and uses of the census on the last page, a cover letter, an information sheet containing instructions for completing the form, and a postage paid return envelope. Additional special instructions were included with report forms sent to grazing associations, feedlot operations, institutional organizations, Indian reservations, and firms with multiple farm or ranch operations. Special instructions also were sent to producers of poultry under contract, bees and honey, fish and other aquaculture products, laboratory animals, and nursery and greenhouse crops.

To provide additional help to farmers in completing their reports, copies of the 1992 Census of Agriculture Report Form Guide booklet were sent to vocational agriculture instructors, USDA county offices of the Agriculture Stabilization and Conservation Service, the Cooperative Extension Service, land-grant colleges, State departments of agriculture, and farm organizations. The Guide contained descriptions and definitions of various items in more detail than was contained in the instructions included with each

report form. Representatives of the above agencies graciously consented to assist farmers in completing their report forms.

# **Followup Procedures**

A thank you/reminder card was mailed to those on the mail list in early January 1993. Four followup letters, three of which were accompanied by a report form, were sent to nonrespondents at 5-week intervals starting in mid-February and continuing until early June 1993.

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

#### MAJOR DATA CHANGES

Prior to each agriculture census, the Census Bureau reviews the content of the census report forms to eliminate inquiries no longer needed, to identify new items necessary to meet user needs, and to better describe the agricultural situation in the Nation. Data requests are solicited from farm organizations, land-grant colleges and universities, State and Federal agencies, State departments of agriculture, agribusinesses, and other users. Each user is asked to identify and justify its specific data needs. The following data inquiries were added to the 1992 report form:

150 days or more
less than 150 days

Number of landlords

Value of agricultural products sold directly to individuals
for human consumption
Injuries and deaths that occurred on the farm

Wheat by type

Canola, other (industrial) rapeseed
Fresh herbs, dried herbs, ginseng

Hybrid striped bass and crawfish

Hired farm workers who worked-

Wording changes were made in farm program participation questions to reflect changes in the program. Questions on landlord and renter names, addresses, and acres were eliminated from the 1992 report form.

## **DATA PROCESSING**

Selected report forms were reviewed prior to keying the data. These included reports with attached correspondence, reports with remarks or no positive data on the front page, and reports with the screener questions indicating no crop or livestock production in 1992.

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

In the computer edit, farms with sales, acreage, or commodities exceeding specified levels were tested for historical comparability. Key items, such as acreage and sales, were compared for substantial changes between 1987 and 1992. Sizeable historical differences were resolved or verified by telephone, if necessary. Prior to publication, tabulated totals were reviewed by statisticians to identify inconsistencies and potential coverage problems. Comparisons were made with previous census data, estimates published by the USDA, and other available data.

## **DEFINITIONS AND EXPLANATIONS**

The following definitions and explanations provide a more detailed description of the terms used in this publication, than are available in the tables or on the report form. Items in the tables which carry the note "See text" are also explained. For an exact wording of the questions on the 1992 census report forms and the information sheet which accompanied these forms, see appendix D. Most definitions of terms are the same as those used in earlier censuses. The more important exceptions are also noted here.

**Abnormal farms.** This category includes institutional farms, experimental and research farms, and Indian reservations. Institutional farms include those operated by hospitals, penitentiaries, churches, schools, universities, grazing associations, and government agencies.

Acres and quantity harvested. Crops were reported in whole acres, except for the following crops which were reported in 10ths of acres: Irish potatoes, sweetpotatoes, tobacco, fruit and nut crops including land in orchards, berries, vegetables, and nursery and greenhouse crops in the open; and in Hawaii, taro, ginger root, and lotus root. Nursery and greenhouse crops grown under glass or other protection were reported in square feet. 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 were to be counted for each crop. Therefore, the total acres of all crops harvested generally exceeded the acres of cropland harvested. An exception to this procedure was hay crops. When more than one cutting of hay was taken from the same acres, the acres were counted only once but the quantity harvested included all cuttings. However, hay cut for both dry hay and green chop or silage were to be reported for each

applicable crop. For interplanted crops or "skip-row" crops, acres were to be reported according to the portion of the field occupied by each crop.

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

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

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

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

**Age of operator.** See Operator characteristics; Farms by age and principal occupation of operator.

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

**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.

**Black and other races.** This category includes Blacks, American Indians, Asian or Pacific Islanders, and all other racial groups other than White.

Canola and other (industrial) rapeseed. For 1992, canola and other rapeseed is a total of canola (edible rapeseed) and industrial rapeseed. These data are comparable to rapeseed for 1987.

**Chemicals.** See Agricultural chemicals used, including fertilizer; Production expenses—Agricultural chemicals.

**Cherries.** For 1992, cherries were reported as sweet cherries, tart cherries, or cherries depending on the regional form the respondent completed. On regional forms for States where cherries were an important fruit crop, sweet cherries and tart cherries were listed separately. On the

other regional forms, either cherries were listed or could be written in. For publication purposes, cherries, total could be shown along with the individual breakdown of sweet cherries, tart cherries, or cherries, not specified. Cherries, not specified was used to account for cherries where the sweet and tart breakdown was not asked or where respondents wrote in cherries but did not specify or code the kind of cherry. All the individual cherry items may not be shown for a given State.

Citrus enumeration. In the 1992 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 form. Each citrus caretaker was enumerated as a farm operator and requested to complete one report form for all groves cared for and to furnish a list of grove owners' names, addresses, and acres of citrus. The names on the lists were matched to completed grove owners' report forms to eliminate duplication. The caretaker also was requested to inform the grove owner that he/she had already reported for the citrus under his/her care and that the grove owner was not to report the citrus again. In the 1992 census, 3 caretakers in Arizona reported 65 grove owners having 7,300 acres of citrus; the 44 caretakers in Florida reported 2,300 grove owners having 150,000 acres of citrus; and 12 caretakers in Texas reported 400 grove owners having 14,000 acres of citrus.

Commodity Credit Corporation loans. This category includes loans for corn, wheat, soybeans, sorghum, barley, oats, cotton, sunflower seed, flaxseed, safflower, canola, rapeseed, mustard seed, peanuts, rye, rice, tobacco, and honey.

Conservation Reserve Programs or Wetlands Reserve Programs. See Cropland in the Conservation Reserve Programs (CRP) or Wetlands Reserve Programs (WRP).

Crop units of measure–field crops. 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. Published units of measure and metric conversions for selected items are shown in appendix E.

**Crop units of measure–fruit crops.** 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 was published in pounds.

**Crop year or season covered.** Acres and quantity harvested are for the calendar year 1992 except for citrus fruits, avocados, olives, vegetables in Florida, sugarcane in Florida and Texas, and pineapples and coffee in Hawaii.

Avocados. The data for California relate to the quantity harvested in the November 1991 through November 1992 harvest season and for Florida the April 1992 through March 1993 harvest season.

Citrus fruits. The data for Florida relate to the quantity harvested in the September 1991 through July 1992 harvest season, except limes that were harvested in the April 1992 through March 1993 harvest season. The data for Texas relate to the quantity harvested in the September 1991 through May 1992 harvest season. The data for States other than Florida and Texas, relate to the quantity harvested in the 1991-92 harvest season.

Coffee. The data for Hawaii relate to the 1991-92 crop.

Olives. The data for California relate to the quantity harvested in the September 1991 through March 1992 harvest season.

*Pineapples.* The data for Hawaii relate to the quantity harvested in the year ending May 31, 1992.

Sugarcane for sugar. The data for Florida relate to the cuttings from November 1991 through April 1992, and for Texas the cuttings from October 1991 through April 1992.

*Vegetables.* The data for Florida relate to the crop harvested in the 1991-92 harvest season.

**Cropland, harvested.** 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.

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

Cropland in the Conservation Reserve Programs or Wetlands Reserve Programs. These categories include acres of "highly erodible" cropland taken out of agricultural production and planted in protective cover crops or

reforested. The Food, Agriculture, Conservation, and Trade Act of 1990 amended the Conservation Reserve Program (CRP) authorized by the Food Security Act of 1985. The 1990 Act continues the CRP and puts greater emphasis on preserving and upgrading water quality by establishing a new Wetlands Reserve Program that provides for annual rental payments and shared costs of conservation practices through a minimum ten-year contract with the USDA. Appendix B presents data on places with all their cropland enrolled in the Conservation Reserve Programs or Wetlands Reserve Programs which were not counted as farms in the 1992 census.

Cropland, irrigated. See Irrigated land.

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

**Cropland, total.** This category includes land from which crops were harvested or hay was cut; land in orchards, citrus groves, vineyards, nurseries, and greenhouses; cropland used only for pasture or grazing; land in cover crops, legumes, and soil-improvement grasses; land on which all crops failed; land in cultivated summer fallow; and idle cropland.

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

**Customwork income.** See Farm-related income—Customwork and other agricultural services.

Customwork, machine hire, and rental of machinery and equipment. See Production expenses.

Data are based on a sample of farms. For censuses since 1978, selected data were collected from only a sample of farms. These data are subject to sampling error. For 1992, the sample form was mailed to approximately 29 percent of all farms, including all large and specialized farms (based on expected sales, acres, or standard industrial classification), all farms in Alaska, Hawaii, and Rhode Island, and a sample of all other farms. Sections 21 through 26 of the 1992 sample forms included inquiries on commercial fertilizer, chemicals, production expenses, machinery and equipment, value of land and buildings, and income from farm-related sources. Estimates of the reliability of county totals for selected items are shown in table F of appendix C.

**Direct sales to consumers.** See Value of agricultural products sold directly to individuals for human consumption.

**Diverted acres.** See Cropland in annual commodity acreage adjustment programs.

**Expenses.** See Production expenses.

**Farm-related income.** Income from farm-related sources consists of gross income in 1992 before taxes and expenses from the sales of farm by-products and other sales and services closely related to the principal functions of the farm business. These data are for income producing activities which are primarily a by-product or supplemental to the farm operation. They exclude income from employment or business activities which are separate from the farm business.

Changes in the values of farm-related income between 1987 and 1992 are due to both an increase in reported values and a change in processing. In 1992, larger values than in previous censuses are accepted as farm-related income rather than being excluded as separate business activities. This is particularly true for customwork and agricultural services. Income from those services is accepted as 1992 farm-related income if it is less than the market value of agricultural products sold and does not exceed \$250,000.

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

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

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

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

Farms by age and principal occupation of operator. Data on age and principal occupation were requested from all operators in 1992. The principal occupation classifications used were:

Farming. The operator spent 50 percent or more of his/her worktime in 1992 in farming or ranching.

Other. The operator spent more than 50 percent of his/her worktime in 1992 in occupations other than farming or ranching.

Farms by combined government payments and market value of agricultural products sold (State table 52). This tabulation is new for Volume 1 in 1992. Its data can be compared to data by market value of agricultural products sold in State table 50 to analyze the difference in economic size when government payments are added to value of sales. Combined sales and government payments may be a better measure of economic size of farm because many payments compensate for acres idled to comply with government programs. Comparable data for government payments and value of sales in 1987 are available from the 1987 Census of Agriculture, Volume 2, Part 5, Government Payments and Market Value of Agricultural Products Sold.

Farms by market value of agricultural products sold or value of sales. In 1992 and 1987, all farms were tabulated by size based on reported sales. In 1982 and earlier censuses, abnormal farms were not tabulated based on sales size. In the tables on market value of agricultural products sold, the sales of abnormal farms in 1982 and earlier censuses were included in the total sales figure but excluded from the detailed size categories. Abnormal farms include institutional farms, experimental and research farms, and Indian reservations. The category "farms with sales of less than \$1,000" included all farms with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more. These farms normally would be expected to sell \$1,000 or more of agricultural products.

The sales size categories used in this report are consistent with the standard business size categories issued by the Office of Management and Budget (OMB) in 1982. In State table 50, data are presented for four sales size categories between \$10,000 and \$49,999. This provides users with bridge data under both the OMB and prior census classifications.

**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 (SIC). For 1992, all agricultural production establishments (farms, ranches, nurseries, greenhouses, etc.) were classified by

type of activity or activities using the standard industrial classification system. These classifications, found in the 1987 SIC Manual<sup>1</sup>, are used to promote uniformity and comparability in the presentation of statistical data collected by various agencies.

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

Characteristics of all farms by selected SIC groupings are shown in State tables 18 and 51. The SIC groupings, shown in State table 51, together with the associated products (value of sales representing 50 percent or more of the value of agricultural products sold during the year) on which the classification is based, are as follows:

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

Cotton (0131). Cotton and cottonseed.

Tobacco (0132). Tobacco.

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

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

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

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

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

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

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

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

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

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

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

**Farms by tenure of operator.** The classifications of tenure used in the 1992 census were:

Full owners, who operated only land they owned.

Part owners, who operated land they owned and also land they rented from others.

Tenants, who operated only land they rented from others or worked on shares for others.

**Farms by type of organization.** All farms were classified by type of organization in the 1992 census. The classifications used were:

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

Partnership, including family partnership.

Corporation, including family corporation.

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

Corporations were subclassified by two additional characteristics into:

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

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

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 \_\_\_\_\_\_842 number \_\_\_\_\_8594

Farms with sales of less than \$1,000. Farms with sales of less than \$1,000 but having the potential for sales of \$1,000 or more were added as a column to State table 50, Summary by Market Value of Agricultural Products Sold: 1992. This addition to the table provides information on all report form items for farms that normally would be expected to sell agricultural products of \$1,000 or more.

**Fertilizer.** See Agricultural chemicals used, including fertilizer; Production expenses—Commercial fertilizer.

**Fish and other aquaculture products.** The raising of fish and other aquaculture 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.

**Floriculture crops.** For 1992, data for floriculture crops are a total of bedding plants, cut flowers and cut florist greens, foliage plants, and potted flowering plants. Floriculture crops, total was not available for 1987.

**Ginseng.** Data for ginseng as a separate crop are being shown for the first time in 1992. For 1987, it was included with herbs.

**Government payments.** This category is limited to direct cash payments received by the farm operator in 1992. It includes deficiency and diversion payments; wool payments; payments from the Conservation Reserve Program, the Wetlands Reserve Program, other conservation programs, and all other federal farm programs under which payments were made directly to farm operators.

**Grain sales.** Data are for the total market value of cash grains sold, including corn for grain or seed, wheat for grain, soybeans for beans, sorghum for grain or seed, oats for grain, and other grains.

**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 pounds fresh weight to 1 pound dry weight.

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.

Hay—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.

Herbs—total, fresh cut, and dried. For 1992 and 1987, herbs, total is a total of herbs, fresh cut, and herbs, dried. Separate data for 1992 are shown for herbs, fresh cut as a vegetable crop and herbs, dried as another crop. Separate data were not available for 1987. Herbs, total for 1987 includes ginseng.

**Hired farm labor.** Data for hired farm workers, eliminated from the 1987 report form, were added back to the census for 1992. Data are for total hired workers including paid family members, workers who worked less than 150 days, and workers who worked 150 days or more.

**Income.** See Net cash return from agricultural sales for the farm unit.

**Injuries and deaths.** Information on the number of injuries and deaths directly connected with farmwork was added to the 1992 census. Data are for work-related injuries and deaths of the farm operator, family members, and hired workers.

**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.

Land area. The approximate land area of counties and States represents the total land area as determined by records and calculations as of January 1, 1993. These data are updated periodically; however, the acreages shown for 1992 are essentially the same as in 1987. Any differences between the land area in 1992 and 1987 are due to annexations and other changes affecting county boundaries.

Land in farms. The acreage designated 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

includes acres set aside under annual commodity acreage programs as well as acres in the Conservation Reserve and Wetlands Reserve Programs for places meeting the farm definition.

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

Land in orchards. This category includes land in bearing and nonbearing fruit trees, citrus or other groves, vine-yards, 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 fewer than 20 total fruit, citrus, nut trees, or grapevines.

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 1987 census as having more than one farm unit. Other reports received showing land in more than one county were separated into two or more reports if the data would substantially affect the county totals.

**Landlords.** This item of information is new for 1992. Data show the number of landlords from whom the farm operator rented land, including those whose land may have been subleased by the farm operator to someone else.

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

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 1992 regardless of who received the payment. It includes sales by the operator as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. In addition, it includes receipts from placing commodities in the Commodity Credit Corporation (CCC) loan program in 1992. It does not include payments received for participation in other federal farm programs nor does it include income from farm-related sources such as customwork and other agricultural services, or income from nonfarm sources.

The value of crops sold in 1992 does not necessarily represent the sales from crops harvested in 1992. Data may include sales from crops produced in earlier years and may exclude some crops produced in 1992, but held in storage and not sold. For commodities, such as sugar beets and wool, sold through a co-op which made payments in several installments, respondents were requested to report the total value received in 1992.

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

Caution should be used when comparing sales in 1992 with sales reported in earlier censuses. Sales figures are expressed in current dollars and have not been adjusted for inflation or deflation.

Misreported or miscoded crops. In a few cases data may have been reported on the wrong line, in the wrong section, or the wrong crop code may have been assigned to a small number of write-in crops. A few of these errors may not have been identified and corrected during processing which resulted in rare cases of inaccurately tabulated data. Reports with significant acres of unusual crops for the area were examined to minimize the possibility that they were in error.

Net cash return from agricultural sales for the farm unit. Net cash return is derived by subtracting total operating expenditures from the gross market value of agricultural products sold. Both gross sales and production expenditures include sales and expenses of the farm operator as well as those of partners, landlords, and contractors. Therefore, the net cash return is that of the farm unit rather than the net farm income of the operator.

Operating expenses used in calculating net cash return do not include depreciation or changes in inventory values. Expenses may have been understated on farms renting land from others because taxes paid by landlords are excluded, and insurance and other landlord expenses not readily known to renters may have been omitted or underestimated.

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

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

**Occupation.** See Operator characteristics; Farms by age and principal occupation of operator.

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

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

**Operators of Spanish origin.** No imputation was made for those not responding to the question on Spanish origin. Operators of Spanish origin are found in all of the racial groups listed in the census and were tabulated according to the race reported.

**Other crop sales.** Data are for the total market value of all crops not listed, such as Irish potatoes, mint for oil, sugar beets, peanuts, sweetpotatoes, sugarcane, etc.

Other cropland. See Cropland, other.

Other fruits and nuts. Data shown for other fruits and nuts relate to any fruits and nuts not having a specific code on the 1992 report form.

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

**Other land.** This category includes land in house lots, barn lots, ponds, roads, ditches, wasteland, etc. It includes those acres in the farm operation not classified as cropland, pastureland, or woodland.

Other livestock and livestock products. This category includes all livestock and livestock products not having specific codes on the 1992 report form.

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

**Plums and prunes.** Farm operators were given the option of reporting the quantity of plums and prunes harvested in dry weight or fresh weight. For publication purposes, all quantities of plums and prunes harvested have been converted to pounds of fresh weight. The conversion used was 2.90 pounds fresh weight to 1 pound dry weight.

**Poultry hatched.** This category includes all poultry hatched on the place during the year and placed or sold. Incubator egg capacity on December 31, 1992, is tabulated under the column heading "Inventory" and the number of poultry hatched and placed or sold is under the heading "Sales".

**Production expenses.** Total farm production expenses include the share of the expenditures provided by landlords, contractors, and partners in the operation of the farm business. Property taxes paid by landlords are excluded. Expenses are limited to those incurred in the operation of the farm business. Expenditures for nonfarm activities; farm-related activities such as providing customwork for others, the production and harvest of forest products, and recreational services; and household expenses are excluded. In 1992, as in other recent censuses, operators producing crops, livestock, or poultry under contract often were unable or unwilling to estimate the cost of production inputs furnished by the contractors. As a consequence, extensive estimation for some expenditure items was required for contract producers. Explanations of selected production expenses are listed below.

Agricultural chemicals. These expenses include the cost of all insecticides, herbicides, fungicides, and other pesticides, including costs of custom application. Data exclude commercial fertilizer purchased. The cost of custom application was excluded from the 1982 data.

Commercial fertilizer. The expense for commercial fertilizer is the amount spent on fertilizer including the cost of custom application. The cost of custom application was excluded from the 1982 data.

Customwork, machine hire, and rental of machinery and equipment. These expenses include costs incurred for having customwork done on the place and for renting

machines to perform agricultural operations. The cost of cotton ginning is excluded. The cost of labor involved in the customwork service is included in the customwork expense. The cost of custom application of fertilizer and chemicals was included in the 1982 customwork data, but is included in expenditures for fertilizer and chemicals in 1992 and 1987. The cost of hired labor for operating rented or hired machinery is included as a hired farm and ranch labor expense.

Feed for livestock and poultry. These expenses include the cost of all feed for livestock and poultry including grain, hay, silage, mixed feeds, concentrates, etc.

Hired farm and ranch labor. These expenses include the total amount paid for farm or ranch labor including regular workers, part-time workers, and members of the operator's family if they received payments for labor. It includes social security taxes, State taxes, unemployment tax, and payment for sick leave or vacation pay.

Interest. In 1992 and 1987, separate data were collected for interest paid on debts secured by real estate and interest paid on debts not secured by real estate. In 1982, only total interest expenses were collected.

Livestock and poultry purchased. These expenses include the total amount spent by the operator, his/her landlord, and by others for all livestock and poultry bought during 1992 for production on the farm or ranch. The total includes amounts spent for cattle, calves, hogs, pigs, sheep, hatchery eggs, etc. Estimations of the value of livestock or poultry grown under contract or fed on a custom basis were to be made based on their value when they arrived on the farm or ranch.

Repairs and maintenance. These expenses include all costs for the repair and upkeep of buildings, motor vehicles, and farm equipment used for the farm business.

Seed cost. These expenses include the cost of all seeds, bulbs, plants and trees, or the estimated cost of these items if provided by contractors. Seed cost does not include the value of seed grown on this place.

**Race.** See Other races; Black and other races; Operator characteristics.

**Rental income.** See Farm-related income—Rental of farmland.

**Sales, total.** See Total sales; Market value of agricultural products sold; Farms by market value of agricultural products sold or value of sales.

Size of farm. See Farms by size.

**Tenure.** See Farms by tenure of operator.

**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 and greenhouse crops, and hay. Respondents were asked to include landlords' and contractors' shares. The value of commodities placed in CCC loans is included as sold. In 1992 and 1987, all farms including abnormal farms were tabulated by size based on reported sales. In 1982, abnormal farms were included in the total sales figure but excluded from the detailed size breakdowns. Abnormal farms include institutional farms, experimental and research farms, and Indian reservations.

**Type of farm.** See Farms by standard industrial classification.

**Type of organization.** See Farms by type of organization.

Value of agricultural products sold directly to individuals for human consumption. This item, eliminated from the 1987 report form, was added back to the cenus for 1992. The item 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.

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

**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.

**Wheat for grain.** For 1992, wheat was listed on the report form separately or in combinations by type as listed below, depending on the regional report form completed by the respondent.

- · Wheat for grain
- Winter wheat for grain Spring wheat for grain
- Winter wheat for grain
   Durum wheat for grain
   Spring wheat, other than durum, for grain

For publication, wheat was shown separately or in combinations by type as listed below, depending on the State for which it was published.

Wheat for grain, total Winter wheat for grain Spring wheat for grain Durum wheat for grain Other spring wheat for grain Non-specified wheat for grain

The wheat by type (winter, spring, durum, and other spring) breakdown was published for States where more than one type was commonly produced; all the types may not be shown. Non-specified wheat was shown when a type not commonly produced in a State was reported on a report form not intended for use for that State or when reporting errors were suspected.

Wheat by type. Data were not available for 1987.

**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.

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

Write-in crops. To reduce the length of the report form, only the major crops for each region were prelisted. For other crops, the respondent was asked 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.