



United States
Department
of Agriculture

VGS-317

Oct. 19, 2006



Electronic Outlook Report from the Economic Research Service

www.ers.usda.gov

Vegetables and Melons Outlook

Gary Lucier and Alberto Jerardo

Fresh Tomato Prices Ease As Supplies Increase

Shipments of fresh market tomatoes have slowly begun to return to more normal volume this month following the short supplies of September and early October that developed due to an unusually hot July and early fall rains. For example, early October prices for a 25-pound box of California large mature green tomatoes in the Chicago wholesale market were \$31.50 (\$1.26/lb), compared with the more usual \$12 per box (\$0.48/lb) a year earlier.

The fresh dry-bulb storage onion crop (excluding California) is down 3 percent from a year earlier and 19 percent from the record-large 2004 crop. With harvested area (excluding California) even with a year earlier, lower production is due to reduced yields. As a result of the smaller fresh-market storage crop and continued good demand for onions (per capita use was 21.2 pounds in 2005), the relatively strong prices which have characterized the onion market since June will likely continue into next spring.

Although below early season expectations, U.S. processing tomato output will still exceed the 10.2 million tons of 2005. This also marks the second consecutive year in which processing tomato yields have been impacted by weather. Tomato yields, which reached a record high 40.8 tons per acre in 2004, fell to 36.2 tons in 2005 and will likely slip below 36 tons this season. With demand for tomato products relatively strong, higher wholesale prices are expected for most tomato products through next summer.

U.S. potato exports are projected to expand 12 percent in 2006 to \$942 million from \$841 million in 2005. Helping drive export growth is the 50-percent surge in fresh exports to \$153 million as export unit prices jump 32 percent. The drivers for processed exports are potato flakes and granules (up 25 percent in value), preserved potatoes (up 17 percent), and potato starch. Frozen fry exports are expected to climb 11 percent or \$45 million in 2006, almost half of the \$96 million projected total export gain.

Close to 10 percent of the value of U.S. fresh mushroom supply in 2006 is expected to be imported, largely from Canada—about twice the 5-percent share in 2001. Fresh mushroom imports in 2006 were up 18 percent in value and 16 percent in volume, which more than offset the decline in processed imports, including dried, preserved, and frozen mushrooms.

The October estimate of the 2006 U.S. dry edible bean crop indicated a decline of 13 percent from a year ago to 23.8 million hundredweight (cwt). With harvested area down less than 1 percent to 1.56 million acres, most of the decline this year was due to the effect of heavy spring rains and summer heat on yield.

Contents

[Industry Overview](#)
[Fresh-Market Vegetables Processing Vegetables](#)
[Potatoes](#)
[Mushrooms](#)
[Dry Beans](#)
[Dry Peas & Lentils](#)
[Commodity Highlight: Garlic](#)
[Contacts & Links](#)
[Appendix Tables](#)

Web Sites

[Veg. & Melons](#)
[Potatoes](#)
[Tomatoes](#)
[Dry Beans](#)
[Market News](#)
[NASS Statistics](#)
[FAS Horticulture](#)
[Organics](#)
[Transportation](#)

The next release is
Dec. 14, 2006

Approved by the
World Agricultural
Outlook Board

Industry Overview

Fresh vegetables: Retail prices for fresh-market vegetables averaged 5 percent above a year earlier through the first 9 months of 2006. Prices for potatoes, broccoli, and tomatoes each averaged higher than during the initial 3 quarters of 2005. Assuming average weather this fall, fresh-market retail prices during October-December 2006 are expected to remain near those of a year earlier.

Melons: Wholesale prices for melon crops have averaged 14 percent below a year earlier during the first 9 months of 2006. Lower prices during the primary spring and early summer shipping season outweighed higher prices later in the summer and fall. Melon area for harvest is expected to rise 3 percent this fall to 6,560 acres due to increased honeydew melon area in Arizona. Low prices a year ago kept fall cantaloup area flat this year, with acreage down in Arizona.

Processing vegetables: Retail prices for processed fruits and vegetables averaged 3 percent above a year earlier through the first 9 months of 2006. Consumers paid just 1 percent more for frozen vegetables but 4 percent more for canned vegetables. Partly reflecting increased production costs, wholesale prices for dehydrated fruits and vegetables jumped 12 percent during the first 3 quarters of 2006. With weather-reduced yields again this year holding the processing tomato crop down in both the United States and other parts of the world, wholesale prices for tomato products (e.g., paste, sauces, catsup, diced, etc.) will likely rise over the coming months. Reduced stocks and higher wholesale prices underscore the likelihood of a strong gain in tomato production intentions for 2007.

Potatoes: With supplies lower and demand slowly returning, consumer prices for all fresh-market potatoes (russet, white, and red) averaged 12 percent above a year earlier through the first 9 months of 2006. Although total potato supplies have been lower, soft demand has kept processed potato prices down, with wholesale prices for frozen potato products (largely french fries) rising less than 1 percent during January-September 2006. However, given an expected recovery in potato demand and little change in fall potato production, retail prices for potatoes and potato products are likely to remain strong over the coming months.

Sweet potatoes: During the first 9 months of 2006, wholesale prices for U.S. fresh-market sweet potatoes averaged 7 percent below a year earlier despite dwindling stocks and good demand.

Dry beans: With modest supplies during the first 9 months of 2006, retail prices for packaged dry edible beans averaged \$0.82 per pound, up 2 percent from a year earlier. However, with the October crop estimate indicating dry bean output down 13 percent from a year earlier, dry bean market prices have begun to move higher. For example, mid-October dealer prices for pinto beans (up 12 percent) and dark red kidney beans (up 10 percent) were averaging above year-earlier levels.

Dry peas and lentils: With strong supplies over the past year, wholesale prices for dry lentils during the January-September 2006 averaged 30 percent below a year earlier. Similarly, wholesale prices for dry peas averaged 2 percent below a year earlier during the same time period. With smaller than expected production and good demand this year, both grower and dealer prices for peas and lentils could advance from current levels in the coming months.

Mushrooms: Because of the impact of higher energy prices, wholesale mushroom prices are expected to rise slightly in the coming months.

Table 1--U.S. vegetable industry at a glance, 2003-06

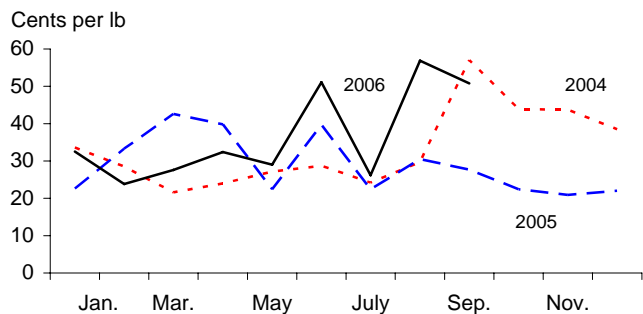
| Item | Unit | 2003 | 2004 | 2005 | 2006 1/ |
|-----------------------|-----------|--------|--------|--------|---------|
| <i>Area harvested</i> | 1,000 ac. | 6,538 | 6,581 | 7,149 | 7,281 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | 1,000 ac. | 1,928 | 1,940 | 1,936 | 1,948 |
| Processing | 1,000 ac. | 1,337 | 1,297 | 1,286 | 1,275 |
| Potatoes | 1,000 ac. | 1,249 | 1,167 | 1,087 | 1,116 |
| Dry beans | 1,000 ac. | 1,347 | 1,219 | 1,569 | 1,562 |
| Other 2/ | 1,000 ac. | 677 | 957 | 1,321 | 1,380 |
| <i>Production</i> | Mil. cw t | 1,295 | 1,355 | 1,300 | 1,301 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | Mil. cw t | 469 | 485 | 473 | 479 |
| Processing | Mil. cw t | 314 | 356 | 317 | 326 |
| Potatoes | Mil. cw t | 458 | 456 | 424 | 428 |
| Dry beans | Mil. cw t | 22 | 18 | 27 | 24 |
| Other 2/ | Mil. cw t | 32 | 41 | 44 | 45 |
| <i>Crop value</i> | \$ mil. | 15,524 | 15,533 | 15,862 | 16,866 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | \$ mil. | 9,769 | 9,701 | 9,819 | 10,100 |
| Processing | \$ mil. | 1,367 | 1,473 | 1,323 | 1,525 |
| Potatoes | \$ mil. | 2,686 | 2,575 | 2,991 | 3,400 |
| Dry beans | \$ mil. | 423 | 453 | 526 | 500 |
| Mushrooms | \$ mil. | 890 | 919 | 909 | 881 |
| Other 2/ | \$ mil. | 388 | 412 | 434 | 460 |
| <i>Unit value 3/</i> | \$/cw t | 11.99 | 11.46 | 12.20 | 12.97 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | \$/cw t | 20.85 | 20.02 | 20.77 | 21.09 |
| Processing | \$/cw t | 4.36 | 4.14 | 4.17 | 4.69 |
| Potatoes | \$/cw t | 5.89 | 5.66 | 7.06 | 7.94 |
| Dry beans | \$/cw t | 18.40 | 25.70 | 18.40 | 21.01 |
| Other 2/ | \$/cw t | 12.05 | 10.15 | 9.91 | 10.23 |
| <i>Trade</i> | | | | | |
| <i>Imports</i> | \$ mil. | 5,454 | 6,212 | 6,603 | 7,408 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | \$ mil. | 3,028 | 3,458 | 3,668 | 4,275 |
| Processing 4/ | \$ mil. | 1,276 | 1,448 | 1,587 | 1,725 |
| Potatoes & products | \$ mil. | 701 | 791 | 787 | 850 |
| Dry beans | \$ mil. | 49 | 65 | 82 | 73 |
| Other 5/ | \$ mil. | 400 | 449 | 479 | 485 |
| <i>Exports</i> | \$ mil. | 3,320 | 3,479 | 3,855 | 4,170 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | \$ mil. | 1,302 | 1,364 | 1,515 | 1,575 |
| Processing 4/ | \$ mil. | 798 | 794 | 828 | 875 |
| Potatoes & products | \$ mil. | 653 | 745 | 841 | 950 |
| Dry beans | \$ mil. | 157 | 145 | 160 | 210 |
| Other 5/ | \$ mil. | 410 | 432 | 511 | 560 |
| <i>Per capita use</i> | Pounds | 447 | 448 | 440 | 443 |
| <i>Vegetables:</i> | | | | | |
| Fresh & melons | Pounds | 172 | 175 | 174 | 175 |
| Processing | Pounds | 122 | 123 | 125 | 126 |
| Potatoes & products | Pounds | 138 | 135 | 126 | 126 |
| Dry beans | Pounds | 7 | 6 | 6 | 7 |
| Other 2/ | Pounds | 9 | 9 | 9 | 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.

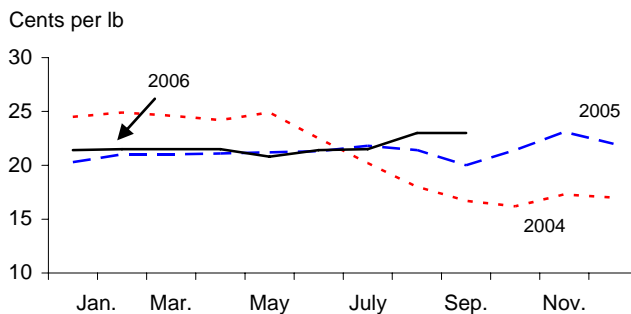
Sources: Derived by ERS from data of USDA, National Agricultural Statistics Service, *Crop Production, Acreage, Agricultural Prices, Crop Values, Mushrooms, and Potatoes*, and from U.S. trade data of the U.S. Dept. of Commerce, Bureau of the Census.

Figure 1
F.o.b. shipping-point prices for fresh-market vegetables

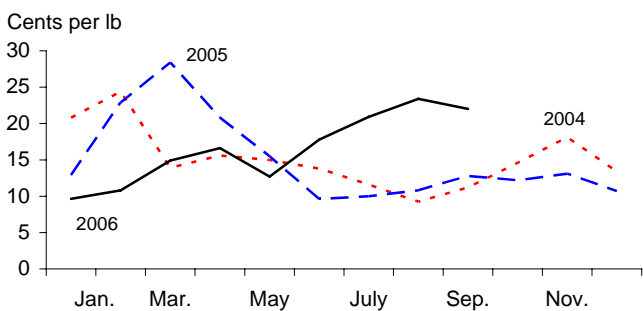
Broccoli



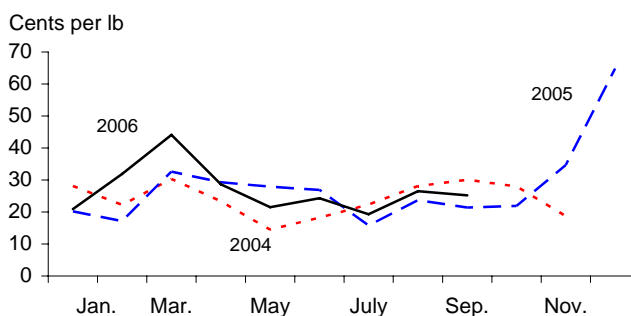
Carrots



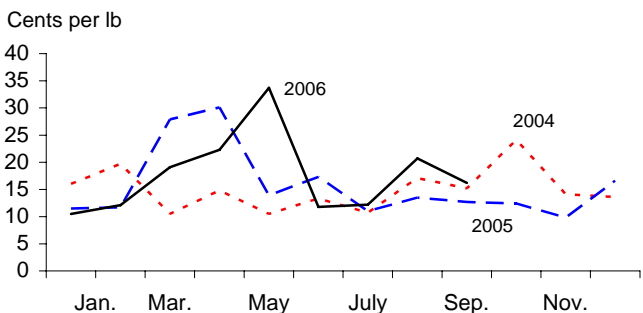
Celery



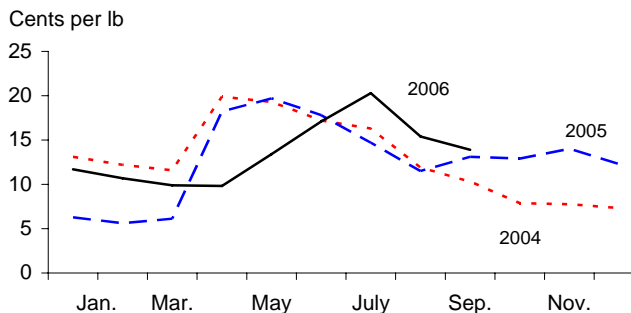
Cucumbers



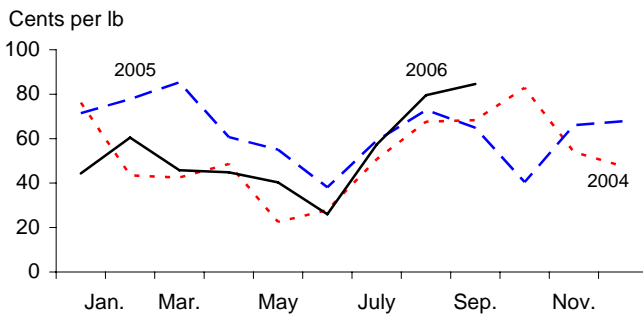
Head lettuce



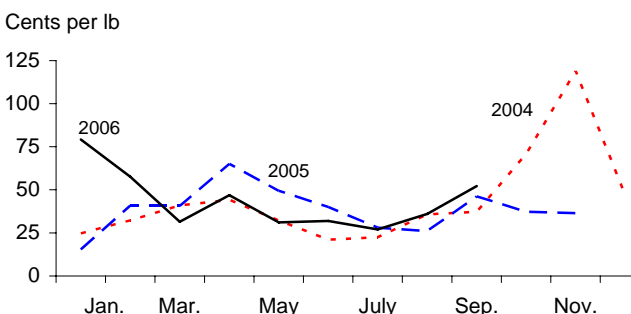
Onions



Snap beans



Tomatoes



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

Fresh-Market Vegetables

Fall Acreage Drops 1 Percent

Area for harvest of the major fresh-market fall vegetables (excluding melons, onions, and potatoes) was forecast to decline 1 percent to 159,700 acres (table 2). This compares with a 3-percent increase last fall and follows little change in summer vegetable acreage this year. Growers of 5 of the 11 surveyed crops are expected to increase acreage this fall. Reductions in area are expected for the remaining six crops, including two of the most consumed fresh vegetables, head lettuce (down 3 percent) and tomatoes (down 2 percent). Acreage is expected to decline about 1 percent each in California and Florida—the top producing States. California is expected to harvest about two-thirds of fall fresh-market vegetable area.

Assuming average weather and yields, fall production may be slightly improved from a year earlier when shipments from Florida were reduced for the second consecutive year by hurricane damage. During the fall (October-December) quarter, shipments of Florida fruits and vegetables declined 26 percent from the previous year and 43 percent from 2 years earlier. Georgia, which suffered a 25-percent reduction in fall volume in 2004, rebounded last year with volume well above both 2004 and 2003. Although Georgia's primary shipping season is during the late spring and early summer, fall-season fresh-market vegetable production has expanded over the past several years. In addition to various Southern greens, Georgia now ships substantial volumes of snap beans, cabbage, sweet corn, cucumbers, bell peppers, and eggplant during the fall.

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

| Item | 2003 | 2004 | 2005 | 2006 | Change |
|---------------------|---------|---------|---------|---------|---------|
| | | | | | 2005-06 |
| | | | | | Percent |
| --Harvested acres-- | | | | | |
| Snap beans | 17,000 | 18,000 | 18,200 | 17,500 | -4 |
| Broccoli | 28,000 | 29,500 | 29,500 | 29,000 | -2 |
| Cabbage | 6,500 | 6,000 | 6,500 | 6,800 | 5 |
| Carrots | 14,700 | 13,500 | 16,200 | 16,700 | 3 |
| Cauliflower | 9,000 | 8,000 | 8,600 | 8,900 | 3 |
| Celery | 6,900 | 6,900 | 6,800 | 6,400 | -6 |
| Sweet corn | 9,900 | 9,100 | 9,000 | 9,700 | 8 |
| Cucumbers | 7,900 | 7,700 | 6,800 | 7,600 | 12 |
| Head lettuce | 31,500 | 29,450 | 31,350 | 30,400 | -3 |
| Bell pepper | 5,100 | 5,100 | 5,400 | 4,600 | -15 |
| Tomatoes | 22,300 | 23,000 | 22,500 | 22,100 | -2 |
| Total | 158,800 | 156,250 | 160,850 | 159,700 | -1 |

1/ Selected crops for harvest largely during Oct.-Dec.

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

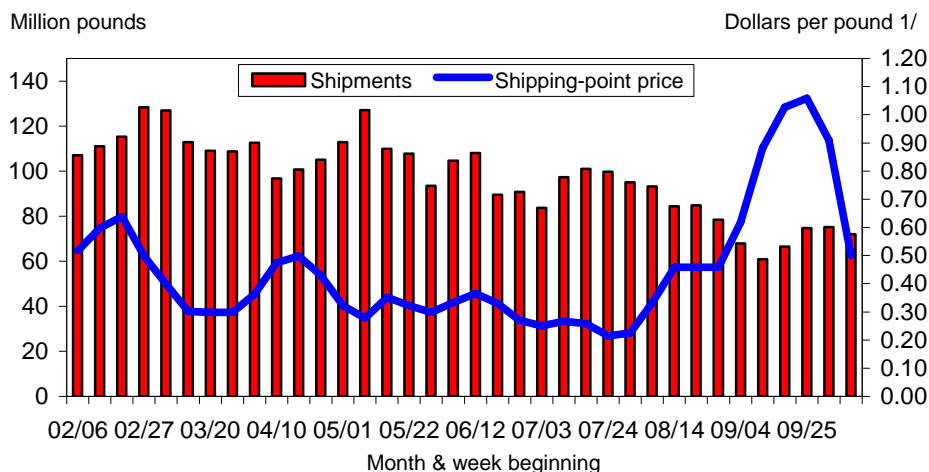
Table 3--Fall-season fresh-market melon area 1/

| Item | 2003 | 2004 | 2005 | 2006 | Change |
|---------------------|--------|--------|--------|--------|---------|
| | | | | | 2005-06 |
| | | | | | Percent |
| --Harvested acres-- | | | | | |
| Cantaloup | 8,400 | 8,500 | 12,600 | 12,500 | -1 |
| Honeydew | 3,900 | 3,200 | 3,100 | 3,700 | 19 |
| Total | 12,300 | 11,700 | 15,700 | 16,200 | 3 |

1/ Selected crops for harvest largely during Oct.-Dec.

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

Figure 2

U.S. fresh tomatoes: Weekly shipments & shipping-point price, 2005-06

1/ Based on dollars per 25-pound carton of mature green tomatoes. Volume excludes grape and cherry tomatoes.

Source: USDA, Agricultural Marketing Service, *Market News*.

Table 4—U.S. quarterly f.o.b. shipping-point prices, 2005-06

| Commodity | 2005 | | | 2006 | | | | Change 3rd Q 1/ Percent |
|-------------------|-----------------------|--------|--------|--------|--------|--------|---------|-------------------------------|
| | Second | Third | Fourth | First | Second | Third | Fourth* | |
| | -- Cents per pound -- | | | | | | | |
| Asparagus | 91.20 | 164.00 | 175.00 | 202.50 | 136.73 | 181.67 | 125.00 | 10.8 |
| Broccoli | 33.97 | 26.87 | 21.77 | 27.97 | 37.50 | 44.63 | 35.00 | 66.1 |
| Cantaloup | 18.45 | 9.97 | 13.27 | -- | 23.80 | 16.97 | 19.00 | 70.2 |
| Carrots | 21.20 | 21.07 | 22.17 | 21.47 | 21.23 | 22.50 | 20.00 | 6.8 |
| Cauliflower | 34.83 | 28.53 | 29.70 | 31.23 | 33.13 | 30.70 | 39.00 | 7.6 |
| Celery | 15.31 | 11.20 | 12.00 | 11.78 | 15.70 | 22.10 | 15.00 | 97.3 |
| Sweet corn | 20.73 | 22.40 | 28.00 | 35.07 | 22.13 | 21.63 | 25.00 | -3.4 |
| Cucumbers | 28.03 | 20.30 | 40.47 | 32.30 | 25.10 | 23.67 | 24.00 | 16.6 |
| Lettuce, head | 20.43 | 12.40 | 12.94 | 13.90 | 22.60 | 16.37 | 16.00 | 32.0 |
| Onions, dry bulb | 17.40 | 12.53 | 12.47 | 10.76 | 13.44 | 16.53 | 12.50 | 31.9 |
| Snap beans | 51.27 | 65.60 | 58.10 | 50.23 | 37.07 | 73.83 | 54.00 | 12.5 |
| Tomatoes, field | 51.50 | 33.40 | 36.90 | 56.10 | 36.67 | 38.40 | 37.25 | 15.0 |
| All vegetables 2/ | 1023 | 817 | 897 | 892 | 1006 | 941 | 870 | 15.2 |

-- = not available. * = ERS forecast. 1/ Change in 3rd-quarter 2006 over 3rd-quarter 2005.

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*.

Fresh Tomato Market Feels the Heat

Like many other vegetables, shipments of fresh-market tomatoes have gradually increased this month following the short supplies of September that developed due to an unusually hot July in California and late summer-early fall rain. For example, early October prices for a 25-pound box of California large mature green tomatoes in the Chicago wholesale market were \$31.50 per box (\$1.26/lb), compared with the more usual \$12 per box (\$0.48/lb) a year earlier.

The impact of the July heat (temperatures in California exceeded 110 degrees Fahrenheit (or F) for several days) varied depending on the stage of growth of

Table 5--Selected fresh-market vegetable shipments 1/

| Item | Annual 2005 | August 2006 | September | | Change previous: 3/ | |
|-------------------|----------------|----------------|-----------|--------|---------------------|------|
| | | | 2005 2/ | 2006 | Month | Year |
| | | --1,000 cwt-- | | | Percent | |
| Asparagus | 3,680 | 195 | 183 | 171 | -12 | -7 |
| Snap beans | 2,596 | 172 | 121 | 83 | -52 | -31 |
| Broccoli | 9,803 | 667 | 846 | 671 | 1 | -21 |
| Cabbage | 1,364 | 989 | 973 | 787 | -20 | -19 |
| Cantaloup | 28,587 | 2,996 | 2,931 | 2,296 | -23 | -22 |
| Carrots | 11,085 | 729 | 810 | 561 | -23 | -31 |
| Cauliflower | 4,293 | 270 | 332 | 225 | -17 | -32 |
| Celery | 17,848 | 1,249 | 1,441 | 986 | -21 | -32 |
| Chinese cabbage | 1,197 | 83 | 107 | 70 | -16 | -35 |
| Sweet corn | 9,972 | 247 | 220 | 178 | -28 | -19 |
| Cucumbers | 14,100 | 960 | 903 | 766 | -20 | -15 |
| Greens | 2,437 | 76 | 68 | 74 | -3 | 9 |
| Head lettuce | 38,255 | 3,446 | 3,713 | 2,841 | -18 | -23 |
| Romaine | 14,510 | 1,239 | 1,364 | 1,061 | -14 | -22 |
| Onions, dry bulb | 50,296 | 3,653 | 4,547 | 2,810 | -23 | -38 |
| Onions, green | 3,540 | 214 | 262 | 172 | -20 | -34 |
| Peppers, bell | 16,577 | 790 | 938 | 680 | -14 | -28 |
| Peppers, chile | 4,009 | 501 | 188 | 181 | -64 | -4 |
| Spinach | 1,156 | 62 | 82 | 31 | -50 | -62 |
| Squash | 7,019 | 270 | 239 | 162 | -40 | -32 |
| Tomato, round | 28,920 | 2,974 | 2,398 | 1,640 | -45 | -32 |
| Tomato, roma | 11,098 | 713 | 1,001 | 443 | -38 | -56 |
| Tomato, ghouse 4/ | 8,468 | 671 | 1,020 | 616 | -8 | -40 |
| Tomato, cherry 5/ | 4,227 | 321 | 278 | 189 | -41 | -32 |
| Watermelon | 35,110 | 5,427 | 2,083 | 950 | -82 | -54 |
| Selected total | 326,467 | 28,719 | 26,865 | 18,473 | -36 | -31 |

1/ All monthly data are preliminary. They include domestic and imported product. 2/ For comparison, preliminary data are shown for September 2005. Final data can be found on the Market News Data Portal at <http://marketnews.usda.gov/portal/fv>. 3/ Change in September 2006. 4/ Includes all types of tomatoes produced under cover. 5/ Includes grape tomatoes.

Source: USDA, Agricultural Marketing Service, *Fresh Fruit and Vegetable Shipments*.

tomato plants. The heat damaged and stressed young plants that were geared for harvest in September. Temperatures over 95 degrees F can prevent most varieties of tomatoes from flowering normally (flowers become tomatoes). It also causes bloom drop in flowering plants, which means plants need to reset flowers—a process that takes about 2 weeks under normal weather conditions. The heat also accelerated the growth of older tomato plants, causing bunching of harvest (the feast) and disrupting the normal flow from fields timed for certain market windows (the later famine). All these impacts, which hit crops in California, Virginia, Michigan, and others, caused a gap in September-early October supplies. By mid-October Florida's fall crop (also delayed by heat and heavy rains) began shipping, easing f.o.b. shipping point prices. Damage to Mexico's winter vegetable area from Hurricane Lane in mid-September was limited, with little impact expected on the volume of U.S. tomato imports this coming winter.

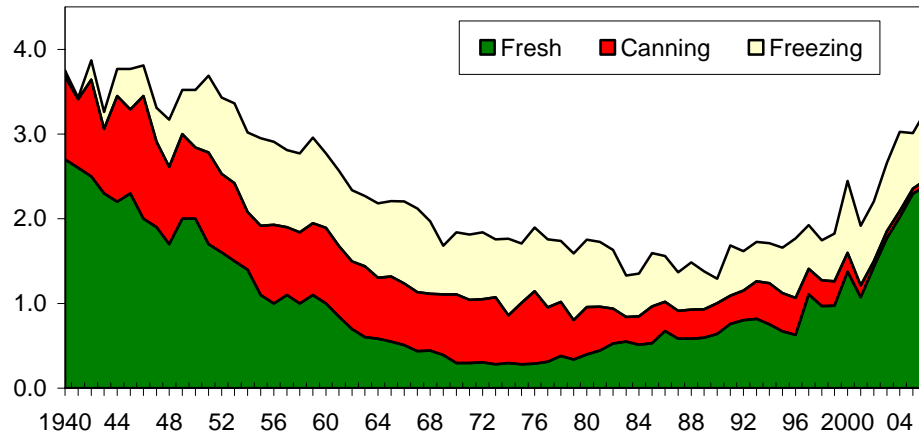
Spinach Market in Doldrums

Movement of fresh-market spinach remains slow and uncertain following resumption of shipments after a national food safety outbreak. Nearly 200 reported cases of *E. coli* O157:H7 infection across 26 States were tied to fresh bagged spinach. Based on epidemiological and laboratory evidence, all contaminated

Figure 3

U.S. spinach: Per capita disappearance, 1940-2006

Pounds/person



Source: Estimated and prepared by USDA, Economic Research Service.

product (there were at least 11 confirmed contaminated product samples) was traced back to one central California firm, with no other firms or product from any other State implicated. Although a potential source of the bacteria was traced to a livestock ranch near a spinach field, precisely how the spinach became contaminated was not known by mid-October. The extent of market loss to the industry (covering the entire value chain from grower to retailer) will not be evident until a clearer picture emerges on the length of time required to rebuild consumer confidence. In mid-October, spinach shipments were only about one-third that of a year earlier and growers remained uncertain about how much to plant. Given that the farm value of the U.S. fresh-market spinach crop averaged \$199 million over the past 3 years (2003-05), and spinach is marketed year-round in the United States, a crude estimate of market loss for all growers would be roughly \$3.5 to \$4.0 million for each week that spinach was not harvested.

The value of fresh-market spinach has more than doubled over the past decade as a surge in demand has encouraged greater production. California accounts for about three-fourths of the value of both the fresh and processing spinach crops. Grower cash receipts for fresh-market spinach during 2003-05 averaged about \$200 million, exceeding those for such crops as squash, cauliflower, asparagus, and green peas.

Like other cool-season leafy crops, most (about 96 percent) of the fresh-market spinach consumed in the United States is produced domestically. Although rising, imports (largely from Mexico) totaled about 23 million pounds in 2003-05, compared with 3 million pounds in 1993-05. During last 10 years, exports (largely to Canada) have doubled to 55 million pounds (2003-05), with much of the growth occurring earlier this decade.

Storage Onion Production Steady

Production of fall storage onions is expected to remain about even with a year earlier at 50.3 million cwt. California's storage crop, which is largely used for dehydration and other processed products, is expected to increase 12 percent. Excluding California, the storage onion crop is down 3 percent from a year earlier and 19 percent from the record-large 2004 crop. With harvested area (excluding

California) about the same as a year earlier, lower storage onion output is due to reduced yields. Although yields were strong and steady in Washington, the largest producer of fresh-market storage onions, hot weather and disease reduced yields in Oregon and Idaho. As a result of the smaller fresh-market storage crop and continued good demand for onions (per capita use was 21.2 pounds in 2005), the relatively strong prices which have characterized the onion market since June will likely continue into next spring.

Asparagus Crop Down 15 Percent

Production of fresh-market asparagus declined 15 percent in 2006 to 1.2 million cwt. Reduced acreage accounted for most of the decline in fresh-market production. California growers have reduced asparagus area 32 percent over the last decade in response to increased import competition, larger acreage in other states, low prices, and a switch to better yielding varieties. Yield in California has increased 26 percent in the last decade, offsetting much of the impact of reduced area.

Imports have largely filled in behind domestic producers in 2006. The volume of fresh asparagus imports during January-July was up 10 percent from the same period a year earlier. Fresh asparagus imports are three times as large as a decade earlier, with imports now satisfying two-thirds of domestic consumption. Mexico and Peru accounted for most of the fresh asparagus volume imported through July. Although both countries are year-round asparagus suppliers, volume from Mexico is greatest during the winter, while shipments from Peru are strong from late summer through the end of the year. With imports filling in for domestic output, U.S. per capita use of asparagus is expected to be maintained at the 2005 level of 1.21 pounds.

Table 6--Selected fresh-market vegetable trade volume, 2004-06 1/

| Item | 2005 Annual | January - August | | | Change 2005-06 Percent |
|------------------------|----------------|------------------|--------|--------|------------------------------|
| | | 2004 | 2005 | 2006 | |
| --1,000 cwt-- | | | | | |
| Exports, fresh: | | | | | |
| Onions, dry bulb | 6,678 | 3,324 | 4,238 | 3,475 | -18 |
| Lettuce, head | 4,501 | 3,153 | 3,061 | 2,573 | -16 |
| Lettuce, other | 4,863 | 3,001 | 3,250 | 3,180 | -2 |
| Broccoli | 3,147 | 2,366 | 2,108 | 2,177 | 3 |
| Tomatoes | 3,265 | 2,267 | 2,286 | 2,015 | -12 |
| Other | 16,851 | 12,122 | 12,118 | 11,132 | -8 |
| Total | 39,306 | 26,234 | 27,061 | 24,551 | -9 |
| Imports, fresh: | | | | | |
| Tomatoes, all | 20,981 | 15,585 | 14,885 | 17,218 | 16 |
| Cucumbers | 9,551 | 6,419 | 6,903 | 6,615 | -4 |
| Onions, dry bulb | 6,592 | 4,304 | 4,058 | 3,792 | -7 |
| Peppers, sweet | 6,526 | 4,025 | 4,487 | 5,361 | 19 |
| Peppers, chile | 4,254 | 2,511 | 2,488 | 3,248 | 31 |
| Squash 2/ | 5,244 | 3,140 | 3,306 | 3,328 | 1 |
| Other | 23,149 | 13,309 | 14,670 | 15,958 | 9 |
| Total | 76,297 | 49,293 | 50,798 | 55,519 | 9 |

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

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

Processing Vegetables

Small Gain in Tomato Crop Likely

Although below early season expectations, U.S. processing tomato output will still exceed the 10.2 million tons of 2005. This also marks the second consecutive year in which tomato yields have been affected by weather. Tomato yields, which reached a record high 40.8 tons per acre in 2004, fell to 36.2 tons in 2005 and will likely slip below 36 tons this season. For growers, the reduction in yields will erase the majority of the positive financial impact resulting from higher tomato prices negotiated with processors this year.

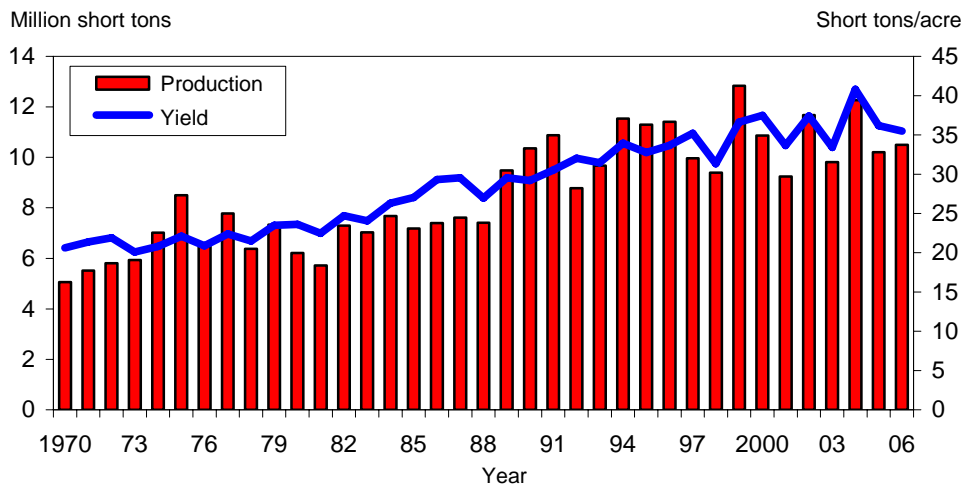
According to data from the California Processing Tomato Advisory Board (CPTAB), California's processing tomato crop will increase from year-earlier levels despite damage from extreme heat this summer. Assuming weather remains warm and dry into early November, California's processing tomato crop (including noncontract output) is projected to increase 4 percent to nearly 10 million short tons. While the hot summer has reduced yields in California and pushed the crop later into the fall, yields in the Midwest are also expected to average below a year earlier due to increased disease pressure. After adding production outside of California, U.S. processing tomato production will likely total about 10.5 million tons in 2006—up from a year earlier but well below the large 2004 crop.

With smaller supplies during the marketing year and a steady economy maintaining demand, wholesale prices for tomato products have already strengthened. In early October, the wholesale price for industrial tomato paste (31 percent Brix) in 300 gallon bins was averaging 38 cents per pound—up 23 percent from a year earlier. These higher prices may negatively impact U.S. export demand while boosting import demand in the coming year, especially for whole tomato products and some sauces.

According to data through early October from CPTAB, the 2006 California tomato crop had an average soluble solids content of 5.36 percent. If maintained through the end of the season, this would be the highest since the 2005 record of 5.44 percent. This is important to many tomato product manufacturers since the greater the average solids content, the larger the yield of processed tomato products such as

Figure 4

U.S. processing tomatoes: Production and yield, 1970-2006 1/



1/ Yield is per harvested acre. 2006 data forecast by ERS.

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

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

| Item | 2005 | 2006 | | Change previous: | |
|---|-------------|-------|-------|------------------|------|
| | Sept. | Aug. | Sept. | Month | Year |
| | -- Index -- | | | -- Percent -- | |
| Consumer Price Indexes (12/97=100) | | | | | |
| Processed fruits and vegetables | 121.2 | 124.1 | 123.3 | 0.6 | 1.7 |
| Canned vegetables | 124.8 | 127.9 | 125.3 | 2.1 | 0.4 |
| Frozen vegetables (1982-84=100) | 181.5 | 181.3 | 179.6 | 0.9 | -1.0 |
| Dry beans, peas, lentils | 118.3 | 121.3 | 120.8 | 0.4 | 2.1 |
| Olives, pickles, relishes | 106.7 | 117.6 | 117.5 | 0.1 | 10.1 |
| Producer Price Indexes (1982=100) | | | | | |
| Canned vegetables and juices | 137.5 | 141.0 | 141.0 | 0.0 | 2.5 |
| Pickles and products | 185.4 | 189.1 | 189.2 | 0.1 | 2.0 |
| Tomato catsup and sauces 1/ | 130.0 | 135.3 | 135.4 | 0.1 | 4.2 |
| Canned dry beans | 126.7 | 133.5 | 136.7 | 2.4 | 7.9 |
| Vegetable juices 1/ | 113.6 | 116.4 | 116.1 | -0.3 | 2.2 |
| Frozen vegetables | 136.6 | 139.4 | 140.0 | 0.4 | 2.5 |
| Frozen vegetable combinations | 105.0 | 107.1 | 107.1 | 0.0 | 2.0 |
| Dried/dehyd. fruit & vegetables | 150.4 | 165.6 | 169.4 | 2.3 | 12.6 |

1/ Index base year is 1987.

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

paste, sauce, and catsup from a given weight of raw tomatoes. The percentage of soluble solids in any given year depends on many factors such as varieties planted, soil types, and weather during the season (hot, dry weather can increase solids content).

Snap Bean and Sweet Corn Output Down

Contract production of snap beans for processing in 2006 is expected to decline 2 percent from a year earlier to about 0.77 million tons. Based on an analysis of acreage changes and regional yields, canning production is expected to decline, while output of frozen snap beans increases. Hot, wet conditions can spur disease in bean crops. However, despite these conditions during part of the season, slightly better yields than a year ago were reported in many States, which helped offset a 4 percent reduction in area for harvest. Although final data will not be published until January, National yields would be second only to the 2004 record of 4.16 tons per acre.

Despite the expectation of a smaller canning crop this year, the average wholesale price for canned snap beans was running 4 to 6 percent below a year earlier in October, with retail sizes down 5 percent to \$8.45 per case (24/300s) and foodservice sizes down 4 percent to \$12.00 per case (6/10s). The sluggish price situation likely reflects higher inventories than a year earlier coming into the 2006/07 marketing year.

Contract production of sweet corn destined for canning and freezing is expected to decline 4 percent to 3.03 million short tons. Based on acres planted and regional yields, the pack of frozen corn is expected to increase while output of canned corn declines. Declining harvested area (down 4 percent) and reduced yields (down 2 percent) each contributed to the smaller crop. Although yields are expected to be lower, they may still be second only to last year's record high of 7.86 tons. The sweet corn crop is expected to decline 5 percent in Minnesota, the top producing State accounting for 30 percent of the crop.

Despite the expectation of a larger frozen pack this year, the average wholesale price for frozen sweet corn was mixed depending on the pack type. In early

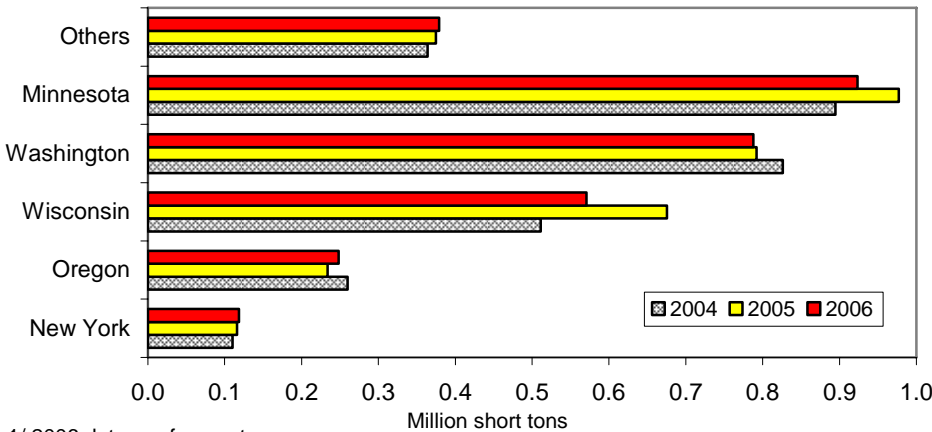
October retail sizes were running 10 percent higher at \$7.78 per case (12 units of 16 ounce bags/boxes) and foodservice sizes down 8 percent to \$0.44 per pound (based on a case of 12-2.5 lb packages). Although overall cut-corn stocks were lower coming into 2006, the split price situation may reflect differences in both inventory levels and demand between the pack types.

Over the past decade, fresh-market sweet corn has generally enjoyed a resurgence, while canned and frozen markets have languished. A brief overview comparing averages during 1993-95 and 2003-05 for the basic annual economic indicators in the market for sweet corn used in frozen products reveals:

- U.S. *production* of sweet corn for freezing is up 4 percent;
- *Import* volume is up 52 percent;
- *Import share of consumption* is up 47 percent;
- *Export* volume is up 10 percent;
- *Export share of supply* is down 5 percent;
- Ending *stocks* are 35 percent higher;
- Total domestic *disappearance* is up 2 percent;
- *Per capita* disappearance is down 8 percent;
- *Delivered price* at the plant door for sweet corn to be processed is unchanged;
- *Delivered price* at the plant door *adjusted* for inflation is down 17 percent;
- *Wholesale price* per case of retail-size frozen cut corn (12-16s) is up 2 percent.

Figure 5

U.S. processing sweet corn: Contract production, 2004-06 1/



1/ 2006 data are forecast.

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

Table 9--Value of processed vegetable trade 1/

| Item | 2005 Annual | January - August | | | Change 2005-06 Percent |
|---------------------|-------------|------------------|------|------|---------------------------|
| | | 2004 | 2005 | 2006 | |
| --Million dollars-- | | | | | |
| Imports: | | | | | |
| Canned | 803 | 458 | 507 | 552 | 9 |
| Frozen | 493 | 295 | 321 | 338 | 6 |
| Dehydrated 2/ | 291 | 167 | 185 | 219 | 19 |
| Exports: | | | | | |
| Canned | 539 | 341 | 349 | 359 | 3 |
| Frozen | 161 | 97 | 104 | 114 | 10 |
| Dehydrated 2/ | 128 | 74 | 80 | 84 | 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.

Potatoes

Fall Crop Value May Reach \$2.8 Billion

In addition to harvested area, two key forecasts for the 2006 fall potato crop—yield per acre and price—determine its production value. The National Agricultural Statistics Service (NASS) forecast for harvested acres for the fall 2006 crop is 1.1 million acres, which is about 3 percent larger than in 2005. Although NASS does not release yield and production data until November, the industry expects yield to be lower than in 2005. Assuming a 2-percent reduction to 395 hundredweight (cwt) per acre, the 2006 fall crop would be 385 million cwt, or less than 1 percent greater than in 2005. Adding the production gains from the spring and summer crops would result in total U.S. potato output rising a bit more than 1 percent.

Fall crop prices are projected to average around \$7 per cwt based on recent year-over-year prices—\$12.17 for fresh-market potatoes and \$5.66 for processing potatoes. This translates to a value of \$2.8 billion for the fall 2006 crop, a 13-percent jump. The total value for the year's four seasons' crops is anticipated at \$3.4 billion, or 14 percent higher than in 2005. The influence of imported potatoes on domestic prices is insignificant this year as import volume is up only 1 percent. Strong U.S. potato exports, however, may have a positive effect on domestic prices, given that 30 percent of grower sales value is earned from shipments abroad.

2005 Crop Sales Volume Is Lowest Since 1992

The 2005 fall potato crop, whose marketing year ended in the summer of 2006, experienced a 29-percent surge in prices as production declined by 7 percent—an indication of relatively strong demand for potatoes. The States where growers received the highest price boosts (ranging from 48 to 90 percent above a year earlier), were Colorado, Nebraska, Pennsylvania, and New York. For the spring and summer crops, Florida and Texas gained the most in sales value from sharply higher prices. In value, growers in these States earned between \$700 and \$1,200 more per acre for their 2005 crop than their 2004 crop. Overall, average sales per

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 | 2,250 | | <i>10,058</i> |
| Pct change | -7.8 | -5.3 | -2.2 | | -5.3 |
| 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 | 3,318 | | <i>15,860</i> |
| Pct change | -10.0 | -9.1 | -8.9 | | -9.3 |

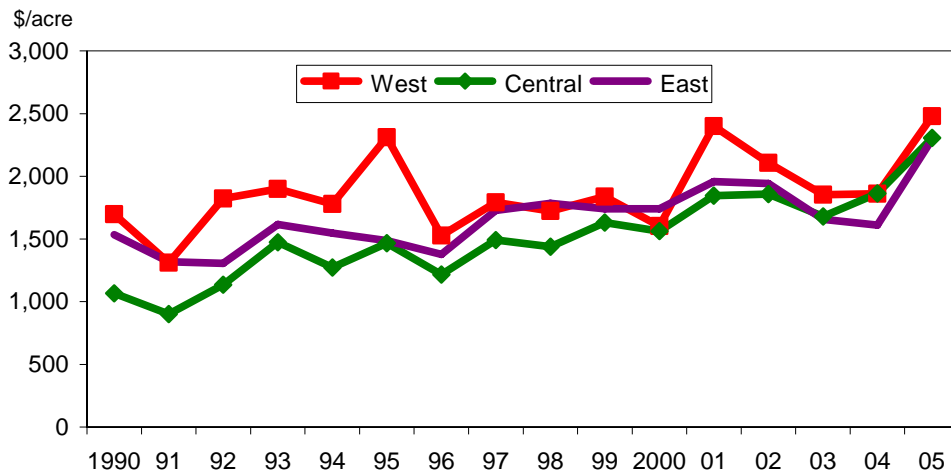
1/ Domestic shipments plus imports minus exports.

2/ Crop year projections are in *italics*.

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

Figure 6

Fall potato sales per acre reflect higher yields from fewer acres harvested



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

acre for all 2005 crop in all States was \$2,538—26 percent or \$529 more per acre than the 2004 crop.

Smaller production in 2005 plus lower imports and larger exports reduced total domestic use of potatoes to 40 billion pounds—a 7-percent drop from 2004. In per capita terms, U.S. potato use declined to 126 pounds in 2005 from 135 pounds in 2004. On a fresh-weight basis, about a third of potatoes eaten per person, per year are for french fried potatoes. Another third are as fresh-market potatoes. The remainder includes chipping potatoes, potatoes for other frozen potatoes, and potatoes used for dehydrated products. Out of all potatoes consumed per capita, 9.4 pounds or 7 percent were imported, twice as much as a decade ago. Domestic use of all potato products decreased in 2005, except for potatoes used for frozen products other than French fries and potatoes used for chips.

But 2005 Crop Sales Value Is Third Largest on Record

The sales value of 2005’s potato crops amounted to \$2.76 billion, an 18-percent jump from 2004. Despite the 6-percent decline in total production sold, average prices rose by 25 percent to \$7.06 from \$5.66 per cwt for the 2004 crops. The price gains offset lower sales volume in the States producing the summer and fall crops. For the 2005 fall crop, average price gains were 36 percent in the East, 27 percent in the Central States, and 29 percent in the West. In Colorado, prices almost doubled. Prices for the summer crop increased 20 percent on average.

Compared with a season earlier, these significantly higher prices translated into double-digit boosts for grower sales value per acre in most States. For the 2005 summer and fall crops, average sales per acre grew by 21 and 31 percent, respectively, to \$2,414 and \$3,212. For all 2005’s seasons, the average sales per acre reached \$2,538, a 26-percent rise from 2004’s \$2,009. Average sales per acre for the 2005 summer crop exceed that of the spring crop for only the second time in more than 2 decades. And the fall crop’s sales per acre are the highest on record.

Exports Are Outpacing Imports

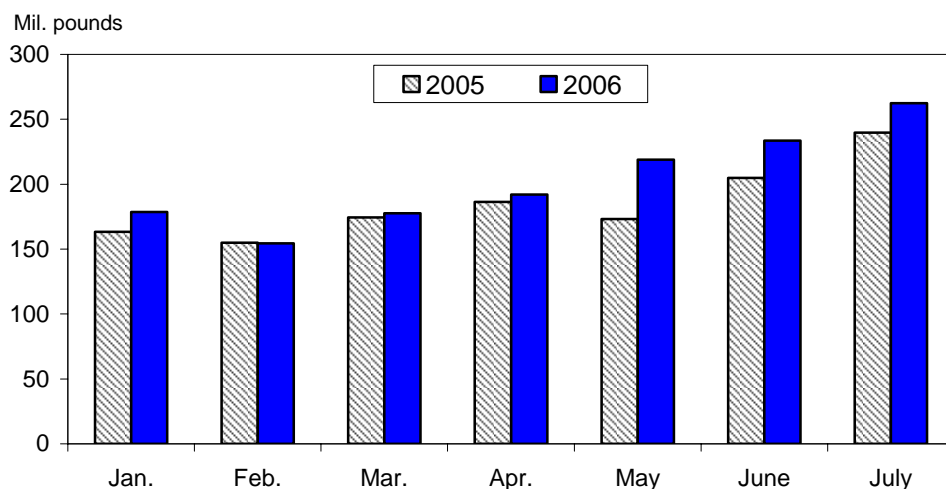
U.S. potato exports are projected to expand 12 percent in 2006 to \$942 million from \$841 million in 2005. Helping drive export growth is the 50-percent surge in fresh exports to \$153 million as export unit prices jump 32 percent. The drivers for processed exports are potato flakes and granules (up 25 percent in value), preserved potatoes (up 17 percent), and potato starch. Frozen fry exports are expected to climb 11 percent or \$45 million in 2006, almost half of the \$96 million projected total export gain. Total potato export volume is expected to increase 9 percent as both fresh and processed products advance at double-digit rates while potato seed exports dip by 65 percent.

Japan remains the top destination of U.S. potatoes, accounting for 27 percent of total U.S. potato export earnings and 41 percent of French fry exports. Canada and Mexico are close behind Japan as top foreign markets for U.S. potato exports. The top foreign market for fresh and seed potatoes is Canada, which is anticipated to purchase \$104 million this year. For potato chips, Mexico now leads as the top market with a projected \$59 million in exports, twice that of Canada and Japan. Mexico also is now the top market for U.S. dehydrated potato products.

The result of exports outpacing imports in 2006 is a 72-percent projected increase in the U.S. potato trade surplus to \$93 million from \$54 million in 2005. Thus, after 2 years of trade deficits in 2002 and 2003, the potato trade balance (in terms of dollar value) is positive again (as it was in 2005). However, on a quantity basis, net export volume for potatoes remains negative because the U.S. is importing more processed potatoes than it exports. Fifty-four percent of the volume of U.S. imports is frozen French fries, down from 59 percent in 2004. Except for all frozen potatoes, potato starch, and seed potatoes, U.S. potato products currently post individual trade value surpluses. Faster economic growth in Japan and Mexico, plus the stronger Canadian dollar are factors behind greater demand for U.S. potatoes and potato products. The continued depreciation of the U.S. dollar in 2006 is raising the purchasing power of many foreign currencies.

Figure 7

U.S. potatoes: Monthly export volume is up in 2006



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

Mushrooms

Subdued Demand Keeps Production and Prices Down

Despite a 4-percent decline in growing area and 2-percent fewer fillings, the volume of agaricus mushroom sales fell by only 1 percent in the July 2005-June 2006 marketing year. With a 1-percent increase in yield partly offsetting the effect of reduced growing area, sales volume declined modestly—from 838 million pounds last year to 830 in 2005-06. By use, fresh-market agaricus sales volume actually increased 1 percent while processing agaricus fell 9 percent. A factor that partly caused the decline in processing agaricus mushroom sales is the rising share of imported processed mushrooms, now accounting for 70 percent of total import volume, up from 66 percent in 2003-05.

Agaricus mushroom sales volume contracted in all U.S. regions except in other Eastern States (New York, Connecticut, Delaware, Maryland, Tennessee, and Florida) as higher yields overcame reduced production area. Although agaricus yields in California were up sharply in 2005, growing area and fillings declined at a greater rate. In other States in the West (Colorado, Montana, Oregon, Utah, and Washington), larger production area was offset by lower agaricus yields. Average agaricus yields have risen about half a pound per square foot of fillings since 1994 to 5.9 pounds in 2006. All regions except the Western States outside California and the Central States experienced higher agaricus yields since the early 1990s.

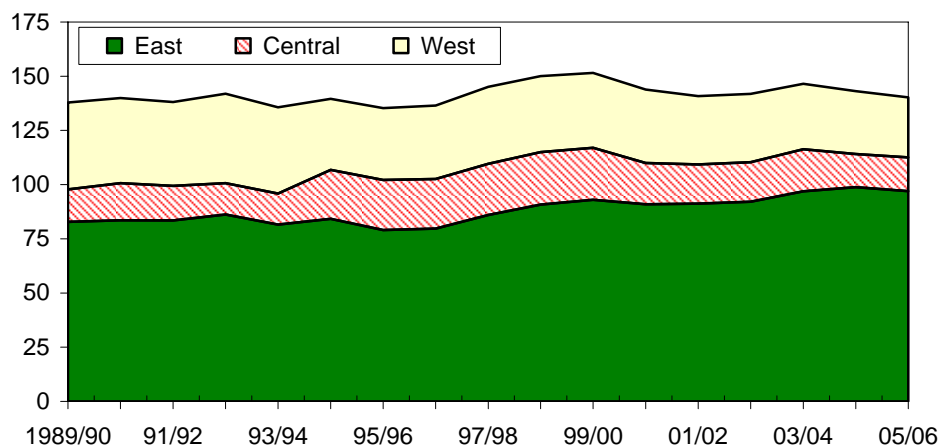
Growers in the Central region and in the Eastern region outside Pennsylvania have the largest agaricus mushroom production areas—averaging 2.2 and 1.5 million square feet of fillings per grower, respectively. Production areas in other regions range from 1.3 million square feet in California to 1.1 million square feet in Pennsylvania. Although Pennsylvania accounts for 59 percent of total U.S. sales volume of agaricus mushrooms, its growers have the smallest average production areas in the country.

In terms of earnings per square foot, California still ranks first in 2006 with more than \$9 in gross sales of agaricus mushrooms per square foot of fillings. The next

Figure 8

Agaricus mushroom area is down in Central & Western States since 2004

Mil. sq. ft.



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

Table 11--Quarterly shipments of agaricus and other mushrooms

| Item/year | July-Sep. | Oct.-Dec. | Jan.-Mar. | Apr.-June | Year 1/ |
|---------------------------|-----------|-----------|-----------|-----------|---------|
| -- Million pounds -- | | | | | |
| U.S.-grown | | | | | |
| 2003-04 | 160.8 | 170.2 | 172.3 | 170.3 | 673.7 |
| 2004-05 | 165.5 | 168.9 | 165.7 | 162.6 | 662.7 |
| 2005-06 | 154.9 | 164.3 | 162.4 | 164.0 | 645.6 |
| Pct change | -6.4 | -2.7 | -2.0 | 0.9 | -2.6 |
| Net imports | | | | | |
| 2003-04 | 46.3 | 55.2 | 62.9 | 68.5 | 232.9 |
| 2004-05 | 52.8 | 52.6 | 56.3 | 67.8 | 229.5 |
| 2005-06 | 57.3 | 49.6 | 50.8 | 54.4 | 212.1 |
| Pct change | 8.5 | -5.8 | -9.6 | -19.8 | -7.6 |
| Total shipments 2/ | | | | | |
| 2003-04 | 207.2 | 225.4 | 235.2 | 238.8 | 906.6 |
| 2004-05 | 218.3 | 221.5 | 222.0 | 230.4 | 892.2 |
| 2005-06 | 212.2 | 213.9 | 213.2 | 218.4 | 857.6 |
| Pct change | -2.8 | -3.4 | -4.0 | -5.2 | -3.9 |

1/ Marketing year projections are in *italics*.

2/ Excludes exports.

Sources: The Mushroom Council (domestic) and U.S. Dept. of Commerce, U.S. Census Bureau.

highest sales per square foot is in the Central region with close to \$8 on average in Illinois, Indiana, Michigan, Oklahoma, Texas, and Wisconsin as a group. Agaricus mushroom growers in Pennsylvania and in the West outside California earned \$4.78 and \$5.76 per square foot on average in 2006, respectively, down from \$4.88 and \$6.16 in 2005. For the U.S. as a whole, agaricus sales since 2003 averaged \$6 per square foot, down 3 percent from a peak of \$6.18 in 2002. These flat earnings are largely due to a narrow price range of \$1.01-\$1.04 per pound of mushrooms since 2002.

Because of their significantly larger production areas, growers in the Central States also boast the highest average agaricus sales per grower. In 2005-06, the Central region sold close to \$18 million worth of agaricus mushrooms per grower, followed by the other Eastern States and California with \$10 million on average. Since growers in California each averaged only 6.7 million pounds in agaricus sales in 2005-06 (43 and 21 percent lower than Central and other Eastern States, respectively), their high sales value per grower is likely attributed to greater relative production of higher-priced brown agaricus mushrooms.

While grower sales of white button agaricus and specialty mushrooms were lower in 2006 than in 2005, sales of brown agaricus mushrooms were up sharply, particularly by growers in Pennsylvania and other Eastern States. Sales of brown agaricus averaged \$2.8 million per grower in the Eastern States in 2006, about twice as much as in 2000 and represent 37 percent of total agaricus sales per grower in 2006. However, since recent years' prices of domestic mushrooms are lower or flat, the domestic use value of all mushrooms is down to \$3.50 per capita in 2006 from \$3.70 in 2004, of which around \$3 are spent for fresh mushrooms.

Fresh Mushrooms from Canada Outpace Processed Imports from Asia

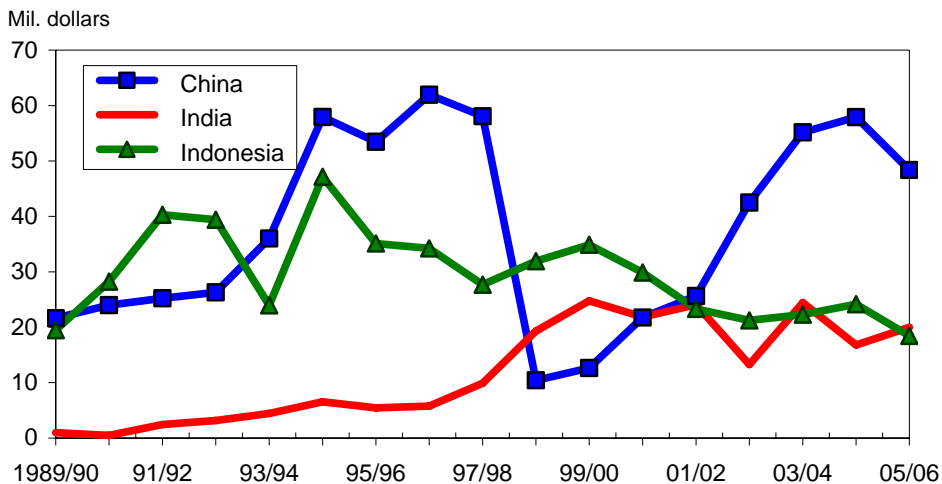
Close to 10 percent of the value of U.S. fresh mushroom supply in 2006 is imported, largely from Canada, and is about twice the 5 percent share in 2001.

Fresh mushroom imports in 2006 were up 18 percent in value and 16 percent in volume, which more than offset the decline in processed imports, including dried, preserved, and frozen mushrooms. Still, in both volume and value, the share of imports in U.S. supply of processed mushrooms was close to 70 percent over the past 3 years, a record level. About 40 percent of the value of processed mushrooms imports come from China, and 32 percent come from India and Indonesia. Nevertheless, processed mushroom imports in 2006 are down 9 percent in value.

All import unit values—for fresh, dried, and prepared mushrooms—are higher in 2006, which accounts in part for the rise in the U.S. trade deficit in mushrooms from \$174 million in 2005 to \$177 million in 2006. Yet, import prices are below their 2003-04 levels, except for dried mushrooms, an indicator of soft demand. While import prices for fresh mushrooms reached \$1.20 per pound in 2006 and came close to their peak of \$1.22 in 2004, prices of imported processed mushrooms remain below levels a decade ago. The value of U.S. mushroom exports, \$31.6 million in 2005-06, is also lower than the \$36 million in 1995-96. The share of exports in growers' total sales value is only 3.6 percent compared with 4.8 percent in 1996. Also, exports' ratio to imports is 15 percent in 2006, down from 24 percent a decade back. These trends are responsible for the rising U.S. trade deficit in mushrooms.

The overall U.S. market for mushrooms appears to be suffering from weak consumer demand. Based on production area, volume and value of sales, prices, import volume, or export value, all of which were down in 2005-06, supply looks abundant relative to demand. Competition from imports is another factor expanding supply and keeping domestic prices subdued. The small export market for U.S. mushrooms does not provide a viable option for expanding grower sales. However, somewhat lower energy prices, if sustained through 2007, can provide some relief to growers' production costs.

Figure 9
U.S. processed mushroom imports from India are displacing Indonesia's



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

Dry Beans

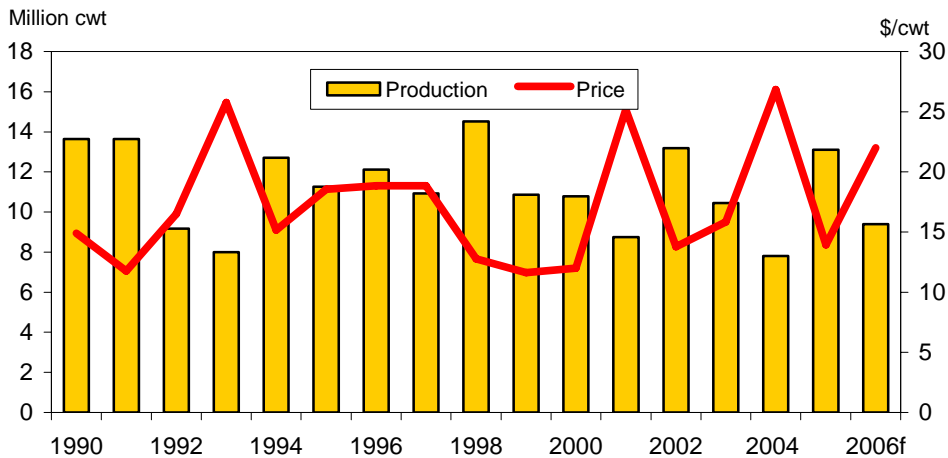
Production Down 13 Percent

The October estimate of the 2006 U.S. dry edible bean crop indicated a decline of 13 percent from a year ago to 23.8 million cwt. Estimated national dry bean output was 2 percent above the August crop forecast, reflecting relatively favorable harvest weather in the upper Midwest. Because of a cool, wet start to the growing season followed by generally hot, dry weather, average U.S. dry bean yield was estimated at 1,523 pounds per acre, down 13 percent from last year and below the long-term trend. Harvested area is now expected to decline less than 1 percent to 1.56 million acres, with acreage losses standing at just 5 percent of planted area—above the average of the past 5 years (9 percent), but improved slightly from a year ago.

Most of the crop gains since the August estimate occurred in Minnesota (improved yield). Yield in North Dakota, the leading dry-bean producing State, is estimated to have plummeted 31 percent from the strong showing of a year ago, while those in California, Nebraska, and Idaho are also below average. On the plus side, per-acre yield in Michigan and New York (up 14 percent) was the best in several years.

Figure 14

U.S. pinto beans: Production and grower price



f = ERS forecast. Cwt = 100 pound bags.

Sources: USDA, National Agricultural Statistics Service, *Crop Production* and USDA, Agricultural Marketing Service, *Bean Market News*.

Table 12--U.S. dry beans: Production, 2003-2006

| Item | 2003 | 2004 | 2005 | 2006 p | Percent change |
|---------------|--------|---------------|--------|--------|----------------|
| | | --1,000 cwt-- | | | Percent |
| North Dakota | 7,800 | 4,750 | 8,588 | 6,615 | -23.0 |
| Nebraska | 3,151 | 2,376 | 3,870 | 2,665 | -31.1 |
| Colorado | 1,168 | 1,039 | 1,898 | 1,330 | -29.9 |
| California | 1,380 | 1,152 | 1,385 | 1,235 | -10.8 |
| Minnesota | 1,870 | 1,150 | 2,430 | 2,450 | 0.8 |
| Idaho | 1,497 | 1,638 | 1,862 | 1,906 | 2.4 |
| Michigan | 2,475 | 3,145 | 3,910 | 3,960 | 1.3 |
| Washington | 525 | 609 | 792 | 1,156 | 46.0 |
| Wyoming | 645 | 541 | 776 | 594 | -23.5 |
| Others | 1,981 | 1,388 | 1,839 | 1,889 | 2.7 |
| United States | 22,492 | 17,788 | 27,350 | 23,800 | -13.0 |

p = NASS preliminary October estimate.

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

Table 13--U.S. dry beans: Monthly grower prices for selected classes, 2005-2006 1/

| Commodity | 2005 | | 2006 | | Chg. prev. year: | |
|-------------------------|-------------------------|-------|-------|---------|------------------|------|
| | Sept. | Oct. | Sept. | Oct. 2/ | Sept. | Oct. |
| | --- Cents per pound --- | | | | --- Percent --- | |
| All dry beans | 18.00 | 18.80 | 19.40 | -- | 7.8 | -- |
| Pinto (ND/MN) | 14.75 | 13.50 | 17.67 | 18.50 | 19.8 | 37.0 |
| Navy (pea bean) (MI) | 20.25 | 17.81 | 18.25 | 18.25 | -9.9 | 2.5 |
| Great Northern (NE/WY) | 16.31 | 15.56 | 18.00 | 18.00 | 10.4 | 15.7 |
| Black (MI) | 18.38 | 18.50 | -- | 20.00 | -- | 8.1 |
| Light red kidney (MI) | 23.13 | 21.75 | 21.50 | 22.50 | -7.0 | 3.4 |
| Dark red kidney (MN/WI) | 22.63 | 21.50 | 22.92 | 23.25 | 1.3 | 8.1 |
| Baby lima (CA) | 36.17 | 34.00 | -- | -- | -- | -- |
| Large lima (CA) | 42.75 | 43.25 | -- | -- | -- | -- |
| Blackeye (CA) | 32.83 | 33.19 | -- | 47.50 | -- | 43.1 |
| Small red (ID) | 21.63 | 19.75 | 21.50 | 21.25 | -0.6 | 7.6 |
| Pink (ID) | 21.50 | 20.38 | 20.33 | 21.25 | -5.4 | 4.3 |
| Cranberry (MI) | 20.00 | 20.88 | -- | -- | -- | -- |
| Garbanzo (ID) | 27.38 | 28.17 | 25.50 | 26.50 | -- | -5.9 |

-- = not available. 1/ Prices are U.S. No. 1, cleaned basis. 2/ Partial month estimate.

Sources: USDA, Agricultural Marketing Service, *Bean Market News*, except "all dry beans" from USDA, National Agricultural Statistics Service, *Agricultural Prices*.

With harvest moving to a close in October, movement of dry beans and price discovery remained sluggish as market participants assessed the domestic supply situation. Many were likely awaiting new information in the form of the October 12 USDA crop production update and two new dry bean stocks reports from North Dakota and Michigan. The reports indicated that dry bean stocks were relatively modest coming into the 2006/07 season. In general, dry bean dealer and grower prices have been creeping higher on the limited trading activity that has occurred. Between early September and mid-October, the greatest increases in dealer prices were noted for dark and light red kidney (each up 11 percent), pinto beans (7 percent), garbanzo beans (6 percent), and cranberry beans (6 percent). Given the expectation for stronger supplies, dealer prices declined for black beans (down 20 percent) and navy beans (down 3 percent).

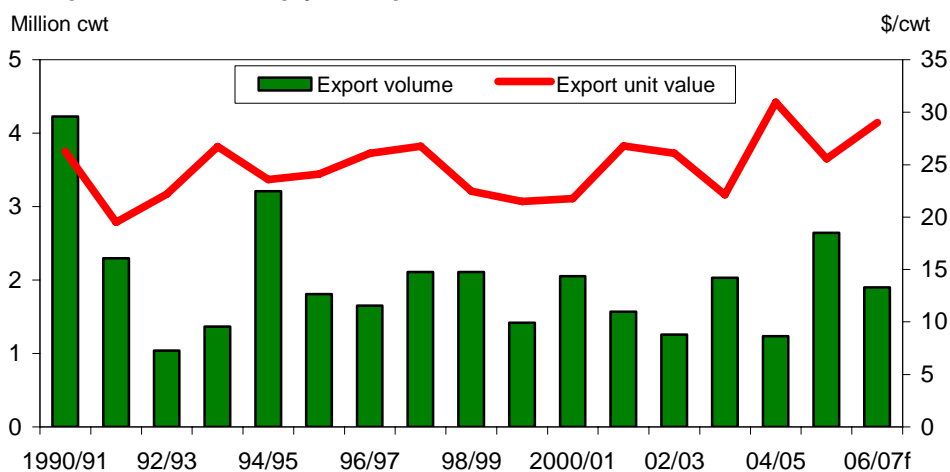
Exports Up in 2005/06, Imports Down

During the 2005/06 marketing year (September-August), dry bean export volume surged 54 percent above a year earlier to 7.33 million cwt. Volume was 26 percent higher than the average of the 3 previous years and was the highest since 2000/01 (8.8 million cwt). Exports to all major destinations increased, with Mexico remaining the top market with 32 percent of total volume. The remaining top 5 included the United Kingdom (9 percent), Canada (9 percent), Haiti (7 percent), and the Dominican Republic (6 percent).

With the exception of blackeyes, volume was higher for every dry bean class in 2005/06. Pinto exports jumped 114 percent to 2.64 million cwt—the strongest pinto exports since 1994/95. Although slightly improved from the low of the previous year, navy bean exports were the second smallest of the past 3 decades. Due to strong competition this decade with nations such as Canada, navy bean exports to the United Kingdom remain about half the levels of the 1990s. Baby lima bean volume was the strongest since 1999/2000 due to a resurgence of demand from Japan, the top market.

Dry bean imports (excluding guar beans) fell 5 percent to 2.24 million cwt during the 2005/06 crop year. Canada (33 percent), China (21 percent), and Mexico (18 percent) continued to be the top three foreign suppliers of dry beans.

Figure 11

U.S. pinto beans: Crop year export volume and unit value

f = ERS forecast. Cwt = 100-pound bags.

Sources: Prepared by ERS using data of the U.S. Department of Commerce, U.S. Census Bureau.

Table 14--U.S. dry bean crop-year export volume

| Item | Crop year, September-August | | | | Change 2004-05 |
|----------------|-----------------------------|---------|---------|---------|-------------------|
| | 2002/03 | 2003/04 | 2004/05 | 2005/06 | |
| | --1,000 cwt-- | | | | Percent |
| Pinto | 1,255 | 2,032 | 1,234 | 2,643 | 114 |
| Navy | 1,463 | 1,211 | 1,005 | 1,061 | 6 |
| Black | 848 | 816 | 617 | 763 | 24 |
| Great Northern | 534 | 427 | 370 | 516 | 39 |
| Lgt red kidney | 328 | 58 | 56 | 153 | 175 |
| Dk red kidney | 401 | 193 | 166 | 252 | 52 |
| Small red | 159 | 232 | 137 | 182 | 32 |
| Garbanzo | 342 | 150 | 227 | 380 | 67 |
| Baby lima | 204 | 195 | 132 | 265 | 102 |
| Large lima | 170 | 99 | 128 | 135 | 6 |
| Blackeyes | 45 | 20 | 56 | 32 | -43 |
| Cranberry | 132 | 97 | 45 | 84 | 88 |
| Pink | 23 | 6 | 19 | 65 | 236 |
| Other | 695 | 617 | 576 | 862 | 49 |
| Total | 6,577 | 6,145 | 4,749 | 7,327 | 54 |

Source: Prepared by ERS using data of the U.S. Dept. of Commerce, U.S. Census Bureau.

Table 15--U.S. dry bean crop-year import volume

| Item | Crop year, September-August | | | | Change 2004-05 |
|----------------|-----------------------------|---------|---------|---------|-------------------|
| | 2002/03 | 2003/04 | 2004/05 | 2005/06 | |
| | --1,000 cwt-- | | | | Percent |
| Pinto | 81 | 178 | 124 | 44 | -65 |
| Navy | 170 | 111 | 175 | 169 | -3 |
| Black | 257 | 202 | 199 | 277 | 39 |
| Lgt red kidney | 61 | 84 | 96 | 103 | 7 |
| Dk red kidney | 57 | 84 | 96 | 109 | 13 |
| Garbanzo, all | 214 | 242 | 231 | 255 | 10 |
| Mung & urd | 316 | 292 | 299 | 322 | 8 |
| Other 1/ | 695 | 773 | 1,144 | 963 | -16 |
| Total | 1,851 | 1,965 | 2,365 | 2,242 | -5 |

1/ Excludes guar beans.

Source: Prepared by ERS using data of the U.S. Dept. of Commerce, U.S. Census Bureau.

Dry Peas and Lentils

Grower Prices Creeping Higher

As they have over the past year, monthly average grower prices for lentils have been running below a year earlier, reflecting ample carryover stocks from the large 2005/06 crop. However, lentil prices bottomed out in July and have begun to rise on steady export (largely food aid) demand and lower expected production in both the United States and Canada.

Over the past year, monthly U.S. grower prices for dry peas have fluctuated with the market at around \$5 per cwt. However, since bottoming out in mid-August, grower prices for dry peas have been moving higher. This price strength may partly reflect reductions in North American yields as Canadian dry pea yields were reported to be lower due to dry weather this summer (U.S. data are not available until January). Also, continued strong export demand for North American dry peas was evident in the July and August trade data.

USDA's Farm Service Agency national posted price for small chickpeas has trended strongly higher this summer and is now running 57 percent above a year earlier at \$9 per cwt. For small chickpeas, which account for just 10 percent of U.S. chickpea area, stronger world demand should help keep prices above the loan rate into next spring.

Lentil Loan Deficiency Payments Rise

Through October 11, loan deficiency payments (LDPs) for all dry peas, lentils, and small chickpeas total \$34 million. This compares with \$41.6 million during all of 2005/06. In addition, CCC loans made through October 11 totaled nearly \$9 million, compared with \$21.1 million for all of 2005/06.

Table 16--U.S. dry peas and lentils: Monthly grower prices by class, 2005-2006

| Crop year & month | Dry peas | Chickpeas | | | Austrian winter peas | All Lentils |
|-------------------------|----------|-----------|-------|-------|----------------------|-------------|
| | | All | Large | Small | | |
| --- Cents per pound --- | | | | | | |
| 2005/06 | | | | | | |
| July | 5.16 | 27.90 | 28.20 | -- | 7.57 | 11.90 |
| August | 4.25 | 20.60 | 25.70 | -- | 6.75 | 11.80 |
| September | 4.66 | 26.50 | 26.80 | -- | 6.22 | 11.50 |
| October | 4.51 | 27.70 | 27.90 | -- | 6.83 | 11.80 |
| November | 4.80 | 25.40 | 25.60 | -- | 7.33 | 11.30 |
| December | 4.99 | 26.10 | 26.50 | -- | 6.99 | 12.20 |
| January | 4.74 | 29.00 | 29.50 | -- | 6.93 | 11.10 |
| February | 5.02 | 26.40 | 31.20 | 18.50 | 7.76 | 11.00 |
| March | 5.05 | 22.20 | 25.20 | -- | 6.54 | 10.50 |
| April | 4.88 | 22.50 | 29.20 | -- | 6.44 | 9.51 |
| May | 5.25 | 24.70 | -- | 21.80 | -- | 9.68 |
| June | 5.30 | 28.70 | 31.30 | 10.80 | 6.23 | 7.81 |
| 2006/07 | | | | | | |
| July | 5.03 | -- | -- | -- | -- | 7.80 |
| August | 4.46 | 26.00 | 27.90 | -- | 6.68 | 9.18 |
| September 1/ | 5.25 | 26.00 | 26.60 | -- | -- | 9.45 |
| Prct change | | | | | | |
| Sept 05-06 | 12.7 | -1.9 | -0.7 | -- | -- | -17.8 |

-- = not available. 1/ Prices for September 2006 are partial-month averages.

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

Table 17--U.S. dry peas and lentils: Price support program

| Crop year & crop | Units | 2004/05 | 2005/06 | 2006/07 (thru Oct 11) | | |
|------------------------|---------|---------|---------|-----------------------|-----------|---------|
| | | DPL 1/ | DPL 1/ | Dry peas | Chickpeas | Lentils |
| Loan Deficiency | | | | | | |
| Applications | Number | 5,966 | 11,082 | 5,376 | 0 | 2,138 |
| Quantity | 000 cwt | 13,611 | 18,598 | 10,811 | 0 | 2,120 |
| Value | 000 \$ | 31,716 | 41,589 | 23,177 | 0 | 10,752 |
| Unit value | \$/cwt | 2.33 | 2.24 | 2.14 | 0 | 5.07 |
| CCC Loans Made | | | | | | |
| Applications | Number | 282 | 535 | 122 | 0 | 149 |
| Quantity | 000 cwt | 1,113 | 2,247 | 646 | 0 | 429 |
| Value | 000 \$ | 11,309 | 21,109 | 3,959 | 0 | 4,870 |
| Unit value | \$/cwt | 10.16 | 9.40 | 6.13 | 0 | 11.36 |

-- = not applicable. 1/ Crop-year totals for all dry peas, lentils, and small chickpeas.

Source: USDA, Farm Service Agency, <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=prsu&topic=psr>

Because of large beginning stocks, the market price (the posted price calculated for purposes of price support), for lentils has remained below a year earlier and below both eastern (\$11.36) and western (\$12.76) loan rates this crop year. As a result, the average loan deficiency payment so far in 2006/07 has been \$5.07 per cwt.

Through October 11, lentil producers have requested \$10.8 million in LDPs for the 2006/07 crop. This is up from \$6.1 million for all of 2005/06. North Dakota (\$3.8 million) and Washington (\$3.5 million) together account for two-thirds of the lentil LDPs so far this year. So far this year, lentil growers have shifted more volume to LDPs than a year ago. About 83 percent of the volume of lentils placed under the marketing loan program thus far in 2006/07 have used LDPs (rather than using CCC loans)—compared with 73 percent during all of 2005/06. This may reflect a greater need for available product to satisfy sales commitments.

According to the FSA, dry pea market prices (posted prices) have increased over the past 2 months but remain below loan rates in both the East (\$6.12/cwt) and West (\$6.63/cwt). However, these continual market price gains have reduced the 2006/07 crop loan deficiency payment rate to an average of \$2.14 per cwt through mid-October—down from \$2.37 per cwt for all of 2005/06. A total of 10.8 million cwt had entered the LDP program, with payments totaling \$23 million. This compares with program payments of \$35.2 million for the 2005/06 dry pea crop. This year, LDPs for dry peas have been made in 14 States led by North Dakota, which has received two-thirds of the payment value, followed distantly by Montana with 15 percent of the total.

For small-sieve chickpeas, the national posted price has been averaging above the \$7.43 per cwt loan rate since July 21. As a result, no LDPs or price support loans have been made on the 2006 crop.

Export Volume Remains Strong

During the first 2 months of the 2006/07 marketing year (July-August), dry pea and lentil exports (excluding seed) continued to climb. Lentil exports are expected to rise again this crop year, helped out by lower market prices. Volume was up 11 percent during the first 2 months of the crop year and exceeded the average of the previous 3 years by 77 percent. Yellow pea export volume continues to surge

upward from last year's record high as rising production in the upper Midwest meets good worldwide demand. With continued strong supplies and relatively low prices, dry split pea (up 125 percent) and dry green pea (up 35 percent) exports also increased during the first 2 months of 2006/07. For chickpeas, reduced early season demand from Canada where production is up again, and relatively high prices early in the new marketing year have pared exports during July-August. In the coming year, overseas movement of all peas and lentils is expected to increase as U.S. shippers take advantage of strong domestic supplies, lower prices, continued food aid demand, pulse shortages in India, and a relatively favorable exchange rate.

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

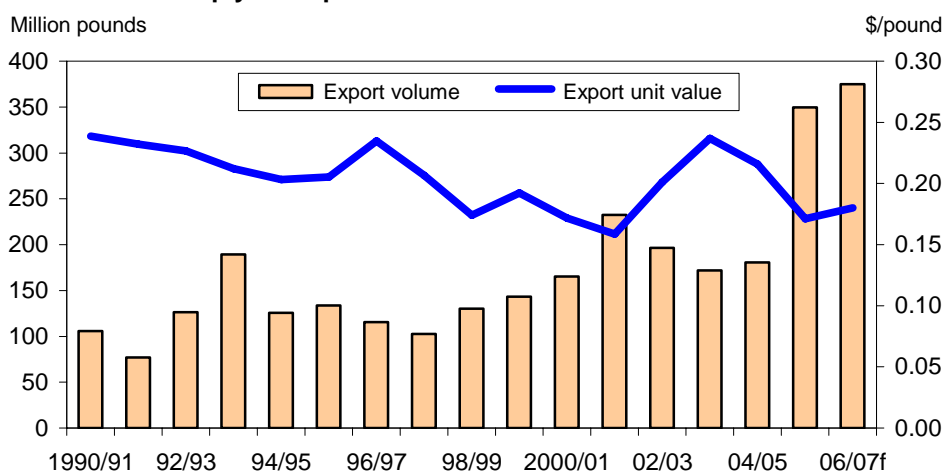
| Item | Crop year 2005/06 | July-August | | | Change 2005-06 Percent |
|---------------------|----------------------|-------------|---------|---------|------------------------------|
| | | 2004/05 | 2005/06 | 2006/07 | |
| --1,000 cwt-- | | | | | |
| Exports: | | | | | |
| Green peas | 3,274.4 | 253.5 | 605.4 | 819.1 | 35 |
| Yellow peas | 2,626.7 | 51.4 | 301.6 | 448.6 | 49 |
| Split peas | 195.5 | 53.8 | 14.1 | 31.7 | 125 |
| Austrian winter pea | 30.5 | 0.0 | 4.0 | 4.3 | 7 |
| Misc. dry peas | 2,588.2 | 42.8 | 131.5 | 233.1 | 77 |
| Chickpeas, all | 391.0 | 26.2 | 33.3 | 22.5 | -32 |
| Lentils, all | 3,495.4 | 182.0 | 355.4 | 394.0 | 11 |
| Total | 12,601.9 | 609.8 | 1,445.4 | 1,953.3 | 35 |
| Imports: | | | | | |
| Green peas | 209.2 | 22.4 | 44.2 | 43.2 | -2 |
| Yellow peas | 87.4 | 9.0 | 20.7 | 7.0 | -66 |
| Split peas | 264.8 | 44.6 | 32.3 | 52.0 | 61 |
| Austrian winter | 3.2 | 0.4 | 0.4 | 0.5 | 17 |
| Misc. dry peas | 151.0 | 8.0 | 26.6 | 33.6 | 27 |
| Chickpeas, all | 236.4 | 44.8 | 34.3 | 53.0 | 55 |
| Lentils, all | 260.0 | 34.3 | 41.9 | 60.9 | 45 |
| Total | 1,211.9 | 163.5 | 200.4 | 250.4 | 25 |

1/ Excludes planting seed.

Source: Compiled by ERS using data from the U.S. Dept. of Commerce, U.S. Census Bureau.

Figure 12

U.S. lentils: Crop year export volume and unit value



f = ERS forecast. July-June crop year.

Source: Compiled by ERS using data from the U.S. Dept. of Commerce, U.S. Census Bureau.

Commodity Highlight: Garlic

Garlic has a long and colorful history with mention in the Bible, ancient Chinese writings, and in various literary works by authors such as William Shakespeare, Dante, and Francis Bacon. Thought to have originated in central Asia around Siberia, garlic was revered by both the ancient Egyptians and the Chinese. In the United States, garlic is primarily used as a food flavoring agent and condiment. In some countries, the green tops are used in a manner similar to scallions. Garlic in its whole raw form has little odor until the cloves are crushed, releasing the pungent scent.

Garlic (*Allium sativum*) is a member of the amaryllis (lily) family and is related to onions, shallots, chives, and leeks. The two main types are hardneck and softneck, with softneck varieties such as California Early accounting for most of the garlic consumed in the United States. Elephant garlic is not true garlic, but a type of leek that is a close relative of garlic and onions.

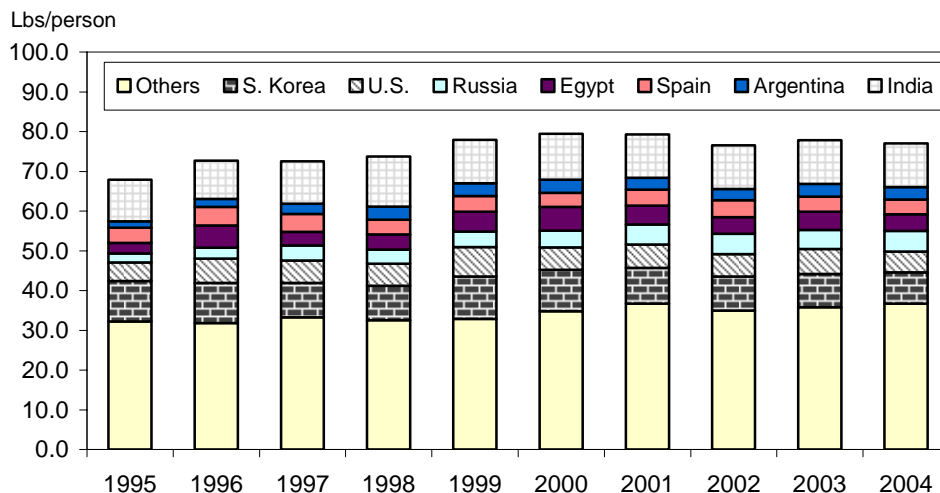
Garlic production is concentrated both internationally and domestically. According to the Food and Agriculture Organization of the United Nations, China is by far the top source of garlic, with an estimated 23 billion pounds annually—75 percent of world output. The majority comes from the Shandong Province—a prime agricultural area located just southeast of Beijing. India (4 percent) and South Korea (3 percent) round out the top three producers worldwide. The United States is the fourth leading garlic producer, with 2 percent of the world crop.

California Is the Dominant Domestic Supplier

In the United States, garlic appears to have gained in popularity as a cash crop over the past 10-15 years. According to the 2002 Census of Agriculture (census), 1,855 farms reported garlic acreage—up from 1,327 farms in 1997 and only 619 farms in 1992. California produces the majority of commercial garlic in the country on just 339 farms—down from a peak of 362 farms in 1997.

According to the census, garlic is now grown in every State except Alaska. California harvests 89 percent of the United States commercial garlic acreage, with

Figure 13
U.S. garlic: World production, excluding China



Source: United Nations, Food and Agriculture Organization, FAOStat (9/2006).

Table 19--U.S. garlic, all uses: Area, production, and value 1/

| | Acres | | Yield per acre | Production | Average price 2/ \$/cwt | Crop value \$ Mil. |
|------|-------------|-----------|-------------------|------------|-------------------------------|--------------------------|
| | Planted | Harvested | | | | |
| | 1,000 acres | | Cwt | 1,000 cwt | | |
| 1985 | 15.0 | 14.6 | 165 | 2,420 | 30.95 | 74.9 |
| 1990 | 20.0 | 19.2 | 179 | 3,413 | 21.25 | 72.7 |
| 1995 | 28.5 | 28.5 | 165 | 4,703 | 31.40 | 147.7 |
| 2000 | 37.9 | 34.8 | 160 | 5,581 | 27.80 | 155.0 |
| 2001 | 37.2 | 35.2 | 167 | 5,877 | 29.40 | 173.0 |
| 2002 | 34.8 | 32.8 | 172 | 5,650 | 27.60 | 155.7 |
| 2003 | 37.0 | 35.0 | 178 | 6,241 | 25.70 | 160.2 |
| 2004 | 33.6 | 31.6 | 165 | 5,224 | 26.50 | 138.6 |
| 2005 | 29.9 | 29.4 | 158 | 4,646 | 40.90 | 190.0 |

-- = Not available. f = ERS forecast.

1/ Data for 1985 and 1990 are for California only. 2/ Season-average farm price.

Source: USDA, National Agricultural Statistics Service, *Vegetables Summary* and the California County Agricultural Commissioners (1985, 1990).

four other States harvesting more than 100 acres—Oregon, Nevada, New York, and Washington. With 3 percent of the Nation's garlic area, Nevada largely produces seed garlic under contract with California firms. Oregon growers account for 6 percent of U.S. garlic area and also produces seed stock for California firms. However, in addition to seed, about two-thirds of the garlic area in Oregon is used for the production of garlic destined for dehydrated products.

In 2005, three California counties accounted for the majority of garlic production—Fresno (76 percent of the crop), Kings (14 percent), and Kern (8 percent). The community of Gilroy in Santa Clara County is billed as the garlic capital of the world because a significant volume of the fresh-market garlic shipped from California is handled in the area.

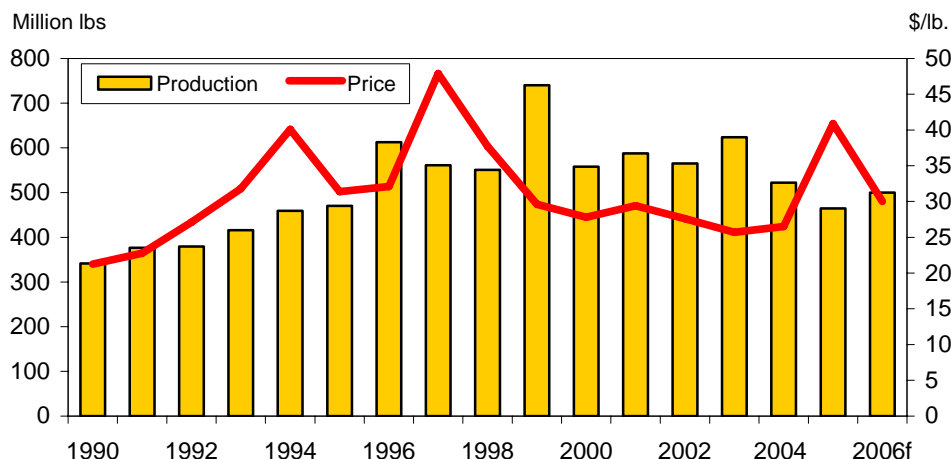
Between 1993-95 and 2003-05, U.S. garlic production increased 20 percent to an average of 537 million pounds. Garlic production in 2005 was the lowest in a decade as unusually cool, wet California weather increased disease pressure and reduced yields. An extreme summer heat wave in California came at the close of the growing season and as a result, the 2006 California garlic crop was still expected to be improved in terms of both quality and quantity from a year ago.

Garlic falls into three broad product segments—fresh-market, dehydrating, and seed stock—with each differentiated by the way the crop is grown, handled, and used. In the mid-1970s, about one-fourth of the U.S. garlic crop was estimated to have entered the fresh market. Reflecting growth in demand over the past several decades, about half of the garlic crop is sold as fresh market produce or used to make “fresh-cut” products. The remainder is sold as various dehydrated products or for certified seed. Under average market conditions, there is little overlap between these 3 markets, although some off-grade fresh market garlic is occasionally sold to dehydrators. Changing relative market prices and stock levels can also prompt some inter-segment sales, particularly between fresh and processing.

While seed and dehydrating garlic are mechanically harvested, fresh-market garlic is hand-harvested. Fresh product is carefully handled to preserve appearance (including sizing, grading, and storing) and is shipped and sold in the same manner

Figure 14

U.S. garlic: Production and grower price



f = ERS forecast.

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

as fresh produce. Fresh-market garlic is used to manufacture crushed, chopped, peeled, and pureed garlic products. Certain varieties of fresh-market garlic can be marketed for up to 3 months from the time of harvest with standard warehouse storage, up to 6 months if kept in cold storage, and up to a year under controlled-atmosphere storage.

Depending on the variety and location, most garlic in California is planted during the fall (October-November) and harvested in summer (June-August). Virtually all garlic produced in the major commercial growing areas is grown under contract. The garlic industry is fairly concentrated in both the fresh and dehydration markets. On the fresh side, there are just a few shippers who account for most of the market volume while three or four firms process nearly all the dehydrated product.

During 2003-05, the U.S. garlic crop had an average farm value of \$163 million—up just 5 percent from 1993-95. With season-average garlic prices averaging 5 percent below those of a decade earlier, crop value increased based on stronger production. After adjusting for inflation, constant dollar garlic prices have declined 22 percent over the past decade due to the price weakness experienced over the last several years. Despite short supplies from the small 2005 crop, wholesale prices for California garlic have been little changed. For example, prices in the Chicago wholesale market averaged just 5 percent above a year earlier during January-September of 2006. This reflected the presence of imports from China that largely filled market gaps with garlic that was priced about a fifth below that of California.

Import Share Continues to Grow

The share of garlic disappearance accounted for by imports has doubled over the past decade. In 1993-95, imports accounted for 22 percent of garlic used in the United States. However, with import volume (expressed on a fresh-weight basis) surging 218 percent between 1993-95 and 2003-05, the share of the U.S. market satisfied by imported garlic and garlic products jumped to 44 percent during 2003-05. It appears that the volume of imports has outstripped domestic demand, which led to the stagnation of domestic production and generally lower f.o.b. shipping-point prices since production peaked in 1999.

Table 20—U.S. garlic imports (product-weight), 1990-06

| Year | Fresh-market | | Powder/flour | | Other dried | | Essential oil | |
|--------|--------------|---------|--------------|---------|-------------|---------|---------------|---------|
| | Volume | Value | Volume | Value | Volume | Value | Volume | Value |
| | Mil. Lbs. | \$ Mil. | Mil. Lbs. | \$ Mil. | Mil. Lbs. | \$ Mil. | Mil. Lbs. | \$ Mil. |
| 1990 | 39.3 | 17.2 | 1.5 | 0.9 | 13.8 | 8.6 | -- | -- |
| 1991 | 41.4 | 22.9 | 2.3 | 1.0 | 9.5 | 4.9 | -- | -- |
| 1992 | 42.3 | 19.0 | 2.5 | 1.2 | 5.9 | 2.6 | -- | -- |
| 1993 | 86.9 | 27.8 | 3.2 | 1.3 | 8.4 | 4.2 | -- | -- |
| 1994 | 47.9 | 21.6 | 6.1 | 1.8 | 12.2 | 4.6 | -- | -- |
| 1995 | 50.2 | 29.0 | 5.2 | 1.6 | 11.7 | 2.9 | -- | -- |
| 1996 | 48.4 | 27.1 | 7.4 | 2.4 | 11.9 | 2.7 | 0.2 | 1.5 |
| 1997 | 38.2 | 20.4 | 3.6 | 1.0 | 13.1 | 2.3 | 0.1 | 1.4 |
| 1998 | 72.7 | 40.7 | 17.2 | 4.2 | 50.7 | 12.4 | 0.2 | 2.2 |
| 1999 | 95.6 | 45.8 | 15.5 | 6.5 | 45.8 | 13.8 | 0.1 | 0.7 |
| 2000 | 63.3 | 27.4 | 8.6 | 3.0 | 35.3 | 7.9 | 0.1 | 0.8 |
| 2001 | 80.6 | 39.9 | 12.9 | 3.4 | 37.9 | 8.2 | 0.2 | 1.6 |
| 2002 | 106.1 | 53.6 | 22.3 | 5.1 | 35.9 | 7.7 | 0.1 | 1.0 |
| 2003 | 100.7 | 43.2 | 19.2 | 4.6 | 58.9 | 11.1 | 0.2 | 1.2 |
| 2004 | 124.9 | 56.9 | 30.4 | 6.6 | 46.1 | 11.4 | 0.2 | 1.8 |
| 2005 | 152.6 | 74.5 | 29.3 | 8.8 | 42.5 | 14.9 | 0.2 | 1.8 |
| 2006 f | 112.4 | 56.6 | 19.3 | 8.3 | 23.2 | 11.1 | 0.1 | 1.5 |

-- = not available. f = ERS forecast.

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

Over the past several years, China has begun to ship more fresh garlic into the U.S. market, eroding the market share of domestic producers. Fresh-market garlic imports have about doubled from 62 million pounds in 1993-95 to 126 million pounds during 2003-05. China is now the source for 73 percent of fresh market garlic sold in the United States, with imports now commanding nearly half of the U.S. market. The product-weight volume of dried/dehydrated garlic imports has jumped 384 percent over the past decade. According to ERS estimates, the import share of the processing garlic market has moved from 15 percent in 1993-95 to 42 percent during 2003-05. China has long held the U.S. dried/dehydrated garlic market, accounting for 98 percent of imported dried whole garlic and garlic powder during 2003-05.

Exports claimed about 6 percent of U.S. garlic supply during 2003-05, down from 13 percent a decade earlier. Exports of fresh-market garlic have declined over the past decade, with volume dropping 46 percent between 1993-95 and 2003-05. Mexico, Canada, and Spain are the top markets for U.S. fresh garlic exports with Spain the only one of the top three markets importing more U.S. fresh garlic than a decade ago. Exports of dried/dehydrated garlic have declined 17 percent between 1993-95 and 2003-05 with volume shipped to Canada (the top market) down 15 percent over this period.

Per Capita Use Remains Relatively Strong

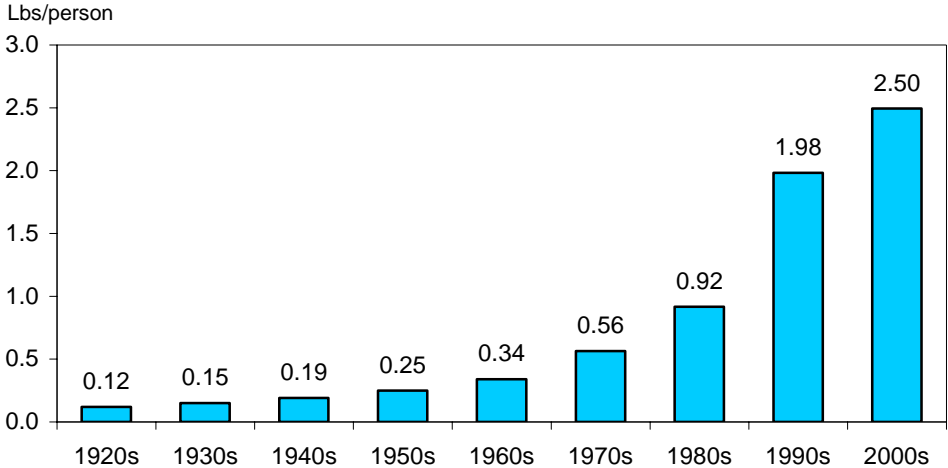
Garlic was introduced into America sometime in the 1700s and adoption and use was slow to catch on. In 1919, when the first estimates were made, per capita use of garlic was less than 0.05 pounds, but use managed to average about 0.12 pounds during the 1920s. Garlic use rose 25 percent in the 1930s and continued to accelerate until it reached an apex in the 1990s with a 115 percent leap over the 1980s. Per capita use of garlic peaked in 1999 at 3.3 pounds, reflecting a record-large California garlic crop that year. Although below the peak, garlic use has remained relatively strong this decade. During the three year period 2003-05, per capita use of garlic averaged 2.6 pounds per person annually—up from 1.8 pounds a

decade earlier. Interest in garlic reflects several factors, including the popularity of various ethnic foods and restaurants, the quest for new taste experiences, health messages circulating about garlic, and demand from the health supplements industry.

These demand factors likely reflect the view of garlic as a so-called “functional food”—a food that imparts both the usual attributes of the food plus certain perceived health-enhancing benefits. Broccoli is another example of such a food. Primarily used in cooking to enhance the palatability of a wide variety of foods, garlic provides vitamins A and C, potassium, phosphorous, selenium, several amino acids, and many different sulfur compounds.

Although the majority of garlic is consumed at home (56 percent), the away from home market is also strong. In the expanding away from home market, fast food accounts for 19 percent of garlic consumption with standard full service restaurants accounting for another 15 percent. The cuisines of many ethnic restaurants (e.g. Italian, Chinese, Korean, and Indian) prominently feature garlic-containing dishes.

Figure 15
U.S. garlic: Average per capita disappearance, by decade



Source: Computed by USDA, Economic Research Service.

Table 21--U.S. garlic, all uses: Estimated supply, disappearance, and price

| Year | Supply | | | Utilization | | | Season-ave. price | |
|----------------------|------------------|---------------|-------|---------------|----------------|----------------------|--------------------------|---------------------------|
| | Production 1/ | Imports 2/ | Total | Exports 2/ | Domestic 3/ | Per capita use | Current dollars 1/ | Constant dollars 4/ |
| -- Million pounds -- | | | | | | | | |
| 1985 | 242.0 | 36.0 | 278.0 | 20.0 | 253.2 | 1.06 | 30.95 | 44.40 |
| 1990 | 341.3 | 80.6 | 421.9 | 63.1 | 352.0 | 1.41 | 21.25 | 26.04 |
| 2000 | 558.1 | 182.0 | 740.1 | 57.3 | 627.0 | 2.22 | 27.80 | 27.80 |
| 2001 | 587.7 | 217.7 | 805.4 | 57.4 | 689.2 | 2.42 | 29.40 | 28.71 |
| 2002 | 565.0 | 263.2 | 828.2 | 51.5 | 720.2 | 2.50 | 27.60 | 26.49 |
| 2003 | 624.1 | 311.5 | 935.6 | 51.0 | 822.2 | 2.83 | 25.70 | 24.18 |
| 2004 | 522.4 | 331.4 | 853.8 | 48.3 | 753.3 | 2.57 | 26.50 | 24.29 |
| 2005 | 464.6 | 346.5 | 811.1 | 54.2 | 710.4 | 2.40 | 40.90 | 36.48 |
| 2006 f | 500.0 | 364.0 | 864.0 | 55.0 | 759.0 | 2.54 | -- | -- |

-- = Not available. f = ERS forecast. 1/ Source: USDA, NASS. 2/ Source: Bureau of the Census, USDC. U.S. exports for 1985 were adjusted using Canadian imports. 3/ Seed use is excluded. 4/ Constant dollar prices are calculated using the GDP deflator, 2000=100.

Source: Compiled and computed by USDA, Economic Research Service.

Contacts and Links

Contact Information

Gary Lucier

Tel: (202) 694-5253 Fax: (202) 694-5820 Email: Glucier@ers.usda.gov

Andy Jerardo

Tel: (202) 694-5266 Fax: (202) 694-5820 Email: Ajerardo@ers.usda.gov

Covers potatoes, sweet potatoes, long-run outlook

Subscription Information

Subscribe to ERS' e-mail notification service <http://www.ers.usda.gov/updates/> to receive timely notification of newsletter availability. Printed copies may be purchased from the USDA Order Desk by calling 1-800-999-6779 (specify the issue number or series SUB-VGS-4039).

E-mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to <http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do> and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.

- Receive weekly notification (on Friday afternoon) via the ERS website. Go to <http://www.ers.usda.gov/Updates/> and follow the instructions to receive notices about ERS outlook reports, *Amber Waves* magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to <http://www.ers.usda.gov/rss/> to get started.

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. How Low Has the Farm Share of Retail Food Prices Really Fallen?

<http://www.ers.usda.gov/Publications/ERR24/>

Growers have been receiving a decreasing share of what consumers pay for food at retail stores, but the extent of this decrease has been overstated for a few commodity groups. Using updated baskets based on what American households bought for at-home consumption between 1999 and 2003, this report estimates farm share for fresh vegetables and fresh fruits. Findings indicate that growers are capturing more of the consumer's food dollar than current estimates suggest.

2. 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.

3. Understanding Fruit and Vegetable Choices—Research Briefs

<http://www.ers.usda.gov/publications/aib792/>

USDA's Food Guide Pyramid recommends 2-4 servings of fruit and 3-5 servings of vegetables daily. As a member of the 5-A-Day public-private partnership, USDA partners with other government agencies and private sector groups to promote the health benefits of fruits and vegetables. Yet consumption of these healthful foods still does not meet dietary recommendations. How can we better understand the reasons for the persistent difficulty in increasing produce consumption? This series of research briefs provides information on the economic, social, and behavioral factors influencing consumers' fruit and vegetable choices.

4. Canada: A Macroeconomic Study of the U. S.' Most Important Trade Partner
<http://www.ers.usda.gov/Publications/WRS0602/>

This report provides an analysis of the Canadian economy, focusing on its trade with the United States and the rest of the world and evaluates Canada's long-term growth prospects. Knowledge of Canada's economic structure, trade patterns, and growth prospects is increasingly important in understanding the overall U.S. trade outlook.

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 use (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. Vegetables and Melons: ERS' Vegetables and Melons Briefing Room contains special articles, data, and links.

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

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

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

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

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

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

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

E. 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>

F. 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>

G. FAS, HTP: USDA, Foreign Agricultural Service's Horticultural and Tropical Products web site.

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

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

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Price table 1—Commercial vegetables and potatoes: Indexes of prices received by U.S. growers, by month, 1995-2006 1/

| Item | Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Annual |
|--------------------------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|--------|
| --1910-14=100-- | | | | | | | | | | | | | | |
| 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 | 756 | 763 | 830 | 878 | 935 | 1,024 | 805 | 925 | 969 | 962 | 1,048 | 1,177 | 923 |
| | 2004 | 849 | 966 | 773 | 884 | 753 | 747 | 836 | 889 | 901 | 1,067 | 1,112 | 807 | 882 |
| 2005 | 636 | 806 | 1,096 | 1,230 | 897 | 942 | 765 | 801 | 884 | 769 | 791 | 1,132 | 896 | |
| 2006 | 874 | 835 | 966 | 1,081 | 1,067 | 870 | 816 | 1,010 | 997 | | | | | |
| 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 | 485 | 492 | 450 | 486 | 510 | 515 |
| 2005 | 531 | 535 | 578 | 566 | 576 | 572 | 665 | 591 | 524 | 484 | 537 | 584 | 562 | |
| 2006 | 596 | 622 | 683 | 671 | 678 | 716 | 901 | 672 | 578 | | | | | |
| --1990-92=100-- | | | | | | | | | | | | | | |
| 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 | 113 | 114 | 124 | 131 | 140 | 153 | 120 | 138 | 145 | 144 | 157 | 176 | 138 |
| | 2004 | 127 | 144 | 116 | 132 | 113 | 112 | 125 | 133 | 135 | 160 | 166 | 121 | 132 |
| 2005 | 95 | 121 | 164 | 184 | 134 | 141 | 114 | 120 | 132 | 115 | 118 | 169 | 134 | |
| 2006 | 131 | 125 | 145 | 162 | 160 | 130 | 122 | 151 | 149 | | | | | |
| 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 | 96 | 97 | 89 | 96 | 101 | 102 |
| 2005 | 105 | 106 | 114 | 112 | 114 | 113 | 131 | 117 | 104 | 96 | 106 | 115 | 111 | |
| 2006 | 118 | 123 | 135 | 133 | 134 | 141 | 178 | 133 | 114 | | | | | |

1/ Prices for 2006 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, 1997-2006

| Item | Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Annual | Change Sep.- Sep. |
|----------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|----------------------|
| | | | | | | | | | | | | | | | 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 | -3.1 |
| | 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 | 9.8 |
| | 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 | -9.4 |
| | 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 | 12.8 |
| | 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 | 21.1 |
| | 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 | -13.1 |
| | 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 | 0.5 |
| | 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 | 8.1 |
| | 2006 | 50.4 | 51.7 | 51.7 | 52.2 | 53.3 | 54.1 | 55.6 | 57.2 | 56.3 | | | | | 16.8 |
| 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 | 12.3 |
| | 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 | 3.7 |
| | 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 | 0.0 |
| | 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 | -7.9 |
| | 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 | 28.7 |
| | 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 | 4.5 |
| | 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 | -7.3 |
| | 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 | 11.9 |
| | 2006 | 135.5 | 149.3 | 135.8 | 136.7 | 137.3 | 143.2 | 151.1 | 152.1 | 168.9 | | | | | 24.9 |
| 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 | -3.7 |
| | 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 | -12.3 |
| | 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 | 44.0 |
| | 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 | 0.0 |
| | 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 | -21.7 |
| | 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 | 27.9 |
| | 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 | -14.1 |
| | 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 | 10.0 |
| | 2006 | 87.4 | 79.4 | 81.5 | 86.9 | 96.7 | 84.8 | 78.3 | 86.4 | 95.3 | | | | | 12.4 |
| 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 | 13.7 |
| | 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 | 2.5 |
| | 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 | 3.7 |
| | 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 | -11.4 |
| | 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 | -0.9 |
| | 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 | 24.2 |
| | 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 | -8.1 |
| | 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 | 8.2 |
| | 2006 | 216.2 | 191.0 | 164.9 | 157.3 | 154.3 | 145.7 | 147.9 | 148.8 | 190.8 | | | | | 33.5 |
| Lettuce, romaine 1/ | 2006 | 134.1 | 140.5 | 138.3 | 147.6 | 147.6 | 132.0 | 123.7 | 135.9 | 143.0 | | | | | -- |
| Peppers, sweet 2/ | 2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 192.7 | -- | -- | -- | -- |
| | 2006 | -- | -- | -- | -- | 163.8 | 169.5 | 176.8 | 171.3 | 171.0 | | | | | -- |
| Cabbage 2/ | 2006 | -- | -- | -- | -- | -- | -- | -- | 56.1 | 60.0 | | | | | |

-- = 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, 1997-2006 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 | |
| | | | | | | | | | | | -- \$/case -- | \$/lb | \$/case |
| 1997 | | | | | | | | | | | | | |
| I | 7.38 | 11.75 | 7.08 | 9.67 | 9.05 | 14.46 | 7.79 | 10.46 | 7.63 | 11.50 | 0.30 | 17.17 | |
| II | 7.00 | 10.83 | 6.67 | 8.75 | 8.88 | 13.75 | 7.75 | 10.46 | 7.83 | 11.50 | 0.30 | 15.13 | |
| III | 7.05 | 11.08 | 6.75 | 8.75 | 8.58 | 13.63 | 7.67 | 10.50 | 8.00 | 11.08 | 0.30 | 15.42 | |
| IV | 7.17 | 10.38 | 7.00 | 9.84 | 8.88 | 13.00 | 7.88 | 10.50 | 7.88 | 10.33 | 0.31 | 16.25 | |
| Average | 7.15 | 11.01 | 6.88 | 9.25 | 8.85 | 13.71 | 7.77 | 10.48 | 7.84 | 11.10 | 0.30 | 15.99 | |
| 1998 | | | | | | | | | | | | | |
| I | 7.21 | 10.63 | 7.05 | 8.63 | 8.13 | 11.25 | 7.84 | 11.00 | 7.92 | 10.58 | 0.33 | 16.42 | |
| II | 7.38 | 10.88 | 7.13 | 9.75 | 8.50 | 10.88 | 7.88 | 11.13 | 7.88 | 10.75 | 0.33 | 16.92 | |
| III | 7.25 | 10.75 | 7.21 | 9.96 | 8.21 | 12.58 | 7.25 | 10.58 | 7.25 | 10.92 | 0.38 | 19.00 | |
| IV | 7.25 | 10.75 | 7.21 | 9.96 | 8.38 | 12.75 | 7.25 | 10.50 | 7.25 | 11.00 | 0.45 | 21.00 | |
| Average | 7.27 | 10.75 | 7.15 | 9.58 | 8.31 | 11.87 | 7.56 | 10.80 | 7.58 | 10.81 | 0.37 | 18.34 | |
| 1999 | | | | | | | | | | | | | |
| I | 7.25 | 10.75 | 7.50 | 10.38 | 8.80 | 13.30 | 7.33 | 10.67 | 7.42 | 11.00 | 0.45 | 21.00 | |
| II | 7.33 | 10.63 | 7.50 | 10.38 | 8.71 | 13.21 | 7.79 | 11.29 | 8.09 | 11.83 | 0.46 | 21.00 | |
| III | 7.50 | 10.63 | 7.50 | 10.38 | 8.75 | 13.58 | 7.88 | 11.38 | 8.09 | 12.00 | 0.46 | 21.00 | |
| IV | 7.63 | 12.34 | 7.46 | 10.92 | 8.75 | 13.58 | 7.88 | 11.13 | 8.04 | 11.75 | 0.35 | 20.29 | |
| Average | 7.43 | 11.09 | 7.49 | 10.52 | 8.75 | 13.42 | 7.72 | 11.12 | 7.91 | 11.65 | 0.43 | 20.82 | |
| 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 | 14.04 | 8.54 | 13.54 | 8.96 | 15.67 | 9.00 | 11.75 | 8.83 | 14.58 | 0.30 | 20.25 | |
| II | 8.75 | 13.58 | 8.63 | 13.25 | 9.13 | 15.42 | 9.00 | 11.75 | 9.00 | 14.17 | 0.30 | 20.17 | |
| III | 8.75 | 13.42 | 8.80 | 12.96 | 9.13 | 15.33 | 8.88 | 12.00 | 9.00 | 13.92 | 0.30 | 20.00 | |
| IV | 8.50 | 13.25 | 8.50 | 13.25 | 9.13 | 15.25 | 8.75 | 11.75 | 9.00 | 13.63 | 0.31 | 20.50 | |
| Average | 8.65 | 13.57 | 8.62 | 13.25 | 9.09 | 15.42 | 8.91 | 11.81 | 8.96 | 14.08 | 0.30 | 20.23 | |
| 2006 | | | | | | | | | | | | | |
| I p | 8.63 | 12.25 | 8.88 | 12.13 | 9.25 | 15.46 | 8.88 | 12.00 | 9.05 | 12.75 | 0.36 | 21.75 | |
| II p | 8.63 | 12.25 | 8.74 | 12.13 | 9.17 | 15.50 | 8.88 | 12.00 | 9.03 | 12.25 | 0.37 | 23.25 | |
| III f | 8.45 | 12.00 | 8.45 | 12.00 | 9.25 | 15.50 | 9.00 | 12.00 | 8.75 | 12.00 | 0.38 | 23.50 | |
| IV f | 8.50 | 12.00 | 8.50 | 12.25 | 9.25 | 15.25 | 9.00 | 12.00 | 9.00 | 12.50 | 0.43 | 24.50 | |
| Average | 8.55 | 12.13 | 8.64 | 12.13 | 9.23 | 15.43 | 8.94 | 12.00 | 8.96 | 12.38 | 0.39 | 23.25 | |

p = Preliminary. f = ERS forecast.

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, 1997-2006 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 |
| --\$ per case-- | | | | | | | | | | | | |
| 1997 | | | | | | | | | | | | |
| I | 6.90 | 0.50 | 6.88 | 0.48 | 7.10 | 0.51 | 9.20 | 0.65 | 10.23 | 0.68 | 7.98 | 0.42 |
| II | 6.90 | 0.50 | 6.83 | 0.47 | 7.10 | 0.50 | 9.20 | 0.65 | 9.93 | 0.69 | 8.30 | 0.42 |
| III | 6.90 | 0.50 | 6.83 | 0.47 | 7.10 | 0.49 | 9.20 | 0.65 | 9.93 | 0.69 | 8.30 | 0.42 |
| IV | 6.83 | 0.47 | 6.83 | 0.47 | 6.90 | 0.48 | 9.20 | 0.65 | 9.93 | 0.69 | 8.30 | 0.42 |
| Average | 6.88 | 0.49 | 6.84 | 0.47 | 7.05 | 0.50 | 9.20 | 0.65 | 10.01 | 0.69 | 8.22 | 0.42 |
| 1998 | | | | | | | | | | | | |
| I | 6.83 | 0.46 | 6.83 | 0.47 | 6.90 | 0.47 | 9.20 | 0.65 | 10.08 | 0.70 | 8.30 | 0.42 |
| II | 6.83 | 0.45 | 6.83 | 0.47 | 6.90 | 0.46 | 9.20 | 0.65 | 10.15 | 0.70 | 8.30 | 0.42 |
| III | 6.83 | 0.44 | 6.83 | 0.45 | 6.75 | 0.45 | 9.20 | 0.65 | 10.15 | 0.70 | 8.30 | 0.42 |
| IV | 6.83 | 0.44 | 6.83 | 0.45 | 6.87 | 0.45 | 9.47 | 0.70 | 10.15 | 0.72 | 8.33 | 0.42 |
| Average | 6.83 | 0.45 | 6.83 | 0.46 | 6.86 | 0.46 | 9.27 | 0.66 | 10.13 | 0.71 | 8.31 | 0.42 |
| 1999 | | | | | | | | | | | | |
| I | 6.83 | 0.44 | 6.83 | 0.45 | 6.88 | 0.46 | 9.47 | 0.70 | 10.15 | 0.72 | 8.30 | 0.44 |
| II | 6.83 | 0.44 | 6.83 | 0.45 | 6.88 | 0.46 | 9.47 | 0.70 | 10.15 | 0.72 | 8.30 | 0.44 |
| III | 6.83 | 0.45 | 6.83 | 0.46 | 6.91 | 0.51 | 9.47 | 0.70 | 10.15 | 0.72 | 8.30 | 0.43 |
| IV | 6.83 | 0.45 | 6.83 | 0.47 | 6.93 | 0.54 | 9.47 | 0.70 | 10.15 | 0.72 | 8.30 | 0.43 |
| Average | 6.83 | 0.45 | 6.83 | 0.46 | 6.90 | 0.49 | 9.47 | 0.70 | 10.15 | 0.72 | 8.30 | 0.44 |
| 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 | 7.30 | 0.54 | 7.33 | 0.58 | 7.28 | 0.57 | 9.47 | 0.72 | 10.15 | 0.72 | 8.30 | 0.50 |
| II | 7.30 | 0.54 | 7.33 | 0.58 | 7.28 | 0.57 | 9.47 | 0.72 | 10.15 | 0.72 | 8.30 | 0.50 |
| III | 7.30 | 0.54 | 7.30 | 0.56 | 7.30 | 0.56 | 9.47 | 0.72 | 10.15 | 0.72 | 8.30 | 0.50 |
| IV | 7.30 | 0.55 | 7.30 | 0.55 | 7.30 | 0.55 | 9.47 | 0.72 | 10.15 | 0.72 | 8.30 | 0.50 |
| Average | 7.30 | 0.54 | 7.31 | 0.57 | 7.29 | 0.56 | 9.47 | 0.72 | 10.15 | 0.72 | 8.30 | 0.50 |
| 2006 | | | | | | | | | | | | |
| I p | 7.10 | 0.50 | 7.25 | 0.56 | 7.23 | 0.52 | 9.47 | 0.72 | 10.15 | 0.72 | 8.32 | 0.52 |
| II p | 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 f | 7.55 | 0.50 | 7.63 | 0.55 | 7.50 | 0.55 | 9.47 | 0.72 | 10.38 | 0.73 | 8.75 | 0.49 |
| IV f | 7.50 | 0.50 | 7.50 | 0.55 | 7.50 | 0.55 | 9.47 | 0.72 | 10.38 | 0.73 | 8.50 | 0.49 |
| Average | 7.38 | 0.50 | 7.50 | 0.56 | 7.47 | 0.54 | 9.47 | 0.72 | 10.30 | 0.72 | 8.60 | 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.

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

Price table 10—U.S. fresh-market herbs: Selected monthly wholesale prices in San Francisco, CA, 2005-2006

| Herb | Unit | 2005 | | | 2006 | | | Change from prev. year | | |
|---------------|--------------|--------------|-------|-------|-------|-------|-------|------------------------|--------|--------|
| | | April | May | June | April | May | June | April | May | June |
| | | -- \$/cwt -- | | | | | | --- Percent --- | | |
| Anise | 24-ct crtn | 14.75 | 16.50 | 16.31 | 18.50 | 14.90 | 14.38 | 25.4 | - 9.7 | - 11.8 |
| Arrugula | 12-ct ctns | 7.75 | 7.75 | 7.75 | 7.50 | 7.50 | 7.50 | - 3.2 | - 3.2 | - 3.2 |
| Basil | 12-ct ctns | 7.88 | 8.00 | 8.00 | 8.75 | 8.63 | 8.31 | 11.0 | 7.9 | 3.9 |
| Celeriac | 12-ct ctns | 10.50 | 10.50 | 10.50 | 10.50 | 10.50 | 13.88 | .0 | .0 | 32.2 |
| Chervil | 12-ct flmbag | 6.50 | 6.50 | 6.69 | 7.00 | 7.00 | 7.00 | 7.7 | 7.7 | 4.6 |
| Chives | 12-ct flmbag | 5.00 | 5.00 | 4.78 | 5.00 | 6.50 | 6.50 | .0 | 30.0 | 36.0 |
| Cilantro | 60-ct ctns | 15.31 | 9.10 | 11.69 | 13.88 | 12.45 | 14.88 | - 9.3 | 36.8 | 27.3 |
| Cipolinos | 10-lb ctns | 17.50 | 19.10 | 19.50 | 18.50 | 18.50 | 18.50 | 5.7 | - 3.1 | - 5.1 |
| Dill | 12-ct ctns | 7.19 | 7.25 | 7.31 | 7.13 | 7.70 | 8.00 | - .8 | 6.2 | 9.4 |
| Dry Eschallot | 5-lb sack | 5.41 | 5.90 | 5.00 | 4.88 | 4.75 | 5.00 | - 9.8 | - 19.5 | .0 |
| Horseradish | 50-lb sack | 2.00 | 2.00 | 2.13 | 2.10 | 2.15 | 2.15 | 5.0 | 7.5 | .9 |
| Lemon grass | Per lb-ctns | 0.74 | 0.70 | 0.68 | 1.10 | 1.50 | 1.50 | 48.6 | 114.3 | 120.6 |
| Marjoram | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.38 | 5.45 | 5.50 | - 2.2 | - .9 | .0 |
| Oregano | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.38 | 5.50 | 5.50 | - 2.2 | .0 | .0 |
| Rosemary | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.38 | 5.50 | 5.50 | - 2.2 | .0 | .0 |
| Mint | 12-ct ctns | 7.63 | 7.50 | 7.50 | 7.75 | 7.60 | 8.25 | 1.6 | 1.3 | 10.0 |
| Sage | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.38 | 5.50 | 5.50 | - 2.2 | .0 | .0 |
| Salsify | 5-1kg flmbg | 26.50 | 24.10 | 23.50 | 23.50 | 23.50 | 23.50 | - 11.3 | - 2.5 | .0 |
| Savory | 24-ct flmbag | 5.50 | 6.00 | 5.88 | 5.50 | 5.50 | 5.50 | .0 | - 8.3 | - 6.5 |
| Sorrel | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.38 | 5.50 | 5.38 | - 2.2 | .0 | - 2.2 |
| Tarragon | 12-ct flmbag | 6.13 | 6.50 | 6.50 | 7.00 | 7.00 | 7.00 | 14.2 | 7.7 | 7.7 |
| Thyme | 12-ct flmbag | 5.50 | 5.50 | 5.50 | 5.50 | 5.50 | 5.50 | .0 | .0 | .0 |
| Verdulaga | 24-ct flmbag | -- | 7.33 | 7.00 | 8.00 | 6.40 | 8.06 | -- | - 12.7 | 15.1 |
| Watercress | 12-ct ctns | 10.50 | 7.50 | 7.44 | 9.88 | 10.50 | 10.50 | - 5.9 | 40.0 | 41.1 |

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, 2003-06

| Item | Annual | | | 2005 | 2006 | | | | | |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2003 | 2004 | 2005 | June | Jan. | Feb. | Mar. | Apr. | May | June |
| Market basket 1/ | | | | | | | | | | |
| Retail cost (1982-84=100) | 185.3 | 194.4 | 198.2 | 197.7 | 202.5 | 201.3 | 200.8 | 200.0 | 200.3 | 200.6 |
| Farm value (1982-84=100) | 110.4 | 124.4 | 123.9 | 122.4 | 127.4 | 125.1 | 125.0 | 123.7 | 122.1 | 124.7 |
| Farm-retail spread (1982-84=100) | 225.6 | 232.1 | 238.3 | 238.2 | 242.9 | 242.4 | 241.6 | 241.1 | 242.4 | 241.5 |
| Farm value-retail cost (%) | 20.9 | 22.4 | 21.9 | 21.7 | 22.0 | 21.8 | 21.8 | 21.7 | 21.3 | 21.8 |
| Fresh fruit | | | | | | | | | | |
| Retail cost (1982-84=100) | 309.0 | 318.5 | 330.7 | 325.3 | 352.2 | 345.3 | 339.9 | 338.5 | 343.8 | 347.0 |
| Farm value (1982-84=100) | 163.2 | 200.5 | 173.4 | 159.2 | 190.8 | 191.2 | 184.8 | 174.8 | 178.8 | 199.2 |
| Farm-retail spread (1982-84=100) | 376.3 | 372.9 | 403.3 | 402.0 | 426.7 | 416.4 | 411.5 | 414.1 | 420.0 | 415.2 |
| Farm value-retail cost (%) | 16.7 | 19.9 | 16.6 | 15.5 | 17.1 | 17.5 | 17.2 | 16.3 | 16.4 | 18.1 |
| Fresh vegetables | | | | | | | | | | |
| Retail cost (1982-84=100) | 250.5 | 261.2 | 271.7 | 266.9 | 300.6 | 289.7 | 279.7 | 276.8 | 275.6 | 272.9 |
| Farm value (1982-84=100) | 149.9 | 146.5 | 145.5 | 167.8 | 171.5 | 156.4 | 143.8 | 176.3 | 150.3 | 135.2 |
| Farm-retail spread (1982-84=100) | 302.2 | 320.2 | 336.7 | 317.8 | 367.0 | 358.2 | 349.6 | 328.5 | 340.0 | 343.7 |
| Farm value-retail cost (%) | 20.3 | 19.0 | 18.2 | 21.4 | 19.4 | 18.3 | 17.5 | 21.6 | 18.5 | 16.8 |
| Processed fruits and vegetables | | | | | | | | | | |
| Retail cost (1982-84=100) | 171.9 | 183.1 | 192.3 | 191.5 | 197.8 | 199.0 | 198.9 | 198.9 | 201.1 | 201.5 |
| Farm value (1982-84=100) | 108.4 | 125.4 | 150.9 | 151.8 | 169.2 | 172.4 | 178.7 | 183.1 | 187.4 | 190.2 |
| Farm-retail spread (1982-84=100) | 191.8 | 201.1 | 205.3 | 203.9 | 206.7 | 207.3 | 205.2 | 203.8 | 205.4 | 205.0 |
| Farm value-retail cost (%) | 15.0 | 16.3 | 18.7 | 18.9 | 20.3 | 20.6 | 21.4 | 21.9 | 22.2 | 22.4 |
| Fats and oils | | | | | | | | | | |
| Retail cost (1982-84=100) | 157.4 | 167.8 | 167.7 | 164.5 | 169.9 | 170.4 | 168.5 | 165.0 | 168.6 | 167.3 |
| Farm value (1982-84=100) | 113.4 | 128.4 | 108.2 | 110.5 | 100.4 | 104.9 | 111.1 | 99.5 | 112.8 | 107.4 |
| Farm-retail spread (1982-84=100) | 173.5 | 182.3 | 189.6 | 184.4 | 195.5 | 194.5 | 189.6 | 189.1 | 189.1 | 189.3 |
| Farm value-retail cost (%) | 19.4 | 20.6 | 17.3 | 18.1 | 15.9 | 16.6 | 17.7 | 16.2 | 18.0 | 17.3 |
| Meat products | | | | | | | | | | |
| Retail cost (1982-84=100) | 169.0 | 183.2 | 187.5 | 189.2 | 187.9 | 188.2 | 188.6 | 188.4 | 187.5 | 187.9 |
| Farm value (1982-84=100) | 108.4 | 116.9 | 124.0 | 123.6 | 127.8 | 128.6 | 129.2 | 129.8 | 130.9 | 131.0 |
| Farm-retail spread (1982-84=100) | 231.1 | 251.3 | 252.8 | 256.5 | 249.5 | 249.3 | 249.6 | 248.5 | 245.6 | 246.3 |
| Farm value-retail cost (%) | 32.5 | 32.3 | 33.5 | 33.1 | 34.5 | 34.6 | 34.7 | 34.9 | 35.3 | 35.3 |
| Dairy products | | | | | | | | | | |
| Retail cost (1982-84=100) | 167.9 | 180.2 | 182.4 | 181.0 | 183.7 | 183.4 | 183.0 | 181.3 | 181.0 | 179.6 |
| Farm value (1982-84=100) | 99.1 | 125.9 | 118.7 | 114.2 | 113.8 | 107.2 | 100.8 | 96.1 | 95.3 | 96.1 |
| Farm-retail spread (1982-84=100) | 231.3 | 230.3 | 241.1 | 242.6 | 248.2 | 253.7 | 258.8 | 259.9 | 260.0 | 256.6 |
| Farm value-retail cost (%) | 28.3 | 33.5 | 31.2 | 30.3 | 29.7 | 28.0 | 26.4 | 25.4 | 25.3 | 25.7 |
| Poultry | | | | | | | | | | |
| Retail cost (1982-84=100) | 169.1 | 181.7 | 185.3 | 184.9 | 181.5 | 181.4 | 182.1 | 180.5 | 180.1 | 182.4 |
| Farm value (1982-84=100) | 113.0 | 142.9 | 139.4 | 139.8 | 122.7 | 122.2 | 119.8 | 112.9 | 113.3 | 127.9 |
| Farm-retail spread (1982-84=100) | 233.7 | 226.4 | 238.1 | 236.8 | 249.1 | 249.6 | 253.8 | 258.3 | 257.0 | 245.2 |
| Farm value-retail cost (%) | 35.8 | 42.1 | 40.3 | 40.5 | 36.2 | 36.0 | 35.2 | 33.5 | 33.7 | 37.5 |
| Eggs | | | | | | | | | | |
| Retail cost (1982-84=100) | 157.3 | 167.0 | 144.1 | 135.4 | 157.9 | 147.6 | 153.1 | 150.6 | 141.8 | 147.5 |
| Farm value (1982-84=100) | 102.0 | 92.2 | 60.1 | 39.7 | 75.3 | 51.7 | 85.8 | 54.6 | 39.7 | 63.6 |
| Farm-retail spread (1982-84=100) | 256.5 | 301.4 | 295.2 | 307.4 | 306.4 | 319.9 | 274.1 | 323.0 | 325.3 | 298.3 |
| Farm value-retail cost (%) | 41.7 | 35.5 | 26.8 | 18.8 | 30.6 | 22.5 | 36.0 | 23.3 | 18.0 | 27.7 |
| Cereal and bakery products | | | | | | | | | | |
| Retail cost (1982-84=100) | 202.8 | 206.0 | 209.0 | 209.4 | 210.6 | 210.3 | 210.9 | 210.9 | 211.9 | 212.8 |
| Farm value (1982-84=100) | 93.5 | 103.7 | 96.4 | 94.0 | 100.3 | 102.7 | 106.1 | 107.6 | 99.1 | 97.1 |
| Farm-retail spread (1982-84=100) | 218.0 | 220.3 | 224.6 | 225.5 | 226.0 | 225.3 | 225.5 | 225.3 | 227.6 | 228.9 |
| Farm value-retail cost (%) | 5.6 | 6.2 | 5.7 | 5.5 | 5.8 | 5.9 | 6.2 | 6.2 | 5.7 | 5.6 |

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, Economic Research Service, <http://www.ers.usda.gov/publications/agoutlook/aotables/2006/08Aug/aotab08.xls>

Price table 12—U.S. tomato prices: Year, month, and level of record highs 1/

| Item | Retail | | Farm | |
|-----------------------|-------------|--------------------|-------------|--------------------|
| | Year | Price | Year | Price |
| | | <i>Cents/pound</i> | | <i>Cents/pound</i> |
| Fresh tomatoes | | | | |
| January | 2006 | 216.20 | 1990 | 116.00 |
| February | 1990 | 236.10 | 1990 | 97.60 |
| March | 1990 | 176.50 | 1996 | 81.70 |
| April | 1996 | 186.70 | 2005 | 65.10 |
| May | 2005 | 191.10 | 1993 | 58.10 |
| June | 1991 | 167.20 | 1991 | 59.50 |
| July | 2005 | 160.70 | 1998 | 40.90 |
| August | 2003 | 151.30 | 2003 | 40.00 |
| September | 2006 | 190.80 | 2006 | 52.10 |
| October | 2004 | 171.50 | 2004 | 70.80 |
| November | 2004 | 233.70 | 2004 | 119.00 |
| December | 2004 | 246.70 | 2005 | -- |

-- = not disclosed. 1/ Nominal dollar prices (unadjusted for inflation).

Source: U.S. Department of Labor, Bureau of Labor Statistics (<http://www.bls.gov/data/home.htm>) and USDA, National Agricultural Statistics Service, *Agricultural Prices*.