

Table
Number **Table Name**

(Click on the table number to go to corresponding table)

Narrative

| | |
|-----------------------|---|
| 19.01 | Farms, Land in Farms, and Selected Items: 2007 and 2012 |
| 19.02 | Farms and Land in Farms, by County: 2012 |
| 19.03 | Number of Farms, Farm Acreage, and Farm Employment: 2000 to 2014 |
| 19.04 | Value of Crop and Livestock Sales: 1985 to 2014 |
| 19.05 | Number of Farms, Farm Acreage, and Farm Employment, by County: 1993 to 2011 |
| 19.06 | Value of Crop and Livestock Sales, by County: 1994 to 2011 |
| 19.07 | Acreage in Crop, Number of Crop Farms, and Value of Crop Sales: 2011 to 2014 |
| 19.08 | Acreage in Crop, Number of Crop Farms, and Value of Crop Sales, by County: 2011 |
| 19.09 | Specialty Crops, Fruits, and Vegetables: 2014 |
| 19.10 | Sugarcane Acreage, by Type of Irrigation: 1993 to 2015 |
| 19.11 | Livestock Inventory, 1987 to 2015 |
| 19.12 | Number of Livestock Operations and Value of Livestock Sales: 2011 to 2015 |
| 19.13 | Number of Livestock Operations and Value of Livestock Sales, by County: 2010 and 2011 |
| 19.14 | Floriculture and Nursery Products: 1998 to 2014 |
| 19.15 | Floriculture and Nursery Products, by Commodity: 2014 |
| 19.16 | Out-of-State Sales of Floriculture and Nursery Products: 2008 to 2012 |
| 19.17 | Agricultural Labor: Hired Workers on Farms, by Type of Farm, 1993 to 2011 |
| 19.18 | General Excise Tax Base for Producing: 1998 to 2015 |
| 19.19 | Agricultural Chemicals Used, Including Fertilizer: 2007 and 2012 |
| 19.20 | Aquaculture Industry Operations: 1990 to 2014 |
| 19.21 | Aquaculture Operations, Acreage, Production, and Value, by County: 2010 and 2011 |
| 19.22 | Farms, Land, and Value of Sales of Organic Agricultural Products: 2014 |

Section 19

AGRICULTURE

This section presents statistics on agricultural land, farms, crops, livestock, dairy products, poultry, and aquaculture. Related information appears in Sections 6 (land use), 12 and 15 (agricultural employment and earnings), and 22 (food processing).

Important sources for data on agriculture include the *United States Census of Agriculture*, most recently published for 2012, the annual report on *Statistics of Hawaii Agriculture* issued by the Hawaii Agricultural Statistics Service, and data compiled by the former Hawaiian Sugar Planters' Association, now the Hawaii Agriculture Research Center, and the Aquaculture Development Program of the Hawaii State Department of Agriculture. Agricultural data for earlier years are summarized in *Historical Statistics of Hawaii*, Section 13. National statistics appear in Section 17 of the *Statistical Abstract of the United States: 2012*.

**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:
2007 AND 2012**

| Item | Unit | 2007 | 2012 |
|--|---------|-----------|-----------|
| Farms | number | 7,521 | 7,000 |
| Land in farms | acres | 1,121,329 | 1,129,317 |
| Average size of farm | acres | 149 | 161 |
| Value of land and buildings 1/ | | | |
| Average per farm | dollars | 1,146,213 | 1,461,342 |
| Average per acre | dollars | 7,688 | 9,058 |
| Estimated market value of all machinery and equipment 1/ | | | |
| Total | \$1,000 | 304,997 | 307,994 |
| Average per farm | dollars | 40,666 | 43,999 |
| Farms by size | | | |
| 1 to 9 | acres | 4,813 | 4,412 |
| 10 to 49 | acres | 1,972 | 1,752 |
| 50 to 179 | acres | 423 | 480 |
| 180 to 499 | acres | 154 | 172 |
| 500 to 999 | acres | 44 | 57 |
| 1,000 or more | acres | 115 | 127 |
| Total cropland | farms | 6,281 | 5,551 |
| | acres | 177,626 | 174,042 |
| Harvested cropland | farms | 6,044 | 5,293 |
| | acres | 103,120 | 99,031 |
| Irrigated land | farms | 2,810 | 2,498 |
| | acres | 58,635 | 81,813 |
| Market value of agricultural products sold | \$1,000 | 513,626 | 661,347 |
| Average per farm | dollars | 68,292 | 94,478 |
| Crops, including nursery and greenhouse crops | \$1,000 | 429,916 | 538,873 |
| Livestock, poultry, and their products | \$1,000 | 83,711 | 122,474 |
| Farms by value of sales | | | |
| Less than \$2,500 | | 2,932 | 2,130 |
| \$2,500 to \$4,999 | | 1,012 | 902 |
| \$5,000 to \$9,999 | | 996 | 1,058 |
| \$10,000 to \$24,999 | | 1,143 | 1,397 |
| \$25,000 to \$49,999 | | 557 | 684 |
| \$50,000 to \$99,999 | | 353 | 323 |
| \$100,000 or more | | 528 | 506 |

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**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:
2007 AND 2012 -- Con.**

| Item | Unit | 2007 | 2012 |
|--|---------|---------|---------|
| Farm by type of organization | | | |
| Family or individual | | 6,363 | 5,685 |
| Partnership | | 437 | 446 |
| Corporation | | 617 | 637 |
| Other-cooperative, estate or trust, institutional, etc | | 104 | 232 |
| Operators by days worked off farm | | | |
| None | | 1,903 | 2,223 |
| Any | | 5,618 | 4,777 |
| 200 days or more | | 2,827 | 2,598 |
| Operators by principal occupation | | | |
| Farming | | 3,861 | 3,642 |
| Other | | 3,660 | 3,358 |
| Average age of principal operator | years | 58.6 | 60.4 |
| Total farm production expenses 1/ | \$1,000 | 486,648 | 659,262 |
| Livestock and poultry | | | |
| Cattle and calves inventory | farms | 1,142 | 1,314 |
| | number | 151,479 | 133,957 |
| Beef cows | farms | 853 | 1,173 |
| | number | 86,000 | (D) |
| Milk cows | farms | 15 | 12 |
| | number | 2,296 | (D) |
| Cattle and calves sold | farms | 713 | 711 |
| | number | 70,567 | 56,159 |
| Hogs and pigs inventory | farms | 225 | 231 |
| | number | 14,933 | 11,441 |
| Hogs and pigs sold | farms | 148 | 131 |
| | number | 20,569 | 12,529 |
| Broilers and other meat-type chickens sold | farms | 7 | 22 |
| | number | (D) | 2,639 |

Continued on next page.

**Table 19.01-- FARMS, LAND IN FARMS, AND SELECTED ITEMS:
2007 AND 2012 -- Con.**

| Item | Unit | 2007 | 2012 |
|--------------------------|---------|---------|---------|
| Selected crops harvested | | | |
| Corn for grain | farms | 14 | 15 |
| | acres | 3,115 | 5,198 |
| | bushels | 124,878 | 367,142 |
| Sugarcane for sugar | farms | 9 | 18 |
| | acres | (D) | (D) |
| | tons | (D) | (D) |
| Pineapples harvested | farms | 42 | 42 |
| | acres | (D) | (D) |
| | tons | (D) | (D) |
| Vegetables harvested | farms | 901 | 960 |
| | acres | 6,845 | 8,880 |
| Potatoes | farms | 15 | 38 |
| | acres | 7 | 26 |
| Sweet potatoes | farms | 94 | 143 |
| | acres | 297 | 882 |
| Land in orchards | farms | 4,443 | 3,488 |
| | acres | 36,652 | 35,832 |

D Withheld to avoid disclosing data for individual farms.

1/ Data are based on a sample of farms.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *2012 Census of Agriculture, Vol.1, Part 1, Hawaii* (May 2014), "Table 1. Historical Highlights: 2012 and Earlier Census Years", pp. 7-8.

Table 19.02-- FARMS AND LAND IN FARMS, BY COUNTY: 2012

| Item | Unit | Hawaii | Honolulu | Kauai | Maui |
|--|-----------------|-----------|-----------|-----------|-----------|
| Farms | number | 4,282 | 999 | 591 | 1,128 |
| Land in farms | acres | 686,856 | 69,168 | 144,127 | 229,166 |
| Average size of farm | acres | 160 | 69 | 244 | 203 |
| Value of land and buildings 1/ | | | | | |
| Average per farm | dollars | 1,280,898 | 1,396,597 | 1,853,486 | 1,998,208 |
| Average per acre | dollars | 7,985 | 20,171 | 7,600 | 9,836 |
| Estimated market value of all machinery and equipment 1/ | | | | | |
| Average per farm | \$1,000 dollars | 157,140 | 56,851 | 33,961 | 60,042 |
| | dollars | 36,698 | 56,908 | 57,464 | 53,228 |
| Farms by size | | | | | |
| 1 to 9 | acres | 2,610 | 743 | 348 | 711 |
| 10 to 49 | acres | 1,141 | 162 | 156 | 293 |
| 50 to 179 | acres | 326 | 51 | 42 | 61 |
| 180 to 499 | acres | 106 | 22 | 20 | 24 |
| 500 to 999 | acres | 37 | 3 | 7 | 10 |
| 1,000 or more | acres | 62 | 18 | 18 | 29 |
| Total cropland | farms | 3,398 | 835 | 416 | 902 |
| | acres | 72,028 | 22,200 | 30,236 | 49,578 |
| Harvested cropland | farms | 3,229 | 821 | 391 | 852 |
| | acres | 57,807 | (D) | 6,800 | (D) |
| Irrigated land | farms | 1,026 | 603 | 266 | 603 |
| | acres | 6,966 | 10,776 | 22,523 | 41,548 |
| Market value of agricultural products sold | \$1,000 | 247,245 | 161,488 | 64,514 | 188,100 |
| Average per farm | dollars | 57,741 | 161,650 | 109,160 | 166,755 |
| Crops, including nursery and greenhouse crops | \$1,000 | 156,384 | 145,313 | 55,696 | 181,480 |
| Livestock, poultry, and their products | \$1,000 | 90,860 | 16,176 | 8,817 | 6,620 |

D Withheld to avoid disclosing data for individual farms.

1/ Data are based on a sample of farms.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *2012 Census of Agriculture, Vol.1, Part 11, Hawaii* (May 2014), "Table 1. County Summary Highlights: 2012", p.208-209.

Table 19.03-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT: 2000 TO 2014

| Year | Number of farms 1/ | Farm acreage 2/ (1,000) | Farm employment 3/ | | |
|------|--------------------|-------------------------|---------------------------------|-----------------------------|---------------|
| | | | Self-employed farm operators 4/ | Unpaid family members 4/ 5/ | Hired workers |
| 2000 | 5,500 | 1,440 | 3,100 | 1,000 | 7,800 |
| 2001 | 5,500 | 1,350 | 3,300 | 1,100 | 7,400 |
| 2002 | 5,500 | 1,320 | 3,000 | 1,100 | 7,500 |
| 2003 | 5,500 | 1,300 | (NA) | (NA) | 7,300 |
| 2004 | 5,500 | 1,300 | (NA) | (NA) | 7,300 |
| 2005 | 5,500 | 1,300 | (NA) | (NA) | 7,000 |
| 2006 | 5,500 | 1,160 | (NA) | (NA) | 7,000 |
| 2007 | 7,500 | 1,120 | (NA) | (NA) | 6,500 |
| 2008 | 7,500 | 1,110 | 3,300 | 900 | 6,200 |
| 2009 | 7,500 | 1,110 | 3,500 | 1,000 | 6,200 |
| 2010 | 7,500 | 1,110 | 3,800 | 1,000 | 6,400 |
| 2011 | 7,500 | 1,110 | (6/) | (6/) | 7/ 7,100 |
| 2012 | 7,000 | 1,129 | (6/) | (6/) | 6,500 |
| 2013 | 7,000 | 1,129 | (6/) | (6/) | 6,500 |
| 2014 | 7,000 | 1,129 | (6/) | (6/) | 7,000 |

NA Not available.

1/ Based on farm definition of \$1,000 or more of agricultural sales.

2/ Includes land not in crop and pasture, such as farm house lots, roads, woodlots, etc.

3/ Working 15 or more hours per week.

4/ Total farm workforce, self-employed operators, and unpaid workers estimates were discontinued from July 2002 to April 2007 due to a change in the National labor statistics program.

5/ Unpaid farm workers include family members and others that worked 15 or more hours during the survey week.

6/ Beginning October 2011, data series discontinued.

7/ Annual averages are based on survey data for January, July, and October.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual) <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 17, 2013, and Hawaii Agricultural Statistics Service, records; U.S. Dept. of Agriculture, National Agricultural Statistics Service, *2012 Census of Agriculture, Vol.1, Part 1, Hawaii (May 2014)*, "Table 1. Historical Highlights: 2012 and Earlier Census Years", pp. 7-8; USDA National Agricultural Statistics Service, Reports *Farm Labor*, <http://usda.mannlib.cornell.edu/usda/current/FarmLabo/FarmLabo-12-05-2013_revision.pdf> accessed May 19, 2014, and records.

Table 19.04-- VALUE OF CROP AND LIVESTOCK SALES: 1985 TO 2014

[Thousands of dollars]

| Year | All crops and livestock | Crops | | | | Livestock |
|------|-------------------------|-----------------|--------------------------|----------------------------|-------------|-----------|
| | | All crops 1/ 2/ | Sugar (unprocessed cane) | Pine-apples (fresh equiv.) | Other crops | |
| 1985 | 528,649 | 445,826 | 222,400 | 90,530 | 132,896 | 82,823 |
| 1986 | 564,717 | 481,312 | 233,800 | 99,720 | 147,792 | 83,405 |
| 1987 | 557,298 | 469,565 | 218,000 | 99,286 | 152,279 | 87,733 |
| 1988 | 573,962 | 485,293 | 209,900 | 107,402 | 167,991 | 88,669 |
| 1989 | 585,048 | 493,261 | 210,300 | 98,310 | 184,651 | 91,787 |
| 1990 | 595,030 | 506,586 | 213,800 | 106,365 | 186,421 | 88,444 |
| 1991 | 551,382 | 464,139 | 174,900 | 107,775 | 181,464 | 87,243 |
| 1992 | 520,227 | 431,958 | 153,700 | 102,100 | 176,158 | 88,269 |
| 1993 | 506,475 | 421,593 | 163,000 | 79,850 | 178,743 | 84,882 |
| 1994 | 503,780 | 427,150 | 160,100 | 78,890 | 188,160 | 76,630 |
| 1995 | 493,385 | 421,089 | 127,700 | 87,360 | 206,029 | 72,296 |
| 1996 | 495,688 | 428,671 | 108,100 | 95,914 | 224,657 | 67,017 |
| 1997 | 488,159 | 420,360 | 85,500 | 91,721 | 243,139 | 67,799 |
| 1998 | 493,342 | 420,634 | 87,300 | 92,776 | 240,558 | 72,708 |
| 1999 | 512,992 | 443,111 | 86,800 | 101,448 | 254,863 | 69,881 |
| 2000 | 499,771 | 431,482 | 62,200 | 101,530 | 267,752 | 68,289 |
| 2001 | 502,178 | 437,438 | 57,800 | 96,337 | 283,301 | 64,740 |
| 2002 | 514,338 | 453,400 | 64,300 | 100,616 | 288,484 | 60,938 |
| 2003 | 520,473 | 461,680 | 64,400 | 101,470 | 295,810 | 58,793 |
| 2004 | 523,957 | 459,702 | 61,500 | 83,104 | 315,098 | 64,255 |
| 2005 | 554,387 | 493,991 | 58,900 | 79,288 | 355,803 | 60,396 |
| 2006 | 558,333 | 499,684 | 50,200 | 73,652 | 375,832 | 58,649 |
| 2007 | 552,889 | 498,338 | 47,600 | (D) | 450,738 | 54,551 |
| 2008 | 570,920 | 522,139 | 44,200 | (D) | 477,939 | 48,781 |
| 2009 | 609,520 | 553,862 | 44,200 | (D) | 509,662 | 55,658 |
| 2010 | 644,620 | 583,680 | 69,800 | (D) | 513,880 | 60,940 |
| 2011 | 679,504 | 602,881 | 78,100 | (D) | 524,781 | 76,623 |
| 2012 | 590,578 | 527,554 | 73,322 | (D) | 454,222 | 63,024 |
| 2013 | 583,038 | 521,182 | 77,740 | (D) | 443,442 | 61,856 |
| 2014 | 552,822 | 474,707 | 54,349 | (D) | 420,358 | 78,115 |

D Data not shown separately to avoid disclosure of individual operations but combined and included in total crop value.

1/ Sum of individual commodities may not add to total. Forage crops' and forest products' value combined and included in total crop value.

2/ Since 2007 pineapples included.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual)

<http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 17, 2013, and records.

Table 19.05-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, BY COUNTY: 1993 TO 2011

| County or island and year | Number of farms 1/ | Farm acreage 2/ (1,000) | Farm employment 3/ | | |
|---------------------------|--------------------|-------------------------|---------------------------------|-----------------------------|---------------|
| | | | Self-employed farm operators 4/ | Unpaid family members 4/ 5/ | Hired workers |
| State total | | | | | |
| 1993 | 5,200 | 1,560 | 2,800 | 1,100 | 8,700 |
| 1994 | 5,300 | 1,530 | 2,700 | 1,200 | 8,100 |
| 1995 | 5,300 | 1,470 | 2,700 | 1,000 | 7,300 |
| 1996 | 5,400 | 1,440 | 2,700 | 1,000 | 7,400 |
| 1997 | 5,500 | 1,440 | 2,700 | 1,200 | 7,000 |
| 1998 | 5,500 | 1,440 | 2,700 | 1,200 | 7,400 |
| 1999 | 5,500 | 1,440 | 3,000 | 1,200 | 7,600 |
| 2000 | 5,500 | 1,440 | 3,100 | 1,000 | 7,800 |
| 2001 | 5,500 | 1,350 | 3,300 | 1,100 | 7,400 |
| 2002 | 5,500 | 1,320 | 3,000 | 1,100 | 7,500 |
| 2003 | 5,500 | 1,300 | (NA) | (NA) | 7,300 |
| 2004 | 5,500 | 1,300 | (NA) | (NA) | 7,300 |
| 2005 | 5,500 | 1,300 | (NA) | (NA) | 7,000 |
| 2006 | 5,500 | 1,300 | (NA) | (NA) | 7,000 |
| 2007 | 7,500 | 1,120 | (NA) | (NA) | 6,500 |
| 2008 | 7,500 | 1,110 | 3,300 | 900 | 6,200 |
| 2009 | 7,500 | 1,110 | 3,500 | 1,000 | 6,200 |
| 2010 | 7,500 | 1,110 | 3,800 | 1,000 | 6,400 |
| 2011 | 7,500 | 1,110 | (6/) | (6/) | 7/ 7,100 |
| Hawaii | | | | | |
| 1993 | 3,000 | 920 | 1,800 | 650 | 3,300 |
| 1994 | 3,100 | 920 | 1,700 | 650 | 3,000 |
| 1995 | 3,150 | 890 | 1,750 | 550 | 2,550 |
| 1996 | 2,700 | 929 | 1,800 | 600 | 2,600 |
| 1997 | 3,300 | 870 | 1,800 | 700 | 2,450 |
| 1998 | 3,300 | 870 | 1,750 | 650 | 2,550 |
| 1999 | 3,300 | 870 | 1,850 | 600 | 2,400 |
| 2000 | 3,300 | 870 | 1,800 | 550 | 2,700 |
| 2001 | 3,250 | 840 | 1,950 | 550 | 2,650 |
| 2002 | 3,250 | 830 | 1,700 | 600 | 2,450 |
| 2003 | 3,250 | 820 | (NA) | (NA) | 2,750 |
| 2004 | 3,250 | 820 | (NA) | (NA) | 2,700 |
| 2005 | 3,250 | 820 | (NA) | (NA) | 2,500 |
| 2006 | 3,250 | 820 | (NA) | (NA) | 2,650 |
| 2007 | 4,650 | 680 | (NA) | (NA) | 2,500 |
| 2008 | 4,650 | 670 | (NA) | (NA) | 2,350 |
| 2009 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2010 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2011 | (8/) | (8/) | (NA) | (NA) | (8/) |

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Table 19.05-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, BY COUNTY: 1993 TO 2011 -- Con.

| County or island and year | Number of farms 1/ | Farm acreage 2/ (1,000) | Farm employment 3/ | | |
|---------------------------|--------------------|-------------------------|---------------------------------|-----------------------------|---------------|
| | | | Self-employed farm operators 4/ | Unpaid family members 4/ 5/ | Hired workers |
| Honolulu | | | | | |
| 1993 | 900 | 90 | 550 | 300 | 2,300 |
| 1994 | 900 | 90 | 500 | 350 | 2,050 |
| 1995 | 900 | 85 | 500 | 250 | 1,900 |
| 1996 | 900 | 92 | 450 | 200 | 2,000 |
| 1997 | 900 | 80 | 500 | 300 | 1,900 |
| 1998 | 900 | 80 | 450 | 250 | 2,100 |
| 1999 | 900 | 80 | 500 | 300 | 2,100 |
| 2000 | 900 | 80 | 500 | 200 | 2,200 |
| 2001 | 850 | 70 | 550 | 250 | 2,300 |
| 2002 | 800 | 70 | 550 | 250 | 2,100 |
| 2003 | 800 | 70 | (NA) | (NA) | 2,150 |
| 2004 | 800 | 70 | (NA) | (NA) | 2,200 |
| 2005 | 800 | 70 | (NA) | (NA) | 2,050 |
| 2006 | 800 | 70 | (NA) | (NA) | 1,950 |
| 2007 | 950 | 60 | (NA) | (NA) | 1,650 |
| 2008 | 950 | 60 | (NA) | (NA) | 1,600 |
| 2009 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2010 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2011 | (8/) | (8/) | (NA) | (NA) | (8/) |
| Kauai | | | | | |
| 1993 | 450 | 200 | 200 | 100 | 1,050 |
| 1994 | 450 | 200 | 200 | 50 | 1,050 |
| 1995 | 450 | 200 | 200 | 150 | 1,000 |
| 1996 | 400 | 214 | 200 | 100 | 1,000 |
| 1997 | 500 | 200 | 200 | 100 | 850 |
| 1998 | 500 | 200 | 200 | 100 | 800 |
| 1999 | 500 | 200 | 250 | 100 | 900 |
| 2000 | 500 | 200 | 300 | 50 | 950 |
| 2001 | 550 | 170 | 350 | 150 | 650 |
| 2002 | 600 | 160 | 250 | 100 | 750 |
| 2003 | 600 | 150 | (NA) | (NA) | 750 |
| 2004 | 600 | 150 | (NA) | (NA) | 650 |
| 2005 | 600 | 150 | (NA) | (NA) | 700 |
| 2006 | 600 | 150 | (NA) | (NA) | 700 |
| 2007 | 750 | 150 | (NA) | (NA) | 650 |
| 2008 | 750 | 150 | (NA) | (NA) | 550 |
| 2009 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2010 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2011 | (8/) | (8/) | (NA) | (NA) | (8/) |

Continued on next page.

Table 19.05-- NUMBER OF FARMS, FARM ACREAGE, AND FARM EMPLOYMENT, BY COUNTY: 1993 TO 2011 -- Con.

| County or island and year | Number of farms 1/ | Farm acreage 2/ (1,000) | Farm employment 3/ | | |
|---------------------------|--------------------|-------------------------|---------------------------------|-----------------------------|---------------|
| | | | Self-employed farm operators 4/ | Unpaid family members 4/ 5/ | Hired workers |
| Maui | | | | | |
| 1993 | 850 | 350 | 300 | 100 | 2,050 |
| 1994 | 850 | 320 | 250 | 100 | 2,000 |
| 1995 | 800 | 295 | 300 | 100 | 1,850 |
| 1996 | 600 | 355 | 300 | 150 | 1,850 |
| 1997 | 800 | 290 | 300 | 100 | 1,850 |
| 1998 | 800 | 290 | 350 | 150 | 1,950 |
| 1999 | 800 | 290 | 450 | 200 | 2,200 |
| 2000 | 800 | 290 | 500 | 150 | 2,000 |
| 2001 | 850 | 270 | 500 | 150 | 1,800 |
| 2002 | 850 | 260 | 500 | 150 | 2,250 |
| 2003 | 850 | 260 | (NA) | (NA) | 1,650 |
| 2004 | 850 | 260 | (NA) | (NA) | 1,800 |
| 2005 | 850 | 260 | (NA) | (NA) | 1,700 |
| 2006 | 850 | 260 | (NA) | (NA) | 1,750 |
| 2007 | 1,150 | 230 | (NA) | (NA) | 1,700 |
| 2008 | 1,150 | 230 | (NA) | (NA) | 1,700 |
| 2009 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2010 | (8/) | (8/) | (NA) | (NA) | (8/) |
| 2011 | (8/) | (8/) | (NA) | (NA) | (8/) |

NA Not available.

1/ Based on farm definition of \$1,000 or more of agricultural sales.

2/ Includes land not in crops and pasture, such as farm house lots, roads, woodlots, etc.

3/ Data not comparable among years shown due to changes in survey periods; sum of county estimates may not add due to rounding.

4/ Total farm workforce, self-employed operators, and unpaid workers estimates were discontinued from July 2002 to April 2007 due to a change in the National labor statistics program.

5/ Unpaid farm workers include family members and others that worked 15 or more hours during the survey week.

6/ Beginning October 2011, data series discontinued.

7/ Annual averages are based on survey data for January, July, and October.

8/ County estimates not published due to staff reduction-in-force but combined and included in the State total.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual)
<http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp>
accessed June 19, 2013, and Hawaii Agricultural Statistics Service, records.

**Table 19.06-- VALUE OF CROP AND LIVESTOCK SALES, BY COUNTY:
1994 TO 2011**

[Thousands of dollars]

| County or island and year | All crops and livestock | Crops | | | | Livestock |
|------------------------------|----------------------------|--------------|-------------------------------------|---|-------------------|-----------|
| | | All crops | Sugar (unpro- cessed cane) | Pine- apples 1/ (fresh equiv.) | Other crops 1/ | |
| State total | | | | | | |
| 1994 | 503,780 | 427,150 | 160,100 | 78,890 | 188,160 | 76,630 |
| 1995 | 493,385 | 421,089 | 127,700 | 87,360 | 206,029 | 72,296 |
| 1996 | 488,303 | 422,568 | 108,100 | 95,914 | 218,554 | 65,735 |
| 1997 | 486,460 | 418,661 | 85,500 | 91,721 | 241,440 | 67,799 |
| 1998 | 493,442 | 420,734 | 87,400 | 92,776 | 240,558 | 72,708 |
| 1999 | 512,992 | 443,111 | 86,800 | 101,448 | 254,863 | 69,881 |
| 2000 | 499,730 | 431,482 | 62,200 | 101,530 | 267,752 | 68,248 |
| 2001 | 502,181 | 437,438 | 57,800 | 96,337 | 283,301 | 64,743 |
| 2002 | 514,338 | 453,400 | 64,300 | 100,616 | 288,484 | 60,938 |
| 2003 | 520,473 | 461,680 | 64,400 | 101,470 | 295,810 | 58,793 |
| 2004 | 523,957 | 459,702 | 61,500 | 83,104 | 315,098 | 64,255 |
| 2005 | 554,387 | 493,991 | 58,900 | 79,288 | 355,803 | 60,396 |
| 2006 | 558,333 | 499,684 | 50,200 | 73,652 | 375,832 | 58,649 |
| 2007 | 552,889 | 2/ 498,338 | 47,600 | (D) | 450,738 | 54,551 |
| 2008 | 570,920 | 2/ 522,139 | 44,200 | (D) | 477,939 | 48,781 |
| 2009 | 609,520 | 2/ 553,862 | 44,200 | (D) | 509,662 | 55,658 |
| 2010 | 644,620 | 2/ 583,680 | 69,800 | (D) | 513,880 | 60,940 |
| 2011 | 679,504 | 2/ 602,881 | 78,100 | (D) | 524,781 | 76,623 |
| Hawaii | | | | | | |
| 1994 | 161,475 | 140,770 | 35,800 | (D) | 104,970 | 20,705 |
| 1995 | 146,427 | 128,564 | 12,200 | (D) | 116,364 | 17,863 |
| 1996 | 141,910 | 125,915 | 1,700 | (D) | 124,215 | 15,995 |
| 1997 | 149,965 | 130,887 | - | (D) | 130,887 | 19,078 |
| 1998 | 142,522 | 121,676 | - | (D) | 121,676 | 20,846 |
| 1999 | 144,470 | 121,939 | - | (D) | 121,939 | 22,531 |
| 2000 | 154,240 | 128,161 | - | (D) | 128,161 | 26,079 |
| 2001 | 160,258 | 134,380 | - | (D) | 134,380 | 25,878 |
| 2002 | 155,651 | 128,426 | - | (D) | 128,426 | 27,225 |
| 2003 | 159,592 | 132,331 | - | (D) | 132,331 | 27,261 |
| 2004 | 174,388 | 143,972 | - | (D) | 143,972 | 30,416 |
| 2005 | (D) | 164,772 | - | (D) | (D) | (D) |
| 2006 | 183,177 | 152,302 | - | (D) | (D) | 30,875 |
| 2007 | 173,572 | 140,895 | - | (D) | (D) | 32,677 |
| 2008 | 165,525 | 137,086 | - | (D) | (D) | 28,439 |
| 2009 | (NA) | (3/) | - | (D) | (D) | (3/) |
| 2010 | (NA) | (3/) | - | (D) | (D) | (3/) |
| 2011 | (NA) | (3/) | - | (D) | (D) | (3/) |

Continued on next page.

**Table 19.06-- VALUE OF CROP AND LIVESTOCK SALES, BY COUNTY:
1994 TO 2011 -- Con.**

[Thousands of dollars]

| County or island and year | All crops and livestock | Crops | | | | Livestock |
|------------------------------|----------------------------|--------------|-------------------------------------|---|-------------------|-----------|
| | | All crops | Sugar (unpro- cessed cane) | Pine- apples 1/ (fresh equiv.) | Other crops 1/ | |
| Honolulu | | | | | | |
| 1994 | 160,678 | 119,958 | 30,600 | 53,690 | 35,668 | 40,720 |
| 1995 | 162,578 | 123,074 | 21,000 | 62,585 | 39,489 | 39,504 |
| 1996 | 156,582 | 121,143 | 10,400 | 68,770 | 41,973 | 35,439 |
| 1997 | 142,256 | 107,347 | - | 63,426 | 43,921 | 34,909 |
| 1998 | 160,819 | 124,630 | - | 64,363 | 60,267 | 36,189 |
| 1999 | 179,324 | 142,407 | - | 73,123 | 69,284 | 36,917 |
| 2000 | 177,704 | 145,784 | - | 72,085 | 73,699 | 31,920 |
| 2001 | 177,462 | 146,504 | - | 69,222 | 77,282 | 30,958 |
| 2002 | 179,778 | 153,725 | - | 70,992 | 82,733 | 26,053 |
| 2003 | 178,852 | 154,228 | - | 71,029 | 83,199 | 24,624 |
| 2004 | 163,974 | 138,878 | - | 54,704 | 84,174 | 25,096 |
| 2005 | (D) | 133,918 | - | (D) | (D) | (D) |
| 2006 | (D) | 146,013 | - | (D) | (D) | (D) |
| 2007 | (D) | 140,811 | - | (D) | (D) | (D) |
| 2008 | (D) | 166,679 | - | (D) | (D) | (D) |
| 2009 | (NA) | (3/) | - | (D) | (D) | (3/) |
| 2010 | (NA) | (3/) | - | (D) | (D) | (3/) |
| 2011 | (NA) | (3/) | - | (D) | (D) | (3/) |
| Kauai | | | | | | |
| 1994 | 54,438 | 49,975 | 35,200 | (D) | 14,775 | 4,463 |
| 1995 | 59,631 | 55,387 | 35,100 | (D) | 20,287 | 4,244 |
| 1996 | 65,988 | 61,814 | 38,800 | (D) | 23,014 | 4,174 |
| 1997 | 63,425 | 59,425 | 31,600 | (D) | 27,825 | 4,000 |
| 1998 | 54,728 | 49,612 | 28,700 | (D) | 20,912 | 5,116 |
| 1999 | 57,933 | 53,390 | 26,600 | (D) | 26,790 | 4,543 |
| 2000 | 46,739 | 42,886 | 18,500 | (D) | 24,386 | 3,853 |
| 2001 | 40,790 | 38,292 | 12,900 | (D) | 25,392 | 2,498 |
| 2002 | (D) | 40,854 | 13,000 | (D) | 27,854 | (D) |
| 2003 | (D) | 47,077 | 13,500 | (D) | 33,577 | (D) |
| 2004 | (D) | 47,652 | 15,300 | (D) | 32,352 | (D) |
| 2005 | (D) | 49,318 | 14,700 | (D) | (D) | (D) |
| 2006 | (D) | 60,352 | 9,500 | (D) | (D) | (D) |
| 2007 | (D) | 65,989 | 9,800 | (D) | (D) | (D) |
| 2008 | (D) | 74,646 | 9,700 | (D) | (D) | (D) |
| 2009 | (NA) | (3/) | 14,200 | (D) | (D) | (3/) |
| 2010 | (NA) | (3/) | - | (D) | (D) | (3/) |
| 2011 | (NA) | (3/) | - | (D) | (D) | (3/) |

Continued on next page.

**Table 19.06-- VALUE OF CROP AND LIVESTOCK SALES, BY COUNTY:
1994 TO 2011 -- Con.**

[Thousands of dollars]

| County or island and year | All crops and livestock | Crops | | | | Livestock |
|------------------------------|----------------------------|--------------|-------------------------------------|---|-------------------|-----------|
| | | All crops | Sugar (unpro- cessed cane) | Pine- apples 1/ (fresh equiv.) | Other crops 1/ | |
| Maui | | | | | | |
| 1994 | 127,189 | 116,447 | 58,500 | 25,150 | 32,797 | 10,742 |
| 1995 | 124,748 | 114,064 | 59,400 | 24,775 | 29,889 | 10,684 |
| 1996 | 123,823 | 113,696 | 57,200 | 27,144 | 29,352 | 10,127 |
| 1997 | 126,266 | 116,453 | 53,900 | 28,295 | 34,258 | 9,813 |
| 1998 | 135,373 | 124,816 | 58,700 | 28,413 | 37,703 | 10,557 |
| 1999 | 131,265 | 125,375 | 60,200 | 28,325 | 36,850 | 5,890 |
| 2000 | 121,047 | 114,651 | 43,700 | 29,445 | 41,506 | 6,396 |
| 2001 | 123,671 | 118,262 | 44,900 | 27,115 | 46,247 | 5,409 |
| 2002 | (D) | 130,395 | 51,300 | 29,624 | 49,471 | (D) |
| 2003 | (D) | 128,043 | 50,900 | 30,441 | 46,702 | (D) |
| 2004 | (D) | 129,200 | 46,200 | 28,400 | 54,600 | (D) |
| 2005 | (D) | 145,983 | 44,200 | (D) | (D) | (D) |
| 2006 | (D) | 141,017 | 40,700 | (D) | (D) | (D) |
| 2007 | (D) | 150,643 | 37,800 | (D) | (D) | (D) |
| 2008 | (D) | 143,728 | 34,500 | (D) | (D) | (D) |
| 2009 | (NA) | (3/) | 30,000 | (D) | (D) | (3/) |
| 2010 | (NA) | (3/) | 69,800 | (D) | (D) | (3/) |
| 2011 | (NA) | (3/) | 78,100 | (D) | (D) | (3/) |

D Data not shown to avoid disclosure of individual operations but included in State total.

NA Not available.

1/ County data may fail to add exactly to State total.

2/ Includes an undisclosed value of pineapple.

3/ County estimates not published due to staff reduction-in-force but combined and included in the State total.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual)

and <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp>
accessed June 17, 2013.

Table 19.07-- ACREAGE IN CROP, NUMBER OF CROP FARMS, AND VALUE OF CROP SALES: 2011 TO 2014

| Subject | 2011 | 2012 | 2013 | 2014 |
|---|---------|---------|---------|---------|
| Acreage in crop (1,000 acres) | | | | |
| Sugarcane | 34.3 | 35.3 | 35.6 | 35.4 |
| Pineapples (land used for pineapple) | (D) | (D) | (D) | (D) |
| Vegetables and melons (harvested acreage) | 2.7 | 2.5 | 3.6 | 3.4 |
| Fruits, excluding pineapples | 3.9 | (NA) | 3.7 | 4.0 |
| Coffee | 1/ 7.7 | 7.9 | 8.2 | 7.8 |
| Macadamia nuts | 17.0 | 15.0 | 16.0 | 16.0 |
| All other crops | 19.2 | 17.9 | 18.0 | 18.1 |
| Number of crop farms | | | | |
| Sugar | 1 | (D) | (D) | (D) |
| Pineapples | 30 | (D) | (D) | (D) |
| Vegetables and melons 2/ | 540 | (D) | (D) | (D) |
| Fruits (excluding pineapples) | 1,600 | (D) | (D) | (D) |
| Coffee | 830 | (D) | (D) | (D) |
| Macadamia nuts | 570 | (D) | (D) | (D) |
| Taro | 115 | (D) | (D) | (D) |
| Flowers and nursery products | 970 | (D) | (D) | (D) |
| Value of crop sales (\$1,000) | | | | |
| Sugar (unprocessed cane) | 78,100 | 73,322 | 77,740 | 54,349 |
| Pineapples (fresh equivalent) | (D) | (D) | (D) | (D) |
| Vegetables, ginger root, herbs, and melons 3/ | 28,822 | 34,152 | 43,491 | 39,790 |
| Fruits (excluding pineapples) | 21,915 | (NA) | 22,380 | 24,972 |
| Coffee (parchment) | 31,540 | 41,300 | 52,080 | 54,270 |
| Macadamia nuts (in shell) | 38,200 | 35,200 | 35,670 | 40,020 |
| Taro | 2,747 | (D) | (D) | (D) |
| Seed crops | 242,970 | 241,615 | 184,235 | 158,800 |
| Flowers and nursery products | 69,600 | 70,300 | 72,292 | 67,162 |

D Data not shown separately to avoid disclosure of individual operations but combined and included with all other crops.

NA Not available.

1/ Revised from previous *Data Book*.

2/ Beginning 2007, ginger root, herbs, noni, kava ('awa) and others combined and included in the Total (non-duplicated).

3/ Includes noni, kava ('awa), and others. Beginning 2007, non-published commodities not included to avoid disclosure of individual operations but combined and included in total crop value.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual) <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 19, 2013, and records.

Table 19.08-- ACREAGE IN CROP, NUMBER OF CROP FARMS, AND VALUE OF CROP SALES, BY COUNTY: 2011

| Subject | Hawaii | Honolulu | Kauai | Maui |
|--|--------|----------|-------|--------|
| Acreage in crop (1,000 acres) | | | | |
| Sugarcane | - | - | - | 34.3 |
| Pineapples (land used for pineapple) | (D) | (D) | (D) | (D) |
| Vegetables and melons (harvested acreage) | (1/) | (1/) | (1/) | (1/) |
| Fruits, excluding pineapples | (1/) | (1/) | (1/) | (1/) |
| Coffee | (D) | (D) | (D) | (D) |
| Macadamia nuts | (D) | (D) | (D) | (D) |
| All other crops | (1/) | (1/) | (1/) | (1/) |
| Number of crop farms | | | | |
| Sugar | - | - | - | 1 |
| Pineapples | (1/) | (1/) | (1/) | (1/) |
| Vegetables and melons | (1/) | (1/) | (1/) | (1/) |
| Fruits (excluding pineapples) | (1/) | (1/) | (1/) | (1/) |
| Coffee | (D) | (D) | (D) | (D) |
| Macadamia nuts | (1/) | (1/) | (1/) | (1/) |
| Taro | (1/) | (1/) | (1/) | (1/) |
| Flowers and nursery products | (1/) | (1/) | (1/) | (1/) |
| Value of crop sales (\$1,000) | | | | |
| Sugar (unprocessed cane) | - | - | - | 78,100 |
| Pineapples (fresh equivalent) | (D) | (D) | (D) | (D) |
| Vegetables, ginger root, herbs and melons 2/ | (1/) | (1/) | (1/) | (1/) |
| Fruits (excluding pineapples) | (1/) | (1/) | (1/) | (1/) |
| Coffee (parchment) | (D) | (D) | (D) | (D) |
| Macadamia nuts (in shell) | (1/) | (1/) | (1/) | (1/) |
| Taro | (1/) | (1/) | (1/) | (1/) |
| Seed crops | (1/) | (1/) | (1/) | (1/) |
| Flowers and nursery products | (1/) | (1/) | (1/) | (1/) |

D Withheld to avoid disclosure of individual operations.

1/ County estimates not published due to staff reduction-in-force but combined and included in the State total.

2/ Includes noni, kava (ʻawa), and others.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual)

<http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp>
accessed June 19, 2013.

Table 19.09-- SPECIALTY CROPS, FRUITS, AND VEGETABLES: 2014

[Data shown for crops with sales in excess of \$1,000,000]

| Crop | Acreage harvested | Yield per acre (1,000 lb.) | Production (1,000 lb.) | Farm price (cents per lb.) | Value of sales (\$1,000) |
|--------------------------|--------------------------|-----------------------------------|-------------------------------|-----------------------------------|---------------------------------|
| Specialty crops | | | | | |
| Coffee (2014-15) | 69,000 | 0.9 | 7,000 | 898.0 | 62,860 |
| Macadamia nuts (2014-15) | 16,000 | (D) | 46,000 | 87.0 | 40,020 |
| Seed crops (2013-14) | 4,840 | (X) | 7,970 | (X) | 158,800 |
| Fruits | | | | | |
| Bananas | 900 | 16.0 | 14,400 | 82.0 | 11,808 |
| Papayas | 1,500 | 15.7 | 23,500 | 48.0 | 11,285 |
| Vegetables | | | | | |
| Cabbage, chinese | 140 | 20.7 | 2,900 | 52.0 | 1,500 |
| Cabbage, head | 450 | 14.8 | 6,670 | 49.0 | 3,240 |
| Cucumbers | 280 | 20.6 | 5,770 | 74.5 | 4,300 |
| Kale | 60 | 10.5 | 630 | 165.1 | 1,040 |
| Lettuce, head | 90 | 13.9 | 1,250 | 215.0 | 2,700 |
| Lettuce, leaf | 130 | 8.7 | 1,130 | 256.6 | 2,900 |
| Onions, green | 80 | 12.3 | 980 | 153.1 | 1,500 |
| Romaine | 130 | 8.8 | 1,150 | 174.0 | 2,000 |
| Snap beans | 140 | 3.2 | 450 | 251.1 | 1,130 |
| Watercress | 40 | 19.0 | 760 | 175.0 | 1,330 |

D Withheld to avoid disclosure of individual operations.

X Not applicable.

Source: USDA National Agricultural Statistics Service,
 <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/> accessed May 6, 2016.

**Table 19.10-- SUGARCANE ACREAGE, BY TYPE OF IRRIGATION:
1993 TO 2015**

| Year | Total cane land | Irrigated cane land | | Unirrigated cane land |
|------|-----------------|---------------------|--------------------|-----------------------|
| | | Drip | Furrow or overhead | |
| 1993 | 121,322 | 74,557 | 11,595 | 35,170 |
| 1994 | 98,413 | 68,547 | 10,753 | 19,113 |
| 1995 | 81,957 | 62,462 | 8,416 | 11,079 |
| 1996 | 68,816 | 56,147 | 7,511 | 5,158 |
| 1997 | 67,820 | 55,585 | 7,115 | 5,120 |
| 1998 | 67,585 | 55,828 | 6,620 | 5,137 |
| 1999 | 60,758 | 51,234 | 4,602 | 4,922 |
| 2000 | 43,821 | 43,821 | - | - |
| 2001 | 50,410 | 50,410 | - | - |
| 2002 | 47,476 | 47,476 | - | - |
| 2003 | 47,733 | 47,733 | - | - |
| 2004 | 43,465 | 43,465 | - | - |
| 2005 | 40,145 | 40,145 | - | - |
| 2006 | 42,080 | 42,080 | - | - |
| 2007 | 41,762 | 41,762 | - | - |
| 2008 | 39,663 | 39,663 | - | - |
| 2009 | 39,812 | 39,812 | - | - |
| 2010 | 34,693 | 34,693 | - | - |
| 2011 | 35,532 | 35,532 | - | - |
| 2012 | 36,746 | 36,746 | - | - |
| 2013 | 35,556 | 35,556 | - | - |
| 2014 | 35,556 | 35,556 | - | - |
| 2015 | 35,556 | 35,556 | - | - |

Source: Hawaii Agriculture Research Center; Hawaiian Commercial & Sugar Company, records.

Table 19.11-- LIVESTOCK INVENTORY, 1987 TO 2015

[In thousands]

| Year | All cattle and calves 1/ | Milk cows 1/ | Hogs and pigs 2/ | Chickens (excluding broilers) 2/ | Bee colonies |
|------|--------------------------|--------------|------------------|----------------------------------|--------------|
| 1987 | 203 | 12.0 | 47.0 | 1,212 | 9 |
| 1988 | 212 | 12.0 | 43.0 | 1,217 | 9 |
| 1989 | 205 | 11.0 | 39.0 | 1,216 | 9 |
| 1990 | 215 | 11.0 | 36.0 | 1,183 | 10 |
| 1991 | 200 | 10.0 | 34.0 | 1,213 | 10 |
| 1992 | 178 | 11.0 | 35.0 | 1,109 | 9 |
| 1993 | 165 | 11.0 | 33.0 | 1,012 | 9 |
| 1994 | 178 | 11.0 | 35.0 | 981 | 9 |
| 1995 | 174 | 10.0 | 34.0 | 933 | 8 |
| 1996 | 172 | 10.0 | 28.0 | 876 | 8 |
| 1997 | 180 | 9.0 | 29.0 | 863 | 9 |
| 1998 | 173 | 9.0 | 29.0 | 747 | 8 |
| 1999 | 164 | 9.0 | 28.0 | 721 | 8 |
| 2000 | 150 | 7.0 | 26.0 | 722 | 7 |
| 2001 | 152 | 7.0 | 27.0 | 659 | 8 |
| 2002 | 151 | 7.0 | 24.0 | 625 | 7 |
| 2003 | 156 | 6.0 | 23.0 | 600 | 7 |
| 2004 | 155 | 5.7 | 22.0 | 598 | 8 |
| 2005 | 161 | 4.6 | 19.0 | 547 | 9 |
| 2006 | 158 | 3.8 | 16.0 | 470 | 10 |
| 2007 | 152 | 2.3 | 15.0 | 398 | 10 |
| 2008 | 150 | 1.6 | 13.0 | 373 | 10 |
| 2009 | 151 | 1.8 | 13.0 | 379 | 10 |
| 2010 | 141 | 2.0 | 12.5 | 364 | 11 |
| 2011 | 140 | 1.9 | 11.5 | (D) | 3/ 9 |
| 2012 | 140 | 1.9 | 11.5 | (D) | 10 |
| 2013 | 135 | 2.2 | 11.5 | (D) | 13 |
| 2014 | 133 | 2.2 | 9.0 | (D) | 15 |
| 2015 | 133 | 2.2 | 9.0 | (D) | 14 |

D Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

1/ As of January 1 of the following year.

2/ As of December 1.

3/ Revised from previous *Data Book*.

Source: Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual); and <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 19, 2013, and records.

Table 19.12-- NUMBER OF LIVESTOCK OPERATIONS AND VALUE OF LIVESTOCK SALES: 2011 TO 2015

| Subject | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|----------|--------|--------|--------|--------|
| Number of livestock operations, Dec. 31 | | | | | |
| Cattle 1/ | 1,000 | (D) | (D) | (D) | (D) |
| Hogs | 230 | (D) | (D) | (D) | (D) |
| Milk | 15 | (D) | (D) | (D) | (D) |
| Eggs | (D) | (D) | (D) | (D) | (D) |
| Honey | 35 | (D) | (D) | (D) | (D) |
| Value of livestock sales (\$1,000) | | | | | |
| Cattle 2/ | 46,369 | 51,056 | 50,771 | 61,444 | 59,826 |
| Hogs 2/ | 2,624 | 2,432 | 2,191 | 4,972 | 2,792 |
| Milk | 9,547 | 9,644 | 10,079 | 10,514 | 9,918 |
| Eggs | (D) | (D) | (D) | (D) | (D) |
| Honey | 3/ 2,431 | 3,113 | 2,126 | 3,195 | 2,785 |

D Data not shown separately to avoid disclosure of individual operations.

1/ Includes beef, dairy, and dairy replacement operations.

2/ Excludes interfarm sales; includes out-of-state sales of slaughter cattle and feeder calves.

3/ Revised from previous *Data Book*.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (2011) and <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 17, 2013, and records.

Table 19.13-- NUMBER OF LIVESTOCK OPERATIONS AND VALUE OF LIVESTOCK SALES, BY COUNTY: 2010 AND 2011

| Subject | Hawaii | Honolulu | Kauai | Maui |
|---|--------|----------|-------|------|
| 2010 | | | | |
| Number of livestock operations, Dec. 31 | | | | |
| Cattle 1/ | (2/) | (2/) | (2/) | (2/) |
| Hogs | (2/) | (2/) | (2/) | (2/) |
| Milk | (2/) | (2/) | (2/) | (2/) |
| Eggs | (2/) | (2/) | (2/) | (2/) |
| Honey | (2/) | (2/) | (2/) | (2/) |
| Value of livestock sales (\$1,000) | | | | |
| Cattle 3/ | (2/) | (2/) | (2/) | (2/) |
| Hogs 3/ | (2/) | (2/) | (2/) | (2/) |
| Milk | (2/) | (2/) | (2/) | (2/) |
| Eggs | (2/) | (2/) | (2/) | (2/) |
| 2011 | | | | |
| Number of livestock operations, Dec. 31 | | | | |
| Cattle 1/ | (2/) | (2/) | (2/) | (2/) |
| Hogs | (2/) | (2/) | (2/) | (2/) |
| Milk | (2/) | (2/) | (2/) | (2/) |
| Eggs | (2/) | (2/) | (2/) | (2/) |
| Honey | (2/) | (2/) | (2/) | (2/) |
| Value of livestock sales (\$1,000) | | | | |
| Cattle 3/ | (2/) | (2/) | (2/) | (2/) |
| Hogs 3/ | (2/) | (2/) | (2/) | (2/) |
| Milk | (2/) | (2/) | (2/) | (2/) |
| Eggs | (2/) | (2/) | (2/) | (2/) |

1/ Includes beef, dairy, and dairy replacement operations.

2/ County estimates not published due to staff reduction-in-force but combined and included in the State total.

3/ Excludes interfarm sales; includes out-of-state sales of slaughter cattle and feeder calves.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual) and <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 19, 2013.

Table 19.14-- FLORICULTURE AND NURSERY PRODUCTS: 1998 TO 2014

| Year | Number of farms | Growing area | | | | | Whole-sale value (\$1,000) |
|---------|-----------------|------------------|--------------------------------|--|----------------------------|--------------------|----------------------------|
| | | Total (acres) 1/ | Green-house (1,000 sq. ft.) 2/ | Artificial shade structure (1,000 sq. ft.) | Natural shade area (acres) | Open field (acres) | |
| 1998 | 745 | 2,679 | 2,810 | 24,200 | 9 | 2,050 | 73,207 |
| 1999 | 765 | 2,712 | 2,910 | 25,695 | 15 | 2,040 | 75,725 |
| 2000 | 735 | 2,719 | 3,235 | 25,180 | 7 | 2,060 | 82,684 |
| 2001 | 790 | 3,049 | 3,175 | 26,660 | 9 | 2,355 | 88,597 |
| 2002 | 870 | 3,648 | 3,030 | 30,415 | 10 | 2,870 | 95,715 |
| 2003 | 865 | 3,890 | 2,540 | 27,465 | 16 | 3,185 | 95,601 |
| 2004 | 920 | 3,830 | 2,620 | 26,560 | - | 3,160 | 95,178 |
| 2005 | 955 | 3,988 | 2,095 | 27,015 | - | 3,320 | 100,962 |
| 2006 | 930 | 4,064 | 2,190 | 25,410 | (NA) | 3,430 | 98,725 |
| 2007 | 1,060 | 4,376 | 2,020 | 25,015 | (NA) | 3,755 | 108,710 |
| 2008 | 1,025 | 3,170 | 2,120 | 23,570 | (NA) | 2,580 | 94,662 |
| 2009 | 1,010 | 2,780 | 1,930 | 24,615 | (NA) | 2,170 | 76,814 |
| 2010 | 970 | 2,650 | 1,875 | 20,940 | (NA) | 2,120 | 71,100 |
| 2011 | 970 | 2,695 | 1,770 | 19,990 | (NA) | 2,195 | 69,600 |
| 2012 3/ | (D) | 2,987 | 1,748 | 19,987 | (NA) | 2,488 | 70,300 |
| 2013 | (D) | 2,615 | 1,419 | 19,873 | (NA) | 2,126 | 72,292 |
| 2014 | (D) | 2,540 | 1,493 | 20,868 | (NA) | 2,020 | 67,162 |

NA Not available.

1/ Details may not sum to total due to rounding and categories not shown separately.

2/ Glass or glass substitute structure.

3/ Revised from previous *Data Book*.

Source: USDA, National Agricultural Statistics Service, Hawaii Field Office, *Hawaii Flowers & Nursery Products, Annual Summary*, (July 15, 2013)

<http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Flowers_and_Nursery_Products/flower.pdf> accessed February 28, 2014, and records.

**Table 19.15-- FLORICULTURE AND NURSERY PRODUCTS, BY
COMMODITY: 2014**

[Shown for commodities with value of sales over \$500,000 and growers with total sales of
\$10,000 or more]

| Commodity | Number of farms having sales 1/ | Number sold | | Value of sales (\$1,000) |
|-------------------------|---------------------------------|--------------|--------|--------------------------|
| | | Unit | Number | |
| Selected cut flowers | | | | |
| Anthuriums | 40 | 1,000 dozens | 278 | 2,438 |
| Proteas | 25 | 1,000 stems | 876 | 841 |
| Orchids | | | | |
| Sprays, Dendrobiums | 32 | 1,000 dozens | 200 | 1,632 |
| Potted, Dendrobiums | 57 | 1,000 pots | 521 | 3,017 |
| Potted, Phalaenopsis | 23 | 1,000 pots | 170 | 1,315 |
| Foliage | | | | |
| Potted, dracaena | 24 | (X) | (NA) | (D) |
| Potted, palms | 25 | (X) | (NA) | 4,710 |
| Potted flowering plants | | | | |
| Anthuriums | 14 | 1,000 pots | 93 | 671 |
| Poinsettias | 17 | 1,000 pots | 217 | 1,132 |
| Plant rentals | 43 | (X) | (NA) | 4,162 |
| Landscape plants 2/ | 107 | (X) | (X) | 18,396 |

X Not applicable.

NA Not available.

1/ Number of farms having sales during that year; "Total" is unduplicated count.

2/ Includes broadleaf and coniferous evergreens, deciduous and flower trees, palms, and citrus, fruit and nut trees, and sod. Does not include palms or potted foliage for indoor or patio use, bedding and garden plants, propagative floriculture material, and items which are included in published categories.

Source: USDA, National Agricultural Statistics Service, Hawaii Field Office, and records.

Table 19.16-- OUT-OF-STATE SALES OF FLORICULTURE AND NURSERY PRODUCTS: 2008 TO 2012

[Thousand of dollars. Based on F.O.B. island value. Includes both wholesale and retail sales. Does not include sales of cut flowers, leis, etc., purchased within the State and hand carried out]

| Type | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|
| Total sales | 43,230 | 35,570 | 30,370 | 29,340 | 29,670 |
| Anthuriums, cut | 5,800 | 4,720 | 4,500 | 4,200 | 4,200 |
| Dendrobiums, sprays | 3,100 | 2,500 | 2,400 | 2,400 | 2,500 |
| Foliage, potted | 9,400 | 7,700 | 6,500 | 7,000 | 7,900 |
| Heliconias | 1,000 | 900 | 900 | 800 | 700 |
| Dendrobiums, potted | 1,900 | 1,800 | 1,400 | 1,100 | 1,000 |
| Proteas | 1,500 | 1,500 | 1,400 | 1,200 | 1,100 |
| Other flowers, nursery products | 20,530 | 16,450 | 13,270 | 12,640 | 12,270 |

Source: USDA, National Agricultural Statistics Service, Hawaii Field Office, *Hawaii Flowers & Nursery Products, Annual Summary*. See also
 <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Flowers_and_Nursery_Products/flower.pdf>
 accessed February 28, 2014.

Table 19.17-- AGRICULTURAL LABOR, HIRED WORKERS ON FARMS, BY TYPE OF FARM: 1993 TO 2011

[Figures are averages based on January, April, July, and October surveys]

| Year | Hired workers 1/ | Hired workers by type of farm | | |
|---------|------------------|-------------------------------|-----------|----------|
| | | Sugar | Pineapple | Other |
| 1993 | 8,700 | 2,500 | 1,400 | 4,800 |
| 1994 | 8,100 | 2,300 | 1,300 | 4,500 |
| 1995 | 7,300 | 1,700 | 1,200 | 4,400 |
| 1996 | 7,400 | 1,400 | 1,200 | 4,800 |
| 1997 | 7,000 | 1,200 | 1,300 | 4,500 |
| 1998 | 7,400 | 1,200 | 1,200 | 5,000 |
| 1999 | 7,600 | 1,200 | 1,300 | 5,200 |
| 2000 | 7,800 | 1,000 | 1,200 | 5,600 |
| 2001 | 7,400 | 800 | 1,200 | 5,500 |
| 2002 | 7,500 | 900 | 1,300 | 5,400 |
| 2003 | 7,300 | 700 | 1,200 | 5,300 |
| 2004 | 7,300 | 700 | 1,200 | 5,400 |
| 2005 | 7,000 | 700 | 1,100 | 5,200 |
| 2006 | 7,000 | 600 | 1,000 | 5,400 |
| 2007 2/ | 6,500 | (NA) | (NA) | (NA) |
| 2008 | 6,200 | (3/) | (3/) | 5,100 |
| 2009 | 6,200 | (4/) | (4/) | 5,300 |
| 2010 | 6,400 | (5/) | (5/) | 5,600 |
| 2011 | 6/ 7,100 | (7/) | (7/) | 6/ 6,250 |

NA Not available.

1/ Sum of hired workers by type of farm may not add to hired workers total due to rounding.

2/ The January 2007 Farm Labor Survey was not conducted. Therefore, the 2007 annual average for hired workers is based on modeled data for January and survey data for April, July, and October.

3/ 1,100 for Sugarcane and Pineapple. Data combined to avoid disclosure of individual operations.

4/ 900 for Sugarcane and Pineapple. Data combined to avoid disclosure of individual operations.

5/ 800 for Sugarcane and Pineapple. Data combined to avoid disclosure of individual operations.

6/ Annual averages are based on survey data for January, July, and October.

7/ 850 for Sugarcane and Pineapple. Data combined to avoid disclosure of individual operations.

Source: Hawaii Agricultural Statistics Service, *Hawaii Agricultural Labor*, Quarterly, various issues <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Miscellaneous/aglabor.pdf> and USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual) and <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 17, 2013.

**Table 19.18-- GENERAL EXCISE TAX BASE FOR PRODUCING:
1998 TO 2015**

[In thousands of dollars. Data are on a cash basis accounting. "Producing" refers to the raising and production of agricultural products in their natural state, the production of natural resource products, fishing, and aquaculture]

| Year 1/ | Amount | Year 1/ | Amount |
|----------------|---------------|----------------|---------------|
| 1998 | 478,201 | 2007 | 475,827 |
| 1999 | 501,501 | 2008 | 448,975 |
| 2000 | 519,272 | 2009 | 351,578 |
| 2001 | 499,896 | 2010 | 339,035 |
| 2002 | 522,418 | 2011 | 399,078 |
| 2003 | 543,561 | 2012 | 401,496 |
| 2004 | 550,949 | 2013 | 392,735 |
| 2005 | 591,329 | 2014 2/ | 336,675 |
| 2006 | 445,679 | 2015 | 337,702 |

1/ Calendar year in which reported, including "prior years" reports. Income received in December is reported the following January, hence these annual totals generally refer to an "income year" ended November 30.

2/ Revised from previous *Data Book*.

Source: Hawaii State Department of Taxation, "General Excise and Use Tax Base" (annual tabular release) see also <<http://files.hawaii.gov/tax/stats/monthly/2015cy-ge.pdf>> accessed April 4, 2016.

**Table 19.19-- AGRICULTURAL CHEMICALS USED, INCLUDING FERTILIZER:
2007 AND 2012**

| Chemicals used | Unit | 2007 | 2012 |
|--|---------------------|-------------|-------------|
| Any fertilizer, manure, or chemicals used | farms | 5,742 | 4,457 |
| Manure used | farms | 705 | 634 |
| | acres on which used | 3,859 | 5,165 |
| Any fertilizer or chemical expense | farms | 6,158 | 5,101 |
| | \$1,000 | 47,046 | 79,577 |
| Commercial fertilizer, lime and soil conditioners used | farms | 4,785 | 3,450 |
| | acres on which used | 116,530 | 109,503 |
| Commercial fertilizer, lime and soil conditioners expenses | farms | 5,653 | 4,428 |
| | \$1,000 | 29,807 | 46,584 |
| Chemical expenses | farms | 4,207 | 4,487 |
| | \$1,000 | 17,238 | 32,993 |
| Chemicals used to control | | | |
| Insects | farms | 2,012 | 2,349 |
| | acres on which used | 33,474 | 30,417 |
| Nematodes | farms | 253 | 379 |
| | acres on which used | 6,889 | 4,089 |
| Diseases in crops and orchards | farms | 836 | 963 |
| | acres on which used | 9,716 | 9,143 |
| Weeds, grass, or brush | farms | 3,053 | 3,299 |
| | acres on which used | 98,108 | 114,713 |
| Chemicals used on crops to control growth, thin fruit, ripen, or defoliate | farms | 255 | 338 |
| | acres on which used | 15,677 | 19,000 |

Source: U.S. Department of Agriculture, *2012 Census of Agriculture, Hawaii*, (May 2014), p. 34.

Table 19.20-- AQUACULTURE INDUSTRY OPERATIONS: 1990 TO 2014

| Year | Number of operations, Dec. 31 | Acreage, Dec. 31 | Production (1,000 lb.) | Value (\$1,000) |
|-------------------------------|-------------------------------|------------------|------------------------|-----------------|
| 1990 | 53 | 489 | 1,452 | 9,241 |
| 1991 | 71 | 595 | 1,207 | 6,884 |
| 1992 | 83 | 615 | 1,272 | 7,134 |
| 1993 | 90 | 640 | 1,296 | 7,469 |
| 1994 | 105 | 605 | 990 | 9,036 |
| 1995 | 107 | 635 | 1,410 | 13,307 |
| 1996 | 117 | 695 | 1,992 | 15,656 |
| 1997 | 110 | (NA) | (NA) | 16,600 |
| 1998 | 105 | (NA) | 2,243 | 16,620 |
| 1999 | 100 | (NA) | 2,404 | 18,102 |
| 2000 | 85 | (NA) | 2,898 | 22,170 |
| 2001 | 80 | (NA) | (NA) | 22,200 |
| 2002 | 70 | (NA) | (NA) | 25,180 |
| 2003 | 85 | (NA) | (NA) | 27,650 |
| 2004 | 100 | (NA) | (NA) | 28,100 |
| 2005 | 70 | (NA) | (NA) | 28,398 |
| 2006 | 80 | (NA) | (NA) | 21,257 |
| 2007 | 70 | (NA) | (NA) | 25,110 |
| 2008 | 70 | (NA) | (NA) | 34,650 |
| 2009 | 70 | (NA) | (NA) | 32,330 |
| 2010 | 75 | (NA) | (NA) | 29,970 |
| 2011 | 70 | (NA) | (NA) | 39,970 |
| 2012 | 70 | (NA) | (NA) | 55,740 |
| 2013 1/ | (NA) | (NA) | (NA) | (NA) |
| 2014 | (NA) | (NA) | (NA) | 78,241 |
| Census of Aquaculture 2013 2/ | 45 | (NA) | (NA) | 58,665 |

NA Not available.

1/ State aquaculture survey was not conducted.

2/ Data from the Census of Aquaculture but are not comparable.

Source: Hawaii State Department of Land and Natural Resources, Aquaculture Development Program (1970-1997), records and Hawaii Agricultural Statistics Service, *Statistics of Hawaii Agriculture* (annual) and <http://www.nass.usda.gov/hi/stats/t_of_c.htm> (1998-2007) and USDA National Agricultural Statistics Service, *Hawaii Annual Statistics Bulletin* (annual) <http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp> accessed June 17, 2013. USDA National Agricultural Statistics Service, *2013 Census of Aquaculture* <https://www.agcensus.usda.gov/Publications/2012/Online_Resources/Aquaculture/> accessed July 7, 2016, and records.

**Table 19.21-- AQUACULTURE OPERATIONS, ACREAGE, PRODUCTION,
AND VALUE, BY COUNTY: 2010 AND 2011**

| Subject | State total | Hawaii | Honolulu | Kauai | Maui |
|------------------------|-------------|--------|----------|-------|------|
| 2010 | | | | | |
| Number of operations | 75 | (1/) | (1/) | (1/) | (1/) |
| Production (1,000 lb.) | (NA) | (1/) | (1/) | (1/) | (1/) |
| Shellfish | 76 | (1/) | (1/) | (1/) | (1/) |
| Finfish | 211 | (1/) | (1/) | (1/) | (1/) |
| Value (\$1,000) | 29,970 | (1/) | (1/) | (1/) | (1/) |
| Shellfish | 575 | (1/) | (1/) | (1/) | (1/) |
| Finfish | 1,012 | (1/) | (1/) | (1/) | (1/) |
| Algae | 16,725 | (1/) | (1/) | (1/) | (1/) |
| Ornamental | 1,837 | (1/) | (1/) | (1/) | (1/) |
| Other 2/ | 9,821 | (1/) | (1/) | (1/) | (1/) |
| 2011 | | | | | |
| Number of operations | 70 | (1/) | (1/) | (1/) | (1/) |
| Production (1,000 lb.) | (NA) | (1/) | (1/) | (1/) | (1/) |
| Shellfish | 55 | (1/) | (1/) | (1/) | (1/) |
| Finfish | 315 | (1/) | (1/) | (1/) | (1/) |
| Value (\$1,000) | 39,970 | (1/) | (1/) | (1/) | (1/) |
| Shellfish | 413 | (1/) | (1/) | (1/) | (1/) |
| Finfish | 1,493 | (1/) | (1/) | (1/) | (1/) |
| Algae | 25,230 | (1/) | (1/) | (1/) | (1/) |
| Ornamental | 2,514 | (1/) | (1/) | (1/) | (1/) |
| Other 2/ | 10,320 | (1/) | (1/) | (1/) | (1/) |

NA Not available.

1/ County estimates not published due to staff reduction-in-force but combined and included in the State total.

2/ Includes seed stock, brood stock, and items not sold by weight which includes number count.

Source: USDA National Agricultural Statistics Service, Hawaii Annual Statistics Bulletin (annual)
<http://www.nass.usda.gov/Statistics_by_State/Hawaii/Publications/Annual_Statistical_Bulletin/index.asp>
accessed June 19, 2013.

Table 19.22-- FARMS, LAND, AND VALUE OF SALES OF ORGANIC AGRICULTURAL PRODUCTS: 2014

| Subject | Number | Acres | Subject | Farms | Amount (\$1,000) |
|-------------------------------------|--------|-------|---|-------|------------------|
| Organic farms (certified or exempt) | 166 | 3,505 | Value of organic agricultural products sold (\$1,000) | 166 | 13,356 |
| Land owned | 119 | (D) | Farms by value of sales | | |
| Land rented from others | 57 | 2,278 | Less than 1,000 | 21 | (D) |
| Land rented to others | 2 | (D) | 1,000 to 2,499 | 15 | 26 |
| | | | 2,500 to 4,999 | 28 | 93 |
| Certified organic acres operated | 121 | 3,373 | 5,000 to 9,999 | 13 | 95 |
| Land owned | 79 | (D) | 10,000 to 19,999 | 18 | 256 |
| Land rented from others | 52 | 2,259 | 20,000 to 24,999 | 14 | 300 |
| Land rented to others | 2 | (D) | 25,000 to 39,999 | 12 | 376 |
| | | | 40,000 to 49,999 | 2 | (D) |
| Exempt organic acres operated | 45 | 132 | 50,000 to 99,999 | 16 | 1,029 |
| Land owned | 40 | 113 | 100,000 to 249,999 | 10 | 1,240 |
| Land rented from others | 5 | 19 | 250,000 to 499,999 | 12 | 4,462 |
| Land rented to others | - | - | 500,000 or more | 5 | 5,389 |
| Transitional land acres operated | 9 | 134 | Crops including nursery and greenhouse | 162 | (D) |
| Land owned | 7 | (D) | Livestock and poultry | 2 | (D) |
| Land rented from others | 2 | (D) | Livestock and poultry products | 11 | (D) |
| Land rented to others | - | - | | | |
| Cropland | 9 | 134 | | | |
| Pastureland | - | - | | | |
| Rangeland | - | - | | | |

D Withheld to avoid disclosing data for individual farms.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, 2012 Census of Agriculture, *Organic Survey 2014* (September 2015), "Table 1. Farms, Land, and Value of Sales of Organic Agricultural Products – Certified and Exempt Organic Farms: 2014", pp. 1-18.

<https://www.agcensus.usda.gov/Publications/2012/Online_Resources/Organics/index.php> accessed April 21,2016.