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TAKING THE CENSUS

Method of Enumeration

The 1978 Census of Agriculture was the first census to include a mailout/mailback enumeration supplemented by a thorough direct interview of all households in a sample of area segments. This combination list-direct enumeration sample approach was instituted to improve completeness of coverage for State level agriculture census statistics.

In censuses prior to 1969, enumerators were assigned to a specific area and called on all farms within the 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. Enumerators going door-to-door in rural areas collected and reviewed all forms that had been completed; they also completed forms for those places with agricultural operations which did not have forms ready.

For the 1969 and 1974 censuses, data were collected primarily by a self-enumeration, mailout/mailback procedure. This procedure was made possible by the availability of specialty lists and several administrative lists, including records from the prior agriculture census, from which a list of agriculture-related names and addresses was constructed.

The mailout/mailback enumeration procedure was not used in taking the agriculture census in Puerto Rico, Guam, the Virgin Islands, and the Northern Mariana Islands. A discussion of the direct enumeration methods used appears in the reports for these outlying areas.

Mail List

The mail list for the 1978 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 1974 census and administrative records of various government agencies, primarily the Internal Revenue Service and the U.S. Department of Agriculture. The administrative lists used for 1978 were more accurate and extensive than those used for the 1974 and 1969 censuses. For 1978, most administrative lists were used in their entirety; whereas, for 1974 and 1969 some lists were sampled so that only selected records were included in the census mailing list.

Lists of large or specialized operations, such as nurseries, broiler growers, fish farms, and livestock range and feedlot operations, which might not be identified in other administrative records, 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 or providing agricultural services were obtained from the 1974 census and updated using results of the 1976 and 1977 Company Organization Surveys conducted by the Economic Surveys Division of the Census Bureau.

A preliminary census mail list was assembled using names and addresses from the 1974 census and administrative source lists available early in 1978. Those records identified as most likely not to be farms, since the name appeared on only one source list or on selected combinations of list sources which had vielded a low percentage of farm operators for the 1974 census, were then selected for inclusion in the 1978 Farm and Ranch Identification Survey. Slightly over 4 million of the short identification forms were mailed in May of 1978 to identify persons who were not active farm operators, to identify tenant and successor operators who were not on administrative source lists, and to update the name, address, and size information for the identified active farm operators. Approximately 1.9 million survey returns were classified as out-of-scope (nonfarms), and an additional 400,000 reports were returned by the Postal Service as being undeliverable, resulting in over 2.3 million names and addresses being deleted from the census mail list as a result of the 1978 Farm and Ranch Identification Survey. The final census mail list containing 4,241,000 names and addresses was developed using results of the 1978 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 during computer processing; an additional group of possible duplicates identified during computer processing was resolved clerically. Other duplicate names not identified prior to mailing were either reported by respondents or located during office processing.

Direct Enumeration Area Sample

When the evaluation survey conducted for the 1974 census confirmed the results of the evaluation survey for 1969 (i.e., an unacceptable number of midsize and a larger number of smaller farms were not included in the mail list), the decision was made to incorporate into the 1978 data collection procedures a direct enumeration area sample to provide State level estimates of the number and statistical characteristics of farms found not to be included in the mail list. The effect of this combination mail list-direct enumeration sample approach has been to drastically reduce the number and effect of missed farms in State totals.

The direct enumeration sample consisted of approximately 6,400 segments in "rural" areas (areas outside places with 2,500 or more population in 1970) in all States, except Alaska and Hawaii. The segments were created and selected using enumeration district maps and data from the 1970 Census of Population and Housing. In October and November 1978, enumerators visited each household in these segments to determine if anyone in the household was associated with an agricultural operation. A 78-A1(A) report form was completed for each person with agricultural operations. This form was similar to the 78-A1(S) sample form but collected additional information on alternate names and addresses and other individuals associated with the operation for use in matching these cases to the census mail file. The front page of the 78-A1(A) report form is reproduced in appendix D. During the enumeration, each operator received an orange-colored sticker and was instructed that if he/she received a census form in the mail, the form should not be filled but returned with the sticker attached indicating that a report had already been completed.

During office processing, a concentrated effort was made to match the direct enumeration sample returns to names and addresses on the census mail list using the sticker returns, microfilm search of the mail file for all associated names, telephone calls to all cases that could be reached by phone, and any other available information. Direct enumeration sample returns not matched to the census mail list after this extensive research comprise the sample representing farms in the State not on the census mail list. Data from these unmatched direct enumeration sample returns were used to provide estimates at the State level for farms not on the census mail list. For each State, these data have been tabulated and published as a "pseudo" county and are an integral part of the State totals. The direct enumeration sample estimates have not been included in individual county totals.

Report Forms

The Census Bureau recognizes the need to minimize both respondent burden and census cost by limiting the number of items for which data are requested to those most needed by users as the basis for current understanding and future planning. In addition to limiting data items, the most recent eight censuses of agriculture have also used sampling techniques to further minimize reporting burden and census cost. For 1945, additional items were included in the enumeration of designated geographic segments, but were omitted from the report forms used for all other areas. For the 1950, 1954, 1959, and 1964 censuses, similar goals were met by instructing the enumerators to determine whether to ask or omit the items in designated sections of the report forms. For the 1969, 1974, and 1978 mailout/mailback censuses, two report forms were used again with the result of minimizing the reporting burden, particularly for smaller farms.

For 1978, the two report forms were a 5-page report form (78-A1(S)) containing all the items asked in the census, and a 4-page form (78-A1 (N)) omitting the sample items (sections 22 through 27). Form 78-A1(N) and the 78-A1(S) sample items are reproduced in appendix D. In all States except Alaska and Hawaii, the sample form (A1(S)) was mailed to all certainty addresses (large farms) and to 20 percent of the noncertainty addresses; the nonsample form (A1(N)) was mailed to the remaining noncertainty addresses. The sample form was mailed to all Alaska addresses. For Hawaii, a modified version of the sample form was used for all farms. The modifications were made principally in the crops section in order to cover the specialized agriculture on the islands. The Statistical Adjustments section of this appendix defines certainty farms and includes a discussion of the criteria used to determine whether the sample or nonsample form was to be mailed to noncertainty addresses.

Initial Mailing

The report forms were distributed by the U.S. Postal Service during the last week of December 1978 to all individuals, businesses, and organizations on the mail list. Approximately 4,241,000 forms were included in the initial mailing (3,140,000 nonsample forms and 1,101,000 sample forms).

From February through August 1979, additional initial mailings were sent primarily to new tenants and successors identified during report form processing. Thus, the total mailing list for the 1978 Census of Agriculture was 4,430,000.

An information sheet containing detailed instructions for completing the form was included with each report form (see appendix D). Additional special instructions were included with report forms sent to identifiable producers of poultry under contract, bees and honey, laboratory animals, feedlot operations, and nursery and greenhouse products.

In an effort to provide additional help in completing reports, approximately 60,000 copies of a Farm Census Guide booklet were sent to county agricultural agencies and related institutions or businesses to whom farmers might turn for help. Included were rural banks, accountants, vocational agriculture instructors, and the following U.S. Department of Agriculture county offices: Agricultural Stabilization and Conservation Service, Farmers Home Administration, and Agricultural 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 assistance was requested. In addition, the telephone number for the Jeffersonville, Ind. processing office was provided in the original mailing in case the respondent requested assistance or had additional questions which were not covered in the instructions.

Followup Procedures

The data collection effort included seven followup letters to nonrespondents, three of which were accompanied by a report form. To evenly distribute the workloads in mailing, receipts, and processing, the mail list was divided into three groups for followup purposes. In late January, the first followup letter was sent to all nonrespondents reminding them of the February 15 due date. The other reminders followed on a flow basis at 3- to 4-week intervals starting in late February and continuing into July.

In low response areas, additional efforts were made. State Commissioners of Agriculture were asked to issue supporting statements urging farmers to complete and return their reports. In early April 1979, nonrespondents in about 300 counties with the lowest response rates were mailed an additional letter using simpler language in large print suggesting that if they needed help in completing their report, they could call collect to the Jeffersonville, Ind. processing office.

From March to November 1979, telephone calls were made to nonrespondents who were large (for most States, those with expected sales of \$80,000 or more) or were located in about 60 counties with low response. Data for large farms were obtained by telephone from secondary sources if the addressee could not be contacted or refused to provide information. Most of the nonresponse calls were made by the staff of the Jeffersonville, Ind. processing office. However, calls to the larger and more complex operations were made by the Agriculture Division staff. Upon completion of data collection, all counties had response rates exceeding 75 percent of the final mail list including additional addresses. The overall response rate for the 50 United States was 88 percent for all addresses and nearly 95 percent for addresses with a known history of farm operations. A significant proportion of the nonresponse cases was found not to have qualifying agricultural operations for 1978. For a description of the adjustment for nonresponse, see Statistical Adjustments.

DATA PROCESSING

All report forms were subjected to a clerical screening review, during which they were corrected to make them acceptable for keying onto magnetic tape. Farm operators completing a nonsample form who reported sales or acres above the certainty level were sent correspondence requesting the additional sample data. Reports for special list cases identified on the mail list as producing specific products such as broilers or cattle were checked to insure that the special item had been reported. Problem reports requiring special review or additional handling were referred to technical assistants, or if necessary, to statisticians for resolution. Report forms with sales or acreage above levels listed as State "must" were subjected to a more stringent precomputer review, including completeness checks for key basic data items. Reports from multiunit operations and institutional and government-operated farms were reviewed and edited by statisticans. All farms with expected or reported sales of \$1,000,000 or more or 30,000 acres or more, all Alaska and Hawaii reports, selected multiunit operations, and other selected problem reports were reviewed by statisticians in the Agriculture Division. Omissions, inconsistencies, and other problems that could not be resolved by reference to other information on the report were resolved by contacting the respondents by telephone or correspondence.

All successors and the more significant tenant names and addresses reported in the census were researched on microfilm of the census mail file. Report forms were mailed to addresses not located on the mail file. Research was also conducted on reports from selected respondents claiming that they had previously completed a census form to eliminate possible duplication.

Data for each report form were subjected to a detailed item-by-item computer edit. The edit included comprehensive checks for consistency and reasonableness, corrected data found to be in error or inconsistent, supplied missing data based on similar size farms within the same county, and assigned farm classification codes which were necessary for tabulating the data. Entries of large magnitude and significant computergenerated changes to the data were manually verified. Obvious errors such as reports of cotton or citrus in the Northern States were also identified and corrected.

Many of the acceptability limits on data were necessarily wide making it impossible to identify and correct all errors or to always supply precise estimates for all the incompleteness in the reports. These factors and others may affect the reliability of data for some minor items, but they should not have a significant effect on major data items in any county.

In the computer edit, those farms with sales or acreage exceeding State "must" levels were tested for historical consistency. Key items such as acreage, number of livestock sold, crops, and sales were compared for significant changes between 1974 and 1978. Problems in historical consistency were resolved usually by telephone.

In order to reduce duplicate reporting because of more than one completed report being received for the same operation under different names, computer listings of reports with similar operator names and size of operation were produced and duplicate reports were deleted prior to tabulations.

After each report was screened, computer edited, and had all identified problems corrected, each data item on the report was added into the total for that item for the county. The result was a computer tabulation matrix for each county containing the sum of individual entries for each data item. This matrix enabled the easy and precise construction of the published tables.

Prior to publication of preliminary reports and volume 1 reports, tabulated totals were reviewed by statisticians to

identify remaining inconsistencies and potential coverage problems. Comparisons were made with historical census trends as well as current year State level estimates published by the U.S. Department of Agriculture and other agencies as part of the coverage review. Selected report forms were reviewed and problem entries were either verified as being correct or the data were corrected.

COMPARABILITY OF DATA

Significant changes were made to the data collection procedures to improve the coverage of the 1978 census, including a more complete mail list and the use of a direct enumeration area sample to supplement the mail list. The effect of these improvements has been to increase the 1978 State farm counts above what they would have been using previous methods. The 1978 State farm counts, consisting of totals from the mail list and the direct enumeration area sample, include farms that would have been missed in the 1974 and 1969 censuses.

The 1978 county farm counts do not include any totals from the direct enumeration sample. However, for some counties, the counts may have increased substantially because of the improved coverage of small farms in the 1978 mail list. County level data on acreages and inventories are generally comparable.

Estimates of the net proportion of farms missed in the 1974 census varied widely by State, from a low of 0.7 percent in Nebraska to a high of 33.0 percent in West Virginia. Appendix C shows adjusted farm counts by State. Because missed farms were typically small, the percent missed was generally higher in States having a relatively large proportion of small farms and urbanized areas having a sizable number of part-time farms. The proportion of the total farms in each State represented by the direct enumeration sample in 1978 can be expected to follow a pattern similar to that for missed farms in 1974.

Since most of the farms identified in the direct enumeration sample were small, these farms have a much greater effect on the State counts of farms and farms reporting than on measures of agricultural production such as land in farms, sales of agricultural products, acres and production of crops, and inventory and sales of livestock and poultry.

Changes in the farm definition also affect the comparability of data. In general, data for 1978 and 1974 would be directly comparable with data for 1969 and earlier censuses only for farms with sales of \$2,500 or more because the data for these farms are not affected by changes in the farm definition. A difference in timing and the change from personal interview to mail enumeration affect comparability with data from censuses prior to 1969. The effect of the 1974 definition change for selected State and county totals is shown in appendix B.

Dollar figures shown for expenses and agricultural product sales have not been adjusted for changes in price levels between census years. Crop and livestock production and sales and expense data are for the calendar year 1978, except for a few crops (such as citrus) for which the production year overlaps the calendar year. Inventories of livestock, poultry, and other specified items are as of December 31, 1978. The reporting period and inventory date are the same as for the 1974 and 1969 censuses. Censuses prior to 1969 were taken by enumerators, each assigned to a specific geographic area. Field work for the 1959 and 1964 censuses was completed mainly in October, November, and December of the reference year. Livestock and poultry inventories for these two censuses were as of the time of enumeration. Other variations in the time of enumeration occurred prior to 1959.

MAJOR CHANGES IN DATA COLLECTED

Unusually strong adverse reaction to the length and content of the 1974 census report form stimulated an intensive review and rejustification of all data inquiries accepted for collection on the 1978 census report form. Data users were requested to provide the Bureau with their data requirements, including the level of publication needed-county, State, or national. Each data item requested was reviewed to determine if it was needed at the county level and if so, whether on a complete or sample basis. Some data items needed only at the State or regional level were relegated to one or another of the follow-on surveys scheduled to be conducted in 1980 for calendar year 1979. By eliminating many items included on the 1974 report form, redesigning the form to accommodate two columns of items per page, and converting many more items to write-in status, especially in the crops sections, the report form was reduced from a 20-page booklet to a 4-page form for most farms and a 5-page form for certainty and sample farms. Data items on the 1974 report form which were eliminated on the 1978 report form were:

Type of rental arrangement Sales of forest products Commercial fertilizer used for specific crops Irrigation methods and quantity of water used Drainage Grain storage facilities Futures markets Contracts Injuries and illnesses Other production expenses Income and expenses from farm-related sources Farm credit Family income from off-farm sources

Much of the detailed data collected in 1974 for costs of materials for individual types of agricultural chemicals and for quantities and costs of several feed categories including roughages purchased were deleted from the report form. In addition, many of the redundant totals used on the 1974 report form for cross checking data, especially in the production expenses and value of agricultural products sold sections, were eliminated.

The following high priority new data items were added to the 1978 report form:

Set-aside acres in Federal Farm Program

Government Commodity Credit Corporation (CCC) loans for grain and cotton

Direct sales to consumers

Foreign ownership of farmland

Greater detail on expenses for energy

FOLLOW-ON SURVEYS AND THE CENSUS OF HORTICULTURAL SPECIALTIES

Integral to each census of agriculture program are the follow-on surveys conducted after the main census. The purpose of these specialized surveys is to collect additional, much needed agriculture-related information from highly specialized operations or from only a sample of farms without burdening all farm operators. Thus, allowing the use of a shorter report form for the general census. The follow-on surveys are limited to high priority data items that yield United States, regional, or State level estimates, which in and of themselves or in association with general census data, are used as the basis for current decisionmaking and future planning.

Data from the Farm Finance, the Farm and Ranch Irrigation, and the Farm Energy Surveys, conducted in 1980 covering calendar year 1979, are published in Volume 5, **Special Reports**, of the 1978 Census of Agriculture.

The Farm Finance Survey provides detailed farm financial data, including debts, expenses, taxes, credits, assets, and farm and off-farm incomes for farm operators. Many of these items as well as detailed data concerning land ownership and landlord characteristics are also being collected from the landlords of the farms involved in the survey.

The Farm and Ranch Irrigation Survey provides high priority data on water use by irrigated farms. Included in the data are: acreage irrigated, yields for irrigated and nonirrigated crops, quantity of water used, methods of distribution, types of pumps, and number of wells.

The Farm Energy Survey provides detailed data on energy purchased by type of energy source, storage capacity, and selected kinds of energy-consuming machinery and equipment.

The 1979 Census of Horticultural Specialties covers the operations of producers of nursery and greenhouse products, mushrooms, and sod in much greater detail than the main census of agriculture. This census has been conducted in 1890, 1930, 1950, and every 10 years since, in association with the census of agriculture. Data for this census are published in Volume 5, Special Reports.

DISCLOSURES

In many tables, data are suppressed and a (D) is used instead of a number. To ensure the confidentiality of information on a characteristic of an individual farm, it is necessary to suppress data when the value of an item for one or two farms can be definitely or approximately determined by mathematical manipulations.

Suppressions of data made within frequency distributions are accomplished in a way that will maintain maximum integrity of the frequency groups as suppressions are made whenever possible in adjacent frequency classes. This allows the user, by subtraction from the total, to have a farm count and total quantity reported for the combined suppressed frequencies. Although the published frequency data are not complete, the truncated frequency distribution is available for analysis purposes.

1974 DATA CORRECTIONS

Some 1974 data have been revised since the 1974 volume I publications were released. The major revisions were for:

Madera County, California-number of heavy breed turkeys sold and related data.

Maricopa County, Arizona-acreage of improved pecans and related data.

DEFINITIONS AND EXPLANATIONS

Definitions and explanations of terms in this section provide more detailed descriptions for selected items and terms than are available on the report form or in the tables. Differences in definitions between censuses, data deficiencies, and special processing performed for individual or related data items are also explained. For an exact wording of the questions on the sample and nonsample forms used in 1978 for the conterminous United States, and the information sheet which accompanied these forms, see appendix D.

For all tables, historical data are shown whenever individual items are comparable, otherwise an (NA) is used. Some historical data may differ slightly from totals included in prior census publications due to rounding of fractions and dollar values.

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

Land in farms—The acreage designated in the tables as "land in farms" consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total 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. Except for open range and grazing land used under government permits, all grazing land 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 Indian 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 total land area of counties and States shown for 1978 represents the land area as determined by records and calculations updated as of January 1, 1979. These data are updated periodically; however, the acreage shown for 1978 are essentially the same as in 1974. Any differences between the land area in 1978 and 1974 are due to annexations, disincorporations, 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 were raised or produced. It was usually the county containing all or the largest proportion of the land in the farm. For a limited number of 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 1974 census and prior special surveys as having more than one separately reportable 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. These reports were assigned to the appropriate counties during office processing.

Value of land and buildings—Farm operators receiving the sample form 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. For 1978, this information is estimated from the replies of a sample of farms; whereas for 1974, all farm operators were asked to provide these data. If the value of land and buildings was not reported, it was estimated during processing by using the average value of land and buildings from a similar farm in the same geographic area.

Other land—This category includes land in house lots, barn lots, ponds, roads, wasteland, etc. The definition of "other land" is the same in 1978 and 1974 only for farms with sales of \$2,500 or more. In 1974, for farms with sales of less than \$2,500, "other land" included pastureland and rangeland other than cropland and woodland pasture in addition to land in house lots, barn lots, ponds, roads, and wasteland.

Land set aside in the Federal Farm Program—The 1978 report form included a new inquiry on the number of acres set aside in 1978 under the provisions of the Federal Farm Program. These data are for acres of cropland taken out of production by growers of wheat, corn, grain sorghums, and barley, and instead planted in cover crops, soil-improvement grasses, etc. No information was obtained as to which grains would have been grown on the acres set aside.

Foreign ownership of agricultural land—An inquiry measuring the impact of foreign ownership of agricultural land was added to the 1978 report forms. All farm operators were asked to report the number of acres owned by individuals who are not U.S. citizens; or owned by foreign-held corporations, unincorporated associations, or foreign governments.

In some cases, operators using land owned by others may not know the beneficiary owner of the land or, if the owner is known, they may not know the citizenship of the landlord. Therefore, a "don't know" category was included on the report form. Corporations with 50 percent or more of the stock held by foreign investors were considered foreign owned. Any land owned and operated by such corporations was included as land held under foreign ownership.

County summary table 36 provides operators response to the foreign ownership inquiry. Counts are provided for those responding "yes," "no," "don't know," and "no response." No attempt was made to contact nonrespondents.

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 he/she rents land to others or has land worked on shares by others, he/she is considered the operator only of the land which he/she retains 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 to be 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 1978. In the 1974 census, operator characteristics were collected only for all farms with sales of less than \$2,500 and for farms with sales of \$2,500 or more operated by individuals (sole proprietorships) and partnerships. If operator characteristics of race, age, sex, and principal occupation were not reported for 1978, they were derived based on reports with similar acreage size, tenure, and sales size. No adjustments were made for nonresponse to residence, Spanish origin, and off-farm work.

Extensive verification and recontacting were done for positive responses to Spanish origin, especially in Southern States. It was found that a number of these responses were in error, apparently the word American in "Mexican American" was mistaken as American origin.

Write-in entries of "other" race were clerically reviewed and recoded where necessary; entries without an accompanying write-in description were not verified by recontacting the respondent. Based on demographic classifications, "other" race is limited to native non-Spanish populations of Central and South American countries.

In the presentation of data on race of operator, the classification "Black and other races" includes Blacks, American Indians, Asian or Pacific Islanders, and any other separate racial group excluding White. For the 1978 census, operators of

Spanish origin are tabulated by reported race. Prior censuses included Spanish origin as "White" whenever separate data for the White race were shown.

The 1978 Census of Agriculture is the first census to collect data on the sex of the operator. For farm operations where both husband and wife participated, the response was determined by the parties involved.

Selected production expenses—Data on selected production expenses incurred in 1978 were requested from farm operators reporting on the sample form. Only selected production expenses were requested; thus, the expense data cannot be used in combination with gross sales to calculate net farm income. The 1974 census attempted to gather selected expenses plus a category "all other production expenses" to arrive at total expenses. This category was to include items such as depreciation, taxes, interest, rent, and insurance for the farm business. Because of the burden to respondents and inaccuracy in reporting, the "all other production expenses" inquiry was not included on the 1978 report form. The 1979 Farm Finance Survey provides estimates on net farm income.

For 1978, as with earlier censuses, expense data in some cases were not fully reported especially by operations producing crops, livestock, or poultry on a contract basis. Many such operators were unable or unwilling to estimate the value of production inputs furnished by the contractor. Estimates were made for individual expense items based on reported crop and livestock information, or on averages or ratios of expense items reported by similar farms in the same geographic area.

Commercial fertilizer—The expense for commercial fertilizer is the amount spent on fertilizer during 1978, excluding the cost of application. Some fertilizer purchased in 1978 may not have been applied during the year. If the fertilizer was applied by someone other than the operator, the cost of application is included as an expense for customwork, machine hire, and rental of machinery and equipment. Some operators may have included the cost of application with the amount spent on fertilizer.

Other agricultural chemicals, including lime-Expenses include the cost of all insecticides, herbicides, fungicides, other pesticides, lime, etc., excluding costs of application. Data exclude commercial fertilizer purchased.

Customwork, machine hire, and rental of machinery and equipment—This expense represents 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 used on rented or hired machinery is included as a hired farm and ranch labor expense.

Energy and petroleum products—More extensive data on energy usage for the farm business were collected in the 1978 census than in prior censuses. Data were collected on expenses, gallons purchased, and storage capacity for gasoline; diesel fuel; LP gas, butane, and propane; and fuel oil. In addition, data on expenses for natural gas; kerosene, motor oil, and grease; electricity; and all other energy sources were collected. Data for 1974 include only storage capacity and expenses for gasoline; diesel; LP gas, butane, and propane; and a combined total expense for motor oil, grease, piped gas, kerosene, and fuel oil. The 1978 energy data were collected from a sample of farms. Additional data on energy usage and storage capacity are available from the 1979 Farm Energy Survey.

Caution should be used in evaluating storage capacity. Farms not reporting storage capacity were not identifiable from farms with no storage capacity; therefore, the totals understate the actual storage capacity available.

Value of agricultural products sold—This item represents the gross market value before taxes and production expenses of all agricultural products sold or removed from the place in 1978 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, and others associated with the operation.

The value of agricultural products sold represents the sum of all crops including nursery products sold, and livestock and 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.' For 1974 and 1969, the value of agricultural products sold included sales of forest products from farms and ranches.

The value of crops sold in 1978 does not necessarily represent the sales from crops harvested in 1978. Data include sales from crops produced in earlier years and exclude some crops produced in 1978, but held in storage and not sold in 1978. For crops sold through a co-op which made payments in several installments, only the total value received in 1978 was to be reported.

The value of agricultural products sold was collected from all operators. Where the operator failed to report a value of sales, 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 applied when comparing sales in 1978 with sales reported in earlier censuses due to the extreme 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 1978 by farm operators for providing machine work, customwork, and other agricultural services for others such as plowing, planting, harvesting, etc. Entries were deleted when duplicate information was reported in the 1978 Census of Agricultural Services, or when entries were large enough to consider the agricultural services activity separate from the farm or ranch. The agricultural services part of a farming operation was generally considered a separate operation when income from agricultural services was greater than \$500,000, or when it was \$10,000 or more and greater than the value of agricultural products sold. Data for establishments primarily engaged in agricultural services are published separately in volume 3. Value of agricultural products sold directly to individuals for human consumption—This 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. By definition, it excludes nonedible products such as nursery products, cut flowers, wool, grains, etc. Sales of agricultural products by vertically integrated operations through their own processing and marketing operations were excluded where identified.

Fertilizer and lime—Detailed inquiries on acreage fertilized and tonnage of fertilizer applied by crop, which were included on the 1974 census form, were not collected in 1978. Data collected for 1978 are limited to total acres of cropland fertilized excluding cropland used only for pasture, and total acres of pastureland and rangeland fertilized. Data on lime use were requested in both 1978 and 1974. Land fertilized and limed data were collected from a sample of farms in 1978. Total acres of individual crops fertilized and, therefore, may include duplication where two or more crops using the same acreage were each fertilized during the year.

Irrigation—The 1978 report forms included inquiries on acres irrigated for specific crops and total acres irrigated for harvested cropland, pastureland or rangeland, and any other land. Data on methods of irrigation and estimated quantity of irrigation water used by farms and ranches collected in the 1974 and 1969 censuses are available from the 1979 Farm and Ranch Irrigation Survey and are included in Volume 5, Special Reports. Irrigation data collected on the 1978 report form are summarized in more detail in volume 2, Part 9, Irrigation on Farms and in Volume 4, Irrigation, which also includes data from off-farm water suppliers covered in the 1978 Census of Irrigation Organizations.

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 the State average price. 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 Economics, Statistics, and Cooperatives Service of the U.S. Department of Agriculture. Prices applied to other livestock and poultry were census-derived averages based primarily on reported value of sales in the 1978 Census of Agriculture. The 1974 and 1969 data were developed in a similar manner.

Poultry hatched—The 1978 data include all poultry hatched during the year that were placed or sold; whereas for 1974, data include only poultry sold. For example, chickens hatched and raised for layer replacement on the same farm are included in 1978 data for poultry hatched, but excluded from 1974 totals. The value of hatchery sales is included in the category "Poultry and Poultry products."

Fish and other aquaculture products—The raising of fish and other aquaculture products in captivity was included as agri-

cultural production by the 1972 Standard Industrial Classification, and data for such operations were included in the agriculture census for the first time in 1974. The value of fish and other aquaculture products sold is included in the category "Other livestock and livestock products." Production in salt water was considered not to be in captivity and was excluded.

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 for pollination of crops). 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-For the 1978 census, reports for selected citrus caretakers in Arizona, Florida, and Texas were obtained by direct enumeration. 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 report form. A citrus caretaker is an organization or person caring for or managing citrus groves for others. 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 number of acres of citrus. The names on the lists were matched to completed grove owners' reports 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 again. In the 1978 census, 8 caretakers in Arizona reported 250 grove owners having 12,000 acres of citrus; the 100 caretakers in Florida reported 6,600 grove owners having 240,000 acres of citrus; and 27 caretakers in Texas reported 1,500 grove owners having 30,000 acres of citrus.

More detailed information by State and county are included in volume 2, part 6.

Crop year or season covered—Acres and quantity harvested are for the calendar year 1978 except for citrus fruits, avocados, and olives; vegetables in Florida; sugarcane in Florida and Texas; and pineapples and coffee in Hawaii.

Citrus fruits—The data relate to the crops harvested from the bloom of 1977 for the 1977-78 marketing season.

Avocados—The data for California relate to the quantity harvested from November 1, 1977 through November 30, 1978; the data for Florida relate to the quantity harvested or to be harvested from April 1978 through March 1979.

Olives—The data relate to the quantity harvested from the bloom of 1977 for the October 1977 to March 1978 harvest season.

Vegetables—The data for Florida relate to the crop harvested for the September 1, 1977 through August 31, 1978, harvest season.

Sugarcane-The data for Florida and Texas relate to the reported cuttings from November 1977 through April 1978.

Pineapples and coffee—The data for Hawaii for pineapples relate to quantity harvested for the year ending May 31, 1978, and coffee for the 1977-78 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; in Hawaii, taro, ginger root, and lotus root. Totals for crops reported in tenths 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 chop or silage would be reported for each applicable crop. For interplanted crops or "skip-row" crops, acres were to be reported according to the portion of the field occupied by each crop.

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

For crops grown purposely for grazing, quantity harvested was not requested. Acres for these crops were to be reported as "cropland harvested" and not as "cropland used only for pasture or grazing." This procedure applies to the following crops:

Corn cut for dry fodder, hogged or grazed Cowpeas hogged or grazed or cut for silage Sorghums hogged or grazed Soybeans hogged or grazed or cut for silage

Quantity harvested was not obtained for crops such as vegetables, nursery and greenhouse products, and soybeans plowed under.

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 or for the individual crop acreages.

Data for hay represent all hay crops, including grass silage and hay crops cut and fed green. 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. **Crop units of measure**—For some crops, the operator could report quantity harvested in a unit of measure currently in use in the area. These crops were: Corn for grain or seed, in bushels shelled or hundredweight shelled; sorghums for grain or seed, in bushels or pounds; rice in 100-lb. bags, bushels, or 162-lb. barrels. Corn for grain and sorghums for grain are published in bushels and rice in 100-lb. bags. 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 are published in pounds.

Write-in crops—To reduce the length of the report form, only the major crops for the United States were prelisted (see sections 2 and 3 of the report form). For the 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 (see sections 4, 5, 6, 7, and 8 of the report form). 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. Crops not coded by the respondent were coded during processing before keying. Writein 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 of the report, 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 unusual crops for the area were examined to minimize the possibility that they were in error.

Comparability of crop data—For the 1974 and 1969 censuses, data for all crops are available for farms with sales of \$2,500 or more while only data for the major crops—corn, sorghums, soybeans, peanuts, wheat, cotton, tobacco, potatoes, hay, vegetables, land in orchards, and berries are available for all farms. For 1978, data for all crops are available for farms with sales of \$2,500 or more and for all farms.

For a number of commodities, less detailed data were collected in 1978 than in 1974. In these instances, 1974 data have been combined to provide comparable figures wherever possible.

The "acres of vegetables harvested" in 1978 and 1969 was the summation of the acres of individual vegetables harvested, but in 1974 it was the total land used for vegetable crops. For "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.

The "other crops" in the tables are not comparable from census to census as crops are added and deleted from the report form each census.

Value of crop production-This item represents the estimated value of all crops harvested during the 1978 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 Economic, Statistics, and Cooperative Service, U.S. Department of Agriculture (USDA). When USDA estimates were not available, Bureau of the Census statisticians made estimates using available sources such as data from adjacent States, respondents, report forms, county extension agents, and other persons knowledgeable about specific crops.

"See Text" References

Items in the tables which carry the note "See text" are explained or defined in this section. Also, additional definitions and explanations for some items are provided.

Data for 1978 are based on a sample of farms-Sections 22 through 27 of the census report form 78-A1(S), which include inquiries on commercial fertilizer and lime, chemicals, machinery and equipment, expenses for energy and petroleum products, selected production expenses, and value of land and buildings, were requested of all certainty (large) farms and approximately 20 percent of all other farms. As these data are subject to sampling error, estimates of the sampling reliability of county totals for selected items are shown in table D.

Farms operated by Black and other races—For 1974 and 1978, "other races" includes American Indians, Asian and Pacific Islanders, and all other racial groups other than White. The 1969 data are limited to farms operated by Blacks. Additional information on race of operator is provided under "operator characteristics".

All other races—This category is limited to native non-Spanish populations of Central and South American countries.

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

Other type of organization—This category includes cooperatives, estates or trusts, prison farms, grazing associations, and Indian reservations.

Market value of agricultural products sold—This item represents the gross market value, before taxes and expenses, of all agricultural products sold in the census year including livestock and poultry and their products, and crops including nursery products and hay. The data include landlords' and contractors' shares. The 1974 and 1969 data include sales of forest products.

Farms with value of agricultural products sold less than \$2,500-In 1978, this category includes all farms, except abnormal farms, with sales less than \$2,500. In 1969 and 1974, farms reporting sales less than \$2,500 but having the production potential for sales of \$2,500 and over are included in the category farms with sales of \$2,500 and over. In frequency distributions, the 1969 and 1974 farms with potential sales of \$2,500 and over are included in the \$2,500 to \$4,999 sales group.

Other livestock and livestock products—Production of fish and laboratory animals is included in this category in 1974 and 1978; whereas, production of these items was excluded entirely from the 1969 census.

Poultry hatched—For 1978, this category includes all poultry hatched during the year that were placed or sold; whereas for 1974, it only included poultry sold. Incubator egg capacity on December 31, 1978, is tabulated under the column heading Inventory and the number of poultry hatched is under the heading Sales.

Worms-For 1978, the production of worms was separately identified; whereas for 1974, it was not. Inventory consists of the number of standard worm beds in production. A standard worm bed was considered to be 24 cubic feet measuring 8 feet by 3 feet by 1 foot. Sales of worms are shown in pounds. Worm casting sales are included in livestock products sold.

Hay crops (tons, dry)—Data shown for hay represent all hay crops, including grass silage and hay crops cut and fed green. 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.

Other tame dry hay-The 1974 categories clover-timothy hay, lespedeza hay, coastal Bermuda grass hay, and other hay have been combined into "other tame dry hay" in 1978.

All vegetables harvested for sale-In 1978 and 1969, the acres of vegetables harvested is the summation of the acres of individual vegetables harvested; while in 1974, it is the total land used for vegetable crops.

Land used for vegetables—Data are 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.

Grapes (pounds)—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.

All nursery and greenhouse products—Data are a summation of the individual items presented.

Excludes abnormal farms—Abnormal farms include institutional farms, experimental and research farms, and Indian reservations. Institutional farms include those operated by hospitals, penitentiaries, schools, grazing associations, government agencies, etc.

Farms by standard industrial classification—See explanation under Farm Classifications.

FARM CLASSIFICATIONS

State tables 29 through 35 present detailed 1978 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. In 1974, comparable detailed data were tabulated only for farms with sales of \$2,500 or more. 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 a number of State and county tables, data are shown separately for all farms and for farms with sales of \$2,500 or more, and for various value of agricultural products sold or value of sales size groups.

For 1978, all farms except abnormal farms have been tabulated by size based on reported sales. Thus, the category "farms with sales of \$2,500 or more" includes only farms with actual sales of \$2,500 or more. For 1969 and 1974, farms reporting sales of less than \$2,500 but having the production potential for sales of \$2,500 or more are included in most tables under the category farms with sales of \$2,500 or more based on potential sales.

In 1969, 1974, and 1978, abnormal farms were not tabulated based on actual or potential sales. Detailed data for abnormal farms are included in all farm data shown in State table 34, but are excluded from totals for all farms shown in other State tables 29 through 35. Otherwise, data for abnormal farms are included in totals for all farms, but are excluded from totals for farms with sales of \$2,500 or more.

In 1969 and earlier censuses, data were classified into nine groups referred to as "economic classes." For farms with sales of \$2,500 or more, the value-of-products-sold classifications used in 1974 and 1978 are the same as the value ranges used for establishing economic classes 1 through 5. Data for farms with sales of less than \$2,500, classified in 1969 and earlier censuses as class 6, part time and part retirement, are not directly comparable to the 1974 and 1978 value-of-product classes because of the change in farm definition and modifications in farm classification. Farms by tenure of operator – The classifications of tenure used for both the 1978 and 1974 censuses are:

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.

Detailed 1978 data by tenure of operator are shown in State table 29 for all farms, excluding abnormal farms, and for farms with sales of \$2,500 or more.

Farms by type of organization—The 1978 Census of Agriculture was the first census in which all farms were classified by type of organization. In the 1969 and 1974 censuses, these data were collected and tabulated only for farms with sales of \$2,500 or more.

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.

For 1978, corporations were subclassified by two additional characteristics into:

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

These subclassifications were not used in the 1974 Census of Agriculture. However, somewhat similar classifications were obtained in a follow-on survey of all corporations identified in the census, which were published in volume IV, part 5 of the 1974 Census of Agriculture. This survey collected detailed information on family and nonfamily corporations, number of shareholders, and other classifications and characteristics of corporations at both the firm (company) and farm levels. In the 1969 census, corporations were classified only by number of shareholders; those having more than 10 or those having 10 or fewer shareholders.

Caution should be exercised when comparing 1978 corporation data to those of the 1974 survey and the 1969 census. For the 1974 survey, respondents were given a choice of four kinds of corporations from which to select the one that best described their operation: Family corporation, independent corporation, parent corporation (with one or more subsidiaries), and subsidiary of another corporation. Classification rules used prevented an independent, parent, or subsidiary corporation from being classified as a family corporation. The two-way choice of family held or other than family held used in 1978 has resulted in a decrease in the number and proportion of nonfamily held corporations reported.

A followup study of the 1969 data indicated that a sizable number of farms were incorrectly reported as corporations, especially in the Southern States. The 1974 survey was used to identify and correct the misreporting of corporations in that census. In the 1978 census, some reports incorrectly had both individual or family operation (sole proprietorship) and family held corporation indicated. These reports were reviewed during the processing phase and resolved based on whether or not the respondent operated under a corporate name, had reported as a corporation in the 1974 census, or was shown to be a corporation on one or more of the administrative records used in developing the census mail list.

Farms by age and principal occupation of operator—Data on age and principal occupation were obtained from all operators for 1978. In 1974, these data were collected only for all farms with sales of less than \$2,500 and for farms with sales of \$2,500 or more operated by individuals (sole proprietorships) and partnerships. Detailed characteristics are shown by six age-of-operator groups in combination with occupation information for all farms in State table 31 and for farms with sales of less than \$20,000 in State table 32. The principal occupation classifications used for 1978 were:

- Farming-The operator spent 50 percent or more of his work time in 1978 in farming or ranching.
- Other- The operator spent 50 percent or more of his worktime in 1978 in occupations other than farming. Some operators engaged in ranching marked "other" as their principal occupation. Most such obvious errors were corrected during processing.

Farms by size – All farms were classified by size according to the total land area in each operation. 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. Detailed characteristics of all farms by 12 size-of-farm groups are presented in State table 33.

Farms by standard industrial classification—As in the 1974 census, agricultural production establishments (farms, ranches, nurseries, greenhouses, etc.) are classified by the Standard Industrial Classification (SIC) system in the 1978 census. These classifications, found in the 1972 SIC Manual, 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 3- or 4-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 was 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 0191 or a general livestock farm in industry 0291.

All farms in the 1978 census were classified by SIC. In the 1974 census, farms with sales of less than \$2,500 were not classified by SIC. In 1978, those agricultural producers having no sales reported were retained as farms and classified as general livestock farms in industry 0291 if livestock or pasture were reported or as general crop farms in industry 0191. Characteristics of all farms by selected SIC groupings are shown in State tables 11 and 35. Additional and more complete 1978 data for various SIC classifications are published in volume 2, part 8.

UNPUBLISHED DATA

Additional data have been assembled in a series of unpublished tables. The unpublished State table "Summary by Standard Industrial Classification of Farms by Value of Sales: 1978" has a format similar to State table 34. The largest size group in the boxhead is \$100,000 or more. Data are shown for the following SIC groupings:

Cash grain farms (011) Field crop farms except cash grain farms (013) Cotton farms (0131) Tobacco farms (0132) Sugar crop, Irish potato, hay, peanut, and other field crop farms (0133) Vegetable and melon farms (016) Fruit and tree nut farms (017) Horticultural specialty farms (018) General farms, primarily crop (019) Livestock farms except dairy, poultry, and animal specialty (021)Beef cattle farms, except feedlots (0212) Dairy farms (024) Poultry and egg farms (025) Animal specialty farms (027) General farms, primarily livestock (0291)

The following unpublished county summary tables include data tabulated by detailed size groupings:

Farms by Size of Farm: 1978 and 1974 Acreage and Value of Owned and Rented Land: 1978 Farms by Acres of Cropland Harvested: 1978 and 1974 Place of Residence of Operator by Occupation and Off-Farm Work: 1978 Hired Farm Labor by Number of Hired Workers: 1978 Farms by Expenses for Hired Farm or Contract Labor: 1978 Broilers Sales by Number Sold Per Farm: 1978 Cows and Heifers That Had Calved-Inventory by Number Per Farm: 1978 Beef Cows Inventory by Number Per Farm: 1978 Milk Cows Inventory by Number Per Farm: 1978 Cattle and Calves Inventory by Number Per Farm: 1978 Cattle and Calves Sales by Number Sold Per Farm: 1978 Fattened Cattle Sales by Number Sold Per Farm: 1978 Hogs and Pigs Inventory by Number Per Farm: 1978 Hogs and Pigs Sales by Number Sold Per Farm: 1978 Feeder Pigs Sales by Number Sold Per Farm: 1978 Other Hogs and Pigs Sales by Number Sold Per Farm: 1978 Sheep and Lambs Inventory by Number Per Farm: 1978 Sheep and Lambs Sales by Number Sold Per Farm: 1978

Data similar to that shown in State table 28 for the acreages of crops harvested and production by acreage size have been summarized at the county level, but have not been tabulated. These summaries can be tabulated at a minimal cost depending on the detail of data requested.

For information on the availability and cost of unpublished tabulations, please write to the Chief, Agriculture Division, Bureau of the Census, Washington, D.C. 20233.

NONSAMPLING ERRORS

Every census or survey is subject to errors. In addition to sampling variability, errors may arise from such sources as incorrect or incomplete reporting, processing, and the inability to obtain a report from each eligible reporting unit. Sampling variability is discussed in Statistical Adjustments.

Reported data in the census may be incorrect as a result of the misunderstanding of questions or because of the use of estimates in reporting. During processing, adjustments were made to data items which appeared to be inconsistent with other items reported for the same farm.

Respondents may have failed to provide all of the information requested. In some cases, the respondent may have indicated the presence of an item but not the amount. Imputations were made for missing data on the quantities and sales of crops and livestock but no imputations were made for place of residence or foreign ownership of land.

Careful efforts were made to keep errors introduced during clerical and electronic processing to a controlled level through the use of quality control, verification, and check measures on specific operations.

Extreme values in the direct enumeration sample (those contributing a substantial proportion of the estimated total) were reviewed individually and sometimes reduced. This will result in a possible downward bias in estimated totals.

Inclusion of the direct enumeration sample in 1978 resulted in a matching operation to identify names and addresses included in both the direct enumeration sample and the mail list. This matching operation was subjected to critical review and verification, including telephone calls to most respondents in the direct enumeration sample who were not matched in normal processing. Duplicates which were not identified during the matching process will result in an upward bias in estimated totals.

An adjustment was made for nonrespondent operations on the mail list. This adjustment employed sampling of both nonrespondent and respondent cases and variation from the adjustment is measured in sampling error; however, any systematic bias is not measured.

An evaluation of coverage is being conducted to measure the extent of undercount or overcount of farms in the census. A description of this evaluation is included in Census Coverage.

CENSUS COVERAGE

Although a complete and fully accurate count of farms, farmland, and farm production is the aim of each nationwide census of agriculture, the complex structure of America's agriculture makes this aim 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 census counts. The results of the coverage evaluation study were published for the 1974 census in Volume IV, **Special Reports**, part 3. This report included estimates of the net percentage of all farms missed in the census. Farm counts for 1974, adjusted for this net undercount, are shown in appendix C.

The inclusion of a direct enumeration sample to supplement the mail list for the 1978 census partially eliminates the major source of undercoverage of farms, namely, incompleteness of the mail list. However, inaccurate counting may still occur because (1) by design, the sample omitted the selection of area segments in places that had 2,500 or more population in 1970; (2) direct enumeration sample interviewers may have under counted or over counted farms; and (3) respondents may have been misclassified as farms or nonfarms during processing.

The coverage evaluation for the 1978 census includes a re-enumeration of a subsample of the direct enumeration segments with matching and verification of differences, identification of operators not included on the mail list in places with 2,500 or more population in 1970 using supplemental questions on the Annual Housing Survey, and verification of the farm-nonfarm classification for a sample of respondents.

The changes in data collection procedures implemented for the 1978 census should substantially reduce undercoverage, and the proportion of farms not included in the census is expected to be between 2 and 3 percent for the United States. Results of the coverage evaluation and other evaluative material are included in volume 5.

STATISTICAL ADJUSTMENTS

Report forms were obtained and tabulated for all the identified larger farms (in general, those with expected sales of \$80,000 or more). In the few instances where the operator did not supply the required information, data were obtained from secondary sources. By means of detailed, programed edit specifications, adjustments or corrections were made during the computer edit operation for internally incomplete or inconsistent data. The review procedures provided for computer printouts of edit changes that exceeded specified limits for the item. These changes were then reviewed for reasonableness by members of the processing staff and necessary corrections made.

Nonresponse

The statistics for each State and county were adjusted to account for nonrespondent smaller operations. The number of

farms for which adjustment was made was estimated on the basis of the results of a canvass of a random sample of mail list addressees who did not respond to the census during the regular followup period. The canvass, using an abbreviated form, was accomplished with the use of the mail and telephone. The sample for each State was designed to provide estimates of the number of nonrespondent farms with a relative standard error of approximately 6 percent. However, approximately one third of the sample could not be contacted resulting in a potential bias in the estimates. The sample estimate of the number of nonrespondent farms at the State level was allocated to strata at the county level using the number of nonrespondents and the proportion of census farms among respondents. A sample of respondent data records was selected by stratum and weighted to represent the nonrespondent farms.

Table A shows for selected items for the State the percent of the published total that the whole farm nonresponse adjustment represents. Adjustment for individual item nonresponse on respondent forms is not included in the percentages. These percentages indicate the potential for bias in published figures resulting from nonresponse, i.e., the extent to which the actual data for nonrespondents may not agree with the nonresponse adjustments. The probable range of difference is unknown. However, the degree of uncertainty regarding the accuracy of the data increases as the percentage of the total represented by the nonrespondent adjustment increases.

Direct Enumeration Sample

Because of undercoverage problems with the mail list for the 1969 and 1974 censuses, a direct enumeration area sample was included to supplement the mail list for the 1978 census. Enumeration district maps and data from the 1970 Census of Population and Housing were used to construct the sampling frame from which the direct enumeration sample was selected. The frame was stratified by State and by a farm density ratio (the ratio of farm households to total households). In this State, the selected sample consisted of 223 segments. The expected number of farms per segment varied by strata from none in residential areas to 12 in intensive farm areas and averaged about 10 farms. Farms enumerated in the direct enumeration sample were matched to the mail list and the data for the unmatched farms were weighted by the reciprocal of the probability of selection for the segment to make State estimates for farm operations not represented on the mail list.

Table A. Percent of State Total Represented by Adjustment for Whole Farm Nonresponse: 1978

Item	Percent of total
Farms Land in farms Value of agricultural products sold	9.0 3.9 2.9 6.6
Corn for grain or seed acres	3./
Wheat for grain acres	7.0
Inventory: Cattle and calves Hens and pullets of laying age Horg and pigs	4.6 .5 5.6

Mail List Sampling

To obtain county data for appropriate items without burdening all farm operators, data for Sections 22 through 27 of the report form 78-A1(S) were collected only from a sample of farms. The sample was selected from the mail list and consisted of all addresses in a certainty stratum and a random sample of addresses from the noncertainty stratum. The certainty stratum consisted of all addresses meeting specified size criteria in terms of indicated acreage and/or value of sales. Certainty size criteria varied by State from 1,000 to 5,000 indicated acres and from \$40,000 to \$200,000 indicated value of sales based on historic or mail list source data. All addresses in counties with less than 100 farms in 1974 were also selected as certainty. Noncertainty addresses in counties with 100 to 199 farms in 1974 were sampled at a rate of 1 in 2, and noncertainty addresses in counties with 200 farms or more in 1974 were sampled at a rate of 1 in 5.

Several elements of the sampling from the mail list and associated data collection may introduce substantial variation and a potential bias into the resulting data. First, the mail list from which the sample was selected contained about 50 percent nonfarm names and addresses which were not identifiable at the time of selection. Both farm and nonfarm names and addresses were selected into the sample. As a result, the farm data actually tabulated came only from part of the sample, specifically the names and addresses which represented farms. Secondly, the stratification was based on size information from several sources and of varying quality. Size information was not available for a substantial proportion of the names and addresses. In addition, sample and nonsample forms may have been returned at a different rate by respondents.

In order to improve the precision and minimize the bias of estimates from the sample, post-stratification was used to produce estimates. Basically, this consisted of classifying all farms into relatively homogenous strata and weighting sample farms within each stratum by the ratio of total farms to sample farms.

Farms meeting certainty size criteria during sample selection and those identified during processing as meeting similar criteria were assigned to a certainty stratum. All other farms were assigned to 64 strata. Farms with sales of less than \$2,500 were classified into eight size-of-farm groups (less than 10 acres, 10 to 49 acres, 50 to 69 acres, 70 to 99 acres, 100 to 199 acres, 200 to 259 acres, 260 to 499 acres, and 500 acres or more); within each of two value-of-sales groups (less than \$1,500 and \$1,500 to \$2,499); within each of two type-of-farm groups (crop or general farms and livestock or poultry farms). Farms with sales of \$2,500 or more were classified into four size-of-farm groups (less than 50 acres, 50 to 99 acres, 100 to 259 acres, and 260 acres or more); within each of the four value-of-sales groups (\$2,500 to \$4,999, \$5,000 to \$9,999, \$10,000 to \$19,999, and \$20,000 or more); within each of two type-of-farm groups (crop or general farms and livestock or poultry farms).

Each stratum was examined and collapsed into another stratum if (1) the stratum contained less than 20 sample farms; or (2) the calculated weight for the stratum was greater than 10 in counties sampled at a rate of 1 in 5 and greater than 4 in counties sampled at a rate of 1 in 2.

The post-stratification provided weights to be assigned to farms in each of the final collapsed strata such that the total of the weights for sample farms in the stratum would be equal to the total number of farms in the stratum.

Estimates were prepared for items in Sections 22 through 27 of the report form by multiplying the data for each item for each farm in the sample by the weight assigned to the farm. The weight for a certainty farm was 1.

Reliability of Census Estimates

Sampling variability in census data may arise from several sources, some affecting all data and others affecting only certain items or geographic levels of tabulation.

The sampling involved in the imputation for nonrespondents affects all data items at all geographic levels of tabulation. However, farms above specified size limits were not eligible for selection to represent nonrespondents. The size limits varied by State from \$60,000 to \$150,000 and from 1,000 to 2,000 acres. As a result of these limits, the sampling variability arises primarily from smaller farms. For computing the estimates of variability due to weighting for nonresponse, the farms selected for weighting were considered to be a random sample of all farms in the stratum from which they were selected.

Estimates from the direct enumeration sample are not included in county totals but contribute to sampling variability of State totals for all data items.

The sample selected from the mail list provides estimated data only for Sections 22 through 27 of the report form. It contributes to sampling variability only for the items in these sections. Including the certainty farms and sample farms, data for Sections 22 through 27 were collected on approximately 26 percent of the farms nationwide.

Table B includes estimates of sampling reliability of State totals for a selected set of items. The estimates of sampling reliability for total number of farms, land in farms, harvested cropland, irrigated land, crops harvested, livestock, and value of agricultural products sold include components of variation for nonresponse imputation and for the direct enumeration sample. The component of variation for nonresponse imputation is relatively small and the direct enumeration sample is the major source of variation for these items. Estimates of sampling reliability for fertilizer use, chemical use, value of machinery and equipment, and value of land and buildings contain components of variation for the direct enumeration sample and the mail list sample.

Table C contains estimates of sampling reliability for the estimated number of farms in a county reporting an item in table D. These estimates of sampling reliability contain com-

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ponents of variation arising from the mail list sample. The approximate standard error in percent may be read directly from the table based on the number of farms reporting the item. For a number of farms not shown in the table, a linear interpolation will provide a reasonable approximation. These estimates should not be applied to counties indicated to be certainty in table D.

Table D shows estimates of the sampling variability of selected items for each county and for the portion of the State total pertaining to farms not on the mail list. Estimates for county totals contain variation from the mail list sample and estimates for the portion not on the mail list contain variation from the direct enumeration sample. Items for counties indicated to be certainty in the table are subject to some sampling error but this is expected to be small and is not-included. Items in county publications with data collected from all farms contain a component of variation from nonrespondent imputation. This component is usually small and is not shown in the sampling variability tables.

The sample estimates and the estimates of standard errors presented in tables B, C, and D permit the construction of interval estimates with prescribed confidence that the interval includes the average result of all possible samples.

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

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

For example, suppose the estimated number of farms in a State is 50,000 with a relative standard error of 3.0 percent. Then the standard error is 1,500 (3.0 percent of 50,000) and the chances are 2 out of 3 (67 percent) that complete coverage using the same survey methods would yield between 48,500 and 51,500 farms.

As calculated, the standard error also partially measures the effect of nonsampling errors but does not measure the effect of any systematic biases in the data arising from incorrect reporting by respondents, adjustments for nonresponse, incomplete unduplication, or incomplete coverage of farms.

Table B. Estimates of the Sampling Reliability of State Totals for Selected Items: 1978

[All far	îns	Farms with sales of	\$2,500 or more
Item	Quantity	Standard error (percent)	Quantity	Standard error (percent)
Farms	194,253	1.1	134,112	0.7
Land in farms	137,547,468	.3	130,294,254	.2
harvested croprand	119,395	.8	93,724	.8
Irrigated land	20,780,738	.2	20,291,383	.2
SCres.	7 018 411	2.2	6 923 496	.0
Agricultural products soldfarms	194,253	1.1	134.112	.5
\$1,000	8,319,725	.5	8,227,240	.5
Cropsfarms	71,723	.8	62,094	.4
\$1,000	2,704,748	.2	2,686,060	.2
Livestock, poultry, and their products	159,054	1.3	110,607	.8
\$1,000	5,614,977	.7	5,541,180	.7
Value of machinery and equipment	193.322	1 1	134 154	7
\$1.000	4,638,781	.6	4,211,787	.6
Average value of land and buildings per farm	275,047	.6	357,409	.5
Corn for grain or seedfarms	12,713	1.6	10,355	.6
acres.,	1,289,547	.4	1,264,389	.4
bushels	115,780,469	.4	114,902,865	.4
Wheat for grainfarms	15,421	.9	14,565	.8
acres.	2,704,184	.4	2,675,641	.4
bushels	55,524,963	.5	55,173,928	.5
Soybeans for beans	3,465	2.2	3,367	2.3
bushels.	16.073.108	1.0	15.981.897	1.0
			,	
Cattle and calves inventoryfarms	146,758	1.2	101,637	.8
number.	12,983,758	.4	12,185,107	.4
Cattle and calves sold	10 262 736	1.2	11 956 961	.8
	4 548 003	,0	4 489 550	.0
Hogs and nigs inventory.	17 454	6.1	9,716	5.7
number.	831.852	1.3	732,314	1.0
Hogs and pigs soldfarms	13,903	6.2	8,789	6.3
number	1,283,651	1.0	1,196,413	.8
\$1,000	112,374	.9	106,282	.9
Sheep and lambs inventoryfarms	8,790	3.3	7,065	1.9
number	2,446,898	.6	2,410,093	.6
Sheep and lambs sold	/,989	1.8	6,822	1.8
number.	1,844,237	1./	1,825,097	1.8
Mens and pullets of laying age inventory	12 171 143	5.9	11,300	3.3
Hens and pullets of laying age sold	1 794	15.0	988	3.8
number.	9,219,064	1.4	9,154,276	1.4
Commoncial fartilizer used	100 410	1.3	77 331	9
acres.	17.002.526	.7	16,389,193	.7
Commercial fertilizer purchasedfarms	108,788	1.2	83,103	.9
\$1,000	334,672	.7	322,990	.7
Agricultural chemicals purchasedfarms.	82,878	.9	67,281	.6
\$1,000	169,054	.7	165,088	.7
Chemicals used on crops for insect control	32,663	1.3	28,331	1.1
acres,	6,691,636	1.0	6,389,333	1.0
chemicala used on crops for disease controlacusacus	925,290	2.3	901,691	2.8
Gasoline purchasedfarms	171,071	1.2	119,300	.8
1,000 gallons.	257,808	.6	(NA)	(NA)
Placel fuel supported	140,029	°,	LJL,744	.0
1.000 gallons.	2, 572	.,,	(NA)	.9 (NA)
\$1,000	118,167	.7	116,355	.7
Iduated and pulltur numbered forms	68.056	2.1	49.438	1.3
slvestock and poultry purchased	2.347.868	.5	2.320.684	.5
Feed nurchasedfarms.	148,964	1.3	101,900	.9
\$1,000	1,527,922	.5	1,492,468	.5
Hired farm laborfarms	72,313	.7	61,183	.6
\$1,000	434,082	.5	424,156	.5

Table C. Estimates of the Sampling Reliability of Farms Reporting an Item in the County: 1978

Farms reporting item	Standard error (percent)	Farms reporting item	Standard error (percent)
25 farms	30.0	1,000 farms	2.0
	20.0	1,500 farms	1.0
	12.0	2,000 farms	1.0
	8.0	3,000 farms	.5
	5.0	4,000 farms	(NA)
	4.0	5,000 farms	(NA)

							Chemicals used on crops for			
County	land and buildings per farm			Acres fer	ilized	Insect o	control	Disease control		
county	Value dollars	Standard error (percent)	Value (\$1,000)	Standard error (percent)	Астев	Standard error (percent)	Acres	Standard error (percent)	Acres	Standard error (percent)
Anderson. Andrews. Angelina. Aransas. Archer. Armstrong. Atascosa. Austin. Bailey. Bandera.	164,829 931,401 131,877 616,062 298,318 359,476 279,762 226,920 360,287 346,951	5.2 .0 4.5 .0 2.9 4.0 9.6 4.1 5.5 5.1	14,458 5,601 7,050 10,313 8,574 23,733 21,795 36,519 4,372	4.2 .0 6.5 .0 5.6 6.3 3.8 5.8 7.0 5.2	72,427 11,235 11,311 3,183 41,437 15,309 74,717 63,062 147,007 5,958	4.7 .0 9.2 .0 6.9 18.0 7.1 11.0 7.3 14.0	9,258 1,967 1,682 6,384 18,934 23,275 23,458 11,591 84,435 425	7.5 .0 19.0 .0 13.0 17.0 11.0 26.0 11.0 27.0	201 20 - 72 (D) 9,213 3,050 3,654 (18	30.0 .0 .0 92.0 (D) 14.0 30.0 35.0 71.0
Bastrop Baylor Bee Be11 Bexar Blanco Borden Bosque Bowle Brazoria	186,593 278,929 312,701 181,243 209,390 401,181 697,512 235,488 160,065 478,304	4.4 4.3 4.2 5.5 4.9 7.0 3.0 2.5 5.1 3.6	14,545 12,102 12,189 27,065 27,333 6,248 7,078 13,735 21,382 33,305	6.2 5.5 8.2 6.7 9.4 8.3 9.9 6.9 8.7 3.7	57,273 80,995 96,569 152,597 72,398 7,315 7,432 65,077 84,762 120,992	9.5 7.0 12.0 7.6 8.7 31.0 23.0 6.5 8.5 3.4	6,594 38,633 16,622 53,166 20,026 1,559 5,031 16,463 17,480 70,265	19.0 9.4 18.0 15.0 50.0 21.0 7.5 13.0 4.9	98 1,420 135 6,868 2,554 54 708 3,587 15,903	1.9 57.0 38.0 18.0 56.0 .0 5.8 88.0 13.0
Brazos Brewster Briscoe Brooks Burnet Caldwell Calhaun Callahan	229,732 2,075,192 528,512 445,566 194,498 175,994 330,543 173,474 547,723 180,009	5.7 .0 8.1 5.2 4.5 4.2 3.2 5.4 7.8 3.7	12,400 1,852 16,768 4,346 15,384 16,630 8,128 11,135 12,808 13,207	5.5 .0 6.5 11.0 7.1 6.1 10.0 5.3 15.0 8.8	43,104 643 54,590 16,481 41,897 82,988 17,823 55,522 61,722 29,336	5.1 .0 9.1 6.0 8.8 7.1 14.0 7.1 15.0 14.0	17,602 (D) 29,263 5,970 5,165 22,173 1,080 9,328 41,205 2,644	6.1 (D) 12.0 5.0 13.0 21.0 17.0 21.0 63.0	103 504 480 2,070 3,768 2,149 2,177 4,574 4,574 319	72.0 .0 60.0 17.0 11.0 15.0 66.0 77.0 23.0 37.0
Cameron Camp Carson Casso Castro Chambers Cherokee Childress Clay Cochran	348,458 97,742 506,523 120,186 574,910 801,525 133,494 229,568 254,520 405,993	2.9 4.3 4.6 5.3 2.7 7.2 5.0 5.0 5.0 5.3 4.2	49,401 8,674 24,702 9,564 60,295 25,411 17,932 12,910 15,923 20,607	3.9 4.8 6.6 6.3 2.7 7.5 4.3 6.9 8.0 6.6	190,929 11,870 92,643 38,079 265,460 86,734 53,813 43,776 75,620 127,913	3.4 9.9 7.6 10.0 2.9 8.6 8.6 11.0 9.6 9.3	163,786 1,067 60,716 5,508 192,545 63,856 11,188 26,461 22,501 32,640	3.4 30.0 11.0 16.0 4.2 14.0 13.0 12.0 14.0 15.0	18,246 140 (D) 256 14,704 9,892 1,632 2,200 130 7,557	13.0 62.0 (D) 48.0 9.5 21.0 33.0 35.0 35.0 12.0
Coke Coleman Collin Collingsworth Colorado Coman Comanche Concho Cooke Coryell	350,619 234,127 323,322 319,468 317,512 359,593 193,702 474,003 201,755 209,143	4.2 2.8 6.8 15.0 2.9 7.3 3.9 2.5 4.9 3.8	5,542 16,875 27,154 17,197 33,473 5,813 38,681 11,190 22,558 13,549	8.0 6.6 4.7 8.3 4.3 8.9 12.0 6.0 5.9 5.9	1,126 19,389 168,447 177,254 121,967 8,575 127,743 11,048 108,638 65,378	34.0 6.2 4.9 15.0 4.1 20.0 4.7 12.0 6.8 9.4	189 6,615 62,280 6,541 46,306 473 29,403 9,171 14,396 14,764	59.0 6.5 8.5 36.0 9.8 57.0 10.0 6.8 15.0 22.0	5,537 403 22,863 63 23,635 3,001 (D)	.0 .0 27.0 .0 11.0 69.0 11.0 .0 34.0 (D)
CottleCrane. Crackett. Crosby. Cuberson. Dallam. Dallas. Dawson. Deaf Smith. Delta.	441,909 605,226 1,593,673 443,501 3,889,666 692,391 263,751 481,401 503,831 176,183	5.4 .0 .3 4.7 .0 2.8 9.6 5.8 2.9 7.3	12,925 410 4,217 35,066 3,818 33,178 15,000 40,224 56,959 8,847	16.0 .0 2.8 5.5 .0 5.4 6.3 5.3 3.5 11.0	35,202 196 1,567 133,660 17,293 172,374 67,347 164,506 212,313 44,226	13.0 .0 5.6 .0 5.6 15.0 9.5 3.7 14.0	16,739 (D) 46,838 9,585 87,307 25,543 24,250 117,819 25,578	48.0 .0 (D) 12.0 .0 6.2 21.0 22.0 5.0 15.0	3,040 - 11,394 (D) 8,296 2,198 (D) 13,129 95	1.1 .0 .0 33.0 (D) 16.0 40.0 (D) 15.0 52.0
Denton De Witt Dickens Dimmit Don ley Duval Eastland Ector Edwards Ellis	311,175 198,053 290,840 902,168 319,424 269,097 150,747 303,841 1,037,813 226,398	4.4 4.4 6.5 2.1 4.0 4.7 3.6 2.2 1.3 4.2	26,760 17,159 13,797 7,136 12,478 10,677 19,496 2,504 3,680 33,809	5.2 7.1 11.0 12.0 6.0 6.8 4.4 3.9 4.9	116,716 53,184 26,160 11,652 51,998 26,229 76,971 923 371 214,122	7.8 7.4 21.0 7.3 11.0 12.0 8.3 12.0 .0 5.4	29,250 522 8,894 6,799 6,898 11,996 18,319 115 344 98,022	27.0 41.0 25.0 1.9 23.0 6.7 19.0 41.0 1.9 9.5	965 770 (D) 1,370 - 1,766 12,829 176 (D) 7,917	44.0 61.0 (D) 25.0 .0 18.0 20.0 29.0 (D) 26.0
El Paso Erath Falls Fannin Fayette Fisher Floyd Foard	404,318 210,206 200,067 167,647 167,510 220,771 409,763 267,145	3.7 2.8 4.1 4.3 4.1 6.8 3.8 6.7	15,074 27,741 21,877 26,830 25,342 23,844 57,996 10,641	6.4 3.9 6.0 3.7 4.2 7.6 5.1 11.0	34,676 91,660 193,344 174,570 104,297 17,252 161,923 28,955	6.2 9.4 4.8 4.8 6.9 16.0 6.0 23.0	15,717 8,785 54,879 40,811 10,759 9,723 110,320 25,426	5.9 12.0 11.0 11.0 15.0 33.0 5.7 17.0	(D) 3,452 2,816 8,258 43 1,138 7,800 1,930	(D) 27.0 19.0 35.0 46.0 46.0 34.0 70.0

	Average value of Value of machinery and						Chemicals used on crops for			
County	land and b per f	uildings arm	equip	ment	Acres fert	ilized	Insect c	ontrol	Disease o	control
	Value dollars	Standard error (percent)	Value (\$1,000)	Standard error (percent)	Acres	Standard error (percent)	Acres	Standard error (percent)	Acres	Standard error (percent)
Fort Bend Franklin. Freestone. Frio. Gaines. Galveston. Garza. Gillespie. Glasscock. Goliad.	506,069 145,114 230,603 578,258 490,782 276,797 395,591 342,652 771,567 306,356	5.6 6.3 3.4 3.3 12.0 5.3 5.6 1.4 3.8	40,262 7,673 11,230 23,713 64,827 6,109 11,221 13,469 12,895 8,148	4.1 8.4 4.9 4.8 4.1 14.0 11.0 8.6 5.4 7.1	147,575 19,636 66,442 68,185 335,221 13,131 6,026 40,278 12,675 20,561	4.5 9.3 7.0 5.2 3.9 15.0 33.0 8.2 14.0 16.0	72,277 489 6,304 34,071 108,990 11,417 8,967 8,386 11,419 1,473	8.6 47.0 13.0 4.8 6.5 31.0 34.0 25.0 13.0 11.0	8,904 - 2,287 18,052 9,249 5,558 - 4,402 240 (D)	15.0 .0 58.0 12.0 22.0 36.0 .0 18.0 56.0 (D)
Conzales Gray Grayson Gregg Grimes Guadalupe Hale Hall Hamilton Hansford	201,810 418,870 186,986 140,673 282,245 175,652 459,415 279,070 171,343 700,457	2.7 3.5 4.8 8.8 4.1 4.9 3.0 4.4 3.3 3.5	24,383 15,271 24,833 5,664 15,076 23,022 88,902 18,404 15,296 40,450	7.1 9.8 5.3 28.0 5.8 8.1 3.8 5.3 5.7 4.8	61,817 53,560 136,806 8,222 61,376 117,921 320,883 44,211 54,073 158,638	10.0 11.0 5.8 14.0 9.8 9.6 3.8 14.0 8.8 4.0	10,543 21,413 37,514 1,394 7,643 8,555 223,668 16,276 6,094 86,559	28.0 22.0 12.0 6.7 18.0 5.3 21.0 20.0 5.0	4,251 5,071 911 (D) 2,879 13,120 4,525 1,280 (D)	64.0 37.0 57.0 (D) 13.0 17.0 83.0 32.0 (D)
Hardeman. Hardin. Harris. Harrison. Hartley. Haskell. Hays. Hemphill. Henderson. Hidalgo.	263,701 272,352 406,055 1,087,508 223,304 330,131 482,285 157,584 300,999	6.9 12.0 7.1 4.2 1.7 4.9 5.3 2.4 4.7 1.8	17,089 4,216 31,599 12,606 19,812 24,474 6,739 9,506 16,210 90,287	10.0 20.0 5.5 9.6 4.5 4.8 7.9 17.0 4.9 2.7	69,610 13,036 95,259 90,075 54,272 38,662 32,154 85,181 314,975	12.0 32.0 4.9 8.7 4.1 11.0 19.0 19.0 7.0 2.9	35,831 9,594 44,891 3,645 43,804 21,359 3,966 4,075 9,941 261,514	18.0 46.0 16.0 5.5 20.0 50.0 .0 28.0 4.0	(D) 1,111 9,238 1,453 2,775 (D) 41 - 556 104,412	(D) 86.0 21.0 57.0 63.0 (D) 91.0 .0 15.0 3.1
Hill. Hockley. Hook. Hopkins. Houston. Howard. Hudspeth. Hunt. Hunt. Irion.	184,177 310,284 267,753 140,506 181,840 307,360 2,446,426 136,994 537,225 921,964	4.0 3.9 4.6 3.7 2.8 5.1 .5 3.0 4.2 .7	35,952 46,845 6,568 29,705 20,329 19,382 5,829 23,102 9,553 2,212	5.4 5.0 4.1 4.5 7.5 4.8 5.2 6.9 5.8	218,586 127,911 25,993 81,359 88,003 27,783 36,042 102,380 52,686 519	4.7 7.8 8.2 5.0 5.3 12.0 5.0 6.3 6.4 .4	118,144 31,235 1,532 8,648 23,952 11,572 23,062 38,189 18,288	8.9 25.0 21.0 22.0 18.0 26.0 5.1 12.0 6.9 .0	5,745 12,233 3,391 2,307 3,269 1,121 (D) 107 784 (D)	29.0 46.0 13.0 25.0 25.0 (D) 72.0 40.0 (D)
Jack Jackson. Jasper. Jeff Davis. Jefferson. Jim Hogg. Jim Wells. Johnson. Jones. Karnes.	257,466 463,612 151,877 1,702,041 521,213 735,680 284,290 167,722 198,594 207,178	6.7 2.6 8.9 .0 2.4 4.1 4.7 4.8 8.1	6,050 31,655 5,729 1,811 23,570 2,732 15,189 21,803 25,008 17,024	4.5 4.4 7.2 .0 6.4 4.3 5.6 5.9 5.3 7.5	17,390 146,502 12,292 1,351 82,315 4,808 102,802 86,327 43,631 75,292	9.7 5.6 15.0 4.7 4.8 7.9 10.0 15.0 9.8	122 83,245 1,927 (D) 36,295 (D) 25,536 21,083 24,143 6,539	.0 8.6 23.0 (D) 5.6 (D) 15.0 18.0 19.0 29.0	31,479 54 (D) 15,242 1,520 1,061 601 6,018	.0 9.8 50.0 (D) 17.0 .0 .0 53.0 45.0 54.0
Kaufman Kendall. Kenedy Kent Kert Kimble. King. Kinney. Kiney. Kleberg. Knox	215,731 381,716 2,611,436 388,738 416,279 522,560 1,071,917 1,778,832 613,038 303,545	3.6 6.6 .0 2.3 4.2 3.4 .0 .0 3.9 5.7	19,534 7,140 625 5,037 5,718 4,401 3,010 2,398 8,453 14,911	4.0 6.9 .0 7.6 4.9 5.3 .0 .0 5.3 5.2	111,904 11,617 1,545 5,747 4,028 3,893 4,088 6,199 55,416 61,891	5.7 8.1 .0 13.0 14.0 8.9 .0 .0 12.0 8.7	30,593 2,483 200 3,566 159 382 1,431 2,537 43,798 54,653	14.0 26.0 .0 6.6 32.0 30.0 .0 .0 2.9 9.4	3,486 51 - 726 40 443 - 1,584 545 (D)	67.0 91.0 8.9 43.0 24.0 .0 .0 49.0 (D)
Lamar Lambasas La Salle Lavaca Lee Leon Liberty Limestone Lipscomb	162,790 361,647 278,626 800,533 136,595 155,643 241,442 385,700 164,530 457,570	4.8 3.5 4.8 3.4 4.7 4.7 3.2 3.4 3.6 5.1	24,732 65,588 6,615 6,692 27,169 16,279 15,696 26,064 16,764 14,483	5.0 3.6 6.1 12.0 9.2 5.9 5.3 4.2 5.5 9.4	113,796 253,062 18,940 18,566 71,444 65,615 83,349 116,565 89,557 29,328	6.8 3.9 11.0 20.0 7.0 7.5 6.4 3.9 5.9 11.0	30,648 138,129 3,022 5,119 11,842 7,431 14,943 99,839 17,235 14,659	13.0 6.0 29.0 70.0 25.0 23.0 12.0 4.2 16.0 20.0	2,124 9,391 3,096 796 2,602 5,598 17 21,685 846	27.0 19.0 39.0 11.0 31.0 23.0 6.6 15.0 .0
Live Oak Llano Loving Lubbock Lynn McCulloch McLennan McMullen	361,047 437,313 3,271,868 369,201 392,195 415,371 175,139 659,870	3.7 3.7 .0 7.9 5.3 2.1 7.9 2.3	14,977 5,075 297 80,399 44,719 11,383 33,750 3,432	7.4 5.0 4.1 6.1 6.0 4.8 4.4	78,639 5,009 (D) 187,734 95,316 21,688 155,591 8,751	11.0 15.0 (D) 6.6 9.0 16.0 6.0 3.8	18,992 783 (D) 61,898 35,299 7,106 53,118 592	10.0 21.0 (D) 13.0 19.0 38.0 15.0 4.8	348 15,374 765 (D) 3,808	.0 50.0 24.0 14.0 (D) 13.0 .0

	Average v	Average value of					Chemicals used on crops for			
County	land and b per f	uildings arm	value of machinery and equipment		Acres fertilized		Insect control		Disease control	
	Value dollars	Standard error (percent)	Value (\$1,000)	Standard error (percent)	Астев	Standard error (percent)	Астев	Standard error (percent)	Acres	Standard error (percent)
Madison Marion Martin Mason Matagorda Maverick Medina Medina Midland Milam	258,704 148,910 441,921 482,013 546,621 778,346 298,138 484,749 535,587 186,114	6.4 13.0 4.4 11.0 2.2 .7 3.7 3.6 9.3 8.9	11,595 2,152 25,821 12,510 39,632 9,235 24,836 3,439 9,936 25,392	6.2 12.0 6.6 7.0 4.6 2.5 6.8 4.3 8.6 5.1	40,669 12,023 46,587 19,242 177,313 10,220 81,875 2,640 12,173 147,813	10.0 31.0 13.0 7.7 3.1 7.0 8.3 19.0 20.0 5.3	5,175 1,584 12,957 5,622 87,717 4,461 21,823 1,776 5,134 46,921	12.0 32.0 25.0 14.0 4.1 7.2 16.0 14.0 37.0 11.0	780 180 3,748 36,388 2,260 1,822 8 1,432 6,729	23.0 56.0 .0 19.0 11.0 8.1 27.0 90.0 46.0 43.0
Mills Mitchell Montgomery Moore Morris Motley Nacogdoches Navarro Newton	230,718 294,785 177,166 333,037 668,666 135,507 353,526 143,235 187,696 211,591	4.1 5.2 3.7 9.2 4.1 9.7 18.0 4.3 3.8 12.0	12,001 17,516 12,772 6,307 23,177 4,694 10,552 22,138 29,350 3,961	8.3 7.9 4.7 6.4 7.6 11.0 9.2 6.3 6.0 11.0	40,233 12,017 68,880 13,369 127,500 25,940 32,406 39,456 156,080 10,765	9.6 20.0 7.0 12.0 5.9 19.0 19.0 8.0 6.8 21.0	9,042 11,220 5,888 1,164 66,566 2,150 16,688 9,930 54,207 3,201	22.0 28.0 19.0 7.6 28.0 26.0 11.0 15.0 19.0	3,494 - 2,351 (D) 3,744 525 606 (D) 2,106 4	30.0 .0 27.0 (D) .6 58.0 78.0 (D) 65.0 85.0
Nolan Nueces Ochiltree Oldham Orange Palo Pinto Panola Parker Parmer Pecos	290,456 489,046 481,897 1,136,744 225,289 282,577 148,320 195,784 469,892 779,388	4.8 5.6 3.7 .8 6.9 3.8 5.8 4.5 2.5 1.7	13,883 36,547 32,128 8,651 3,198 8,599 12,646 17,722 73,412 5,989	6.4 6.0 7.5 4.4 7.4 8.9 4.0 5.3 3.7 4.6	6,773 286,383 103,728 20,228 8,500 28,305 26,936 56,148 288,368 9,735	3.6 4.9 9.8 8.7 9.0 16.0 9.8 10.0 2.9 .0	6,140 88,925 55,729 16,862 2,397 3,340 6,560 3,659 217,846 7,365	29.0 12.0 8.5 9.8 3.1 42.0 14.0 26.0 3.8 25.0	15 880 3,182 2,207 475 125 3,923 11,253 1,662	27.0 .0 .0 15.0 40.0 42.0 21.0 19.0 .0
Polk Potter. Presidio. Randall. Beagan. Real. Red River. Reeves. Refugio.	231,563 798,725 1,460,940 171,903 340,413 886,967 546,675 215,399 969,739 844,456	8.0 4.8 .4 8.7 5.7 1.7 4.3 5.0 1.5 4.7	6,107 5,457 4,028 5,724 30,220 5,522 1,758 21,852 6,443 11,615	8.6 7.0 9.2 6.4 5.9 6.0 5.9 5.3 11.0	10,996 9,633 3,785 26,699 63,488 3,581 1,065 83,522 21,122 98,661	11.0 17.0 9.2 8.6 8.2 13.0 8.5 6.5 7.5	1,766 4,079 1,169 689 29,256 5,541 88 29,113 13,805 31,050	22.0 9.5 13.0 23.0 13.0 25.0 4.6 18.0 7.5 23.0	559 2,150 (D) 157 3,168 - 4 2,173 1,773 4,042	51.0 64.0 (D) 66.0 49.0 .0 47.0 90.0 .0 4.5
Roberts Robertson Rockwall Runnels Sabine Sabine San Augustine San Jacinto San Patricio San Saba	771,460 211,511 356,696 131,650 78,241 143,532 310,612 536,986 518,442	.0 3.8 13.0 4.1 5.3 10.0 8.4 7.7 5.0 5.7	4,748 17,197 2,844 28,562 15,544 2,853 4,005 3,007 34,319 13,373	.0 7.2 6.5 5.7 4.4 9.9 6.9 8.3 4.1 7.7	11,681 115,234 17,087 31,149 50,042 2,790 8,432 11,348 252,083 37,499	.0 6.4 11.0 16.0 8.5 20.0 15.0 21.0 3.7 9.8	4,116 35,067 2,425 13,055 8,487 765 1,466 5,021 98,129 8,656	$\begin{array}{c} .0\\ 14.0\\ 20.0\\ 20.0\\ 17.0\\ 26.0\\ 26.0\\ 40.0\\ 4.6\\ 16.0\\ \end{array}$	1,345 (D) 90 2,390 	.0 9.3 (D) 67.0 42.0 .0 56.0 56.0 56.0 46.0 26.0
Schleicher Scurry Shackelford Shelby Sherman Smith Somervell Starr Sterphens Sterling	611,382 234,483 458,845 110,346 869,892 159,823 143,866 250,086 304,458 2,165,096	2.3 3.0 4.5 2.7 5.9 13.0 3.5 3.3 .0	5,793 21,386 4,623 17,535 30,317 18,782 2,369 13,900 6,286 2,298	8.8 8.6 13.0 3.7 4.0 5.9 8.0 8.1 7.5 .0	6,195 19,957 10,968 30,273 155,155 59,822 5,802 9,740 10,052 839	54.0 25.0 21.0 9.1 4.0 7.7 15.0 3.1 18.0 .0	906 31,645 (D) 5,718 109,463 9,516 276 41,945 1,528	32.0 13.0 (D) 16.0 5.0 13.0 45.0 8.2 12.0 .0	(D) 55 (D) 1,030 4,387 4,393 55 6,511 115	(D) 85.0 (D) 79.0 .0 24.0 79.0 2.2 53.0 .0
Stonewall. Sutton. Swisher. Tarrant. Taylor. Terrell. Terry. Throckmorton. Titus. Tom Green.	313,301 857,570 360,007 328,073 210,236 1,528,946 337,861 361,376 139,786 459,464	3.9 .9 4.2 5.3 5.1 .0 5.6 3.5 5.3 4.3	8,823 2,843 47,876 17,326 21,009 1,795 44,718 7,790 11,931 26,014	7.2 1.0 5.1 4.5 7.1 .0 6.3 8.2 9.5 6.6	10,803 205 186,626 56,350 30,983 302 221,953 23,054 32,174 24,376	16.0 .0 6.5 6.8 12.0 .0 6.5 13.0 9.5 14.0	6,663 185 109,389 17,524 21,919 (D) 55,587 9,950 5,785 22,856	7.5 14.0 8.4 26.0 20.0 (D) 8.1 18.0 16.0 38.0	(D) 9,482 2,208 6 12,264 620 150	(D) .0 61.0 14.0 1.1 .0 41.0 2.9 25.0
Travis Trinity Tyler Upshur Upton Uvalde Val Verde Van Zandt	354,680 232,762 222,286 121,145 1,156,768 586,043 1,196,338 ~122,450	5.0 6.5 9.4 5.7 .0 2.1 .8 3.3	15,793 6,070 4,627 10,183 4,166 16,575 4,707 26,419	7.1 8.4 12.0 4.9 .0 7.4 3.8 3.8	59,489 17,357 14,608 30,884 7,538 52,795 254 99,387	10.0 11.0 17.0 8.0 .0 8.6 35.0 4.5	15,234 2,672 3,282 6,238 3,871 25,988 11,582	24.0 18.0 15.0 13.0 .0 13.0 .0 12.0	755 267 35 79 (D) 4,535 19 1,874	35.0 58.0 44.0 37.0 (D) 28.0 9.1 38.0

			[1	Chen	heau slant	on crons for	
County	Average v. land and b per f	alue of uildings arm	Value of mac equip	chinery and ment	Acres fertilized		Insect control		Disease control	
	Value dollars	Standard error (percent)	Value (\$1,000)	Standard error (percent)	Acres	Standard error (percent)	Acres	Standard error (percent)	Acres	Standard error (percent)
Victoria Walker Waler Washington Webb Wharton Wheeler Wichita Wilbarger	324,459 388,326 486,360 396,603 187,325 1,090,660 393,305 243,004 276,388 303,792	6.2 6.6 3.6 .0 4.4 1.9 3.5 3.8 5.6 4.9	20,203 8,030 19,604 1,335 21,863 6,948 68,408 15,872 14,958 24,133	7.3 11.0 6.0 5.3 3.3 3.8 7.6 6.2 5.8	80,639 27,774 68,413 7997 65,750 8,398 284,347 89,795 81,741 140,649	8.2 13.0 7.1 .0 6.0 .0 3.5 10.0 9.2 6.7	46,905 6,342 24,021 (D) 8,298 2,566 174,382 533 39,536 67,951	12.0 7.6 8.9 (D) 54.0 .0 4.6 56.0 13.0 9.1	5,782 627 7,364 (D) 428 (D) 48,029 - 2,567 (D)	23.0 66.0 7.0 (D) 64.0 (D) 6.8 .0 1.5 (D)
Willacy Williamson. Wilson. Winkler. Wise. Wood. Yoakum. Young. Zapata. Zayata. Zayala.	548,366 236,701 180,807 1,868,394 225,972 117,213 450,391 177,667 397,881 958,951	1.7 5.6 7.5 .0 5.2 5.9 10.0 3.9 7.3 2.5	22,902 37,105 27,348 721 23,061 15,931 22,777 11,832 2,940 12,669	4.0 4.1 5.0 6.6 4.4 7.9 9.9 6.1 5.7	91,912 230,671 111,017 	3.8 3.6 5.0 12.0 6.9 13.0 10.0 1.6 12.0	65,497 87,027 30,982 8,759 7,789 20,669 6,421 1,428 40,724	4.5 8.4 7.5 .0 30.0 14.0 27.0 19.0 .0 14.0	12,937 6,431 5,982 3,928 1,332 896 851 7,130	1.8 29.0 22.0 .0 58.0 47.0 .0 58.0 .0 9.8
	54,305	14.0	148,505	14.0	307,030	24.0	54,777	39.0	4,000	
					Farm product:	Lon expenses				
County	Gaso	line	Diesel	l fuel	Livestock a purch	nd poultry ased	Fee	d	Hired far	m labor
	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)
Anderson	417 155 171 25 393 330 955 587 1,208 201	6.2 .0 6.7 .0 4.6 6.8 5.2 4.5 8.7 6.0	162 159 69 19 249 277 849 228 1,403 40	5.7 0 16.0 0 11.0 8.3 5.4 16.0 8.7 15.0	3,948 151 1,611 48 5,144 8,481 5,764 4,370 16,317 1,058	11.0 .0 21.0 .0 3.2 2.3 3.6 5.7 2.2 17.0	3,171 301 2,369 94 8,001 2,325 5,048 5,334 8,827 879	7.4 .0 2.1 .0 7.1 1.2 2.8 9.0 1.0 7.3	726 456 398 1,304 643 2,601 955 3,016 242	6.7 .0 6.7 .0 6.2 2.1 6.8 15.0 7.1 12.0
Bastrop. Baylor Bee. Bell. Bexar. Blanco. Borden. Bosque. Bowie. Brazoria.	467 337 448 803 876 278 263 572 461 875	5.0 6.6 5.2 5.4 4.5 12.0 6.4 4.1 7.8 4.0	131 386 397 584 550 59 179 211 312 687	9.7 6.3 12.0 10.0 7.4 20.0 13.0 8.9 10.0 3.2	1,279 10,202 1,123 5,249 7,595 735 1,132 5,061 4,818 1,727	10.0 5.5 8.4 4.9 6.2 11.0 2.8 3.2 2.8 11.0	2,515 2,919 1,182 4,505 6,265 2,762 671 4,609 5,643 2,176	8.9 8.7 7.5 1.6 8.4 9.6 6.3 4.2 4.8 4.1	547 706 1,226 4,036 782 547 1,123 1,465 2,794	12.0 7.1 5.5 6.9 9.4 3.2 14.0 4.8 6.4 6.5
Brazos. Brewster. Briscoe. Brooks. Brown. Burleson. Burnet. Caldwell. Calhoun. Callahan.	444 219 470 206 546 498 456 390 323 436	7.2 .0 12.0 6.5 4.8 8.1 7.2 7.3 11.0 5.1	235 12 601 120 202 242 83 157 409 134	5.3 .0 16.0 3.9 8.1 10.0 18.0 9.0 13.0 14.0	2,897 1,421 1,261 1,402 7,367 4,299 2,250 4,079 1,001 2,990	19.0 .0 14.0 4.0 3.0 5.9 5.4 5.6 3.6 9.8	4,638 1,109 585 1,047 5,673 3,840 2,160 8,109 521 2,417	4.3 .0 12.0 6.6 4.8 8.7 10.0 4.6 9.1 8.0	2,059 620 1,158 794 1,453 990 465 897 930 495	2.2 .0 13.0 5.0 4.2 7.9 12.0 12.0 12.0 16.0 9.1
Cameron. Camp. Carson. Carson. Cass. Castro. Chambers. Chrokee. Childress. Clay. Cochran.	1,104 272 664 296 1,583 560 690 371 684 509	5.0 4.9 7.5 5.2 5.3 9.8 5.4 7.3 6.3 7.4	1,983 192 635 63 2,636 792 185 458 352 1,192	4.4 3.7 5.3 10.0 4.9 9.2 8.3 9.6 10.0 7.9	7,427 3,479 19,442 974 103,897 460 3,181 1,224 6,018 10,697	1.7 3.1 2.6 15.0 .5 11.0 15.0 7.2 7.8 8.3	4,903 10,859 4,438 2,914 48,827 632 4,782 585 4,944 13,096	1.4 4.6 1.1 13.0 1.1 3.0 11.0 9.0 9.1 6.3	11,962 3,022 1,283 403 7,684 2,464 2,629 911 939 2,859	2.8 .9 7.3 15.0 2.3 13.0 4.1 9.5 7.4 6.3
Coke Coleman Collin Collingsworth Colorado Comal	293 616 846 465 1,050 193	3.9 6.4 4.7 11.0 7.7 6.9	49 268 668 496 644 50	9.9 9.3 5.5 13.0 5.0 21.0	1,318 2,316 7,535 4,835 3,049 757	8.8 4.7 5.9 4.7 17.0 39.0	1,253 3,258 4,719 1,541 4,232 824	5.5 9.9 2.8 3.5 7.3 15.0	462 716 2,277 871 2,862 254	11.0 10.0 6.5 13.0 6.0 25.0

					tion expenses					
County	Gasol	ine	Diesel	Diesel fuel		nd poultry ased	Feed		Hired farm labor	
	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)
Comanche Concho Cooke Coryel1 Cottle Crane Crockett, Crosby Culberson Dallam	1,009 425 698 492 430 30 473 896 159 907	3.6 4.2 11.0 4.4 11.0 .0 1.2 6.3 .0 4.7	623 232 278 177 574 2 14 1,571 135 1,348	5.5 6.6 11.0 10.0 17.0 .0 9.1 .0 3.7	4,921 3,770 2,399 3,281 817 493 2,950 849 1,688 65,296	11.0 5.1 13.0 9.8 11.0 .0 3.2 4.5 .0	11,297 2,158 4,709 2,837 589 140 2,702 742 833 30,576	5.3 3.9 15.0 11.0 11.0 .0 1.5 6.9 .0	2,426 947 1,068 651 800 46 1,385 3,765 906 2,946	7.0 5.4 9.3 9.2 13.0 .0 1.3 4.9 .0 3.6
Dallas Dawson. Deaf Smith. Delta. Denton. De Witt. Dickens. Dirmmit. Donley. Duval.	584 964 1,567 228 738 664 548 359 432 510	6.8 6.0 3.2 9.6 5.3 4.8 13.0 6.3 8.2 5.4	285 1,761 1,707 153 427 225 475 227 239 284	20.0 6.0 5.5 15.0 8.9 12.0 14.0 8.0 13.0 14.0	4,380 467 214,066 1,418 4,232 1,722 8,226 10,163 10,718 1,441	8.8 1.6 .4 29.0 9.5 6.9 1.6 1.8 2.6 5.8	2,455 1,842 121,150 828 8,308 4,657 2,430 4,546 4,674 1,764	18.0 .6 .5 13.0 5.9 11.0 9.2 1.1 2.1 3.0	2,086 3,374 6,647 313 1,604 1,042 876 1,786 1,786 1,020 1,395	7.0 7.0 2.4 12.0 8.9 6.3 8.9 4.2 15.0 7.9
Eastland Ector Edwards Ellis El Paso Erath Falls Famin Fayette Fisher	645 100 385 881 442 918 825 745 885 518	6.4 4.0 3.1 5.6 3.7 8.2 4.6 3.3 7.3	364 12 40 847 574 381 638 671 233 609	9.3 20.0 5.9 9.4 7.0 12.0 7.4 9.4 9.1	2,028 429 1,413 2,953 20,744 7,140 12,975 6,705 2,597 3,130	30.0 5.0 5.3 18.0 .7 5.2 5.0 2.4 12.0 14.0	3,532 461 2,633 3,195 7,354 20,235 3,052 2,310 8,280 2,222	8.914.01.814.05.04.53.08.48.34.9	566 163 802 2,458 4,600 2,732 1,514 1,101 1,040 1,356	14.0 10.0 1.3 6.7 4.2 4.2 11.0 7.7 8.0 9.3
Floyd Foard Fort Bend Franklin Freestone Frio Gaines Galveston Garza Gillespie	1,344 328 1,075 498 803 1,546 163 327 621	4.9 11.0 3.7 9.2 5.9 5.1 3.3 14.0 8.1 3.9	1,920 367 895 127 1,179 2,871 132 284 153	5.1 13.0 4.7 13.0 8.7 5.2 3.8 28.0 11.0 8.0	24,191 3,505 559 2,261 6,505 15,943 6,060 377 1,085 2,360	1.0 14.0 9.4 11.0 2.2 2.4 .6 16.0 5.1 7.2	10,009 632 1,320 5,017 2,302 5,898 3,032 440 2,231 7,425	.3 15.0 5.6 19.0 6.2 1.6 1.5 12.0 .8 3.4	5,409 690 4,144 410 787 3,953 5,403 431 1,400 873	5.1 16.0 5.9 11.0 11.0 3.8 4.7 27.0 7.2 9.5
Glasscock Goliad Gonzales Gray.son Gregg. Grimes Guadalupe Hale Hal	309 367 946 446 777 98 531 686 1,771 565	4.7 7.3 5.4 5.4 6.6 10.0 4.8 9.1 4.5 6.2	365 224 269 440 452 30 240 386 3,143 771	7.2 24.0 20.0 11.0 8.0 9.1 11.0 3.9 8.5	716 4,555 15,278 51,468 8,571 759 2,889 3,406 32,797 801	20.0 2.5 3.9 .9 3.3 22.0 7.5 12.0 1.2 11.0	607 3,949 45,751 21,815 3,977 735 6,554 3,234 10,783 628	2.9 3.0 2.8 .4 9.2 9.4 9.3 20.0 2.6 8.5	1,059 780 3,740 1,579 1,012 251 1,374 1,130 8,413 1,336	4.7 8.3 5.0 11.0 39.0 6.7 12.0 5.4 12.0
Hamilton. Hansford. Hardeman. Hardin. Harris. Harrison. Hartley. Haskell. Hays. Hemphill.	528 1,290 448 105 930 288 591 618 255 315	5.9 4.2 9.2 23.0 5.3 6.4 2.6 7.5 8.1 7.2	209 1,178 494 88 698 91 683 700 146 183	14.0 3.8 15.0 47.0 7.8 9.4 4.8 7.5 20.0 10.0	3,971 141,810 1,941 50 2,205 2,748 56,947 2,325 1,433 21,878	6.9 .5 8.9 35.0 8.2 23.0 .3 6.6 14.0 3.5	4,217 45,581 202 3,781 2,465 18,034 1,016 1,733 12,976	11.0 .2 5.6 9.9 15.0 7.2 .2 4.5 17.0 .4	644 791 164 4,463 495 2,157 1,410 582 980	10.0 2.9 11.0 31.0 6.4 15.0 2.0 7.8 18.0 7.0
Henderson. Hidalgo. Hill. Hockley. Hookins. Hookins. Houston. Howard. Hudspeth. Hunt.	524 2,190 972 953 285 1,037 649 398 314 698	6.3 4.7 4.7 5.1 5.6 4.8 3.8 7.8 3.7 5.3	190 3,721 764 2,010 86 366 368 710 286 300	13.0 4.3 9.6 7.0 8.5 7.8 7.1 8.9 6.0 7.6	4,746 2,490 1,745 7,521 2,996 6,005 2,008 883 1,363 2,410	9.2 7.8 12.0 2.0 6.0 8.1 8.0 21.0 4.2 14.0	2,585 2,930 4,409 5,502 2,873 30,883 2,683 848 1,665 2,180	5.5 9.6 7.1 .4 9.1 4.8 7.8 29.0 1.8 7.3	1,175 22,164 1,582 4,014 696 3,152 988 1,197 1,842 962	5.8 2.8 9.0 7.4 7.9 6.3 5.2 9.3 3.0 10.0
Hutchinson. Irion. Jack. Jackson. Jasper. Jeff Davis. Jefferson. Jim Hogg.	424 122 351 744 153 169 % 584 228	3.9 2.9 4.6 4.7 11.0 .0 5.3 4.3	254 (D) 61 936 56 17 646 57	9.6 (D) 11.0 4.4 9.4 .0 6.3 7.8	12,636 678 1,754 874 708 1,734 720 960	3.5 1.4 7.1 8.0 22.0 .0 13.0 6.7	3,605 1,105 1,982 1,068 2,075 1,112 476 742	1.4 1.0 6.0 6.3 12.0 .0 6.5 6.0	767 426 475 2,539 335 690 2,029 738	2.6 1.9 7.9 6.6 20.0 .0 5.7 1.5

County	Gasol	ine	Diesel	fuel	Livestock an purche	nd poultry ased	Feed		Hired farm labor	
	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Е х репзе (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)
Jim Wells	481	4.0	452	6.4	2.356	4.9	2 481	9.2	2 002	5 5
Johnson	738	6.5	320	12.0	4,139	9.3	8,249	8.9	1,557	10.0
Jones	714	7.1	720	6.8	10,324	4.1	1,761	6.4	1,394	10.0
Karnes	502	7.5	297	12.0	1,946	16.0	1,883	15.0	772	12.0
Kendall.	275	4.4	351	9.1	/,958	4.6	2,856	4.5	1,405	6.3
Kenedy	84	.0	(a)	(D)	45	22.0	313	15.0	039 562	12.0
Kent	224	6.7	1 59	8.5	850	3.3	438	8.0	374	5.7
Kerr.	301	4.9	35	7.6	1,209	11.0	1,600	6.7	849	6.5
Kimble	357	8.9	41	17.0	1,117	5.9	1,965	3.8	563	7.2
King	128	.0	77	.0	566	0	538	0	640	0
Kinney	233	.0	115	.0	1,954	.0	1.499	.0	912	.0
Kleberg	327	3.9	369	9.8	2,505	4.7	3,126	1.5	5,005	.6
Knox	416	7.1	534	6.8	4,829	5.1	994	11.0	1,230	8.9
Lamb	1 737	4./	2 535	11.0	2,/2/	15.0	4,115	8.9	1,453	15.0
Lampasas	374	5.4	97	15.0	2,852	9.6	2,833	8.3	341	10.0
La Salle	374	4.9	234	23.0	2,926	19.0	2,094	3.9	1,121	12.0
Lavaca	922	13.0	304	37.0	1,700	11.0	5,836	7.9	1,446	11.0
Lee	457	6.8	1/1	13.0	1,897	14.0	3,390	11.0	388	12.0
Leon	520	4.9	211	8.4	3,041	20.0	4,040	4.7	756	10.0
Liberty	746	5.7	880	5.2	535	26.0	989	6.0	2,913	3.5
Limestone	545	4.5	203	10.0	3,753	11.0	2,057	5.1	855	7.9
Live Oak	467	7.4	364	10.0	2 133	7.9	3,5/9	3.8	533	5.9
Llano	441	6.4	58	7.7	2,750	4.3	7,099	5.9	776	13.0
Loving	19	.0	9	.0	13	.0	156	.0	38	.0
Labbock	1,984	5.0	2,404	5.7	36,099	.4	21,379	1.5	7,551	6.3
McCulloch	509	4.8	265	14.0	5,282	20.0	3,194	7.0	3,220	6.5 4.9
					-,		-,		-,	
McLennan	887	4.3	598	7.2	7,857	5.4	11,525	4.6	2,219	6.0
McMullen	202	3.3	262	6.8 6.7	1,162	5.6	1,0/9	2.0	404	6.3
Marion	58	14.0	23	28.0	771	13.0	416	14.0	4,024	12.0
Martin	545	7.4	927	9.8	403	5.7	473	7.9	1,681	7.8
Mason	542	5.1	176	9.4	9,133	2.0	7,655	2.3	1,983	6.3
Matagorda	882	4.4	1,194	4.6	19 097	12.0	1,288	3.9	4,469	3.7
Medina	800	4.4	751	10.0	5,627	3.5	3,356	2.4	1,378	6.7
Menard	251	3.9	44	4.4	6,203	1.2	3,084	2.7	561	6.4
Midland	205	0 1	273	16.0	1 97/	2	1 357	2.2	900	7 2
Milam	839	3.6	494	6.3	3,080	9.0	4.628	4.1	1.778	8.0
M111s	498	4.1	152	8.6	9,175	2.0	6,580	1.9	1,177	5.7
Mitchell	422	7.2	503	11.0	3,080	3.6	924	6.7	1,178	8.6
Montague	586	4.4	186	21.0	4,534	5.4	3,550	10.0	869	12.0
Moore	944	5.0	948	3.8	95,914	.6	36,939	.1	3,429	2.1
Morris	170	11.0	64	13.0	615	25.0	1,334	9.1	530	18.0
Motley	382	9.5	462	13.0	821	16.0	650	6.1	699	11.0
Nacogdoches	649	6.1	268	8.5	11,220	3.0	29,427	3.0	2,3/6	3.4
Navarro	882	4.9	471	9.0	3,810	6.9	2,936	11.0	1,670	9.0
Newton	84	20.0	56	18.0	231	33.0	844	36.0	49	25.0
Nolan	462	5.9	1 348	9.0	9,720	25.0	1,978	5.4	1,189	5.2
Ochiltree	970	5.7	1.021	6.0	20,199	1.6	7,762	1.3	1,769	5.8
01dham	298	4.0	226	7.4	19,617	1.2	8,588	.4	1,092	1.9
Orange	76	4.9	43	8.1	209	16.0	281	9.6	268	3.3
Palo Pinto	340	7.5	93	20.0	1,39/	/.1	11 774	5.0	415	9.8
Parker.	733	5.1	204	9.9	3,551	8.5	6,498	8.9	2,061	6.7
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Parmer	2,105	2.7	2,801	3.0	167,397	.4	73,657	.3	8,066	2.7
Pecos	420	7.2	39	12.0	625	16.0	740	18.0	183	8.8
Potter	168	5.1	106	8.9	5,358	3.8	1,467	1.9	572	4.1
Presidio	257	4.4	72	19.0	1,109	.7	1,147	.8	1,411	3.5
Raine	221	6.7	83	12.0	2,205	13.0	1,486	13.0	310	15.0
Randall	176	3.4	181	7.1	719	5.7	741	2.6	2,481	5.9
Real	133	3.5	5	16.0	155	4.0	735	1.6	241	2.0
Red River	611	5.8	458	12.0	3,210	6.8	3,593	6.8	1,008	7.8
Demos	1.74	30	275	7 5	48 202	. 2	23. 241	2	2 311	1.4
Refueto	330	3.8	421	7.2	952	1.1	562	4.1	1.828	10.0
Roberts	238	.0	119	.0	6,110	.0	2,316	.0	695	.0
Robertson	599	8.8	295	17.0	6,200	6.3	4,758	14.0	1,322	12.0
Rockwall	114	32.0	65	7.4	281	1/.U 1 R	1/4	15.0	- L/G 051	14.0 5 0
Kunnels	<u>604</u> <u>44</u> 3	6.0	137	12.0	1.798	11.0	3,560	4.9	501	18.0
Sabine	85	11.0	20	13.0	1,569	11.0	6,713	11.0	129	13.0

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		Farm production expenses										
County	Gasol	ine	Diesel	fuel	Livestock an purch	nd, poultry ased	Fee	ed	Hired far	n labor		
	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)	Expense (\$1,000)	Standard error (percent)		
San Augustine	116	12.0	34	17.0	1.837	9.8	6.898	11.0	189	15.0		
San Jacinto	122	16.0	41	22.0	351	26.0	599	35.0	116	29.0		
San Patricio	755	4.6	1,204	4.4	5,274	.9	4,095	1.0	3,891	4.4		
San Saba	650	5.01	256	10.0	5,22/	4.8	5,339	8.2	1,16/	4.9		
Scurry.	528	3.0	470	10.0	1,720	14.0	1,000	4.9	1 020	4.4		
Shackelford	224	8.0	76	7.5	1,969	2.6	1,628	15.0	550	5.9		
Shelby	526	4.5	197	4.6	15, 134	2.4	26,471	4.3	1,966	3.2		
Sherman	927	4.1	995	4.3	83, 263	.5	38,403	.4	3,217	2.6		
Smith	587	5.9	219	17.0	4,149	5.6	3,700	9.6	2,029	10.0		
Somervell	91	15.0	27	24.0	81	52.0	373	15.0	52	48.0		
Starr	510	3.4	393	6.5	9,967	1.3	5,536	1.4	3,241	2.7		
Storling	266	5.1	74	5.3	1,554	7.3	1,228	5.9	445	5.3		
Stonewall.	1/0	12.0	24	.0	1,297	.0	1,129	.0	450	.0		
Sutton	277	1 2	2/3	23.0	1,810	3.0	2,652	13.0	523	3.8		
Swisher	1,296	11.0	1,507	8.3	76.230	.7	37,991	1.5	4 793	4.4		
Terrant	561	9.5	232	6.4	4.754	5.6	5,281	11.0	1,431	5.8		
Taylor	595	10.0	493	9.1	58,234	.4	19,091	2.1	1,633	7.8		
Terrell	248	.0	16	.0	1,244	.0	1,632	.0	628	.0		
Terry	1,040	6.0	2,032	6.5	170	8.3	944	4.8	3,768	6.9		
Throckmorton	311	6.3	146	8.3	2,865	6.3	2,034	3.1	433	7.4		
Tom Crean	243	5.7	98	9.8	1,475	11.0	5,246	10.0	589	9.8		
Travis	/4/	5.2	590	9.3	20,068	1.0	9,353	5.7	2,275	6.3		
Trinity	180	8.5	71	15.0	1,519	10.0	1,63/	5.8	//9	10.0		
Tyler	117	14.0	43	16.0	677	29.0	639	16.0	293	23.0		
Upshur	360	9.4	85	10.0	2,941	15.0	7,785	11.0	740	9.2		
Upton	153	.0	145	.0	1, 249	.0	´757	.0	592	.0		
Uvalde	522	4.1	585	5.0	4,025	2.6	2,783	2.8	1,692	5.3		
Val Verde	467	1.9	35	7.1	1,959	2.1	3,070	1.0	1.619	2.8		
Van Zandt	828	3.5	268	6.6	5,198	13.0	3, 532	7.8	1,421	7.1		
Victoria	598	5.0	383	8.7	2,233	25.0	2,897	7.6	1,346	7.7		
Waller.	200	8.9	144	13.0	1,933	3.6	2,321	5.2	702	9.9		
Ward	445	0.1	399	6.9	1,6/4	3.5	1,683	7.1	1,983	6.5		
Washington	675	4.2	173	12.0	3 21/		191	.0	136	.0		
Webb	610	3.6	(D)	(D)	5,698	2.2	4 276	1.8	1,102	8.1		
Wharton	1,552	3.5	1,801	4.0	1,317	11.0	1,515	4.3	6,952	2.4		
Wheeler	452	5.0	290	5.7	13, 501	2.8	14,341	1.3	1,015	7.5		
Wichita	345	6.6	366	14.0	2.866	6.3	1 409	120	833	-, I		
Wilbarger	676	6.6	683	7.4	3,578	12.0	3,074	4.7	1 916	5.7		
Willacy	550	6.0	1,166	4.0	300	32.0	101	12.0	3,815	3,1		
Williamson	929	4.5	762	6.5	4,421	8.8	3,809	4.9	1,943	6.9		
Winkler	796	5.1	752	7.7	2,575	6.9	3,820	4.8	1,613	6.7		
Wise	4/ 707		(D)	(D)	94		161	.0	107	.0		
Wood	536	5.4	394	10.0	3,25/	13.0	9,757	11.0	1,614	20.0		
Yoakum	844	22.0	1,108	11.0	3,0/9	10.0	/,111	9.9	980	12.0		
Young	422	5.2	166	8.7	2,696	7.3	437	1.3	1,689	11.0		
Zapata	205	9.2	99	12.0	1,561	11.0	786	8.2	633	7.0		
Zavala	504	6.8	483	2.5	8,594	2.9	4,699	3.0	2,730	3.4		
Farms not on mail list	3,285	14.0	811	27.0	32,508	32.0	24,695	25.0	2,240	45.0		
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APPENDIX B. Farms by Current and Prior Definitions and Value of Agricultural Products Sold: 1978 and 1974

	Defir	ition used fo	or 1974 and 193	78	Definitio	on used for 1	959, 1964, and	1969	Operations exc	luded by cu 1959 d	urrent definition b efinition	ut not by
	Farm	s	Value of pro (\$1,0	oducts sold 100)	Farm	15	Value of pro (\$1,0	oducts sold 100)	Forms		Value of prod (\$1,000	ucts sold))
	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974
Texas	194 253	174 068	8 319 725	5 638 180	232 450	186 617	8 329 904	5 641 077	38 197	12 549	10 179	2 897
Anderson Andrews Argelina Aronsas Archer Armstrong Atrascosa Austin Bailey Bandera	1 198 106 618 49 426 256 1 211 1 514 494 429	1 159 82 637 27 436 244 1 129 1 466 479 395	14 856 5 302 6 959 847 24 972 20 532 35 532 35 532 20 399 67 308 3 772	9 060 1 969 4 468 506 17 753 13 423 23 840 12 898 48 083 2 310	1 339 123 730 58 455 241 1 316 1 678 507 504	1 238 89 706 32 458 255 1 196 1 597 492 439	14 893 5 305 6 981 850 24 980 20 533 35 564 20 455 67 311 3 798	9 076 1 969 4 480 507 17 758 13 425 23 856 12 930 48 085 2 320	141 17 112 9 29 5 105 164 13 75	79 7 69 5 22 11 67 131 13 44	37 3 22 3 8 1 32 56 3 26	16 (Z) 12 1 5 2 16 32 2 10
Bastrop Beylor Beel Bekl Banco Borden Bosque Bowie Brazoria	298 346 656 1 570 1 840 440 143 973 1 041 1 161	1 207 386 631 1 635 1 614 402 994 1 092 1 038	12 512 19 927 14 851 30 933 33 829 8 825 6 452 20 777 22 423 42 091	8 074 12 589 13 231 22 321 53 658 5 490 3 916 21 138 16 577 33 883	1 466 363 694 1 755 2 199 488 145 1 043 1 174 1 361	1 289 395 665 1 788 1 825 445 141 1 043 1 164 1 164	12 557 19 932 14 865 30 982 33 941 8 838 6 452 20 795 22 459 42 155	8 092 12 591 13 239 22 361 53 711 5 502 3 917 21 150 16 595 33 911	168 17 38 185 359 48 2 70 133 200	82 9 34 153 211 43 1 49 72 126	45 5 13 49 112 13 (2) 17 36 64	18 2 8 40 53 12 1 12 18 28
Brazos Brewster Briscoe Brooks Buroet Burieson Burieson Caldwell Calhoun Callahan	802 110 287 283 1 120 1 173 740 877 258 776	741 94 293 216 1 072 1 133 735 802 253 735	20 317 8 650 16 274 7 388 25 282 20 565 10 121 23 870 15 032 11 794	13 993 4 011 12 319 5 309 19 444 10 274 5 455 21 052 11 011 7 649	908 119 292 319 1 236 1 258 804 967 275 850	823 101 299 236 1 164 1 208 782 859 258 795	20 354 8 651 16 276 7 397 25 311 20 596 10 137 23 895 15 037 11 812	14 013 4 013 12 321 5 313 19 469 10 289 5 468 21 062 11 013 7 665	106 9 5 36 116 95 64 90 17 74	82 7 6 20 92 75 47 57 5 60	37 1 2 9 30 31 16 25 5 18	20 2 4 25 15 13 10 2 16
Cameron	1 236 387 359 840 556 301 1 307 376 825 311	1 324 391 355 928 616 284 1 378 402 746 297	84 738 23 429 40 494 8 673 257 915 26 987 22 801 11 477 23 658 49 969	59 897 11 979 40 217 5 135 204 810 21 557 15 993 9 557 18 851 33 919	1 364 422 372 950 563 337 1 471 383 877 317	1 468 426 362 1 000 622 303 1 491 423 792 308	84 785 23 440 40 496 8 698 257 918 27 000 22 849 11 479 23 673 49 971	59 948 11 986 40 218 5 149 204 810 21 563 16 015 9 561 18 863 33 921	128 35 13 110 7 36 164 7 52 6	144 35 7 72 6 19 113 21 46 11	47 11 2 26 3 13 48 2 15 2	51 7 1 14 - 6 22 4 12 2
Coke Colima Collingsworth Colingsworth Corand Comanche Concho Cooke Coryell	342 857 1 407 456 1 289 528 1 256 396 1 191 977	296 847 1 430 498 1 295 498 1 320 390 1 178 1 093	6 614 16 738 35 047 20 672 39 664 4 129 42 943 14 926 26 095 14 102	4 278 10 249 25 766 14 417 38 591 2 569 29 261 10 577 16 207 11 963	358 902 1 619 468 1 407 624 1 329 414 1 275 1 055	310 906 1 573 509 1 374 562 1 389 414 1 262 1 157	6 621 16 747 35 105 20 674 39 704 4 162 42 961 14 930 26 116 14 118	4 282 10 262 25 794 14 421 38 611 2 584 29 279 10 585 16 231 11 980	16 45 212 12 18 96 73 18 84 78	14 59 143 11 79 64 69 24 84 64	7 10 58 2 40 33 18 4 21 16	4 13 28 4 20 15 18 8 24 17
Cottle	244 30 160 462 73 385 980 684 650 435	273 24 174 516 73 345 804 553 637 513	13 900 1 032 14 035 43 315 6 582 139 741 19 893 32 953 412 499 9 123	8 485 316 8 790 25 085 4 454 64 233 13 676 15 234 266 871 4 550	247 33 161 78 394 1 252 690 665 465	279 25 178 528 76 352 986 578 652 528	13 902 1 032 14 035 43 319 6 582 139 741 19 971 32 954 412 501 9 132	8 486 316 8 791 25 089 4 454 64 236 13 717 15 237 266 874 4 554	3 3 9 5 9 272 6 15 30	6 1 12 3 7 182 25 15 15	2 1 4 (Z) 77 1 3 9	1 1 4 (Z) 3 41 3 3 4
Denton De Witt Dickens Dimmit Donley Duval Eastland Ector Edwards Ellis	1 265 1 533 378 209 380 977 1 074 169 214 1 469	1 293 1 456 357 210 372 877 1 117 123 227 1 486	29 975 20 955 20 988 25 962 27 549 17 144 20 050 2 370 10 874 26 352	24 978 15 684 8 949 15 604 12 272 13 056 14 849 1 071 5 466 22 020	1 475 1 661 386 216 404 1 060 1 166 211 229 1 648	1 413 1 568 373 218 388 940 1 191 153 232 1 602	30 030 21 004 20 990 25 964 17 165 20 070 2 387 10 877 26 403	25 008 15 710 8 951 15 606 12 277 13 069 14 866 1 079 5 468 22 046	210 128 8 7 24 83 92 42 15 179	120 112 16 8 16 63 74 30 5 116	56 49 2 6 20 20 17 3 51	30 26 2 13 13 17 8 2 26
El Paso Farth Falls Fayette Fisher Floyd Foard Fort Bend Franklin	380 1 450 1 108 1 513 2 379 714 690 288 1 125 465	317 1 438 1 199 1 593 2 368 726 729 286 1 251 539	51 579 55 193 34 527 28 941 28 662 20 699 96 110 11 425 43 896 13 783	36 061 28 306 23 480 17 299 21 021 12 309 60 134 7 807 28 793 9 691	448 1 573 1 204 1 661 2 629 745 698 292 1 240 513	387 1 511 1 288 1 700 2 501 740 742 293 1 344 572	51 602 55 232 34 559 28 981 28 748 20 710 96 112 11 427 43 934 13 793	36 093 28 330 23 493 17 323 21 045 12 311 60 138 7 809 28 813 9 699	68 123 96 148 250 31 8 4 115 48	70 73 89 107 133 14 13 7 93 33	23 39 32 39 86 11 3 2 38 10	32 24 13 24 24 24 2 4 2 2 4 20 8
Freestone Frio Gaines Galveston Garzo Gillespie Glasscock Golida Gonzales Gray	980 517 707 362 258 1 180 198 596 1 559 360	1 018 478 620 295 230 1 057 164 546 1 500 388	16 236 51 366 67 369 6 028 11 229 24 947 11 131 16 135 99 942 87 093	6 169 32 229 41 548 4 147 3 869 13 667 4 901 6 745 66 549 37 419	1 096 542 725 448 270 1 289 200 637 1 662 378	1 103 493 637 340 251 1 180 174 585 1 580 411	16 264 51 374 67 372 6 057 11 232 24 987 11 131 16 148 99 981 87 098	6 178 32 233 41 549 4 161 3 873 13 694 4 904 6 753 66 569 37 425	116 25 18 86 12 109 2 41 103 18	85 15 17 45 21 123 10 39 80 23	28 8 3 29 3 40 1 13 40 5	9 4 1 14 27 3 8 20 6

APPENDIX B. Farms by Current and Prior Definitions and Value of Agricultural Products Sold: 1978 and 1974—Con.

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	Definiti	on used fo	or 1974 and 1976	9	Definition	used for 1	959, 1964, and 1	969	Operations exclud	led by cu 1959 de	rrent definition but finition	not by
	Farms		Value of proc (\$1,00	iucts sold 10)	Farms		Value of prod (\$1,00	ucts sold 0)	Farms		Value of product (\$1,000)	ts sold
	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974
Grayson Gregg Grimes Guadalupe Hali Hamilton Hamilton Hardisford Hardeman Hardin	3 509 337 1 017 3 491 934 408 1 001 355 403 252	1 625 328 1 012 1 467 1 078 467 1 001 358 433 215	31 099 3 609 20 759 21 665 143 049 19 379 16 528 229 052 13 786 1 988	16 214 1 891 14 156 16 869 136 017 12 649 10 246 113 496 9 999 1 638	1 704 418 1 141 1 701 949 418 1 068 360 425 316	1 766 379 1 082 1 587 1 094 485 1 057 363 455 235	31 153 3 634 20 798 21 731 143 055 19 382 16 546 229 055 13 794 2 003	16 251 1 898 14 171 16 894 136 023 12 652 10 259 113 497 10 004 1 642	195 81 124 210 15 10 67 5 22 64	141 51 70 120 16 18 56 5 22 20	54 25 39 66 2 19 3 8 15	37 7 15 25 6 3 13 13 5 4
Harris Harrispn Hartley Haskeli Haskeli Hemphili Henderson Hidalgo Hili Hockley	1 630 920 740 530 214 1 362 2 812 1 470 721	1 478 984 196 774 503 226 1 340 2 827 1 562 745	39 384 9 533 98 777 22 208 8 527 45 806 18 479 208 838 28 911 55 208	32 474 6 657 80 101 14 465 6 254 22 462 9 622 136 177 36 125 32 175	2 019 1 073 205 764 635 219 1 498 3 010 1 579 735	1 721 1 095 201 801 576 233 1 429 3 045 1 639 765	39 514 9 578 98 778 22 212 8 555 45 809 18 514 208 907 28 942 55 213	32 540 6 668 80 101 14 469 6 267 22 464 9 645 136 248 36 145 32 180	389 153 24 105 5 136 198 109 14	243 111 5 27 73 7 89 218 77 20	131 46 (Z) 5 28 3 34 70 31 4	666 11 (Z) 4 13 2 23 71 20 5
Hood Hopkins Houston Howard Hudtspeth Hunt Hutchinson Irion Jack Jackson	528 1 578 1 346 433 1 38 1 646 168 117 608 751	515 1 639 1 206 414 1 686 144 110 637 757	13 221 70 027 17 870 13 501 17 971 18 598 25 507 5 557 10 244 37 672	8 931 40 880 11 137 4 513 9 471 12 070 14 430 3 564 5 081 33 819	598 1 697 1 490 471 146 1 903 179 131 667 808	548 1 742 1 281 462 148 1 844 152 124 676 803	13 239 70 062 17 903 13 508 17 971 18 666 25 510 5 561 10 259 37 686	8 940 40 898 11 152 4 527 9 473 12 105 14 433 3 568 5 088 33 826	70 119 144 38 8 257 11 14 59 57	33 103 75 48 4 158 8 14 39 46	17 35 33 7 (Z) 68 3 4 15 14	9 18 15 14 2 35 3 4 7 7
Jasper Jeff Davis Jefferson Jim Hogg Jim Wells Johnson Jones Karries Kaufman Kendali	475 68 467 176 692 1 412 952 1 051 1 276 512	447 63 426 155 672 1 376 951 1 023 1 212 498	4 633 7 462 28 117 9 892 19 538 27 070 28 453 14 674 24 400 7 957	10 900 2 530 34 788 5 907 17 535 20 399 18 847 9 883 14 596 5 385	598 73 522 188 765 1 691 1 006 1 125 1 485 579	512 63 459 164 714 1 536 1 006 1 081 1 283 566	4 656 7 463 28 135 9 895 19 562 27 153 28 468 14 697 24 456 7 979	10 910 2 530 34 796 5 909 17 545 20 438 18 861 9 894 14 617 5 398	123 5 55 12 73 279 54 74 209 67	65 33 9 42 160 55 58 71 68	22 (Z) 18 4 25 83 16 23 55 23	10 8 2 10 39 14 11 21 13
Kenedy	24 164 413 381 48 108 218 407 1 393 918	23 158 396 331 55 93 213 485 1 429 944	3 741 6 258 6 707 8 332 5 814 11 236 27 159 18 276 23 195 156 719	2 499 2 591 4 490 4 246 3 154 4 356 10 122 15 269 16 029 67 734	24 169 477 402 48 113 259 420 1 509 934	23 169 435 359 55 98 230 505 1 514 954	3 741 6 261 6 724 8 338 5 814 11 238 27 173 18 280 23 229 156 722	2 499 2 594 4 496 4 255 3 154 4 357 10 125 15 278 16 052 67 738	5 64 21 5 41 13 116 16	- 11 39 28 5 17 20 85 10	2 17 6 14 14 34 3	- 3 6 9 - 1 3 9 23 4
Lampasas La Salle Lavaca Lee Leo Leo Liberty Limestone Lipscomb Lipscomb Lipscomb Live Oak	570 265 2 165 1 289 1 087 753 1 195 331 723 468	588 266 2 137 1 223 1 040 649 1 165 342 702 464	10 458 12 010 22 177 14 099 15 356 32 840 16 253 26 345 15 018 18 193	7 357 8 883 16 517 11 842 8 140 24 754 9 275 22 435 10 520 7 761	632 276 2 387 1 415 1 191 864 1 300 335 787 493	637 279 2 280 1 328 1 115 721 1 220 347 740 506	10 477 12 013 22 245 14 138 15 378 32 874 16 276 26 346 15 034 18 200	7 367 8 887 16 556 11 861 8 155 24 768 9 286 22 436 10 526 7 77?	62 11 126 104 111 105 4 64 25	49 13 143 105 75 72 55 5 38 42	19 3 68 39 22 34 23 1 15 7	10 4 39 19 15 14 11 1 6
Loving Lubbock Lynn McCulloch McMullen Madison Martin Mason Mason	13 1 227 650 537 1 788 210 664 197 412 565	13 1 226 582 552 1 977 195 698 223 395 535	1 059 123 611 37 309 16 168 44 741 6 146 23 023 2 384 16 674 28 119	383 93 454 14 186 10 381 33 436 4 390 5 396 8 461 16 278	14 1 293 658 557 2 052 219 723 230 426 592	14 1 278 608 567 2 146 199 744 238 411 563	1 059 123 632 37 312 16 175 44 819 6 149 23 043 2 391 16 677 28 127	383 93 474 14 193 10 383 33 476 4 391 5 403 968 8 462 16 287	1 66 8 20 264 9 59 33 14 27	1 52 26 15 169 4 45 15 16 28	20 3 7 77 3 20 7 2 8	200 7 20 40 1 7 2 1 9
Matagorda Mavarick Medina Midland Mila Mitheli Mantague Mantagomery	704 190 1 337 268 301 1 430 689 411 1 016 594	753 134 1 303 244 225 1 493 688 458 991 532	52 163 36 382 27 535 14 944 10 652 27 680 28 455 19 061 18 839 7 605	42 327 46 229 25 224 6 761 13 831 21 922 13 436 8 481 9 582 5 438	750 205 1 452 278 348 1 552 712 440 1 094 725	795 151 1 373 260 255 1 607 718 481 1 040 607	52 176 36 385 27 562 14 947 10 669 27 717 28 461 19 066 18 858 7 648	42 335 46 232 25 240 6 765 13 840 21 949 13 443 8 487 9 592 5 464	46 15 115 10 47 122 23 29 78 131	42 17 70 16 30 114 30 23 49 75	13 3 26 3 17 37 7 5 19 43	8 3 16 4 9 27 7 6 10 26
Moore	265 364 257 1177 3436 472 472 473 148 226 623	270 341 259 1 213 1 531 278 467 798 395 154 190 626	180 098 5 175 10 195 65 625 24 563 2 056 30 391 43 060 55 273 37 741 2 130 8 254	101 819 3 689 6 656 36 984 1 695 17 658 47 634 82 183 33 731 2 489 5 178	279 406 260 1 293 1 566 309 501 826 408 152 287 690	280 371 271 1 297 1 606 312 498 833 407 164 212 666	180 103 5 187 10 196 65 659 24 607 2 066 30 399 43 085 55 274 37 743 2 149 8 267	101 820 3 700 6 657 37 003 15 267 1 701 17 664 47 640 82 186 33 733 2 495 5 186	14 42 3 116 130 45 29 76 5 4 61 67	10 30 12 84 75 34 31 35 12 10 22 40	4 12 34 44 10 8 25 1 1 19 13	1 11 19 23 6 6 6 6 3 2 6 8

APPENDIX B. Farms by Current and Prior Definitions and Value of Agricultural Products Sold: 1978 and 1974—Con.

	Definit	Definition used for 19		r 1974 and 1978		n used for 1	959, 1964, and	1969	Operations excl	uded by cu 1959 de	current definition but not b definition	
	Farms		Value of prod (\$1,00	lucts sold 0)	Farm	s	Value of pro (\$1,0	ducts sold 00)	Farms		Value of produ (\$1,000	icts sold))
	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974	1978	1974
Panola Parker Parcos Polk Potter Presidio Rains Randali	878 1 451 751 239 456 166 135 460 552 114	950 1 378 704 250 404 132 134 446 486 110	26 488 25 276 349 545 32 531 3 131 12 837 10 206 8 213 140 380 7 430	19 067 16 953 261 487 16 986 2 066 8 999 9 805 4 623 107 970 3 019	1 024 1 737 763 262 539 193 139 511 599 121	1 025 1 525 719 264 451 164 144 481 521 112	26 520 25 355 349 548 32 535 3 155 12 847 10 206 8 230 140 392 7 433	19 082 16 987 261 492 16 988 2 074 9 011 9 807 4 630 107 981 3 019	146 286 12 23 83 27 4 51 47 7	75 147 15 14 14 32 10 35 35 2	31 80 3 24 9 - 16 12 3	15 34 5 2 8 12 2 7 11 -
Real Rad River Refugio Roberts Roberts Rockwall Runnels Sabine	144 1 051 153 247 96 1 028 168 941 1 285 239	145 1 094 172 250 87 982 164 951 1 299 237	2 666 19 624 89 410 16 451 15 098 23 944 2 605 25 782 13 877 14 522	1 483 13 918 50 089 13 677 23 130 13 172 1 348 25 121 9 863 11 679	154 1 153 175 261 96 1 112 199 990 1 468 281	163 1 157 178 269 88 1 035 189 985 1 424 268	2 667 19 644 89 413 16 458 15 098 23 973 2 611 25 794 13 921 14 531	1 485 13 930 50 089 13 680 23 131 13 181 1 356 25 131 9 888 11 682	10 102 22 14 	18 63 6 19 1 53 25 34 125 31	1 19 3 7 28 6 12 44 9	2 12 (Z) 3 1 9 8 10 25 3
San Augustine San Jacinto San Patricio San Saba Schleicher Schright Shackelford Shelby Sherman Smith	343 276 606 652 257 631 254 1 118 283 1 504	369 250 598 663 264 633 254 1 287 300 1 524	13 116 1 765 53 968 23 507 9 642 15 727 7 513 62 275 174 728 22 271	8 291 1 181 39 430 19 649 6 022 8 719 5 042 47 504 103 445 18 594	380 314 655 678 265 674 271 1 232 294 1 753	420 291 633 686 275 683 269 1 356 302 1 646	13 122 1 773 53 986 23 516 9 643 15 735 7 518 62 303 174 730 22 336	8 298 1 190 39 437 19 657 6 024 8 726 5 044 47 518 103 445 18 619	37 38 49 26 8 43 17 114 11 249	51 41 35 23 11 50 15 69 2 122	6 9 18 9 2 8 4 29 2 9 2 64	7 9 7 8 2 7 2 14 (Z) 25
Somervell Starr Stephens Stonewall Sutton Swisher Tarront Taylor Terrell	217 735 429 74 338 160 628 1 027 904 74	222 784 430 78 340 156 699 958 904 72	1 801 29 409 6 747 5 301 9 730 9 774 165 089 24 566 94 866 6 422	1 805 13 227 4 722 3 134 5 151 5 269 124 913 16 857 42 875 3 215	250 812 460 76 347 161 635 1 275 1 023 79	235 914 455 79 364 164 727 1 131 992 78	1 810 29 435 6 756 5 301 9 731 9 774 165 090 24 645 94 900 6 423	1 807 13 255 4 729 3 134 5 153 5 272 124 917 16 914 42 895 3 216	33 77 31 2 9 1 7 248 119 5	13 130 25 1 24 8 28 173 88 6	9 26 9 - 1 79 34 1	2 28 7 (2) 2 3 4 57 20 1
Terry Throckmorton Titus Tom Green Trovis Trovis Trinity Tyler Upshur Upton Uvokte	600 316 726 782 915 480 381 911 82 510	599 333 777 894 501 337 940 69 459	37 440 10 687 12 670 49 401 16 584 3 668 2 041 18 154 7 264 27 379	22 864 8 448 8 427 27 656 12 407 3 003 1 476 13 397 2 221 16 709	609 322 821 860 1 090 534 452 1 047 89 554	612 346 827 841 1 017 519 376 1 022 73 486	37 443 10 689 12 695 16 643 3 684 2 060 18 190 7 266 27 389	22 866 8 453 8 437 27 677 12 435 3 044 1 484 13 410 2 222 16 714	9 6 95 78 175 54 71 136 7 44	13 13 50 70 123 18 39 82 4 27	2 3 25 4 60 16 18 36 2 10	2 5 10 21 28 1 8 13 1 5
Val Verde Van Zondt Victoria Walker Ward Washington Webb Wharton Wharton Whareler	214 2 115 965 532 658 69 1 685 440 1 328 510	195 2 026 868 528 605 53 1 619 342 1 413 520	15 582 25 230 21 111 9 658 20 760 1 423 20 330 26 378 79 234 42 250	8 543 13 018 13 804 9 413 16 158 983 11 086 15 346 74 297 27 285	235 2 393 1 081 635 728 79 1 894 476 1 438 526	209 2 164 964 595 656 64 1 750 358 1 533 536	15 589 25 302 21 150 9 683 20 776 1 425 20 399 26 383 79 268 42 251	8 545 13 049 13 824 9 424 16 169 984 11 125 15 347 74 323 27 287	21 278 116 103 70 10 209 36 110 16	14 138 96 67 51 11 131 16 120 16	7 72 39 26 16 1 6 6 34 1	2 31 20 11 11 139 1 26 2
Wichita	568 599 339 1 788 1 455 31 1 363 1 191 331 690 318 257 18 858	544 620 406 1 935 25 1 288 1 160 297 718 294 253 (NA)	13 893 35 512 37 874 41 015 28 527 1 199 30 182 22 812 19 664 12 458 7 424 41 965	11 989 30 370 31 150 35 820 16 523 910 19 702 12 273 12 556 12 874 4 134 32 710 (NA)	659 632 372 1 987 1 574 35 1 520 1 334 339 736 335 267 39 349	583 642 427 2 059 1 445 28 1 392 1 246 311 757 311 258 (NA)	13 925 35 522 37 884 41 084 28 554 1 200 30 215 22 853 19 668 12 471 7 429 41 968 95 536	11 998 30 378 31 156 35 853 16 537 910 19 724 12 292 12 559 12 886 4 135 32 710 (NA)	91 33 33 199 19 4 157 143 8 46 17 10 20 491	39 22 21 124 67 3 104 86 14 39 17 5 (NA)	32 10 10 27 1 32 40 4 13 6 3 3	9 8 6 33 14 (2) 22 19 3 12 1 (Z) (NA)

APPENDIX C. Comparison of 1974 Farm Counts With 1978 Farm Counts

The 1978 Census of Agriculture preliminary reports show that there are 2,475,171 farms in the continental United States (excluding Alaska and Hawaii). In 1974 there were 2,310,702 farms reported. However, these figures are not directly comparable because improvements in methodology and coverage account significantly for the higher 1978 counts. If the improved 1978 procedures had been used in 1974, an estimated 2.6 million farms would have been included in the census. It should be noted that farms missed in the 1974 census were generally small and affected the farm count to a greater degree than other data. The missed farms accounted for about 5 percent of the land in farms and 3 percent of the total value of agricultural products sold. This appendix briefly describes census procedures and provides 1974 farm counts adjusted for net missed farms and compared with 1978 farm counts.

The State totals from the 1978 Census of Agriculture are based on two separate sources.

The primary source is the mail portion of the census. As in the 1974 and 1969 censuses, this part of the operation involved mailing out a report form to each name believed to be associated with agriculture. Mail and telephone followups were used to secure the highest possible rate of return of completed forms from the operators of the Nation's farms.

However, the evaluation studies conducted show that some farms were missed in the 1974 and 1969 censuses. Despite every effort to assemble a complete list, some operators did not get on the mail list.

To improve the coverage of the 1978 census, additional mail list sources were used. Also, recognizing the shortcomings of the mail method, especially in counting the number of small farms, it was decided to take another step to ensure a more complete count.

The second step involved conducting a complete enumeration of all households in approximately 6,400 sample segments in rural areas in all States, except Alaska and Hawaii. Farms enumerated in this sample were matched to the mail list. The sample farms not located on the mail list provided reliable estimates by State of the number and characteristics of the farms not represented in the mail portion of the census.

Estimates for such farms are an integral part of the State counts in 1978, but they are not a part of the county counts. The sample was not large enough to provide reliable estimates for each county.

Because of the procedures described above, the State counts for 1978 are not directly comparable with the counts for 1974 and 1969.

To bridge the gap between the 1974 and the 1978 farm counts, this appendix provides adjusted farm counts for 1974 which are approximately comparable with farm counts for 1978.

The adjustment factors are based on data from table 13 of 1974 Census of Agriculture volume IV, Part 3, Coverage Evaluation, which presented data showing the estimated percent of farms missed and overcounted by regions and States. The estimated net percent of farms missed was derived by subtracting overcounted farms from missed farms.

The 1974 coverage evaluation did not include Alaska and Hawaii; thus the 1978 and the 1974 data for these States are exclusively from farms on the mail list. Improvements in the 1978 mail list, especially for Hawaii, have contributed to the increased farm counts.

Table A presents adjusted 1974 farm counts by value of agricultural products sold categories. For each State, the adjusted farm counts for the two value-of-sales categories were derived using the 1974 published farm counts and the net percent missed. The adjusted counts for the two size categories were then added together to obtain the adjusted State count. The State counts were summed to obtain division, region, and U.S. level counts. As a result, adjusted counts derived by summation may not be exactly consistent with the indicated percent missed. The 1978 farm counts are from the preliminary reports and may differ slightly from final counts.

Table B shows 1974 reported and adjusted counts compared with 1978 counts for regions by farm size and tenure of operator categories. Adjusted counts in these tables were proportionally adjusted to regional counts from table A and summed to the U.S. level. As a result, the indicated percent missed will not always agree with adjusted data.

All data published in 1974 were based on reported numbers. The adjusted counts should be used only for comparison with 1978 counts and not for comparison with other 1974 data.

Both the 1974 and 1978 farm counts are subject to sampling variability. For 1974, the coefficient of variation for the adjusted farm counts is approximately 0.4 percent at the U.S. level and ranges from 1.0 percent to 6.0 percent for individual States. Measures of sampling variability for 1978 counts are presented in appendix A.

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Table A. Farms by Areas and Value of Agricultural Products Sold: 1978 and 1974

			Farms, 1974		Percent change,
	Farms, 1978 ¹	Published	Net percent missed	Adjusted	adjusted 1974 to 1978
United States ²	2,475,171	2,310,702	10.7	2,622,416	-5,6
Farms with sales of					
\$100,000 or more	223,268	152,850	-2.0	149,471	+49.4
\$40,000 to \$99,999	364,010	. 324,417	1.1	327,834	+11.0
\$20,000 to \$39,999	306,483	321,733	2.0	327,438	-6.4
\$10,000 to \$19,999	309,250	309,876	5.8	326,852	-5.4
\$5,000 to \$9,999	330,464	296,043	8.1	322,002	+2.6
\$2,500 to $$4,999$	331,329	289,511	11.4	326,432	+1.5
Northoast	010,307	616,272	25.9	842,387	-27.5
Farms with sales of	149,585	127,331	10.5	152,730	-2,2
\$100,000 or more	12,699	8,003	1.9	8,282	+53.3
\$20,000 to \$39,999	15 820	20 543	9.8	23,012	-24 7
\$10.000 to \$19.999	14, 194	14,900	9.5	14,680	-3.3
\$5,000 to \$9,999	16.734	13,173	3.1	13, 797	+21.3
\$2,500 to \$4,999	19,609	13,148	16.7	16.019	+22.4
Less than \$2,500	44,494	35,406	35.5	55,121	-19.3
North Central	1,027,319	1,017,367	6.3	1,096,353	-6.3
\$100,000 or more	106,649	69,440	-3.1	67,123	+58.9
\$40,000 to \$99,999	215,707	192,962	.2	192,692	+11.9
\$20,000 to \$39,999	173,422	194,488	2.3	198,391	-12.6
\$10,000 to \$19,999	148,064	165,864	4.0	172,189	-14.0
\$5,000 to \$9,999	126,879	131,677	6.1	139,755	-9.2
\$2,500 to \$4,999	103,363	103,914	10.6	115,841	-10.8
Less than \$2,500	153,235	159,022	23.0	210, 362	-27.2
South Farms with sales of	1,016,070	930,099	15.2	1,107,200	-8.2
\$100,000 or more	67,430	45,765	-2.7	44,568	+51.3
\$40,000 to \$99,999	84,887	73,981	3.2	76,455	+11.0
\$20,000 to \$39,999	85,965	75,791	1.6	77,051	+11.6
\$10,000 to \$19,999	116,407	99,629	8.2	108,567	+7.2
\$5,000 to \$9,999	155,115	124,106	10.4	138,561	+11.9
Less than \$2,500	331,269	365,584	25.5	497,648	-33.4
West ² Farms with sales of	282,397	235,705	9.5	266, 133	+6.1
\$100,000 or more	36,490	29,642	.2	29,498	+23.7
\$40,000 to \$99,999	37,581	35,116	.0	34, 875	+7.8
\$20,000 to \$39,999	31,274	30,911	.9	30,977	+1.0
\$10,000 to \$19,999	30,587	29,483	6.8	31,416	-2.6
\$5,000 to \$9,999	31,736	27,087	10.0	29,889	+6.2
\$2,500 to \$4,999	33,360	27,206	10.6	30,222	+10.4
Less than \$2,500	81,369	56,260	27.8	79,256	+2.7
New England ³	30,157	23,269	17.8	28,548	+5.6
Farms with sales of \$2,500 or more	18,844	16,667	5.2	17,517	+/.6
Farms with sales of less than \$2,500	11,313	6,602	39.0	11,051	+2.0
Viddle Atlantic	119 228	104 262	16.2	124, 182	-4.0
Perms with sples of \$2 500 or more	86.047	75.458	5.7	80,092	+7.4
Farms with sales of less than \$2,500	33,181	28,804	34.6	44,090	-24.7
	-				
New York	49,323	43,682	14.2	50,847	-3.0
Farms with sales of \$2,500 or more	35,095	32,230	4.3	33,678	+4.2
Farms with sales of less than \$2,500	14,228	11,452	33.3	17,169	-17.1
New Jersey	9,932	7,409	14.5	8,760	+13.4
Farms with sales of \$2,500 or more	6,742	5,530	4.5	5,791	+10.4
Farms with sales of less than \$2,500	3,190	1,879	30.7	2,909	+/.4
Descender de	50 973	53 171	18 3	64 575	-71
Pennsylvania	44 210	37 698	7 2	40 623	-7.1
Farms with sales of ϕ_2 , 500 of more	15 763	15,473	35.4	23,952	-34.2
ratus with sales of less than \$2,500	10,,00	,			
Fast North Central	452,213	444.695	7.1	486.098	-7.0
Parma with sales of \$2,500 or more	366.051	360,619	2.9	371,995	-1.6
Farms with sales of less than \$2,500	86,162	84,076	24.1	114,103	-24.5
	· · · · ·			·	
Ohio	95,821	92,158	4.9	96,899	-1.1
Farms with sales of \$2,500 or more	73,841	70, 338	2.1	71,847	+2.8
Farms with sales of less than \$2,500	21,980	21, 820	12.9	25,052	-12.3
		•			
Indiana	88,458	87,915	7.2	95, 341	-7.2
Farms with sales of \$2,500 or more	71,681	70,986	3.6	73,637	-2.7
Farms with sales of less than \$2,500	16,777	16,929	22.0	21,704	-22.7
]	
Illinois	109,770	111,049	9.1	126,295	-13.1
Farms with sales of \$2,500 or more	96,389	97,738	3.8	101,599	-5.1
Farms with sales of less than \$2,500	13,381 (13,311	40.1	24,696	-45.8

See footnotes at end of table.

Table A. Farms by Areas and Value of Agricultural Products Sold: 1978 and 1974 - Con.

			Farms, 1974		Percent change,
	Farms, 1978 ¹	Published	Net percent missed	Adjusted	adjusted 1974 to 1978
East North CentralCon.					
Michigan	68,158	64,094	9.9	71,213	-4.3
Farms with sales of \$2,500 or more	47,767	46,670	6.0	49,649	-3.8
Farms with sales of less than \$2,500	20,391	17,424	19.2	21,564	-5.4
Wisconsin	90,006	89,479	5.3	96,350	-6.6
Farms with sales of \$2,500 or more	76,373	74,887	.5	75,263	+1.5
Farms with sales of less than \$2,500	13,633	14,592	30.8	21,087	-35.3
West North Central	575,106	572,672	5.6	610,255	-5.8
Farms with sales of \$2,500 or more	508,033	497,726	3.2	513,996	-1.2
Farms with sales of less than \$2,500	67,073	74,946	21.8	96,259	-30.3
Minnesota	102,984	98,537	9.0	108,614	-5.2
Farms with sales of \$2,500 or more	87,753	85,926	5.5	90,927	-3.5
Farms with sales of less than \$2,500	15,231	12,611	28.7	17,687	-13.9
Iowa	126,379	126,104	4.4	133,125	-5.1
Farms with sales of \$2,500 or more	117,704	117,142	3.2	121,014	-2.7
Farms with sales of less than \$2,500	8,675	8,962	26.0	12,111	-28.4
Missouri	121,826	115,711	9.6	128,948	-5.5
Farms with sales of \$2,500 or more	97,848	82,421	4.7	86,486	+13.1
Farms with sales of less than \$2,500	23,978	33,290	21.6	42,462	-43.5
North Dakota	41,172	42,710	4.4	45,649	-9.8
Farms with sales of \$2,500 or more	38,914	40,681	3.2	42,026	-7.4
Farms with sales of less than \$2,500	2,258	2,029	44.0	3,623	-37.7
South Dakota	39,667	42,825	1.5	43,420	-8.6
Farms with sales of \$2,500 or more	36,927	39,849	1.6	40,497	-8.8
Farms with sales of less than \$2,500	2,740	2,976	-1.8	2,923	-6.3
Nebraska	65,991	67,597	.7	68,480	-3.6
Farms with sales of \$2,500 or more	61,507	62,594	.0	62,594	-1.7
Farms with sales of less than \$2,500	4,484	5,003	15.0	5,886	-23.8
Kansas	77,087	79,188	3.7	82,019	-6.0
Farms with sales of \$2,500 or more	67,380	69,113	1.9	70,452	-4.4
Farms with sales of less than \$2,500	9,707	10,075	12,9	11,567	-16.1
South Atlantic	325,678	296,103	16.6	362,451	-10.1
Farms with sales of \$2,500 or more	216,297	189,339	7.0	203,934	+6.1
Farms with sales of less than \$2,500	109,381	106,764	30.3	158,517	-31.0
Delaware and Maryland ³	22,600	18,563	7.1	19,952	+13.3
Farms with sales of \$2,500 or more	17,287	14,592	3.0	15,043	+14.9
Farms with sales of less than \$2,500	5,313	3,971	19.1	4,909	+8.2
Virginia	56,685	52,699	13.5	61,636	-8.0
Farms with sales of \$2,500 or more	38,416	31,738	4.5	33,234	+15.6
Farms with sales of less than \$2,500	18,269	20,961	26.2	28,402	-35.7
West Virginia	20,619	16,909	33.0	26, 195	-21.3
Farms with sales of \$2,500 or more	9,603	6,122	11.7	6, 933	+38.5
Farms with sales of less than \$2,500	11,016	10,787	44.0	19, 262	-42.8
North Carolina	89,477	91,280	14.1	105,774	-15.4
Farms with sales of \$2,500 or more	64,897	62,518	9.2	68,852	-5.7
Farms with sales of less than \$2,500	24,580	28,762	22.1	36,922	-33.4
South Carolina	33,450	29,275	22.8	43,034	-22.3
Farms with sales of \$2,500 or more	18,979	17,534	.8	17,675	+7.4
Farms with sales of less than \$2,500	14,471	11,741	53.7	25,359	-42.9
Georgia	58,682	54,911	13.2	63,133	-7.1
Farms with sales of \$2,500 or more	38,906	35,874	8.1	39,036	3
Farms with sales of less than \$2,500	19,776	19,0 3 7	21.0	24,097	-17.9
Florida	44,165	32,466	22.6	42,727	+3.4
Farms with sales of \$2,500 or more	28,209	20,961	9.5	23,161	+21.8
Farms with sales of less than \$2,500	15,956	11,505	41.2	19,566	-18.5
East South Central	318,640	306,010	14.8	360,164	-11.5
Farms with sales of \$2,500 or more	211,915	171,372	7.8	185,880	+14.0
Farms with sales of less than \$2,500	106,725	134,638	22.3	174,284	-38.8
Kentucky	110,002	102,053	10.5	113,897	-3.4
Farms with sales of \$2,500 or more	83,433	67,662	6.3	72,211	+15.5
Farms with sales of less than \$2,500	26,569	34,391	17.5	41,686	-36.3
Tennessee	96,792	93,659	18.8	115,683	-15.3
Farms with sales of \$2,500 or more	63,407	48,320	11.2	54,414	+16.3
Farms with sales of less than \$2,500	33,385	45,339	26.0	61,269	-45.5

See footnotes at end of table.

Table A. Farms by Areas and Value of Agricultural Products Sold: 1978 and 1974 - Con.

			Farms, 1974		Percent change
	Farms, 1978 ¹	Published	Net percent missed	Adjusted	adjusted 1974 to 1978
East South CentralCon.					
Alabama	57,540	56,678	13.3	64,821	-11.2
Farms with sales of \$2,500 or more Farms with sales of less than \$2,500	34,665 22,875	29,303 27,375	7.5	31,679 33,142	+9.4
Mindani-i			- 7 - 6	,-	
Farms with sales of \$2,500 or more.	30, 410	53,620	17.2	65,763	-1/.4
Farms with sales of less than \$2,500	23,896	27,533	27,9	38,187	-37.4
West South Central	371.752	327,986	14.5	384,585	-3.3
Farms with sales of \$2,500 or more	256,589	203, 804	7.3	219, 738	+16.8
Farms with sales of less than \$2,500	115,163	124,182	25.0	164,847	-30.1
Arkansas	58,788	50,959	16.7	61,489	-4.4
Farms with sales of \$2,500 or more	40,669	31,299	10.0	34,777	+17.0
Farms with sales of less than \$2,500	18,119	19,660	26.4	26,712	-32.2
Louisiana	38,973	33,240	23.7	43,264	-9.9
Farms with sales of \$2,500 or more	22,683	18,580	12.3	21,186	+7.1
Farms with sales of less than \$2,500	16,290	14,660	33.6	22,078	-26.2
0klahoma	79,530	69,719	11.7	79,243	+.4
Farms with sales of \$2,500 or more	58,781	47,833	5.6	50,671	+16.0
Farms with sales of less than \$2,500	20,749	21,886	23.4	28,572	- 27.4
Texas	194,461	174,068	12.6	200,589	-3.1
Farms with sales of \$2,500 or more	134,456	106,092	6.2	113,104	+18.9
Farms with sales of less than \$2,500	60,005	67,976	22.3	87,485	-31.4
Mountaín ³	127,881	111,868	6.7	122,588	+4.3
Farms with sales of \$2,500 or more	97,876	90,449	2.4	92,673	+5.6
Farms with sales of less than \$2,500	30,005	21,419	28.4	29,915	+.3
Pacific ²	154,516	123,837	11.6	143,545	+7.6
Farms with sales of \$2,500 or more	103,152	88,996	5.6	94,204	+9.5
Farms with sales of less than \$2,500	51,364	34,841	27.5	49,341	+4.1
Washington	37,778	29,410	10.8	32,999	+14.5
Farms with sales of \$2,500 or more	24,737	21,079	6.4	22,520	+9.8
Farms with sales of less than \$2,500	13,041	8,331	20.5	10,479	+24.5
Oregon	34,875	26,753	15.5	31,788	+9.7
Farms with sales of \$2,500 or more	21,071	17,043	6.3	18,189	+15.8
Farms with sales of less than \$2,500	13,804	9,710	28.6	13,599	+1.5
California	81,863	67,674	10.5	78,758	+3.9
Farms with sales of \$2,500 or more	57,344	50,874	4.9	53,495	+7.2
Farms with sales of less than \$2,500	24,519	16,800	33.5	25,263	-2.9

 $^1\,\text{Data}$ are from preliminary reports and may differ slightly from final counts. $^2\,\text{Alaska}$ and Hawaii not included. $^3\,\text{Data}$ not compiled for individual States.

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Table B. Farms by Size of Farm and Tenure of Operator: 1978 and 1974

Γ			Farms, 1974		Percent change,
	Farms, 1978 ¹	Published	Net percent missed	Adjusted	adjusted 1974 to 1978
UNITED STATES ²					
Farms	2,475,171	2,310,702	10.7	2,622,416	-5.6
Farms by size:				17/ 772	. 21 0
1 to 9 acres	213,110	126,604	20.1	1/4,//3	+21.9
10 to 49 acres	4/4,535	378,631	22.9	494,024	-13.1
180 to / 99 porce	596 268	627,500	3.9	646 957	-7.8
500 acres or more.	377,314	362,048	1.5	369,865	+2.0
Tenure of operator:		1 (00 0/7	12.0	1 (50 0/2	12.1
Full owner	1,450,414	1,422,367	13.0	1,050,942	-12.1
Tenant.	311,913	260,687	12.6	304,072	+2.6
NORTHEAST				-	
Farms	149,385	127,531	16.5	152,730	-2.2
Farms by size:					
1 to 9 acres	13,534	7,689	16.8	9,301	+45.5
10 to 49 acres	28,098	19,416	31.2	28,403	-1.1
50 to 179 acres	61,017	54,901	17.1	66,655	-8.5
180 to 499 acres	38,288	37,864	6.0	40,542	-5.6
Sou acres or more	8,448	/,661	1.5	7,829	+7.9
Tenure of operator: Full owner.	93 880	83 389	19.5	103 110	-9.0
Part owner	43,680	36,112	4.9	37,797	+15.6
Tenant	11,825	8,030	32.4	11,823	.0
NORTH CENTRAL					
Farms	1,027,319	1,017,367	6.3	1,096,353	-6.3
Farms by size:					
1 to 9 acres	58,168	36,065	30.8	52,227	+11.4
10 to 49 acres	138,016	108,756	18.5	133,716	+3.2
180 to 499 acres	324,583	350,343	6.8	376,663	-13.8
500 acres or more	185,070	176,593	.9	178,560	-9.5 +3.6
Tenure of operator:					
Full owner	542,504	568,866	7.5	620,166	-12.5
Part owner	334,287	313, 364	4.0	329, 173	+1.6
Tenant	150,528	135,137	7.3	147,014	+2.4
SOUTH					
Farms	1,016,070	930,099	15.2	1,107,200	-8.2
Farms by size:					
1 to 9 acres	95,711	55,659	31.1	81,428	+17.5
50 to 179 acres	232,908	194,050	24.2	258,033	-9.7
180 to 499 acres	197,023	196 395	4.0	433,227	-14.4
500 acres or more	119,500	114,347	3.8	119,811	-8.2
Tenure of operator:					
Full owner	633,455	623,219	17.4	757,206	-16.3
Part owner	264,029	214,061	7.5	232,239	+13.7
·man ²	118,580	92,819	20.9	117,755	+.7
WEST-					
Farms	282,397	235,705	9.5	266,133	+6.1
Farms by size:	15 (05				
10 to 49 acres	45,697	27,191	12.7	31,817	+43.6
50 to 179 acres	57 416	50,409	22.0	73,872	+2.2
180 to 499 acres	39.475	36.044	- R TA 'A	60,252	-4.7
500 acres or more	64,296	63,447	-1.8	56,527 63,665	+8.1 +1.0
Tenure of operator:				-	• -
Full owner	180,575	146,893	12.1	170,460	+5.9
Tenant	70,848	64,111	4.1	68,193	+3.9
	30,974	24,701	8.3	27,480	+12.7

 $^1 \rm Data$ are from the preliminary reports and may differ slightly from final counts. $^2 \rm Alaska$ and Hawaii not included.

APPENDIX D. Report Forms

DUE BY FEBRUARY 15, 1979					Form	Approved:	0.M.B. N	o. 41 - S7802
NOTICE Response to this inquiry is required by law (title 13, U.S. Code). By I THE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by sworn Ce	he same law YOUR REP neus employees and may tion investigation or re	be used	FORM 78-A1(N)		e.u	BURE	AU OF T	COMMERCI HE CENSU:
only for authinized purposes. Four relion Connect be used to purpose of take The law else provides that copies relatived in your files are immune from legal proc the commensations exclusion to this reserve a legal refer to the li-dist Consus Fil	ess. • Number (CPN)		CEN	S.	197	78 CEI	NSU:	5
			8 78	E		OF		
			Z	S	AG	RICUL	TUR	E
			COMPLETE AN	D RETURN	ro 12	reau of the C DI East Yent Nersonville,	iensus In Street Indiana	47132
			Note 🔶 P	ease read the	Information	Sheet before	completi	ng the form.
			If book figures filing by Feb. 1 sent to the ab	are not avail 5 causes an i ove address.	able, reasoni indue burden, include you	ible estimate a time exter or 11-digit C	es may b ision requirements of the second s	e used. If lest may be 'ile Number
			If you received	more than one	re-			
	전에 이미지 가운데. 특성 전 1000 전에 201		Number(s) here copies with your	and return e completedre	xtră port.			
			CENSUS 035	036		037	038	
(Please correct errors in name, address, and ZIP code	,		ONLY					
SECTION 1 ACREAGE IN 1978 If the acres you operated in 1978 changed during the year, refer to the	INSTRI		Sections during 19	2 through 8 78. Please	provide spac eport your c	e for reporti rops in the a	ng crops oppropriat	e section.
Report land owned, rented, or used by you, your shouse, or by the partnership.			Do not ini to report	clude crops g DNL.Y those	rown on land props NOT lis	rented to oth ited in section	iers. Use ms 2 thro	e section 8 nigh 7.
corporation, or organization for which you are reporting. Include ALL LAND, REGARDLESS OF LOCATION OR USE - creptand, pasturetand.	SECTION	2 Wer	e any of the FOI	LOWING CR	OPS harveste	d from this p	lace in 1	978?
tangeland, woodland, idle land, house lots, etc. None Num	bar of scres		41	Acres	Quar	tity harveste	ed b	Acres
1. All land owned	1. Field	corn for gr	ain of	067	068	, Bi	. 100	9 9
2. All tand rented of leased r from of merics, including tand worked by you on shares, used rent free, in exchange for services, payment	seed (a abei	Report qua led-weight	basis; [7]		1	OR C		
(DO, NOT include land used on a per-head basis under a grazing	2. Field	corn for si	lage	070	071	т	ons, 07	2
3. All land rented or leased TO OTHERS, including land worked on	3. Wheat	for grain .	·····	073	074		07	5
shares by others and land subleased. Also complete item 6 below.	4. Oats f	or grain .	····· 🗇	076	077	B	J. 07	8
AGRES IN THIS PLACE - ADD acres owned (item 1) and acres rented (item 2), then SUBTRACT acres rented TO	\$. Barley	for grain		079	080	 Bı	J. 08	ſ .
OTHERS (item 3), and enter the result in this space.				082) 083	BL	J0°	34
For this control report these are the "ACHES IN THIS PLACE." If the entry is zero please refer to the INFORMATION SHEET, Section 1.	seed (a	nciude mi	lo) 🗖	0.95		Lt	os.	
S. If you rented land FROM OTHERS (item 2) enter the following information for ear	ch landlord, 7. Sorghu	ms for sila n chop (e)	ige iclude			Τα	ons,	,
Name of landlord Mailing address (include ZIP code) Num	sorghu 8. Sovbea	m-sudan ci ns for bea	ns	088	089	gr	een 09	0
048	9. Cotton		·····	091	092	BI Bi	1. 09:	3
049	10. Tohac	:o - all ty	pes 🗂	094	/10 095	Lt	os. 09	5 /1
Liet additional landlords on a separate sheet of paper.	11. Irish p	otatoes	•••••	097	/10 098	Cv	vt. 091	/10
S. If you rented land TO OTHERS (item 3), enter the following information for each	renter. 12. Sweetp	otatoes ar	nd yams 📋	100	/10 101	BL	1.	2 /10
Name of renter Mailing address (Include 21P code) Num 050 051	ber of acres SECTION	3 Wate or 1 2005 1	any DRY HAY, arvested from th May cut from pa] YES - Compile	GRASS SILA is place in 1: starse.) its this secti	GE, HAYLA 9787 (Include 10	SE, or GREE • Porghum-Bu	N CHOP	cut nie
052	-	2 []NO - Gotos	action 4				
L'et additionel rentera on a separate ateet of paper. 6. Of the land you rented or leased to others, None oss how many acres did you own?	ll cutt same f gRAS	ngs were i ielde, nepe SILAGE, AY	made for both dry vt the soreage in HAYLAGE, and	r hay and gra the appropri GREEN CHI	as silage, ha isté itema und XP.	yinge, or greater fer DRY HAY	en chop f / and als	rom the b.under
7. During 1978, did you have any Federal or State grazing permits on a per-head basis; such as Equal Sance Table Context	(if two made (once, i	or more ca rom the sa out report	uttings of dry ha me acres, report lotal tans from a	y wate acres only if cuttings.)	Acres harvested	Quantity t (Report e or green as India	tervested ther dry weight cated	Acres irrigated
Indian Reservations, etc.?	□ No hay or	and alfail dehydratir	la mixtures for		103	104	Tons, dry	105
I. How many set eside acres did you have None oss	2. Small j	gtain hay -	- oats, wheat, ba	niey, etc.	106	107	Tons, dry	108
	- Acres 3. Other 1	ame dry h Rermuda	ay, clover, lespe I grass, Sudan gr	deza, ass etc	109	110	Tons,	111
s in what county was the County come State I have	4. Wild h	iy	· · · · · · · · · · · · · · ·		112	113	Tons,	114
argest value of your arricultural products Principal	GRASS	SILAGE, N CHOP	HAYLAGE, ANI) 			ary	<u> </u>
. 057	(if two heyleg	or more c e, or gree	uttings of gress h chop were mad	silege, From the		1		
Lital operations in any Other 058	report 5. Grace	totel tone	from all outlings	(a)	115	116	Tons,	117
the county name(s), etc 059	6. Hay ci	ops cut an	id fed green (gre	en chop)	118	119	Tons,	120

Page 1

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004 1 YE 2 NO 1. TOTAL ACRES in bear or other groves, vineya	S - Comp - Go to ring and to rds, and	niate this an a section 5 nonbeating fr nul trees on	uit orct this pla	ards, citru	s	Tol Whole a 121	al acres cres Ten	Acres ha Whole ac 122	irrigal es 1	ed Fentha /10]	NORCITE	US CROF	5 Cud	CITRUI (Paper)	CROPS	-' Cal
Z. From the list at the rig requested information f trees, estimate the area	iht, enter or each c a covered	name and co rop even if n I by each kin	de for of harv d of fru	the fruit tre ested becar it. If other	ies, graper use of low f crops we	rines, and n prices, dam re interplant	ut trees on lage from h led with tri	this place in ail, frost, etc es, see infor	1978. For Nation	Repo interp Sheet	rt the anted	Apricota Avocadus Informet Cherries	See Ion Sheet	129 128 147	harvest from bio Grapefri Lembos	ad in 1977-78 Ann of 1977) Ult	··· 3
.		NUA TREES (IBER C	F ES OF -	Acres and y	in trees ines of	Outer	Uni	i of me færk o	iasure 10		Grapes Grapes Olives	dry weigi fresh wei See	nt 171 gent 177	Oranges Tangels	1	
Crop name	Code	Nonbearin 4ge	e 1	Searing age	ali Whole ac	ages res i Tentha	harve	sted A	100	Bates	Lbs. per box	Informat Peaches . Peaches .	ion Sheet	207	manda Other c	rins	;:: 1
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	1	1	1		2	/10	3	10	*□	3	5	Other non Specify	citrus -	261	the ahe Almond	n) •	9
	1	1	1		2	/10	3	10	2	,	15 1				Pecans	, improved , wild	3
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1 YE 2 NC For Florida, report for August 31, 1978 harve other States report for	S — Com — Go t Septemb st seasor calendar	plete this se to section 6 ter 1, 1977 th h; for all year 1978.	ctian rough	Acr	es - Taniba	Acres III	ligated	From the li	1 2 SI beic ed will		ES – Ce D – Ce ner crop neme.	mptoto this r to section name and c Acres here	saction D Olis. Aap ested	kort quant	ity harves	ted in Acres in	rigated
1. Land from which veget harvested in 1978	lables we	xe		375	/10	376	/10	0.041 8		-ļ-ĭ	<u> </u>	pole acres	Tenths	1		Whole acre 2	s Tent
2. From the list below, e	nter the	crop name an	d code	for each cr	op harvest	ed in 1978.				+			/10	1		2	+ /
each crop. Report cro	ps grown	under protec	tion in	section 6.						+		<u>.</u>	/10	1		2	-+-/
Crop nan	ie		Sode	Acres ha	i /10	Acres in	/10	If more spa	ce is i	hooded	, 459 54	parate sha	i /10 It of pape	r.		L	<u> </u>
					/10	1	/10	Crop name Blackberrie	us and	dewbo	rries (p	Con ounds) 501	•	Cro Ras	p name spheries (pounds)	Code . 551
					/10	1	/10	Blueberrie Blueberrie	, tame , wild	(pour (pour	ds) ds)			Stra All	other ber	(pounds) les (pounds) -	. 516
					/10	1	/10	SECTION 8	1	iere an	y OTHE	R CROPS	ar vested	from this	place in 1	1978 — rice, p	canets,
					/10	1	/10		oon fi	ieki se	eds, su FS – ex	par crops, o mateira Auto	r other cr	ops and p	reviously :	reported?	
If more space is needed, Crep name Beans, snap (bush and pole) Broccoll Cabbage Cabbage Cabbage Cabbage Cartaloups and Persian meions Carrots Califower Califower Califower Califower Califower Califower Califower Collerds Cowpeas (blackeyed and other green cowpeas).	use sepa Code 373 381 383 385 391 395 397 401 401 407 409	Crop same Cucumbers of Eggplant Garlic Honeydaw m Lettuce and Lime beans, Mustand gree Onions, dry Onions, gree Give Pass, green English (e green com	elons romain green ms	Ced (Ids. 41 41 42 42 42 42 42 42 42 42 42 42 42 43 43 10 43	Crop a Crop a Pepper Punpk Radish Spinac Squash Squash Squash Squash Squash Turnip Turnip Waterm Other v Spec	sme s, sweet s, hot ns es corn es greens elors egetables - f/	Code 443 445 445 447 457 457 453 445 445 445 445 445 445 445 445 445	From the li unit specif Crop	2 st beli wd wi	N SW, 611	0 - an her crop hame.	name and C le Acres	9 Offit, Flor harveste	ort quant d Quar 1 1 1	Thy Aarvas Kity Karva	ted in sted Acres 2 2 2 2 2	lir igata
SECTION 6 Were any flower a	NURSE	RY and GRE petable specia	ENHOU and pl	SE PRODU ants, vegel	ICTS, sod, lables und	bulbs, flow or glass or (ers, aher										· _··
	n, ar MU S - Com	SHROOMS () Sinte this en	own FC	IR SALE or	n this plac	e in 1978?										- 2	
2 🗖 NO	- Go t	a section 7		None	Ate Source fee	a irrigated	Tenths										
1. Nursery and greenhous	e produc	ts irrigated i	n 1978	- 47	7	478	/10	L									
2. From the list below, e	nter the p	product name	and co	de for each	product g	rown,		Crop name			, wee a	ранаса зляс С	ada Gray				Car
Product name	Code	Square feel glass or c	ther	Acres in	n the open 1978	Sales	in 1978	Affolfa see Beans, dry (100-opur	d (pou field d bag	inus) and se	ed	•••••	82 P783 Red 84	clover se	ousnels) ed (pound pound bag	s)	
	}	protection	n 43/Q	Whole acr	as Tenth	2 Dollars	Cents	Beans, dry (100-pour	lims d beg	n			Rice	(bush (barre	els) or (s)	·····	
	1			<u>+</u>		2	1	Com cut fo	r dry i (repoi	loddar, 1 acre	hogged only)		Rye 1 Seff	PASE SOO	d (pounds) ands)		: 8
				1	/1	2 \$		Cowpeas for Emmer and	H dry spelt	peas ((bushi mile)	nushele its)		Solg Solg	nums cut hay (tona hums hor	tor dry for dry weighted or an	age ht), ted	:: 92
If more space is needed, Product same Bedding plants (include ve Buibs	use sope getable p it greens onmentals ind nut tre	rate sheet of Cade plants) 479 482 485 3, 143,	Produ Folia Mush Sod h Vege Green	et name ge and flow coms srvested table and fl thouse value	vering plan lower seed	11:	Cade 491 494 497 990 983	Flaxseed (Grains, mil Kentucky I Lespedeza Mint for oi Peanuts to Peas, dry	bushel lid (bi lidegri sect (pour nuts leid a	(pound (pound (pound (pound (pound (pound (pound (pound (pound	et (pour s) s) s) s) d (poun	cia) 	01 Suga 14 Suga 28 Suga 24 Suga 24 Suga 24 Suga 25 Cite	r boets for reams for informat reams for lower see ithy seed r crops ()	r sugar (tor sugar (tor lon Sheet saed (tors d (pounds) (pounds) - pounds) -	one) a) 1)	· · 71

FORM 78-A1(N) (4-10-78)

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SECTION 9 GROSS VALUE of CROPS SOLD from this place in 1978, BEFORE taxes	SECTION 12 Did you or anyone else have any CATTLE or CALVES on this place in 1978?
Report your best estimate of the value for each of the following groups of crops	2 NO - Go to section 13
sold from this place in 1978. Include the value of the landloid's and/or contractor's share, estimating if necessary, include value of Government CCC loans.	DECEMBER 31, 1978 INVENTORY None place Dec. 31, 1973
1. Greins sold in 1978, including Government CCC loans - None Dollars Centa	1. CATTLE AND CALVES of all ages all
com for grain, grain sorghums, rice, wheat and other 776	(Total of a, b, c, and d below)
flaxseed, sunflower seed, popcorn, and safflower	had calved Deer Cows
a. Of the total, how much was Hone Dollars Centa	MILK COWS kept for production of milk or cream for still or bone use - include day milk come and Milk
Government CCC loans?	mility builders that had calved
2. Cotton and cuttonseed, including	c, HEIFERS AND HEIFER CALVES - Exclude heifer
Government CCC loans	a creep careep calles fail it
a. Of the lotal, how much was None Dollars Cents received in 1978 from 779	AND BULL CALVES.
3 Tehacro	CALTLE AND CALVES SOLD FROM THIS PLACE IN 1978 Made Made Number sold Deltage Content
A, Field seeds, grass seeds, hay, lorage, and silage C	molude those res on this place of a contract of the burners burners burners burners basis. Also report as an intervent from this place of a
5. Vegelables, sweet corn, and melons - DO NOT include Inleh	to a tendiol for further feating. 809
6. Fruits, nuts, berries - apples, peaches, grapes, 783	2. Celves weighing less than 500 pounds
citius, pecans, strawberries, etc	3. Cettle, tackuding calves weighing 500 pounds of more
8. Other crops - peaauts, Irish potatoes, sweetpotatoes, 785	a. Of the total cattle sold, how many
suger beels, sugercase, mint for oil, hops, etc Severity s	were FATTERED on this place on GRAIN 612 613 or CONCENTRATES for 30 days or more and SDI D for SLAICHTER?
SECTION 10 LAND USE IN 1978	DAIRY PRODUCTS SOLD FROM
NOTE: If the same land had more than one use in 1978, REPORT THAT LAND	THIS PLACE IN 1978 Gross value of sales None Dollars Cents
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."	4. Gross value of sales of DAIRY PRODUCTS e14
Croptand harvested - include all land from which grops were	SECTION 13 Did you or anyone else have any HOGS or PIGS on this place in 1978?
hervested of hey was out, and all land in orchards, citius grores, vineyerds, and nursery and greenhouse products.	013 VES - Complete this section
Cropland used only for pasture or grazing include notation pasture and grazing land that could have been used for crops	2 NU = Go to septice 74 Number on this piece Dec. 31, 1978
Without additional improvements	UCLCRIDER 31, 19/6 INVERSIORT BIS Total
grasses, but NOT harvested and NOT pastured	a HORS and PICS used on be used for BREEDING
d. Cropland on which all crops failed (Exception: Do not report here land in orchards and vineyards on which the crop failed.	b. OTHER HOGS and PIGS
Such expresse is to be reported in them 2a.)	UTTERS FARROWED
I. Cropland idle	2. LITTERS FARROWED on this place between - Name Number of litters
3. Vendland include all woodints . C	a. December 1, 1977 and May 31, 1978
end timber tracts and cutover and deforeated land with young	a, June 1, 1978 and November 30, 1978
A Other nastural and recent and r	Pumber and Grass value of sales
than cruptend and woodland peature	HOGS AND PIGS SOLD Hone In 1978 Dollars Conts
5. All other land - Land in house lots, poeds, toads, wasteland, etc	3. HOGS and PIGS SOLD from this place in 1978
5. TOTAL ACRES - And the acres reported in items 2 through 5 (blend be the same as item 7 above.)	4. Of the hogs and pigs sold, how many were sold
SECTION 11 Was my LAND in this place IRRIGATED at my time in 1978?	AS FEEDER PIGS for further regarding
Irrigated land is all land watered by any artificial or controlled means - aprinklars, furrows or ditches, apreader dikas, etc. include supplemental,	914 1 YES - Complete this section
partial, and proplant irrigation.	2 NO - Ga to section 15
2 NO - Go to section 12	INVENTORY SALES Number on this Number sold
1. How many acres of each of the following classifications None Number of acres of land were irrigated in 1978? None Irrigated	TUEED and 1 AUDT at all anna
HARVESTED LAND reported in section 10,	Buff Lusses and as a lifer
and land in bearing and nonbearing full and nut crope	
section 10, items 2b and 4 - include spring Hooding	Note Number shorn Poends of wool shorn
It water diverted or apread by dame, spreader dikes, venels, ditches, pipes, or other works.	2. SHEEP and LAMBS SHORN
c. ANY OTHER LANDS - Such as land not harvested due to 601 complete failure, idle land, land in cultivated summer failow.	T Brown visitia at asta.
or land in cover crops and soil-improvement grasses	None Dollars Centa
A TOTAL LAND IRRIGATED (Total at a b mate share)	ambs, and wool from this place to 19782

4

.

011 UES - Complete INV acation (soling work, costimutor), None Dollars Cents 1 West Not Cost None Dollars Cents Soling
Norme Norme Total number sold in 1376 Grass value of sates boliars in 1378 - planting, plowing, spraying, harvesting, etc Ist 1. Horses and ponies of all ages. Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image: State of the planting, plowing, spraying, harvesting, etc Image:
Nome Disc size Dec. 31, 1978 Sold in 1978 Dottars Cents Specify kind of work dome 1. Horses and ponies of all ages. 53 631 632 SECTION 18 During 1378 did you SELL any cross, livestock, or livestock predects of DRE 31, 1978 Sectify kind of work dome 2. Mules, burros, and donkeys. 53 634 633 Sectify kind of work dome 3. Mink and heir petts 5 637 538 1 Doitars Cents 3. Mink females used for breeding. 5 637 538 1 Name Doitars Cents 4. Other livestock or animal specialities in captivity (fener rame and code from "List A" beform. 1 3 Sectify products acid - vagetables, aggs, etc. Sectify products acid - vagetables, aggs, etc. 5. Livestock or animal products (fener name and code from "List O" bolow.// Name Code Code Sectify products of alles FAML To Individuality sold Sectify products cold - vagetables, aggs, etc. 5. Livestock or animal products (fener name and code from "List O" bolow.// Name Code Sectify products cold rule waster in 1978. Sectify products cold rule protein. Sectify products cold rule protein in charge) Sectify products acids of the protein. Sectify products acids of the protein in the protein in the protein in the pro
1. Hotss and points of all ages ass ass size
2. miles, builts, and their petts 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
3. Mink and their petts
a. kink tenales used for breeding
4. Other livestock or animal specialties in capitables, egg, etc
If Enter name and code from "List A" below.) 1 2 Name Code
Name
5. Livestock or animal products (Enter name and code from "List B" below.) Name Acres under water for aquaculture Total quantity sold in 1978 Gross value of sales Dollars PARTNERSHIP operation. Include family partnerships Total number of partners Total number of partners 922 Name Code
Image code from "List B" below.) Image code from "List B" below.) Image code from "List C" below.) <td< td=""></td<>
Name Code Image: State of the sthe state of the state of the sthe state of the sthe sta
6. Fish and other aquaculture products (Enter name and code from "List C" below.) Name Code Name Code Name Code Name Code Colonies of bees 839 Other goats 842 Rabbits and their petts 651 All other livestock - Milk goats
code from "List C" below.)
Number Number SECTION 20 CHARACTERISTICS AND OCCUPATION OF OPERATOR (Senior partner or person in charge) Name Code Name Code Name Code Name Code Name Code Name Code Mame Code Stat All other livestock – Stat Milk goats 845 Chinchillas and their perts Stat Stat Stat Name Code Name Code Name Code Name Code Name Code Name Code Name Code Name Code Mame Code Name Code Name Code Name Code Mame Code Name Code Name Code Name Code Mohair sold 664 Catish 572 Other fish – Specify Stat Goals milk sold 655 Trout 872 Other fish – Specify Stat Other livestock products – baltish Stat Topical and Other fish aquaculture Other aquaculture
Name Code Name Code Name Code Name Code St All other joints St All other livestock St All other livestock St All other livestock St All other livestock St
Angora goats
List B List C Name Code Name Code Mohair sold 864 Catlish 872 Other fish - Goats milk sold 866 Trout 872 Other fish - specify set Honey sold 866 Tropical and Other gauculture Other gauculture Other - specify set Other Unsetsock products - baltish 850 products - of ther gauculture of ther gauculture
Mohair sold
Honey sold
0
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 1978? (Include poultry grown for others on a 3. AGE of operator (senior partner or person in charge).
ore compract basis.) 016 1 YES - Complete this section 1
2 NO - Go to section 17 None Dec. 31, 1978 sold in 1978 5. SPANISH ORIGIN - Is the operator (senior partner or person in charge) of Spanish origin or descent 927
1. HENS and PULLETS of laying age
2. PULLETS 3 months old or older not yet of laying age
3. PULLET CHICKS and PULLETS under 3 months old (Exclude commercial broilers.)
4. BROILERS, fryers, and other meat type chickens, including capons and roasters
5. TURKEYS a Turkeys for slaughter / Exclude broaders
s _ 10/00/01 01 01/02 01 01 01 01 01 01 01 01 01 01 01 01 01
6. OTHER POULTRY raised in captivity – ducks, geese,
pigeons or squab, pheasants, quail, etc. (Enter poultry name and code from the list below.) SECTION 21 Was any of the land in this place held under FOREIGN OWNERSHIP in 1978?
Poultry name Code 1 2 0 N0 3 0 to section 28
Poultry nameCodeCode Code Of the total acres in this place, how many were owned by 930
Ducks 904 Pigeons or squab 908 Quail
Specity
1978 and placed or sold – chickens, 916 SECTIONS 22 – 27 Not applicable to this form
turkeys, ducks, etc Specify kind of poultry
8. Incubator egg capacity on December 31, 1978
and poultry products (eggs, etc.) from this Gross value of sales Telephone Area code Number
poutry and poutry products moved from this place by contractors and others

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(Sections 22 through 27 were collected from only 20 percent of the farms; see text)

SECTION 22 Was any COMMERCIAL FERTILIZ LIME used on this place during 197	ER, including ROCK /8?	PHOSPHATE, or	SECTION 25 EXPENDITURE	ES FOR I	ENERGY and 78	petroleu	a products for the	÷
022 1 🔲 YES - Complete this section			Include expenditures paid by and others for production of c	you T	Expendi	we	Gallons	Storage capacity on
2 🗌 NO 🛥 Go to section 23	Na	ne fartilized	livestock, and other agricultu products from this place to 1978	Hone -	Dollars	Cents	purchased in 1978	this place (in policits
 Acres of cropiand fertilized in 1978, other than c used only for pastures reported in section 10, ite 	ropland # 2b	932	1. Gasoline for farm business		166 5 169	1 1	967	968 971
2. Acres of pastureland and rangeland fertilized in 1978 reported to section 10, items 2b and 4	- -	933	2. Diesel tuel for the farm business		72	1	973	974
3. LIME - tons of time used and acres on M	one Tons of time	Acres limed	the fam business (4,5 lbs.= 1 gailon)			1		
Which applied (Do not include land plaster or gypsum of time for senitation.)	934	935	4, Fuel oil for the farm business		75	I I I	976	977
SECTION 23 Ware my INSECTICIDES, HERBICH	DES, FUNGICIDES, N	EMATICIDES,	5. Natural gas for the farm business		78	i i		
923 1 YES - Complete this section	11 CHI (VA CA 8300 64 4	11. Piero in	6. Kerosene, motor oil, grease, for the farm business	ہ ا	79	1 5 1		
2 🗌 NO 🛩 Go to election 24			7. Electricity for the farm		80	3		
Include any materials provided by you, your landli item listed, report acres only once. If multipurpor	ords, or contractors. se chemicals were use	For each sd, report	8, Other-coal, wood, coke, stc.		81	1		
acreage treated for each purpose.		•	SECTION 26 SELECTED PR	ODUCTI 1978	ON EXPENS	EL paid b	r you and others	
 Sprays, dusts, granules, lumigants, etc., (fungicus herbicide, insecticide, nematicide) to control – 	le, Nona	Number of acres on which used	Include your best estimates a	expension of a	es paid by y	RU, YOMI I Shi and Al	andiord, contractor	3,
a. Insects on hay and other crops		936	products in 1978. DO NOT IN customeork for others; operat	ICLUDE	expenses conformative	enected v	rith performing misses, or service	F
b. Nematodes in crops		¥3/	or household expenses not tel	leted to	he farm busi	A CS S.	Repu	
c. Diseases in crops and orchards (blights, smuls	· _	956	1. Livestock and poulity purchashogs, pigs, sheep, lambs, goal	sod – ca its, hors	tlie, calves, 13, chicks,		None Do	Bars Canto
d. Weeds, grass, or brush in crops and pasture	······	939	poults, started pullets, etc 2. Total feet ourchased for liver	stock an	f poultry – r	 1919.	**** 2 5	
2. Chemicals for defoliation of for growth control		940	hay, sillage, mixed feeds, con a Conneccally mixed formula	centrate:	s, etc		🗆 🔉	
of crops or thinning of fruit	·····□		complete, supplement, cont (Do not include	centrates	<u></u>			
3. Were any chemicals used for -			ingrediants purchased ceparately, such as soybean musi, flotte	7085 984	Tenthe 98	Doitars 5	Cents	
 Insect control on livestock and poultry, including treatment of buildings? 	⁸⁴¹ I Yes	.2 🗆 No	cottonesed mail, and ureal,		/10 \$			
b. Sanitation, rodent and bird control, etc.? (foctude time for sanitation)		2 - No	 Animal health costs for lives verarinerian services, second 	lock and , veccin	poulity. Inc w, medicine	laðv 1, otc	5	
SECTION 24 MACHINERY AND EQUIPMENT on	this place on Decembe	n 31, 1978	 Seeds, builts, plants, and trac 5. Commercial fertilizer purchase 	ss purchi Xed - ail	ised forms, inclu	ing reck	· · · · · □ 5 988	
(Include only equipment used for equ	louibrei operatiene in	1877 or 1978.)	phosphate and grpsum. Repo	rt cuelor	application	conte in		1
•Value of ALL machinery and equipment on this • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •	place, December 31, 1	978	 Agricultural chemicals purcha fungicides, other pesticides, 	nsed — in lime, etc	isacticidos, 1. <i>Report cu</i>	wibicide: Hom	۹۰۰ (۱۹۹۵) ۱۹۰۰ (۱۹۹۵)	1
equipment, and implements usually kept on this p and used for the farm of same business?	lace Est	imated market value	7. Hired farm or ranch labor iss	nout. In Inform	ation Shout)	·····	····	
trucke, tractore, combines, plowe, disks, harrowa, pumps, motore, trigation equipment, dairy equipm	diyers, Ient 943	Dollars i Cente	 a. Of the hired workers, inclu family workers, how many 	iding pei 	d None	Number 991	di watere	
mouding milkers and bulk tanks, livestock feeds grinding and mixing equipment, etc		i	(1) Worked 150 days or mor	æ?	••• 🗆	992		
SELECTED	[Of the total, HOW	(2) Worked less than 150 d	ws?	••• 🗆]			
this place, December 31, 1978. (Asport	Total number on this place on December 31, 1978	MANY were manufac- tured in the tast 5 years (1974-1979)?	 Contract (abort - inortude expenses as hervesting of truit, vegeta contract basis by a contract. 	enditurei bies, be	primerily fo rise, etc., p	labor, a Montaid of the second		1 1 1
None	944	(Number) 945	9. Customwork, machine hire an	id rental	of machinery	and	- l	
2. Automobiles	946	947	opurpment - include expandit for concommont auch as grind combining, com plaking, dryf	tures for ling and ing, allo	use of equip nixing feed, hilling, some	nooi ent siowing, ing,	394	ennen sternasjon
J. MOIOFITUCKS (Include pickups)	948	949	dusting, fattilizing, atc. (En	clude co	et of catton	inningi .	**** 🔲 💈	1
tractors and motor tillers	950	951	Please give your best ESTIM	ATE of	the CURREN	rany an T	Catinated curre	t motion value
5. Grain and bean combines, self-propeiled only			reported in section 1, items 1	, oundin 1, 2, and	3, page 1.	rs. Non	of land and Dollars	ownsings Conta
6. Corn heads for combines	954	953	1. All land owned		•••••	⊷ 🗆	5 5 997	
7. Other corn pickers and picker-shellers \dots	086	507 087	2. All land rented or leased FR	ON OTH	ERS	•• □	\$ 998	
8. Cotton pickers (Exclude cotton strippers)	958	959	S. All IBIG IERIEC OF IERSEG TO	VINCN	• • • • • • • • •	<u>م، D</u>	15	
9. Mower conditioners	960	961	4					
10. Pickup balers	962	963	4					
11. Field forage hervesters, shear bar of flywheel type								

FORM 78-A1(1)

GENERAL INFORMATION

WE NEED A COMPLETED REPORT FORM FROM EVERYONE receiving this request. Please follow the instructions given below for completing section 1. You will then be able to determine what additional information is to be provided.

- 1. The enclosed census report form is being used by farms and ranches throughout the entire United States. Because it is meant for use in all parts of the country, it may contain sections and inquiries which do not apply to you. In this case, mark the "None" or "No" box and go on to the next item or section.
- 2. If You Receive More Than One Report Form If you have multiple farming operations, you should complete a report for EACH SEPARATE and DISTINCT production unit, that is, each individual farm, ranch, feedback, greenhouse, etc.; or combination of farms, etc., for which you maintain SEPARATE records of operating expenses and sales, livestock and other inven-tories, crop acreages, and production. Return any duplicate or extra report forms in the same any ouplicate of exita report forms in the same envelope with the report(s) you complete so we can remove the extra addresses from our mail register. In the space provided to the right of the address label of the report form you complete, write the 11-digit number from the label of the extra form or forms.

3. Partnership Operations

A partnership is an association of two or more persons who have agreed (informally or under legal contract) on the amount of their contributions and profit distributions.

Complete only ONE report for the entire partnership farm and ranch operation, including all partners' shares on the same report. If two or more report forms were received for the partnership see 2 above.

Partners who also have separate operations of their own should complete reports for those separate operations. For additional information on Partnerships see section 19 below

4. How To Enter Your Responses On The Report Form

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

Enter whole numbers unless the "Tenths" column is provided, such as reporting acres of trish potatoes in section 2. If you have 1/2, 1/4, or 1/3 of an acre, convert to tenths. For example convert 1/2 to 5/10, 1/3 to 3/10, example conver 1/4 to 2/10, etc.

If you do not recall exact figures, please give your best estimate. You may indicate "Est." Your best estimate. For may indicate Est. (for estimated) beside the answer, if you like. For all dollar items, we need only whole dollars, although a "Cents" column is provided for those who wish to report cents.

COMPLETING THE REPORT FORM

Section 1 - ACREAGE IN 1978

This section determines the land for which you should report agricultural activities. It also pro-vides space for reporting landlords, renters, and location(s) of agricultural activities.

Changes in the Acres Operated in 1978 - Report all land that YOU USED during 1978, and the crops and livestock production on that land, even if some or all of it was no longer a part of your operation on December 31, 1978.

If you had agriculture operations at any time during 1978, but quit farmingbefore December 31, 1978, report your 1978 crop and livestock pro-duction and sales from that land for the portion of the year that you operated the land. Please explain in the margin of the report form (or on a separate sheet of paper) that you quit farming or ranching during 1978 and give the approximate date and the name and address of the present operator, it known. operator, if known.

INFORMATION SHEET

1978 CENSUS OF AGRICULTURE

If you acquired land for agricultural operations, but did not use it for livestock or crop production in 1978, include the land in section 1. Please explain in the margin or on a separate sheet of

Completing Items 1, 2, 3, and 4 of Section 1 - Use items 1, 2, and 3 to determine the acres of Use items 1, 2, and 3 to determine the acres of land that are your responsibility for the purpose of making the agriculture census report. Include all land that you were associated with in 1978, regardless of location or use, but do not include holdings of residential property not associated with agricultural operations. Report all land in whole acres in this section.

Item 1 - Land Owned - Report all land owned in 1978 whether held under title, purchase contract or mortgage, homestead law, or as heir or trustee of an undivided estate, by you and/or your spouse, or by the partnership, corporation, or organization for which you are reporting.

Item 2 - Land Rented or Leased FROM Others Report all land rented by you, even though the landlord may have supplied equipment, fertilizer, or other materials and/or some supervision of the work

INCLUDE in item 2 -

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

DO NOT INCLUDE in item 2 - Land used on a DO NOT INCLUDE in item 2 – Land used on a per-head or animal unit license or permit basis, such as land used under section 3 of the Taylor Grazing Act, National Forest Land, or Indian Reservation Permit Land.

item 3 - Land Rented TO OTHERS - Cash tenants, share tenants, and share croppers are farm operators for census purposes and are respon-sible for making the agriculture census report for the land they operate.

INCLUDE in item 3 -

- a. Owned land rented TO others for cash or a share of the crops or livestock
- b. Land which you rented from others and then subleased to others in 1978
- c. Land rented out for residential or other nonfarm purposes, if it was part of the land reported in item 1 or 2
- d. Land worked for you by someone else on a share-of-crop basis
- e. Land which you allowed others to use rent-free

NOTE: Please enter the names and addresses of renters, tenants, and sharecroppers in item 6.

Item 4 – Acres in this Place – This is the sum of the land that you owned in 1978 (item 1), PLUS the land that you rented FROM others (item 2), MINUS the land that you rented TO others (item 3). It is very important that you report this figure correctly (even if "0" acres), since the remainder of your report should cover only those operations on "the Acres in This Place" reported in item 4.

"Zero Acres in Place" - Should you complete the rest of this form?

If you yourself had crop or livestock activities on the land for any portion of the year, you should complete the rest of the form. See "Changes in Acres Operated in 1978," above.

If all your land was operated by a renter or sharecropper for all of 1978, you do not have to complete the entire form. In this case, you should:

- a. Complete item 6 for renter.
- b. Skip to section 28 and complete Name, Address, Telephone number, etc.
- c. Explain briefly in the margin or on separate paper that you did not operate a farm or ranch in 1978. For example, "All land rented out," "Solid Farm," "Retired," etc., and give the approximate date that

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you quit operating. If you sold your farm, please give the name and address of current owner or operator, if known.

d. Mail the form in the return envelope provided.

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, "Total Acres in This Place." But you should include in your report any livestock located on permit land in 1978.

Sections 2-8 - CROPS

Sections 2 through 8 provide space for reporting crops harvested during the 1978 crop year from the land shown in section 1, item 4, of your report. Please report your crops in the appropriate section. Do not include any crops grown on land rented, leased, or worked on shares by others during 1978.

Acres Harvested - Enter the acres harvested in 1978. Round fractions to whole acres except where tenths are requested, as for Irish potatoes.

Quantity Harvested – The units of measure on the report form are those most commonly used throughout the country. If you use a different unit of measure, please convert your figure for quantity harvested to the unit requested. If harvest is incomplete by December 31, 1978, please estimate the total quantity harvested.

Crop Irrigation - For each crop irrigated, report number of acres irrigated. Irrigation is defined 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

- a. Sections 2 and 3 In these two sections, separate lines are provided for reporting each of several crops widely grown in the United States. Do not write in data for any other crops.
- b. Sections 4-8 In each of these sections, report any of the crops listed in the same section. To report a crop in any of these sections, (1) find the crop name and the code number in 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 requested in the headings of the remaining columns.

Example: A farmer harvested 20 acres of alfalfa seed, yielding 6,000 pounds, and 30 acres of red clover seed, yielding 8,400 pounds. (He did not irrigate either crop.) He would enter the following in section B:

SECTION & Vera	My OTHER CI	ROPS Autvested fra rops, or other crops	m this place in 1978 - I not previously report	- rice, provets, Ind ⁹
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fion the list before it	ullei (100 nami 00 name	e and code . Report	r ovanisty harvesting of	
Ciep name	Coor	Acres Nevented	Quantity Namested	Acies suspites
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If more space is needed, use separate sheet of paper

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 of the report form.

Example: A farmer harvested 1,230 bushels of wheat from 40 acres in 1978, then planted and harvested 1,550 bushels of soybeans from the same 40 acres before the end of the year. He irrigated the soybeans but not the wheat.

Correct entries		Acres	Bushels	Acres irrigated
item 3	Wheet	40	1,230	
Item 8	Soybeans	40	1,550	40

Sections 2-8 - CROPS - Continued Interplanted Crops and "Skip Row" Planting -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. Thirty acres of soybeans would be reported in section 2, item 8, and 30 acres of cotton in section 2, item 9.

Vegetables - Report acres of vegetables harvested FOR SALE. Do not report acres of vegetables for home use. Report the total acreage of each vegetable crop harvested.

Example: You harvested 10 acres of lettuce from a field in 1978, then replanted the field to lettuce and harvested the 10 acres again. Enter only 10 acres of land from which vegetables were harvested in item 1 of section 5, but write in 20 acres of lettuce harvested in item 2 of section 5.

Fruit 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 (exclude abandoned trees).

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.

Example: If 20 acres of cotton were grown in a 30 acre pecan orchard, you would report 20 acres of cotton in section 2, item 9, and 30 acres of pecans in section 4.

Avocados, Olives, Sugarcane

Avocados – For California report the quantity harvested from November 1, 1977 through November 30, 1978. For Florida report the quantity harvested from April 1978 through March 1979, estimating if necessary.

Olives - Report the quantity harvested from the bloom of 1977 for the October 1977 to March 1978 harvest season.

Sugarcane – For Florida and Texas report cuttings from November 1977 through April 1978. For Louisiana and Hawaii report for the 1978 crop year.

Section 9 -- GROSS VALUE OF CROPS SOLD

Report the values received during 1978, regardless of the year in which the crops were harvested. Give gross values (before deducting taxes and expenses). If full payment was not received for a crop or crops sold in 1978, report only the amount actually received in 1978.

For value of grains and cotton, include as sold the value of government CCC loans received in 1978 but not loans obtained from any other government or private source.

Section 10 - LAND USE

The purpose of this section is to classify the acres you reported in section 1, item 4, by principal use in 1978. Do not include any acres you rented TO others (reported in section 1, item 3).

Land Used for Multiple Purposes – If part of your land was used for more than one purpose in 1978, 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 2a, "Cropland harvested," but NOT as "Cropland used for cover crop, legumes, ... etc." (item 2c).

Double Cropping - When more than one crop was harvested from the same land in 1978, report that land only ONCE as "Cropland Harvested," item 2a of this section.

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

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Section 12-16 - LIVESTOCK AND POULTRY

Animals and Poultry to be included in the Report – Report all animals and poultry on the place on December 31, 1978. Include all owned by you and any kept by you for others. Include animals on unfenced land, on National Forest land, on district land or cooperative grazing association land, or on rangeland administered by the Bureau of Land Management on a per-head or lease basis (such as on wheat pasture). Include poultry (broilers, layers, turkeys, etc.) fed under contract on "This Place." Include livetock and poultry kept on this place for home use, 4H projects, etc.

Number sold — Report all animals and poultry sold or removed from this place including those sold for a landlord or given to a landlord as his share or to others in trade or in payment for goods and services. Include animals of all ages without regard to ownership or who shared in the receipts if the animals were located on the place 30 days or more and were sold or removed from the place in 1978.

Sales from Contract and Custom Feeding Operations – Include animals and poultry (including poultry under contract) fed on this place on a contract or custom basis if they were removed from the place in 1978.

Value of Sales ~ Be sure to report the total gross value of sales of animals and poultry without deducting cost of iteed, cost of livestock purchased, cost of hauling and selling, etc. If the sale price or value is not known, give your best estimate of their value when they left this place.

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

Animals to be Excluded from the Report – Do not report any animals or poultry kept under a share arrangement on land rented TO others in 1978.

Animals Sold from Another Place – Animals owned by you, but held and sold from someone else's place should NOT be included. For example, do not report cattle purchased elsewhere, fed in, and sold from a feediot not part of this place.

Animals Bought and Sold – Do not include animals bought and resold within 30 days. Such purchases and sales are considered "dealer" transactions.

Fat Cattle Sales - Do not include with fattened cattle in item 3a of section 12:

- Veal calves which were fattened primarily on milk, or
- b. Dairy cows fed only the usual dairy ration before being sold, or
- c. Cattle and calves that were sold for further feeding.

All Other Livestock – Specify the name of any other livestock, animal specialty, or livestock products on or sold from this place that have not been accounted for elsewhere on this form.

Example: Bees sold (colonies, packages, pounds); semen sales, animals bred and sold for laboratory use; birds, frogs, etc.

Section 19 - TYPE OF ORGANIZATION

Use the following definitions to assist you in determining the type of organization for your operation:

Individual or Family Operation (Sole Proprietorship) – 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 the agreement to share contributions, decisionmaking, profits, and liabilities exists. Producing products under contract or under a share rental agreement does not constitute a partnership.

Corporation - 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.

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 fund of money or property administered for the benefit of another individual or organization), prison farm, grazing association, Indian reservation, etc.

Section 20 - 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 (Sole Proprietorship) ~ Complete this section for the operator.

For Partnership Operations - Complete items 1 through 5 and 7 (of this section) for the "Senior Partner." The "Senior Partner" is the individual who is mainly responsible for the agricultural operations on this place. Consider the oldest partner as the "Senior Partner" if each shares equally in the day-to-day management decisions. For item 6 (Principal Occupation) consider all members of the partnership together. Please include as "Farming" worktime at all types of agricultural enterprises, including specialties, such as greenhouses, nurseries, mushrooms, ranching, feed lots, broiler feeding, etc.

For Incorporated and Other Operations (Cooperatives, Estates, stc.) - Complete section 20 for the person in charge, such as hired manager, business manager, or other person primarily responsible for the on-site, day-to-day operation of the farm or ranch business.

Section 22 - COMMERCIAL FERTILIZER

Report acres on which commercial fertilizer was applied during 1978. If some acres where fertilized more than once, report acres ONLY ONCE.

Section 24 — MACHINERY AND EQUIPMENT The estimated market value in item 1 refers to ALL machinery and equipment kept 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 26 – 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 1978. Please give estimates if you do not know the exact figures. For example, if you grew broilers or fed cattle for others, include in item 1, as purchases, your best estimate of the value of the baby chicks or cattle at the time they were brought to this place. Also include in item 2, the value and amount of all feed purches by you or someone else for use on this place.

Do not include expenses related to nonfarm activities (trading and speculation, or livestock dealer activities).

Hired Labor – Expenditures for hired labor should include gross weges or salaries, commissions, paid bonuses, and leave pay before deductions, plus the value of benefits paid by you – Social Security taxes, unemployment insurance, etc. Do not include room and board, house rent, or other items paid in kind.

ролы 78-А1(А) U.S. DE (#-28-78)	FARTMENT OF COMMERCE BUREAU OF THE CENSUS	Form Approved: O.M.B. No. 41-S78038 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 sword Census employees and may be used only for statistical burgers. Your report CANNOT he used for numerical of lavation investigation.								
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sumber? 9. Do you have a Federal YES - Enter Employer Identification YES - Enter	of this r the El number	place?	L	(1) Location (State and	(county)	Name				
Number for this farm or ND				(2) Location (State and	(county)	Name				
Part II - TYPE OF ORGANIZAT Mark (X) type of organization as shown in co. for that type, Complete only one pair of this	'ION lumn 8 of A3 Listing Sheet an nave, Date reported for subs	id ask que equint se	stions	5. During the past two y has this farm or ranci used any name or add	ears, 1 Iress	Name				
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operated under any name [] NO atter than your own?	Post Office	State	ZIP code	6. Does this farm of ran manager who is prime the farm of ranch ope	ch employ a hirsd rily in charge of rations?	. 1 [] YES – Go to Item 7	2 🗆 NO	SKIP to Item 8		
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ollow than the one (have listed?	Mailing address - Roule/	bute/Box/Street		Other - Specify a end inter	nd view	Mailing address - Ro	s - Route' Box/Street			
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4. Who is the blood manager?	Mailing address - Routel	Box/Stree	ət	Type D - OTHER ORG	ANIZATIONS					
Item 5 - SKIP to page 2 () Other - Specify and SKIP to page 2	Post Office	State	ZIP code	4 1. What type of organiza	ition operates of C	ontrois the operations of	l this farm or	ranch unit?		
Type B - PARTNERSHIP OPERATION	Name		<u> </u>	2 Trust	€ State Gove	roment 6[_]	uther - Speci	2		
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3. What is the name and mailing address	of each pastner? Do not list					Name		1		
[] Other - Specify (Use "Remarks"	If more space.is required.)			 What is the name and address used for this or ranch energion? 	mailing farm	Mailing address - R	oute/Box/Stre	et		
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 Does this partnership employ a hired primarily in charge of the farm or rand 	namager who is h operations? 2 1 NO	S - Go to) - SKIP t	item S o item S	matiing address?		Post Office	State	ZIP code		
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Other - Specify and and Interview S. Which partner is primarily in charge	Mailing address - Route/	Box/Stree	ZIP code	6. Who is the hired man	ager1 part 1,	saturi Q		T ABOUTY T		
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item 5 - SKIP to page 2	7			Uner - Specify a end inter	no view	Post Office	State	ZIP code		