Volume 1

State and County Data

Part 11

Hawaii

AC78-A-11

1978 CENSUS OF AGRICULTURE

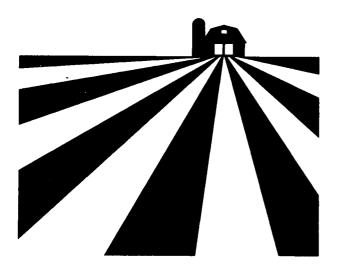
U.S. Department of Commerce BUREAU OF THE CENSUS



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1978 CENSUS OF AGRICULTURE

Volume 1 **State and County Data**



Part 11 **Hawaii**AC78-A-11

Issued June 1981



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HISTORY

The census of agriculture provides a periodic statistical picture of the Nation's farming, ranching, and related activities. The 1978 Census of Agriculture is the 21st taken by the U.S. Department of Commerce, Bureau of the Census.

The first agriculture census was taken in 1840 as part of the sixth decennial census. From 1840 to 1950, an agriculture census was taken as part of the decennial census of population. A mid-decade census of agriculture was conducted in 1925, 1935, and 1945. From 1954 to 1974 a census of agriculture was taken for the years ending in 4 and 9. In 1976, Congress authorized the census of agriculture to be taken for 1978 and 1982 to adjust the data reference year to coincide with the 1982 Economic Censuses covering manufacturing, mining, construction, retail trade, wholesale trade, service industries, and selected transportation activities. Thereafter, the agriculture census will revert to a 5-year cycle.

AUTHORITY AND AREA COVERED

The census of agriculture is authorized under the provisions of title 13, United States Code. Section 142(a) provides for the census to be taken in 1979, in 1983, and in every fifth year after 1983. Section 191 provides that the census shall include each State, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. A census of agriculture will be conducted in American Samoa and the Northern Mariana Islands in conjunction with the 1980 Census of Population and Housing.

FARM DEFINITION

Since 1850, when minimum criteria defining a farm for census purposes were first established, the farm definition has been changed nine times, as the Nation has grown and changed. The current definition was announced on August 12, 1975, in accordance with a joint agreement between the U.S. Department of Agriculture, the Office of Management and Budget, and the Bureau of the Census. It defines a farm, for statistical purposes, as any place from which \$1,000 or more of agri-

cultural products were sold or normally would have been sold during the census year. The previous definition (used for the 1959, 1964, and 1969 censuses, and for the 1974 preliminary county reports) counted as a farm any place with less than 10 acres from which \$250 or more of agricultural products were sold or normally would have been sold during the census year, or any place of 10 acres or more from which \$50 or more of agricultural products were sold or normally would have been sold during the census year.

METHOD OF ENUMERATION

Evaluation studies of the 1969 and 1974 censuses, which were conducted primarily by mail, indicated that the administrative lists used to create the census mailing list were not adequate to assure complete coverage in the census. Also, censuses prior to 1969, conducted by direct enumeration, had been found by evaluation studies (conducted since 1950) to be progressively less and less complete, as increased mobility of farm operators led to increases in the numbers of nonresident operators, operators farming on a part-time basis, and operators farming two or more separate tracts.

The 1978 Census of Agriculture was conducted primarily by mail for maximum economy, supplemented by a personal canvass of a statistical area segment sample for maximum completeness of coverage. The area segment sample, which consists of selected geographic areas completely canvassed by direct enumeration, provides reliable estimates for States of the number and characteristics of any farms not represented in the mail portion of the census. Estimates for such farms are an integral part of the State totals published for the 1978 census. The direct enumeration sample estimates are statistically reliable only for State totals and have not been allocated to counties. Appendix A provides a more detailed description of how the 1978 census was taken and includes a discussion of census coverage.

COMPARABILITY OF DATA

State totals for 1978 are not directly comparable with totals for 1974 or earlier censuses as they include data for farm operations represented on the mail list plus estimates from the direct enumeration sample for farms not represented on the mail list. The 1974 State level data include only operations represented on the mail list.

Coverage evaluation studies for the 1974 census indicated that 10.7 percent of all farms were not included in the census. Farms missed in the census were usually small and accounted for less than 3 percent of the total value of agricultural products sold and less than 6 percent of the land in farms. The proportion of farms missed in the 1974 census was generally higher in

States having a large proportion of small farms and urbanized areas having a sizable number of part-time farms. Farm counts for 1974, adjusted for the net undercount, are shown in appendix C.

County level data on acreages and inventories for 1978 and 1974 are generally comparable; however, improvements in the coverage of the 1978 census, especially of smaller farms, should be taken into consideration when comparing farm counts.

USE OF SAMPLING

Two types of sampling were used for data collection for the 1978 census. In addition to the State estimates from the direct enumeration sample discussed previously, data for items in sections 22 through 27 of the census report form were collected from only a sample of farms. Data based on a sample are subject to sampling error. Detailed discussions of the census report forms, the use of sampling, and estimates of sampling error are included in appendix A.

GRAPHICS

Several charts and maps presented on the following pages show selected agricultural statistics for this State. The items in the charts and the first four maps are presented for all States. The last four maps present data of particular importance to this State.

TABULAR PRESENTATION

State data—In chapter 1, State tables 1 through 28 show detailed State level data usually accompanied by historical data for one or more censuses. Tables 29 through 35 provide 1978 State data cross-tabulated by various farm classifications.

County summary data—Selected data items are presented by county in chapter 2. Tables 1 through 15 include general data such as land in farms, size of farms, land use, operator characteristics, expenses, and machinery and equipment. Inventory and sales data for livestock, poultry, and animal specialties are contained in tables 16 through 27 and detailed crop data in tables 28 through 35. Tables 36 through 43 present data on foreign ownership, income from customwork, direct sales to consumers, operators by racial group, and female operators.

Individual county data—Five pages of tables are presented in chapter 3 for each county with 10 farms or more in 1978. The tables include final data for each county and are more comprehensive than those in the preliminary reports. Data are provided for all farms and for farms with sales of \$2,500 or more for both 1978 and 1974.

This chapter also includes a set of similar tables for the State as a whole and for those farms in the State not on the mailing list and not included in county tables.

PRELIMINARY REPORTS

Preliminary reports have been published separately for all counties in the United States with 10 farms or more in 1978, each State, the four geographic regions, and the United States. This series provided, at the earliest possible date, information on major data items, with comparable final data from the 1974 census. The data items were standard for each State and county except in table 3 where the selected crops varied by State according to their relative importance in the State. The State preliminary report also included a full set of tables providing data derived from the direct enumeration sample on the estimated number and characteristics of farms not included in county totals because they were not represented on the mailing list.

For major data items at the county level differences between the preliminary and final figures are in general less than 5 percent. At the State level, differences are significantly less.

CENSUS DISCLOSURE RULES

In keeping with the provisions of title 13, United States Code, data that would disclose the operations of an individual farm are not published. However, the number of farms in a given size category or other classification is not considered a disclosure. Appendix A presents additional information on disclosure rules.

DEFINITIONS AND EXPLANATIONS

Appendix A includes definitions and explanations of selected terms used in the tables.

"SEE TEXT" REFERENCE

Items in the tables which are followed by the reference "See text" are explained or defined in appendix A.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- Zero.
- (D) Data withheld to avoid disclosing information for individual farms.
- (X) Not applicable.
- (Z) Less than half of the unit reported.
- (NA) Not available.
- Independent city.

Highlights of the State's Agriculture: 1978 and 1974

		All farms	······································	Farms with sales of \$2,500 or more						
	1978		19741	1978		19741				
	Total	Not on mail list	Total	Total	Not an mail list	Total				
Farmsnumber	4 310		3 020	2 898	-	2 092 2 090 210				
Land in farms acres	1 988 282	- i	2 118 976	1 940 451 670	_f	2 070 210				
Average size of farm acres	461	-1	702 151 433	156 006		149 773				
Harvested cropland acres Average per form acres	158 639 37	-	50	136 000	-	72				
Farms by size:			2 505	2 450	_	1 670				
1 to 49 acres number_	3 738	~	398	329	_1	310				
50 to 499 acres number 500 to 999 acres number	442 24		23	19	-]	20]				
1,000 acres or morenumber_	106	-	, 94	100	-	92				
Value of land and buildings:2	413 948		340 570	547 693	_]	455 173				
Average per farmdollars	413 948 897	-	485	818	_[456				
Average per acredollars		-}	97 279	164 096	_	93 842				
Value of machinery and equipment on farms? \$1,000 _ Average per farm dollars	172 521 40 028	-	32 212	56 624	-1	44 858				
Value of agricultural products sold\$1,000	419 251	_	609 788	417 456	-	608 466				
Average per form dollars	97 274	-1	201 917	144 050	-	290 854				
Crops sold\$1,000	331 020	-	536 537	329 849	-	535 605 256 025				
Average per form dollars	76 803	-	177 661	113 820	-}	256 023 56 815				
Livestock and livestock products sold\$1,000	71 043	-	57 195	70 435	-i	27 158				
Average per farmdollars	16 483	-1	18 939	24 305 17 171	-1	16 032				
Poultry and poultry products sold\$1,000 Average per form dollars	17 187 3 988	-	16 042 5 312	5 925	-1	7 663				
Farms by value of agricultural products sold:	1 398		983		_	741				
Less than \$2,500 number_ \$2,500 to \$9,999 number_	1 360		894	1 360	_ {	894				
\$10,000 to \$39,999	945		600	945		600				
\$40,000 to \$99,999number	313	_1	270	313	_ {	270				
\$100,000 to \$199,999number	117	_]	116	117	-1	116				
\$200,000 or more number	163	_1	138	163	-i	138				
Abnormal farmsnumber_	14	, (X)	19	(X)	(X)	∞				
Value of agricultural products sold by farms having sales of — Less than \$2,500\$1,000\$1,000	1 651		1 068	_	_[62				
\$2,500 to \$9,999\$1,000	7 147	_ [4 694	7 147	_	4 694				
\$10,000 to \$39,999\$1,000_	18 801	_1	12 582	18 801	_}	12 582				
\$40,000 to \$99,999\$1,000	19 605	_	17 103	19 605	-	17 103				
\$100,000 to \$199,999\$1,000	16 039	-	16 165	16 039	-1	16 165				
\$200,000 or more\$1,000	355 865	-1	557 859	355 865	-1	557 859				
Abnormal farms\$1,000	144	(20)	316	(X)	(X)	(X)				
Form production expenses for selected items: ² Feed for livestock and poultry\$1,000	34 227	Ì	37 136	33 988	1	36 956				
Seeds, bulbs, plants, and trees\$1,000	2 033	- <u>j</u>	1 014	1 922	T.I.	993				
Commercial fertilizer \$1,000_	26 530		18 807	26 196		18 631				
Other agricultural chemicals\$1,000_	13 700	_{-}	8 374	13 413	_}	8 303				
Petroleum products - gasoline, diesel, etc\$1,000	11 595	-	7 344	11 266	_	7 212				
Hired farm labor\$1,000	131 217	-	88 464	130 332	~	88 226				
Livestock and poultry inventory:	010.00:			010.757		202 151				
Cattle and calvesnumber	218 901	-1	227 461	210 797	-	222 151				
Hogs and pigs number	50 071	-	51 021	46 132	-1	48 810				
Sheep and lambs number Chickens 3 months old or older number	(D) 1 243 801	-	12 066 1 305 449	(D) 1 241 823	-	1 303 961				
Crops harvested:				00.0						
Sugarcane acres	99 065	-	(NA)	99 053	- 1	94 523				
All constables harmosted for agle	9 213 485	-i	(NA)	9 212 632	-	8 986 443				
All vegetables harvested for sale acres	5 509 17 948	- ((NA)	5 351 15 912	- }	3 056				
Land in orchards acres Pineapples acres	25 314	-	16 016 (NA)	25 309	-	14 861 29 530				
tons	685 502	- 1	(NA)	685 469	- }	692 760				
10115	003 302		(NA)	003 487		072 700				

¹Not fully comparable because of direct enumeration sample in 1978 totals; see text. ²1978 data are based on a sample of forms; see text.