

HAWAII VEGETABLES



Annual report of harvested acreage,
production, and farm value

Released: October 27, 1997

Vegetable and melon output down slightly

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The Hawaii Agricultural Statistics Service estimates total production of vegetables and melons for 1996 at 81.6 million pounds, down 1 percent from 1995. Total farm value declined 3 percent to \$30.9 million as lower farm prices more than offset the higher output.

Production hindered by adverse weather

Vegetable and melon growers in both the western and eastern half of the State were hindered by adverse, but disparate, weather conditions during 1996. In the western islands, farmers on Kauai and Oahu benefitted from a mixture of sunshine and showers for most of the year. However, an intense rainstorm on Election Day (November 5) and subsequent periods of heavy rain caused extensive losses to vegetables and melons on both these islands. Hardest hit were farmers on Oahu where most of the State's sweet corn, green onions, watercress, watermelons, and specialty vegetables were being grown.

While having a devastating effect on Oahu and Kauai, the Election day rainstorm and the rainy weather that followed were a relief for the eastern half of the State. Most of the earlier rain systems, that provided needed moisture to Kauai and Oahu, generally dissipated as they moved eastward through the State. As a result, major vegetable growing areas on Maui, Molokai, and the Big Island were relatively dry during the year. By October, widespread water restrictions were in effect for the eastern islands. The most severe restrictions were a mandatory 25-percent reduction in water usage for Upcountry Maui, and the South Kohala and Hamakua districts of the Big Island. Although County officials lifted most of the mandatory water restrictions a month later when the Election day rainstorm arrived. The dry year did have an adverse impact on the production of crops such as head cabbage, Chinese cabbage, romaine, and dry onions experienced lower than expected yields.

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Fact finding for agriculture

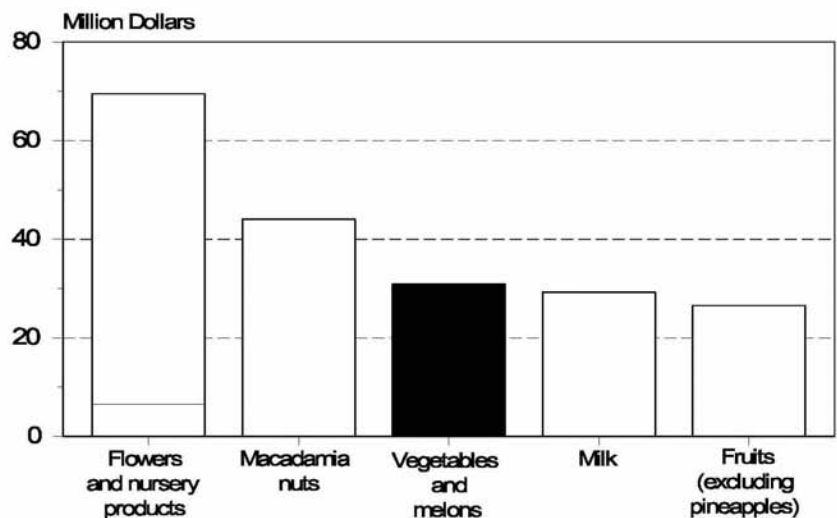
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Hawaii's Top 5 Diversified Agricultural Commodities, 1996



HASS (10/97)

Watermelons led all others

Watermelons topped all vegetables with production of 17.1 million pounds in 1996, down 16 percent from 1995's record high. Head cabbage recorded the second largest volume at 14.1 million pounds, up 9 percent from 1995. Among the remaining vegetables, tomatoes and cucumbers recorded notable production gains. Tomato growers experienced their largest crop in 8 years with total output of 7.0 million pounds in 1996, up 17

percent from 1995. Cucumber farmers harvested their biggest crop in 12 years with 4.8 million pounds in 1996, up 20 percent from 1995.

Farm value drops 3 percent

The farm value of all vegetables and melons totaled \$30.9 million in 1996, down 3 percent from the previous year. A combined increase in production and farm prices enabled tomato growers to post a 27-percent increase in farm revenues to \$3.7 million; tops among all vegetables and melons. Other

individual crops that garnered farm revenues in excess of \$1 million were: watermelon, head cabbage, dry onions, cucumbers, Chinese cabbage, green onions, sweet potatoes, green peppers, and watercress. Of the top ten revenue crops, only tomatoes and cucumbers recorded increases from the previous year. The combined category of "Other vegetables and melons" had a farm value of \$3.2 million, second only to tomatoes and a 2-percent increase from 1995.

Vegetable and melons: Acreage, production, and value, State of Hawaii ¹

Commodity	Harvested acreage		Production		Value	
	1995	1996	1995	1996	1995	1996
	-----Acres-----		-----1,000 pounds-----		-----1,000 dollars-----	
Beans, snap.....	120	160	540	520	537	504
Bittermelon.....	10	15	110	150	110	158
Broccoli.....	110	150	300	500	182	255
Burdock.....	30	20	330	300	594	540
Cabbage, Chinese.....	370	410	7,800	7,700	1,833	1,810
Cabbage, head.....	600	640	12,900	14,100	2,838	2,609
Cabbage, mustard.....	180	200	1,700	1,700	680	731
Carrots.....	5	-	60	-	20	-
Cauliflower.....	15	10	200	120	94	51
Celery.....	60	55	1,250	1,150	394	334
Corn, sweet.....	390	400	1,300	1,400	689	700
Cucumbers.....	400	400	4,000	4,800	1,600	2,064
Daikon.....	260	280	3,300	3,300	974	941
Dasheen.....	7	7	130	100	133	94
Eggplant.....	60	70	1,200	1,300	984	949
Lettuce.....	180	180	1,500	1,500	773	705
Onions, dry.....	210	210	2,300	2,000	2,622	2,360
Onions, green.....	220	190	1,500	1,400	1,440	1,316
Peas, Chinese.....	5	5	25	25	45	45
Peppers, green.....	200	230	2,400	2,600	1,392	1,248
Pumpkins.....	20	30	180	250	41	75
Radish.....	15	20	170	200	97	116
Romaine.....	185	175	1,700	1,700	765	663
Squash, Italian.....	75	80	620	700	316	336
Squash, oriental.....	10	10	200	200	80	84
Sweet potatoes.....	320	280	2,800	2,500	1,540	1,300
Tomatoes.....	240	280	6,000	7,000	2,910	3,710
Watercress.....	40	35	1,200	1,000	1,380	1,140
Watermelon.....	800	760	20,400	17,100	3,468	2,822
Other vegetables and melons.....	710	718	6,065	6,300	3,141	3,213
Total vegetables and melons	5,847	6,020	82,180	81,615	31,672	30,873

¹ Sum of island estimates may not add to State total due to rounding. Only selected crops are shown separately. All other vegetables and melons are included in the "Other vegetables and melons" category. Does not include ginger root and herbs. ² Vegetables and melons: Acreage harvested (e.g., 1 acre planted and harvested 3 times during the year = 3 harvested acres). Watercress: Average acreage during the year.

1996 ISLAND SUMMARIES

Hawaii

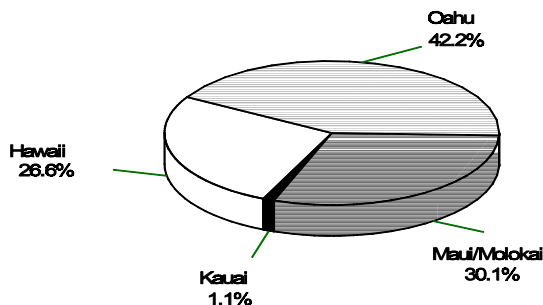
Production of all vegetables and melons totaled 22.5 million pounds for the Big Island in 1996, down 2 percent from the previous year. The overall drop in output occurred as lower yields more than offset a 4-percent increase in harvested acreage. Last year's dry weather was mainly responsible for the decline in yields.

Total farm value is estimated at \$8.8 million in 1996, down 2 percent from the previous year. Chinese cabbage was the only crop to register sales of more than \$1.0 million.

Maui and Molokai

Combined production of vegetables and melons from these two islands is estimated at 26.2 million pounds, down 27 percent from 1995. Although combined to avoid disclosure of individual operations, both islands recorded declines in acreage and production during 1996. However, most of the overall decrease was due to a shift in watermelon production from Molokai to Oahu. Partially offsetting the loss of watermelons on Molokai was an increase in cucumber plantings on that island.

FRESH VEGETABLES AND MELONS Total production, by island, 1996



HASS (10/98)

Total farm value of vegetables and melons on Maui and Molokai was \$10.8 million in 1996, down 17 percent from 1995. Crops with farm revenues exceeding \$1 million were tomatoes (\$2.8 million), dry onions (\$2.3 million), and head cabbage (\$1.4 million).

Oahu

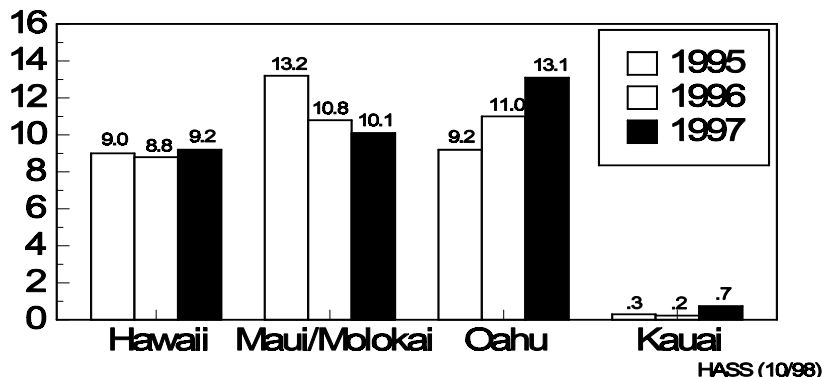
In 1996, Oahu led all islands by accounting for approximately 40 percent of the State's total vegetable

and melon harvested acreage and production. Expansion of such crops as sweet corn, head cabbage, green peppers, and watermelons enabled Oahu to boost output to 32.6 million pounds, up 41 percent from 1995. Production of many commodities would have been even higher if not for the devastating Election day rainstorm and subsequent rainy weather.

Farm revenues totaled \$11.0 million in 1996, up 19 percent from 1995 and representing 36 percent of the State total.

HAWAII FRESH VEGETABLES AND MELONS: Farm value, by islands, 1995-1997

\$ Millions



Kauai

Vegetable and melon growers on Kauai had 1996 production of 330,000 pounds, down 22 percent from 1995. Declines in production were recorded for most of the crops grown on Kauai.

Total farm value is estimated at \$230,000 for 1996, down 18 percent from 1995. Crops are not listed individually for Kauai to avoid disclosure. However, major crops on Kauai include sweet corn, dry onions, sweet potatoes, watermelons, and tomatoes.

**Acreage, production, and farm value of selected vegetables and melons
By Islands, State of Hawaii, 1995 and 1996. ¹**

Commodity	Harvested acreage ²		Production		Farm value	
	1995	1996	1995	1996	1995	1996
	-----Acres-----		-----1,000 pounds-----		-----1,000 dollars-----	
Hawaii						
Cabbage, Chinese	260	290	5,600	5,600	1,327	1,333
Cabbage, Head	225	220	4,840	4,300	1,041	815
Celery	40	35	870	850	276	255
Daikon	165	185	1,700	2,000	468	544
Lettuce	120	120	875	950	446	428
Tomatoes	40	55	1,025	1,345	612	896
All other vegetables and melons	992	1,005	7,948	7,435	4,792	4,484
Island total	1,842	1,910	22,858	22,480	8,962	8,755
Maui/Molokai						
Beans, snap	30	37	220	245	228	256
Cabbage, Head	370	315	8,000	7,300	1,784	1,351
Celery	20	20	380	300	118	79
Corn, sweet	45	50	160	185	105	114
Cucumbers	70	140	900	2,500	342	988
Lettuce	30	25	240	200	106	80
Onions, dry	205	200	2,265	1,980	2,587	2,344
Onions, green	15	15	150	120	171	132
Peppers, green	105	15	1,300	160	723	79
Romaine	110	85	1,140	960	473	341
Squash, Italian	45	35	410	380	209	181
Sweet potatoes	155	95	1,500	1,100	816	558
Tomatoes	190	215	4,900	5,580	2,239	2,751
Watermelons	360	60	9,950	1,750	1,602	277
All other vegetables and melons	253	258	4,290	3,460	1,613	1,308
Island total	2,003	1,565	35,805	26,220	13,116	10,839
Oahu						
Beans, snap	20	16	90	55	92	52
Corn, sweet	155	195	390	690	265	333
Cucumbers	255	215	1,650	1,500	759	761
Eggplant	45	45	760	700	649	546
Onions, green	160	140	1,250	1,165	1,169	1,072
Watermelons	425	690	10,300	15,280	1,823	2,521
All other vegetables and melons	887	1,189	8,655	13,195	4,555	5,764
Island total	1,947	2,490	23,095	32,585	9,312	11,049
Kauai						
Island total	55	55	422	330	282	230

¹ Sum of island estimates may not add to State total due to rounding. Only selected crops are shown separately to avoid disclosure. All vegetables and melons that are not shown separately are included each island's "Other vegetables and melons" total. Does not include ginger root and herbs.

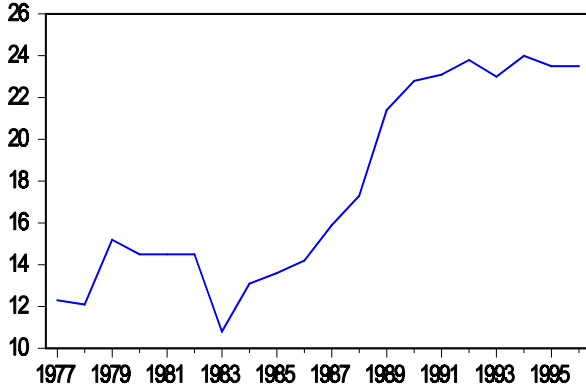
² Reflects the number of times an area was planted and harvested; e.g., 1 acre planted and harvested 3 times during the year = 3 harvested acres.

PRICES RECEIVED BY FARMERS

Selected Commodities, State of Hawaii, 1977-1996

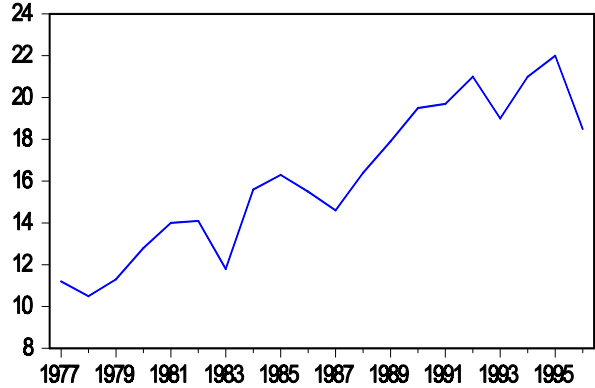
Chinese Cabbage

Cents per pound



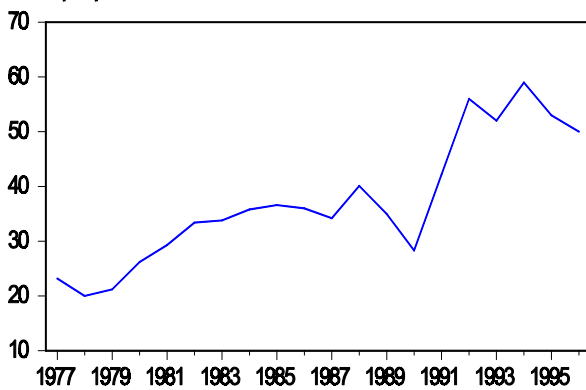
Head Cabbage

Cents per pound



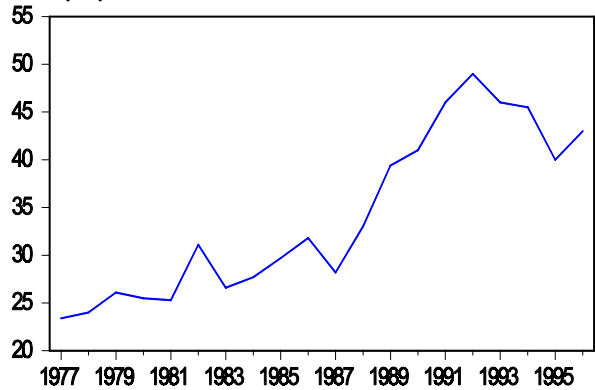
Sweet Corn

Cents per pound



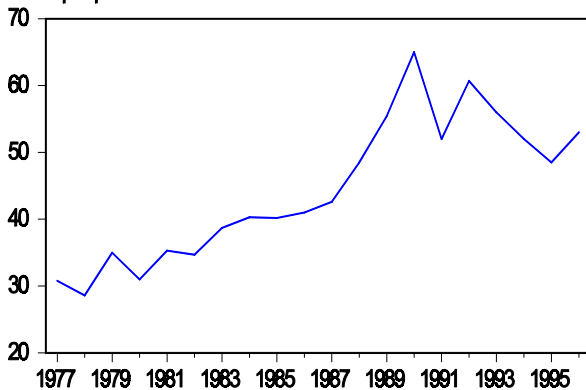
Cucumbers

Cents per pound



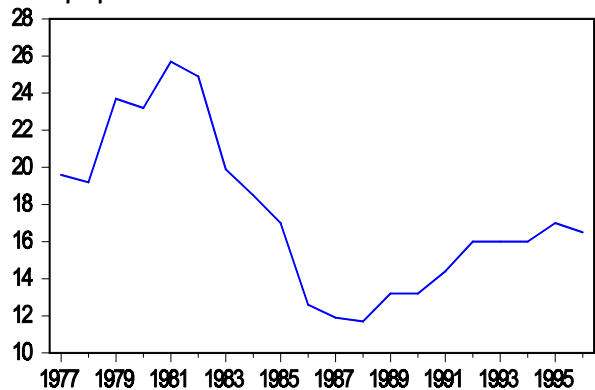
Tomatoes

Cents per pound



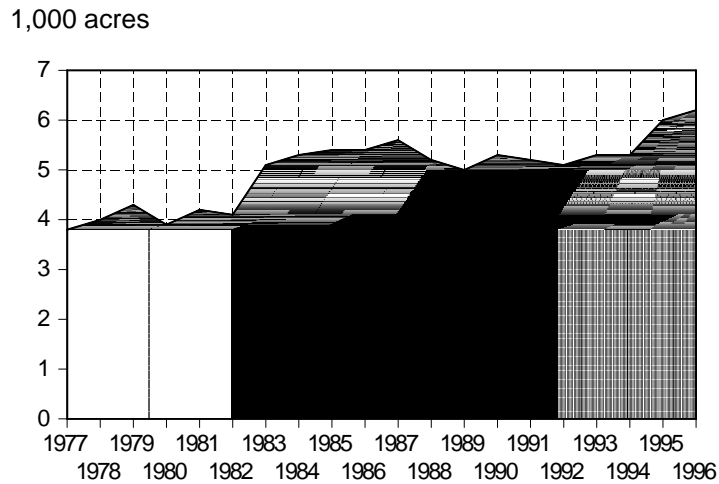
Watermelons

Cents per pound



HARVESTED ACREAGE ¹

A 20-year Look at Vegetable and Melon ¹ Harvested Acreage State of Hawaii, 1977-96



Year	Acres harvested 1,000 acres	Year	Acres harvested 1,000 acres
1977	3.8	1987	5.6
1978	4.0	1988	5.2
1979	4.3	1989	5.0
1980	3.9	1990	5.3
1981	4.2	1991	5.2
1982	4.1	1992	5.1
1983	5.1	1993	5.3
1984	5.3	1994	5.3
1985	5.4	1995	6.0
1986	5.4	1996	6.2

¹ Includes ginger root.