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Vegetables and Melons Outlook

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Summer Vegetable Prices Lower

This summer (July-September), with steady demand and continued favorable weather yielding strong supplies, fresh-market vegetable prices measured at the point of first sale (largely grower or shipping-point) are likely to remain below a year earlier. Assuming no disruptions from tropical weather over the next month, shipping-point prices for summer fresh-market vegetables are expected to average about a tenth below a year earlier. Since peaking in February, retail prices for fresh-market vegetables have declined each month through July.

Given a 4-percent increase in contract area and the expectation of strong yields, contract production of U.S. processing tomatoes is expected to increase 17 percent to 12.3 million short tons—second only to the record 12.8 million ton crop of 1999. Per-acre yields in California are expected to be vastly improved over the weather-shortened levels of the last 2 years and will likely be second only to 2004's record 41.5 tons per acre.

Imports of melons are projected to increase by double-digit rates in value and volume in 2007, due largely to watermelon. Import demand for watermelon reflects its greater domestic appeal. While imported watermelon largely comes from Mexico, cantaloups are mostly shipped from Guatemala, Costa Rica, and Honduras.

Foreign demand for frozen french fried potatoes is noticeably higher, with exports of frozen fries to Japan, Mexico, Canada, and China running ahead of last year. Potato chip exports to Canada are also strong. The U.S. dollar's lower exchange value, particularly vis-à-vis the Canadian dollar, is partly responsible for the boost in export demand.

U.S. dry edible bean production is expected to decline 2 percent to 23.7 million cwt. While per-acre yields are expected to improve at least 5 percent from a year ago to 1,649 pounds, harvested area is expected to drop about 6 percent.

The farm value of all mushroom sales during the 2006/07 crop year (July-June), totaled a nominal dollar record \$956 million, up 7 percent from the previous year. Total U.S. mushroom sales volume declined 2 percent to 827 million pounds. However, the net domestic per capita use of all mushrooms managed to rise 2 percent to 4.0 pounds due to a 25 percent increase in processed mushroom imports.

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The next release is
October 25, 2007

Approved by the
World Agricultural
Outlook Board.

Industry Overview

Fresh vegetables: Expected improvement in per-acre yield of summer storage onions (the primary source of onions during the fall and winter) may outweigh a 2 percent drop in area harvested to leave production up modestly from the 38 million hundredweight (cwt) of 2006. This crop will transition from the summer nonstorage onion crop, which is expected to total 10.9 million cwt—up 3 percent from a year earlier. Following a spring with record-high prices, fresh dry-bulb onion prices have slowly weakened this summer but are expected to remain above long-term averages into early fall. This summer, fresh vegetable prices are expected to average below the highs of a year ago as harvested area remains near that of a year earlier and yields improve from last summer's weather-reduced levels.

Melons: This summer (largely July-September), area for harvest of the three leading melon crops was estimated to be 123,800 acres—5 percent above a year earlier. Increased watermelon area (up 13 percent) will outweigh lower area for honeydew melons (down 7 percent) and cantaloup (down 2 percent). Prices have generally eased following a strong spring, with July wholesale prices for all melons averaging 15 percent below a year earlier.

Processing vegetables: Processors of the five leading vegetables (tomatoes, sweet corn, snap beans, green peas, and cucumbers for pickles) have contracted 1.21 million acres in 2007—up 1 percent from the comparable producing States of a year earlier. Contract production accounted for 99 percent of the output of the five leading processing vegetables last year. Area for tomatoes, the single largest processing vegetable (in terms of output), is expected to be 4 percent greater than a year ago due to the influence of strong wholesale prices. Following 2 poor years, tomato yields in California are expected to rebound strongly with favorable growing weather prevailing this season.

Potatoes: The 2007 fall potato crop was planted on 1.01 million acres, up 2 percent from a year earlier. Although area was up in many States, about two-thirds of the increase came from Idaho and Washington. Across all four seasons in 2007, area for harvest is expected to total 1.13 million acres—1 percent above a year earlier. In both Idaho and Washington, more than three-fourths of the fall crop was considered to be in good to excellent condition in late August.

Dry edible beans: U.S. dry bean area for harvest was estimated to be down 6 percent to 1.44 million acres. Given August acreage estimates and expectations for average yields, production could increase for pinto, lima, garbanzo, and light red kidney beans, while declining for most other bean classes. The 2007/08 all dry bean price is expected to average at least 20 percent above the \$20/cwt of 2006/07.

Dry peas and lentils: According to USDA estimates, area for harvest of dry peas is down 6 percent in 2007, while lentil area is expected to drop 28 percent. Despite periods of intense heat this summer, yields are expected to exceed the lows of a year ago and push production of dry edible peas above a year ago. Given low carryover stocks and good export demand, dry pea and lentil prices are expected to average well above year-earlier levels in 2007/08.

Mushrooms: Intended agaricus bed and tray production area for the 2007/08 season is forecast to remain about even with a year earlier at 143 million square feet. While growers in Eastern and Central States each intend to keep area steady, those in California expect to cut area by 2-percent. Assuming a recovery in yields from the drop of this past year, 2007/08 mushroom output is expected to increase.

Table 1--U.S. vegetable industry at a glance, 2004-07

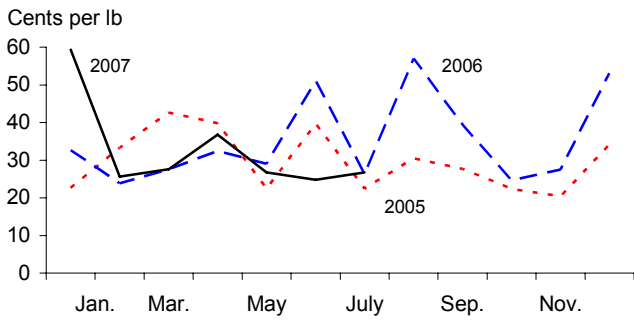
Item	Unit	2004	2005	2006	2007 1/
<i>Area harvested</i>	1,000 ac.	6,547	7,128	7,220	6,995
<i>Vegetables:</i>					
Fresh & melons	1,000 ac.	1,917	1,916	1,913	1,918
Processing	1,000 ac.	1,287	1,270	1,250	1,265
Potatoes	1,000 ac.	1,167	1,087	1,116	1,132
Dry beans	1,000 ac.	1,219	1,534	1,538	1,440
Other 2/	1,000 ac.	957	1,321	1,404	1,241
<i>Production</i>	Mil. cw t	1,347	1,281	1,286	1,332
<i>Vegetables:</i>					
Fresh & melons	Mil. cw t	480	472	466	475
Processing	Mil. cw t	353	314	319	353
Potatoes	Mil. cw t	456	424	435	438
Dry beans	Mil. cw t	18	27	24	24
Other 2/	Mil. cw t	41	44	41	42
<i>Crop value</i>	\$ mil.	14,898	15,905	16,522	17,381
<i>Vegetables:</i>					
Fresh & melons	\$ mil.	9,152	9,829	10,159	10,800
Processing	\$ mil.	1,388	1,255	1,322	1,415
Potatoes	\$ mil.	2,575	2,991	3,226	3,200
Dry beans	\$ mil.	453	516	518	585
Mushrooms	\$ mil.	919	909	889	956
Other 2/	\$ mil.	412	405	409	425
<i>Unit value 3/</i>	\$/cw t	11.06	12.42	12.85	13.05
<i>Vegetables:</i>					
Fresh & melons	\$/cw t	19.09	20.82	21.78	22.75
Processing	\$/cw t	3.93	3.99	4.14	4.01
Potatoes	\$/cw t	5.66	7.06	7.42	7.31
Dry beans	\$/cw t	25.70	18.50	20.00	24.65
Other 2/	\$/cw t	10.15	9.25	9.87	10.01
<i>Trade</i>					
<i>Imports</i>	\$ mil.	6,217	6,607	7,284	8,030
<i>Vegetables:</i>					
Fresh & melons	\$ mil.	3,458	3,668	4,091	4,500
Processing 4/	\$ mil.	1,448	1,587	1,746	1,900
Potatoes & products	\$ mil.	791	787	856	920
Dry beans	\$ mil.	65	82	84	110
Other 5/	\$ mil.	454	483	507	600
<i>Exports</i>	\$ mil.	3,520	3,899	4,234	4,475
<i>Vegetables:</i>					
Fresh & melons	\$ mil.	1,364	1,515	1,625	1,725
Processing 4/	\$ mil.	794	828	861	890
Potatoes & products	\$ mil.	745	841	950	1,050
Dry beans	\$ mil.	145	160	211	185
Other 5/	\$ mil.	472	555	588	625
<i>Per capita use</i>	Pounds	445	440	428	438
<i>Vegetables:</i>					
Fresh & melons	Pounds	172	173	172	173
Processing	Pounds	123	126	117	123
Potatoes & products	Pounds	135	126	124	126
Dry beans	Pounds	6	6	6	6
Other 2/	Pounds	9	9	10	9

1/ ERS forecasts. 2/ Includes sweet potatoes, dry peas, lentils, and mushrooms (except for crop value). 3/ Ratio of total value to total production. 4/ Includes canned, frozen, and dried. Excludes potatoes, pulses, and mushrooms. 5/ Other includes mushrooms, dry peas, lentils, sweet potatoes, and vegetable seed. All trade data are on a calendar-year basis.

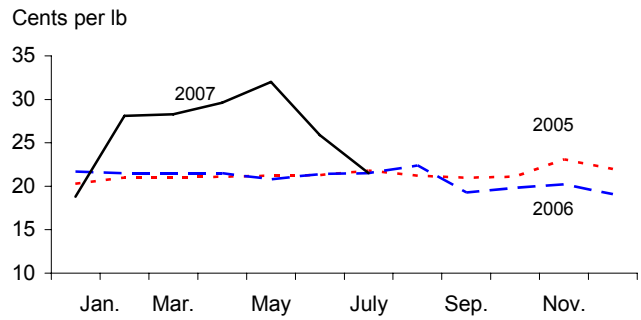
Sources: Derived by ERS from data of USDA, National Agricultural Statistics Service, *Crop Production, Acreage, Agricultural Prices, Crop Values, Mushrooms, and Potatoes*, and from U.S. trade data of the U.S. Dept. of Commerce, U.S. Census Bureau.

Figure 1
Point-of-first sale (farm) price for fresh-market vegetables

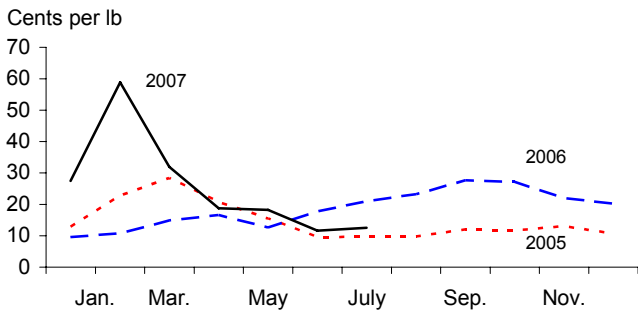
Broccoli



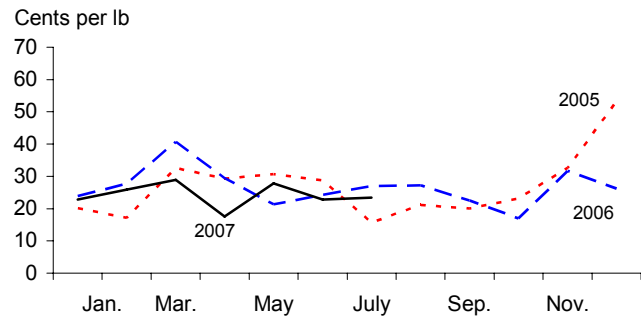
Carrots



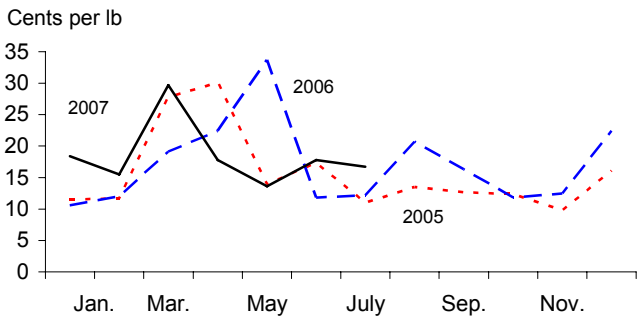
Celery



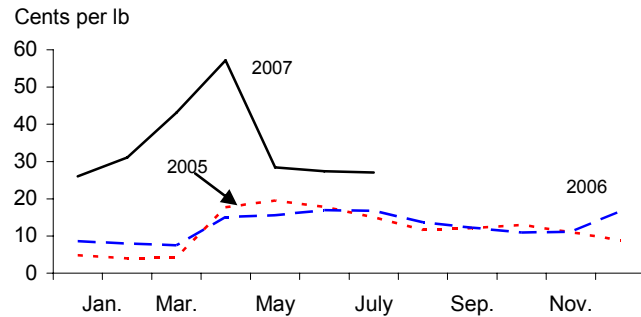
Cucumbers



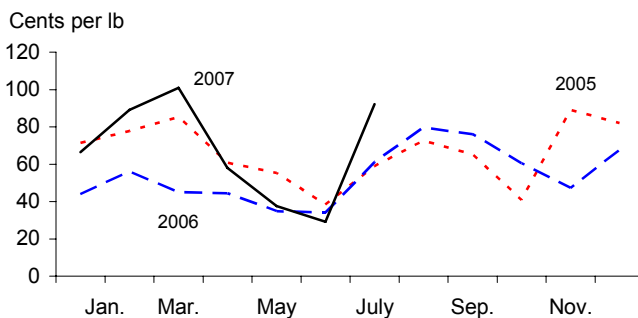
Head lettuce



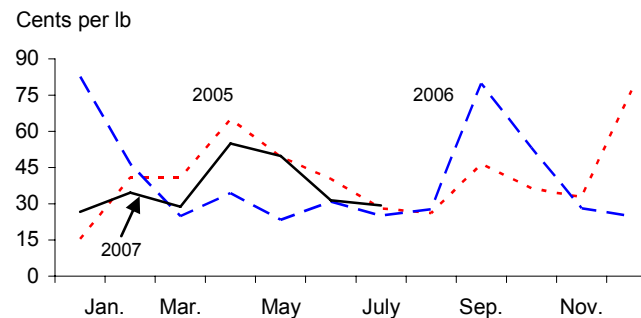
Onions



Snap beans



Tomatoes



Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Fresh-Market Vegetables

Summer Acreage Up 1 Percent

This summer, fresh-market vegetable (including summer nonstorage onions) and melon area for harvest is forecast up 1 percent over a year ago. Since bottoming out in 2005, summer area has increased during each of the past 2 years. Increased summer acreage this year largely reflects strong grower prices during the previous summer season and increased use of watermelon for juice products. During the summer of 2006, average prices received by growers for fresh-market vegetables were the highest on record (unadjusted for inflation) due to the hot dry weather. California, accounting for 46 percent of this year's summer season area, reduced acreage 2 percent. Much of California's reduction was due to lower area for head lettuce (down 14 percent) and broccoli (down 3 percent). New York, the second leading summer-season producer with 12 percent of acreage, expects to harvest 2 percent more area than a year earlier. Excluding melons and onions, summer area for harvest was forecast to decline 1 percent.

Excluding melons and potatoes, shipments of fresh market vegetables declined 8 percent during the spring (April-June) of 2007. Shipments were below a year earlier for most crops including asparagus, cabbage, snap beans, cauliflower, onions, and iceberg lettuce. Improved volume was noted for artichokes, romaine lettuce, and tomatoes. In July, fresh vegetable shipments were down about 5 percent reflecting lower acreage for crops such as iceberg lettuce, broccoli, and snap beans and unusually hot temperatures in some growing regions. September volume is expected to improve for tomatoes, onions, and peppers but drop for iceberg lettuce.

This July, shipments of squash were down 12 percent from a year earlier, with most of the drop coming from smaller imports of miscellaneous types such as acorn, buttercup, and spaghetti. Volume of yellow crookneck squash was up this July while yellow straightneck and zucchini shipments were lower. Zucchini accounts for at least a third of squash market shipments during the summer, followed by yellow straight-neck and crookneck types. Meanwhile, shipments of non-bell (mostly chile) peppers continued to trend higher, with July volume up 20 percent compared with a year earlier. Most of the volume consisted of mixed imports from Mexico, with varieties such as Anaheim, Cubanelle, habenero, jalapeno, poblano, and Serrano noted.

Table 2--Summer-season fresh-market vegetable area 1/

Item	2004	2005	2006	2007	Change
					2006-07
					Percent
					--Acres--
Snap beans	17,200	18,800	20,900	19,700	-6
Broccoli	32,500	33,000	34,000	33,000	-3
Cabbage	12,900	12,700	13,300	14,700	11
Carrots	18,900	17,500	18,500	21,800	18
Cauliflower	8,000	9,000	10,000	10,000	0
Celery	5,800	5,900	5,500	5,400	-2
Sweet corn	109,100	106,800	106,400	106,700	0
Cucumbers	4,600	5,100	4,300	4,700	9
Head lettuce	46,200	44,900	44,600	39,000	-13
Bell pepper	3,500	3,200	3,200	3,000	-6
Tomatoes	39,200	39,400	38,300	38,600	1
Total	297,900	296,300	299,000	296,600	-1

1/ Selected crops for harvest largely during July-September.

Source: USDA, National Agricultural Statistics Service, *Vegetables*.

Table 3--Selected fresh-market vegetable shipments 1/

Item	Annual 2006	June 2007	July		Change previous: 2/	
			2006	2007	Month	Year
	--1,000 cwt--				Percent	
Snap beans	3,332	322	134	129	-60	-4
Broccoli	9,783	681	667	639	-6	-4
Cabbage	13,049	602	630	498	-17	-21
Cantaloup	27,378	4,100	3,370	3,233	-21	-4
Carrots	10,897	691	773	593	-14	-23
Cauliflower	4,219	282	301	254	-10	-16
Celery	16,770	1,232	1,194	1,064	-14	-11
Sweet corn	11,438	2,392	509	548	-77	8
Cucumbers	14,248	926	972	716	-23	-26
Greens	2,137	83	68	92	11	35
Head lettuce	36,880	2,778	3,190	2,630	-5	-18
Romaine	14,521	1,120	1,045	1,151	3	10
Leaf lettuce	4,141	274	349	232	-15	-34
Onions, dry bulb	46,002	3,178	3,526	3,118	-2	-12
Onions, green	3,466	202	183	139	-31	-24
Peppers, bell	17,643	1,608	1,063	1,050	-35	-1
Peppers, chile	4,783	349	464	435	25	-6
Squash	7,034	225	311	274	22	-12
Tomato, round	29,048	2,043	2,084	2,714	33	30
Tomato, roma	10,835	513	702	619	21	-12
Tomato, ghouse 3/	9,819	1,459	1,130	1,178	-19	4
Tomato, cherry 4/	4,182	325	296	302	-7	2
Watermelon	40,443	10,389	6,154	6,746	-35	10
Selected total	342,048	35,774	29,115	28,354	-21	-3

1/ All 2007 data are preliminary. Includes domestic and imported product. 2/ Change in July 2007. 3/ Includes all types of tomatoes produced under cover. 4/ Includes grape tomatoes.

Source: USDA, Agricultural Marketing Service, *Fruit and Vegetable Market News*.

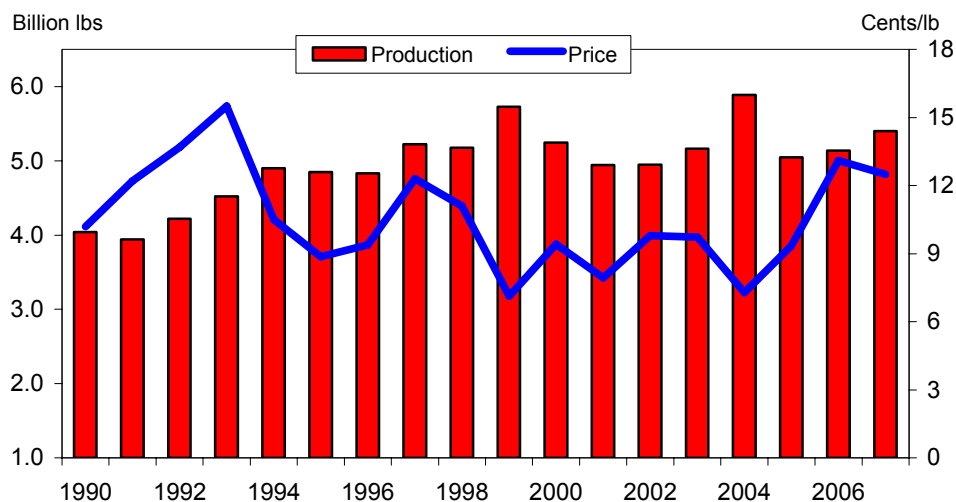
This summer, with steady demand and continued favorable weather yielding strong supplies, fresh-market vegetable prices are likely to remain below a year earlier. During the summer quarter of 2006 (July-September), prices for fresh market vegetables as measured at the point of first sale (largely grower or f.o.b. shipping-point) jumped 20 percent to a record high as extreme heat and drought disrupted plant growth and reduced yields. Assuming no disruptions from tropical weather over the next month, shipping-point prices for summer fresh-market vegetables are expected to average about a tenth below a year earlier.

Storage Onion Crop May Rise

Harvested area for all onions is expected to total 159,680 acres in 2007—3 percent below a year earlier. Harvested area for the spring crop was down while the summer nonstorage crop remained steady. Area expected to be harvested for summer/fall storage onions is down 2 percent from a year ago. Yield for both the 2007 spring (up 10 percent) and summer non-storage (up 3 percent) crops each averaged above a year earlier. Although yields for the summer storage crop are expected to be much improved from a year earlier, periods of hot, dry weather in both eastern and western states will likely prevent national yields from reaching the 2004 record high. Thus, with improved yields, production of storage onions for the fresh market (excluding California) will likely approach 40 million cwt—exceeding the 38 million cwt of a year ago. Assuming crop quality is high (preventing excessive inventory shrinkage) and export demand returns to average levels, 2007/08 fresh dry bulb onion supplies should improve enough to ease prices back from the extreme highs experienced over most of 2007.

Figure 2

U.S. storage onions: Production and season-average price



Source: USDA, National Agricultural Statistics Service, *Vegetables*, except 2007 by ERS.

During the spring, reduced harvested area was offset by improved yields, leaving production of spring-season onions about unchanged from a year earlier at 11.2 million cwt. Lower production in Texas was largely offset by increased output in Georgia. With yields up 3 percent and harvested area steady, the U.S. summer nonstorage onion crop is expected to total 10.9 million cwt—up 3 percent from a year ago. Production is expected to be the same or higher in every State except California, where yields were the lowest since 2003 due to rain-delayed planting and cool weather during the growing season.

During the second quarter (Apr.-June), fresh dry bulb onion prices measured at the point of first-sale averaged \$37.67 per cwt, up 137 percent from the previous spring and well above the previous record high set in 2003 (\$29.47/cwt). Limited domestic supplies and strong export demand helped propel prices higher. Since peaking in April, prices have trended lower, with marketings from the spring and summer nonstorage crops. However, market psychology remained tilted upward, with prices through mid-July averaging 60 percent above a year earlier and 80 percent above the average of the previous 3 years.

Fresh Imports Up 12 Percent

The volume of fresh vegetable (excluding potatoes and melons) imports increased 12 percent during the first half (Jan.-June) of the 2007 calendar year. The value of those imports totaled \$2.5 billion with import value from Mexico (up 9 percent), Canada (up 7 percent), China (up 53 percent), Peru (up 25 percent) each increasing. Fresh imports from China largely consisted of garlic. Together, Mexico and Canada accounted for 87 percent of U.S. fresh-market vegetable import volume during the first half of 2007. Import volume increased for items like dry bulb onions (up 69 percent), hothouse tomatoes (up 15 percent), squash (up 11 percent), and cucumbers (9 percent), and declined for round field-grown tomatoes (down 4 percent) and sweet (bell) peppers (6 percent). In 2006, with rising imports and lower domestic output, the fresh vegetable (excluding potatoes and melons) import share of consumption reached a record high of nearly 17 percent. Given the sharp gains experienced in import volume during the first half of the year, import share is expected to continue to trend higher in 2007.

The January-June volume of fresh vegetable exports fell 7 percent from a year earlier to the lowest volume since 1998 as weather-related problems such as the January western freeze reduced available supplies and raised prices. The quantity of fresh vegetables shipped to Canada (down 4 percent) and Japan (down 44 percent) decreased, while volume shipped to Mexico (which also suffered from reduced supplies due to weather impacts) was up 24 percent. Combined, these three nations accounted for 93 percent of U.S. fresh vegetable export volume. Export volume declined for the majority of major vegetables, with the exception of such crops as tomatoes, celery, and peppers.

Table 4—U.S. quarterly grower (point-of-first-sale) prices, 2006-07

Commodity	2006			2007				Change 2nd Q 1/ Percent
	Second	Third	Fourth	First	Second*	Third *	Fourth*	
	Cents/pound							
Asparagus	94.70	129.67	127.00	119.00	112.33	175.00	--	18.6
Broccoli	37.80	40.83	35.07	41.07	29.43	32.00	35.00	-22.1
Cantaloup	23.80	15.70	22.10	--	22.75	13.50	18.00	-4.4
Carrots	21.23	21.07	19.70	25.80	29.17	21.00	20.00	37.4
Cauliflower	37.63	40.83	33.67	42.37	35.37	30.00	35.00	-6.0
Celery	15.70	24.00	23.10	41.57	16.23	13.50	16.00	3.4
Sweet corn	21.40	23.23	18.53	27.40	21.27	22.00	21.50	-0.6
Cucumbers	25.35	25.57	24.97	28.90	22.73	23.00	23.00	-10.3
Lettuce, head	22.63	16.40	15.57	22.07	16.40	23.00	17.50	-27.5
Onions, dry bulb	15.90	14.23	13.47	33.57	37.67	17.50	11.50	136.9
Snap beans	37.80	72.30	58.43	85.57	41.60	75.00	59.00	10.1
Tomatoes, field	29.53	44.23	35.37	30.03	45.40	30.00	40.00	53.7
All vegetables 2/	971	954	872	1,200	1,027	885	900	5.8

-- = not available. * = ERS forecast. 1/ Change in 2nd-quarter 2007 over 2nd-quarter 2006.

2/ Price index with base period of 1910-14 (the period when the index equaled 100).

Source: Derived by ERS from USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Table 5--Selected fresh-market vegetable trade volume, 2005-07 1/

Item	2006	January - June			Change 2006-07 Percent
	Annual	2005	2006	2007	
	--1,000 cwt--				
Exports, fresh:					
Onions, dry bulb	6,588	3,178	2,649	2,298	-13
Lettuce, head	3,639	2,364	2,084	1,704	-18
Lettuce, other	4,610	2,638	2,528	2,291	-9
Tomatoes	3,177	1,564	1,491	1,618	9
Broccoli	3,053	1,593	1,758	1,723	-2
Carrots	2,531	1,708	1,582	1,550	-2
Other	13,700	8,099	8,238	7,726	-6
Total	37,298	21,145	20,330	18,911	-7
Imports, fresh:					
Tomatoes, all	21,879	12,396	14,321	15,495	8
Cucumbers	9,743	6,139	5,816	6,330	9
Onions, dry bulb	6,432	3,521	3,226	5,450	69
Peppers, sweet	7,161	3,908	4,730	4,463	-6
Squash 2/	5,304	3,135	3,154	3,489	11
Peppers, chile	5,086	1,935	2,454	2,422	-1
Asparagus, all	2,653	1,099	1,215	1,300	7
Other	21,658	10,538	11,019	12,269	11
Total	79,916	42,672	45,935	51,217	12

1/ Excludes melons, potatoes, mushrooms, and dry pulses. 2/ Excludes chayote.

Source: Prepared by ERS using data from U.S. Department of Commerce, U.S. Census Bureau.

Melons

Assuming average yields, summer melon production is likely to expand in 2007 due to an expected 5-percent gain in harvested acreage. However, all of the gain in melon area will come from a projected 13-percent jump in watermelon acres, with fewer harvested acres expected for summer cantaloup and honeydew melons. Over the past 4 years, improvements in watermelon yields were superior to those experienced for both cantaloup and honeydews.

Generally, with no changes in demand, there is an inverse relationship between supply and price. For watermelon in 2006, an increase in production resulted in an 11-percent lower average price. For cantaloup, prices rose 8 percent as production declined by 6 percent. As a result, the value of production of watermelons declined, but rose slightly for cantaloup in 2006. For all melons, the farm value of production was down 1 percent, with value per harvested acre dropping 3 percent to \$3,389.

Although U.S. imports of melons are up 27 percent since 2004—from 1,834 to 2,325 million pounds in 2006—domestic production has not deviated much from its average of 65.7 million cwt over the past decade. While yield has been on a long upward trend, the area planted and harvested have commensurately been on a decline. As a result, the import share of consumption has been on a gradual incline. Per capita consumption of melons has remained steady at around 28 pounds over the past decade.

Per capita consumption of watermelons reached almost 16 pounds in 2006, up from 13 pounds in 2004. A number of factors are credited for increased watermelon consumption—seedless varieties, smaller sizes and weights, various flesh colors other than red (yellow, orange, white, pink), new juice products featuring watermelon, and year-round supply by way of imports. Although large oval or elliptical-shaped watermelons are still available, their larger size and heavier weight generally limit purchases.

Watermelon's share of all U.S. melon consumption has increased relative to cantaloup and other melons. The consumption of melons other than watermelon has declined from 14.5 pounds in 1999 to 12 pounds in 2006. In terms of value, per capita use of watermelon was a record \$1.72 in 2006 (at wholesale), up from \$.90 in 2000. In comparison, per capita use value of other melons as a group was \$2.00 in 2006, down from \$2.50 in 2001.

At nearly 18 percent, the import share of consumption for watermelon in 2006 was much lower than the 38 percent import share for cantaloup and other melons. The reason for watermelon's smaller import percentage is expanding domestic production, which rose nearly 10 percent in 2006. Gains in watermelon production

Table 6--Summer-season fresh-market melon area 1/

Item	2004	2005	2006	2007	Change
					2006-07
					Percent
					--Acres--
Cantaloup	40,300	39,500	39,100	38,300	-2
Honeydew	14,000	15,400	15,000	13,900	-7
Watermelon	55,700	56,800	63,400	71,600	13
Total	110,000	111,700	117,500	123,800	5

1/ Selected crops for harvest largely during July-September.

Source: USDA, National Agricultural Statistics Service, *Vegetables*.

were biggest in Georgia and Texas, as well as in smaller producer States. By contrast, domestic cantaloup production dropped by more than 6 percent in 2006. Production of cantaloup and honeydew melons was down in California in 2006, while cantaloup production in Texas plummeted.

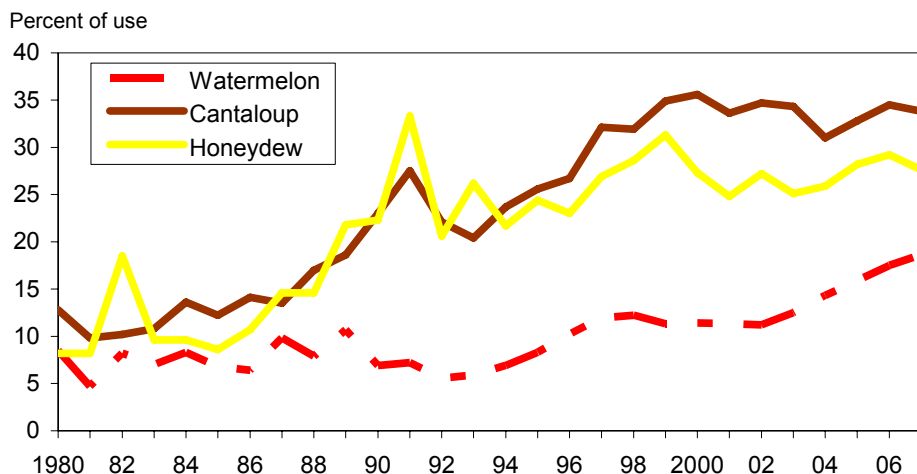
Imports of melons are projected to increase by double-digit rates in value and volume in 2007, due largely to watermelon. Import demand for watermelon reflects its greater domestic appeal. Exports, which largely go to Canada, favor cantaloup at double-digit rates in value and volume. Watermelon exports are projected to move up in value due to higher export prices, but are expected to be lower in volume. While imported watermelon largely come from Mexico, cantaloups are largely shipped from Guatemala, Costa Rica, and Honduras. Imports are concentrated during the colder months in the United States—starting in the fall and continuing through late spring.

Table 7--U.S. melons, fresh: Crop value per acre

States	1993	1995	1997	1999	2001	2003	2005	2006
<i>Dollars per acre</i>								
Cantaloup	2,767	3,454	3,642	3,537	4,511	4,322	3,745	3,798
Arizona	3,591	3,819	4,897	3,213	4,833	5,735	4,361	4,428
California	2,907	3,460	3,717	3,633	4,631	3,773	3,494	3,645
Georgia	664	1,820	1,638	2,278	1,920	2,688	2,418	3,090
Texas	2,784	4,408	2,800	5,112	6,225	7,464	6,578	4,706
Honeydew	2,957	3,431	3,423	3,952	4,078	4,266	4,052	3,974
Arizona	4,320	3,856	3,240	3,360	5,418	4,925	5,712	5,562
California	2,672	2,992	3,330	3,798	3,645	3,500	3,717	3,342
Texas	3,440	4,920	4,746	5,900	6,804	11,434	3,124	8,060
Watermelon	1,267	1,767	1,701	1,511	1,701	2,292	3,229	3,039
Arizona	2,297	2,850	2,409	2,211	4,386	5,310	6,916	5,040
California	3,377	5,434	5,017	4,214	5,777	5,808	5,439	4,859
Florida	1,800	1,900	1,825	2,070	1,767	2,580	4,883	4,389
Georgia	630	1,551	1,155	975	1,325	1,677	1,659	1,880
Texas	1,008	1,414	1,346	796	720	1,936	3,328	2,752

Sources: USDA, National Agricultural Statistics Service, *Vegetables*; www.FAS.USDA.gov/ustrade.

Figure 3
U.S. melons: Share of domestic use from imports, 1980-2007



Source: Computed by USDA, Economic Research Service.

Processing Vegetables

Area for Harvest Up 1 Percent

In 2007, contract area for harvest of the five major processing vegetables (tomatoes, sweet corn, snap beans, green peas, and cucumbers) is expected to total 1.21 million acres—up 1 percent from a year ago. Contract production accounted for 99 percent of the output of the five leading processing vegetables last year. While area devoted to canning vegetables declined 3 percent, processors responded to shrinking inventories and stronger wholesale prices by increasing area for freezing vegetables 8 percent. Area contracted was higher for each of the 3 freezing vegetables and is the largest combined area since 2001. Driven by a larger tomato crop and yields that at least match the average of the past 3 years for other crops, total output of the five leading processing vegetables could approach 17 million tons—up about one-tenth from a year earlier.

Given a 4-percent increase in contract area and the expectation of strong yields, contract production of U.S. processing tomatoes is expected to increase 17 percent to 12.3 million short tons—second only to the record 12.8 million ton crop of 1999. Per-acre yields in California are expected to be vastly improved over the weather-shortened levels of the last 2 years and will likely be second only to 2004's record 41.5 tons per acre. Weekly processing tonnage peaked in mid-August and total processed tonnage was running well ahead of a year earlier when the crop got off to a slow start. Inventories of tomato product coming into the 2007/08 crop year were up 11 percent from a year earlier as higher wholesale prices apparently slowed demand for tomato products. Although above the low levels of a year earlier, stocks of available tomato paste were less than a million tons. Typically, about half of the tomato crop is processed into bulk tomato paste for later sale, with another quarter of the tomato crop made into bulk paste by remanufacturers for use in their own products (e.g., sauces, catsup, juices). The final quarter of the tomato crop is generally processed directly into whole/diced tomato products (e.g., stewed tomatoes, salsa), tomato pulp-containing products (e.g., special sauces), or dried and dehydrated products (e.g., sun-dried tomatoes, tomato powder).

Table 8--Processing vegetables: Consumer and producer price indexes

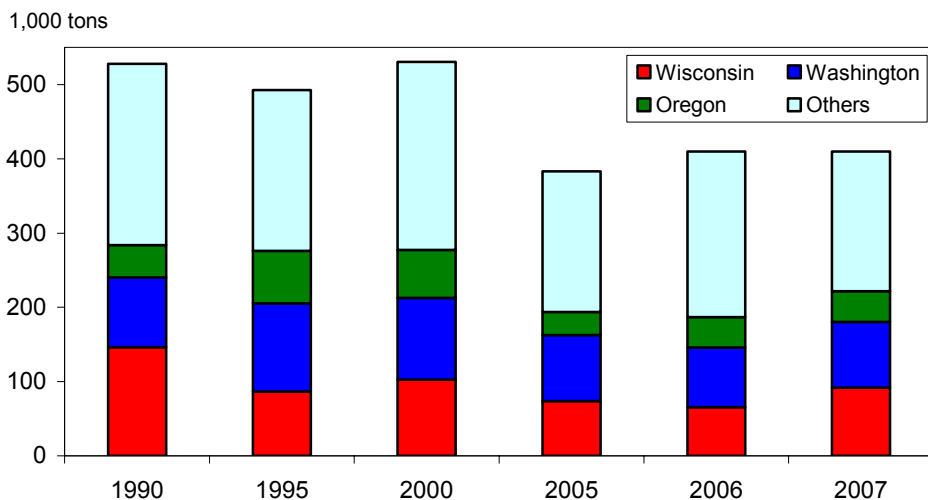
Item	2007		2006	Change previous:	
	July	June	July	Month	Year
-- Index --					
Consumer Price Indexes (12/97=100)					
Processed fruits and vegetables	129.0	127.7	123.8	1.0	4.2
Canned vegetables	131.2	130.5	128.1	0.6	2.4
Frozen vegetables (1982-84=100)	182.6	178.6	178.8	2.2	2.1
Dry beans, peas, lentils	134.6	133.0	120.7	1.2	11.5
Olives, pickles, relishes	121.2	120.9	110.3	0.3	9.9
Producer Price Indexes (1982=100)					
Canned vegetables and juices	143.1	144.2	140.2	-0.8	2.1
Pickles and products	195.1	194.8	189.1	0.2	3.2
Tomato catsup and sauces 1/	137.7	137.7	134.0	0.0	2.8
Canned dry beans	134.4	134.4	134.7	0.0	-0.2
Vegetable juices 1/	116.6	117.3	115.9	-0.6	0.6
Frozen vegetables	148.4	145.9	139.4	1.7	6.5
Frozen vegetable combinations	108.4	105.7	107.0	2.6	1.3
Dried/dehy. fruit & vegetables	179.3	178.7	165.1	0.3	8.6

1/ Index base year is 1987.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics (<http://www.bls.gov/data/home.htm>).

Figure 4

U.S. green peas for processing: Production, 1990-2007



Source: USDA, National Agricultural Statistics Service, *Vegetables* (2007 contract only).

U.S. processors reduced sweet corn contract area 4 percent, with area for canning down 9 percent and freezing up 1 percent. Processors generally purchase very little sweet corn on the open market (none was reported last year). Despite a late start in the upper Midwest due to a cool, wet early spring, few problems have been noted in this year's crop. In mid-August, harvest in Minnesota was running well ahead of average with more than a third of the crop delivered to plants. Given contract acreage and current crop conditions, production of processing sweet corn could be 4 to 8 percent below a year ago, totaling around 2.9 million short tons—potentially the smallest crop since 1993.

Green Pea Output Up 1 Percent

The first estimate of 2007 contract production for processing green peas indicated a 1-percent increase from a year earlier to 409,940 short tons. Estimated contract area for harvest was up 7 percent from a year earlier, with more than 98 percent of annual harvested area produced under contract. With hot dry weather stressing the crop in some areas, per-acre yields were expected to decline 6 percent (to 1.93 tons) from last year's record high. In Wisconsin, area for harvest is expected to rise 39 percent to the highest level since 2000 and push the State past Washington as the second-leading producer of processing green peas. Although early estimates suggested that yields in Wisconsin could be the second-highest on record, periods of hot dry weather may have impacted productivity. Unusually hot dry weather in Washington, Oregon, and Delaware was also expected to trim yields from year-earlier levels, although Washington's late season canning yields were reported to be favorable. The next production estimate for green peas and other processing vegetables is scheduled to be released in the September 6 *Vegetables* report from USDA's National Agricultural Statistics Service.

Processed Imports Up

During the first half of 2007, the value of processed vegetable imports (excluding potatoes, mushrooms, and pulses) increased 10 percent to \$933 million. Mexico (26

percent of value), China (14 percent), Canada (13 percent), Peru (7 percent), and Spain (4 percent) remain the top five foreign sources of canned, frozen, and dehydrated vegetables. Led by tomato products, the value of canned vegetable imports increased 7 percent. Much of the gain in canned imports to this point in 2007 came from Peru (up 31 percent) and China (up 25 percent). Most of the gain in canned imports from Peru came from asparagus and artichokes, while China increased shipments of bulk tomato paste in response to strong wholesale prices in the U.S. market.

Excluding potatoes, U.S. imports of frozen vegetables were up 12 percent during January-June led by gains in broccoli (up 13 percent) and sweet corn (31 percent). Mexico (42 percent of export value), Canada (19 percent), and China (12 percent) remain the top three sources. The value of dried and dehydrated vegetable and herb imports (excluding potatoes and mushrooms) rose 13 percent from a year earlier during the first 6 months of 2007. China, which accounted for 36 percent of import value, shipped more garlic and chile peppers during the first half of the year. Dried garlic bulb volume from China was up 67 percent, while garlic powder/flour rose 29 percent.

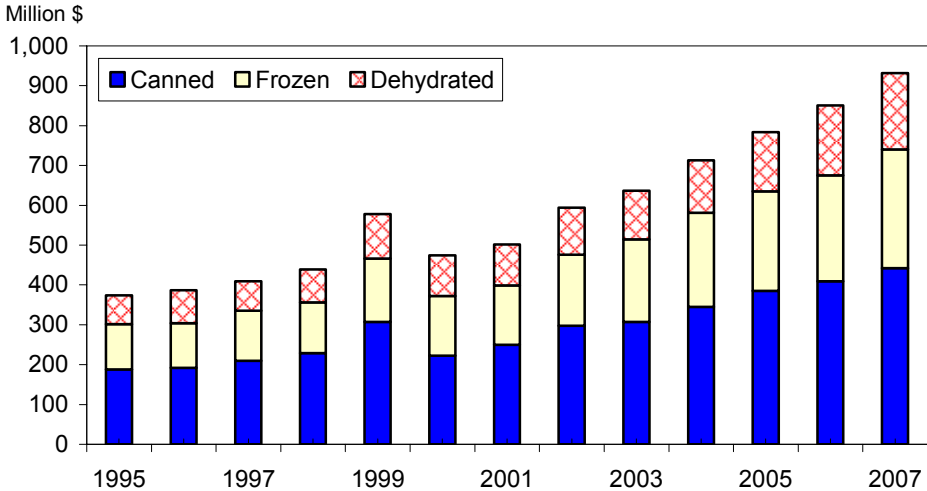
Table 9--Value of processed vegetable trade 1/

Item	2006	January - June			Change
	Annual	2005	2006	2007	2006-07
	-- Million dollars --				Percent
Imports:					
Canned	883	385	409	438	7
Frozen	526	250	266	298	12
Dehydrated 2/	353	148	175	197	13
Exports:					
Canned	555	264	272	271	0
Frozen	175	75	85	100	17
Dehydrated 2/	129	60	63	66	5

1/ Excludes potatoes and mushrooms. 2/ Includes dried.

Source: Derived by ERS from data of the U.S. Department of Commerce, U.S. Census Bureau.

Figure 5
U.S. processed vegetables: Import value for January-June, 1995-2007



Source: Derived by USDA, ERS from data of U.S. Dept. of Commerce, U.S. Census Bureau.

Potatoes

Fall Production Expected To Rise

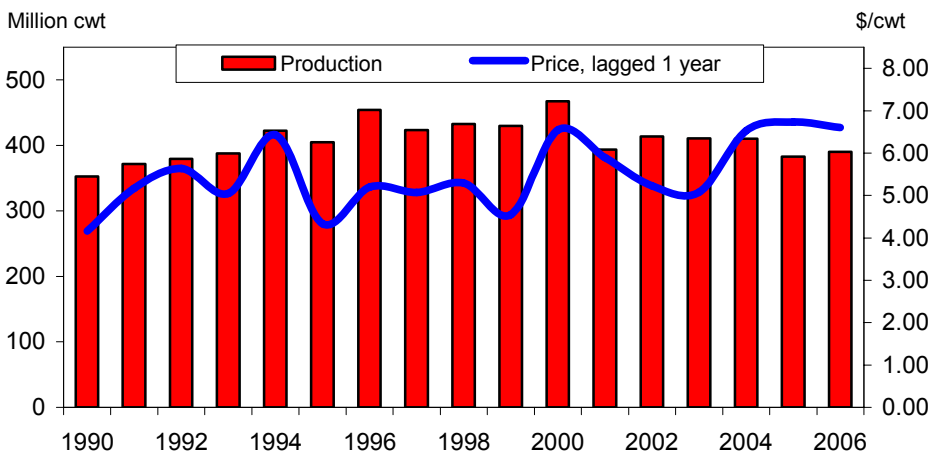
Fall potato production in 2007 can be forecast using two approaches. One approach is to anticipate the average yield per acre. The other approach is to use the price elasticity of supply (the percentage change in supply with respect to price) with a 1 year lag on price. In the first approach, estimating yield entails using the average yield in recent years, which is around 400 cwt per acre. Applying this yield level against NASS' projected 996,000 acres of fall potatoes to be harvested gives a production estimate of 398 million cwt in 2007. This amount represents a 1.5-percent increase from fall 2006.

Using the second approach, the price elasticity of supply is 0.6 on average from 1992 to 2006. This measure leads to a fall production estimate of 398.5 million cwt in 2007, which is not significantly different from the first approach's estimate. Thus, forecasting the fall crop's yield at 400 cwt per acre in the first approach turns out to be consistent with using the average elasticity since 1992 in the second approach. Given NASS' projection for the other seasons' production levels, total U.S. potato production for 2007 is forecast at 438 million cwt, or 1 percent more than in 2006.

If the elasticity of supply with respect to price is less than 1, a 1-percent rise in average price is expected to generate an increase in production of less than 1 percent. That is, to affect a 1-percent decline in production, observed prices have to fall by more than 1 percent on average. For the 2006 fall potato crop, average prices rose from \$6.53 per cwt in 2005 to \$6.73, a 3-percent increase. If the change in production is assumed to be directly proportional to the change in acres planted or harvested (as it was in 2006), then the 2-percent larger area planted in 2007 is expected to raise production similarly by about 2 percent. These expectations are consistent with supply that is proportionately less responsive to price changes (elasticity is less than 1)—3 percent higher fall crop prices in 2006 are projected to boost fall production by 2 percent (or at most less than 3 percent) in 2007.

Prices for the 2007 fall crop appear to be somewhat more difficult to gauge. Average prices through May 2007 were slightly higher than the same period in

Figure 6
U.S. fall potato production and lagged season-average prices 1/



1/ Prices are from the previous crop year (lagged one year).
Source: USDA, National Agricultural Statistics Service, *Potatoes, Crop Production*.

Table 10--U.S. potatoes: Quarterly shipments 1/

Item/year	Jan.-Mar.	Apr.-June	July-Sep.	Oct.-Dec.	Year 2/
-- Million pounds --					
Fresh market					
2003	2,915	2,883	2,392	2,884	11,073
2004	2,782	2,771	2,455	2,885	10,893
2005	2,798	2,728	2,300	2,790	10,617
2006	2,579	2,585	2,230	2,564	9,958
2007	2,649	2,678			
Pcnt change	2.7	3.6			
Total potatoes					
2003	4,494	5,284	3,419	4,011	17,207
2004	4,306	5,683	3,732	4,158	17,879
2005	4,439	5,232	3,642	4,177	17,490
2006	3,995	4,758	3,348	3,922	16,023
2007	4,459	4,971			
Pcnt change	11.6	4.5			

1/ Domestic shipments plus net imports through May 2007.

Sources: Derived by ERS from data of USDA, Agricultural Marketing Service, *Market News* and U.S. Department of Commerce, U.S. Census Bureau.

Table 11--Potatoes: Fall crop stocks as percentage of usage, 15 major States 1/

Crop year	Fall potatoes stocks on:						
	1-Dec	1-Jan	1-Feb	1-Mar	1-Apr	1-May	1-Jun
-- Percent --							
2001	100.0	86.8	85.5	82.6	75.6	67.7	52.9
2002	100.0	87.5	86.0	83.0	76.1	66.0	55.3
2003	100.0	87.2	85.7	83.0	75.8	67.4	54.1
2004	100.0	87.3	86.0	82.6	76.7	68.7	58.4
2005	100.0	86.9	85.8	82.2	74.4	65.6	54.8
2006	100.0	87.2	85.4	81.6	74.2	64.4	53.0
% change 2/		0.4	-0.5	-0.8	-0.3	-1.8	-3.1

1/ Usage during current and future months. 2/ Change from 2005 to 2006.

Source: USDA, National Agricultural Statistics Service, *Potato Stocks*.

2006. However, prices in June and July averaged below those of a year earlier. If these lower prices continue through the fall, the value of production for the 2007 crop may not exceed 2006's \$3.2 billion. Should the average price decline exceed 1 percent, then the total production value for 2007 will amount to less than \$3.2 billion (assuming the 1-percent rise in production happens). However, if demand for the fall crop turns out to be strong, or stronger than current expectations, then prices may rise again. Exports are expected to remain vigorous given that the Canadian dollar has appreciated against the U.S. dollar. Not only will exports to Canada be helped by the relative exchange rate, but foreign markets will favor U.S. potatoes versus Canada's based on price.

Notwithstanding seemingly softer potato prices in recent months, processing use is definitely more intensive than in 2006. Demand by processors in the Pacific Northwest region is higher as well—5 percent more than last year through May, especially with respect to Idaho's processing potatoes. Indeed, fall 2006 crop stocks in Idaho are below last year's levels, indicating a 7-percent faster use rate. Potato stocks as a ratio of fall 2006 production were serially lower since January 2007,

signaling relatively brisk demand this year. Frozen potatoes in cold storage were also about 4 to 5 percent lower from January to June. Since potato production in 2006 was 2.5 percent larger than in 2005, smaller frozen stocks thus far indicate hearty demand for french fries and other frozen potato products.

Given recently weaker prices, especially for fresh-market potatoes, overall demand through July 2007 appears to be stronger based on larger shipments than a year earlier. Shipments are up about 5 percent thus far, largely with respect to chipping and seed potatoes. Foreign demand for frozen french fries is noticeably higher than last year. Exports of frozen fries to Japan, Mexico, Canada, and China are running ahead of last year. Potato chip exports to Canada are also strong. The U.S. dollar's lower exchange value, particularly compared with the Canadian dollar, is partly responsible for the boost in export demand.

Table 12--Potatoes used for processing in the United States

Item & season	Potatoes processed through:									
	Oct. 1	Nov. 1	Dec. 1	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	
<i>Million hundredweight (cwt)</i>										
Pacific Northwest 1/										
2003-04	27.9	42.0	57.0	69.3	79.9	94.9	108.1	120.5	136.1	
2004-05	28.4	42.4	56.7	69.0	80.4	95.3	108.1	121.9	137.2	
2005-06	25.0	39.4	53.2	65.2	76.5	91.6	106.1	119.0	133.6	
2006-07	25.0	42.9	57.1	69.9	82.3	97.7	112.1	125.7	140.4	
% change 2/	0.2	8.9	7.5	7.2	7.5	6.6	5.6	5.6	5.1	
Other States										
2003-04			15.4	18.6	22.3	26.1	30.0	34.2	38.2	
2004-05			14.0	17.0	20.6	24.0	27.9	31.8	35.9	
2005-06			12.4	16.0	19.5	23.0	26.3	30.4	33.7	
2006-07			15.2	19.3	23.4	27.3	32.0	34.9	39.4	
% change 2/			22.5	20.8	19.9	18.7	21.6	14.7	17.2	

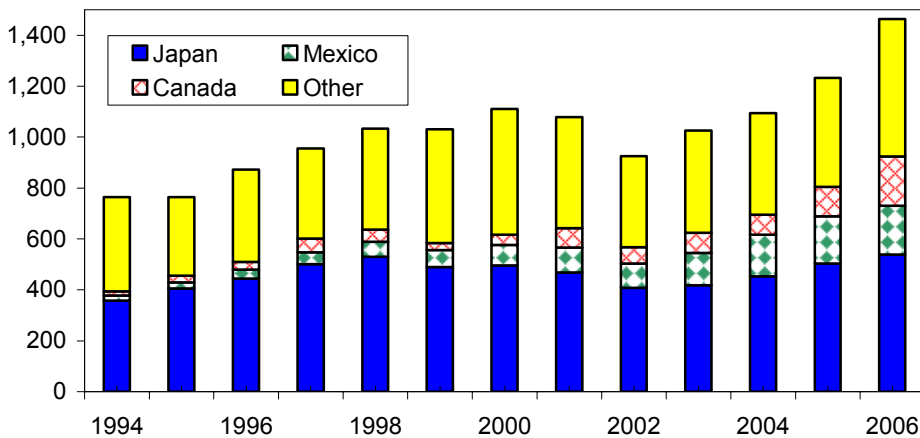
1/ Potatoes used for processing in Idaho, Washington, and Oregon. 2/ Change from 2005 to 2006.

Source: USDA, National Agricultural Statistics Service, www.nass.usda.gov.

Figure 7

U.S. frozen french fries: Export volume, crop years 1994-2006

Million lbs.



1/ The potato crop year runs from September 1 to August 31.

Source: Derived by USDA, ERS from data of U.S. Dept. of Commerce, U.S. Census Bureau.

Dry Edible Beans

Improved Yields Mute Acreage Decline

The first estimate of 2007 U.S. dry edible bean production indicated a reduction of 2 percent, to 23.7 million cwt (table 13). While per-acre yields are expected to improve at least 5 percent from a year ago to 16.49 cwt, acreage is expected to be lower. Despite strong dry bean prices, growers ultimately reduced dry bean plantings 8 percent due largely to very attractive prices for other crops. As a result, estimated area available for harvest is forecast to decline 6 percent to 1.44 million acres. Rain across some dry areas may lead to some improvement in yield and could move the estimate of U.S. dry bean production up around last year's level when the next estimate is released on October 12.

Wisconsin, a small dry-bean State that produces primarily light and dark red kidney beans, was the only State to plant more dry beans this year. Growers in the other surveyed states indicated either lower acreage or no change from the previous year. North Dakota, which accounted for 45 percent of U.S. dry bean seeded area this year, expects to harvest the same area as a year ago, with increased pinto and large chickpea area offsetting reductions for most other bean types.

With less acreage, production is expected to decline in the majority of the 18 States included in the USDA dry bean survey. The most notable exception is the leading producer, North Dakota. With improved growing weather this season, North Dakota could see a 25 percent jump in dry bean production, thanks to an expected recovery in yields from last year's low level. Minnesota, also an important producing State, expects output to remain steady with a year earlier, with rising black bean and pinto bean output expected to offset small reductions in other classes. Washington is the only other State with at least 1 million cwt of output to indicate a larger dry bean crop this year. Along with more pinto beans, Washington growers again expect an increase in large chickpea production, which could push the State's dry bean crop past 1 million cwt for the first time since 1981. Growers in Michigan, the second-leading producer, anticipate below-average yields (the lowest since the disastrous 2001 season) as dry weather likely sliced into yield potential. Some improvement may show up in later estimates as late-season rains spread over the state. Yields are also down in Colorado where dry bean production continues to slump and could reach the lowest level since 1934. Although average yield may reach a record high in Nebraska, dry bean harvested area could be the lowest since 1972.

Table 13--U.S. dry beans: Production, 2004-07

Item	2004	2005	2006	2007 p	Percent change
	--1,000 cwt--				Percent
North Dakota	4,750	8,588	7,680	9,600	25.0
Nebraska	2,376	3,870	2,728	2,300	-15.7
Colorado	1,039	1,320	1,140	800	-29.8
California	1,152	1,385	1,209	1,189	-1.7
Minnesota	1,150	2,430	2,228	2,228	0.0
Idaho	1,638	1,862	1,906	1,672	-12.3
Michigan	3,145	3,910	4,085	2,828	-30.8
Washington	609	792	968	1,012	4.5
Wyoming	541	776	590	552	-6.4
Others	1,388	1,839	1,713	1,560	-8.9
United States	17,788	26,772	24,247	23,741	-2.1

p = NASS preliminary August estimate.

Source: USDA, National Agricultural Statistics Service, *Crop Production*.

Table 14--U.S. dry beans: Area planted by class, 2004-07

Item	2004	2005	2006	2007 p	Percent change
	--1,000 acres --				Percent
Pinto	650.9	784.8	690.9	678.2	-1.8
Navy	185.1	236.4	280.7	224.4	-20.1
Black	138.3	111.6	167.4	173.2	3.5
Large chickpeas 1/	39.0	79.3	119.4	115.5	-3.3
Light red kidney	55.7	71.4	43.4	49.0	12.9
Great Northern	51.1	72.8	69.7	58.8	-15.6
Dark red kidney	51.3	60.7	48.8	43.3	-11.3
Small red	33.2	50.9	35.5	28.9	-18.6
Pink	29.3	37.9	45.3	29.0	-36.0
Blackeye	28.0	23.0	31.4	26.0	-17.2
Baby lima	11.3	16.7	13.5	16.0	18.5
Large lima	15.1	15.1	12.9	13.9	7.8
Cranberry	13.4	12.4	9.8	8.3	-15.3
Others 2/	52.6	57.0	61.1	40.3	-34.0
United States	1,354.3	1,630.0	1,629.8	1,504.8	-7.7

p = NASS preliminary August estimate. 1/ Excludes small chickpeas. 2/ Includes small chickpeas.

Source: USDA, National Agricultural Statistics Service, *Crop Production*.

Table 15--U.S. dry beans: Monthly grower prices for selected classes, 2006-07

Commodity	2006		2007		Chg. prev. year:	
	July	Aug.	July	Aug.	July	Aug.
	--- Cents per pound ---				--- Percent ---	
All dry beans	21.70	19.50	25.10	--	15.7	--
Pinto (ND/MN)	14.25	16.40	22.10	22.13	55.1	34.9
Navy (pea bean) (MI)	19.50	20.00	22.75	24.00	16.7	20.0
Great Northern (NE/WY)	18.00	18.00	28.00	28.50	55.6	58.3
Black (MI)	21.38	22.00	26.50	26.50	23.9	20.5
Light red kidney (MI)	20.50	--	--	35.50	--	--
Dark red kidney (MN/WI)	20.50	20.80	30.00	34.00	46.3	63.5
Small red (ID/WA)	19.50	19.20	24.00	25.33	23.1	31.9
Pink (ID/WA)	19.50	19.20	22.50	23.50	15.4	22.4
Garbanzo (ID/WA) 1/	--	24.60	29.50	29.00	--	17.9

-- = not available. 1/ Garbanzo beans are also known as large chickpeas.

Source: USDA, AMS, *Bean Market News* except "All beans" from USDA, NASS, *Agricultural Prices*.

As indicated by the planted area estimates released in August (table 14) and yield patterns in major States, output of pinto, lima, garbanzo, and light red kidney beans may rise, while declining for most other bean classes. Little change in output is expected for Great Northern beans as lower acreage is about offset by improved yields. USDA will release the first official estimate of production by class in the December 11 *Crop Production* report.

Prices To Remain Strong in 2007/08

During the first 11 months of 2006/07, unweighted grower prices across all classes of dry beans averaged \$23.23—24 percent above a year ago. With the exception of California, grower prices averaged above a year earlier in every major dry bean State. In North Dakota, the low price came in the first month of the marketing year (September) and then peaked in March before stabilizing between \$22 and \$23 in anticipation of the State's larger 2007 crop. Preliminary data indicate the second largest year-over-year increase in price among major states in 2006/07 was in North Dakota, which realized a 17-percent gain in grower prices over the previous season.

In the year ahead, despite a larger pinto bean crop and relatively strong black bean and garbanzo bean crops, grower prices for U.S. dry beans will average above those of 2006/07 due to the competitive influence of other crops and limited 2007/08 supplies of most dry beans. As a result, even without the impact of alternative crop markets, prices for most classes of dry beans would be expected to remain strong relative to the average of the past few years. In general, prices will likely fluctuate at an elevated price level across the dry bean complex over the next few years as dealers and processors struggle to remain competitive. However, as this year proved, given competitive prices, dry beans will remain relevant in crop rotations.

During July, the preliminary estimate of the Producer Price Index for canned dry beans averaged slightly less than a year earlier. This contrasted with both a year ago (up 3 percent) and 2 years ago (up 6 percent) when higher processing costs were passed forward following a period of several years with little change in price. Reflecting higher dealer prices this season, the July U.S. retail price for dry packaged beans averaged 96.8 cents per pound—up 16 percent from a year earlier and 21 percent above 2 years ago.

Export Volume Down 12 Percent

Given higher dry bean prices, dwindling supplies, and weaker food aid demand through the first 10 months of 2006/07 (September-June), the volume of dry bean exports fell 12 percent from a year ago. Short stocks and higher U.S. prices cut into trade for such crops as pinto beans, Great Northern beans, dark red kidney beans, and small red beans. Export movement was brisk for black beans (up 49 percent) and cranberry beans (up 29 percent) and moderately higher for garbanzo and navy beans (each up 9 percent). Among the major export markets, sales declined to Mexico (down 7 percent), the United Kingdom (down 25 percent), and Japan (down 4 percent), while volume shipped to Canada increased slightly. In 2006, the United States exported 20 percent of its dry bean supply (production, stocks, and imports), compared with 16 percent a year ago and the highest since 2001. During 2007/08, the pace of exports is likely to remain slow, with limited supplies of several classes being directed toward domestic markets. As a result, the export share of supply is expected to decline to around 18 percent—the average so far this decade.

Table 16--U.S. dry beans: Crop year export volume to date

Item	Crop year 2005/06	September - June		Change 2005-06 Percent	
		2004/05	2005/06		2006/07
		-- 1,000 cwt --			
Pinto	2,555	960	2,198	1,732	-21
Navy	1,061	890	981	1,065	9
Great Northern	852	344	802	341	-58
Black	749	480	613	912	49
Garbanzo	380	194	358	392	9
Baby lima	265	124	225	235	5
Dark red kidney	252	140	234	124	-47
Small red	182	114	157	77	-51
Light red kidney	154	48	133	169	27
Large lima	135	122	127	96	-25
Cranberry	84	37	72	93	29
Pink	65	18	51	15	-72
Blackeye	32	51	30	15	-50
Other	790	430	685	575	-16
Total	7,556	3,953	6,667	5,841	-12

Source: Compiled by ERS from data of U.S. Department of Commerce, U.S. Census Bureau.

Dry Peas and Lentils

Planted Area Down

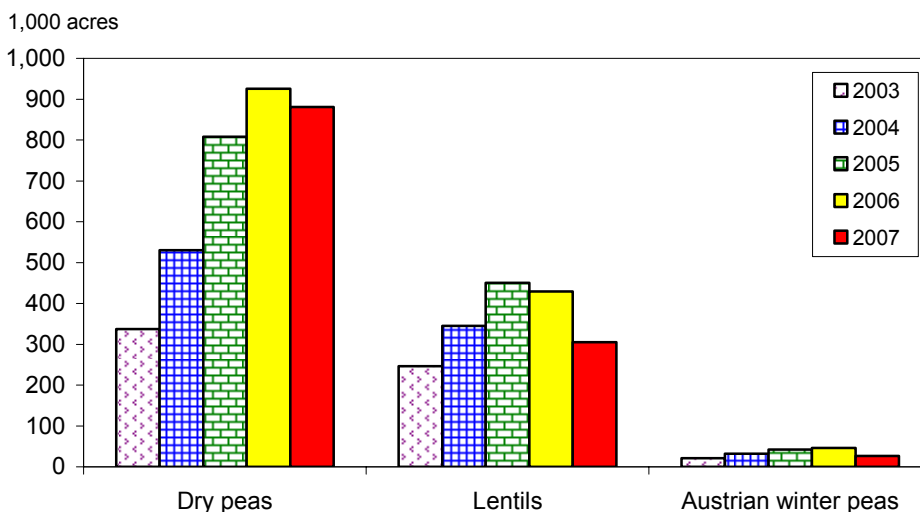
With strong competition from wheat and other crops this spring, dry pea and lentil acreage declined. Area planted to dry edible peas (excluding Austrian winter peas) fell 5 percent to 880,500 acres. While area was lower in small producing states such as Idaho and Oregon, the majority of the reduction was centered in North Dakota. Growers in Montana and Washington (the second- and third- largest in terms of area) devoted more area to dry peas this spring. For lentils, strong prices for competing crops encouraged growers to move into other crops this spring, with area planted dropping 29 percent to 305,000 acres. Lentils, primarily a food crop, rely on strong food aid purchases and commercial export demand in addition to traditional and developing domestic markets.

During the final quarter (April-June) of the 2006/07 marketing year, grower prices (as reported in *Agricultural Prices*) for all dry edible peas jumped 94 percent from a year earlier to \$9.99/cwt. With the new crop coming in, prices began their seasonal decline and likely bottomed out by mid-August. In July, grower prices for all dry peas averaged 84 percent above a year earlier. The food-pea market remains attractive to growers with top grade whole dry green peas from Washington and Idaho selling in late August for \$11.25/cwt, compared with \$5.93 a year earlier. Despite larger crops in the United States and Canada, the feed-pea market is also strong, with short crops in Europe and generally higher prices in the grain and protein meal complex setting the tone for the coming marketing year.

With another modest crop expected in the United States this year and earlier uncertainty over Canadian output and crop quality, lentil prices averaged \$14.40/cwt in July—up 85 percent from a year earlier. According to the *Bean Market News*, August prices for top grade lentils have jumped 15 percent from a month earlier, aided by expectations of reduced domestic supplies and reports of quality issues in western Canada, a major competitor in world markets. For all chickpeas, grower prices are expected to average above a year earlier given continued strong demand. Prices for all chickpeas averaged \$28.47/cwt during the April-June quarter (up 20 percent from a year earlier), with the preliminary July price exceeding \$30/cwt—the highest since June 2005.

Figure 8

U.S. dry peas and lentils: Acres planted, 2003-07



Source: USDA, National Agricultural Statistics Service, *Crop Production*.

Dry Pea Exports Decline in 2006/07

During the 2006/07 marketing year (July-June), U.S. export volume for dry peas and lentils fell 8 percent to 11.6 million cwt. However, with the exception of lentils and miscellaneous dry peas, volume was higher for every major trade category, led by split peas, yellow peas, and green peas. Because of a short crop in 2006, India increased imports from the United States, taking 26 percent of 2006/07 U.S. dry pea and lentil export volume—up from 9 percent a year earlier. A year earlier, Spain led with 17 percent of 2005/06 U.S. pea and lentil export volume due to a short crop there. Exports to India in 2006/07 were valued at \$35 million. Nearly half of the volume shipped to India consisted of dry green peas, with another 28 percent consisting of dry yellow peas. Lentils made up just 2 percent of the 3.1 million cwt of dry peas and lentils exported to India in 2006/07. The average unit value of whole green peas shipped to India rose 6 percent from a year earlier to 11.8 cents per pound, but was still well below the 13.6 cents received in 2004/05.

Table 17--U.S. dry peas and lentils: Monthly grower prices by class, 2006/07-06/07

Crop year & month	Dry peas	Chickpeas			Austrian winter peas	All Lentils
		All	Large	Small		
--- Cents per pound ---						
2006/07						
July	5.03	22.80	--	--	--	7.80
August	4.46	24.60	26.30	--	6.68	9.18
September	5.71	25.40	25.50	--	--	12.10
October	5.80	21.30	25.00	15.90	6.04	11.00
November	6.46	25.10	25.20	--	6.37	13.20
December	7.03	25.00	25.10	--	6.69	11.50
January	7.21	28.20	28.50	--	6.64	14.00
February	7.73	28.50	29.40	--	7.72	13.60
March 1/	8.30	27.50	29.60	--	8.39	12.10
April	9.64	30.00	30.10	--	--	13.30
May	10.60	27.00	29.00	--	--	14.60
June	10.10	28.40	30.30	--	9.62	13.20
2007/08						
July	9.26	30.60	31.30	--	--	14.40
Percent change						
July 07-06	84.1	34.2	--	--	--	84.6

-- = not available. 1/ Prices for July 2007 are partial-month averages.

Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Table 18--U.S. dry peas & lentils: Export volume by class 1/

Item	Crop year, July-June				Change
	2003/04	2004/05	2005/06	2006/07	2005-06
--1,000 cwt--					
Percent					
Green peas	1,436.7	2,481.0	3,277.2	3,708.6	13
Yellow peas	881.5	1,353.1	2,626.7	3,547.2	35
Split peas	199.3	218.6	195.5	380.7	95
Austrian winter pea	9.5	10.4	30.5	49.8	63
Misc. dry peas	202.8	620.7	2,588.5	1,126.1	-56
Chickpeas, all	153.0	220.2	391.1	414.0	6
Lentils, all	1,718.0	1,803.8	3,495.4	2,332.8	-33
Total	4,600.8	6,707.9	12,605.0	11,559.3	-8

1/ Excludes planting seed.

Source: Derived from data of U.S. Department of Commerce, U.S. Census Bureau.

Mushrooms

Production Down, Value Up

The farm value of all mushroom sales during the 2006/07 crop year (July-June), totaled a record \$956 million, up 7 percent from the previous year. Total U.S. mushroom sales volume declined 2 percent to 827 million pounds as a 1-percent increase in total area filled with Agaricus mushrooms was outweighed by a 3-percent reduction in yield. Agaricus yield was down in both Pennsylvania (down 5 percent) and California (down 3 percent)—the two top producing States.

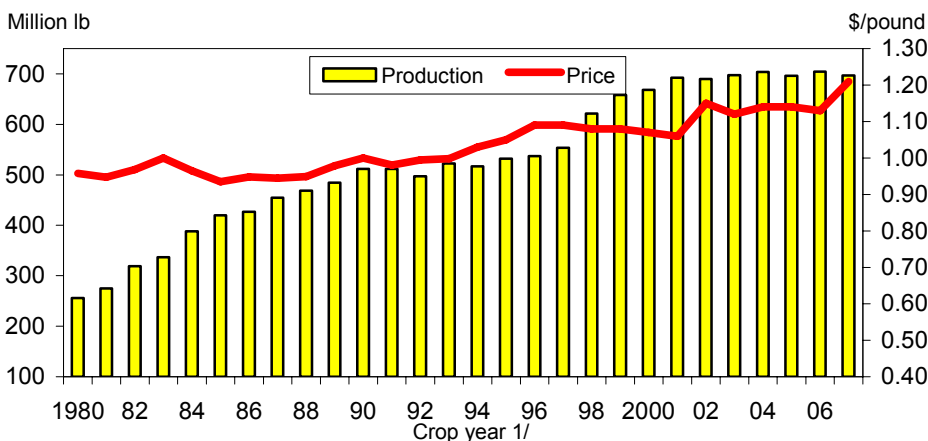
Sales volume of fresh Agaricus mushrooms declined 1 percent to 697 million pounds, returning the gains made a year ago. Fresh-sales volume accounts for about 86 percent of all Agaricus sales. On the processing side, Agaricus volume dropped 9 percent from a year earlier and now stands 37 percent below a decade earlier. Lower processing volume was more than offset in the market by a 25-percent rise in processed imports. Although demand for fresh market mushrooms has been relatively stale, average prices rose 7 percent to a nominal dollar record \$1.21 per pound. Meanwhile, reflecting reduced mushroom supplies, the unit value of mushrooms available for processing jumped 50 percent to \$0.64 cents per pound—the highest nominal dollar price since 1994/95. Despite reduced production, per capita use of all mushrooms rose 2 percent to 4.01 pounds in 2006/07. Fresh-market use declined 3 percent to about 2.6 pounds per capita, but processing use rose 13 percent to nearly 1.5 pounds per capita, supported by sharply higher imports.

The sales volume of specialty mushrooms (excluding brown Agaricus), most of which are sold in the fresh market, declined 5 percent to 12.8 million pounds, with the entire drop in Shiitake mushrooms (down 13 percent). Volume of oyster mushrooms rose 4 percent to 4.7 million pounds, accounting for more than one-third of specialty volume. The volume of brown Agaricus mushrooms (including Portabello and Crimini varieties), which have been trending higher, fell 15 percent in 2006/07—effectively erasing all the gain of a year earlier. These varieties now account for 15 percent of Agaricus sales value, down from 18 percent a year earlier.

The volume of mushrooms sold as certified organic fell 2 percent to 8.57 million pounds in 2006/07. Specialty (nonagaricus) mushrooms accounted for 22 percent of certified organic sales, with the remainder Agaricus. The share of mushroom sales volume consisting of certified organic products remained at 1 percent in 2006/07.

Figure 9

U.S. fresh-market agaricus mushrooms: Production & producer price



1/ Crop year ends with year listed (e.g., 1980 = 1979/80).

Source: USDA, National Agricultural Statistics Service, *Mushrooms*.

Intended Agaricus bed and tray production area for the 2007/08 season is expected to remain about the same as a year earlier at 143 million square feet. While growers in Eastern and Central States each intend to keep area constant, those in California expect to cut square footage 2 percent. Given about the same area as this year and a recovery in yields, U.S. Agaricus mushroom production is likely to increase in the 2007/08 season to 835 million pounds or more. Assuming modest changes in trade volume, per capita disappearance of all mushrooms is expected to rise during the coming year.

Table 19--U.S. agaricus mushrooms: Sales, price, and value, selected States

State	Volume of sales		Price		Value of sales	
	2005/06	2006/07	2005/06	2006/07	2005/06	2006/07
	1,000 pounds		Dollars per pound		1,000 dollars	
Pennsylvania	492,426	496,566	0.767	0.891	377,702	442,292
California	117,916	117,851	1.500	1.590	176,638	187,473
Other States	223,335	199,432	1.319	1.432	294,496	285,596
United States	833,677	813,849	1.020	1.120	848,836	915,361

Source: USDA, National Agricultural Statistics Service, *Mushrooms*.

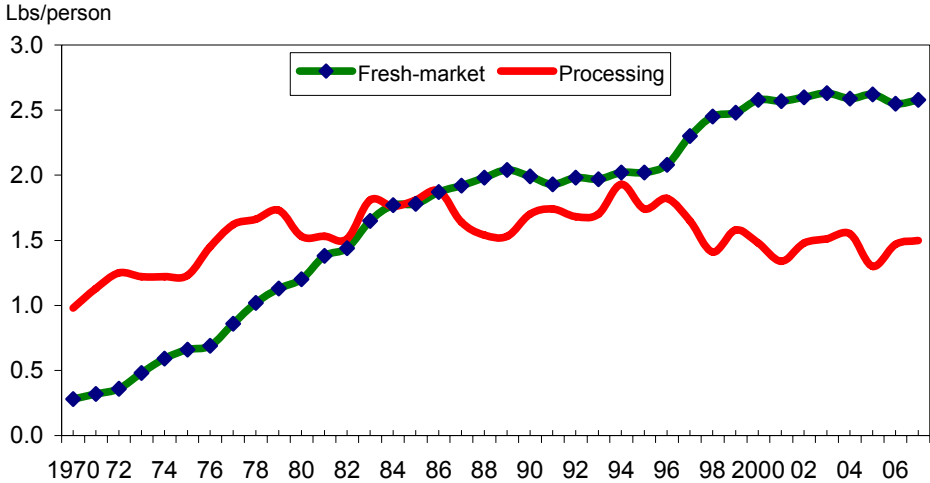
Table 20--U.S. brown agaricus & specialty mushrooms: Sales, price, and value

State	Volume of sales		Price		Value of sales	
	2005/06	2006/07	2005/06	2006/07	2005/06	2006/07
	1,000 pounds		Dollars per pound		1,000 dollars	
Brown 1/	117,297	99,189	1.30	1.41	152,038	140,133
All specialty	13,436	12,817	3.02	3.16	40,529	40,438
Shiitake	7,685	6,698	3.25	3.36	24,942	22,508
Oyster	4,563	4,748	2.15	2.41	9,827	11,424
Other	1,188	1,371	4.85	4.75	5,760	6,506
Total	130,733	112,006	1.47	1.61	192,567	180,571

1/ Includes Portobello and Crimini.

Source: USDA, National Agricultural Statistics Service, *Mushrooms*.

Figure 10
U.S. mushrooms: Per capita net domestic disappearance, 1970-2007



Source: Calculated by USDA, ERS.

Commodity Highlight: Sauerkraut

The Germans generally receive the credit for being the first to ferment cabbage using salt near the end of the 16th century, although a type of wine-pickled sauerkraut was reportedly made in China over 2,000 years ago. The word sauerkraut means "sour cabbage" in German. Since it kept well and contained vitamin C, sauerkraut sailed the open seas and helped prevent scurvy. Sauerkraut was introduced to America by German immigrants in Pennsylvania.

The United States is among the top 10 producers of cabbage in the world. As for most vegetables, China is easily the world's top producer with other top countries including India, Russia, South Korea, and Japan. Cabbage belongs to the Cruciferae (mustard) family which includes Brussels sprouts, broccoli, cauliflower and kale. Cabbage is of the genus Brassica, species oleracea, and variety capitata. This shallow-rooted cool-season crop, which grows best when temperatures are 50 - 75 degrees F., is cultivated for its large leafy head and is thought to have originated in Western Europe.

In the United States, cabbage has 4 distinct end uses:

- the traditional fresh-market
- the sauerkraut industry
- the fresh-cut salad industry uses cabbage in salad mixes, shredded bagged cabbage, and as the main ingredient in fresh-cut bagged cole slaw
- food manufacturing including deli-type cole slaw and frozen eggrolls.

According to ERS estimates, processed deli-type coleslaw (40 to 45 percent of use) and fresh head cabbage (around 35 percent) account for the majority of cabbage disposition. Other major uses include sauerkraut (around 12 percent) and various fresh-cut products (5 to 10 percent). A small amount of cabbage is also dehydrated (dried, flakes, or powder) for use as a flavoring agent in soups and as an ingredient in other dehydrated foods.

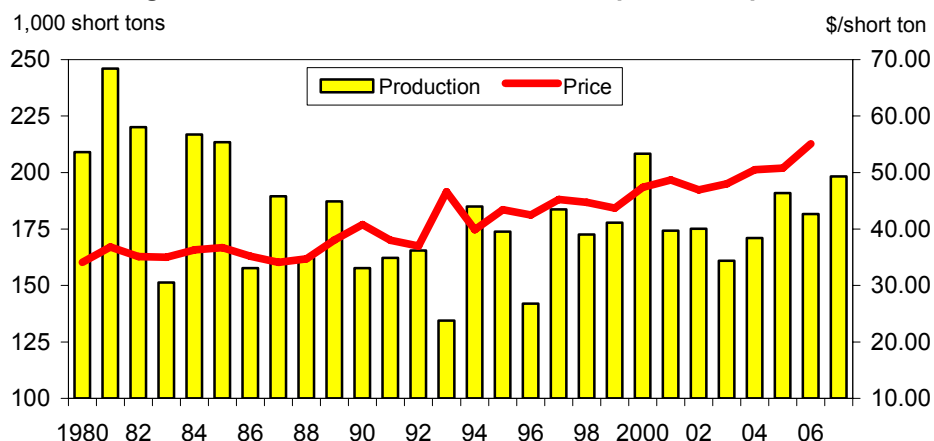
Sauerkraut is made by shredding the center leaves of special white varieties of cabbage, adding salt, and curing for several weeks in large vats. Since it is a salt-pickled product, consumers concerned about sodium intake can rinse sauerkraut to reduce the sodium. According to the Pickle Packers International, there are several variations of sauerkraut including:

- Bavarian Kraut—includes caraways seeds and added sugar
- Winekraut--fermented in white wine
- Sauerkraut salad—a ready to eat, somewhat sweet and mild mixture of cabbage, onions, red peppers, vinegar and seasonings.

In the United States, there is little overlap between the fresh cabbage and sauerkraut markets since sauerkraut makers prefer cabbage varieties with white interiors and high solids content (less water). In any given year, about 98 percent of cabbage used for sauerkraut is grown under contract with processors, with open market purchases limited to a few hundred acres. While the vast majority of fresh-market cabbage is hand harvested to minimize damage and maximize yield, most cabbage destined for sauerkraut is machine harvested to minimize costs since the return per acre is only about one-fifth that for fresh market cabbage. The cabbage varieties used for sauerkraut can be stored for later processing over several months, but with controlled atmosphere storage systems, cabbage can remain viable for more than 6 months. After processing cabbage into sauerkraut, the solid wastes generated in the production process are generally plowed back into the growing fields.

Figure 11

U.S. cabbage for sauerkraut: Production & f.o.b. plant door price



Source: USDA, National Agricultural Statistics Service, *Vegetables Annual* except ERS estimates for 1981-91 and 2002-07 based on available State data.

Sauerkraut Processors Concentrated

There are about 20 sauerkraut manufacturers in the United States, with the majority located in New York, Wisconsin, and Ohio. According to the 2002 Census of Manufacturers, only about 6 of these firms have canned/bottled sales of more than \$100,000—down from 7 commercial firms in 1997 and 10 in 1992. Most of the other firms specialize in bulk or refrigerated sauerkraut (sold in polybags). The value of canned/glass pack commercial manufacturer sauerkraut shipments to distributors and retailers totaled \$58 million in 2002, down from \$71 million in 1997 but up from \$47 million in 1992. The manufacturer value of finished sauerkraut was \$22 million in 2002, up from \$20 million in 1997 and \$9 million in 1992. The average yield of sauerkraut as measured in two large factories was 64.7 tons from 100 tons cabbage.¹

Although official data have not been released since 2001, available data suggest that the farm value of U.S. cabbage used to make sauerkraut is valued at just under \$10 million. Available retail sales data (covering about two-thirds of all retail sales) indicate that in 2006, supermarket sales of canned/bottled sauerkraut totaled \$50 million—about the same as the two previous years. This excludes both foodservice sales and sales of “fresh-pack” refrigerated sauerkraut. Likely reflecting holiday demand and seasonal dietary changes, retail sales of sauerkraut are generally strongest during the winter (Jan.-Mar.), with about 30 percent of sales during this quarter. Retail sales are lowest during the summer when many likely get their sauerkraut away from home on products such as hot dogs and reuben sandwiches. According to the industry, one fourth of all U.S. households purchase sauerkraut at some time during the year.

Wisconsin and New York Tops In Sauerkraut

U.S. cabbage acreage is largely centered in the east and upper Midwest and is spread across all 50 states. According to the Census of Agriculture, cabbage is produced on 85,324 acres, with 3,757 farms shipping into the fresh and processing markets. However, only 161 of these farms produced cabbage used to make

¹ Nowak, Jacek and Yong D. Hang. “The Rapid Degradation of Sauerkraut Brine By Free and Immobilized Yeast Cells,” *The Electronic Journal of Polish Agricultural Universities*, Vol. 6, Issue 2. 2003.

sauerkraut. About 15 percent (12,666 acres) of harvested cabbage acreage is processed for sauerkraut. During 2004-06, total U.S. cabbage production averaged 8 percent above 1994-96. During this time, output of cabbage for both the fresh market and sauerkraut increased. Estimated 2004-06 production of cabbage for sauerkraut (called “liberty cabbage” during World War I) rose 9 percent from a decade earlier, but totaled 8 percent below the 1984-86 average.

With 30 percent of the Nation’s cabbage area harvested for sauerkraut, Wisconsin is the top source of cabbage for sauerkraut. More than half of the State’s head cabbage goes into manufacturing sauerkraut. According to the 2002 Census, head cabbage for fresh market and processing is produced on 167 Wisconsin farms—up 6 percent from 1997. Cabbage for sauerkraut is grown on 25 of these farms, which account for 48 percent of the total area devoted to cabbage in the State. Growers in seven Wisconsin counties plant cabbage for processing, with two-thirds of the 3,800 acres concentrated in Outagamie County. Processing cabbage production is no longer enumerated in Wisconsin but industry sources indicate production of cabbage for sauerkraut has been rising the past few years. In general, cabbage planting in Wisconsin runs from mid-April to mid-June, with harvest running from around the first day of summer through the end of September.

Although New York is an important producer of cabbage for the fresh market, it is also the second-leading producer of cabbage for processing. The State accounts for about 28 percent of the national cabbage area used for sauerkraut—second only to Wisconsin. According to the Census, there were 291 New York farms growing cabbage for all uses in 2002—down 35 percent from 1997. Cabbage for sauerkraut is grown on 45 New York farms, which together account for 23 percent of the total area devoted to cabbage in the State. Production of cabbage for sauerkraut in New York has increased, rising 44 percent over the past decade, fully recovering from a downturn in the early to mid-1990s. This recovery has likely been helped along by consolidation among processors which has led to diminishing production in states such as Michigan, Ohio, and Washington.

Growers in 14 New York counties plant cabbage for sauerkraut led by Ontario (26 percent of the state processing cabbage area) and Orleans (16 percent) counties. The processing crop accounted for just 6 percent of New York’s \$62 million in farm cash receipts for cabbage during 2004-06. In general, cabbage planting in New York runs from mid-April to mid-June, with harvest running from around the first day of summer through mid-December.

Although there are no known commercial sauerkraut processors in the state, 28 of North Carolina’s 223 cabbage growers harvested 1,163 acres of cabbage for processing into sauerkraut in 2002. This represents nearly a tenth of the cabbage harvested for sauerkraut, with North Carolina growers likely shipping cabbage to processors in states such as New York. Cabbage destined for processing accounted for about one-fourth of the cabbage harvested in the State with 90 percent coming from Pasquotank County in the Northeastern part of the state. Pasquotank also accounts for the majority of the fresh market cabbage produced in North Carolina. Cabbage can be harvested in the state every month except February and March, which means the supply is virtually year round with minimal storage required.

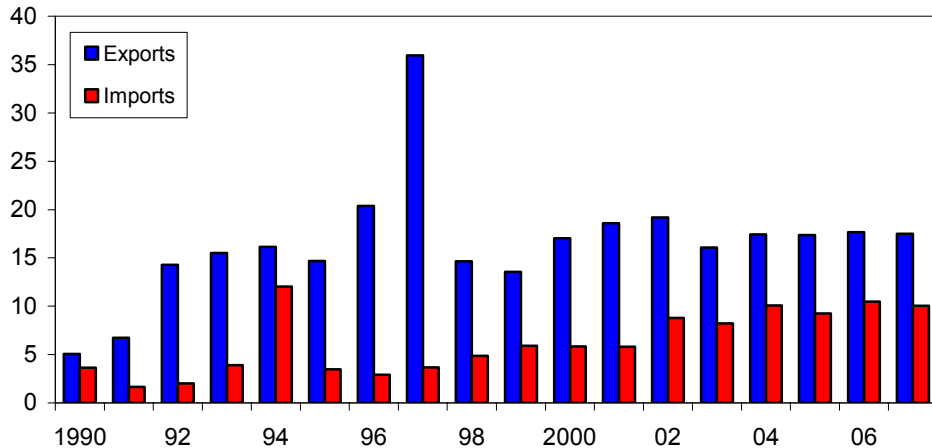
U.S. International Trade Is Limited

Foreign trade plays a relatively minor role in the U.S. sauerkraut industry. In terms of both volume and value, the U.S. has historically been a net exporter of

Figure 12

U.S. sauerkraut: Export and import volume

Mil lbs



Source: Trade data of U.S. Dept. of Commerce, U.S. Census Bureau.

sauerkraut. A relatively efficient domestic industry keeps prices low and limits opportunities for imports. In 2006, sauerkraut imports totaled a record-high (by value) \$2.4 million. Import volume totaled 5.7 million pounds in 2006—second only to the 1994 record high of 6.6 million pounds. Imports have averaged about 2 percent of net domestic disappearance (a proxy for consumption) so far this decade (2000-06), compared with 1 percent during the 1990s and less than 1 percent during the 3 prior decades. Germany (52 percent), Poland (24 percent), and Canada (19 percent) were the top U.S. import sources by volume for sauerkraut during 2004-06.

U.S. sauerkraut exports totaled \$3.1 million in 2006—the third highest after 1997 (\$8.6 million) and 1996 (\$5.4 million). Export volume, which has been relatively steady over the past decade, totaled 9.5 million pounds in 2006. Nearly 4 percent of U.S. sauerkraut supplies are exported annually, with 96 percent of shipments during 2004-06 to Canada.

Consumption Steady This Decade

Sauerkraut enjoys a wide range of culinary uses, with traditional dietary roles continuing to provide a solid demand base. Sauerkraut is a standard feature at various Oktoberfest festivals (the first was in Bavaria in the early 1800s). It also remains a popular vegetable topping on hot dogs, half smokes, and bratwurst. One of the more popular uses for sauerkraut is on the Reuben sandwich. This is a combination of corned beef, Swiss cheese, sauerkraut and Russian dressing on rye bread and was invented by deli owner Reuben Kulakofsky in the kitchen of Omaha’s Blackstone Hotel about 60 years ago. Today, you can begin and end your meal with sauerkraut. One example might be starting off with a sauerkraut-stuffed olive in a beverage and after dinner, top off your meal with chocolate sauerkraut cake. A 100-gram serving (just under one-half cup) of undrained sauerkraut contains 19 calories, has no fat, provides fiber, has 25 percent of the RDA for vitamin C, and smaller amounts of a host of other important nutrients.

On a fresh-weight equivalent basis, net domestic disappearance of cabbage in the form of sauerkraut totaled 351 million pounds during 2004-06. This represented about 12 percent of all head cabbage consumed in the United States, with most of

the remainder eaten as fresh cabbage or fresh cabbage products such as cole slaw. Total net disappearance of sauerkraut is up 10 percent since 1994-96.

On a per capita basis, sauerkraut use totaled about 1.2 pounds per person during 2004-06, little changed from 1994-96 but down from 1.6 pounds during 1984-86. Prior to stabilizing recently at 1.2 pounds per person, sauerkraut consumption had trended lower during the 1980s and 1990s from an average of 2.2 pounds in the 1960s and 1970s. This may have reflected occasional negative publicity regarding red meat consumption (particularly smoked meats) and a general trend away from salty foods. The recent stabilization in per capita use may reflect the inclusion of sauerkraut in a wider array of recipes as consumers search for more variety in foods.

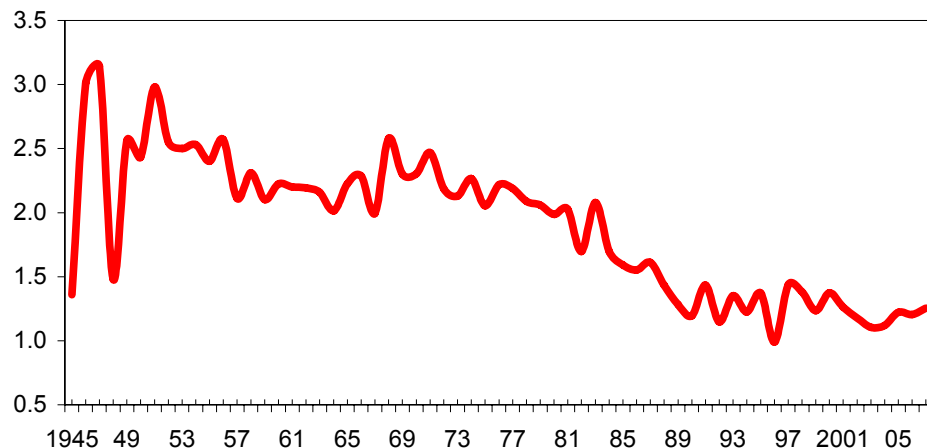
According to the USDA Continuing Survey of Food Intakes by Individuals (CSFII), most cabbage and cabbage-based products are consumed at home. Despite the close association of sauerkraut with deli sandwiches like the Rueben and the popularity of the condiment on hot dogs, the USDA consumer diet survey indicated that 79 percent of sauerkraut is consumed at home. The survey indicated that 6 percent of sauerkraut was sourced from fast food places, and 8 percent each from other restaurants and “miscellaneous” places (such as ball parks, arenas, street vendors, etc.). The CSFII survey also indicated that three-fourths of sauerkraut was consumed in the Midwest and East, with consumers in the South and West reporting relatively light consumption.

Non-Hispanic white consumers accounted for 91 percent of all sauerkraut consumption followed distantly by non-Hispanic black consumers reporting 7 percent of use. Hispanic and Asian consumers show little interest in sauerkraut, with about 1 percent of total use each. Sauerkraut appears to be favored by consumers with the greatest financial means. CSFII households identified as upper income (income 3.5 times the poverty level) represented 39 percent of the U.S. population but consumed 43 percent of sauerkraut. Men aged 20-39 (16 percent of the population) favor cabbage, particularly sauerkraut, for which they account for 30 percent of total use. Men between the ages of 40 and 59 (12 percent of the population) were found to be the second largest group of sauerkraut consumers, with 26 percent of the total.

Figure 13

U.S. cabbage for sauerkraut: Per capita disappearance, 1945-2007

Lbs/person, fresh-weight



Source: Calculated by USDA, Economic Research Service.

Contacts and Links

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Covers potatoes, sweet potatoes, mushrooms, melons, longrun outlook

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Articles

The following are links to articles released on subjects directly related to the vegetable and melon industry. These articles are in Adobe Acrobat (.pdf) format:

1. Outbreak Linked to Spinach Forces Reassessment of Food Safety Practices

<http://www.ers.usda.gov/AmberWaves/June07/Features/Spinach.htm>

Discusses the 2006 U.S. foodborne illness outbreak traced to contaminated spinach. While the risk of contracting a foodborne illness from eating spinach is low, spinach and leafy greens have been associated with numerous outbreaks due to contamination with *E. coli* O157:H7. The outbreak has forced the spinach and leafy green industries to consider new approaches to food safety.

2. Factors Affecting Carrot Consumption in the United States

<http://www.ers.usda.gov/publications/vgs/2007/03Mar/VGS31901/>

Examines the consumption distribution of fresh-market (including fresh-cut) and processed carrots in the United States. The majority of carrots are purchased at retail and consumed at home, with at-home per capita consumption of fresh baby/cut carrots greatest in the central and eastern regions. Non-Hispanic Whites and Asians were found to consume the most carrots.

3. Eliminating Fruit and Vegetable Planting Restrictions

<http://www.ers.usda.gov/publications/err30/>

This report finds that market effects would likely be limited and confined to specific regions and commodities. Eliminating these planting restrictions for commodity program participants might enable some producers to switch from program crops to fruit and vegetables in such areas as California, the upper Midwest and the coastal plain in the Southeastern States.

4. Fruit and Vegetable Backgrounder

<http://www.ers.usda.gov/Publications/vgs/apr06/VGS31301/>

Fruit and Vegetable Backgrounder describes the economic characteristics of the U.S. fruit and vegetable industry, providing supply, demand, and policy background for an industry that accounts for nearly a third of U.S. crop cash receipts and a fifth of U.S. agricultural exports. A variety of challenges face this complex and diverse industry in both domestic and international markets, ranging from immigration reform and its effects on labor availability, to international competitiveness.

5. NAFTA at 13: Implementation Nears Completion

<http://www.ers.usda.gov/Publications/WRS0701/>

Implementation of the North American Free Trade Agreement (NAFTA) is drawing to a close with the last of the transitional restrictions governing agricultural trade to be removed in 2008. The agricultural sectors of Canada, Mexico, and the United States have become more integrated, with the importance of Canadian and Mexican produce to U.S. fruit and vegetable consumption continuing to expand.

Data Tables

The following links provide the most recent data on vegetables and melons. You may choose links for Adobe Acrobat (.pdf) table compilations or the original Excel workbook (spreadsheet) tables:

1. Per capita availability (a.k.a. use or consumption)

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/percap.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/percap.xls>

2. Vegetable prices

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/price.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/price.xls>

3. Fresh vegetables and melons

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/fresh.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/fresh.xls>

4. Processing vegetables

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/proc.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/proc.xls>

5. Potatoes

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/potat.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/potat.xls>

6. Sweet potatoes

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/swpot.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/swpot.xls>

7. Dry edible beans

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/drybn.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/drybn.xls>

8. Mushrooms

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/mush.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/mush.xls>

9. Vegetable and melon trade

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/trade.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/trade.xls>

10. Dry peas and lentils

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/drypea.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/drypea.xls>

11. World vegetable production and harvested area

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/world.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/world.xls>

12. Mexican and Canadian vegetable production

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/Mexcan.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/Mexcan.xls>

13. U.S. farm cash receipts and cost indicators

PDF file: <http://www.ers.usda.gov/publications/vgs/tables/Receipt.pdf>

Excel file: <http://www.ers.usda.gov/publications/vgs/tables/Receipt.xls>

Web Sites

A. U.S. Trade Data—FASonline: This relatively simple, yet powerful online application allows the user to freely access and download detailed U.S. export and import data.

<http://www.fas.usda.gov/ustrade/>

B. Vegetables and Melons: ERS' Vegetables and Melons Briefing Room contains special articles, data sets, and links.

<http://www.ers.usda.gov/briefing/vegetables/>

C. Potatoes: ERS' Potato Briefing Room contains special articles, data, and links.

<http://www.ers.usda.gov/briefing/potatoes/>

D. Tomatoes: ERS' Tomato Briefing Room contains special articles, data, and links.

<http://www.ers.usda.gov/briefing/tomatoes/>

E. Dry Beans, Peas, and Lentils: ERS' Dry Bean Briefing Room contains special articles, data, and links.

<http://www.ers.usda.gov/briefing/drybeans/>

F. USDA Market News: Agricultural Marketing Service's web site containing fresh shipments, f.o.b. and terminal market prices, weekly truck rates, annual reports, and more.

<http://www.ams.usda.gov/fv/mnacs/index.htm>

G. NASS Vegetables: Links to USDA, National Agricultural Statistics Service's annual and quarterly reports on vegetables & melons.

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1177>

H. FAS, HTP: USDA, Foreign Agricultural Service's horticultural web site, with links.

<http://www.fas.usda.gov/http/default.htm>

I. Organic Farming and Marketing: USDA, ERS Briefing Room contains articles, data, graphics, and links.

<http://www.ers.usda.gov/Briefing/Organic/>

J. Truck Rate Report: USDA, AMS weekly report on cost of shipping by trailer truck.

http://www.ams.usda.gov/mnreports/wa_fv190.txt

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Price table 1—Commercial vegetables and potatoes: Indexes of prices received by U.S. growers, by month, 1995-2007 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
<i>1910-14=100</i>														
Commercial vegetables 2/	1995	803	772	989	1,161	1,037	808	653	680	781	651	658	678	806
	1996	631	742	986	818	691	774	661	775	679	727	747	643	740
	1997	740	700	789	754	710	751	747	817	794	971	817	911	792
	1998	816	775	837	1,042	859	736	806	764	760	886	756	779	818
	1999	702	749	806	870	786	732	696	709	700	650	654	776	736
	2000	656	572	719	907	874	785	795	862	958	835	964	769	808
	2001	810	980	923	916	964	805	837	968	894	688	731	1,144	888
	2002	1,054	1,283	1,816	803	770	731	771	807	795	704	735	694	914
	2003	752	755	824	865	924	1,015	797	920	964	959	1,201	1,059	920
	2004	852	936	741	848	722	712	666	852	864	1,037	1,055	786	839
	2005	618	783	1,099	1,212	900	923	741	790	857	758	755	1,014	871
	2006	847	763	883	997	1,035	881	791	1,016	1,055	822	789	1,006	907
2007	1,173	1,125	1,303	1,184	1,017	881	895							
Potatoes 3/	1995	466	450	484	505	529	612	729	586	497	539	548	547	541
	1996	564	589	633	668	696	707	700	521	482	461	452	434	576
	1997	426	431	433	433	477	431	499	544	440	433	457	477	457
	1998	491	524	554	546	559	539	517	481	449	415	450	475	500
	1999	489	497	520	546	532	557	610	517	451	429	474	463	507
	2000	475	496	519	545	529	511	559	464	406	384	383	395	472
	2001	409	450	437	466	453	486	532	632	516	461	538	578	497
	2002	620	645	715	699	748	806	884	651	520	466	524	547	652
	2003	533	554	567	592	590	559	570	483	458	443	479	493	527
	2004	488	504	530	568	558	558	552	495	485	444	477	506	514
	2005	534	535	578	566	576	573	622	574	491	472	539	578	553
	2006	596	571	706	700	661	702	859	693	534	519	584	591	643
2007	612	634	720	731	711	710	699							
<i>1990-92=100</i>														
Commercial vegetables 2/	1995	120	116	148	174	155	121	98	102	117	97	98	101	121
	1996	94	111	147	122	103	116	99	116	102	109	112	96	111
	1997	111	105	118	113	106	112	112	122	119	145	122	136	118
	1998	122	116	125	156	129	110	121	114	114	133	113	117	123
	1999	105	112	121	130	118	110	104	106	105	97	98	116	110
	2000	98	86	107	136	131	117	119	129	143	125	144	115	121
	2001	121	147	138	137	144	120	125	145	134	103	109	171	133
	2002	158	192	272	120	115	109	115	121	119	105	110	104	137
	2003	112	113	123	129	138	152	119	138	144	143	180	159	138
	2004	127	140	111	127	108	107	100	127	129	155	158	118	126
	2005	93	117	164	181	135	138	111	118	128	113	113	152	130
	2006	127	114	132	149	155	132	118	152	158	123	118	151	136
2007	175	168	195	177	152	132	134							
Potatoes 3/	1995	92	89	96	100	105	121	144	116	98	106	108	108	107
	1996	111	116	125	132	138	140	138	103	95	91	89	86	114
	1997	84	85	86	85	94	85	99	107	87	85	90	94	90
	1998	97	104	109	108	111	106	102	95	89	82	89	94	99
	1999	97	98	103	108	105	110	121	102	89	85	94	91	100
	2000	94	98	103	108	105	101	110	92	80	76	76	78	93
	2001	81	89	86	92	90	96	105	125	102	91	106	114	98
	2002	123	127	141	138	148	159	175	129	103	92	104	108	129
	2003	105	110	112	117	117	110	113	96	90	87	95	97	104
	2004	96	100	105	112	110	110	109	98	96	88	94	100	102
	2005	106	106	114	112	114	113	123	113	97	93	106	114	109
	2006	118	113	139	138	131	139	170	137	106	103	115	117	127
2007	121	125	142	144	140	140	138							

1/ Prices for 2007 are preliminary. 2/ Includes fresh and processing vegetables. 3/ Includes fresh potatoes and dry edible beans.

For longer historical price series, see the *Vegetables and Melons Situation and Outlook Yearbook* at:

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1212>

Source: USDA, National Agricultural Statistics Service, *Agricultural Prices*.

Price table 5—Fresh-market vegetables: U.S. average retail prices, by month, 1997-2007

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	Change
															July- July
															Percent
--Cents/lb.--															
Potatoes, white	1997	33.5	33.1	33.0	33.5	33.8	34.5	36.7	38.8	38.8	37.4	36.6	37.0	35.6	--
	1998	36.2	36.2	36.8	36.9	38.1	39.0	39.2	38.2	37.6	37.9	37.0	37.5	37.6	6.8
	1999	38.1	38.2	38.4	38.0	38.8	39.1	41.1	42.9	41.3	39.3	38.4	39.5	39.4	4.8
	2000	39.2	40.1	39.3	38.8	37.9	37.6	39.0	40.0	37.4	36.7	35.1	34.7	38.0	-5.1
	2001	35.5	34.8	35.6	36.2	36.3	38.8	40.9	43.9	42.2	41.8	41.0	41.0	39.0	4.9
	2002	42.6	44.7	46.5	49.3	50.8	51.7	54.9	55.9	51.1	49.2	47.3	47.9	49.3	34.2
	2003	48.3	47.2	46.3	46.6	46.6	46.2	46.4	46.4	44.4	44.1	43.8	43.9	45.9	-15.5
	2004	45.7	44.6	45.9	46.1	43.5	46.2	47.1	46.4	44.6	45.0	44.3	44.9	45.4	1.5
	2005	45.8	44.8	44.0	45.0	45.2	45.5	47.7	49.1	48.2	50.5	49.9	49.8	47.1	1.3
	2006	50.4	51.7	51.7	52.2	53.3	54.1	55.6	57.2	56.3	54.5	51.7	51.7	53.4	16.6
	2007	51.7	51.4	51.8	52.9	53.0	53.8	54.5							-2.0
Broccoli	1997	109.8	115.6	103.2	92.2	88.6	92.1	96.8	90.5	90.3	104.0	100.3	92.6	98.0	--
	1998	137.9	106.6	112.2	111.4	123.8	108.7	107.6	103.0	101.4	104.0	101.6	97.4	109.6	11.2
	1999	112.3	99.9	99.0	101.2	95.2	94.4	99.3	96.2	105.2	102.8	100.1	100.4	100.5	-7.7
	2000	118.2	98.9	106.9	101.3	117.4	123.6	113.9	112.0	105.2	108.0	108.5	151.8	113.8	14.7
	2001	98.7	97.8	108.3	95.4	99.9	100.5	98.1	97.8	96.9	101.1	89.7	97.3	98.5	-13.9
	2002	137.4	168.1	114.7	120.4	103.6	109.3	111.9	113.5	124.7	107.3	116.5	105.2	119.4	14.1
	2003	112.2	110.1	119.9	113.9	115.1	112.7	113.3	109.3	130.3	135.8	131.2	135.6	120.0	1.3
	2004	131.9	121.6	112.5	102.2	110.7	106.0	106.9	106.7	120.8	139.9	133.5	141.4	119.5	-5.6
	2005	123.5	134.6	131.8	148.9	129.9	130.7	144.2	132.0	135.2	119.6	128.8	122.9	131.8	34.9
	2006	135.5	149.3	135.8	136.7	137.3	143.2	151.1	152.1	168.9	140.9	138.9	146.0	144.6	4.8
	2007	182.8	172.0	145.8	154.1	141.2	137.3	147.5							-2.4
Lettuce, iceberg	1997	65.1	59.4	61.4	66.6	59.8	59.3	64.9	69.4	73.7	82.3	101.0	69.9	69.4	--
	1998	107.2	64.3	69.5	83.7	87.7	71.1	69.2	68.6	71.0	75.7	76.5	63.5	75.7	6.6
	1999	64.9	65.8	77.4	75.3	69.1	65.2	62.7	65.2	62.3	66.9	67.7	66.8	67.4	-9.4
	2000	74.8	65.0	67.1	65.0	80.3	68.6	65.6	67.3	89.7	77.2	77.4	85.1	73.6	4.6
	2001	73.6	84.7	89.5	76.7	87.0	72.2	66.3	78.4	89.7	81.1	73.4	78.8	79.3	1.1
	2002	100.3	106.1	154.2	114.7	72.0	67.5	67.4	68.9	70.2	68.7	75.4	68.0	86.1	1.7
	2003	73.4	68.2	65.5	72.3	79.5	83.2	80.8	70.9	89.8	85.8	92.7	125.5	82.3	19.9
	2004	87.6	80.5	81.3	80.1	71.0	75.1	73.7	80.8	77.1	83.0	84.9	82.3	79.8	-8.8
	2005	81.7	73.0	82.9	100.4	92.6	89.5	88.5	85.5	84.8	92.6	87.3	85.4	87.0	20.1
	2006	87.4	79.4	81.5	86.9	96.7	84.8	78.3	86.4	95.3	87.3	85.0	89.6	86.6	-11.5
	2007	92.6	92.0	91.5	98.6	87.9	85.6	84.9							8.4
Tomatoes, field grown	1997	121.3	131.4	165.4	134.8	117.5	130.0	114.1	113.0	109.1	116.2	137.0	161.7	129.3	--
	1998	145.2	135.6	151.5	139.8	147.2	139.3	151.5	131.2	124.1	157.3	168.9	179.8	147.6	32.8
	1999	190.4	147.6	139.5	129.8	128.4	130.4	128.7	123.2	127.2	127.9	130.0	140.5	137.0	-15.0
	2000	144.3	128.6	136.4	148.7	136.6	131.8	128.2	126.2	131.9	138.7	150.3	156.7	138.2	-0.4
	2001	141.4	131.3	133.6	143.3	124.3	135.6	125.7	118.5	116.8	126.7	146.8	140.4	132.0	-2.0
	2002	145.1	129.8	129.2	131.9	133.2	129.9	124.3	118.1	115.8	123.6	143.0	165.5	132.5	-1.1
	2003	171.1	156.5	161.9	155.5	140.1	139.8	146.0	151.3	143.8	143.6	148.0	153.3	150.9	17.5
	2004	147.2	151.0	152.9	151.9	151.0	133.1	125.3	131.2	132.1	171.5	233.7	246.7	160.6	-14.2
	2005	166.0	142.8	154.8	171.0	191.1	165.5	160.7	141.6	142.9	154.7	157.4	184.8	161.1	28.3
	2006	216.2	191.0	164.9	157.3	154.3	145.7	147.9	148.8	190.8	218.8	178.4	163.9	173.2	-8.0
	2007	162.1	164.4	155.5	163.0	168.5	151.0	148.6							0.5
Lettuce, romaine 1/	2006	134.1	140.5	138.3	147.6	147.6	132.0	123.7	135.9	143.0	141.0	142.9	145.5	139.3	--
	2007	161.2	181.7	163.1	154.5	150.4	142.5	134.4							8.6
Peppers, sweet 2/	2005	--	--	--	--	--	--	--	--	--	192.7	--	--	--	--
	2006	--	--	--	--	163.8	169.5	176.8	171.3	171.0	208.0	195.5	189.0	180.6	--
	2007	190.5	211.9	218.2	235.2	222.6	221.9	195.3							10.5
Cabbage 2/	2006	--	--	--	--	--	--	--	56.1	60.0	58.5	59.5	60.6	58.9	--
	2007	61.0	66.5	68.9	65.1	61.0	58.1	58.6							--
Celery 2/	2007	--	128.3	--	92.1	--	82.9	--							--
Carrots 2/	2007	--	--	--	--	--	80.5	77.8							--

-- = not available. 1/ Romaine data was first reported by BLS in January 2006. 2/ Reported by BLS as statistically valid data are available.

Source: U.S. Department of Labor, Bureau of Labor Statistics (<http://www.bls.gov/data/home.htm>).

Price table 7—Canned vegetables: Quarterly wholesale price trends, 2000-07 1/

Year & quarter	Sweet corn 2/		Snap beans 3/		Green peas 4/		Carrots 5/		Beets 6/		Tomato paste 7/	
	24/300	6/10	24/300	6/10	24/300	6/10	24/300	6/10	24/300	6/10	55-drum	6/10
											-- Dollars per case --	
											\$/lb	\$/case
2000												
I	7.75	13.84	7.50	11.67	8.75	14.79	7.88	10.88	8.21	11.75	0.34	19.63
II	7.84	15.00	7.50	11.92	8.84	16.33	7.88	10.88	8.38	11.38	0.34	20.04
III	7.71	15.00	7.25	12.00	8.79	16.00	7.96	11.13	8.46	11.38	0.32	19.50
IV	7.63	15.09	7.38	11.17	8.75	16.13	7.75	11.01	8.50	11.75	0.32	19.00
Average	7.73	14.73	7.41	11.69	8.78	15.81	7.87	10.97	8.39	11.57	0.33	19.54
2001												
I	7.25	14.75	7.25	10.25	8.63	15.46	7.75	10.88	7.75	11.75	0.31	17.88
II	7.25	14.75	7.25	10.25	8.63	15.25	7.75	10.88	7.75	11.75	0.31	17.88
III	7.67	14.92	7.67	10.42	8.96	15.42	7.92	11.05	7.92	11.75	0.32	17.88
IV	8.25	15.25	8.25	12.55	9.00	15.42	8.33	11.25	8.42	11.83	0.32	17.88
Average	7.61	14.92	7.61	10.87	8.81	15.39	7.94	11.02	7.96	11.77	0.32	17.88
2002												
I	9.00	15.75	9.00	14.59	9.00	15.25	9.00	12.00	9.00	12.00	0.32	17.63
II	8.33	15.08	8.33	12.05	8.75	15.08	9.00	12.00	9.00	12.00	0.31	17.80
III	8.00	14.75	8.00	10.88	8.63	15.00	9.00	11.50	9.00	12.00	0.31	18.50
IV	8.00	14.67	8.00	11.05	8.88	15.09	8.75	11.50	9.00	12.00	0.31	20.38
Average	8.33	15.06	8.33	12.14	8.82	15.11	8.94	11.75	9.00	12.00	0.31	18.58
2003												
I	8.00	14.00	8.00	11.13	9.00	15.42	8.63	11.50	9.00	12.00	0.32	18.46
II	8.00	14.00	8.00	11.38	9.00	15.50	8.71	11.50	9.00	12.00	0.30	19.46
III	8.00	14.00	8.00	11.75	9.00	16.00	8.63	11.50	9.00	12.00	0.29	17.63
IV	8.00	14.13	8.00	12.38	9.00	16.00	8.63	11.50	9.00	12.00	0.29	17.63
Average	8.00	14.03	8.00	11.66	9.00	15.73	8.65	11.50	9.00	12.00	0.30	18.30
2004												
I	8.17	14.80	8.17	14.38	9.17	16.00	8.63	11.50	9.00	12.00	0.29	18.67
II	8.42	15.46	8.33	15.92	9.13	15.75	8.75	11.50	9.00	13.00	0.30	20.25
III	8.50	15.63	8.33	16.17	9.00	15.59	9.00	11.50	9.00	14.00	0.30	20.25
IV	8.42	15.29	8.46	15.84	8.92	15.54	9.00	11.75	8.50	15.00	0.30	20.25
Average	8.38	15.30	8.32	15.58	9.06	15.72	8.85	11.56	8.88	13.50	0.30	19.86
2005												
I	8.58	14.08	8.54	13.54	8.96	15.67	9.00	11.75	8.83	14.58	0.30	20.25
II	8.75	13.42	8.67	13.25	9.13	15.33	9.00	11.75	9.00	14.00	0.30	20.25
III	8.67	13.58	8.71	12.83	9.13	15.42	9.00	12.00	9.00	13.63	0.31	20.54
IV	8.71	12.25	8.88	12.50	9.13	15.25	9.00	12.00	8.96	13.38	0.33	21.13
Average	8.68	13.33	8.70	13.03	9.09	15.42	9.00	11.88	8.95	13.90	0.31	20.54
2006												
I	8.63	12.25	8.88	12.13	9.25	15.46	9.00	12.00	9.05	12.80	0.36	21.46
II	8.63	12.25	8.75	12.13	9.17	15.50	9.00	12.00	9.03	12.25	0.37	22.58
III	8.38	11.75	8.45	12.00	8.71	15.50	9.00	12.00	8.50	11.88	0.40	23.25
IV	8.38	11.75	8.57	12.00	8.63	15.50	9.00	12.00	8.50	11.88	0.44	23.25
Average	8.51	12.00	8.66	12.07	8.94	15.49	9.00	12.00	8.77	12.20	0.39	22.64
2007												
I p	8.38	12.27	8.63	12.00	9.25	15.50	--	--	8.43	11.90	0.46	23.25
II p	8.83	13.13	8.83	13.13	9.34	15.50	--	--	8.71	11.90	0.46	23.25
III f	9.05	13.13	8.93	13.50	9.34	15.50	9.00	12.00	8.85	12.45	0.40	23.00
IV f	9.00	12.50	9.00	12.75	9.07	15.50	9.00	12.00	8.50	12.00	0.36	23.00
Average	8.82	12.76	8.85	12.85	9.25	15.50	9.00	12.00	8.62	12.06	0.42	23.13

p = Preliminary. f = ERS forecast. -- = not available.

1/ Some prices calculated as averages of quoted ranges. 2/ Whole kernel corn, Midwest. 3/ 4-sieve cut, Midwest. 4/ 4-sieve, Midwest. 5/ Medium sliced, Midwest. 6/ Medium sliced, Midwest. 7/ 26-percent solids for 6/10 and 31 percent for 55-gallon drum, California.

Source: American Institute of Food Distribution, *Price Trends*.

Price table 8—Frozen vegetables: Quarterly wholesale price trends, 2000-07 1/

Year and quarter	Sweet corn 2/		Snap beans 3/		Green peas 4/		Cauliflower 4/		Broccoli 6/		Spinach 7/	
	12/16	12/2.5	12/16	12/2	12/16	12/2.5	12/16	12/2	24/10	12/2	24/10	12/3
<i>Dollars per case</i>												
2000												
I	6.83	0.48	6.83	0.47	6.93	0.54	9.47	0.70	10.15	0.72	8.30	0.43
II	6.83	0.48	6.83	0.47	6.93	0.54	9.47	0.70	10.15	0.72	8.30	0.43
III	6.83	0.47	6.83	0.47	6.93	0.54	9.47	0.70	10.15	0.72	8.30	0.43
IV	6.83	0.47	6.83	0.47	6.93	0.54	9.47	0.70	10.15	0.72	8.30	0.43
Average	6.83	0.47	6.83	0.47	6.93	0.54	9.47	0.70	10.15	0.72	8.30	0.43
2001												
I	6.83	0.46	6.83	0.47	6.93	0.53	9.47	0.70	10.15	0.72	8.30	0.43
II	6.83	0.46	6.84	0.47	6.88	0.53	9.47	0.70	10.15	0.72	8.30	0.43
III	6.88	0.49	6.85	0.47	6.88	0.55	9.50	0.72	10.15	0.72	8.30	0.45
IV	6.88	0.49	6.85	0.49	6.88	0.55	9.50	0.72	10.15	0.72	8.30	0.45
Average	6.86	0.47	6.84	0.48	6.89	0.54	9.49	0.71	10.15	0.72	8.30	0.44
2002												
I	6.88	0.49	6.93	0.49	6.88	0.55	9.50	0.72	10.15	0.72	8.30	0.48
II	7.10	0.50	7.10	0.50	7.05	0.55	9.49	0.72	10.15	0.72	8.30	0.48
III	7.10	0.50	7.10	0.51	7.07	0.55	9.47	0.72	10.15	0.72	8.30	0.48
IV	7.10	0.51	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
Average	7.05	0.50	7.06	0.51	7.02	0.55	9.48	0.72	10.15	0.72	8.30	0.48
2003												
I	7.10	0.55	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
II	7.10	0.55	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
III	7.10	0.55	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
IV	7.10	0.55	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
Average	7.10	0.55	7.10	0.54	7.10	0.55	9.47	0.72	10.15	0.72	8.30	0.48
2004												
I	7.10	0.55	7.10	0.54	7.10	0.55	9.50	0.72	10.15	0.72	8.30	0.48
II	7.10	0.55	7.10	0.54	7.38	0.55	9.50	0.72	10.15	0.72	8.30	0.48
III	7.38	0.56	7.38	0.58	7.38	0.58	9.50	0.72	10.15	0.72	8.30	0.50
IV	7.30	0.54	7.33	0.58	7.28	0.57	9.50	0.72	10.15	0.72	8.30	0.50
Average	7.22	0.55	7.23	0.56	7.29	0.56	9.50	0.72	10.15	0.72	8.30	0.49
2005												
I	7.00	0.48	7.33	0.57	7.28	0.52	9.47	0.72	10.15	0.72	8.30	0.52
II	7.04	0.47	7.33	0.56	7.28	0.52	9.47	0.72	10.15	0.72	8.30	0.52
III	7.12	0.48	7.33	0.56	7.28	0.52	9.47	0.72	10.15	0.72	8.30	0.53
IV	7.10	0.48	--	0.56	7.28	0.52	9.47	0.72	10.15	0.72	8.30	0.52
Average	7.07	0.48	7.33	0.56	7.28	0.52	9.47	0.72	10.15	0.72	8.30	0.52
2006												
I	7.10	0.50	7.25	0.56	7.28	0.52	9.47	0.72	10.15	0.72	8.32	0.52
II	7.35	0.50	7.63	0.56	7.63	0.55	9.47	0.72	10.30	0.72	8.81	0.49
III	7.58	0.50	7.63	0.56	7.34	0.54	9.47	0.72	10.38	0.73	8.88	0.50
IV	7.58	0.50	7.63	0.56	7.20	0.54	9.47	0.72	10.38	0.73	8.88	0.50
Average	7.40	0.50	7.53	0.56	7.36	0.54	9.47	0.72	10.30	0.72	8.72	0.50
2007												
I p	7.58	0.44	7.53	0.63	7.20	0.54	9.47	0.72	10.38	0.73	8.88	0.50
II p	7.58	0.44	7.53	0.63	7.20	0.54	9.47	0.72	10.38	0.73	8.88	0.50
III f	7.58	0.44	7.53	0.63	7.20	0.54	9.47	0.72	10.38	0.73	8.88	0.50
IV f	7.58	0.44	7.50	0.60	7.20	0.54	9.47	0.72	10.38	0.73	8.60	0.50
Average	7.58	0.44	7.52	0.62	7.20	0.54	9.47	0.72	10.38	0.73	8.81	0.50

p = Preliminary. f = ERS forecast.

1/ Some prices calculated as averages of quoted ranges. 2/ Whole kernel (cut) corn, f.o.b. West Coast basis. 3/ Regular cut. 4/ Poly bags. 5/ Sliced, poly bags. 6/ Spears. 7/ Chopped. F.o.b. West Coast.

Source: American Institute of Food Distribution, *Price Trends*.

Price table 10—U.S. fresh-market herbs: Selected monthly wholesale prices in San Francisco, CA, 2006-07

Herb	Unit	2006			2007			Change from prev. year		
		June	July	August	June	July	August	June	July	August
		<i>Dollars per hundredweight (cwt)</i>						<i>--- Percent ---</i>		
Anise	24-ct crtn	14.38	12.50	12.00	11.50	11.50	11.25	- 20.0	- 8.0	- 6.3
Arrugula	12-ct ctns	7.50	7.50	7.50	8.00	8.00	8.00	6.7	6.7	6.7
Basil	12-ct ctns	8.50	7.75	7.75	8.25	8.25	8.25	- 2.9	6.5	6.5
Celeriac	12-ct ctns	13.50	15.00	15.00	13.00	13.00	13.00	- 3.7	- 13.3	- 13.3
Chervil	12-ct flmbag	7.00	7.00	7.00	6.75	6.75	6.75	- 3.6	- 3.6	- 3.6
Chives	12-ct flmbag	6.50	6.50	6.50	5.25	5.50	5.50	- 19.2	- 15.4	- 15.4
Cilantro	60-ct ctns	14.87	16.25	21.13	12.19	15.72	21.17	- 18.0	- 3.3	.2
Cipolinos	10-lb ctns	18.50	18.50	18.50	17.50	17.50	17.50	- 5.4	- 5.4	- 5.4
Dill	12-ct ctns	8.00	8.25	8.06	7.94	8.00	8.00	- .7	- 3.0	- .7
Dry Eschallot	5-lb sack	5.00	5.00	5.00	6.00	6.00	6.00	20.0	20.0	20.0
Horseradish	5-lb bag	2.15	2.15	2.15	2.15	2.15	2.15	.0	.0	.0
Lemon grass	Per lb-ctns	1.50	1.50	1.50	2.25	2.25	2.25	50.0	50.0	50.0
Marjoram	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Oregano	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Rosemary	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Mint	12-ct ctns	8.25	8.50	8.50	8.00	8.00	8.00	- 3.0	- 5.9	- 5.9
Sage	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Salsify	5-1kg flmbg	23.50	23.50	23.50	29.25	29.25	29.25	24.5	24.5	24.5
Savory	24-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Sorrel	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Tarragon	12-ct flmbag	7.00	7.00	7.00	7.50	7.50	7.50	7.1	7.1	7.1
Thyme	12-ct flmbag	5.50	5.50	5.50	5.63	5.63	5.63	2.4	2.4	2.4
Verdulaga	24-ct ctns	8.13	8.25	8.25	11.50	9.00	9.00	41.5	9.1	9.1
Watercress	12-ct ctns	10.50	10.50	10.50	14.25	12.00	12.00	35.7	14.3	14.3

-- = not available.

Source: Derived from data provided by USDA, Agricultural Marketing Service, FV Data Portal, <http://marketnews.usda.gov/portal/fv>

Price table 11—Farm-retail price spreads, 2004-07

Item	Annual			2006				2007		
	2004	2005	2006	Sept	Oct	Nov	Dec	Jan	Feb	Mar.
Market basket 1/										
Retail cost (1982-84=100)	194.4	198.2	201.9	203.1	204.3	203.3	203.6	205.9	207.8	208.0
Farm value (1982-84=100)	124.4	122.3	120.0	126.1	124.2	122.7	123.0	130.8	131.1	137.3
Farm-retail spread (1982-84=100)	232.1	239.2	246.0	244.6	247.4	246.8	247.0	246.4	249.1	246.0
Farm value-retail cost (%)	22.4	21.6	20.8	21.7	21.3	21.2	20.8	22.2	22.1	23.1
Fresh fruit										
Retail cost (1982-84=100)	318.5	330.7	350.7	357.6	361.1	360.2	363.5	366.5	372.9	363.8
Farm value (1982-84=100)	200.5	173.4	195.4	230.5	198.0	177.0	196.5	175.8	185.8	175.2
Farm-retail spread (1982-84=100)	372.9	403.3	422.4	416.3	436.4	444.8	440.6	454.5	459.3	450.9
Farm value-retail cost (%)	19.9	16.6	17.6	20.4	17.3	15.5	17.1	15.1	15.7	15.2
Fresh vegetables										
Retail cost (1982-84=100)	261.2	271.7	284.3	294.2	301.8	288.6	286.1	298.3	308.6	302.4
Farm value (1982-84=100)	146.5	145.5	157.9	195.5	174.8	125.4	135.2	167.5	196.7	217.5
Farm-retail spread (1982-84=100)	320.2	336.7	249.3	345.0	367.1	372.5	363.7	365.5	366.1	346.0
Farm value-retail cost (%)	19.0	18.2	18.9	22.6	19.7	14.7	16.0	19.1	21.6	24.4
Processed fruits and vegetables										
Retail cost (1982-84=100)	183.1	192.3	201.0	202.3	201.5	201.3	202.6	204.8	205.9	205.7
Farm value (1982-84=100)	125.4	138.0	137.6	137.5	136.6	137.1	137.4	135.6	138.2	138.3
Farm-retail spread (1982-84=100)	201.1	209.3	220.7	222.5	221.7	221.3	222.9	226.4	227.0	226.7
Farm value-retail cost (%)	16.3	17.1	16.3	16.2	16.1	16.2	16.1	15.7	16.0	16.0
Fats and oils										
Retail cost (1982-84=100)	167.8	167.7	168.0	167.9	169.1	168.1	166.7	170.2	171.7	170.9
Farm value (1982-84=100)	128.4	108.2	101.8	107.4	114.4	125.8	123.7	122.6	126.3	128.9
Farm-retail spread (1982-84=100)	182.3	189.6	192.3	190.2	189.2	183.7	182.5	187.7	188.4	186.4
Farm value-retail cost (%)	20.6	17.3	16.3	17.2	18.2	20.1	20.0	19.4	19.8	20.3
Meat products										
Retail cost (1982-84=100)	183.2	187.5	188.8	190.0	190.5	190.7	189.4	190.6	190.3	193.3
Farm value (1982-84=100)	116.9	121.4	117.8	123.2	121.1	118.2	116.5	118.0	121.3	130.8
Farm-retail spread (1982-84=100)	251.3	255.4	261.7	258.5	261.7	265.1	264.2	265.1	261.1	257.5
Farm value-retail cost (%)	32.3	32.8	31.6	32.9	32.2	31.4	31.1	31.3	32.3	34.3
Dairy products										
Retail cost (1982-84=100)	180.2	182.4	181.4	179.9	182.0	180.6	181.0	183.5	183.8	185.7
Farm value (1982-84=100)	125.9	118.7	102.6	101.8	107.7	110.2	113.7	116.5	119.4	124.0
Farm-retail spread (1982-84=100)	230.3	241.1	254.0	251.9	250.5	245.5	243.1	245.3	243.2	242.6
Farm value-retail cost (%)	33.5	31.2	27.1	27.2	28.4	29.3	30.1	30.4	31.2	32.0
Poultry										
Retail cost (1982-84=100)	181.7	185.3	182.0	183.9	182.9	181.8	182.5	181.8	183.2	186.0
Farm value (1982-84=100)	142.9	139.4	128.1	140.0	139.1	140.9	129.4	136.3	147.9	157.0
Farm-retail spread (1982-84=100)	226.4	238.1	244.1	234.4	233.4	228.9	243.6	234.2	223.8	219.4
Farm value-retail cost (%)	42.1	40.3	37.7	40.7	40.7	41.5	38.0	40.1	43.2	45.2
Eggs										
Retail cost (1982-84=100)	167.0	144.1	151.2	147.1	146.3	159.3	176.5	176.6	190.5	184.9
Farm value (1982-84=100)	92.2	60.1	70.0	63.9	65.6	116.0	114.3	135.4	107.8	117.0
Farm-retail spread (1982-84=100)	301.4	295.2	297.0	296.5	291.2	237.1	288.3	250.6	339.1	306.8
Farm value-retail cost (%)	35.5	26.8	29.7	27.9	28.8	46.8	41.6	49.3	36.3	40.7
Cereal and bakery products										
Retail cost (1982-84=100)	206.0	209.0	212.8	213.6	214.6	214.5	214.8	216.3	219.0	218.5
Farm value (1982-84=100)	103.7	96.4	110.3	110.9	120.0	122.9	119.8	121.9	124.1	128.0
Farm-retail spread (1982-84=100)	220.3	224.6	227.2	227.9	227.8	227.3	228.1	229.5	232.2	231.1
Farm value-retail cost (%)	6.2	5.7	6.3	6.4	6.8	7.0	6.8	6.9	6.9	7.2

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by the Bureau of Labor Statistics (BLS). Farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale, and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail value and farm value, represents charges for assembling, processing, transporting, and distributing.

Source: USDA, ERS, <http://www.ers.usda.gov/publications/agoutlook/aotables/2007/04Apr/aotab08.xls>