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Summary

Tomato processors intend to contract for 17 percent more acreage in 1999. California, which now accounts for about 95 percent of the U.S. processing tomato crop, projects output to rise as much as 30 percent, with all other States projected to produce 10 percent more than a year ago. This increase is a reaction to sharply higher wholesale prices for tomato products caused by last year's weather-shortened crop and continued strong consumer demand. The average price for bulk tomato paste, the key raw ingredient used in the manufacture of tomato products like sauces, soups, ketchup, and juice, was up about 45 percent during the first quarter of 1999. This was the highest paste price since 1990, reflecting California's tight stocks.

This spring, area for harvest of 13 selected fresh-market vegetables is 1 percent greater than a year ago. With quality and yields likely to improve over last year's weather-affected levels, available supplies are expected to exceed those of last year. Rising acreage for commodities such as broccoli, tomatoes, and head lettuce outweighed declining area for cabbage, carrots, and bell peppers. Spring melon acreage is up 1 percent, with cantaloupe continuing to trend higher and watermelon acreage sliding for the fifth consecutive year. In addition to these changes, sweet spring onion production is expected to rise strongly, with output forecast up in both Georgia and Texas and good yields expected in California and Arizona.

Despite cool, rainy weather in March and early April in California, warm and dry weather has largely prevailed in major production areas this year, leaving above-average supplies of most vegetables. Fresh-market shipments were up during the first quarter for vegetables such as artichokes, asparagus, and tomatoes. With market volume continuing strong for fresh-market vegetables, first-half shipping-point prices are expected to average about a tenth below year-earlier levels. Following the lead of farm prices, fresh vegetable retail prices are also expected to average below year-earlier levels during the first 6 months of 1999.

With shipments from domestic sources higher and import volume from Mexico down, the domestic share of the fresh-vegetable market improved during the 1999 winter season. Mexico's winter-shipping season was delayed for commodities like tomatoes as cool weather slowed crop maturity by several weeks. As a result, Florida, which enjoyed a strong production season, garnered a larger share of the winter tomato market—rebounding from about a third of winter tomato shipments in 1998 to about 47 percent in 1999.

Per capita use of all vegetables and melons totaled 449 pounds in 1998—down 1 pound from a year earlier.

Declining fresh-market vegetable use (down 4 percent) outweighed rising per capita use of canning (up 1 percent) and freezing vegetables (up 1 percent). El Niño-related weather fronts brought above-average precipitation and below-average temperatures to many of the major vegetable-producing areas in 1998, reducing quality and yields, shifting harvest schedules, and ultimately raising prices. On the fresh-market side, significant declines in per capita use were experienced in head lettuce, cucumbers, carrots, and cabbage. Partially offsetting were increases in snap beans, asparagus, and broccoli.

Processors of five selected vegetables (tomatoes, sweet corn, snap beans, green peas, and cucumbers) expect to contract for 1.4 million acres in 1999—up 12 percent from a year ago. Open-market purchases were higher than usual in 1998 due to reduced contracting in several minor vegetable-processing States. With less open-market buying expected this year, the total acreage increase (contract plus open market) may be closer to 3 percent, with most of this increase coming from tomatoes. Given average acreage losses and trend yields this coming season, output of the five leading processing vegetables could be 6 to 10 percent higher than a year ago and approach 17 million short tons.

The U.S. trade surplus in potatoes increased nearly 7 percent in 1998, after 2 years of declines due to increasing imports of frozen french fries from Canada. Total U.S. potato exports were valued at \$757 million in 1998, compared with \$369 million in imports. Imports of fries from Canada continued to grow, but were more than offset by increased exports of potato chips and fries. The strong growth in chip exports was due to the poor fall-1998 potato crop in Europe. Exports of processed products, led by chips, will likely continue to benefit from the European shortage until the new crop is harvested this fall. A return to normal production in Europe this fall would likely lead to reduced chip exports toward the end of this year and into 2000.

Despite relatively low prices, U.S. dry bean output may increase from last year's level. The U.S. Department of Agriculture's *Prospective Plantings* report indicated that dry bean growers plan to seed 2 percent more acres this spring. If realized, most of this increase will likely be in white beans (e.g. navy and limas) and in the smaller colored beans (e.g. red kidneys and cranberry). Acreage devoted to pintos, the top bean class, will likely fall due to burdensome stocks and deteriorating prices. With dry bean prices in general drifting lower into the spring planting season, some growers may decide to plant crops other than dry beans (e.g. soybeans in Michigan, wheat in North Dakota, etc.).

Industry Overview

Improved weather in 1999 has restored some semblance of normality to the process of vegetable and melon production and marketing. With better yields, domestic fresh vegetable shipments have increased and regained most of the market share lost to imports last season. Fresh vegetable prices at all levels of the marketing chain are also well below the highs of a year ago and are expected to average a tenth below last year during the first 6 months of the year. On the processing side, tomato production could rise as much as 30 percent from a year ago in an attempt to rebuild stocks depleted partly because of last year's inclement weather. After a strong export year in 1998, dry bean growers may be facing low prices as production continues strong and export volume declines.

Some economic highlights for the U.S. vegetable and melon sector:

- U.S. growers are likely to harvest 1 percent more acres of fresh-market vegetables and melons this spring than last year. Declining acreage in Florida (down 7 percent) and no change in Texas were outweighed by a 5-percent gain in California.
- A combination of increased area and improved yields is expected to leave spring season fresh-market vegetable supplies above a year ago. With imports also expected to increase, these larger supplies will keep April-June f.o.b. shipping-point prices below the high levels of a year ago.
- Contract area for the five leading processing vegetables is expected to rise 12 percent to 1.4 million acres in 1999. This increase is due mostly to stronger processing tomato prices. Canneries expect to increase contract area 14 percent, while vegetables for freezing rise 7 percent.
- The first estimate of 1998 total per capita vegetable and melon use is 449 pounds—down about 1 pound from a year earlier. Reduced supplies and higher prices led to a 3-percent reduction in fresh vegetable use, nearly offsetting higher potato and processing vegetable use. Per capita use is projected to increase in 1999.
- Similar to a year ago, vegetable and melon exporters face a strong U.S. dollar, higher U.S. processed vegetable prices, and weak economies in several key markets. During the first 2 months of 1999, the total value of U.S. vegetable and melon exports declined 2 percent from a year earlier.
- Despite weaker than expected potato prices this past season, the Economic Research Service projects that fall-season potato growers could plant slightly more acreage than a year ago. This spring, despite a 5-percent cut in harvested area, improved weather brought higher yields, resulting in a 4-percent increase in spring-season potato production.
- Preliminary indications point to a 2-percent increase in dry bean area this year, with acreage in Minnesota, California, and Michigan notably higher. Given reduced export activity and a steady domestic market, rising stocks and lower prices are expected this year.

Table 1--U.S. vegetable industry: Area, production, value, unit value, and trade, 1997-1999 1/

Item 2/	Unit	1997	1998	1999
Area harvested	1,000 ac.	6,943	7,170	7,100-7,425
Vegetables				
Fresh-market	1,000 ac.	1,850	1,866	1,825-1,875
Processing	1,000 ac.	1,423	1,434	1,500-1,600
Potatoes	1,000 ac.	1,354	1,394	1,370-1,410
Dry beans	1,000 ac.	1,759	1,914	1,875-1,975
Other 2/	1,000 ac.	557	562	545-565
Production	Mil. cwt	1,286	1,269	1,280-1,330
Vegetables				
Fresh-market	Mil. cwt	436	423	420-440
Processing	Mil. cwt	325	309	330-350
Potatoes	Mil. cwt	467	478	470-490
Dry beans	Mil. cwt	29	31	31-33
Other 2/	Mil. cwt	29	28	27-29
Crop value	\$ mil.	13,754	13,603	12,840-13,780
Vegetables				
Fresh-market	\$ mil.	8,071	8,099	7,500-8,000
Processing	\$ mil.	1,457	1,380	1,450-1,550
Potatoes	\$ mil.	2,622	2,493	2,350-2,550
Dry beans	\$ mil.	577	605	540-580
Other 2/	\$ mil.	1,027	1,026	1,000-1,100
Unit value 3/	\$/cwt	10.69	10.72	10.00-10.35
Vegetables				
Fresh-market	\$/cwt	18.51	19.15	17.75-18.75
Processing	\$/cwt	4.48	4.47	4.20-4.60
Potatoes	\$/cwt	5.61	5.22	5.00-5.50
Dry beans	\$/cwt	19.30	19.80	17.00-18.00
Other 2/	\$/cwt	34.99	36.71	36.50-38.50
Trade				
Imports	\$ mil.	3,142	3,760	3,700-4,200
Vegetables				
Fresh & melons	\$ mil.	1,828	2,262	2,200-2,500
Canned, frozen	\$ mil.	631	690	700-750
Potatoes	\$ mil.	280	369	390-450
Dry beans	\$ mil.	31	27	24-28
Other 4/	\$ mil.	372	412	390-440
Exports	\$ mil.	3,061	3,242	3,075-3,500
Vegetables				
Fresh & melons	\$ mil.	1,028	1,051	975-1,175
Canned, frozen	\$ mil.	719	718	675-775
Potatoes	\$ mil.	644	757	790-860
Dry beans	\$ mil.	206	281	200-230
Other 4/	\$ mil.	463	433	425-475

1/ ERS estimates of trade in 1999. 2/ Other includes sweet potatoes, dry peas, lentils, and mushrooms. 3/ Ratio of total value to total production. 4/ Other includes mushrooms, dry peas, lentils, dehydrated vegetables, sweet potatoes and vegetable seed.

Sources: Economic Research Service and National Agricultural Statistics Service, USDA.

Fresh Vegetables & Melons

Spring Outlook: Acreage Up, Prices Lower

This spring, area for harvest of 13 selected fresh-market vegetables is 1 percent greater than a year ago (table 13). With quality and yields expected to improve over last year's weather-affected levels, available supplies this spring will likely exceed those of last year. Rising acreage for commodities such as broccoli (18 percent), tomatoes (8 percent), and head lettuce (6 percent) outweighed declining area for cabbage (14 percent), carrots (8 percent), and bell peppers (8 percent). Spring melon acreage is up 1 percent, with cantaloupe (14 percent) continuing to trend higher and watermelon (7 percent) acreage sliding for the fifth consecutive year. In addition to these changes, sweet spring onion production is expected to rise strongly, with output forecast up in both Georgia and Texas and good yields expected in California and Arizona.

Some highlights of spring-season vegetable acreage for harvest includes:

- 13 selected fresh-market vegetables, up 1 percent;
- the three major melon crops, up 1 percent;
- asparagus, up 1 percent;
- spring onion acreage, up 4 percent; and
- broccoli, up 18 percent.

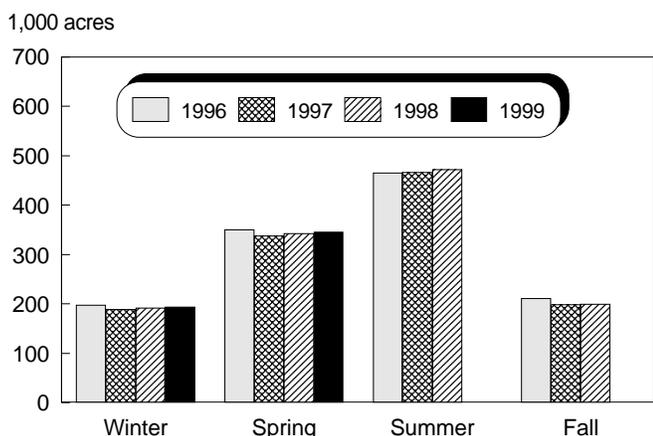
Assuming continued favorable weather, vegetable and melon prices will likely remain below those of last year through at least early summer. During the first few weeks of February, shipping-point prices for most major commodities averaged between \$4 and \$7 per carton (carton weights vary by com-

modity)—an unusual occurrence which reflected good yields in all major growing areas. However, the effects of a cold weather spell in December showed up during the last week in February, leading to temporary supply gaps. This caused prices for head lettuce, tomatoes, and several other vegetables to double—partly offsetting the low prices earlier in the month.

With generally good yields in both southern and western growing areas during the first 4 months of 1999, fresh-market vegetable prices at all levels of the marketing chain have averaged below the El Niño-impacted highs of 1998. El Niño weather in 1998 hit California and Florida with untimely rains and cool temperatures, which delayed both planting and crop maturity. The added uncertainty over crop schedules in 1998 caused shipping-point prices for fresh-market vegetables to average 10 percent above 1997 prices.

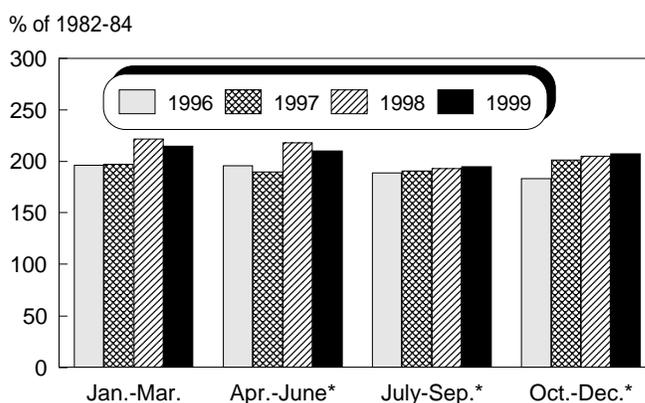
Warm and dry weather has largely prevailed in most major vegetable production areas this year. However, unusually cool, wet weather in March and early April may delay harvest or impact the quality of some California vegetables this spring. Although temporary supply gaps could develop, yields are generally expected to be good. With acreage up, vegetable supplies will be above average this spring. Favorable weather during the first quarter allowed fresh-market shipments to rise 3 percent (table 14). With volumes expected to continue relatively strong into early summer for most fresh-market vegetables, first-half shipping-point prices are expected to average about a tenth below year-earlier levels. As a result, fresh vegetable retail prices are also expected to average below year-earlier levels during the first 6 months of 1999.

Figure 1
U.S. Fresh-Market Vegetables: Seasonal Area for Harvest



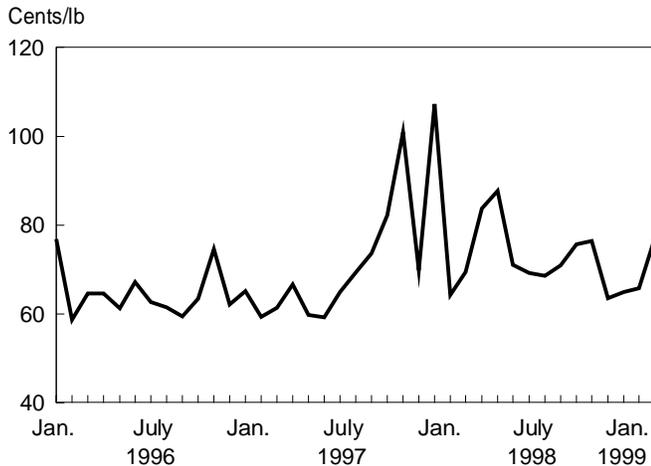
Source: National Agricultural Statistics Service, USDA.

Figure 2
Fresh-Market Vegetables: Quarterly Retail Price Index



*The second, third, and fourth quarters of 1999 are estimated.
Source: Bureau of Labor Statistics, USDL.

Figure 3
Retail Lettuce Prices



Source: Bureau of Labor Statistics, USDL.

In mid-March, the following shipping-point price contrasts were noted:

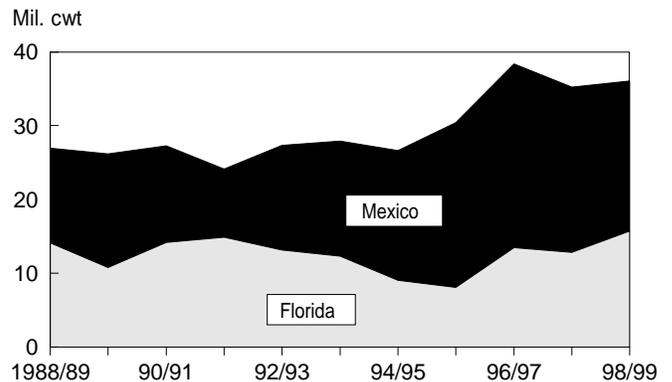
- Iceberg lettuce, \$5 per 50-pound box, down 60 percent from a year ago;
- Mature green tomatoes-large, \$7.50 per 25-pound box, down 25 percent;
- Bell peppers-large, \$9.75 per 28-pound carton, down 25 percent;
- Celery, \$4.75 per 60-pound carton, down 58 percent.

Winter Acreage Increased

Acreage for harvest of 13 selected vegetables rose 1 percent to 193,500 acres during the 1999 winter season (largely January to March). Acreage increased in each of the four surveyed States, with California and Texas each up 5 percent, Arizona up 2 percent, and Florida up 1 percent from a year ago. California accounts for about 47 percent of winter vegetable acreage, followed by Arizona (27 percent), Florida (20 percent), and Texas (6 percent). Acreage increased the most for tomatoes (28 percent), bell peppers (16 percent), and head lettuce (6 percent), but declined for snap beans (17 percent) and spinach (16 percent). Winter acreage accounts for about 10 percent of the annual fresh vegetable and melon area (1.8 million acres in 1998).

Domestic shipments of fresh vegetables increased during the winter quarter, recovering from last year's weather-shortened volume. Domestic shipments of asparagus, snap beans, bell peppers, and tomatoes each rose substantially from a year earlier. The domestic share of the market also improved as import volume (primarily from Mexico) declined this winter. Mexico's winter-shipping season was delayed for warm-season commodities like tomatoes as cool weather delayed crop maturity by several weeks. As a result, Florida, which

Figure 4
Winter-Fresh Vegetables: Shipments for October-March Season 1/



1/ Includes snap beans, cucumbers, eggplant, bell peppers, squash, and tomatoes.

Source: Agricultural Marketing Service, USDA.

enjoyed a strong production season, garnered a larger share of the winter tomato market—rebounding from about a third of winter tomato shipments in 1998 to about 47 percent in 1999.

Watermelon: Is Production Really Falling?

Among other things, the declining trend in watermelon acreage is likely a combination of rising per-acre yields and successive years of freeze damages in Florida and drought in Texas. Watermelon yields have been rising in the 1990s, reflecting improved varieties and a larger proportion of acreage covered by irrigation, especially in States like Texas. In addition, seedless varieties now account for a substantial portion of the watermelon crop. With much higher seed costs and more challenging cultural requirements, seedless melon acreage tends to be more intensively managed—resulting in less crop abandonment and higher per-acre yields.

Seedless melons also tend to be smaller and lighter than the average seeded variety. As seedless garner a larger share of the watermelon crop, the result may be the appearance of declining production in official statistics. The U.S. Department of Agriculture's (USDA) production statistics measure the total weight of melons produced (several decades ago, USDA measured the number of melons produced). It is likely that watermelon sales have increased the past few years (as retailers report) but weight-based volume measures, reflecting declining average melon weight, cannot reflect increasing farm production and sales of individual melons.

Artichoke Supplies Recover

The weather has also been much kinder to artichoke growers in California this year. Artichoke growers expect to produce their largest crop in 3 years. December frost damaged some plants, but supplies are said to be larger than last year's

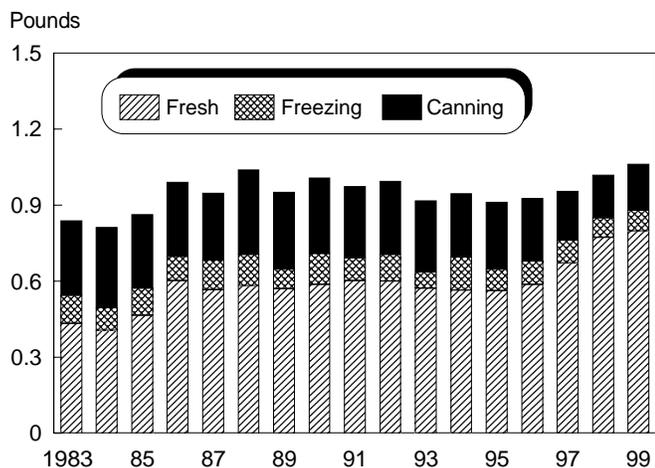
weather-challenged crop. Per capita use of artichokes is steady at 0.6 pound. Because of the short crop the past few years, imports as a proportion of consumption have risen from a fourth to a half. With the recovery in domestic output this year, the share of market attributable to imports is expected to decline. Nearly all artichoke imports arrive in canned form, with Spain (93 percent of the total) and Italy (4 percent) accounting for most of the volume. With domestic supplies short, shipping-point prices for artichokes have more than doubled during this decade.

Asparagus Popularity on the Rise

From 1986 to 1996, per capita use of fresh-market asparagus remained steady at 0.6 pound. Per capita use increased 0.1 pound in both 1997 and 1998 and now stands at 0.8 pound—the highest since 1950. Fresh asparagus shipments peak around the Easter/Passover holiday period in early spring and are generally strongest during February to May. In the early 1990s, about 77 percent of all fresh-market asparagus shipments occurred during these months. However, in the last 2 years these months have only accounted for 65 to 67 percent of shipments. Meanwhile, volume has increased in January and during the summer months as asparagus demand slowly begins to take hold outside of the traditional spring/holiday niche.

Due to the seasonal nature of asparagus production, both domestic and import supplies are required to meet year-round demand. The majority of the rising demand this decade has been met with imported product. Imports have risen 140 percent since 1995, while domestic production has gained 21 percent. Imports now account for 53 percent of fresh-market asparagus use—the same as in 1995 but up from 30 percent in 1990.

Figure 5
U.S. Per Capita Use of Asparagus



Source: Economic Research Service, USDA.

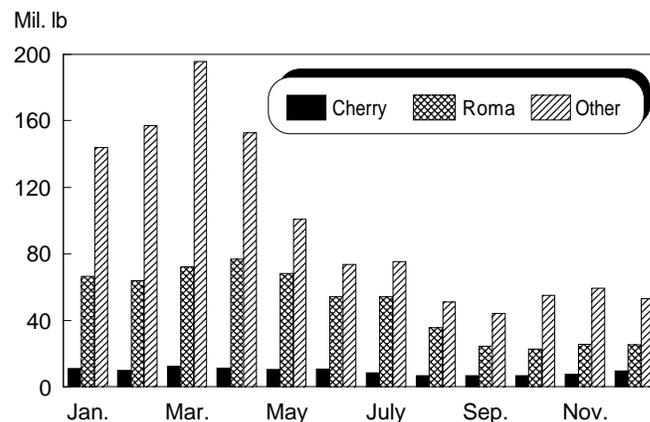
Since bottoming out in 1995, U.S. asparagus acreage has steadily climbed. Although small gains have been noted in New Jersey and Michigan, most of the new acreage has been planted in California—spurred by fresh-market demand. This spring, asparagus area for harvest for both fresh and processing uses increased 1 percent to 73,100 acres. California growers, who regained the lead in asparagus production from Washington last year, intend to harvest 4 percent more area this year. With imports up and production in California likely to exceed a year ago, fresh-market per capita use will at least be maintained at 0.8 pound.

Fresh Tomato Imports Continue To Rise

The value of fresh-market tomato imports increased 17 percent in 1998, while volume rose 14 percent. Tomato imports from Mexico rose 11 percent to 1.62 billion pounds. However, Mexico continued to lose market share, accounting for 87 percent of tomato import volume—down from 89 percent in 1997 and over 90 percent 3 years ago. Most of this share has been lost to countries primarily selling greenhouse/hydroponic tomatoes. Although volume from Israel, Belgium, and the Netherlands continued to rise, most of the gain in this market segment came from Canada. The volume of fresh-market tomato imports from Canada rose 65 percent in 1998 to 136 million pounds. With Canada's greenhouse industry continuing its rapid expansion, the value of the Canadian dollar remaining weak, and strong U.S. demand for premium tomatoes, further double-digit increases are expected in 1999.

Tomatoes are among the products identified in a preliminary list of food items from European nations that may be subjected to a punitive 100-percent tariff due to the European Union (EU) ban on beef that contains growth hormones. Virtually all tomatoes imported from EU nations are high-

Figure 6
Fresh-Market Tomatoes:
Monthly Import Volume, 1998



Source: Bureau of the Census, USDC.

value greenhouse/hydroponic varieties. Tomatoes are only one of several items on the preliminary U.S. Trade Representative's list, which are scheduled to be finalized by mid-June if the EU meat ban is not lifted by May 13 as required by the World Trade Organization. Although it seems unlikely that all three of the identified fresh-market tomato tariff codes will be covered by the punitive duty, any cut in greenhouse tomato volume from the EU would benefit domestic, Canadian, and Mexican producers. Fresh-market tomato imports from the EU were valued at over \$80 million in 1998.

Per Capita Use Declines in 1998

Per capita use of all vegetables and melons totaled 449 pounds in 1998—down 1 pound from a year earlier (table

47). Rising per capita use of canning (up 1 percent) and freezing vegetables (up 1 percent) was outweighed by falling fresh-market use (down 4 percent). El Niño-related weather fronts brought above-average precipitation and below-average temperatures to many of the major vegetable-producing areas in 1998, reducing quality and yields, shifting harvest schedules, and ultimately raising prices. On the fresh-market side, significant declines in per capita use were experienced in head lettuce (down 15 percent), cucumbers (11 percent), carrots (6 percent), and cabbage (5 percent). Partially offsetting were increases in snap beans (up 21 percent), asparagus (14 percent), and broccoli (10 percent). Production of snap beans, popular in stir-fry dishes, increased in most States as both acreage and yields were higher.

Estimating the Consumer Value of Fresh-Market Tomatoes

There is continual interest in knowing what consumers pay for produce. However, there are no comprehensive sales data covering the various final sales points for fresh-market fruits and vegetables.

USDA publishes annual estimates of farm cash receipts for fruits and vegetables. However, once a commodity leaves the farm, product disposition information becomes sketchy. Using fresh-market tomatoes as an example, we can walk through one possible method of making an estimate of final consumer sales value. The following analysis will be based on certain explicit assumptions and related data to arrive at an estimate for 1998.

The first question is, "what data are available?" USDA publishes annual fresh-market tomato production (3.13 billion pounds in 1998). The Bureau of Labor Statistics publishes a monthly estimate of U.S. average retail price, which only includes various field grown varieties. In 1998, this price averaged \$1.48 per pound. If you assume all tomatoes are sold at that price, the retail value of domestically grown field tomatoes would have been \$4.6 billion in 1998. However, this value must be qualified further.

Although tomatoes can be marketed several ways, the two most important are the retail market (e.g. supermarkets) and the foodservice/institutional channel (e.g. restaurants). Industry estimates suggest that just under half of all fresh-market tomatoes are sold through foodservice/institutional channels—for this analysis, we will call it 45 percent. It would be a simple matter to assume all tomatoes have the same retail value and move on. However, it seems safe to assume that the foodservice markup is smaller than the retail side—we shall assume it is about 20 percent less than the \$1.48 retail value. The most important reason to assume a value difference exists, is that some retail services (such

as packaging, higher-priced labor to maintain displays, etc.) are not required by restaurants and other bulk foodservice customers. If this assumption holds, the final value of the foodservice/institutional side of the market would have been \$1.18 per pound in 1998. Taken together, this places the consumer value of domestically grown field tomatoes at \$3.7 billion.

Next, we must add the value of 275 million pounds (ERS estimate) of greenhouse/hydroponic tomatoes produced in the United States. Greenhouse/hydroponic crops are not included in USDA production statistics. These tomatoes likely have a retail value of \$2 to \$3 per pound. To be conservative, an average price of \$2 per pound will be used. Only a few of these high-valued tomatoes currently enter the foodservice market (assume about 5 percent). The greenhouse/hydroponic market segment adds about \$0.5 billion.

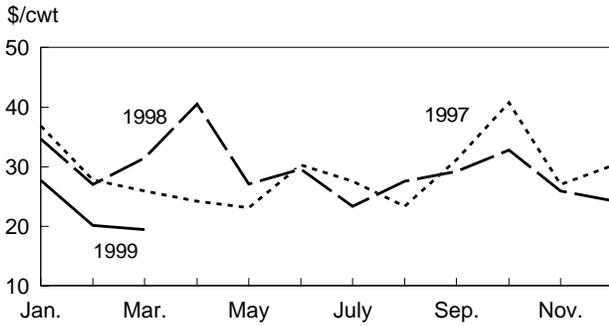
Finally, we must also add the value of net tomato imports of 1.68 billion pounds in 1998. These are sold alongside of domestic products and are valued similarly. Net imports conservatively add another \$2.0 billion to the total. This gives a total consumer value for fresh-market tomatoes of \$6.2 billion. Each of these estimates also takes into account losses within the marketing channel due to damage and normal shrinkage, which averages as much as 15 percent.

Of course, there are a few other qualifiers to this valuation method, including; 1) all tomatoes produced in the field do not make it into the marketing channel (this field loss percentage is largely unknown); and 2) USDA production statistics do not cover all 50 States or home gardens. Some locally produced products, farmer's markets, and roadside sales are not captured in USDA's commercial production series. To complete the analysis, we make the somewhat heroic assumption that these two factors largely cancel each other out.

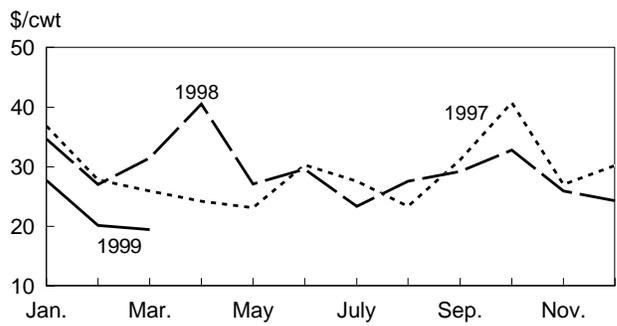
Figure 7

F.O.B. Shipping Point Prices for Selected Fresh Vegetables

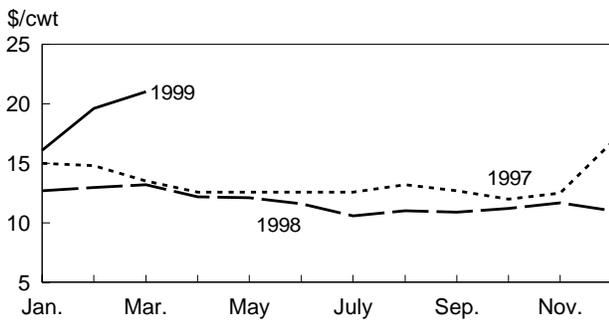
Broccoli



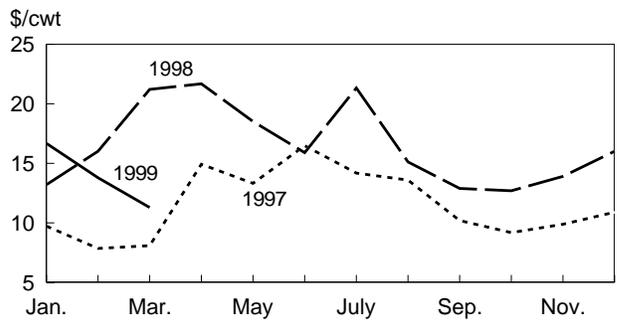
Lettuce



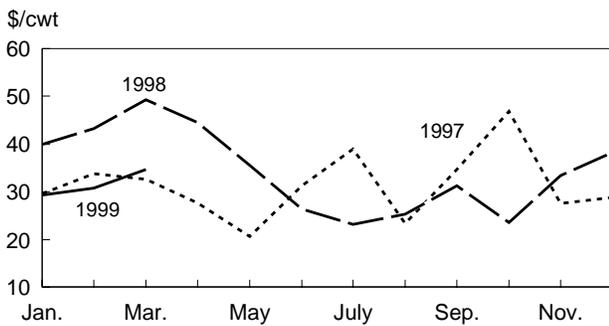
Carrots



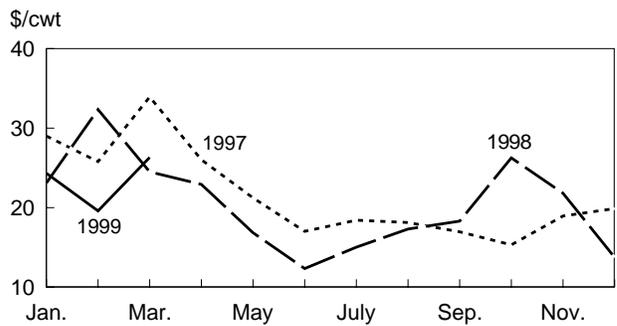
Onions



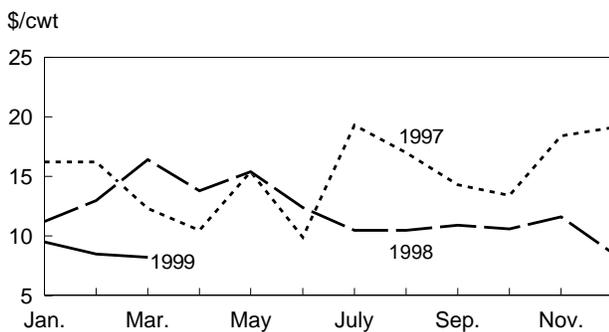
Cauliflower



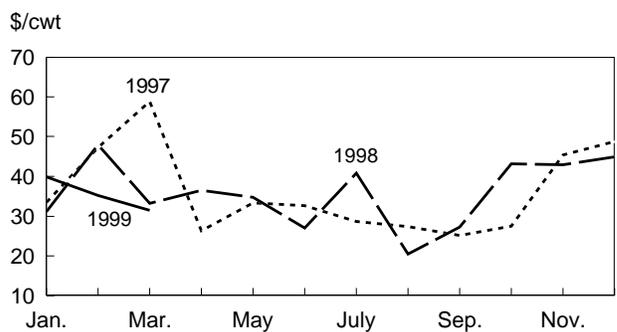
Sweet Corn



Celery



Tomatoes



Source: National Agricultural Statistics Service, USDA.

United States Still a Net Importer

For the fourth consecutive year, the United States will be a net importer of vegetables (includes melons, pulses, mushrooms, and seed) in 1999. This year's deficit may remain near 1998's level as both import and export growth slows. Stronger domestic supplies and lower prices are expected to put a damper on imports, while export growth will continue to be hobbled by the strong dollar and larger foreign supplies of items like dry beans. In 1998, the value of imports jumped 22 percent to \$3.8 billion, with much of the increase reflecting higher prices for fresh-market commodities. Exports totaled \$3.2 billion, up 6 percent from 1997.

Because of low transportation costs, Mexico and Canada have historically been the top two U.S. suppliers, with 50 percent and 19 percent of U.S. vegetable imports. Rounding out the top five import sources are the Netherlands (4.0 percent), China (3.7 percent), and Spain (3.5 percent). About three-fourths of imports from the Netherlands are fresh-market greenhouse-grown vegetables, while 60 percent of imports from Spain are canned artichokes and pimentos. China primarily supplies products like canned mushrooms, canned bamboo shoots, and dried vegetable products.

The import share of U.S. vegetable and melon consumption is rising, climbing from 7 percent in 1990 to 11 percent in 1998. Rising imports have led to increased tension in some areas of the industry (e.g. fresh tomatoes, canned mushrooms, frozen potatoes) as domestic growers cite unfair competition and lowered prices. However, with freer world trade, strong "off-season" demand, and continued interest in tropical and other

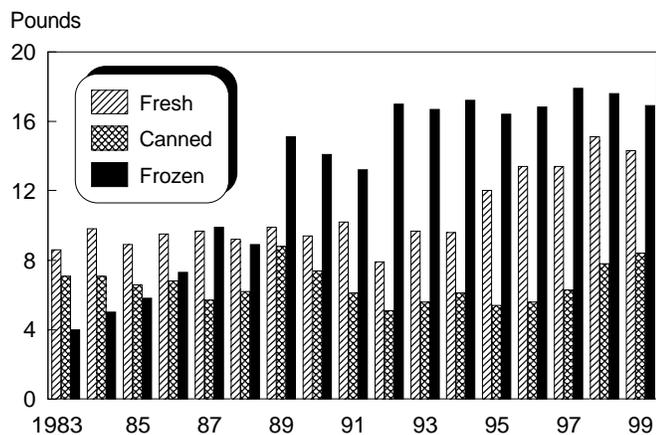
specialty vegetables, vegetable and melon imports are likely to continue rising over the next several years.

As the leading supplier, Mexico tends to receive the most attention from market observers. The value of imports from Mexico has risen 63 percent since 1994 to \$1.9 billion in 1998. However, U.S. imports from Canada have climbed even faster, jumping 152 percent to \$0.7 billion in 1998—the largest increase among the top five suppliers. The reasons behind the increase include the sinking value of the Canadian dollar, the removal of import tariffs, the existence of multi-national corporations operating in both countries, and the rising interest in greenhouse-grown vegetables.

Growth in imports from Canada has been similar among the top three market segments (fresh, canned, frozen) since 1994, with shares of total imports relatively unchanged. U.S. fresh market imports from Canada have risen 154 percent since 1994 to \$320 million in 1998. Greenhouse/hydroponic vegetables, a rapidly expanding specialty market in the United States, represents the major force in this sector. Canada currently has the largest greenhouse vegetable acreage in North America (about 700 acres). Frozen vegetable imports from Canada have risen 162 percent to \$295 million, with three-fourths of the total in french fried potatoes. Most of the french fries enter under contract with fast food firms.

Canada also appears to be shipping the ketchup to go with those fries. Ketchup exports to the United States increased from virtually nothing in 1993 to \$19 million last year. Most of this growth has likely been a reflection of the changing business practices of a major U.S. tomato processor.

Figure 8
Vegetables: Import Share of Consumption 1/



1/ Excludes potatoes, pulses, and mushrooms. Coverage expanded in 1989 for frozen import data.
Source: Economic Research Service, USDA.

Table 2--Selected fresh vegetables: U.S. imports, 1995-98

Item	1995	1996	1997	1998	1997-98 Percent
	--1,000 cwt--				
Asparagus	791	761	886	1,098	24
Snap beans	377	398	460	428	-7
Broccoli	427	536	707	805	14
Cabbage	786	792	877	898	2
Carrots	2,222	2,223	2,230	1,792	-20
Cauliflower	131	168	376	321	-15
Celery	566	565	681	1,060	56
Sweet corn	155	235	230	400	74
Cucumbers	5,720	6,863	6,675	7,233	8
Lettuce, head	518	283	679	229	-66
Onions, all	4,785	6,204	5,712	5,939	4
Tomatoes	13,689	16,251	16,368	18,680	14
Watermelon	3,364	4,553	5,042	4,842	-4
Total	33,532	39,833	40,925	43,725	7

Source: Bureau of Census, U.S. Department of Commerce.

Cash Receipts and Cost Indicators

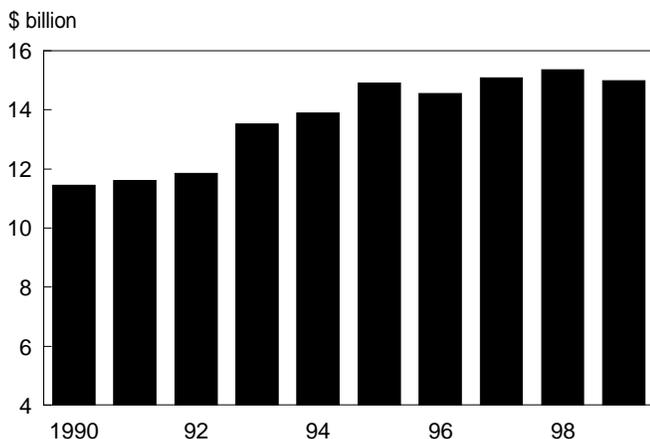
Revenue Up in 1998 But May Fall in 1999

The 1998 estimate for grower cash receipts from the sale of vegetables (including melons, potatoes, pulses, and mushrooms) indicates a 2-percent increase from a year earlier to \$15.3 billion (table 17). This was 15 percent of all crop receipts and about the same level as soybean receipts. Increased fresh vegetable, potato, dry bean, and mushroom revenues more than offset reductions in processing vegetables, sweet potatoes, and dry peas. Receipts for the major fresh market and processing vegetables remained unchanged in 1998 at \$9.4 billion. The value of the 25 major fresh-market vegetables and melons rose 1 percent to \$8.1 billion, while the 10 leading processing vegetables declined 7 percent to \$1.3 billion. Fresh snap beans (up 51 percent), escarole/endive (37 percent), romaine (33 percent), asparagus (25 percent), broccoli (16 percent), and cabbage (14 percent) realized the largest increases in farm value. Lima beans (down 49 percent), garlic (26 percent) and head lettuce (25 percent) each lost value compared with 1997 as both production and prices fell. Except for spinach and cauliflower, cash receipts declined across the board for processing vegetables. In 1999, grower cash receipts are projected to decline to around \$15 billion as lower shipping-point prices pressure fresh vegetable, pulse, and potato revenues and offset projected increases for processing vegetables and sweet potatoes.

Input Prices May Rise

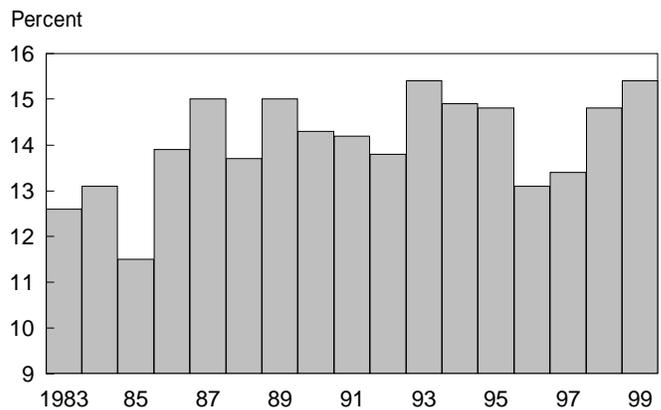
In 1999, prices paid by vegetable and melon farmers for production inputs are projected to rise 1 to 3 percent from a

Figure 9
Vegetables and Melons: U.S. Cash Receipts



1998 preliminary and 1999 forecast.
Source: Economic Research Service, USDA.

Figure 10
Vegetables and Melons: Percentage of U.S. Crop Cash Receipts



1998 preliminary and 1999 forecast.
Source: Economic Research Service, USDA.

year earlier. Prices paid are expected to decline from a year earlier for fertilizer and agricultural chemicals (due mostly to herbicides), with fuel prices lower during the spring, but rising into the summer. More than offsetting any declines will be increases for seed, labor, and machinery. In 1998, ERS estimates suggest the average input costs of vegetable and melon growers increased 1.1 percent. This was less than expected due to a sharp drop in energy-based inputs. Farm wage rates, the most heavily weighted item in the ERS vegetable input price index, are expected to rise 2 to 4 percent in 1999.

Marketing Costs in 1998

At the start of 1999, the Economic Research Service marketing cost index indicated that the prices for production items used by food processors, wholesalers, and retailers rose just 1 percent from a year earlier. Among individual items, the largest increase was in processor's labor costs, which rose 3 percent from a year earlier. Labor was closely followed by the cost of paperboard boxes and containers (up 2.7 percent) and advertising costs (up 2.3 percent). These increases were partially offset by substantially lower costs for short-term interest (down 13 percent) and petroleum fuels (down 31 percent). The decline in world petroleum prices also helped electricity (down 1.3 percent) and transportation (down 1 percent) vendors to offer lower rates. The cost of metal cans and glass containers changed little from a year ago, which will help vegetable canneries maintain their slim margins.

Processing Vegetables

Strong Economy; Strong Demand

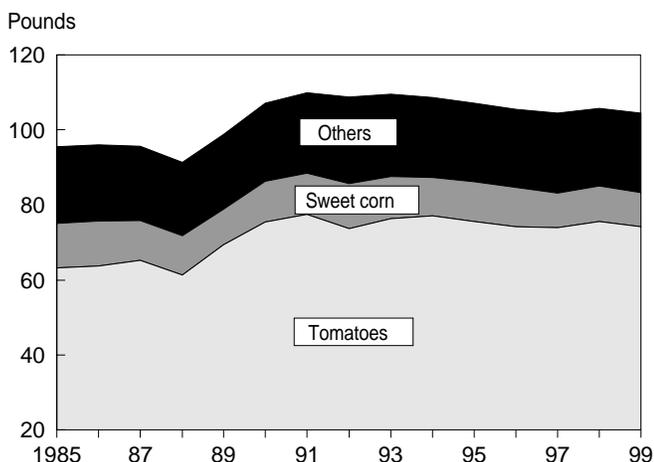
Moderate economic growth and low unemployment will continue to support food demand (including processed vegetables) in both the retail and foodservice industries in 1999. Real disposable personal income increased 3.2 percent in 1998 and is expected to post similar strong gains in 1999. Retail sales at all food stores increased 3 percent to \$443 billion in 1998. A similar increase is expected in 1999. On the foodservice side of the market, strong economic growth helped restaurant sales (eating-places only) rise a bit more than 3 percent to \$229 billion last year. Reflecting the strong economy, full-menu restaurant sales rose faster than fast food sales. The National Restaurant Association expects industry sales to rise nearly 5 percent in 1999.

Per capita use of all processing vegetables (excluding potatoes) totaled 129 pounds in 1998, up 1 percent from a year earlier (table 47). Canning and freezing use each increased 1 percent, with canning use totaling 105.8 pounds per person and freezing use 22.7 pounds. In the year ahead, utilization of processed vegetables is expected to about keep pace with population growth, yielding little change in per capita use.

Output To Rise, Prices Decline

Processors of five selected vegetables (tomatoes, sweet corn, snap beans, green peas, and cucumbers) expect to contract for 1.4 million acres in 1999—up 12 percent from a year ago (table 20). Open-market purchases were higher than usual in 1998 (5 percent of output versus 1 percent) due to reduced contracting in several minor vegetable-processing States. With less open-market buying expected this year, the

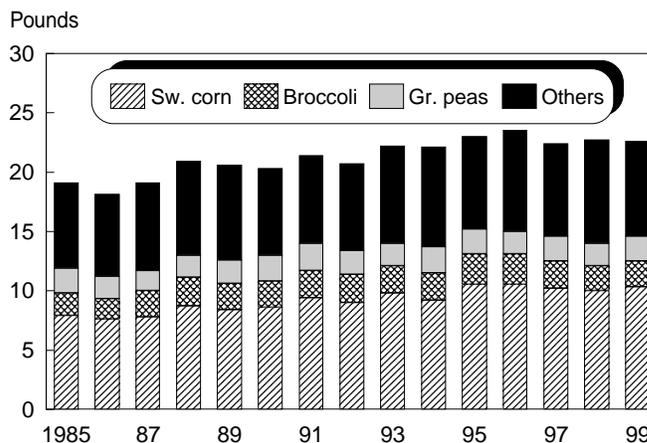
Figure 11
Vegetables for Canning: Per Capita Use



Source: Economic Research Service, USDA.

total acreage increase (contract plus open-market) may be closer to 3 percent, with most of this increase coming from tomatoes. Given average acreage losses and trend yields this coming season, output of the five leading processing vegetables could be 6 to 10 percent higher than a year ago and approach 17 million short tons.

Figure 12
Vegetables for Freezing: Per Capita Use 1/



1/ Excludes potatoes.
Source: Economic Research Service, USDA.

Table 3--Domestic utilization of selected processing vegetables 1/

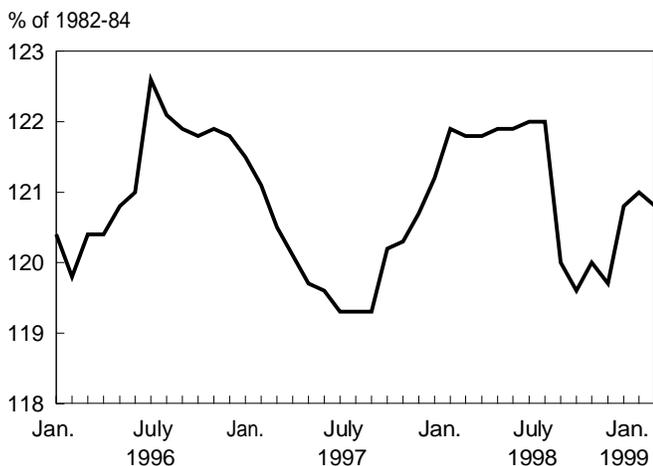
Year	Tomatoes	Sweet	Snap	Green
		corn	beans	peas
Million pounds				
Canning:				
1982	13,959	2,691	974	576
1993	19,721	2,884	1,030	414
1994	20,095	2,654	1,000	379
1995	19,875	2,772	940	416
1996	19,701	2,794	1,037	400
1997	19,806	2,497	991	403
1998	20,418	2,537	1,020	399
1999f	20,235	2,473	1,015	401
Freezing:				
1982	--	1,337	356	385
1993	--	2,529	452	484
1994	--	2,398	510	562
1995	--	2,756	444	553
1996	--	2,791	514	516
1997	--	2,745	478	552
1998	--	2,704	528	524
1999f	--	2,818	543	576

f = ERS forecast. -- = Not available.

1/ Total supply (production, imports, beginning stocks) less exports and ending stocks.

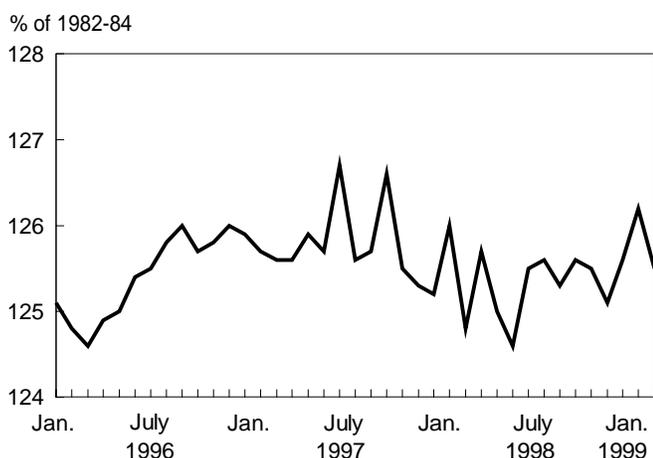
Source: Economic Research Service, USDA.

Figure 13
Canned Vegetables: Wholesale Price Index



Source: Bureau of Labor Statistics, USDL.

Figure 14
Frozen Vegetables: Wholesale Price Index



Source: Bureau of Labor Statistics, USDL.

Economic Research Service (ERS) estimates suggest that canned vegetable stocks on January 1 were 20 percent below a year earlier. The majority of this decline came from processing tomatoes (down about a fifth). However, inventory positions were also likely down for snap beans and sweet corn. Green pea stocks were likely only slightly lower, while pickle stocks were up nearly a fifth. Despite the increase, stocks of pickled cucumbers were not high relative to historical levels, which will likely spur a small increase in total cucumber acreage. In general, the expected increase in canning acreage will likely cause wholesale prices for canned vegetables to weaken over the next year, especially for tomato products. During the first quarter of 1999, wholesale prices for canned vegetables averaged 1 percent less than a year earlier.

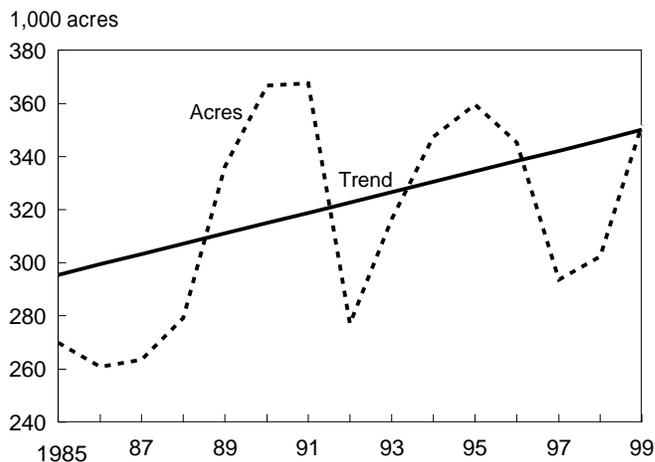
Stocks of frozen vegetables in cold storage on January 1 were up 1 percent and were the third highest on record (table 27). Green pea stocks were up 27 percent and were 8 percent higher than the average for the 1990s. Stocks of frozen green beans were down 7 percent and are now at average levels. Frozen sweet corn (cut-basis) inventories on January 1 were about even with the record high of a year ago. Given few open-market purchases this year, lower total acreage for freezing vegetables will help bring inventories into a more manageable and profitable range for processors. The resulting lower supplies, together with consistent demand may cause wholesale prices for frozen vegetables to rise slightly over the coming year. During the first quarter of 1999, wholesale prices were relatively unchanged from a year earlier.

Processing Tomato Output To Rise

Tomato processors intend to contract for 17 percent more acreage in 1999. California, which now accounts for about 95 percent of the U.S. processing tomato crop, projects output to rise as much as 30 percent, with all other States projected to produce 10 percent more than a year ago. This increase is a reaction to sharply higher wholesale prices for tomato products caused by last year's weather-shortened crop and continued strong consumer demand. The average price for bulk tomato paste, the key raw ingredient used in the manufacture of tomato products like sauces, soups, ketchup, and juice, was up 45 percent during the first quarter of 1999 (table 22). This was the highest paste price since 1990 and reflects a California stock situation (for all tomato products) about 20 percent below a year ago. ERS estimates suggest this was the shortest January 1 inventory position since 1988.

In response to higher market prices and lower inventories, the California Tomato Growers Association base contract

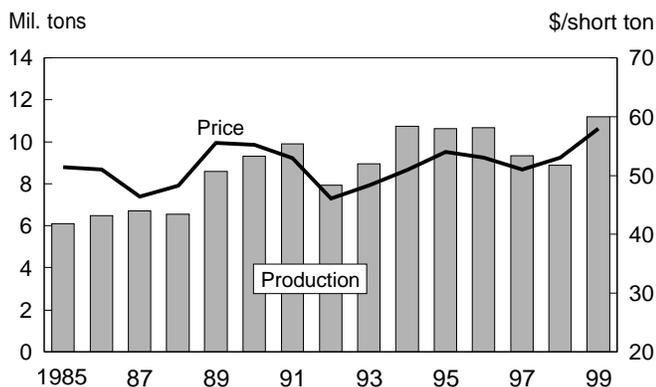
Figure 15
U.S. Processing Tomatoes: Planted Acres



Source: National Agricultural Statistics Service, USDA.

Figure 16

California Processing Tomato Production and Field Prices



1999 forecast.

Sources: National Agricultural Statistics Service, USDA and California Tomato Growers Association.

price for processing tomatoes in 1999 is up 9 percent to a nominal dollar record high of \$58 per short ton. This compares with a base price of \$53 per ton last year—the highest in several years (the lowest in the past 5 years was \$47 per ton in 1993). Given good plant efficiency, this means that the raw product component cost for paste manufacturers will rise from just over 16 cents per pound of paste (31 percent solids) to nearly 18 cents.

In 1998, the value of processed tomato product exports exceeded the value of imports by \$129 million, down from a margin of \$148 million in 1997. Higher prices for tomato products during the second half of the year made the U.S. market more attractive to foreign traders but also discouraged potential buyers of U.S. products. Import volume increased to nearly 5 percent of total domestic tomato use, compared with nearly 4 percent in 1997. Exports used 7 percent of total tomato supplies, the same as in 1997. Canada remained the leading market for U.S. processed tomato exports, accounting for 50 percent of the total value sent to other nations. Japan (12 percent) and Mexico (6 percent) were the next most important foreign buyers of U.S. tomato products.

Per capita use of processing tomatoes was estimated to be 75.6 pounds in 1998, up 2 percent from the previous year. The increase in domestic use was significant since export volume declined 7 percent from the 1997 record high. Despite the fact that estimates of total tomato movement during the calendar year indicate an increase, cursory supermarket volume summaries suggest sales volume was lower in 1998. This suggests that most of the growth in tomato product sales is likely occurring in the foodservice/institutional sector. With a larger crop and an expanding economy supporting foodservice demand for tomato-based foods such as pizza and pasta dishes, domestic use in 1999 will likely be maintained near last year's level of 20.4 billion pounds

(fresh-weight basis). Although production is expected to rise substantially this summer, export volume will not likely recover its previous vigor until late summer when U.S. tomato product prices decline.

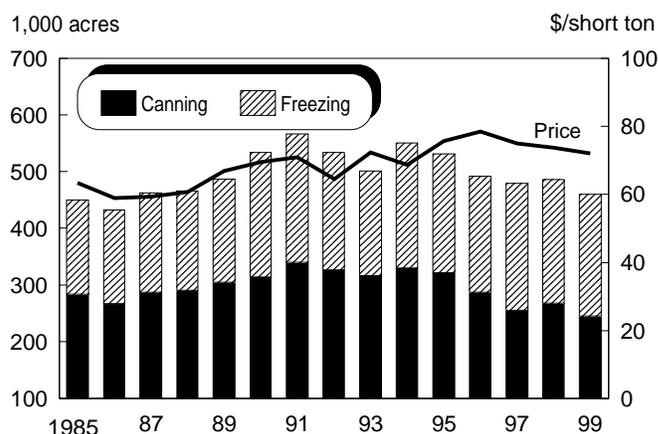
Sweet Corn: Overall Per Capita Use Steady

In 1999, processors expect to contract for 462,200 acres of sweet corn—up 6 percent from a year ago. Canneries expect to increase contract acreage 6 percent this year. However, total canning acreage (contract plus open market) will likely be smaller this season. Manufacturers of canned and frozen corn are not expected to supplement the sweet corn contract pack with open-market purchases as they did in 1998 when open-market purchases accounted for about 10 percent of the pack. Although contract acreage is expected to be up 6 percent, total sweet corn area for freezing may remain just below that of 1998 due largely to ample frozen stocks.

After potatoes and tomatoes, sweet corn is the most popular processing vegetable in the United States. On a fresh-equivalent basis, per capita use of processed sweet corn totaled 19.4 pounds. This level of use has been virtually the same for the past three decades. However, there has been a gradual shift from canned to frozen corn over the years and this shift has continued during the 1990s. In 1995, frozen use “caught up to” canned use and exceeds it today. The reasons offered by researchers for this shift in use range from the popularity of microwave cooking to changing consumer preferences. In 1998, per capita use of canning sweet corn was estimated to be 9.4 pounds, down from an average of 10.3 pounds the previous 5 years. Despite the long-term growth, domestic demand for frozen sweet corn may have softened slightly since peaking in 1996. In 1998, use of sweet corn in frozen forms totaled 10.0 pounds, unchanged from the 1993-97 average, but down from the 1996 peak of 10.5 pounds.

Figure 17

U.S. Processing Sweet Corn: Planted Acres and Prices at the Packinghouse Door



Source: National Agricultural Statistics Service, USDA.

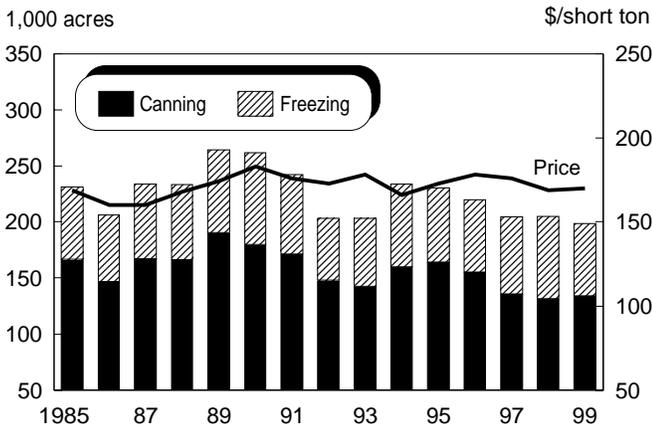
Snap Beans: Canning Acreage To Rise

In 1999, processors expect to contract for 200,500 acres of snap beans—up 14 percent from a year ago. However, like sweet corn, most snap beans will be produced from contract acreage this year, with the total area (contract plus open-market) remaining near that of 1998. Canneries are looking for more product this year to replenish inventories drawn down by two consecutive moderately sized crops. With demand running at roughly 1.5 million pounds per day, freezers have adequate stocks on hand and expect to reduce output slightly this year.

The processed snap bean industry is a fairly steady, mature market, which depends almost entirely on domestic demand.

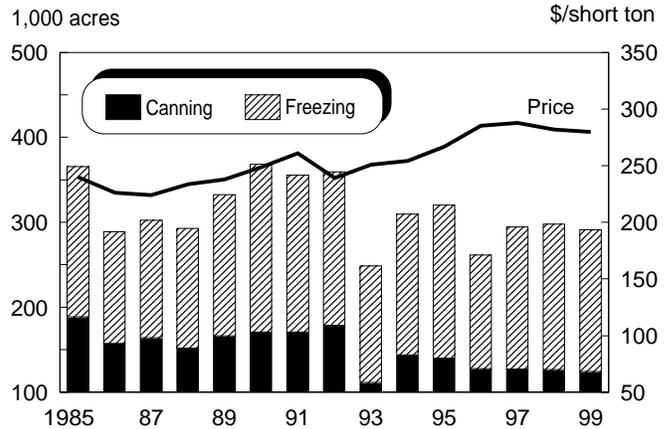
Less than 1 percent of canned snap beans are exported, while less than 3 percent of frozen snap beans are sold to foreign buyers. The basic trends in demand are similar to those of most other processed vegetables, with a slight long-run downward trend in canned use and a corresponding slight upward trend in frozen use. However, since the mid-1980s there appears to have been a lengthy pause in these long-run trends, with fairly stable demand evident for both canned and frozen snap beans. Per capita use of frozen snap beans (on a fresh basis) totaled 2.0 pounds in 1998, only the third time use has reached that record-tying high (1989, 1994). On the canning side, per capita use totaled 3.8 pounds—the same as the average for the previous 5 years and the average for the mid-1980s.

Figure 18
U.S. Processing Snap Beans: Planted Acres and Prices at the Packinghouse Door



Source: National Agricultural Statistics Service, USDA.

Figure 19
U.S. Processing Green Peas: Planted Acres and Prices at the Packinghouse Door



Source: National Agricultural Statistics Service, USDA.

Potatoes

Spring and Winter Production Rises

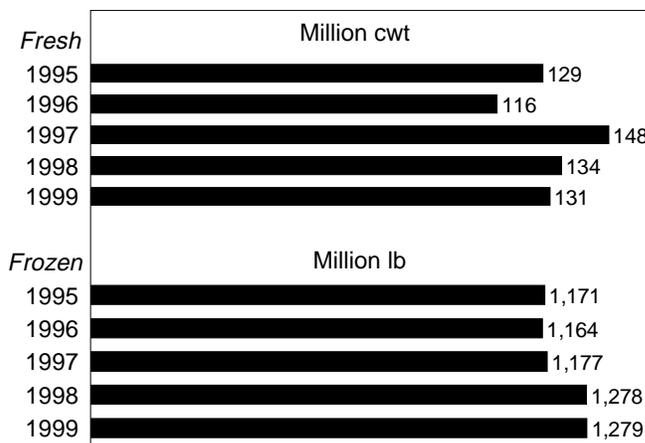
The first estimate of the 1999 spring potato crop is 22.0 million hundredweight (cwt), up 4 percent from last year, but 2 percent below 2 years ago. Harvested acreage was down 5 percent this year, due in part to cutbacks in acreage for chipping potatoes in Florida. Harvested acreage in Florida declined 9 percent from last year but was up 5 percent in California. Florida and California are the two largest spring-season producers.

Overall, spring yields are expected to rise nearly 10 percent from last spring, when El Niño-induced rains caused increased abandoned acreage and decreased yields. This spring, potato growth in California was slowed by cool weather early in the growing season, but the crop has since made good progress and is only slightly behind schedule in April. Harvest will start in early May and continue through mid-July. All other growing areas have also received favorable weather and are expecting good crops.

Production of winter potatoes in 1999 is estimated to be 3.62 million cwt, up 21 percent from 1998 and 5 percent from 1997. Harvested acreage was up 18 percent from 1998, and yields were estimated to be nearly 3 percent higher due entirely to an 11-percent increase in Florida. Yields were down 5 percent in California, where high temperatures after planting caused poor stands, and a December freeze killed some fields. Harvest of winter potatoes was completed by the end of January in California and by the end of April in Florida.

Figure 20

Stocks of Fresh and Frozen Potatoes, April 1



Source: National Agricultural Statistics Service, USDA.

Potato Stocks Down

On April 1, fresh potato stocks were 131 million cwt, down 2 percent from a year ago, and 11 percent below the record level in 1997. April 1 stocks represented 31 percent of fall production in the 15 potato-storage States, 1 percent less than last year. Increased production during fall 1998, continued strong domestic and international demand for processed product, stagnant raw-product prices, and lower recovery rates by processors have all contributed to near-record processing use this year. (Due to lower-than-average solids content in potatoes from last fall's crop, processors have had to

Table 4--Potatoes: Processing use through December 1, monthly and seasonal totals, major States, 1985/86-1998/99

Season	Processed through							Entire season
	December 1	December	January	Potatoes processed during:			Others	
				February	March	April		
	--1,000 cwt--							
1985/86	48,240	11,330	10,285	13,415	14,030	13,425	32,830	143,555
1986/87	43,070	11,660	9,385	12,735	15,310	13,620	34,570	140,350
1987/88	48,045	11,035	12,735	13,320	13,860	12,505	37,980	149,480
1988/89	45,430	11,935	11,205	12,210	14,725	13,360	32,415	141,280
1989/90	54,230	12,595	13,955	13,635	14,285	13,015	29,500	151,215
1990/91	58,250	13,975	14,320	13,950	15,230	15,845	39,135	170,705
1991/92	58,855	12,425	14,370	15,445	15,870	15,310	41,825	174,100
1992/93	57,355	14,125	13,650	15,365	15,065	14,735	43,910	174,205
1993/94	61,305	13,820	14,850	15,990	17,365	17,270	46,115	186,715
1994/95	65,580	16,040	16,700	17,275	18,160	18,390	51,965	204,110
1995/96	71,415	16,275	16,275	17,680	18,090	16,890	42,180	198,805
1996/97	78,240	15,745	16,600	20,160	18,865	18,680	59,245	227,535
1997/98	68,355	15,265	15,500	19,390	19,700	17,585	56,297	212,092
1998/99	73,170	15,920	19,000	20,578	20,382	--	--	--

1/ Excludes potatoes used for chips in Maine, Michigan, Minnesota, North Dakota, and Wisconsin.

Source: National Agricultural Statistics Service, USDA.

use more raw product than normal to produce a given amount of finished product [fries, hash-browns, etc.]. Processor use is up 8 percent from last year, and is only less than 1 percent below the record pace set in the 1996/97 season (when fall production was a record 454 million cwt). However, the processing pace may slow somewhat later this spring as quantities of quality potatoes for processing dwindle, particularly if processors anticipate better quality from summer and fall crops.

Despite the relatively poor overall processor recovery rates this year, the increased processing use this season has caused frozen stocks to remain virtually unchanged from a year ago. Stocks of all frozen potato products on April 1 were 1.28 billion pounds. French fry stocks were just 2 percent below a year ago, while stocks of all other frozen potatoes were up 11 percent. The decline in fry stocks and increase in other frozen (hash browns, tater-tots, etc.) may also be due in part to the lower quality of the 1998 fall crop. Fries tend to require higher quality potatoes for production than do most other frozen potato products.

Grower Prices Down in 1998/99

With increased supplies this season, grower prices for all potatoes during the October through February period averaged 5 percent below year-earlier levels. Fresh-market potato prices averaged 7 percent below a year ago, while processing potatoes were down 4 percent from the same period a year ago. The Producer Price Index (PPI) for frozen french fries has also averaged slightly below year-earlier levels (down 1 percent), while the PPI for Irish potatoes for consumer use shows a 4-percent increase from October to February.

Although grower prices have averaged lower than a year ago through February, retail prices have averaged slightly higher than last year. For the October through February period,

Table 5--Potatoes: U.S. retail prices, by type, 1985-99

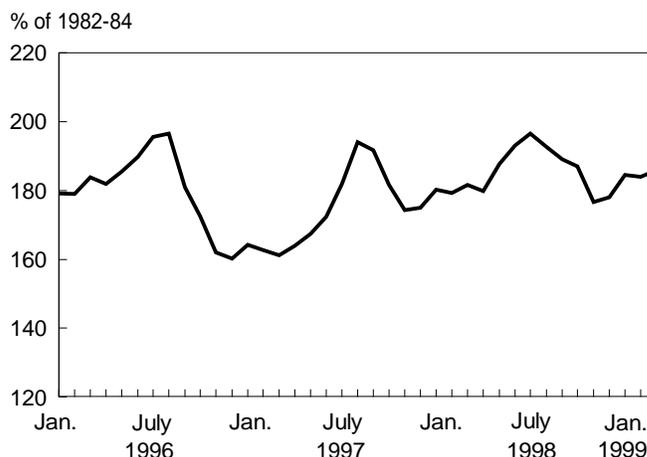
Year	Fresh	French fries	Potato chips
	--Dollars/pound--		
1985	0.208	0.706	2.606
1986	.241	.696	2.675
1987	.276	.690	2.751
1988	.261	.698	2.619
1989	.342	.751	2.861
1990	.371	.836	2.958
1991	.330	.853	2.968
1992	.305	.869	2.901
1993	.348	.862	2.883
1994	.374	.862	2.971
1995	.379	.861	3.005
1996	.381	.895	3.057
1997	.354	.937	3.130
1998	.376	1.006	3.162
1999 f	.375	1.000	3.220

f = ERS forecast.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Figure 21

Fresh Potatoes: Retail Price Index



Source: Bureau of Labor Statistics, USDL.

fresh retail prices have averaged nearly 3 percent higher than a year ago, and the Consumer Price Index (CPI) for fresh potatoes was just over 2 percent higher. The rise in retail price may be partially attributed to smaller supply of high-quality potatoes for market. Retailers may be charging a slight price premium for better quality fresh potatoes. The retail price for frozen french fries has also averaged higher than a year ago, up nearly 5 percent for the period of October through February.

It is difficult to determine exactly what will happen to grower prices for the remainder of the 1998/99 season. The price-gap between this year and last closed between October and December, but has since widened. The preliminary grower price for all potatoes for March 1999 is 9 percent below a year ago. With the supply of high-quality potatoes from the 1998/99 crop dwindling, and the new crop approaching, many processors may be content to slow down production this spring and summer, and wait for new-crop potatoes to process this fall. Early-season processing varieties can become available as early as July. If demand remains sluggish in anticipation of the new crop, the 1998/99 season-average price may fall even further below the \$5.62 per cwt average of 1997/98.

Will Fall Acreage and Production Rise Despite 2 Years of Lower Prices?

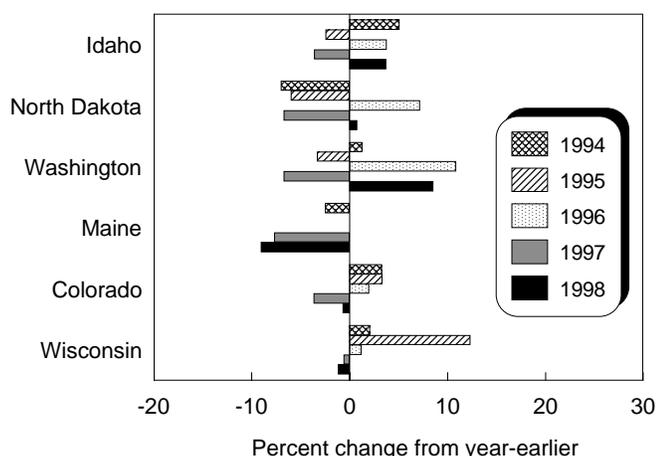
Although grower prices decreased for the second consecutive year in 1998/99, it is not clear that this will signal an acreage and production reduction this fall. An Economic Research Service (ERS) forecasting model predicts a 3-percent decrease in planted acreage for 1999 (all seasons). Although the model does include several significant variables, including previous year prices, there appear to be several factors currently at work in the market that may counteract the effects of a 2-year decline in grower prices.

Perhaps most significant is the relatively poor outlook for competing crops in several major growing areas. Growers in the Columbia Basin of Washington did not fare well with sugarbeets last year, and many may be looking to shift some sugarbeet acreage to potatoes this fall. Crops such as wheat and dry peas are competing crops in many areas and may also appear relatively unattractive this season. So even at reduced prices, potatoes may still look more attractive to some growers than other crops. This indicates that overall potato acreage could actually increase this fall.

If fall acreage were to increase just 1 to 2 percent from a year ago, and if yields returned to long-term trend levels, 1999 potato production (all seasons) would approach 482-487 million cwt (up 1 to 2 percent from last year). A 2-percent increase in fall-season area, coupled with yields just slightly above long-term trend, could push production for all seasons over 490 million cwt. While it is not likely that the 1996 record crop of 499 million cwt will be matched this year, it is highly likely that this will be the second largest crop on record. The U.S. Department of Agriculture will issue its first official estimate of planted acreage of fall potatoes in July.

Increased production in the United States this year would likely trigger a third consecutive year of reduced grower prices. While domestic and foreign demand for U.S. potato products remains strong, increased production could combine with improved processing recovery rates to make marketable supplies of potatoes increase by more than 1 to 2 percent. While frozen processors may indeed need to continue expanding output of finished product to meet growing export demand, improved recovery rates would allow them to do so without substantially increasing raw product procurement. Additionally, competition from Canada in both fresh and processed potato products continues to increase, putting further downward pressure on prices.

Figure 22
U.S. Potato Acreage: Leading States



Source: National Agricultural Statistics Service, USDA.

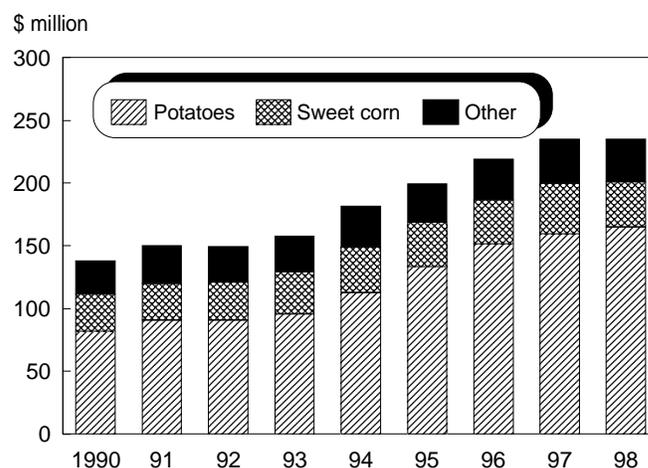
Potato Trade Surplus Rises in 1998

The U.S. trade surplus in potatoes increased nearly 7 percent in 1998 to \$388 million after 2 years of declines due to increasing imports of frozen french fries from Canada. Total U.S. potato exports were valued at \$757 million in 1998, compared with imports of \$369 million. Imports of fries from Canada continued to grow, but were more than offset by increased exports of potato chips (up 52 percent in value, to \$247 million) and fries (up 8 percent to \$324 million).

The strong growth in chip exports, and perhaps some of the growth in fry exports, was due to the poor fall-1998 potato crop in Europe. Exports of processed products, led by chips, will likely continue to benefit from the European shortage until the new crop is harvested this fall. A return to normal production in Europe this fall would likely lead to reduced chip exports toward the end of this year and into 2000. Fry exports would likely be less affected by improved European production, as the United States and the Netherlands (the primary European exporter of fries) traditionally serve different world markets. The Netherlands export primarily to other European Union countries, while the primary export markets for the United States are in Asia and the Pacific Rim.

In December, the Canadian Food Inspection Agency amended the regulations prescribing standard container sizes for frozen french fried potatoes by establishing new standard container sizes ranging from 2 to 20 kilograms. U.S. exporters of frozen french fries have complained for years about Canada's strict packaging rules, arguing they limited U.S. sales to Canada's foodservice industry. This change may result in greater opportunities for U.S. frozen french fries in Canada and comes at a time when the U.S. industry is under pressure from rising imports of Canadian french fries.

Figure 23
Value of Frozen Vegetable Exports to Japan



Source: Bureau of the Census, USDC.

Sweet Potatoes

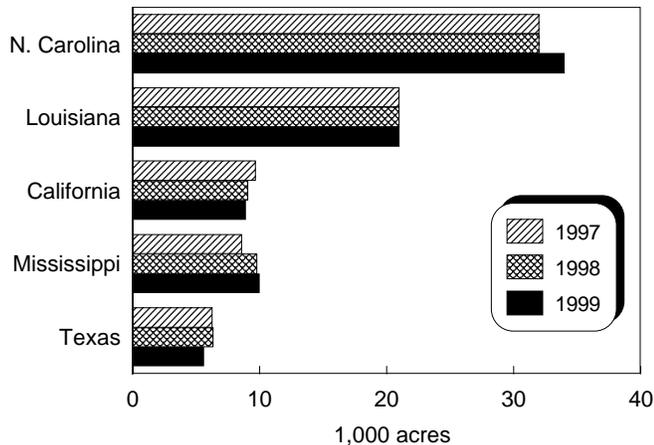
Acres Unchanged for 1999

U.S. sweet potato growers intend to plant 86,700 acres this spring, virtually unchanged from a year ago, and just 1 percent above 1997 (table 38). Acreage increases are expected in Mississippi (up 2 percent from a year ago) and North Carolina (up 3 percent). All other major sweet potato-producing States will plant the same or less area than last year. The largest acreage decrease is expected in Texas, where growers intend to plant 800 fewer acres of sweet potatoes than a year ago (a 12-percent decrease), perhaps due in large part to last year's extremely low yields due to severe drought. This decrease will be more than offset by the 1,000-acre increase expected in North Carolina, the largest sweet potato-producing State.

Poor growing conditions were not limited to only Texas last year. In fact, much of the South was hampered by drought last summer, which caused overall U.S. sweet potato yields and production to fall 12 percent and 11 percent from 1997. Yields in Louisiana (the second largest sweet potato-producing State) last year were down a third from 1997 and a half from 1996. This year, Louisiana growers have indicated no change in planted acreage from last year.

If yields in the United States return to trend (160 per cwt) this year, the 1999 crop could total nearly 13.4 million cwt, up 12 percent from last year, and nearly the same as 1997. A larger crop would likely trigger lower grower prices, perhaps in the \$14.00 to \$15.00 per cwt range for the season average. However, with domestic demand seeming to stabilize somewhat in recent years, and increasing export demand, the 1999 season-average price may not decline significantly from the preliminary 1998 season-average price of \$15.80.

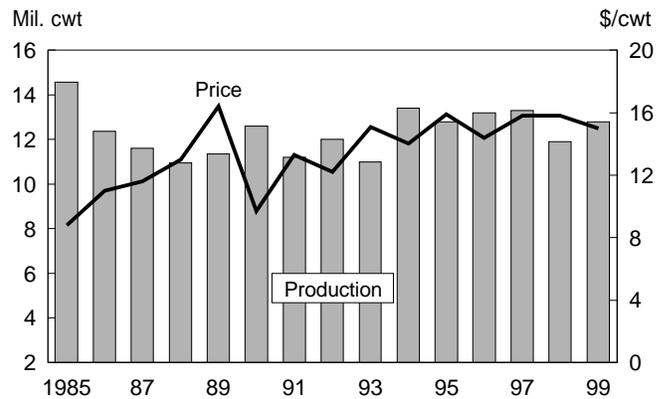
Figure 24
Sweet Potatoes: Planted Acreage for Major States



Source: National Agricultural Statistics Service, USDA.

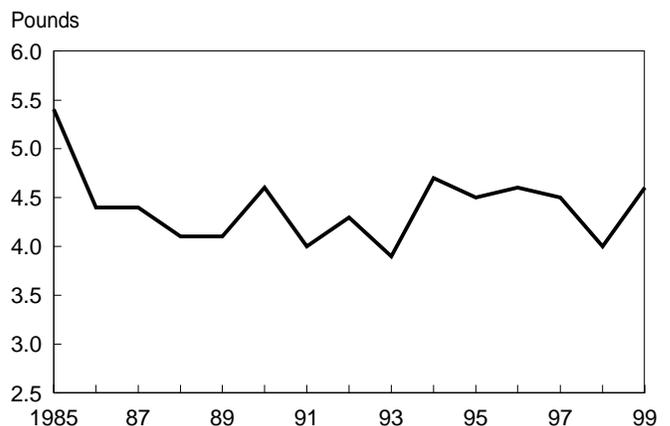
Despite last year's smaller crop, the 1998 preliminary season-average price of \$15.80 per cwt is virtually unchanged from 1997 (although it may rise slightly before it is finalized). F.o.b. shipping-point prices in Louisiana and North Carolina were about the same or slightly higher than a year ago during the high volume months of October, November, and December. However, since that time, the January through March prices from these areas have been about 4 to 5 percent higher than the previous year. This recent price rise may not have a dramatic effect on the season-average price due to volume, but may be a factor influencing many growers in Louisiana and North Carolina to plant the same or more acreage this spring.

Figure 25
Sweet Potatoes: Production and Grower Prices



Sources: National Agricultural Statistics Service and Economic Research Service, USDA.

Figure 26
Sweet Potatoes: Per Capita Use



Source: Economic Research Service, USDA.

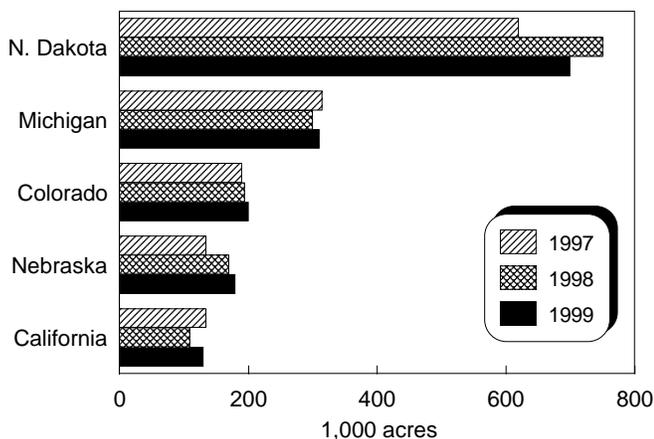
Outlook Clouded by Rising Stocks, Low Prices

Despite relatively low prices, U.S. dry bean output may increase from last year's level. USDA's *Prospective Plantings* report indicated that dry bean growers plan to seed 2 percent more acres this spring. Most of this increase will likely be in white beans (e.g. navy and limas) and in the smaller colored beans (e.g. red kidney and cranberry). Acreage devoted to pintos, the top bean class, will likely fall due to burdensome stocks and deteriorating prices.

In the current marketing year which ends in August, estimated gross revenue flowing into the production sector increased an estimated 5 percent to \$605 million. Another positive last year was a 38-percent jump in overall export volume. However, the 1999/2000 dry edible bean market outlook is clouded by soft dry bean prices, uncertainty over exports, and large stocks of pinto beans (among others). With dry bean prices drifting lower into the spring planting season, some growers may decide to plant crops other than beans (e.g. soybeans in Michigan, wheat in North Dakota, etc). Major field crops such as soybeans offer Commodity Credit Corporation loan rates that may end up being more attractive to growers than current or expected prices for most classes of dry beans.

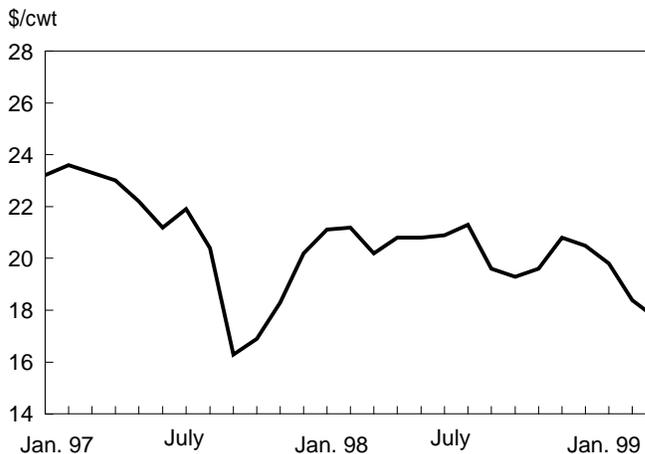
Further complicating the domestic outlook is that Canadian growers face the same dilemma and are expected to plant as much as 40 percent more dry bean acreage this year. The majority of these additional acres will be white beans (largely navy) with some increase in black, kidney, and cranberry beans also possible. Canada, which exports

Figure 27
**Dry Edible Beans:
 Planted Acreage for Major States**



Source: National Agricultural Statistics Service, USDA.

Figure 28
Dry Edible Beans: Monthly Grower Prices



Source: National Agricultural Statistics Service, USDA.

roughly 80 percent of its production, will continue to be an important competitor in world white bean markets.

In addition, Mexico expects a strong dry bean crop this year. Thus, U.S. exports to Mexico will decline from a year ago, with U.S. beans again largely serving the upper end of the Mexican market. Pinto beans likely accounted for more than half of all U.S. dry beans imported by Mexico, with black beans accounting for another fifth. Exports of Great Northern beans to Iraq may also be in some jeopardy due to the current instability in the region. However, dry weather in Turkey may leave output in that nation below expectations and may yet provide an avenue for U.S. Great Northern beans this coming year.

Although higher stocks were partly responsible for lower prices, a portion of the price weakness this winter was a reaction to events (or non-events) in Mexico. The primary focus was on the delay (continuing at this writing) in announcing the auction date for import certificates. These permits are supposed to cover imports during the January to December period. This failure to offer import permits during the first quarter disrupted the normal flow of product through the market and imparted an air of uncertainty to U.S. dry bean markets. This weak market undertone even spread to some bean markets not directly affected by Mexican trade (e.g. Great Northern beans). As a result, U.S. dry bean grower prices were pressured during the first quarter (down 8 percent). The first quarter price slump hit hardest in States that have a large percentage of their crop in pinto beans, including Colorado (prices were down 33 percent), Idaho (down 23 percent), and North Dakota (down 19

percent). This slide in dry bean prices is expected to end (at least temporarily) when the auction of certificates takes place and exports to Mexico resume.

Pinto Market Weak

The 1998/99 pinto bean market can be best characterized as weak. Dealer prices in early March were 28 percent lower than a year earlier. The only lower March price this decade was during the 1991/92 crop year. Economic Research Service (ERS) estimates of pinto bean stocks suggest January 1 stocks were burdensome, although still well below the record 1991/92 level. Production is expected to decline this year, but may not fall enough to make a dent in stocks. Thus, with stocks high and export opportunities uncertain, pinto bean dealer prices during the 1999/2000 marketing year could resemble those seen in 1991/92 (\$16-\$17).

Pinto bean export volume during calendar 1998 surged 93 percent from 1997's low levels. Most of the increased volume went to Mexico, Haiti, and the Dominican Republic. Pinto bean exports were valued at \$68 million, and the average export unit value rose 9 percent to \$26.30 per cwt. In the coming year, with stronger output in Mexico, it is likely that export volume will fall below last year's level of 2.6 million cwt. However, the lower prices expected in the coming season may enhance competitiveness in world markets and could keep annual volume around 2 million cwt.

In 1998, U.S. per capita use of pinto beans rose slightly to 3.7 pounds—the highest since 1992's record of 3.8 pounds. Total domestic utilization was an estimated 990 million pounds—a record high. With ample supplies and lower prices likely this year, per capita use of pintos is expected to reach a record-tying 3.8 pounds. Given the likelihood of another year of relatively strong production in 1999, this level of use could be maintained into the year 2000, with prices expected to remain low throughout at least the first half of that year as well.

Navy Bean Production To Swell

March dealer prices for navy beans were 20 percent above a year ago and were the third highest this decade. As one of the few major bean classes that currently appears to be profitable, growers in Michigan, Minnesota, and North Dakota likely planted extra navy bean acreage in 1999. The industry just completed working off a burdensome stock situation and is now sitting at the lowest stock levels this decade. Barring a weather disaster, this situation is bound to change in the coming year. Large supply changes tend to be destabilizing in the navy bean market because domestic and foreign demand are relatively mature, changing little from year to year. In addition, an expected increase in the Canadian pea bean crop will add to exportable supplies from North

America. Thus, a large increase in U.S. production could send dealer prices in this market below \$20 by year-end. Annual U.S. domestic and export demand is likely close to 5.7 million cwt. In most years, anything above this results in building stocks.

With prices higher the second half of the year, export volume declined 8 percent in 1998. Exports to the United Kingdom declined 21 percent, while sales to the second leading export market, Italy, remained unchanged. Navy bean exports were valued at \$42 million. Little change in export volume is expected in 1999. With stocks the lowest since 1986 and prices higher, U.S. per capita use of navy beans declined to 1.2 pounds in 1998. Increased production and lower prices will likely allow some recovery in per capita use in 1999.

Dry Bean Farms Fewer and Larger

According to the 1997 Census of Agriculture, there were 10,911 farms producing dry edible beans in the United States—17 percent less than in 1992. Although there are now fewer growers in dry beans, acreage and production has continued to rise, meaning the average dry bean farm continues to become larger. As a result, nearly 84 percent of production came from operations with 100 or more acres of dry beans in 1997—up from 77 percent from 1992. The most common dry bean acreage remains 100 to 249 acres, with 29 percent of farms fitting into this classification compared with 26 percent in 1992.

In Michigan, the number of farms harvesting dry beans declined 32 percent. All the decline came in farms harvesting less than 250 acres of dry beans. The number of farms in Michigan harvesting more than 250 acres of dry beans actually increased 15 percent. These larger farms also increased their share of the State's crop to 54 percent—up from 41 percent in 1992.

The 1997 Census of Agriculture also shows that 34 percent of dry bean area is now produced under irrigation—down from 42 percent in 1992. Given the apparent rise in dryland bean acreage this decade, an extended summer drought could have a significant negative effect on yield and production. Aside from El Nino-related problems in California, growing weather was about average in the United States in 1998. With a La Nina weather episode forecast for the next 3 to 6 months, sufficient moisture is expected in the major bean-producing States. Although far from certain, a reduced drought potential can be an important factor in the overall production outlook. Dry bean yields have increased from 1,235 pounds in 1970 to 1,611 pounds this past season, with trend yields for 1999 running 2 percent above the actual 1998 level.

Mushroom Imports Down in 1998, But Fresh and Straw Continue To Rise

Imports of mushrooms for all uses decreased in 1998 to nearly 155 million pounds, compared with 164 million in 1997 and 174 million in 1995, the highest on record. The fresh or chilled category rose 40 percent to 21 million pounds last year. The straw category also continues to trend upward as imports were nearly 15 million pounds last year. Most of the straw mushroom imports are supplied by Taiwan and Indonesia, while most of the fresh and chilled imports are supplied by Canada. Frozen and dried imports were higher, but whole, sliced, and the "all other" categories were lower (table 49). Mushroom imports were lower from China, Indonesia, Hong Kong, and Chile, but higher from Taiwan, Mexico, the Netherlands, India, and some others (table 48).

Mushroom imports were valued at \$145 million (U.S. Dept. of Commerce, Customs Service) in 1998, compared with \$150 million a year earlier. China was the major supplier, with \$38 million, followed by Indonesia, Canada, and India (table 50).

Preliminary projections are that world mushroom production for all uses will be nearly unchanged in 1998/99 at 4.56 billion pounds. Production in 1997/98 was estimated at a record 4.58 billion pounds (table 51). China's production is about 1.13 billion pounds, or 25 percent of the world total, followed by the United States at 818 million pounds (18 percent), the Netherlands (10 percent), France (8 percent), and United Kingdom (5 percent).

USITC Makes Final Determination In Processed Mushroom Case

The U.S. International Trade Commission (ITC) announced its final determination that the U.S. preserved mushroom industry suffered economic injury. This injury was found to have resulted from the selling of imports from China, India, and Indonesia at less than fair value (LTFV).¹

The Commission transmitted its determinations in these investigations to the Secretary of Commerce on February 11, 1999. The views of the Commission are contained in USITC Publication 3159 (February 1999), entitled Certain Preserved Mushrooms from China, India, and Indonesia: Investigations No. 731-TA-777-779 (Final). The Commission further issued a final phase notice of scheduling which was published in the *Federal Register*.

The final ITC determinations completed action on the antidumping petitions filed in January 1998 by the Coalition for Fair Preserved Mushroom Trade. The ruling mandates the duties to be paid on processed mushroom products that are exported from these countries to the United States. The duties range from 121 to 198 percent for China; from 6 to 243 percent for India; and from 7 to 22 percent for Indonesia. Antidumping duties of 148.5 percent were placed on Chile late last year. The ITC issued orders that these antidumping duties will stay in place for at least 5 years. During the fifth year of each order, the U.S. Department of Commerce and the ITC will conduct a "sunset" administrative review to determine whether the domestic industry would be reinjured by importers were the order to be removed on the fifth

anniversary. If Commerce and the ITC find that the domestic producers would be injured by revocation of the order, then the order will remain in place for at least another 5 years.

The antidumping petition was preceded by a drop in the price for domestic mushrooms going into the processed market to their lowest level in 12 years, as the volume also dropped to its lowest point in a decade. With the processed mushroom market supplied with low-priced imports, growers turned to the fresh market, depressing the market in that area. Imports from China, India, Indonesia, and Chile have dropped significantly in the past several months and the outlook is that more domestic mushrooms will likely be diverted to processing markets, reducing pressure on fresh supplies.

¹For purposes of these investigations, certain prepared mushrooms are of the species *Agaricus bisporus* and *Agaricus bitorquis*, whether imported whole, sliced, diced, or as stems and pieces. Preserved mushrooms refers to mushrooms that have been prepared or preserved by cleaning, blanching, and sometimes slicing or cutting. These mushrooms are then packed and heated in containers, including but not limited to cans or glass jars, in a suitable medium that may include, but is not limited to, water, brine, or butter (butter sauce). Included within the scope of the investigations are brined mushrooms, which are presalted and packed in a heavy salt solution to provisionally preserve them for further processing. Excluded from the scope of the investigations are: (1) all other species of mushroom, including straw mushrooms; (2) all fresh and chilled mushrooms, including refrigerated or quick blanched mushrooms; (3) dried mushrooms; and (4) marinated, acidified, or pickled mushrooms, which are prepared or preserved by means of vinegar or acetic acid, but may contain oil or other additives.

The Role of Exports in the U.S. Fruit and Vegetable Industry

Gary Lucier and Susan Pollack¹

Abstract: Exports of fruits and vegetables have expanded this decade, with rising U.S. supplies and the gradual lowering of trade barriers. While the domestic market remains the major outlet for almost all fruits and vegetables raised in the United States, the role of exports has steadily increased. In 1997, 9.6 percent of the total supply of U.S. fruit, tree nuts, vegetables, and melons were exported—26 percent more than in 1990. The fruit industry is more export-dependent than the vegetable industry, with 11.5 percent of fruit and tree nut supply exported compared with 8.4 percent of vegetables. Americans generally consume more vegetables than fruit, partially explaining the greater reliance on exports for the fruit industry.

Keywords: Trade, exports, fruits, vegetables, tree nuts, dry beans, supply

Exports of fruits and vegetables continued to expand in the nineties as U.S. supplies rose and trade barriers fell. Fruits, tree nuts, vegetables, and pulses accounted for nearly 17 percent of U.S. agricultural export value in 1998—up from about 14 percent in 1990. While the domestic market remains the major outlet for almost all fruits and vegetables grown in the United States, foreign market growth has outpaced domestic growth. New or expanded markets are continuously being sought to expand market potential.

In 1997, 9.6 percent of the total supply (volume) of U.S. fruit, tree nuts, vegetables, and melons was exported, 26 percent more than in 1990 (tables A-1 and A-2). The fruit industry is more export-dependent than the vegetable industry, with 11.5 percent of fruit and tree nut supply exported and only 8.4 percent of all vegetables and melons.

Americans generally consume more vegetables than fruit, partially explaining the greater reliance on exports for the fruit industry. The difference is even greater for fresh produce, with 24.6 percent of fresh fruit supply exported in 1997 compared with only 7.6 percent of fresh vegetables and melons. Export dependency of specific commodities within the fruit and vegetable industries also varies.

As industries become more dependent on the export market, they must also contend with new marketing risks besides those already inherent in these industries (e.g. inclement weather and import competition). Marketing internationally requires adjustments to such things as varying macroeconomic situations which affect exchange rates and final demand (e.g. the recent Asian monetary crises). It also requires careful study of the target markets to gain an understanding of the specific demand criteria of foreign consumers.

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Table A-1--Fruit and vegetable exports as a percent of supply, 1997 1/

Item	Exports	Supply	Exports as
			a percent of supply
	-- Mil. lbs. --		Percent
Vegetables:			
Fresh vgs. & melons 2/	3,698	48,723	7.6
Fresh, excl. potatoes	3,255	40,126	8.1
Melons	443	8,597	5.2
Potatoes, all	3,847	44,535	8.6
Fresh-market	670	13,500	5.0
Processing	3,177	31,035	10.2
Canned 2/	3,912	49,838	7.8
Frozen 2/	924	11,191	8.3
Sweet potatoes	30	1,420	2.1
Dry beans	801	4,373	18.3
Dry peas & lentils	384	759	50.5
Mushrooms, all	25	1,113	2.3
All vegetables	13,621	161,952	8.4
Fruits:			
Fresh, all	5,089	28,098	18.1
Excluding bananas	5,089	20,690	24.6
Frozen	110	1,849	5.9
Canned 3/	90	5,481	1.6
Dried	1,631	5,186	31.5
Juice	3,749	54,825	6.8
Tree nuts	523	1,486	35.2
All fruits & nuts	11,192	96,925	11.5
Fruit & vegetables			
Fresh, incl. fresh potatoes	9,457	90,321	10.5
Excluding bananas	9,457	82,913	11.4
Frozen (incl. potatoes)	2,953	33,420	8.8
Canned (incl. potatoes)	4,051	55,847	7.3
Other 4/	8,352	79,027	10.6
All fruits & vegetables	24,813	258,615	9.6

1/ All data are expressed in terms of fresh weight. 2/ Excludes fresh potatoes.

3/ Includes pineapple. 4/ Includes sweetpotatoes, dry beans, dry peas, mushrooms, fruit juice, dried fruits, tree nuts, dehydrated potatoes, and potato chips.

Source: Economic Research Service, USDA.

Table A-2--Fruit and vegetable exports as a percent of supply, 1990 1/

Item	Exports	Supply	Exports as
			a percent of supply
-- Mil. lbs. --			Percent
Vegetables:			
Fresh vgs. & melons 2/	2,685	38,774	6.9
Fresh, excl. potatoes	2,463	32,406	7.6
Melons	223	6,368	3.5
Potatoes, all	1,719	34,666	5.0
Fresh-market	327	12,019	2.7
Processing	1,392	22,647	6.1
Canned 2/	1,604	45,948	3.5
Frozen 2/	689	9,535	7.2
Sweet potatoes	15	1,318	1.1
Dry beans	1,107	4,236	26.1
Dry peas & lentils	282	437	64.6
Mushrooms, all	32	962	3.4
All vegetables	8,134	135,877	6.0
Fruits:			
Fresh, all	4,100	27,379	15.0
Excluding bananas	4,100	21,290	19.3
Frozen	60	2,183	2.7
Canned 3/	96	5,257	1.8
Dried	1,559	5,209	29.9
Juice	2,311	42,660	5.4
Tree nuts	488	1,369	35.6
All fruits & nuts	8,614	84,057	10.2
Fruit & vegetables			
Fresh, incl. fresh potatoes	7,113	78,172	9.1
Excluding bananas	7,113	72,083	9.9
Frozen, incl. potatoes	1,592	26,130	6.1
Canned, incl. potatoes	1,718	51,667	3.3
Other 4/	6,325	63,966	9.9
All fruits & vegetables	16,748	219,935	7.6

1/ All data are expressed in terms of fresh weight. 2/ Excludes potatoes.

3/ Includes pineapple. 4/ Includes sweet potatoes, dry beans, dry peas, mushrooms, fruit juice, dried fruits, tree nuts, dehydrated potatoes, and potato chips.

Source: Economic Research Service, USDA.

Vegetables

Foreign sales have become increasingly important within U.S. vegetable and melon markets. Exports claimed 8.4 percent of the 162 billion pounds in total U.S. vegetable supplies during 1997. This is up from 6 percent of supplies exported in 1990. Although the share of supply exported varies substantially among commodities, there is amazingly little variation across major aggregate commodity groupings. While 8.1 percent of fresh-market vegetables (excluding potatoes) were exported in 1997, 7.8 percent of canned vegetables and 8.3 percent of frozen vegetables were sent to other countries.

The most export-dependent vegetables are (table A-3):

- Onions for dehydration, 67 percent;
- Dry edible peas & lentils, 51 percent;
- Fresh-market cauliflower, 32 percent;
- Fresh-market broccoli, 19 percent;
- Dry edible beans, 18 percent;

Table A-3--Selected vegetables and melons: Share of supply exported

Crop	1975-77	1985-87	1995-97
	--Percent--		
Fresh:			
Potatoes	7.0	2.9	4.5
Tomatoes	6.8	7.0	6.3
Lettuce, head	6.1	8.6	6.0
Onions, dry bulb	6.4	5.2	8.5
Broccoli	---	14.4	18.6
Sweet corn	---	3.6	4.7
Cauliflower	---	13.7	31.8
Asparagus	10.9	15.1	18.1
Carrots	6.8	8.4	5.9
Cucumbers	5.5	5.0	4.4
Eggplant	---	---	15.5
Bell peppers	6.7	7.9	6.6
Celery	7.5	11.6	12.9
Watermelon	3.5	1.6	5.7
Cantaloupe	---	4.6	4.5
Snap beans	5.0	8.3	11.1
Cabbage	3.3	3.0	3.9
Garlic, all 1/	3.9	10.4	12.2
Canned:			
Tomatoes	1.0	0.9	6.2
Sweet corn	2.6	8.1	17.8
Snap beans	0.9	0.8	0.3
Green peas	0.5	0.3	2.5
Cucumbers (pickles)	0.3	0.9	1.8
Cabbage (sauerkraut)	---	---	4.3
Asparagus	2.5	2.3	9.8
Frozen: 2/			
Potatoes	---	2.9	9.0
Sweet corn	---	9.1	10.0
Green peas	---	3.3	4.2
Snap beans	---	---	2.5
Spinach	---	3.5	4.2
Dry:			
Pinto beans	8.8	16.0	11.6
Navy beans	12.5	22.6	22.7
Great Northern beans	24.9	36.5	26.1
Onions, dehydrated	46.5	42.4	66.6

-- = Not available. 1/ Data cover all uses. 2/ Data not available prior to 1978.

Source: USDA, Economic Research Service.

Although the United States has been a net importer of vegetables and melons (including potatoes, mushrooms, and pulses) during the past few years, the difference between imports and exports has been relatively small. In 1997, imports totaled \$3.1 billion, exceeding exports by less than \$50 million. However, in 1998, because of strong demand for fresh vegetables and melons due in part to El Niño-disrupted domestic supplies, the value of imports reached \$3.7 billion while exports reached \$3.2 billion. Most of the gain in exports in 1998 came from fresh vegetables, dry beans, and dried vegetable products.

Fresh Vegetables

Exports of fresh-market vegetables and melons account for 8.1 percent of available supplies. In value terms, fresh-market vegetables and melons claimed the largest share of total vegetable exports at about \$1.1 billion for each of the past 5

years. There is a discernable seasonal pattern to fresh exports, with volume peaking in the spring and reaching a low during the summer months. This pattern is largely influenced by demand from Canada, our leading foreign market. Canada's vegetable imports are lowest during their summer growing season and peak in the spring when their supplies of storage-type vegetables are exhausted and before their own growing season has begun.

Lettuce (all types) was the largest fresh export (\$159 million in 1997), but lettuce also enjoys relatively strong domestic demand. The same is true for tomatoes, the second largest fresh export (\$131 million). Exports remove just 6 percent of domestic supplies for these two commodities (table A-3). This percentage has remained fairly constant for several decades as growth in domestic consumption has matched rising exports.

Fully a third of cauliflower supplies move into export markets, making it the most export-dependent fresh-market vegetable. This dependence has been increasing over the past decade. While cauliflower exports were double the levels of 10 years ago, production has declined, reflecting shrinking domestic demand. Per capita use of fresh-market cauliflower was 1.6 pounds in 1997, down from 2.2 pounds in 1988. In addition to cauliflower, fresh-market broccoli, asparagus, and eggplant are also heavily dependent on exports.

Japan and Canada account for the majority of U.S. cauliflower and broccoli exports. While Canada has been an important market for years, sales to Japan have been rising over the past decade. Because of the recession in Japan, demand for some U.S. vegetables has slowed. When prosperity returns to Japan in the next few years, U.S. fresh-vegetable exports are expected to continue their long-term growth.

Frozen Vegetables

Export demand for U.S. frozen vegetables (including potatoes) has increased substantially during the past decade. Exports accounted for 9 percent of U.S. frozen vegetable supplies in 1997, compared with 6 percent in 1990. In 1998, U.S. frozen vegetable exports (including potatoes) totaled about 1.5 billion pounds, with a value of \$518 million. Potato products (primarily french fries) account for 71 percent of all frozen vegetable export volume. Frozen potato exports have been rising strongly for many years, fueled by the expansion of U.S. fast food establishments overseas, particularly in Japan. Excluding potatoes, frozen vegetable exports (on a fresh-weight basis) totaled 994 million pounds in 1998—up 8 percent from 1997.

Japan is the largest export market for U.S. frozen vegetables, accounting for 49 percent of the total value in 1998. Other important markets include South Korea, Hong Kong, Canada, and Mexico. Growth in U.S. frozen vegetable exports to Japan has been steady. U.S. frozen vegetable exports to Japan have risen 70 percent since 1990. The

United States holds close to half of the Japanese frozen vegetable market (competing primarily with China, Taiwan, and New Zealand). French fried potatoes and sweet corn account for the majority of the frozen vegetables sold to Japan. Despite the economic recession there, exports of french fries to Japan increased 15 percent in 1998.

Exports to Mexico have risen by a factor of 6 during the 1990s—propelled primarily by frozen french fries. Mexico is now the destination for 5 percent of U.S. frozen vegetable exports. Exports to Mexico rose for the third consecutive year following the decline of 1995 caused by a weakening economy.

With the exception of potatoes, U.S. demand for frozen vegetables appears to have become stagnant during the past 5 years. If domestic demand cannot be stimulated in the future, the importance of exports rises, with sector growth hinging on increased overseas sales. Fortunately, interest in American-style foods continues to surge in many parts of the world. This should continue to support the export of products like frozen potatoes and sweet corn and raise the profile of exports in the frozen vegetable sector.

Canned Vegetables

Exports of canned vegetables account for around 8 percent of available supplies. This is up from 2 percent in the mid-1980s and 1 percent in the mid-1970s. In terms of value, canned vegetables account for the second largest share of exports at about \$0.6 billion. Sweet corn is the largest canned vegetable exported, with about a fourth of the total value. Tomato paste and tomato sauces round out the top three canned exports.

Canada is the leading export market for U.S. canned vegetables. Exports to Canada have nearly quadrupled since 1990, with Canada now accounting for 39 percent of all canned vegetable export value—up from 22 percent in 1990. Japan is the second largest U.S. market, with 15 percent of canned export value, while another combined 12 percent of supplies are exported to Taiwan, South Korea, Hong Kong, and Singapore. A prolonged recession in Japan has limited U.S. exports the past few years. As a result, since peaking in 1995, canned exports to Japan declined in 1996 and since have stagnated. This is similar to the downturn experienced by fresh vegetable exporters. It is expected that exports will rebound with improvement in Japan's economy.

Rising export shares largely reflect the efforts of vegetable canners to expand markets overseas to compensate for the slow erosion of domestic demand over the past 30 years. During this time, U.S. consumers have been slowly switching their allegiance to fresh and frozen forms of vegetables. For example, per capita use of canned sweet corn has declined from around 14 pounds in the early 1970s to 9.4 pounds today. At the same time, use of frozen sweet corn has moved from around 6 pounds in the early 1970s to over

10 pounds now. After slumping in the late 1980s, per capita use of fresh-market sweet corn is now close to a pound higher than the early 1970s.

Dry Vegetables

Based on limited data for dehydrated vegetables, dehydrated onions are the most export-dependent vegetable commodity. Although exports are undoubtedly important for this industry, the lack of stock data for finished onion products likely results in an overstatement of the contribution of export sales to the industry. If we assume a third of production is carried over as finished inventory the following year, the export dependency of dehydrated onions declines to roughly 50 percent.

A limited domestic market makes exports critical for dry peas and lentils (an industry for which we do have stocks data). About half of dry pea and lentil supplies move into foreign markets. Many of these overseas transactions involve purchases by the U.S. Government (CCC) for humanitarian food aid. The Federal Government also purchases dry peas and lentils for various domestic feeding programs. Along with dry beans, peas and lentils are popular in food aid programs because they are easy to transport, are readily accepted foods worldwide, and are a cheap source of protein.

Close to a fifth of dry edible bean supplies are shipped to foreign markets. This food category is actually composed of several separate bean markets and each vary in export dependence. Among dry beans, Great Northern beans are the most dependent on exports, with close to a third of supplies being shipped overseas. Unfortunately, Iraq has historically been the most important market. The embargo on exports to Iraq resulted in a substantial contraction of the Great Northern market, with both exports and domestic production declining sharply in the early 1990s.

Fresh Fruit

The fresh fruit industry relies heavily on export markets, with about 6 billion pounds exported in 1998 at a value of \$1.8 billion. Fresh fruit most heavily dependent on exports include grapefruit, cherries, lemons, plums, oranges, apricots, pears, and apples (table A-4). Canada has been the leading destination for U.S. fresh fruit throughout the nineties, accounting for about a third of all fresh fruit exports in 1998. The other major markets are Japan, Hong Kong, Taiwan, and Mexico.

The grapefruit industry relies the most on exports, as U.S. per capita consumption for grapefruit has remained relatively stable throughout the nineties while production has grown. From 1995-97, 40 percent of the grapefruit supply was exported, 24 percent more than in the mid-eighties. Japan has been the major foreign market for grapefruit in the nineties and maintained its market share in 1998 despite that country's recession. Japan, along with Canada, France,

Table A-4--Selected fruits and tree nuts: Share of supply exported

Crop	1975-77	1985-87	1995-97
--Percent--			
Fresh:			
Grapefruit	23.98	32.28	40.13
Cherries 1/	7.93	19.06	38.98
Lemons	51.88	36.78	27.35
Plums	12.78	18.78	27.15
Oranges	23.46	27.07	26.94
Apricots	16.51	18.00	25.79
Pears	11.27	11.83	24.91
Apples	6.04	9.58	21.85
Grapes	24.24	18.71	19.93
Papayas	--	19.01	11.83
Peaches	2.72	6.71	11.61
Kiwifruit	--	29.93	9.30
Cranberries	--	--	9.30
Strawberries	4.83	6.88	9.22
Blueberries	--	--	8.92
Tangerines	5.52	6.46	7.28
Mangoes	--	10.38	6.31
Avocados	16.51	6.25	4.81
Pineapples	3.73	4.33	2.98
Limes	10.69	6.68	2.23
Frozen: 2/			
Sweet Cherries	0.79	8.00	20.23
Blueberries	3.19	8.25	13.83
Strawberries	3.00	1.75	7.62
Canned:			
Sweet cherries	14.17	51.28	59.96
Tart cherries	26.74	3.09	14.46
Peaches	6.16	2.64	3.50
Dried:			
Raisins	28.75	29.69	37.33
Prunes	41.07	35.05	33.19
Dates	15.21	14.43	19.35
Juice:			
Grape	--	12.20	16.59
Orange	5.54	4.46	6.98
Grapefruit	6.56	6.42	6.94
Apple	4.51	1.58	3.13
Nuts:			
Almond	47.18	47.75	63.32
Hazelnuts	6.90	33.78	49.67
Pistachio	0.97	6.78	49.72
Walnut	20.92	23.52	39.92

1/ Includes sweet and tart cherries. 2/ Average of 1976 to 1977.

Data not available prior to 1976.

Source: USDA, Economic Research Service.

the Netherlands, and Taiwan accounted for 83 percent of fresh grapefruit shipments in 1998.

Fresh oranges account for the largest volume of fresh fruit exports in the nineties, accounting for over a quarter of the total. While the quantity of fresh orange exports grew in the seventies and early eighties, it appears to have leveled out since the mid-eighties. This may be due partly to the maturing of the export markets and presently due to limited trade potential in other markets.

Fresh apple exports have taken off since the mid-eighties, increasing from a 10-percent share of supply to a 22-percent

share during 1995-97. While exports have been growing steadily to major export markets led by Taiwan and Canada, exports to Mexico grew rapidly throughout the nineties, even before the enactment of the North American Free Trade Agreement (NAFTA). In fact, since NAFTA, the quantity of fresh apple exports to Mexico has slowed due to the peso devaluation and the dumping charges the Mexican Government brought against Washington State apple growers in 1998. With the resolution of the dumping case, fresh apple exports to Mexico should resume and continue to expand. Further expansion of fresh apple trade to other countries is hampered by phytosanitary bans or restrictions in major markets such as Japan and South Korea, virtually closing these markets to U.S. apples. There has been recent action in Japan to move towards opening its markets to an increased number of apple varieties. Since Japan is such an important market for U.S. fresh fruit, any lowering of trade barriers should increase apple exports in the coming years.

Frozen Fruit

The share of frozen fruit supply exported has more than doubled since 1990, with 119 million pounds shipped in 1998 at a value of \$73 million. Berries make up the major portion of frozen fruit. Strawberries are the most important berry, accounting for about 40 percent of all frozen fruit exports. Frozen strawberry exports have increased sharply since 1992 as domestic production has grown faster than consumption.

Compared with fresh and canned fruits, Americans do not consume many frozen fruit products. Supplies totaled about 1.8 billion pounds in 1997, making the United States a major producer of frozen fruit products in the world. These domestic supplies are largely adequate to satisfy demand. Therefore, trade in frozen fruit is relatively small, with imports and exports each accounting for about 6 percent of supply in 1997.

Japan and Canada are the two largest foreign markets for U.S. frozen fruit, with each country's share of the market growing during the 1990s. These two countries accounted for 56 percent of U.S. frozen fruit exports in 1998.

Canned Fruit

Canned fruit exports accounted for less than 2 percent of domestic supply in both 1990 and 1997. Canned peaches comprised the largest quantity of canned fruit exported, however, only 3.5 percent of canned peach supply was exported during 1995-97. The quantity of supply exported is understated, however, because the United States ships fresh clingstone (canning) peaches to Mexico where they are canned for the Mexican market. Exports of canned peaches to Mexico have also been growing in recent years, making Mexico the largest foreign market for U.S. canned peaches, followed by Canada. Exports to France and other European countries are generally low, except when production in Greece, the major European producer of canned peaches, is down.

Dried Fruit

Almost a third of U.S. dried fruit supply was exported in 1997—the largest proportion of any fruit product. The United States is a major world grower of dried fruit, producing the largest quantity of prunes, and alternating with Turkey as the largest raisin producer. Japan accounted for about a quarter of the shipments, followed by the United Kingdom, Canada, and Germany. Raisins accounted for over a half of dried fruit exports in 1998, of which almost a quarter went to the United Kingdom. Following Japan and Canada, the European Union (EU) is the major destination for U.S. raisins overseas. Prune exports accounted for about a third of dried fruit exports, with Japan and the EU the major markets.

Fruit Juices

Only about 7 percent of fruit juice supplies were exported in 1997. Most is consumed domestically, as U.S. fruit juice consumption has remained strong in the nineties. Orange juice comprised about half the juice exports in 1998, although typically only about 7 percent of U.S. orange juice is exported. As the world's largest orange juice consumer, the United States usually imports more orange juice than it exports. Canada, the EU, and Japan are the major markets for U.S. orange juice. These same countries are also major buyers of grapefruit, grape, and apple juices.

Tree Nuts

About 35 percent of U.S. tree nut supply was exported in 1997, the same as in 1990. Almonds are an important agricultural export product from the United States, ranking as California's second most valuable agricultural export behind cotton in the mid-nineties. In 1998, almonds accounted for 56 percent of all nut exports, with a value of \$760 million (shelled-basis). Germany imported about a quarter of U.S. almond exports in 1998, much of which is used to make almond paste and marzipan. Spain and Japan fill out the other top three destinations. The EU and Japan also topped the export markets for walnuts.

Conclusion

While the domestic market remains the major outlet for almost all fruits and vegetables raised in the United States, the role of exports has steadily increased. Part of this increase may reflect the maturation of some domestic markets, bringing a need to look elsewhere to sustain revenue growth. The fruit industry is more export-dependent than the vegetable industry, but both contain subsectors highly dependent on foreign sales. As global trade barriers fall, a relatively efficient U.S. fruit and vegetable industry selling quality products should continue to reap the benefits of world commerce in the new millennium.

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Table 6--Fresh vegetables: U.S. f.o.b. shipping point prices, by month, 1994-99 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Season
														average
-- \$/cwt --														
Asparagus	1994	135.00	141.00	97.60	88.50	92.90	97.00	143.00	144.00	196.00	151.00	--	--	100.00
	1995	150.00	118.00	93.60	160.00	93.20	103.00	105.00	--	--	--	--	--	113.00
	1996	84.50	84.50	87.90	87.30	95.40	108.00	108.00	--	--	--	--	--	92.90
	1997	161.00	140.00	116.00	105.00	97.40	109.00	101.00	--	--	--	--	--	108.00
	1998	179.00	158.00	144.00	130.00	106.00	114.00	127.00	211.00	199.00	152.00	148.00	--	126.00
1999	141.00	119.00	178.00	132.00	--	--	--	--	--	--	--	--	--	--
Broccoli	1994	23.50	21.40	19.50	21.80	27.10	21.10	21.60	18.50	38.60	37.00	57.70	46.00	27.50
	1995	24.70	34.30	54.40	34.00	26.50	27.30	19.50	31.30	27.70	23.60	20.80	26.90	29.30
	1996	34.60	22.00	30.90	25.20	28.20	30.60	24.10	24.10	23.90	24.30	31.10	28.60	27.10
	1997	36.80	27.80	25.90	24.20	23.10	30.30	27.50	23.30	31.20	40.70	27.00	30.20	29.10
	1998	34.70	27.00	31.40	40.50	27.10	29.60	23.30	27.60	29.20	32.80	29.70	35.00	30.80
1999	27.70	20.10	22.10	22.10	--	--	--	--	--	--	--	--	--	--
Carrots	1994	10.70	10.40	11.50	10.30	12.10	12.10	13.50	16.10	15.30	15.30	15.10	15.70	12.90
	1995	19.20	16.90	18.70	19.40	19.20	15.20	15.00	16.10	16.10	15.30	15.50	13.00	16.80
	1996	12.60	13.80	15.90	15.70	12.00	11.00	10.50	14.50	12.60	12.00	16.00	17.20	13.40
	1997	15.00	14.80	13.50	12.60	12.60	12.60	12.60	13.20	12.70	12.00	12.50	16.80	12.90
	1998	13.60	12.90	12.90	12.40	11.80	11.80	10.60	10.80	10.60	11.00	11.80	11.70	12.30
1999	16.10	19.60	21.20	26.60	--	--	--	--	--	--	--	--	--	--
Cauliflower	1994	24.80	24.90	23.10	20.80	32.20	29.10	31.40	24.30	34.00	31.30	42.50	29.80	28.80
	1995	31.40	31.50	53.90	68.40	47.70	37.60	26.70	34.20	25.40	21.10	22.60	33.20	34.70
	1996	35.20	36.10	52.80	37.00	37.70	35.70	24.30	27.20	23.80	29.20	30.00	31.10	33.00
	1997	29.60	33.80	32.60	27.70	20.70	31.20	38.90	23.40	34.60	46.90	27.60	28.90	32.30
	1998	35.10	44.00	49.50	43.80	35.50	26.40	23.20	26.00	32.30	25.90	42.30	50.00	36.20
1999	29.40	30.80	39.70	52.60	--	--	--	--	--	--	--	--	--	--
Celery	1994	11.40	8.85	7.78	8.34	13.50	8.92	12.40	14.90	12.60	12.00	13.90	25.50	11.80
	1995	24.30	26.00	20.60	33.30	24.50	14.40	11.60	10.50	16.50	13.20	12.90	11.40	16.30
	1996	7.90	8.50	12.20	11.60	8.90	11.50	11.50	10.30	11.60	9.79	12.40	13.40	10.50
	1997	16.20	16.20	12.30	10.50	15.40	9.89	19.30	17.00	14.30	13.40	18.40	19.10	14.70
	1998	11.20	11.40	16.40	13.80	15.40	12.40	10.60	10.40	10.60	10.40	11.90	14.00	12.20
1999	9.51	8.47	8.35	9.02	--	--	--	--	--	--	--	--	--	--
Sweet corn	1994	24.50	15.50	22.80	18.50	20.40	20.20	19.10	11.90	15.30	19.70	19.90	26.00	17.20
	1995	25.00	44.70	27.80	16.60	24.50	18.80	18.60	17.10	18.50	20.70	24.00	23.30	18.30
	1996	29.90	30.20	28.90	21.90	17.50	14.00	18.90	17.40	16.70	17.90	19.40	17.70	16.90
	1997	29.00	25.80	33.90	26.00	21.20	17.00	18.40	18.10	16.90	15.30	18.90	19.90	17.70
	1998	18.70	31.60	24.20	19.60	16.90	13.80	16.80	16.60	18.20	25.40	23.50	19.40	17.60
1999	24.30	19.60	26.30	17.20	--	--	--	--	--	--	--	--	--	--
Lettuce	1994	7.91	11.80	9.71	11.70	11.40	13.80	10.60	10.90	17.30	22.10	22.40	37.20	13.30
	1995	13.40	9.32	27.00	48.20	47.00	15.60	12.60	15.20	25.60	13.30	11.50	16.10	23.50
	1996	11.30	14.90	16.50	13.20	13.30	15.20	12.70	23.50	13.70	15.40	17.70	8.87	14.70
	1997	14.90	9.58	13.50	15.60	10.40	14.90	17.10	22.80	22.30	34.80	29.90	21.30	17.60
	1998	19.00	10.90	12.50	24.60	14.10	11.80	15.50	16.30	14.00	21.10	10.90	9.00	15.20
1999	10.30	15.40	14.50	26.70	--	--	--	--	--	--	--	--	--	--
Onions	1994	31.40	33.90	18.80	10.80	8.64	8.49	12.30	9.54	9.32	10.60	12.20	12.70	10.80
	1995	13.50	17.60	17.90	20.00	14.70	10.40	13.60	9.56	10.00	9.83	9.48	10.10	11.10
	1996	10.70	10.10	8.11	8.86	9.54	11.10	12.10	12.60	12.70	11.50	10.40	10.20	10.50
	1997	9.75	7.87	8.09	14.90	13.30	16.50	14.20	13.60	10.20	9.19	9.86	10.90	11.90
	1998	11.40	13.50	17.10	17.80	17.70	14.90	19.10	14.30	12.80	12.70	14.00	15.90	14.30
1999	16.70	13.80	11.20	18.30	--	--	--	--	--	--	--	--	--	--
Tomatoes	1994	41.50	19.30	24.50	16.50	20.60	31.30	26.90	30.60	22.70	28.50	31.20	37.40	27.40
	1995	41.10	29.80	37.10	20.50	14.70	35.70	24.40	19.60	19.50	22.50	33.10	25.00	25.50
	1996	18.40	40.00	81.70	50.50	24.40	24.20	26.00	22.10	23.40	28.30	29.70	30.40	28.20
	1997	33.50	47.30	58.80	26.30	33.40	32.60	28.60	27.30	25.20	27.40	45.40	48.80	31.70
	1998	26.40	44.00	34.00	37.20	36.50	17.80	40.60	25.50	28.60	44.90	43.60	47.70	35.00
1999	39.90	35.20	24.80	24.10	--	--	--	--	--	--	--	--	--	--

-- = Not available. 1/ Prices for 1999 are preliminary.

Source: National Agricultural Statistics Service, USDA.

Table 7--Commercial vegetables and potatoes: Indexes of prices received by U.S. growers, by month, 1993-99 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
--1910-14=100--														
Commercial 2/	1993	807	841	731	1,112	856	677	710	741	757	642	696	851	785
	1994	775	755	623	586	649	694	654	631	699	784	828	1,094	731
	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	753	717	813	767	743	785	761	836	796	985	951	907	818
	1998	801	749	804	981	841	704	792	744	743	883	752	746	795
	1999	718	769	777	959									
Potatoes 3/	1993	477	477	528	601	599	540	621	532	474	469	593	562	539
	1994	565	580	670	599	591	595	661	567	469	448	460	462	556
	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	555	537	532	488	447	413	450	461	500
	1999	478	488	498	553									
--1990-92=100--														
Commercial 2/	1993	121	126	109	166	128	101	106	111	113	96	104	127	117
	1994	116	113	93	88	97	104	98	94	105	117	124	164	109
	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	113	107	122	115	111	118	114	125	119	147	142	136	122
	1998	120	112	120	147	126	105	119	111	111	132	113	112	119
	1999	107	115	116	144									
Potatoes 3/	1993	94	94	104	119	118	107	123	105	94	93	117	111	107
	1994	112	115	132	118	117	118	131	112	93	89	91	91	110
	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	110	106	105	96	88	82	89	91	99
	1999	94	96	98	109									

1/ Prices for 1999 are preliminary. 2/ Includes fresh and processing vegetables. 3/ Includes fresh potatoes and dry edible beans.

Source: National Agricultural Statistics Service, USDA.

Table 8--Vegetables: Producer Price Indexes, by month, 1993-99 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
--1982=100--														
Fresh 2/	1993	128.8	125.8	117.4	178.5	164.3	80.7	98.4	110.5	117.0	89.5	141.1	167.0	126.6
	1994	146.3	99.3	96.1	91.4	91.2	94.9	104.8	95.7	107.1	113.8	128.1	244.7	117.8
	1995	163.5	149.2	159.2	199.1	167.2	127.2	107.3	94.8	152.9	116.0	115.8	125.5	139.8
	1996	133.9	119.4	202.5	155.6	108.2	96.6	108.8	97.2	91.3	106.0	131.5	99.3	120.9
	1997	105.2	126.2	150.4	109.6	103.2	112.2	115.7	125.2	121.8	143.1	124.7	118.5	121.3
	1998	133.1	136.6	148.2	162.9	123.2	106.5	153.7	114.9	135.0	161.9	131.2	148.1	137.9
	1999	131.9	93.1	117.4										
Canned 3/	1993	110.1	109.8	109.7	109.1	110.0	109.9	111.1	109.6	110.4	111.5	112.3	112.6	110.5
	1994	113.1	116.1	116.8	116.5	117.9	118.0	118.9	118.1	116.0	116.0	114.2	113.1	116.2
	1995	112.9	114.3	114.9	113.1	117.6	117.4	118.2	117.5	117.6	117.8	118.4	119.6	116.6
	1996	120.4	119.8	120.4	120.4	120.8	121.0	122.6	122.1	121.9	121.8	121.9	121.8	121.2
	1997	121.5	121.1	120.5	120.1	119.8	119.9	119.1	119.3	119.3	120.2	120.3	120.7	120.2
	1998	121.2	121.9	121.8	121.8	121.9	121.9	122.0	122.0	120.0	119.6	120.0	119.7	121.2
	1999	120.8	121.0	120.8										
Frozen	1993	118.0	118.0	117.9	118.7	119.9	121.1	121.3	122.1	122.6	123.2	123.7	124.7	120.9
	1994	125.5	126.1	126.1	126.4	126.9	127.0	126.4	126.4	125.2	124.9	124.7	125.0	125.9
	1995	125.1	124.7	124.9	124.9	124.2	123.6	123.2	123.6	124.4	124.6	123.7	124.0	124.2
	1996	125.1	124.8	124.6	124.9	125.0	125.4	125.5	125.8	126.0	125.7	125.8	126.0	125.4
	1997	125.9	125.7	125.6	125.6	125.7	125.7	126.9	125.6	125.7	126.6	125.5	125.3	125.8
	1998	125.2	126.0	124.8	125.7	125.0	124.6	125.5	125.6	125.3	125.6	125.5	125.1	125.3
	1999	125.6	126.2	125.5										

1/ Indexes for 1999 are preliminary. 2/ Excludes potatoes. 3/ Includes vegetable juices.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 9--Vegetables: Consumer Price Indexes, by month, 1993-99 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
--1982-84=100--														
Fresh vegetables 2/	1993	172.4	171.1	173.7	179.3	189.6	167.1	155.8	156.1	157.4	157.7	166.1	174.9	168.4
	1994	181.7	168.1	167.0	163.9	162.8	168.7	170.2	163.7	163.5	167.0	178.4	212.7	172.3
	1995	209.4	198.6	193.6	220.4	203.5	194.9	188.7	175.4	181.7	182.0	180.3	188.4	193.1
	1996	193.8	188.4	206.0	209.2	190.0	188.0	188.0	182.3	175.1	180.9	187.7	181.2	189.2
	1997	190.6	198.6	202.2	191.8	187.3	189.1	190.3	192.3	189.5	192.8	205.2	205.2	194.6
	1998	233.8	210.5	220.2	219.7	229.7	214.7	214.0	205.6	200.1	213.9	214.9	212.3	215.8
	1999	224.5	209.8	209.2										
Potatoes, fresh	1993	139.7	138.9	142.4	152.0	156.0	163.4	165.2	165.8	156.1	152.1	158.3	165.0	154.6
	1994	169.4	171.3	179.8	186.3	179.9	185.7	194.1	190.4	168.8	157.3	154.2	154.2	174.3
	1995	157.1	157.2	161.8	164.6	165.3	183.1	200.8	195.5	182.8	179.7	172.6	175.3	174.7
	1996	179.1	179.0	183.8	181.9	185.5	189.8	195.5	196.6	180.9	172.5	162.0	160.2	180.6
	1997	164.2	162.8	161.2	163.9	167.3	172.4	181.9	194.0	191.7	181.6	174.3	175.0	174.2
	1998	180.2	179.3	181.6	179.9	187.7	193.1	196.5	192.7	189.1	187.0	176.7	178.0	185.2
	1999	184.5	184.0	185.9										
Lettuce, fresh	1993	181.6	187.3	222.5	213.1	195.5	142.2	164.5	173.8	172.2	168.1	165.3	152.1	178.2
	1994	146.3	146.5	158.8	144.9	143.3	147.6	156.2	157.3	178.7	178.8	212.3	273.4	170.3
	1995	257.2	176.1	178.1	379.6	342.2	209.5	167.9	177.5	222.0	193.1	178.5	172.2	221.2
	1996	201.6	165.6	208.8	189.3	176.3	183.4	179.7	175.7	174.5	179.8	209.0	184.6	185.7
	1997	195.9	184.5	185.8	188.6	174.8	173.5	184.9	200.1	212.8	223.4	257.9	218.5	200.1
	1998	290.5	198.8	210.7	245.4	310.2	222.9	212.5	205.8	208.1	221.7	222.8	199.3	229.1
	1999	207.9	200.6	217.0										
Tomatoes, fresh	1993	182.7	170.9	139.6	159.2	235.9	193.2	131.1	134.2	164.8	147.7	159.6	197.2	168.0
	1994	238.5	175.1	148.5	150.7	152.7	170.0	162.1	159.2	154.6	158.1	178.5	233.6	173.5
	1995	217.1	217.2	175.0	202.3	159.0	178.2	200.7	150.9	157.2	175.7	183.5	242.6	188.3
	1996	178.1	178.0	237.4	292.3	227.5	190.3	174.2	170.7	164.4	180.4	192.1	193.4	198.2
	1997	193.6	211.7	264.5	228.0	200.3	218.6	193.0	193.4	186.3	195.9	224.6	253.4	213.6
	1998	238.4	226.0	244.9	229.7	237.3	222.3	247.4	218.6	206.6	248.2	268.7	281.9	239.2
	1999	299.8	239.9	224.6										
Other, fresh	1993	180.4	180.3	184.8	188.5	188.9	167.9	158.7	156.2	154.2	161.4	172.2	178.5	172.7
	1994	179.5	171.0	170.8	165.1	165.1	168.4	168.7	158.5	162.2	171.6	181.0	216.1	173.2
	1995	217.0	214.0	214.8	212.8	201.1	202.0	187.3	176.2	181.1	183.6	184.0	183.2	196.4
	1996	203.0	200.8	206.2	202.0	185.9	189.3	192.5	183.4	177.6	185.7	192.3	185.9	192.1
	1997	199.3	211.8	204.5	193.8	194.8	191.7	195.1	191.4	186.3	190.9	201.2	201.5	196.9
	1998	243.1	223.1	232.5	229.0	227.7	221.3	213.1	208.6	202.6	214.4	214.0	209.8	219.9
	1999	223.6	215.1	214.2										
Frozen vegetables	1993	132.6	130.8	132.5	132.1	131.6	133.4	133.6	134.1	134.7	135.8	135.8	135.4	133.5
	1994	139.1	138.0	138.4	138.0	140.2	139.9	140.4	139.9	139.9	139.6	136.3	136.5	138.9
	1995	140.1	140.0	140.2	139.6	140.2	140.8	141.8	141.8	141.5	141.2	141.3	140.4	140.7
	1996	141.9	142.5	142.6	141.7	143.7	143.5	143.6	146.2	144.9	145.3	145.0	143.7	143.7
	1997	148.3	147.7	146.1	147.6	146.6	148.7	149.8	150.4	148.0	147.6	148.1	147.8	148.1
	1998	150.0	149.8	149.4	150.4	152.8	151.2	151.7	153.5	152.5	152.4	150.5	150.3	151.2
	1999	154.1	153.2	151.8										
--December 1997=100--														
Processed fruits and vegetables 3/	1997	--	--	--	--	--	--	--	--	--	--	--	100.0	--
	1998	101.6	100.9	101.7	101.0	102.4	102.3	103.0	103.5	103.2	102.9	102.3	102.0	102.2
	1999	104.1	103.8	103.6										
Canned vegetables 3/	1997	--	--	--	--	--	--	--	--	--	--	--	100.0	--
	1998	103.5	102.1	104.5	102.5	103.3	104.1	105.0	105.1	104.0	103.7	104.1	103.1	103.8
	1999	106.7	105.5	104.7										
Dried beans, peas, lentils 3/	1997	--	--	--	--	--	--	--	--	--	--	--	100.0	--
	1998	100.1	100.5	99.8	99.9	99.8	100.6	101.0	100.8	100.0	101.1	100.0	100.5	100.3
	1999	101.3	101.8	102.2										

1/ Not seasonally adjusted. 2/ Includes potatoes. 3/ New indexes beginning with January 1998.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 10--Fresh vegetables: U.S. average retail prices, by month, 1993-99

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	
		--Cents/lb.--													
Potatoes, white	1993	31.1	31.1	32.7	35.4	36.0	37.9	37.6	37.0	34.1	34.1	34.7	36.4	34.8	
	1994	36.9	37.3	39.5	41.3	38.9	39.0	40.1	38.9	35.5	34.0	33.9	33.5	37.4	
	1995	33.9	33.7	34.8	35.9	35.7	39.6	43.9	42.5	39.9	39.6	37.7	38.0	37.9	
	1996	38.5	38.5	39.2	39.4	39.2	40.1	40.8	40.3	37.5	35.9	34.3	33.5	38.1	
	1997	33.5	33.1	33.0	33.5	33.8	34.5	36.7	38.8	37.4	36.6	36.6	37.0	35.4	
	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	
	1999	38.1	38.2	38.4											
Carrots	1993	48.0	47.4	45.6	44.7	43.5	43.7	43.1	40.0	38.3	39.2	40.0	41.3	42.9	
	1994	42.4	42.1	41.6	41.4	41.2	43.8	45.1	46.2	45.6	45.7	46.4	47.7	44.1	
	1995	50.0	53.2	52.6	56.5	57.6	56.4	54.1	53.0	51.3	52.2	50.6	52.6	53.3	
	1996	51.4	49.4	50.8	51.7	52.7	52.5	51.2	51.4	50.5	48.9	50.3	53.7	51.2	
	1997	52.6	52.4	53.3	51.9	21.4	50.8	52.0	50.8	49.5	49.3	49.3	50.0	48.6	
	1998	51.2	51.3	66.7	55.5	55.9	55.5	61.8	59.2	52.9	52.6	54.4	53.9	55.9	
	1999	55.2	57.5	57.8											
Cabbage	1993	39.5	39.4	37.6	42.7	48.4	47.1	44.2	42.2	41.1	36.4	36.0	37.1	41.0	
	1994	35.6	34.6	30.9	33.0	34.3	36.6	35.8	33.6	37.1	43.0	43.4	45.3	36.9	
	1995	50.0	44.6	41.0	45.3	52.5	46.3	39.7	36.1	40.1	43.2	40.0	40.9	43.3	
	1996	40.3	39.3	35.8	40.3	41.3	39.5	47.0	44.0	39.5	39.4	37.8	39.6	40.3	
	1997	40.1	42.2	36.6	40.0	39.6	39.4	40.0	37.2	36.8	42.0	42.0	46.4	40.2	
	1998	50.5	46.4	44.7	45.4	48.7	49.7	44.1	42.8	40.4	42.1	42.7	42.1	45.0	
	1999	42.5	41.2	39.6											
Celery	1993	64.0	78.7	86.8	67.2	65.8	58.3	51.8	50.2	48.5	52.6	51.1	49.2	60.4	
	1994	53.0	47.6	47.6	45.0	50.7	53.0	52.4	51.9	52.0	48.4	48.2	52.1	50.2	
	1995	74.4	74.9	70.5	78.2	87.7	79.3	65.7	56.8	56.0	60.8	54.5	53.6	67.7	
	1996	51.5	52.3	49.7	53.6	51.7	52.3	53.4	51.2	51.6	49.5	49.2	44.2	50.9	
	1997	56.9	60.9	56.9	52.8	59.4	57.4	59.6	61.5	55.0	56.8	56.8	56.6	57.6	
	1998	61.6	57.8	54.1	61.6	61.3	62.5	59.7	62.7	63.3	64.2	59.7	53.4	60.2	
	1999	59.0	56.3	56.3											
Cucumbers	1993	51.9	57.7	63.5	81.4	66.9	52.6	52.8	50.5	48.4	51.3	77.8	92.7	62.3	
	1994	70.7	59.4	60.7	60.6	55.3	69.8	63.5	47.5	48.1	60.3	59.5	69.1	60.4	
	1995	107.3	94.5	89.7	62.2	63.9	67.9	63.8	58.0	60.0	56.8	55.6	53.0	69.4	
	1996	79.9	92.3	100.4	76.8	60.9	60.3	57.5	54.5	51.6	75.0	75.6	60.3	70.4	
	1997	68.8	73.8	72.4	69.3	75.5	62.7	63.5	62.8	59.5	60.6	60.6	57.7	65.6	
	1998	--	--	90.3	--	--	--	--	--	--	--	--	--	--	
	1999	--	--	107.0											
Lettuce, iceberg	1993	62.5	57.9	84.3	85.4	77.9	53.1	64.8	65.4	64.0	58.7	60.6	52.5	65.6	
	1994	50.6	54.2	61.3	53.2	53.5	51.9	56.4	53.1	61.7	65.2	77.6	90.5	60.8	
	1995	82.1	60.2	60.7	134.3	134.6	80.4	60.9	65.8	85.9	70.0	65.2	61.4	80.1	
	1996	76.9	58.7	64.7	64.6	61.3	67.2	62.7	61.5	59.5	63.4	74.6	62.2	64.8	
	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	
	1999	64.9	65.8	77.4											
Onions, 1/ fresh dry bulb	1993	43.8	44.4	44.9	58.6	65.7	52.9	46.4	44.1	42.9	40.4	43.0	48.0	47.9	
	1994	55.3	59.7	56.5	46.4	41.9	42.4	45.0	44.0	41.9	39.8	40.4	43.2	46.4	
	1995	40.3	45.5	51.6	52.8	49.8	46.9	46.5	46.3	42.3	39.8	42.7	41.4	45.5	
	1996	42.6	41.9	41.9	46.0	41.7	45.3	43.1	43.1	43.2	45.6	45.3	46.4	43.8	
	1997	46.3	44.7	50.1	51.6	49.7	48.1	49.4	53.1	45.1	43.6	43.6	45.7	47.6	
Peppers, sweet	1993	106.8	101.0	111.7	134.2	175.4	120.7	97.0	92.2	93.0	104.8	122.6	125.7	115.4	
	1994	128.1	109.1	103.5	103.4	110.2	104.1	104.8	99.3	93.8	113.6	136.9	152.1	113.2	
	1995	156.4	163.4	156.2	172.3	118.0	149.2	119.3	109.1	123.3	109.4	136.7	132.2	137.1	
	1996	112.6	129.4	147.0	141.8	111.9	136.7	134.5	119.5	108.6	113.8	142.4	133.9	127.7	
	1997	119.1	143.7	139.7	131.4	134.0	137.8	129.5	122.7	120.8	166.7	166.7	154.0	138.8	
	1998	167.1	156.8	163.6	174.5	177.2	150.8	149.6	134.1	119.4	142.5	155.3	145.7	153.1	
	1999	142.9	131.1	133.4											
Tomatoes, field grown	1993	114.1	109.8	88.0	101.6	155.3	127.8	82.4	85.6	109.2	94.4	101.0	131.3	108.4	
	1994	160.4	111.2	91.4	95.1	94.9	104.7	99.0	96.9	95.8	97.9	112.9	142.8	108.6	
	1995	132.3	130.0	108.1	129.9	98.0	110.2	125.2	93.8	95.0	104.1	109.7	150.7	115.6	
	1996	110.3	108.4	146.7	186.7	137.9	112.7	103.1	100.6	98.0	108.4	118.2	121.0	121.0	
	1997	121.3	131.4	165.4	134.8	117.5	130.0	114.1	113.0	116.2	137.0	137.0	161.7	131.6	
	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	
	1999	190.4	147.6	139.5											

-- = Not reported. 1/ Data series no longer reported by BLS.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 11--Fresh vegetables: U.S. area, production, and value, 1996-98

Commodity	Harvested area			Production			Value		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
	--1,000 acres--			--Million cwt--			--\$ 1,000--		
Artichokes 1/	8.90	9.30	10.70	0.89	0.93	0.91	65,416	73,910	62,899
Asparagus 1/	73.56	74.03	74.93	1.99	2.03	2.05	156,623	182,390	210,672
Lima beans	3.20	2.50	2.00	0.09	0.08	0.04	2,883	2,475	1,280
Snap beans	82.86	82.66	87.90	3.96	3.81	4.84	166,559	154,414	233,551
Broccoli 1/	133.50	130.80	133.00	15.69	16.88	18.40	415,695	481,459	554,338
Brussels sprouts 1/	3.80	3.20	3.20	0.68	0.51	0.51	20,120	21,180	22,249
Cabbage	71.92	75.23	76.18	22.90	25.27	24.20	228,972	273,032	312,769
Cantaloupe	101.14	102.71	105.36	21.57	20.84	22.63	393,333	374,110	419,559
Carrots	113.66	111.38	112.50	33.24	38.59	37.55	443,863	497,202	461,423
Cauliflower 1/	48.20	43.50	45.80	7.35	6.89	7.17	237,342	217,534	245,629
Celery 1/	27.84	26.91	27.20	19.02	18.12	18.42	199,877	266,321	224,012
Sweet corn	227.80	236.40	235.76	23.13	23.64	24.80	390,737	418,617	436,828
Cucumbers	56.60	57.45	57.68	9.84	11.57	11.49	186,590	204,674	223,839
Eggplant	3.10	3.30	3.20	0.71	0.79	0.77	19,150	18,980	21,595
Escarole and endive	3.56	3.10	2.93	0.61	0.56	0.58	13,377	13,235	18,176
Garlic 1/	35.00	33.00	34.00	6.13	5.61	4.93	196,333	268,776	171,621
Honeydews	27.30	26.60	26.70	4.74	4.83	5.11	80,405	91,040	103,680
Lettuce									
Head	220.70	205.40	205.00	62.68	75.49	65.53	912,586	1,324,119	994,483
Leaf	41.33	48.61	49.92	9.19	10.39	11.09	246,628	299,250	323,074
Romaine	32.80	34.35	40.45	8.57	9.86	11.50	161,676	190,944	254,293
Onions 1/ 2/	166.21	165.91	164.14	64.11	68.77	65.13	604,789	770,011	830,976
Bell peppers 1/	66.10	56.20	56.78	16.64	14.96	14.31	466,151	479,512	483,222
Spinach	17.80	22.70	23.00	1.93	3.27	2.98	56,735	102,322	108,747
Tomatoes	120.64	115.19	114.51	33.63	32.78	31.26	947,031	1,040,382	1,095,451
Watermelons	199.26	179.30	173.19	42.72	39.92	36.89	270,179	305,017	284,525
Total	1,886.78	1,849.73	1,866.03	412.01	436.36	423.06	6,883,050	8,070,906	8,098,891

1/ Includes some processing. Data for asparagus, broccoli, and cauliflower include processing with acreage data only. Production and value data are for the fresh market. 2/ Value excludes production not marketed because of shrinkage.

Source: National Agricultural Statistics Service, USDA.

Table 12--Winter-season fresh vegetables: U.S. harvested area, selected crops, 1994-99 1/

Item	1994	1995	1996	1997	1998	1999	Change
							1998-99
							Percent
							--1,000 acres--
Snap beans	10.2	13.0	10.0	10.0	11.5	9.5	-17.4
Broccoli 2/	28.0	28.0	29.5	30.0	30.5	30.3	-0.7
Cabbage	14.0	12.0	13.5	10.3	11.3	10.0	-11.5
Carrots	21.0	22.4	33.2	30.0	27.4	24.8	-9.5
Cauliflower 2/	10.0	9.0	9.0	9.5	9.5	9.8	3.2
Celery 2/	6.9	6.6	6.7	6.9	7.3	7.4	1.4
Sweet corn	6.5	4.9	5.8	4.3	5.8	6.1	5.2
Eggplant	0.5	0.8	0.7	0.7	0.8	0.7	-12.5
Escarole and endive	1.1	0.7	0.9	0.6	0.8	0.8	6.7
Lettuce	71.7	60.2	75.3	68.8	68.5	72.5	5.8
Bell peppers	6.2	6.0	6.0	4.8	4.3	5.0	16.3
Spinach	2.7	2.6	2.8	2.4	2.5	2.1	-16.0
Tomatoes	16.7	13.7	11.7	10.8	11.3	14.5	28.3
Total	195.5	179.9	205.1	189.1	191.5	193.5	1.1

1/ Winter-season harvest period includes November or April in some States. 2/ Includes fresh-market and processing.

Source: National Agricultural Statistics Service, USDA.

Table 13--Spring-season fresh vegetables: U.S. harvested area, selected crops, 1994-99

Item	1994	1995	1996	1997	1998	1999	Change
							1998-99
	--1,000 acres--						Percent
Asparagus 1/ 2/	73.1	68.9	70.4	71.6	72.7	73.1	0.6
Snap beans	15.7	19.2	17.0	19.9	23.6	22.9	-3.0
Broccoli 2/	27.5	25.5	31.5	28.5	28.0	33.0	17.9
Cabbage	10.0	8.6	8.2	8.6	8.5	7.3	-14.1
Cantaloups	40.2	37.5	28.4	35.7	36.0	41.2	14.4
Carrots	17.5	19.0	25.8	22.9	27.8	25.7	-7.6
Cauliflower 2/	12.5	11.0	11.5	10.0	10.0	11.0	10.0
Celery 2/	5.4	5.5	5.5	5.2	4.7	5.0	6.4
Sweet corn	37.0	35.2	39.5	42.6	41.2	38.2	-7.3
Cucumbers	10.3	10.4	8.5	8.3	7.5	7.0	-6.7
Eggplant	1.1	0.7	0.7	0.7	0.7	0.5	-28.6
Escarole and endive	1.1	1.0	1.1	1.0	1.0	0.8	-25.0
Honeydew melons	7.1	7.0	6.2	5.2	5.7	6.3	10.5
Lettuce, head	53.8	45.4	45.2	42.7	43.5	46.2	6.2
Spring onions	37.5	36.8	39.2	37.3	34.6	35.9	3.8
Bell peppers	8.5	8.7	7.9	7.8	7.6	7.0	-7.9
Tomatoes	29.0	30.6	29.3	26.0	26.2	28.3	7.8
Watermelons	87.6	81.1	73.8	71.0	70.4	65.3	-7.2
Total	474.9	452.1	449.6	445.0	449.7	454.6	1.1

1/ Includes CA, MI, NJ, and WA. 2/ Includes fresh-market and processing.

Source: National Agricultural Statistics Service, USDA.

Table 14--Fresh vegetables: U.S. shipments, by quarter, 1998-99 1/

Commodity	1998				1999		Annual		
	I	II	III	IV	I	Change 2/	1997	1998	Change
	--1,000 cwt--				Percent		--1,000 cwt--		
Artichokes	16	37	2	14	24	50.0	566	69	-87.8
Asparagus	707	852	190	178	1,118	58.1	1,964	1,927	-1.9
Snap beans	594	782	110	639	877	47.6	1,876	2,125	13.3
Broccoli	2,463	2,029	1,911	2,135	2,626	6.6	9,126	8,538	-6.4
Cabbage	3,958	2,988	2,194	2,765	4,160	5.1	12,155	11,905	-2.1
Carrots	3,259	3,268	2,632	2,509	3,141	-3.6	14,382	11,668	-18.9
Cauliflower	1,004	1,000	874	1,083	1,011	0.7	4,430	3,961	-10.6
Celery	3,975	4,110	3,498	4,702	3,996	0.5	16,564	16,285	-1.7
Sweet corn	1,233	6,948	1,426	793	1,819	47.5	9,757	10,400	6.6
Cucumbers	2,736	2,949	2,277	3,258	3,244	18.6	11,086	11,220	1.2
Lettuce, iceberg 3/	10,416	11,130	11,020	9,777	9,643	-7.4	41,425	42,343	2.2
Lettuce, romaine 3/	2,506	1,931	1,946	2,130	2,393	-4.5	8,629	8,513	-1.3
Lettuce, other 3/	1,228	860	895	916	1,038	-15.5	4,439	3,899	-12.2
Onions, dry	10,264	10,599	10,316	9,556	9,566	-6.8	41,973	40,735	-2.9
Peppers, bell	3,228	2,858	1,549	2,639	3,863	19.7	10,475	10,274	-1.9
Squash	2,329	1,162	566	2,039	2,019	-13.3	5,249	6,096	16.1
Tomatoes 4/	10,893	11,338	8,452	8,784	11,457	5.2	43,620	39,467	-9.5
Watermelon	1,796	15,304	11,909	1,378	2,440	35.9	26,573	30,387	14.4
Subtotal	62,605	80,145	61,767	55,295	64,435	2.9	264,289	259,812	-1.7
Sweet potatoes	578	733	525	1,512	952	64.7	3,299	3,348	1.5
Potatoes 5/	43,817	49,935	34,998	36,715	43,032	-1.8	169,866	165,465	-2.6
Total	107,000	130,813	97,290	93,522	108,419	1.3	437,454	428,625	-2.0

1/ Includes imports, exports, and domestic transfers. Data are preliminary. 2/ Change from first quarter 1998. 3/ Excludes processed lettuce.

4/ Includes cherry tomatoes. 5/ Includes fresh, chipper, and seed potatoes.

Source: Agricultural Marketing Service, USDA.

Table 15--Selected fresh vegetables: U.S. import volume and value, by country, 1998

Country	Snap	Cucumbers	Eggplant	Bell	Squash	Onions	Tomatoes	Total
	beans			peppers				
	--1,000 lbs.--							
Canada	2,612	29,474	73	34,286	1,354	76,300	136,088	280,189
Mexico	39,264	677,703	79,939	343,500	360,562	455,641	1,618,310	3,574,918
Guatemala	578	3,337	0	0	27	2,919	0	6,862
Honduras	0	10,421	0	5,095	493	38	0	16,047
Dominican Republic	224	705	400	919	23	0	64	2,334
Netherlands	0	549	173	45,894	7	3,242	81,138	131,002
Belgium	0	0	0	750	0	110	7,111	7,970
Spain	1	923	0	700	0	1,278	14,326	17,229
Israel	0	44	8	7,061	0	0	10,437	17,551
Peru	74	0	0	0	0	29,234	0	29,308
Others	33	146	3,357	665	6,261	25,128	545	36,135
World	42,787	723,302	83,949	438,870	368,728	593,892	1,868,019	4,119,546
	-- \$ 1,000 --							
Canada	943	12,622	23	30,803	305	11,999	100,508	157,203
Mexico	21,322	142,464	29,418	171,782	110,528	120,696	567,443	1,163,653
Guatemala	242	222	0	0	7	718	0	1,188
Honduras	0	1,083	0	539	73	3	0	1,698
Dominican Republic	132	362	179	397	7	0	35	1,111
Netherlands	0	383	175	52,605	11	2,250	64,487	119,913
Belgium	0	0	0	869	0	63	5,555	6,488
Spain	1	548	0	810	0	165	10,894	12,418
Israel	0	14	10	6,916	0	0	8,625	15,565
Peru	36	0	0	0	0	5,622	0	5,658
Others	50	155	640	784	893	8,895	349	11,765
World	22,727	157,853	30,446	265,506	111,823	150,411	757,895	1,496,660

Source: Bureau of the Census, U.S. Department of Commerce.

Table 16--Selected fresh vegetables: U.S. export volume and value, by country, 1998

Country	Asparagus	Broccoli	Cabbage	Carrots	Cauliflower	Celery	Sweet corn	Cucumbers	Lettuce	Onions 1/	Peppers	Tomatoes	Total
							-- 1,000 lbs --						
Canada	14,527	166,332	80,984	223,837	84,543	191,659	71,293	49,943	569,681	259,198	125,056	265,180	2,102,234
Mexico	230	1,576	2,555	3,191	4,493	4,972	4,045	881	45,311	59,329	1,381	10,557	138,520
Dominican Republic	0	0	48	0	0	0	0	0	28	6,329	0	76	6,481
China	0	72	142	41	0	11,556	1,543	0	965	365	0	0	14,683
Germany	396	0	0	1,265	0	0	0	0	0	852	40	211	2,764
Netherlands	54	39	0	33	0	370	0	0	51	2,679	234	765	4,225
United Kingdom	1,116	92	30	1,750	24	3,773	4,233	10	2,340	11,796	227	2,414	27,804
Switzerland	5,620	0	0	0	0	33	0	0	0	0	4	0	5,656
Australia	258	0	0	0	34	0	0	0	0	7,212	64	0	7,567
Russia	0	0	2,899	1,228	0	0	5,284	7	279	2,363	65	52	12,175
Japan	11,406	109,953	953	4,333	84,420	9,188	838	15	12,615	174,458	91	1,211	409,480
South Korea	137	46	81	0	28	20	0	0	70	6,784	0	0	7,168
Hong Kong	26	12,088	1,340	40	1,760	34,958	4,217	34	36,019	12,837	16	548	103,883
Taiwan	7	9,461	9,836	47	473	9,941	52	4	7,784	31,672	160	0	69,438
Malaysia	0	36	0	6	101	450	0	0	51	2,825	0	0	3,468
Singapore	7	35	289	338	0	4,723	39	0	7,160	2,081	0	0	14,671
United Arab Emirates	0	0	0	8,636	0	0	20	0	52	813	0	0	9,521
Other	608	539	383	10,801	249	94	2,012	38	4,644	38,882	429	5,310	63,988
World	34,393	300,269	99,539	255,544	176,125	271,737	93,576	50,932	687,050	620,474	127,767	286,324	3,003,728
							-- \$ 1,000 --						
Canada	17,081	47,355	18,237	52,210	26,895	29,279	12,810	12,738	134,881	50,138	54,000	107,376	562,998
Mexico	172	489	240	612	1,181	717	852	137	8,022	10,306	669	3,733	27,131
Dominican Republic	0	0	4	0	0	0	19	0	9	1,083	0	25	1,140
China	0	19	15	15	0	2,591	565	0	276	44	0	0	3,526
Germany	813	0	0	278	0	0	0	0	0	166	47	223	1,526
Netherlands	91	10	0	7	0	0	0	0	31	529	116	803	1,588
United Kingdom	1,562	21	8	740	25	970	1,379	4	895	5,862	150	2,496	14,112
Switzerland	6,633	0	0	0	0	4	0	0	0	0	7	0	6,644
Australia	350	0	0	0	17	0	0	0	0	2,038	50	0	2,454
Russia	0	0	372	153	0	0	1,470	4	91	502	28	14	2,634
Japan	17,762	39,836	320	1,808	28,223	1,753	269	23	7,372	22,255	78	841	120,540
South Korea	261	34	33	0	22	3	0	0	45	1,223	0	0	1,620
Hong Kong	40	4,440	280	6	666	7,183	1,207	10	9,881	1,727	9	155	25,606
Taiwan	9	3,528	1,286	9	182	1,991	15	8	2,116	4,952	104	0	14,200
Malaysia	0	12	0	5	12	95	0	0	24	343	0	0	492
Singapore	12	9	71	171	0	978	12	0	2,096	303	0	0	3,653
United Arab Emirates	0	0	0	1,549	0	0	5	0	28	266	0	0	1,849
Other	848	171	75	2,305	87	108	657	15	1,350	5,335	377	4,855	16,186
World	45,636	95,925	20,941	59,869	57,310	45,674	19,261	12,939	167,119	107,072	55,635	120,521	807,901

1/ Includes sets.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 17--Vegetables: U.S. farm cash receipts, 1991-98

State	1991	1992	1993	1994	1995	1996	1997p	1998f	Change
									1997-1998
									Percent
									--\$ 1,000--
Alabama	91,894	72,970	79,249	83,315	85,903	74,235	77,917	75,828	-2.7
Alaska	2,476	2,573	3,102	2,898	3,556	2,974	3,564	3,563	0.0
Arizona	319,256	312,966	426,010	361,539	718,881	568,038	607,134	711,972	17.3
Arkansas	22,583	24,582	18,756	24,419	26,076	16,756	19,889	23,534	18.3
California	3,635,988	4,059,426	4,934,070	5,217,683	5,906,258	5,641,974	6,113,027	5,953,365	-2.6
Colorado	217,475	198,836	333,919	304,186	272,813	279,098	235,139	290,102	23.4
Connecticut	23,101	21,608	24,763	24,941	24,614	26,763	24,256	25,831	6.5
Delaware	49,342	42,281	39,768	37,255	35,462	37,925	38,103	44,847	17.7
Florida	1,558,416	1,756,993	1,688,676	1,448,371	1,321,518	1,402,880	1,565,723	1,554,102	-0.7
Georgia	249,130	267,081	281,555	340,542	439,673	386,437	475,597	416,545	-12.4
Hawaii	33,291	38,787	36,717	39,710	41,923	42,180	43,569	42,864	-1.6
Idaho	654,646	626,190	723,399	719,457	814,692	836,090	657,588	698,194	6.2
Illinois	86,964	78,493	72,055	81,194	73,420	78,986	69,472	66,115	-4.8
Indiana	78,820	75,790	83,300	89,585	88,241	98,201	101,016	104,918	3.9
Iowa	11,723	10,735	5,642	14,619	16,943	24,157	18,033	18,258	1.2
Kansas	34,655	33,908	27,571	21,950	16,294	16,707	15,923	12,929	-18.8
Kentucky	29,466	28,141	30,370	30,075	28,875	31,703	30,118	30,117	0.0
Louisiana	64,624	55,674	66,388	70,875	71,337	71,716	74,474	72,203	-3.0
Maine	121,952	114,198	106,109	111,978	116,090	116,504	119,713	126,298	5.5
Maryland	92,225	65,314	63,786	67,249	73,051	77,454	79,439	84,862	6.8
Massachusetts	62,831	55,919	59,073	63,809	60,638	74,315	71,920	75,530	5.0
Michigan	352,242	371,888	417,580	451,298	405,489	436,990	387,064	429,758	11.0
Minnesota	214,934	216,008	167,718	231,727	213,898	274,082	256,310	262,885	2.6
Mississippi	39,592	41,763	39,573	44,695	42,574	40,574	44,492	45,424	2.1
Missouri	20,435	20,907	20,708	25,221	26,355	21,583	23,770	21,707	-8.7
Montana	21,621	18,647	23,356	26,045	24,250	29,505	25,453	26,330	3.4
Nebraska	75,526	70,096	75,809	100,252	103,988	122,681	116,091	133,021	14.6
Nevada	21,397	19,221	33,842	27,343	35,227	42,678	33,510	63,991	91.0
New Hampshire	16,174	17,104	19,847	20,742	28,779	29,516	28,768	27,676	-3.8
New Jersey	125,410	139,699	160,236	194,975	174,606	181,225	170,785	177,697	4.0
New Mexico	156,540	157,135	149,137	140,496	152,825	158,368	163,133	125,224	-23.2
New York	402,347	268,195	337,033	327,840	324,834	245,961	315,877	368,429	16.6
North Carolina	245,702	197,421	253,758	294,753	281,184	311,021	343,453	336,905	-1.9
North Dakota	178,204	197,466	183,011	230,829	206,129	293,328	229,097	230,310	0.5
Ohio	163,534	133,670	159,409	148,044	128,529	143,429	148,074	140,676	-5.0
Oklahoma	40,364	41,113	47,296	47,066	48,122	44,929	48,725	45,685	-6.2
Oregon	321,809	328,384	417,587	389,158	391,588	395,288	371,785	387,090	4.1
Pennsylvania	76,027	98,154	97,674	97,968	88,456	93,100	101,459	99,561	-1.9
Rhode Island	5,874	5,553	6,607	6,725	6,469	6,660	6,662	7,445	11.8
South Carolina	102,940	53,248	86,614	88,620	91,786	74,680	71,008	69,880	-1.6
South Dakota	9,163	7,353	6,291	9,126	7,133	8,138	8,226	7,052	-14.3
Tennessee	48,321	47,738	53,726	65,208	58,464	62,657	67,342	76,053	12.9
Texas	409,230	351,004	407,675	394,837	456,079	355,863	343,523	456,846	33.0
Utah	30,330	35,263	35,338	31,913	23,089	22,266	24,589	26,852	9.2
Vermont	9,140	9,874	9,797	11,200	12,300	13,484	13,458	13,484	0.2
Virginia	100,188	104,230	85,520	113,683	110,119	75,675	94,170	92,792	-1.5
Washington	599,911	573,002	781,897	810,410	848,630	770,202	816,576	824,466	1.0
West Virginia	3,642	5,800	6,300	6,000	5,800	5,600	5,700	5,700	0.0
Wisconsin	374,190	353,515	328,903	384,819	361,890	377,626	368,262	371,648	0.9
Wyoming	19,098	25,472	20,356	16,584	18,031	18,575	16,992	16,814	-1.0
U.S.	11,624,743	11,851,388	13,536,876	13,893,227	14,912,881	14,560,777	15,085,968	15,323,378	1.6

p = preliminary. f = forecast.

Source: Economic Research Service, USDA.

Table 18--Representative wholesale prices for selected fresh-market vegetables and melons in Chicago, 1998-1999

Commodity	Shipping point 1/	Shipping container	1998												1999			
			Apr 1	May 1	June 1	July 1	Aug 3	Sep 4	Oct 5	Nov 2	Dec 1	Jan 4	Feb 1	Mar 1	Apr 5			
Artichokes	CA	Carton, 24s	18.00	17.75	37.50	--	27.00	24.00	23.00	32.00	34.50	--	28.00	24.00	20.00			
Beans, round green	FL	Bushel cartons	22.00	14.00	17.50	27.00	12.00	12.00	12.50	14.50	25.50	24.50	20.50	20.00	16.50			
Beets, medium	TX, IL	25 lb sacks, loose	9.50	9.50	10.50	11.50	7.00	7.00	7.00	6.50	6.00	5.75	5.75	5.50	7.50			
Brussels sprouts	CA, MX	25 lb cartons	10.50	12.50	19.00	--	25.00	14.00	20.50	13.50	16.75	19.50	11.50	14.00	26.00			
Cabbage, Danish-type, medium	NY	50 lb cartons	9.25	8.50	11.00	10.00	8.00	7.15	7.00	6.00	6.00	6.00	6.00	5.75	5.75			
Chinese cabbage (Nappa)	CA	30 lb cartons	14.00	14.50	13.50	12.50	9.50	9.75	11.50	10.00	9.25	10.00	10.00	10.50	11.50			
Carrots, baby peeled	CA	Carton, 24-1 lb filmbags	16.75	16.75	16.00	16.25	16.50	17.00	17.25	16.75	16.75	16.75	16.75	16.75	16.75			
Eggplant, medium	FL, NJ	1 1/9 bushel cartons	--	20.00	20.00	10.00	16.00	11.00	13.50	14.50	8.00	8.50	9.50	--	12.00			
Garlic, white colossal	CA, MX	30 lb cartons	34.00	35.00	37.00	39.00	40.00	46.00	47.00	47.50	49.00	47.00	47.00	39.00	32.00			
Greens, Kale	CA	Carton, 24s	12.00	12.00	10.00	9.00	9.50	9.25	9.00	8.75	8.75	8.75	8.75	8.75	9.00			
Greens, Kohlrabi	CA, TX	Carton, 12s	11.50	--	12.50	12.50	12.00	12.00	12.00	12.00	12.00	12.00	14.00	14.50	12.00			
Greens, Turnip tops	GA, IL	Carton, 24s	7.75	8.25	8.25	8.25	8.75	8.75	10.50	8.00	8.00	8.00	8.00	7.75	7.50			
Greens, Mustard	CA	Carton, 24s	7.75	8.25	8.25	8.00	8.75	9.00	10.50	8.00	8.00	7.75	7.75	7.50	7.00			
Greens, Collards	GA	Carton, 24s	7.75	8.25	8.25	8.00	--	9.00	10.50	8.00	8.00	8.00	8.50	8.50	8.25			
Lettuce, Boston	CA	Carton, 24s	9.50	17.00	8.50	9.50	9.00	8.50	9.00	8.50	11.50	8.75	8.50	8.25	8.25			
Lettuce, Romaine	CA	Carton, 24s	8.50	39.00	19.50	14.50	10.50	9.50	10.50	9.50	9.25	9.00	10.50	10.50	11.50			
Mushrooms, button, large	PA	10 lb carton	12.50	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75			
Mushrooms, Shiitake	PA	5 lb carton	20.50	20.50	20.50	20.50	22.00	22.00	20.50	20.50	20.50	20.50	20.50	20.50	20.50			
Mushrooms, Oyster	PA	5 lb carton	16.50	16.50	16.50	16.50	16.00	16.00	16.00	16.00	16.00	16.00	16.00	15.75	15.75			
Mushrooms, Cremini	PA	5 lb carton	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00			
Mushrooms, Portobellas	PA	5 lb carton	10.25	10.25	10.25	10.25	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00			
Mushrooms, various red	FL, MX	1/2 bushel carton	17.00	19.00	10.00	8.00	9.50	9.00	17.00	9.00	18.00	22.00	22.00	20.00	21.00			
Okra, small-medium	CA, MX	Carton, bunched 48s	7.50	7.75	8.25	8.25	10.00	10.50	12.00	10.50	7.75	13.50	7.50	8.00	7.00			
Green onions	CA, IL, MX	Carton, bunched 12s	13.00	13.00	12.50	19.50	14.50	12.00	12.00	12.00	13.50	14.50	13.50	11.50	11.00			
Leeks	CA, IL, MX	Cartons, bunched 60s	10.50	11.00	19.50	14.50	12.00	11.00	11.50	11.50	12.50	11.50	13.50	10.50	9.50			
Parsley, curly	CA	10 lb carton	13.00	10.00	19.50	12.00	16.00	9.00	27.00	--	--	--	--	8.50	11.00			
Snow peas	CA, GU	10 lb carton	17.50	20.00	25.00	12.00	27.50	20.00	36.00	29.50	22.50	21.50	17.00	22.00	18.00			
Sugar snap peas	CA, GU	10 lb carton	14.50	14.00	9.50	15.50	10.00	10.00	12.00	16.00	9.50	9.50	9.50	15.50	11.50			
Green bell peppers, large	FL, CA	1 1/9 bushel carton	14.50	17.50	11.50	8.50	10.00	7.25	12.00	12.00	10.50	9.50	9.50	8.50	12.00			
Jalapeno pepper, medium	FL, GA, MI	1/2 & 5/9 bushel crates	8.50	7.75	6.25	6.00	6.00	5.50	6.00	6.00	14.00	14.00	6.50	5.00	5.00			
Radishes	FL, MI	Cartons, 30-6oz filmbags	13.50	13.50	11.50	11.50	12.00	11.00	10.50	11.00	9.50	9.50	8.50	9.50	9.50			
Spinach	CA	Cartons, bunched 24s	--	8.00	7.25	9.00	6.50	12.00	7.50	6.25	5.50	19.00	9.50	19.50	12.00			
Squash, Zucchini, medium	FL, NJ, MI	1/2 & 5/9 bushel crates	24.50	11.50	8.25	10.00	8.00	12.00	12.00	9.00	6.00	18.50	10.50	22.50	12.00			
Squash, Yellow straightneck, med.	FL, NJ, MI	1/2 & 5/9 bushel crates	15.00	15.25	15.50	17.50	18.25	17.00	17.00	14.50	15.75	15.75	15.75	15.00	14.50			
Sweet potatoes, U.S. #1, Beaurgd	LA	40 lb cartons	12.00	14.50	11.50	17.50	7.00	7.00	15.00	12.50	19.00	16.25	8.50	12.00	9.50			
Tomatoes, mature green, large	FL, CA, MX	25 lb carton	14.50	18.50	15.00	15.00	12.00	7.50	16.00	16.00	20.00	25.00	11.50	10.00	10.50			
Tomatoes, vine ripe, large, 4x5s	MX, CA, FL	25 lb carton	10.00	13.00	8.00	13.50	9.00	9.00	11.00	11.50	15.00	16.50	8.50	10.00	10.00			
Tomatoes, cherry	FL, CA, MX	Flats of 12-1 pint bks	9.50	12.00	9.50	19.00	10.00	9.25	14.50	20.00	25.50	24.50	10.50	10.50	10.50			
Tomatoes, plum-type	FL, CA, MX	25 lb carton	8.50	8.50	9.00	9.00	8.50	8.50	9.50	8.75	8.50	8.50	8.50	8.50	7.75			
Turnips, purple top, medium-large	CA, IL	25 lb filmbags	15.50	30.00	14.00	10.50	9.50	11.50	11.00	10.00	9.50	9.50	9.50	10.00	10.00			
Bok Choy	CA, FL	30 lb cartons	13.00	15.50	16.50	10.00	9.50	8.50	9.50	14.00	10.00	22.00	12.50	11.00	15.50			
Cantaloupes	CA, CR, MX	1/2 carton 15s	10.25	10.50	12.00	11.50	10.50	8.50	6.00	5.50	8.50	17.50	12.50	10.50	12.50			
Honeydews	CA, HD, CR	2/3 cartons 6s	0.30	0.34	0.30	0.21	0.23	0.24	0.21	0.29	0.24	0.28	0.27	0.21	0.30			
Watermelon, various red	CA, TX, MX	Carton 4s, per lb	0.33	0.34	0.35	0.24	0.25	0.22	0.23	0.27	0.25	0.43	0.37	0.32	0.39			
Watermelon, red seedless	CA, MX	Carton 5s, per lb	--	--	--	--	--	--	--	--	--	--	--	--	--			

-- = not available.

1/ Major shipping points by commodity into the Chicago Wholesale Market. CA=California, FL=Florida, TX=Texas, MI=Michigan, IL=Illinois, NY=New York, NJ=New Jersey, GA=Georgia,

PA=Pennsylvania, LA=Louisiana, MX=Mexico, CR=Costa Rica, HD=Honduras, GU=Guatemala.

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

Table 19--Supermarket sales of selected processed vegetables, 1993-97 1/

Item	1993	1994	1995	1996	1997	Change 1996-97
	-- Million dollars --					Percent
Canned:						
Asparagus	79.8	80.2	83.3	80.6	80.7	0.1
Beans, green	323.1	340.7	347.2	368.1	403.8	9.7
Beans, baked	390.7	395.5	411.0	411.0	433.9	5.6
Beans, refried	132.6	142.8	149.1	144.8	147.6	1.9
Beans, other canned	380.3	396.2	409.0	418.6	434.2	3.7
Beets	42.9	44.7	44.9	45.1	48.9	8.4
Carrots	29.8	30.4	32.0	32.2	33.2	3.0
Corn, sweet	412.6	438.9	445.5	457.5	495.7	8.4
Greens 2/	15.0	15.5	17.2	19.4	19.6	1.0
Mushrooms	183.0	186.1	188.1	185.9	177.7	-4.4
Peas, green	184.8	192.8	188.8	192.7	207.9	7.9
Peppers & pimentos	180.3	189.7	196.6	197.1	205.9	4.5
Pickles	504.5	546.9	601.8	633.8	633.7	0.0
Potatoes & swt potatoes	92.7	95.4	98.8	100.7	102.9	2.2
Relishes	95.2	96.2	96.7	101.5	105.3	3.7
Sauerkraut	50.3	51.9	51.8	49.7	50.6	1.8
Spinach	38.4	37.4	38.0	38.9	39.3	0.9
Squash 4/	4.8	4.8	4.5	4.3	4.7	7.7
Tomato products						
Tomatoes, whole	442.1	454.7	473.4	507.9	503.8	-0.8
Ketchup	415.0	436.2	445.2	459.2	474.9	3.4
Tomato paste & sauces	415.2	414.0	408.0	404.5	389.0	-3.8
Barbecue sauce	328.4	353.3	349.7	344.9	350.3	1.6
Chili (hot) sauce	68.7	75.9	82.2	86.5	93.1	7.6
Pizza sauces	56.7	51.9	53.3	55.5	52.9	-4.7
Taco sauce	51.7	50.5	49.9	47.6	49.7	4.5
Chili sauce	32.3	31.7	32.6	34.9	36.8	5.7
Vegetables, mixed	70.7	75.0	77.9	83.3	88.2	5.9
Vegetables, other canned	192.4	198.8	210.5	212.8	215.3	1.2
Frozen: 3/						
Beans, all	199.5	195.9	192.8	194.5	190.7	-2.0
Broccoli	191.3	183.8	181.8	175.4	173.5	-1.1
Carrots	29.5	27.1	25.2	23.3	22.9	-1.6
Corn, on cob	154.6	149.3	144.2	143.2	134.7	-6.0
Corn, whole-kernel	195.3	199.6	194.3	203.6	209.5	2.9
Onion rings	30.9	29.7	36.4	38.7	37.7	-2.4
Onions, other	9.2	9.3	9.6	10.5	10.6	1.5
Peas, green	214.4	213.5	206.6	205.7	204.2	-0.7
Potatoes, fries & other	700.0	726.7	733.6	761.3	783.6	2.9
Spinach	88.2	87.1	90.3	92.2	93.1	1.0
Squash 4/	10.6	10.6	10.9	11.5	11.7	1.4
Vegetables in sauce/crumbs	110.2	104.5	96.4	102.2	110.1	7.7
Vegetables, mixed	484.3	527.1	585.4	599.5	602.2	0.4
Vegetables, other plain	144.5	139.4	140.8	139.9	136.6	-2.4
Dried:						
Dried beans & grains	193.2	219.6	204.7	210.8	216.3	2.6
Dried vegetables, other	18.9	22.6	25.5	27.2	27.8	2.3
Other:						
Potato chips	1,718.5	1,857.7	1,918.6	1,920.9	2,012.0	4.7
Potatoes, instant mashed	265.8	277.2	263.6	268.0	294.4	9.8

1/ Includes movement through U.S. food stores, drug stores, and mass merchandising (warehouse-type) stores. 2/ Includes mustard greens, turnip greens, mixed greens, salad greens, collard greens, okra, and kale. 3/ Includes food store sales only. 4/ Includes zucchini squash only.

Source: Information Resources, Inc.

Table 20--Processing vegetables: Selected U.S. contract plantings, 1994-96 average, 1997-99

Crop	1994-96 average	Contract area 1/			Change from:	
		1997	1998	Intended 1999	Avg.-1999	1998-99
		-- 1,000 acres --			-- Percent --	
Snap beans:						
Canning	151,410	132,940	112,400	136,700	-9.7	21.6
Freezing	64,403	69,600	64,000	63,800	-0.9	-0.3
Sweet corn:						
Canning	321,293	248,030	233,300	246,900	-23.2	5.8
Freezing	211,877	227,900	203,200	215,300	1.6	6.0
Green peas:						
Canning	135,587	126,200	115,550	124,150	-8.4	7.4
Freezing	161,760	166,400	150,550	167,200	3.4	11.1
Total						
Canning	608,290	507,170	461,250	507,750	-16.5	10.1
Freezing	438,040	463,900	417,750	446,300	1.9	6.8
Cucumbers 2/	99,513	93,170	71,320	94,060	-5.5	31.9
Tomatoes	347,120	290,700	298,700	349,840	0.8	17.1
Grand total	1,492,963	1,354,940	1,249,020	1,397,950	-6.4	11.9

1/ Does not include open market plantings. 2/ For pickles.

Source: National Agricultural Statistics Service, USDA.

Table 21--Processing vegetables: U.S. acreage, production, and value, 1996-98

Commodity	Acreage harvested			Production			Value			
	1996	1997	1998	1996	1997	1998	1996	1997	1998	
		-- Acres --			-- Short tons --			-- 1,000 dollars --		
Asparagus: 1/										
Canning	--	--	--	35,030	28,410	28,960	42,706	34,292	34,485	
Freezing	--	--	--	8,750	10,510	6,685	10,437	13,279	8,223	
Snap beans:										
Canning	144,870	128,380	124,000	536,700	471,930	451,840	92,858	79,264	72,023	
Freezing	62,180	66,700	67,000	248,220	257,320	255,930	46,897	48,768	47,817	
Broccoli: 1/										
Processing	--	--	--	63,250	56,810	56,148	24,501	24,036	21,769	
Carrots: 1/										
Processing	25,720	22,360	23,780	590,460	569,450	549,280	39,526	38,396	37,537	
Cauliflower: 1/										
Processing	--	--	--	27,640	28,300	72,248	13,174	13,577	38,322	
Sweet corn 2/:										
Canning	276,200	246,500	255,000	1,723,620	1,647,250	1,659,340	139,708	123,467	117,439	
Freezing	198,000	219,300	212,300	1,572,710	1,695,080	1,591,390	119,132	126,862	121,946	
Cucumbers (pickles):	105,200	103,370	102,070	563,689	620,100	615,310	139,985	145,371	139,891	
Peas, green 3/:										
Canning	119,600	111,400	112,450	199,164	203,950	192,990	60,242	63,269	57,140	
Freezing	130,200	159,800	160,550	218,508	276,140	290,850	58,668	75,227	79,482	
Tomatoes	339,140	283,390	299,760	11,407,301	9,973,259	9,394,810	711,043	605,107	542,510	
Lima beans:										
Canning	9,350	12,400	10,570	10,270	14,070	14,680	4,350	6,171	5,936	
Freezing	41,450	42,030	40,170	64,780	66,000	59,280	29,789	30,476	27,399	
Fordhook	5,200	5,300	3,200	11,980	11,930	6,400	6,575	6,788	3,795	
Baby	36,250	36,730	36,970	52,800	54,070	52,880	23,214	23,688	23,604	
Beets:										
Processing	10,210	7,560	6,690	125,870	123,700	105,530	8,092	8,245	6,467	
Cabbage (kraut):	7,290	5,490	6,750	141,920	183,670	168,550	6,029	8,299	7,440	
Spinach:										
Canning	7,110	5,330	5,650	59,300	41,180	42,060	5,776	4,419	4,266	
Freezing	8,500	8,990	7,050	84,550	86,510	68,130	8,689	8,928	9,878	
Total	1,526,470	1,465,030	1,473,960	17,746,512	16,419,639	15,683,291	1,591,391	1,487,929	1,407,369	

-- = Not available.

1/ Processing acreage is not reported separately for these dual-use crops. 2/ Corn in the husk. 3/ Production and value on a shelled basis.

Source: National Agricultural Statistics Service, USDA.

Table 22--Canned vegetables: Quarterly wholesale price trends, 1991-99 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 \$/lb	6/10 \$/case
-- \$/case --												
1991												
I	9.21	13.08	7.42	10.21	9.42	12.17	7.79	10.38	6.88	10.83	0.40	19.08
II	9.21	11.88	7.42	9.96	9.04	12.46	7.21	10.17	6.75	10.13	0.38	20.09
III	8.46	11.29	6.88	9.54	8.88	12.13	7.38	10.13	6.50	9.63	0.34	17.75
IV	8.62	11.08	6.50	9.21	9.04	12.25	7.33	10.00	6.79	9.29	0.31	16.67
Average	8.87	11.83	7.05	9.73	9.09	12.25	7.43	10.17	6.73	9.97	0.36	18.40
1992												
I	8.25	10.50	6.56	8.88	9.33	11.78	7.00	9.50	6.50	9.25	0.29	15.75
II	8.13	10.17	6.50	10.18	9.21	12.03	6.75	9.58	5.50	9.25	0.28	14.58
III	8.71	10.63	7.17	10.00	9.04	12.42	7.04	9.63	5.88	9.25	0.31	15.00
IV	9.04	11.96	7.04	10.08	8.06	11.83	7.00	9.88	6.38	9.25	0.32	15.50
Average	8.53	10.81	6.82	9.79	8.91	12.02	6.95	9.65	6.06	9.25	0.30	15.21
1993												
I	8.58	11.46	6.58	9.88	6.46	11.33	6.88	9.50	7.29	9.71	0.34	15.13
II	8.00	11.50	6.17	10.00	6.29	10.50	6.83	9.44	7.25	10.04	0.35	14.71
III	8.38	11.63	6.17	10.25	8.79	11.46	7.08	9.38	7.38	10.38	0.36	14.67
IV	9.42	17.38	7.17	11.75	9.29	14.29	7.88	10.54	8.13	12.38	0.39	15.75
Average	8.59	12.99	6.52	10.47	7.71	11.90	7.17	9.71	7.51	10.63	0.36	15.06
1994 8/												
I	9.67	19.75	7.04	13.67	9.25	15.42	7.88	11.67	8.46	13.75	0.42	16.42
II	9.58	19.75	6.80	14.42	9.08	15.58	7.88	11.58	8.50	13.75	0.42	17.46
III	8.67	16.17	6.80	12.92	8.50	14.17	7.71	11.25	7.92	13.75	0.40	17.25
IV	7.42	13.08	6.33	11.67	7.25	13.50	7.63	12.13	7.50	13.50	0.41	17.38
Average	8.84	17.19	6.74	13.17	8.52	14.67	7.78	11.66	8.10	13.69	0.41	17.13
1995												
I	7.13	10.63	6.42	10.63	7.46	14.13	7.25	9.50	8.50	13.00	0.39	18.38
II	6.88	10.42	6.55	10.50	7.80	14.42	7.25	9.46	7.38	13.00	0.39	18.38
III	7.00	10.25	6.79	10.25	7.96	14.84	7.25	9.38	8.00	12.50	0.39	18.38
IV	7.29	12.46	7.09	11.09	8.21	14.75	7.38	9.38	8.00	11.00	0.37	18.04
Average	7.07	10.94	6.71	10.62	7.86	14.53	7.28	9.43	7.97	12.38	0.38	18.30
1996												
I	7.17	13.83	7.38	10.83	8.21	16.25	7.84	9.63	8.00	12.00	0.36	17.50
II	7.83	12.92	7.63	11.17	8.75	16.50	7.96	9.82	8.00	12.00	0.34	15.75
III	8.46	13.00	7.92	11.46	9.38	16.50	8.25	10.00	7.96	12.00	0.31	16.67
IV	7.96	12.75	7.55	11.00	9.13	16.50	7.83	10.33	7.25	12.00	0.30	17.33
Average	7.86	13.13	7.62	11.12	8.87	16.44	7.97	9.94	7.80	12.00	0.33	16.81
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												
lp	7.25	10.75	7.50	10.38	8.63	13.05	7.25	10.50	7.25	11.00	0.46	21.00
llf	7.13	10.50	7.50	10.38	8.75	13.25	7.75	11.25	7.75	11.50	0.46	21.00

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 except 1991 quotes from New York State. 7/ 26 percent solids for 6/10 and 31 percent for 55-gallon drum, California.

8/ In mid-1994, most canners switched from size 303 to 300 cans (have 10 percent less volume) for retail packs.

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

Table 23--Selected canned vegetables: U.S. import volume and value, by country, 1998

Country	Sweet corn	Green peas	Green beans	Tomato paste	Tomato sauce 1/	Asparagus	Cucumbers	Total
--1,000 lbs, product weight--								
Canada	15,290	13,368	35,676	186	12,258	0	31,375	108,152
China	0	0	527	0	0	1,994	1	2,522
Dominican Republic	0	11,339	0	0	2,313	0	0	13,653
France	0	46	44	0	5,763	0	501	6,354
Honduras	0	0	0	0	0	0	21,072	21,072
India	0	85	1,010	0	19	0	16,954	18,068
Israel	0	0	0	714	239	0	1,169	2,122
Italy	0	0	220	605	3,349	0	34	4,208
Mexico	3	0	3,150	18,408	323	0	5,449	27,334
Spain	0	0	14	0	4,328	71	0	4,412
Thailand	3,440	0	213	0	29	0	0	3,682
Others	62	4,579	3,704	874	3,350	589	12,379	25,538
World	18,795	29,418	44,558	20,788	31,971	2,653	88,934	237,117
-- \$1,000 --								
Canada	4,036	3,752	8,805	75	4,403	0	10,142	31,213
China	0	0	285	0	0	1,436	4	1,725
Dominican Republic	0	7,265	0	0	771	0	0	8,036
France	0	27	23	0	4,974	0	600	5,624
Honduras	0	0	0	0	0	0	1,789	1,789
India	0	86	499	0	10	0	3,514	4,109
Israel	0	0	0	287	104	0	655	1,046
Italy	0	0	63	353	1,193	0	16	1,624
Mexico	3	0	1,406	4,556	233	0	656	6,854
Spain	0	0	16	0	6,570	105	0	6,692
Thailand	1,204	0	80	0	24	0	0	1,309
Others	27	3,612	2,469	382	3,889	575	4,699	15,653
World	5,270	14,741	13,648	5,653	22,172	2,117	22,073	85,674

1/ Includes puree.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 24--Selected canned vegetables: U.S. export volume and value, by country, 1998

Country	Sweet corn	Green peas	Green beans	Tomato paste	Tomato sauce	Asparagus	Cucumbers	Total
--1,000 lbs, product weight--								
Australia	429	0	1,482	563	135	2,536	90	5,234
Brazil	501	0	0	6,490	299	0	513	7,802
Canada	4,783	1,460	1,529	98,310	170,792	657	23,337	300,867
Cayman Isles	0	17,097	149	0	0	0	0	17,246
Costa Rica	2,344	46	1	53	234	235	41	2,955
Germany	28,248	0	0	1	582	0	14	28,844
Hong Kong	12,805	0	0	3,471	1,615	0	335	18,227
Japan	134,953	12	96	22,987	12,091	141	4,140	174,420
Malaysia	981	0	0	197	297	0	7	1,482
Mexico	11,360	164	1,807	9,853	13,895	50	369	37,498
Netherlands	37,390	0	277	70	2,679	64	4,162	44,642
Norway	12,648	0	0	1,575	1,632	4	0	15,859
Philippines	7,365	11	0	9,510	555	0	78	17,519
Russia	4,972	827	51	55	120	0	179	6,204
Singapore	4,618	17	27	448	910	5	138	6,163
South Korea	26,331	0	0	17,395	4,110	0	4,902	52,739
Sweden	8,038	0	0	0	2,797	0	0	10,835
Taiwan	60,218	0	0	5,339	1,426	0	256	67,240
United Kingdom	26,163	0	500	259	4,056	2,332	55	33,367
Other	29,727	4,425	3,566	69,194	20,038	909	2,509	130,367
World	413,873	24,060	9,485	245,771	238,262	6,933	41,125	979,509
-- \$ 1,000 --								
Australia	128	0	514	178	58	3,086	62	4,027
Brazil	121	0	0	1,904	83	0	308	2,416
Canada	1,446	430	368	33,596	68,407	717	7,955	112,918
Cayman Isles	0	8,050	43	0	0	0	0	8,093
Costa Rica	863	19	6	19	127	152	22	1,207
Germany	9,131	0	0	3	441	0	9	9,584
Hong Kong	5,070	0	0	1,429	1,308	0	202	8,010
Japan	51,208	4	13	7,758	5,102	67	1,513	65,665
Malaysia	309	0	0	147	160	0	5	622
Mexico	2,935	149	716	3,335	4,739	29	208	12,111
Netherlands	10,761	0	91	18	1,713	24	1,659	14,268
Norway	4,440	0	0	507	1,301	6	0	6,254
Philippines	3,115	6	0	3,003	191	0	61	6,376
Russia	1,490	295	22	30	66	0	101	2,004
Singapore	1,503	8	11	169	371	8	62	2,131
South Korea	11,648	0	0	6,631	1,526	0	2,105	21,910
Sweden	2,738	0	0	0	1,776	0	0	4,514
Taiwan	24,430	0	0	1,885	632	0	112	27,059
United Kingdom	8,377	0	193	75	1,830	1,608	31	12,115
Other	10,902	1,829	1,440	18,570	10,139	828	1,090	44,798
World	150,616	10,790	3,419	79,259	99,969	6,525	15,505	366,083

Source: Bureau of the Census, U.S. Department of Commerce.

Table 25--Selected frozen vegetables: U.S. carryover, pack, seasonal supply, and shipments, 1994/95-1998/99

Commodity/season	Carryover 1/	Pack	Season supply	Total shipments
--Million pounds--				
Broccoli:				
1994/95	133.6	151.2	284.8	174.2
1995/96	110.6	205.5	316.0	151.3
1996/97	164.8	138.4	303.2	203.9
1997/98	99.3	109.0	208.3	87.5
1998/99p	120.8			
Lima beans:				
1994/95	16.4	114.6	131.1	107.7
1995/96	23.4	121.8	131.1	97.7
1996/97	33.4	107.7	141.0	113.0
1997/98	28.1	123.5	151.5	119.3
1998/99p	32.2			
Snap beans: 2/				
1994/95	71.5	360.5	431.9	344.5
1995/96	87.4	339.0	426.5	346.3
1996/97	80.2	355.9	436.1	351.2
1997/98	84.9	372.6	457.5	366.3
1998/99p	91.3			
Cauliflower:				
1994/95	40.1	66.9	107.0	57.4
1995/96	49.6	64.2	113.8	75.4
1996/97	38.4	48.5	86.9	54.1
1997/98	32.8	44.6	77.4	40.5
1998/99p	36.9			
Carrots:				
1994/95	152.6	412.7	565.3	399.7
1995/96	165.6	418.8	584.5	429.0
1996/97	155.4	398.0	553.4	403.5
1997/98	149.8	409.0	558.9	409.4
1998/99p	149.5			
Corn, sweet: 3/				
1994/95	94.2	917.9	1,012.1	877.8
1995/96	134.3	889.3	1,023.6	875.5
1996/97	148.1	827.0	975.1	852.1
1997/98	123.0	955.3	1,078.3	881.6
1998/99p	196.8			
Green peas:				
1994/95	98.6	499.7	598.3	478.8
1995/96	119.6	505.4	624.9	491.4
1996/97	133.6	369.4	503.0	429.6
1997/98	73.4	468.1	541.4	445.0
1998/99p	96.5			
Okra:				
1994/95	13.2	65.1	78.3	32.9
1995/96	45.3	64.8	110.2	89.2
1996/97	21.0	60.8	81.8	68.8
1997/98	13.0	57.7	70.7	40.8
1998/99p	30.0			
Spinach:				
1994/95	44.8	204.5	249.3	190.5
1995/96	58.8	185.6	244.5	180.4
1996/97	64.1	183.0	247.1	212.4
1997/98	34.6	198.7	233.4	169.4
1998/99p	64.0			
Squash: 4/				
1994/95	38.9	58.1	96.9	56.4
1995/96	40.5	55.0	95.5	60.1
1996/97	35.4	42.4	77.8	39.6
1997/98	38.2	46.6	84.7	23.8
1998/99p	60.9			
Total:				
1994/95	703.8	2,851.2	3,555.0	2,719.8
1995/96	835.2	2,849.3	3,684.5	2,810.3
1996/97	874.2	2,531.1	3,405.3	2,728.3
1997/98	677.0	2,785.2	3,462.2	2,583.5
1998/99p	878.7			

p = preliminary. 1/ Carryover dates are March 1 for broccoli and spinach; May 1 for squash; June 1 for green peas and okra, July 1 for snap beans, lima beans, and cauliflower; August 1 for the others. 2/ Includes regular-cut, french-cut, whole green beans, and wax beans. 3/ Cut-basis (cob converted using factor of 0.4706). 4/ Includes summer and zucchini squash.

Sources: National Agricultural Statistics Service, USDA for carryover and American Frozen Food Institute for pack.

Table 26--Frozen vegetables: Quarterly wholesale price trends, 1994-99 1/

Year and quarter	Sweet corn 2/		Snap beans 3/		Green peas 4/		Carrots 5/		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--												
1994												
I	7.64	0.61	7.40	0.51	7.40	0.53	5.77	0.43	11.75	0.64	8.35	0.42
II	7.77	.64	7.40	.51	7.40	.53	5.77	.43	11.75	.64	8.35	.42
III	7.27	.65	6.97	.51	6.97	.52	5.77	.43	11.75	.64	8.52	.42
IV	6.94	.57	6.75	.51	6.75	.52	5.77	.43	11.08	.64	8.60	.42
Average	7.41	.62	7.13	.51	7.13	.53	5.77	.43	11.58	.64	8.45	.42
1995												
I	6.75	.55	6.75	.49	6.75	.51	5.75	.41	10.75	.66	8.19	.41
II	6.75	.55	6.75	.49	6.75	.51	5.89	.44	10.75	.68	8.40	.43
III	6.75	.54	6.75	.48	6.75	.51	5.89	.42	10.75	.69	8.40	.44
IV	6.75	.52	6.75	.45	6.75	.49	5.89	.42	10.75	.69	8.63	.41
Average	6.75	.54	6.75	.48	6.75	.50	5.86	.42	10.75	.68	8.41	.42
1996												
I	6.67	.47	6.67	.44	6.42	.47	5.76	.39	10.88	.67	7.31	.41
II	6.72	.45	6.63	.46	6.63	.48	5.76	.39	10.94	.67	7.67	.41
III	6.90	.50	6.90	.49	7.09	.51	5.76	.39	10.75	.67	7.67	.41
IV	6.90	.50	6.90	.49	7.10	.51	5.76	.39	10.38	.67	7.67	.41
Average	6.80	.48	6.78	.47	6.81	.49	5.76	.39	10.74	.67	7.58	.41
1997												
I	6.90	.50	6.88	.48	7.10	.51	5.76	.39	10.23	.68	7.98	.42
II	6.90	.50	6.83	.47	7.10	.50	5.76	.39	9.93	.69	8.30	.42
III	6.90	.50	6.83	.47	7.10	.49	5.76	.39	9.93	.69	8.30	.42
IV	6.83	.47	6.83	.47	6.90	.48	5.76	.40	9.93	.69	8.30	.42
Average	6.88	.49	6.84	.47	7.05	.50	5.76	.39	10.01	.69	8.22	.42
1998												
I	6.83	.46	6.83	.47	6.90	.47	5.76	.42	10.08	.70	8.30	.42
II	6.83	.45	6.83	.47	6.90	.46	5.74	.43	10.15	.70	8.30	.42
III	6.83	.44	6.83	.45	6.75	.45	5.71	.40	10.15	.70	8.30	.42
IV	6.83	.44	6.83	.45	6.87	.45	5.71	.40	10.15	.72	8.33	.42
Average	6.83	.45	6.83	.46	6.86	.46	5.73	.41	10.13	.71	8.31	.42
1999												
lp	6.83	.44	6.83	.45	6.88	.45	5.71	.40	10.15	.72	8.35	.44
llf	6.83	.44	6.83	.45	6.88	.45	5.71	.40	10.15	.72	8.30	.44

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: "Price Trends," American Institute of Food Distribution.

Table 27--Frozen vegetables: U.S. cold storage holdings, January 1, 1994-99

Commodity	1994	1995	1996	1997	1998	1999 1/	Change from
							a year ago
	-- Short tons --						Percent
Asparagus	7,391	4,904	4,845	4,177	3,454	3,081	-11
Lima beans	24,797	29,720	30,104	30,348	36,111	37,735	4
Snap beans	92,209	112,341	112,149	101,324	115,331	106,700	-7
Broccoli	67,387	54,538	68,425	60,486	56,156	56,876	1
Brussels sprouts	17,169	15,096	9,442	8,157	9,963	9,373	-6
Carrots	130,497	135,572	153,823	141,885	150,435	128,312	-15
Cauliflower	30,342	38,622	32,504	27,188	29,256	25,149	-14
Sweet corn 2/	185,575	242,681	249,313	247,154	266,323	265,300	0
Mixed vegetables	22,458	29,136	30,246	27,104	22,872	26,510	16
Okra	8,171	31,246	19,977	14,273	26,265	23,284	-11
Onions	18,051	25,622	24,381	20,395	15,594	20,174	29
Blackeye peas	4,803	6,579	4,997	4,913	4,672	4,020	-14
Green peas	130,669	130,244	140,675	112,067	109,767	138,929	27
Peas and carrots	7,682	4,665	5,201	3,366	2,880	5,143	79
Spinach	23,580	35,005	34,470	23,445	33,546	34,616	3
Squash	30,840	32,267	28,893	29,432	37,699	35,136	-7
Southern greens	15,893	14,997	10,830	13,453	10,386	16,383	58
Other vegetables	129,306	120,626	159,760	157,320	142,835	150,798	6
Total	946,820	1,063,856	1,120,030	1,026,484	1,073,541	1,087,515	1
French fries	389,577	417,562	452,249	475,584	486,977	448,628	-8
Other frozen potatoes	113,631	130,726	109,624	90,237	94,797	127,019	34
Potatoes	503,208	548,288	561,872	565,821	581,774	575,647	-1
Grand total 3/	1,450,028	1,612,144	1,681,902	1,592,305	1,655,315	1,663,162	0.5

1/ Preliminary. 2/ Cut basis, with cob converted using factor of 0.4706. 3/ May not add to total because of rounding.

Source: National Agricultural Statistics Service, USDA.

Table 28--Selected frozen vegetables: U.S. import volume and value, by country, 1998

Country	Sweet	Green	Green	Carrots	Spinach	Broccoli	Cauliflower	Total
	corn	peas	beans					
	-- 1,000 lbs, product weight --							
Belgium	0	0	279	1,502	0	0	164	1,944
Canada	29,170	23,593	10,789	2,866	29	1,337	1,240	69,024
China	55	3,713	303	0	24	68	459	4,622
France	0	13	3,198	43	16	0	0	3,271
Guatemala	0	2,481	375	0	0	61,215	2,806	66,877
Israel	0	0	0	1,630	0	0	0	1,630
Mexico	252	287	412	0	5,913	285,991	36,482	329,336
Peru	217	207	0	0	0	0	0	424
Australia	885	188	0	0	0	0	0	1,074
Others	257	1,144	222	143	18	39	262	2,084
World	30,836	31,625	15,577	6,185	5,999	348,651	41,413	480,286
	-- \$ 1,000 --							
Belgium	0	0	93	556	0	0	26	676
Canada	10,064	7,789	4,229	505	6	670	611	23,875
China	19	2,966	195	0	18	18	127	3,342
France	0	10	2,195	29	10	0	0	2,244
Guatemala	0	1,314	207	0	0	20,119	1,098	22,739
Israel	3	0	0	882	0	0	0	885
Mexico	66	128	198	0	1,598	86,779	12,693	101,461
Peru	196	194	0	0	0	0	0	389
Australia	84	18	0	0	0	0	0	102
Others	151	643	211	30	9	5	40	1,088
World	10,582	13,061	7,328	2,002	1,642	107,590	14,596	156,801

Source: Bureau of the Census, U.S. Department of Commerce.

Table 29--Selected frozen vegetables: U.S. export volume and value, by country, 1998

Country	Sweet corn	Green peas	Green beans	Carrots	Spinach	Total
--1,000 lbs, product weight--						
Australia	5,474	0	1,248	168	543	7,432
Canada	6,711	8,487	11,632	48	6,855	33,733
Chile	742	828	80	86	0	1,736
Hong Kong	11,268	165	0	3,785	50	15,267
Japan	97,315	10,544	2,403	14,982	311	125,554
Mexico	6,600	3,967	2,146	41	73	12,825
Singapore	133	0	4	371	12	521
South Korea	4,149	261	18	0	0	4,429
Sweden	404	0	102	0	0	506
Taiwan	2,819	0	1	0	0	2,820
United Kingdom	5,539	149	108	0	0	5,795
Others	21,119	2,111	1,074	441	90	24,834
World	162,273	26,512	18,815	19,921	7,934	235,455
-- \$ 1,000 --						
Australia	1,860	0	382	46	275	2,563
Canada	2,137	3,238	4,307	17	3,237	12,936
Chile	273	270	28	18	0	589
Hong Kong	3,695	95	0	1,016	16	4,822
Japan	39,552	3,831	735	4,645	211	48,976
Mexico	1,657	1,022	1,137	17	29	3,862
Singapore	50	0	3	116	5	173
South Korea	1,501	90	14	0	0	1,605
Sweden	130	0	26	0	0	156
Taiwan	890	0	3	0	0	893
United Kingdom	1,729	36	239	0	0	2,004
Others	7,448	676	951	124	45	9,245
World	60,924	9,258	7,826	5,999	3,818	87,825

Source: Bureau of the Census, U.S. Department of Commerce.

Table 30--Frozen french fry crop-year supply and use, 1994/95-1998/99 1/ 2/

Item	1994/95	1995/96	1996/97	1997/98	1998/99F
--1,000 cwt, fresh weight equivalent--					
Utilized production	136,531	129,029	145,489	131,628	136,150
Imports	6,602	7,509	11,896	15,606	17,947
Beginning stocks	16,640	18,279	18,418	20,896	20,208
Total supply	159,773	154,817	175,803	168,130	174,304
Exports	15,570	15,454	17,490	19,287	21,409
Ending stocks	18,279	18,418	20,896	20,208	20,500
Domestic consumption:					
Total	125,923	120,945	137,417	128,635	132,395
Per capita (lbs/person) 3/	48.1	45.8	51.6	47.8	48.8

F=ERS forecast. 1/ Crop year runs from October 1 through September 30. 2/ Excludes other frozen potatoes. 3/ Calculated using U.S. population on January 1 of the second year (e.g. 1996 population used in 1995/96).

Source: Economic Research Service, USDA.

Table 31--Winter-season potatoes: U.S. acreage, yield, and production, 1989-93 average, 1994-99

Item	1989-93	1994	1995	1996	1997	1998	1999
-- 1,000 acres --							
Acres harvested:							
California	5.2	4.5	5.0	5.7	6.6	7.0	7.8
Florida	7.9	7.8	6.9	8.8	9.4	8.0	9.9
United States	13.1	12.3	11.9	14.5	16.0	15.0	17.7
-- Cwt per acre --							
Average yield:							
California	235	215	260	250	235	220	210
Florida	181	180	170	210	200	180	200
United States	203	193	208	226	214	199	204
-- 1,000 cwt --							
Production:							
California	1,226	968	1,300	1,425	1,551	1,540	1,638
Florida	1,424	1,404	1,173	1,848	1,880	1,440	1,980
United States	2,650	2,372	2,473	3,273	3,431	2,980	3,618

Source: National Agricultural Statistics Service, USDA.

Table 32--Spring-season potatoes: U.S. acreage, yield, and production, 1989-93 average, 1994-99

Item and State	1989-93 1/	1994	1995	1996	1997	1998	1999
-- 1,000 acres --							
Acres harvested:							
Alabama	4.0	2.5	2.5	1.9	1.6	1.7	1.6
Arizona	6.1	6.3	6.5	9.0	6.5	8.1	9.4
California	20.8	20.5	17.8	20.1	20.7	18.5	19.5
Florida-Hastings	26.9	29.0	27.0	27.5	23.9	24.5	22.0
Florida-other	7.7	9.6	9.0	8.0	8.8	10.0	7.0
North Carolina	16.7	17.0	16.5	17.0	17.3	17.5	16.5
Texas	5.5	5.5	5.0	6.5	8.7	10.3	9.8
Total	87.7	90.4	84.3	90.0	87.5	90.6	85.8
-- Cwt per acre --							
Average yield:							
Alabama	164	175	160	160	170	130	175
Arizona	287	265	270	275	280	282	280
California	378	380	350	375	390	335	375
Florida-Hastings	209	220	220	230	220	235	230
Florida-other	204	230	210	180	215	160	200
North Carolina	178	180	185	190	190	190	195
Texas	164	200	185	170	195	170	210
Total	244	251	240	249	255	233	256
-- 1,000 cwt --							
Production:							
Alabama	683	438	400	304	272	221	280
Arizona	1,735	1,670	1,755	2,475	1,820	2,284	2,632
California	7,869	7,790	6,230	7,538	8,073	6,198	7,313
Florida-Hastings	5,632	6,380	5,940	6,325	5,258	5,758	5,060
Florida-other	1,572	2,208	1,890	1,440	1,892	1,600	1,400
North Carolina	2,978	3,060	3,053	3,230	3,287	3,325	3,218
Texas	900	1,100	925	1,105	1,697	1,751	2,058
Total	21,369	22,646	20,193	22,417	22,299	21,137	21,961

1/ U.S. totals include Louisiana which was dropped from the NASS estimates program following the 1989 season.

Source: National Agricultural Statistics Service, USDA.

Table 33--Domestic shipments of U.S. potatoes, 1986-99

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
--1,000 cwt--													
Table potatoes:													
1986	9,822	8,614	9,199	9,291	9,318	8,200	6,593	7,596	8,007	8,613	8,420	9,775	103,448
1987	10,068	8,156	9,286	8,879	8,590	8,705	7,988	8,045	8,994	9,022	9,258	9,587	106,578
1988	9,733	8,878	10,417	8,989	8,692	9,091	7,670	7,807	9,107	8,902	9,902	9,814	109,002
1989	9,892	8,532	9,955	8,131	8,943	8,855	8,086	8,659	8,156	8,580	9,132	9,114	106,035
1990	9,632	8,213	9,008	7,861	9,191	9,000	7,748	8,113	8,091	8,849	9,335	8,855	103,896
1991	10,651	8,767	9,701	8,920	9,652	8,479	8,761	9,025	8,915	9,719	10,351	9,352	112,293
1992	10,847	9,334	10,146	9,829	9,986	9,466	7,794	8,130	8,845	8,885	8,946	9,420	111,628
1993	9,284	8,106	10,006	9,257	9,340	9,332	9,205	8,346	8,868	8,723	10,025	9,447	109,939
1994	10,056	8,849	10,254	8,752	10,175	9,694	8,368	9,095	9,233	8,942	10,287	10,349	114,054
1995	10,111	9,372	10,384	9,165	10,008	9,233	8,518	8,443	8,372	8,971	9,347	8,947	110,871
1996	9,958	8,611	9,033	8,866	9,360	8,979	9,128	8,538	9,110	9,636	9,997	9,597	110,813
1997	11,052	8,950	10,115	9,819	10,655	9,922	8,808	8,010	8,942	9,862	9,522	9,844	115,501
1998p	11,823	8,402	9,461	11,384	8,959	9,111	11,173	8,236	10,354	9,053	9,531	10,665	118,152
1999p	10,004	8,650	10,104										
Chipping potatoes:													
1986	1,341	1,492	1,982	2,336	3,688	2,456	1,015	1,269	940	1,371	1,874	1,939	21,703
1987	2,072	1,578	2,090	2,143	4,018	2,462	1,029	1,425	1,445	1,729	1,955	1,865	23,811
1988	1,890	1,810	1,901	2,685	3,738	2,334	1,088	1,504	1,500	1,734	1,783	1,977	23,944
1989	1,276	1,152	1,409	2,018	4,586	3,078	1,494	1,127	1,432	1,496	1,483	1,629	22,180
1990	1,428	1,188	1,474	2,524	4,313	3,098	1,400	1,067	1,436	1,536	1,513	1,676	22,653
1991	1,547	1,235	1,819	2,267	4,028	2,243	1,120	1,080	1,422	1,978	2,599	2,314	23,652
1992	2,117	2,781	2,745	3,644	4,261	3,179	1,279	1,591	2,060	3,199	2,592	2,644	32,092
1993	3,170	2,308	2,913	2,531	3,653	3,186	1,474	1,086	2,415	3,624	2,656	3,066	32,082
1994	3,315	2,547	3,377	3,004	4,073	2,102	1,172	1,349	2,028	2,829	2,825	4,002	32,623
1995	3,754	2,831	2,968	3,028	3,654	2,381	1,123	1,139	3,030	2,211	2,683	3,611	32,413
1996	3,640	2,666	3,073	2,515	3,006	1,899	1,164	1,213	1,668	2,617	3,187	2,875	29,523
1997	2,834	2,297	2,584	2,994	4,041	1,921	848	1,506	1,569	1,901	3,187	2,874	28,556
1998p	3,710	2,759	3,311	3,022	3,282	2,628	1,559	1,333	2,341	2,444	2,017	2,549	30,955
1999p	2,495	2,269	3,388										
Seed potatoes:													
1986	524	547	1,779	3,058	1,409	80	0	0	0	10	140	367	7,914
1987	543	669	1,986	3,123	1,129	164	0	0	3	12	131	271	8,031
1988	494	553	1,626	4,345	537	375	0	0	0	73	92	605	8,700
1989	543	602	1,302	3,674	566	112	0	0	0	48	159	443	7,449
1990	741	693	3,010	3,039	505	81	0	0	0	0	111	479	8,659
1991	709	955	2,229	3,908	599	118	0	1	0	11	159	323	9,012
1992	695	1,245	3,184	6,889	3,248	147	0	1	0	72	227	327	16,035
1993	841	957	2,055	6,633	5,833	190	18	2	6	105	194	385	17,219
1994	892	1,090	2,865	9,045	2,224	46	5	0	10	115	252	549	17,093
1995	830	892	2,234	7,160	5,231	992	7	0	1	286	255	531	18,419
1996	805	1,157	4,110	9,063	7,373	948	0	14	29	284	345	334	24,462
1997	541	921	3,029	6,632	5,518	308	2	4	51	121	216	422	17,765
1998p	795	709	3,226	9,010	2,313	226	2	0	0	0	0	0	16,281
1999p	320	772	3,128										
All potatoes:													
1986	11,687	10,653	12,960	14,685	14,415	10,736	7,608	8,865	8,947	9,994	10,434	12,081	133,065
1987	12,683	10,403	13,362	14,145	13,737	11,331	9,017	9,470	10,442	10,763	11,344	11,723	138,420
1988	12,117	11,241	13,944	16,019	12,967	11,800	8,758	9,311	10,607	10,709	11,777	12,396	141,646
1989	11,711	10,286	12,666	13,823	14,095	12,045	9,580	9,786	9,588	10,124	10,774	11,186	135,664
1990	11,801	10,094	13,492	13,424	14,009	12,179	9,148	9,180	9,527	10,385	10,959	11,010	135,208
1991	12,907	10,957	13,749	15,095	14,279	10,840	9,881	10,106	10,337	11,708	13,109	11,989	144,957
1992	13,659	13,360	16,075	20,362	17,495	12,792	9,073	9,722	10,905	12,156	11,765	12,391	159,755
1993	13,295	11,371	14,974	18,421	18,826	12,708	10,697	9,434	11,289	12,452	12,875	12,898	159,240
1994	14,263	12,486	16,496	20,801	16,472	11,842	9,545	10,444	11,271	11,886	13,364	14,900	163,770
1995	14,695	13,095	15,586	19,353	18,893	12,606	9,648	9,582	11,403	11,468	12,285	13,089	161,703
1996	14,403	12,434	16,216	20,444	19,739	11,826	10,292	9,765	10,807	12,537	13,529	12,806	164,798
1997	14,427	12,168	15,728	19,445	20,214	12,151	9,658	9,520	10,562	11,884	12,925	13,140	161,822
1998p	16,328	11,870	15,998	23,416	14,554	11,965	12,734	9,569	12,695	11,497	11,548	13,214	165,388
1999p	12,819	11,691	16,620										

p = Preliminary estimates based on weekly data.

1/ Reflects shipments from U.S. sources only.

Source: Agricultural Marketing Service, USDA.

Table 34--Fall potatoes: March 1 stocks, by area, 1984/85-1998/99

Crop year	Eastern States 1/	Central States 2/	Western States 3/	Total
-- Million cwt --				
1984/85	13.6	26.4	78.4	118.4
1985/86	17.9	29.4	91.4	138.7
1986/87	11.4	24.4	92.9	128.7
1987/88	13.1	27.3	98.4	138.8
1988/89	10.5	19.0	95.0	124.5
1989/90	10.6	19.6	86.4	116.6
1990/91	10.1	23.8	100.6	134.5
1991/92	8.4	30.5	106.9	145.8
1992/93	13.2	30.1	109.5	152.8
1993/94	9.8	24.5	119.1	153.4
1994/95	9.3	32.1	128.2	169.6
1995/96	10.2	32.4	113.4	156.0
1996/97	12.9	39.9	136.4	189.2
1997/98	12.0	34.9	129.0	175.9
1998/99	10.0	38.1	126.0	174.1

1/ Maine, New York, and Pennsylvania. Includes Ohio in 1993/94 and 1994/95 to avoid disclosure of individual operations. 2/ Michigan, Minnesota, Nebraska, North Dakota, Ohio, and Wisconsin. Ohio included with Eastern States for 1993/94 and 1994/95. 3/ California, Colorado, Idaho, Montana, Oregon, and Washington.

Source: National Agricultural Statistics Service, USDA.

Table 35--U.S. potato shipments: Season total through April 3 1/

State	1997/98			1998/99			Change		
	Table	Chipper	Seed	Table	Chipper	Seed	Table	Chipper	Seed
--1,000 cwt--							Percent change		
Idaho	23,548	1,197	1,645	23,046	1,390	1,505	-2.1	16.1	-8.5
Colorado	14,677	0	607	14,908	0	567	1.6	--	-6.6
Wisconsin	8,899	6,025	800	8,741	6,692	767	-1.8	11.1	-4.1
Washington	9,452	0	259	9,283	0	0	-1.8	--	--
North Dakota	1,873	1,395	854	1,987	1,421	1,112	6.1	1.9	30.2
Michigan	1,815	6,597	0	1,536	6,518	0	-15.4	-1.2	--
Maine	3,681	1,721	1,353	4,080	1,431	967	10.8	-16.9	-28.5
Others	23,489	13,224	2,221	23,306	13,914	1,651	-0.8	5.2	-25.7
U.S. total	87,434	30,159	7,739	86,887	31,366	6,569	-0.6	4.0	-15.1
Imports	3,150	0	540	2,285	0	180	-27.5	--	-66.7
Total	90,584	30,159	8,279	89,172	31,366	6,749	-1.6	4.0	-18.5

1/ Excludes imports and new season shipments.

Source: Market News, AMS, USDA.

Table 36--Potatoes and pulses: Prices received by U.S. growers, by month, 1992-99 1/

Item	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Season	
														average	
															--\$/cwt--
Potatoes, all uses	1992	4.07	4.08	4.64	5.16	4.43	4.71	7.00	6.64	4.89	4.55	4.90	5.06	5.52	
	1993	5.15	5.29	6.06	7.19	7.18	6.45	7.61	6.05	5.12	4.96	6.40	6.12	6.17	
	1994	6.01	6.42	7.65	6.68	6.59	6.67	7.50	6.28	5.04	4.58	4.75	4.87	5.58	
	1995	4.88	4.90	5.39	5.54	5.77	6.97	8.66	6.69	5.76	6.30	6.42	6.29	6.77	
	1996	6.65	6.92	7.51	7.83	8.09	8.14	8.02	5.59	4.93	4.76	4.43	4.32	4.91	
	1997	4.23	4.50	4.60	4.61	5.26	4.66	5.52	6.26	5.09	4.93	5.13	5.29	5.64	
	1998	5.40	5.94	6.41	6.27	6.39	6.13	6.03	5.55	4.91	4.43	4.81	5.03	5.24	
	1999	5.32	5.61	5.81	6.47										
Potatoes, table stock	1992	4.07	4.08	4.64	5.16	4.43	4.71	7.00	6.64	4.89	4.55	4.90	5.06	6.53	
	1993	5.59	5.95	6.73	8.91	8.36	7.96	9.22	7.85	6.92	6.78	8.09	7.36	8.06	
	1994	7.15	8.02	10.60	7.91	8.58	8.19	9.12	8.73	5.68	4.94	5.06	4.99	7.16	
	1995	4.78	4.98	5.90	6.03	7.25	9.97	10.70	9.66	9.31	8.00	7.94	7.46	8.88	
	1996	8.06	8.60	9.46	9.94	9.90	10.60	10.10	7.55	5.66	5.12	4.04	3.69	5.62	
	1997	3.21	3.82	3.46	3.92	4.60	5.27	7.25	8.86	7.04	6.46	5.89	5.88	6.64	
	1998	5.77	6.81	7.54	6.84	7.11	7.17	7.34	6.39	5.99	5.45	5.21	5.14	6.15	
	1999	5.68	6.44	6.57											
Potatoes, processing	1992	4.34	4.06	3.96	4.17	3.71	3.93	3.90	5.05	4.56	4.32	4.43	4.77	4.50	
	1993	4.86	4.88	5.14	6.33	7.09	5.37	5.40	5.02	4.62	4.57	4.75	4.99	5.06	
	1994	5.08	5.12	5.38	5.00	4.78	5.49	4.87	4.91	4.89	4.52	4.57	4.73	4.84	
	1995	4.95	4.78	4.76	4.83	4.79	5.02	5.70	4.98	4.92	4.66	5.23	5.39	5.20	
	1996	5.45	5.45	5.72	5.90	6.61	6.48	5.98	4.91	4.66	4.66	4.69	4.69	4.77	
	1997	4.98	4.90	5.11	5.02	6.04	5.04	4.37	4.81	4.61	4.60	4.71	4.96	5.00	
	1998	5.06	5.25	5.24	5.49	5.97	5.58	5.01	5.01	4.49	4.25	4.53	4.94	4.68	
	1999	5.03	4.94	5.17											
Dry edible beans	1992	14.70	15.20	15.30	15.80	16.30	15.10	16.90	18.20	20.10	20.20	21.30	21.50	19.90	
	1993	21.20	20.70	20.00	18.30	17.80	16.50	18.60	19.10	21.10	23.20	26.60	25.00	24.60	
	1994	25.90	25.40	26.20	26.10	25.60	25.00	26.10	25.40	21.10	23.50	22.60	22.20	22.50	
	1995	22.30	21.10	21.30	23.60	25.30	24.10	24.00	23.00	18.30	19.10	19.50	20.60	20.80	
	1996	19.60	19.90	19.90	22.70	24.80	25.80	26.80	26.90	24.40	24.00	25.10	24.10	23.50	
	1997	23.20	23.60	23.30	23.00	22.20	21.20	21.90	20.40	16.20	16.90	18.60	20.30	19.30	
	1998	21.10	21.20	20.20	20.80	20.80	20.90	21.30	19.60	19.30	19.60	20.80	20.50	19.80	
	1999	19.80	18.40	17.20	18.80										
Green peas, whole-dry	1992	8.00	8.20	8.25	8.05	7.90	8.10	8.25	7.80	8.35	9.05	9.15	8.95	8.65	
	1993	8.80	9.00	8.95	8.75	8.80	8.70	7.95	7.30	7.05	7.00	6.85	6.65	7.15	
	1994	6.50	6.55	6.90	7.00	7.25	7.60	8.00	8.25	8.30	8.80	9.95	11.00	11.30	
	1995	12.05	12.90	13.40	13.50	13.60	13.00	9.50	9.30	9.00	8.35	8.25	8.25	9.65	
	1996	8.30	8.75	9.50	9.95	10.15	10.85	11.65	12.50	12.30	11.00	11.00	11.00	11.60	
	1997	11.50	12.60	14.25	13.80	13.00	11.90	9.00	7.70	7.65	7.90	8.00	8.00	7.80	
	1998	8.00	8.00	8.00	7.95	7.75	7.75	7.70	6.85	6.15	6.00	6.20	6.30	6.40	
	1999	6.50	6.50	6.50	6.50										
Yellow peas, whole-dry	1992	7.20	7.45	7.45	7.25	7.15	7.05	--	--	7.50	7.70	7.75	7.70	7.55	
	1993	7.50	7.50	7.50	7.25	7.30	7.70	7.90	7.55	8.40	8.55	8.75	8.60	8.50	
	1994	8.70	8.75	8.65	8.50	8.30	8.00	8.05	8.45	8.25	8.75	9.40	9.90	9.45	
	1995	9.80	9.50	9.55	9.65	10.00	9.75	9.50	9.50	9.20	8.85	8.75	8.75	9.50	
	1996	8.75	9.50	8.80	9.05	9.30	10.40	11.00	12.00	12.25	11.00	11.00	11.00	11.15	
	1997	11.40	12.50	13.60	12.80	11.75	10.40	8.50	7.60	7.55	7.60	7.75	7.60	7.45	
	1998	7.50	7.50	7.60	7.50	7.50	7.50	7.05	6.50	5.65	5.70	5.80	5.95	6.10	
	1999	6.00	6.05	6.25	6.15										
Lentils	1992	15.50	15.50	15.65	15.15	14.50	14.80	17.25	15.55	19.40	20.50	21.65	22.00	18.40	
	1993	22.00	18.90	16.25	14.90	17.75	15.95	16.25	15.15	17.55	16.40	16.50	15.15	14.95	
	1994	14.80	14.95	15.60	14.60	13.80	13.55	13.10	13.30	13.00	13.65	13.40	13.35	13.80	
	1995	13.25	13.05	13.25	13.65	13.65	13.50	15.40	16.70	16.50	16.10	15.75	15.75	16.90	
	1996	15.50	15.50	15.50	15.70	17.25	19.00	19.75	20.60	19.75	18.50	18.15	17.25	17.15	
	1997	17.00	17.40	17.50	17.00	16.50	16.25	16.00	14.75	13.80	12.90	12.10	11.50	11.80	
	1998	11.40	12.00	11.60	11.10	10.75	11.00	12.00	11.30	10.05	10.70	10.80	10.95	10.90	
	1999	11.00	11.15	11.60	11.35										

-- = Not available.

1/ Prices for 1999 are preliminary

Sources: National Agricultural Statistics Service, USDA, and Agricultural Marketing Service, USDA.

Table 37--Potatoes: U.S. export volume and value to selected destinations, 1998

Country	Fresh 1/	Frozen fries	Other frozen	Chips	Flakes and granules	Dried 2/	Other 3/	Total
--1,000 lbs, product weight--								
Canada	523,334	54,688	608	45,047	1,423	3,690	24,309	653,098
Mexico	71,235	53,594	7,315	35,398	9,626	342	24,114	201,624
Belgium and Luxembourg	0	0	0	17,122	48	27	20	17,217
Brazil	18	400	99	13,881	1,437	10	370	16,217
Netherlands	22	11,272	106	69	62	0	8	11,538
United Kingdom	3,232	13,318	1,177	3,032	176	526	318	21,781
Hong Kong	5,790	65,842	1,600	14,448	954	329	1,066	90,029
Japan	0	524,720	23,831	28,070	35,301	3,092	1,084	616,097
South Korea	44	52,320	1,459	4,643	165	146	136	58,912
Taiwan	6,370	50,177	2,714	12,382	1,490	0	1,536	74,670
Russia	4,600	3,083	2,181	25,229	1,464	794	996	38,348
China	142	8,653	137	30	1,494	0	473	10,930
Indonesia	0	15,183	0	86	563	0	0	15,832
Malaysia	1,883	21,344	81	1,528	487	890	133	26,346
Philippines	449	40,360	56	2,476	620	0	6,792	50,752
Singapore	4,927	22,229	649	3,046	195	1,413	0	32,459
Thailand	1,956	12,334	0	1,914	101	0	0	16,305
Venezuela	436	1,847	43	1,509	265	61	224	4,384
Other	26,479	39,714	4,640	35,617	15,884	4,326	10,885	137,545
World	650,917	991,077	46,698	245,529	71,755	15,644	72,464	2,094,083
-- \$ 1,000 --								
Canada	69,970	23,318	239	41,100	1,044	2,478	13,624	151,774
Mexico	11,028	16,861	2,096	27,992	2,670	149	9,083	69,878
Belgium and Luxembourg	0	0	0	17,504	19	12	9	17,545
Brazil	3	135	10	13,002	657	8	155	13,970
Netherlands	9	3,759	73	52	29	0	8	3,929
United Kingdom	1,264	6,998	725	3,213	99	492	199	12,989
Hong Kong	693	19,398	350	14,971	542	182	1,177	37,313
Japan	0	171,270	11,158	33,673	14,146	1,567	538	232,352
South Korea	22	15,093	842	4,340	108	86	60	20,551
Taiwan	1,103	14,825	989	13,011	732	0	1,015	31,676
Russia	502	431	548	26,511	978	588	1,605	31,163
China	10	3,110	31	31	726	0	191	4,098
Indonesia	0	4,334	0	99	266	0	0	4,698
Malaysia	223	6,559	46	1,900	229	310	54	9,321
Philippines	59	12,670	30	3,125	247	0	3,304	19,436
Singapore	571	7,270	360	3,656	75	762	0	12,693
Thailand	315	3,704	0	2,197	39	0	0	6,256
Venezuela	184	558	17	1,605	110	51	87	2,611
Other	3,446	14,389	1,539	39,184	6,961	2,591	6,829	74,939
World	89,401	324,684	19,052	247,165	29,677	9,276	37,939	757,193

1/ Includes seed. 2/ Dried, whole, cut, sliced. 3/ Includes flour, starch, and other prepared/preserved (mostly canned).

Source: Bureau of the Census, U.S. Department of Commerce.

Table 38--Sweet potatoes: U.S. planted acreage, 1992-96 average, 1997-98, indicated 1999

State	1992-96	1997	1998	Indicated 1999	Change from 1998 to 99
	avg. 1/ --1,000 acres--				
Alabama	4.5	3.9	3.8	3.7	-2.6
California	8.9	9.7	9.1	8.9	-2.2
Georgia	2.5	1.0	0.8	0.7	-12.5
Louisiana	19.6	21.0	21.0	21.0	0.0
Mississippi	6.2	8.6	9.8	10.0	2.0
New Jersey	1.6	1.2	1.1	1.0	-9.1
North Carolina	34.0	32.0	33.0	34.0	3.0
South Carolina	2.4	1.3	1.3	1.3	0.0
Texas	5.9	6.3	6.4	5.6	-12.5
Virginia	0.6	0.6	0.5	0.5	0.0
United States	86.2	85.6	86.8	86.7	-0.1

1/ Includes Maryland and Tennessee. Estimates discontinued in 1995.

Source: National Agricultural Statistics Service, USDA.

Table 39--Sweet potatoes: Shipping point prices, by State, selected weeks, 40-lb cartons, 1992-99 1/

Week ending	U.S. No. 1	
	Louisiana Beauregard 2/	N. Carolina Jewel
	--\$/carton--	
1992:		
Jan 31	11.50	10.25
Feb 28	11.50	10.00
Mar 27	11.63	9.75
1993:		
Jan 29	8.68	7.25
Feb 26	8.37	7.25
Mar 26	8.25	7.25
1994:		
Jan 28	14.12	11.75
Feb 25	14.00	12.25
Mar 25	14.00	12.25
1995:		
Jan 24	11.25	9.50
Feb 25	11.25	9.50
Mar 25	11.00	9.50
1996:		
Jan 30	--	10.50
Feb 27	12.00	10.50
Mar 26	11.50	10.50
1997:		
Jan 30	11.75	10.50
Feb 27	11.75	10.50
Mar 26	11.75	10.50
1998:		
Jan 1	12.00	10.00
Feb 26	12.50	10.00
Mar 30	12.50	10.00
1999:		
Jan 4	13.00	10.50
Feb 26	13.00	10.50
Mar 29	13.00	10.50

-- = Not available. 1/ 1998-99 prices are midpoints of previous week range. 2/ Dollars per 40 pound carton of cured medium U.S. number one grade.

1992-94 Louisiana prices are for Jewels. 3/ Dollars per 40 pound carton of cured medium U.S. number one grade.

Source: Agricultural Marketing Service, USDA.

Table 40--Dry edible beans: U.S. planted acreage, 1991-95 average, 1996-99

State	Average	1996	1997	1998	Indicated 1999	Change from 1998 to 99
	1991-95					
-- 1,000 acres --						
Percent						
California	138.8	128.0	135.0	110.0	130.0	18.2
Colorado	201.8	145.0	135.0	170.0	180.0	5.9
Idaho	136.0	95.0	100.0	105.0	105.0	0.0
Michigan	370.0	340.0	315.0	300.0	310.0	3.3
Minnesota	122.0	160.0	175.0	190.0	235.0	23.7
Nebraska	206.0	205.0	190.0	195.0	200.0	2.6
North Dakota	522.0	580.0	620.0	750.0	700.0	-6.7
Others 1/	237.4	186.0	199.8	190.1	185.5	-2.4
United States	1,934.0	1,839.0	1,869.8	2,010.1	2,045.5	1.8

1/ Includes Kansas, Montana, New Mexico, New York, Oregon, Texas, Utah, Washington, Wisconsin, and Wyoming.

Source: National Agricultural Statistics Service, USDA.

Table 41--Dry edible beans: U.S. production, by State, by class, 1998

Type	1998 production											Annual		Change from 1997 to 1998
	MI	ID	WY	NE	WA	CO	NY	CA	MN	ND	Other 1/	1997	1998 2/	
--1,000 cwt--														
Percent														
Navy	1,180	35	0	102	0	9	0	0	755	1,767	49	5,524	3,897	-29.5
Great Northern	0	158	127	1,855	0	3	0	0	43	0	0	2,251	2,186	-2.9
Pinto	293	914	578	1,386	380	2,617	0	0	726	6,832	785	10,920	14,511	32.9
Red kidney	260	52	0	252	19	170	241	196	615	88	115	2,610	2,008	-23.1
Small red	200	275	0	0	185	0	0	0	0	0	0	892	660	-26.0
Large lima	0	0	0	0	0	0	0	480	0	0	0	718	480	-33.1
Baby lima	0	0	0	0	0	0	0	310	0	0	0	902	310	-65.6
Small white 3/	0	31	0	0	22	0	0	0	0	0	7	183	60	-67.2
Blackeye	0	0	0	0	0	0	0	677	0	0	83	807	760	-5.8
Pink	0	373	0	0	150	0	0	70	125	189	0	699	907	29.8
Cranberry	285	18	0	0	0	0	0	40	44	0	0	660	387	-41.4
Garbanzo	0	136	0	0	59	0	0	85	0	0	59	392	339	-13.5
Black	2,100	107	67	56	55	9	147	40	172	816	0	2,122	3,569	68.2
Others	107	13	36	15	20	60	38	150	58	106	151	690	754	9.3
Total	4,425	2,112	808	3,666	890	2,868	426	2,048	2,538	9,798	1,249	29,370	30,828	5.0

1/ Includes Kansas, Montana, New Mexico, Oregon, Texas, Utah, and Wisconsin. 2/ Preliminary. 3/ Includes flat small whites.

Source: National Agricultural Statistics Service, USDA.

Table 42--Dry edible beans: Season-average wholesale price, by class, 1986/87-1998/99 1/

Crop year	Great		Small		Baby lima	Large lima	Blackeye	Small whites	Lt. red kidney	Garbanzo	Navy	Black
	Northern	Pintos	reds	Pinks								
	--\$/cwt--											
1986/87	24.53	19.22	19.61	18.88	21.91	25.85	34.84	48.63	33.22	29.42	43.22	--
1987/88	23.07	20.22	22.68	19.70	38.75	41.16	25.46	23.08	26.18	20.58	20.93	--
1988/89	30.48	37.64	34.06	35.03	40.16	45.81	28.29	36.17	50.42	28.47	37.65	--
1989/90	32.95	40.51	33.45	35.16	33.67	43.06	31.15	29.25	42.95	36.07	29.82	40.50
1990/91	21.94	21.19	31.16	23.16	37.61	45.98	31.73	25.60	27.01	34.62	20.41	23.85
1991/92	18.93	17.91	25.62	20.55	21.83	38.93	23.68	23.73	31.08	39.83	17.71	19.90
1992/93	21.25	23.81	30.02	27.21	22.70	27.48	25.80	29.40	34.29	41.60	21.15	24.25
1993/94	33.15	33.28	29.33	28.53	34.65	41.87	42.72	28.72	33.18	32.44	23.73	27.95
1994/95	37.18	21.32	28.19	26.25	33.81	44.67	40.18	34.39	31.09	43.21	31.63	32.60
1995/96	38.38	25.78	28.95	28.17	39.60	50.00	28.75	29.67	31.20	47.76	23.90	23.20
1996/97	26.55	27.60	39.10	32.05	45.50	56.95	32.55	37.15	40.35	32.10	23.25	27.30
1997/98p	27.10	26.50	28.25	28.65	27.45	39.40	30.70	28.85	30.80	33.75	20.40	32.50
1998/99f	26.20	21.75	28.40	27.60	41.50	47.50	35.55	28.75	34.15	35.50	24.00	32.00

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

1/ F.O.B. dealer prices.

Source: Agricultural Marketing Service, USDA.

Table 43--Dry edible beans: U.S. trade volume, by quarter, 1997-98

Category	1997				1998				Annual		
	I	II	III	IV	I	II	III	IV	1997	1998	Change
	--1,000 lbs--								Percent		
Exports:											
Black beans	7,296	9,599	11,527	18,421	23,567	40,255	6,794	30,847	46,843	101,464	116.6
Great Northern	14,335	43,726	4,484	39,665	38,146	15,711	21,862	47,761	102,210	123,481	20.8
Baby limas	8,337	3,299	2,422	13,362	4,684	7,258	4,350	6,193	27,420	22,485	-18.0
Other limas	5,485	1,353	1,269	3,139	3,812	6,242	2,460	2,854	11,246	15,367	36.6
Navy beans	57,049	43,050	57,767	68,679	60,985	50,366	48,713	48,158	226,545	208,222	-8.1
Pinto beans	37,690	22,390	32,089	41,837	53,831	77,642	49,499	77,841	134,006	258,813	93.1
Kidney beans	18,491	18,378	21,283	22,592	21,248	15,455	13,291	20,509	80,744	70,503	-12.7
Small red	4,202	12,174	2,585	4,380	2,572	2,426	6,463	11,852	23,341	23,314	-0.1
Misc. whites	363	503	211	1,316	751	190	678	1,272	2,393	2,891	20.8
Other beans 1/	20,919	23,736	31,454	26,881	35,772	64,928	35,921	56,315	102,990	192,936	87.3
Garbanzo beans	1,307	1,529	1,804	3,190	1,961	2,979	3,087	7,835	7,830	15,862	102.6
Blackeye cowpeas	1,292	1,265	1,527	2,794	4,994	5,292	2,449	4,628	6,878	17,364	152.4
Cranberry beans	1,299	770	1,385	5,347	4,943	6,691	324	1,660	8,801	13,617	54.7
Subtotal, less seed	178,065	181,772	169,807	251,603	257,265	295,436	195,891	317,725	781,247	1,066,317	36.5
Seed beans	18,027	9,330	7,211	17,741	18,324	21,890	7,601	17,798	52,308	65,612	25.4
Total, including seed	196,092	191,102	177,018	269,344	275,589	317,326	203,491	335,523	833,555	1,131,929	35.8
Imports:											
Garbanzo beans	7,966	6,745	7,864	8,623	5,527	6,671	5,433	6,840	31,198	24,471	-21.6
Pinto beans	2,274	7,390	1,888	2,087	5,192	2,818	3,717	5,377	13,639	17,104	25.4
Kidney beans	460	653	713	1,224	486	306	1,396	1,219	3,050	3,407	11.7
Fava beans	512	160	315	581	250	273	343	479	1,568	1,345	-14.2
Other beans	11,952	13,620	12,202	13,516	10,338	10,780	12,936	12,045	51,290	46,099	-10.1
Subtotal, less seed	23,164	28,568	22,982	26,031	21,793	20,848	23,825	25,960	100,745	92,426	-8.3
Seed beans	11,574	23,848	13,451	17,986	13,509	21,321	16,144	25,728	66,859	76,702	14.7
Total, including seed	34,738	52,416	36,433	44,017	35,302	42,169	39,969	51,688	167,604	169,128	0.9
Net trade 2/	161,354	138,686	140,584	225,327	240,287	275,157	163,522	283,835	665,951	962,801	44.6

1/ Includes, fava, blackgram, and miscellaneous dry beans. 2/ Exports less imports. Includes seed.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 44--Selected dry peas, lentils, and beans: U.S. export volume and value, by country, 1998

Country	Green peas 1/	Lentils	Lima beans 2/	Pinto	Great northern	Kidney 3/	Navy	Black
--1,000 lbs--								
Algeria	0	0	0	0	12,467	0	0	0
Angola	4,226	1,955	0	2,709	0	0	0	0
Australia	325	93	1,058	684	1,227	825	8,157	127
Bosnia-Herzegovina	0	0	0	507	0	789	1,752	0
Brazil	3,386	226	238	5,133	127	0	0	2,184
Canada	963	4,091	1,066	0	0	4,941	7,251	0
Colombia	3,085	90	0	7	0	913	844	0
Costa Rica	277	7	0	0	149	14	0	13,151
Dominican Republic	94	28	19	26,924	168	89	733	150
France	0	0	40	131	17,184	7,459	1,024	0
Haiti	9,048	2,379	0	50,768	0	14	0	0
India	11,314	94	40	0	0	0	0	119
Iraq	0	0	0	0	35,393	0	0	0
Italy	1,663	6,486	460	42	2,669	7,694	21,177	0
Japan	3,000	308	24,682	11	4,627	377	84	78
Malaysia	1,386	0	79	93	1,549	68	153	0
Mexico	4,338	9,453	420	147,365	0	6,633	6,665	77,592
Netherlands	111	88	439	120	4,002	2,008	1,154	9
Peru	44,608	22,376	1,663	22	0	0	0	0
Philippines	24,336	0	0	0	2,626	45	44	159
Rwanda	3,813	0	0	2,081	0	0	0	0
Spain	327	36,677	0	43	2,243	1,466	796	584
Taiwan	2,200	23	225	0	45	79	0	97
Turkey	1,033	0	0	0	3,532	0	0	0
United Kingdom	110	13	6,394	425	554	8,799	137,514	80
Venezuela	4,582	442	227	0	1,168	3,681	400	3,533
Others	63,242	24,582	801	21,748	33,749	24,609	20,475	3,601
World	187,469	109,411	37,852	258,813	123,481	70,503	208,222	101,464
-- \$ 1,000 --								
Algeria	0	0	0	0	2,966	0	0	0
Angola	584	288	0	646	0	0	0	0
Australia	46	16	378	188	364	230	1,568	43
Bosnia-Herzegovina	0	0	0	127	0	254	354	0
Brazil	412	54	97	1,256	26	0	0	835
Canada	167	779	457	0	0	1,482	1,240	0
Colombia	316	31	0	4	0	255	172	0
Costa Rica	45	3	0	0	39	7	0	3,707
Dominican Republic	26	7	8	6,874	53	34	95	55
France	0	0	19	35	3,568	2,207	241	0
Haiti	1,150	372	0	12,098	0	5	0	0
India	1,100	19	16	0	0	0	0	50
Iraq	0	0	0	0	10,263	0	0	0
Italy	232	1,352	173	9	532	2,277	4,996	0
Japan	434	86	6,950	3	1,098	75	8	15
Malaysia	161	0	22	15	384	20	27	0
Mexico	731	2,131	133	40,698	0	1,872	1,635	24,125
Netherlands	18	28	103	33	814	610	277	3
Peru	5,973	3,917	346	5	0	0	0	0
Philippines	3,011	0	0	0	765	13	11	51
Rwanda	443	0	0	529	0	0	0	0
Spain	43	6,500	0	13	499	434	192	166
Taiwan	364	6	68	0	7	27	0	23
Turkey	126	0	0	0	717	0	0	0
United Kingdom	18	4	2,249	112	157	2,634	27,514	29
Venezuela	562	59	69	0	244	1,062	93	1,043
Others	8,011	4,662	266	5,395	8,285	7,648	3,153	1,189
World	23,973	20,315	11,354	68,041	30,781	21,147	41,575	31,335

1/ Includes whole and splits. 2/ Includes baby and other limas. 3/ Includes dark and light red kidney.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 45--Vegetable imports: U.S. value, by group, by month, 1995-99

Month and year	Fresh 1/	Melons	Canned	Frozen	Mushrooms 2/	Potatoes 2/	Dry peas	Dry beans 2/	Seed	Dried and dehydrated	Total
--Million dollars--											
1995:											
Jan.	205.5	13.2	24.3	22.3	16.3	14.3	1.9	2.7	3.5	4.3	308.4
Feb.	228.2	20.7	19.5	22.3	16.1	12.4	1.5	2.4	2.6	4.8	330.7
Mar.	180.7	36.8	23.1	20.8	18.5	18.5	2.5	2.9	4.9	5.0	313.6
Apr.	124.2	48.8	27.4	16.5	20.8	18.9	2.0	2.9	5.7	4.6	271.8
May	85.4	16.3	32.3	16.4	20.3	15.6	1.6	4.0	7.9	4.6	204.4
June	70.7	4.8	29.4	14.5	18.0	12.1	1.2	4.4	6.4	5.0	166.4
July	65.8	0.8	24.3	14.2	18.6	10.4	0.9	3.5	4.5	4.1	147.1
Aug.	60.3	0.1	31.4	17.0	15.6	9.3	1.3	2.6	2.7	5.1	145.4
Sep.	59.1	0.1	32.5	16.6	13.6	12.5	0.8	6.2	5.9	3.9	151.2
Oct.	59.5	3.0	30.1	19.8	11.5	17.7	0.9	4.9	5.5	6.4	159.5
Nov.	93.9	10.9	26.2	20.6	11.4	18.4	0.9	2.8	7.4	5.0	197.3
Dec.	131.1	17.9	23.8	17.8	12.7	20.6	0.7	2.4	3.6	5.6	236.1
Annual	1,364.4	173.5	324.2	218.6	193.5	180.8	16.1	41.7	60.7	58.5	2,631.9
1996:											
Jan.	167.1	20.6	27.9	22.2	11.2	21.1	1.1	3.3	4.9	6.2	285.6
Feb.	172.6	20.7	24.1	22.5	11.1	20.7	1.2	2.8	3.5	6.8	286.1
Mar.	190.8	35.5	26.5	18.5	10.8	29.2	2.1	3.6	3.3	5.5	325.8
Apr.	260.9	65.5	30.4	17.8	10.9	31.1	1.7	3.8	6.7	8.2	437.0
May	155.9	20.7	33.0	16.4	12.9	19.1	1.2	5.1	8.1	6.3	278.6
June	109.7	3.4	26.8	15.1	13.4	16.4	0.8	3.8	5.6	6.5	201.5
July	77.8	0.4	25.9	15.8	14.5	15.5	1.2	2.9	5.6	6.2	165.8
Aug.	64.8	0.0	28.7	16.0	13.4	12.4	2.1	3.0	3.9	5.9	150.2
Sep.	58.7	0.2	25.9	17.8	10.6	14.6	1.6	5.1	5.4	4.7	144.6
Oct.	73.6	4.9	34.2	23.5	11.9	19.4	1.4	5.0	5.3	7.7	186.9
Nov.	103.5	12.2	29.8	21.5	13.2	20.2	1.8	4.1	8.5	8.4	223.3
Dec.	148.5	20.6	28.5	22.9	14.3	22.4	1.0	3.7	6.5	7.0	275.4
Annual	1,583.8	204.7	341.6	230.1	148.2	242.1	17.2	46.1	67.3	79.5	2,960.8
1997:											
Jan.	187.6	24.2	29.0	20.8	14.7	23.3	1.2	3.7	5.7	5.4	315.7
Feb.	186.6	25.0	29.6	21.4	13.1	21.8	1.0	3.8	4.9	4.5	311.6
Mar.	261.4	45.9	32.9	23.7	10.2	26.6	1.2	3.6	5.3	4.4	415.1
Apr.	144.9	59.6	33.4	23.9	13.2	27.7	1.0	5.2	7.6	4.8	321.2
May	115.7	30.0	34.8	18.3	13.9	24.5	0.9	6.1	7.3	5.0	256.4
June	92.2	3.2	29.7	18.0	14.2	20.2	0.9	5.1	8.6	4.5	196.4
July	79.9	0.4	31.1	17.0	13.1	19.4	0.8	3.7	8.5	7.7	181.6
Aug.	75.5	0.2	28.6	16.5	12.2	14.9	0.8	2.6	5.4	5.5	162.2
Sep.	69.7	0.3	32.0	20.2	10.9	19.3	1.3	4.0	6.4	6.8	170.9
Oct.	78.7	5.3	33.7	23.0	11.3	26.2	1.1	4.1	5.6	5.1	194.1
Nov.	128.9	13.0	31.5	24.0	11.6	28.5	1.1	4.0	9.7	6.3	258.4
Dec.	182.5	22.6	33.8	24.6	14.2	27.7	0.9	4.5	11.5	6.5	328.9
Annual	1,603.7	229.7	380.1	251.4	152.4	280.1	12.1	50.3	86.4	66.5	3,112.7
1998:											
Jan.	269.5	26.2	28.1	22.6	11.8	29.0	1.3	3.4	8.2	9.3	409.2
Feb.	227.3	24.3	27.2	22.0	15.1	30.6	1.0	3.2	6.5	10.7	368.1
Mar.	264.2	46.8	31.5	21.3	21.3	43.6	0.7	5.0	4.9	11.4	450.8
Apr.	226.2	59.9	34.8	20.5	10.2	44.0	0.8	6.3	8.0	10.7	421.4
May	155.9	43.3	39.5	19.4	11.7	30.2	0.8	6.4	9.5	11.7	328.5
June	129.8	8.4	39.0	21.2	10.8	30.0	0.8	4.5	8.7	13.5	266.7
July	115.4	1.0	35.7	19.1	11.7	23.4	0.9	2.9	6.6	13.2	229.9
Aug.	94.6	0.1	35.7	20.6	8.1	17.1	0.7	3.0	9.7	10.9	200.3
Sep.	87.1	0.0	37.9	19.6	9.6	26.6	1.0	4.8	7.2	13.8	207.6
Oct.	112.0	4.1	36.2	23.1	11.6	32.3	1.0	3.8	8.9	15.2	248.1
Nov.	141.8	14.6	37.0	27.3	11.5	31.4	0.9	4.3	6.4	15.8	291.1
Dec.	193.3	20.6	43.2	27.6	15.6	30.6	0.9	4.8	9.5	17.1	363.2
Annual	2,017.0	249.4	425.8	264.3	149.0	368.9	10.8	52.3	94.1	153.3	3,784.9
1999:											
Jan.	279.2	29.6	34.6	24.4	13.6	30.8	0.9	4.6	6.9	15.9	440.5
Feb.	213.3	39.7	39.7	28.8	12.9	31.0	0.8	6.2	5.7	12.3	390.4

1/ Excludes potatoes, mushrooms, and melons. 2/ Includes seed or spawn (mushroom).

Source: Bureau of the Census, U.S. Department of Commerce.

Table 46--Vegetable exports: U.S. value, by group, by month, 1995-99

Month and year	Fresh 1/	Melons	Canned	Frozen	Mushroom 2/	Potatoes 2/	Dry peas 2/	Dry beans 2/	Seed 3/	Dried and dehydrated 4/	Total
--Million dollars--											
1995:											
Jan.	97.0	2.0	33.9	10.7	2.1	37.4	5.4	13.7	17.4	7.8	227.5
Feb.	78.1	2.5	37.4	11.2	2.0	54.3	10.3	14.4	10.3	10.4	231.0
Mar.	92.9	2.5	37.5	11.9	2.6	53.2	10.0	10.6	11.6	9.9	242.8
Apr.	118.8	3.7	38.4	12.4	2.1	53.4	3.8	14.1	8.4	9.2	264.2
May	106.8	10.5	40.2	11.8	2.7	53.1	4.1	20.4	6.6	9.7	265.9
June	88.0	17.2	39.4	13.9	2.3	70.4	4.0	28.1	6.5	8.8	278.8
July	59.9	15.1	34.9	10.5	2.2	60.3	1.9	21.3	9.4	9.3	224.6
Aug.	43.9	14.4	36.4	9.3	1.9	48.1	8.1	15.8	13.1	10.4	201.4
Sep.	51.1	8.1	36.7	11.5	4.3	47.9	8.9	13.9	9.8	10.3	202.4
Oct.	61.7	4.4	41.7	13.7	8.0	46.7	10.8	24.0	10.0	10.7	231.8
Nov.	66.7	3.7	40.4	13.7	5.1	49.0	6.3	23.8	12.5	10.1	231.4
Dec.	77.5	2.0	38.5	11.2	3.0	43.9	5.9	21.0	17.2	11.9	231.9
Annual	942.5	86.1	455.6	141.7	38.2	617.6	79.5	221.1	132.8	118.6	2,833.9
1996:											
Jan.	72.1	2.1	35.6	10.9	1.3	41.8	6.3	14.8	15.3	10.9	211.2
Feb.	68.7	2.0	38.6	10.0	0.8	43.9	5.1	14.0	9.5	9.3	201.8
Mar.	84.4	2.6	38.0	12.0	1.0	54.0	5.0	13.6	12.2	10.4	233.3
Apr.	91.6	3.9	36.8	13.5	1.0	54.0	8.8	16.6	6.7	10.2	243.2
May	86.5	8.3	43.1	13.1	0.9	58.1	11.7	20.0	5.8	9.0	256.4
June	79.8	15.5	42.9	12.3	0.8	68.0	3.8	18.0	6.1	10.4	257.4
July	63.5	16.0	41.8	10.5	0.6	57.9	6.0	19.2	7.5	10.4	233.5
Aug.	46.0	12.5	40.1	11.6	0.6	48.7	3.3	20.9	11.8	10.7	206.3
Sep.	56.5	7.6	41.0	11.2	1.7	44.5	4.9	20.9	11.4	10.6	210.3
Oct.	75.2	4.5	45.6	12.4	9.0	48.8	5.7	30.3	11.0	11.9	254.5
Nov.	74.9	3.2	46.5	16.3	3.0	48.5	7.1	23.5	16.6	11.8	251.4
Dec.	72.1	2.4	37.9	11.6	3.0	43.6	6.6	22.7	20.4	10.9	231.2
Annual	871.4	80.6	487.9	145.5	23.6	611.7	74.4	234.5	134.4	126.5	2,790.5
1997:											
Jan.	80.7	2.4	43.1	13.7	2.2	53.1	7.7	17.4	23.1	14.1	257.6
Feb.	74.7	2.2	40.4	12.1	2.1	47.9	6.1	16.7	22.6	10.5	235.3
Mar.	90.1	3.0	45.6	14.0	1.8	53.7	5.8	21.2	11.5	12.3	259.1
Apr.	93.6	3.6	49.1	13.5	1.6	48.3	5.3	12.7	8.3	11.9	247.8
May	92.7	10.2	54.5	15.8	2.7	56.1	5.4	21.0	8.2	11.7	278.3
June	84.2	15.1	48.7	12.9	2.1	57.6	3.2	24.8	9.0	10.8	268.4
July	78.5	16.6	46.1	13.6	1.8	64.4	5.7	17.6	14.7	11.3	270.2
Aug.	61.5	10.8	42.1	11.8	1.8	50.5	2.9	16.9	12.8	13.6	224.8
Sep.	49.9	5.2	45.1	12.7	6.1	46.8	5.0	13.1	13.4	12.5	209.7
Oct.	74.6	4.5	49.6	14.4	9.0	52.2	6.9	23.1	14.7	12.4	261.5
Nov.	86.8	3.6	47.2	17.7	5.4	54.9	6.9	20.1	14.8	12.5	269.8
Dec.	89.5	2.9	44.5	11.1	2.6	58.7	6.6	29.3	17.0	12.2	274.5
Annual	956.9	80.2	556.1	163.4	39.1	644.1	67.5	234.0	170.1	145.7	3,056.9
1998:											
Jan.	90.8	2.2	42.3	13.5	1.7	53.8	7.8	15.1	21.7	11.6	260.3
Feb.	80.0	2.0	41.0	13.2	1.9	51.4	7.9	33.0	14.9	10.9	256.1
Mar.	94.6	2.8	47.5	15.1	2.4	57.9	5.4	30.5	14.1	12.2	282.5
Apr.	107.2	3.3	47.3	17.8	1.7	60.5	5.1	25.6	8.1	13.0	289.5
May	106.8	10.1	46.5	14.7	1.8	66.5	4.3	25.4	7.1	11.5	294.7
June	81.4	15.0	47.0	13.8	1.5	75.5	3.4	41.5	6.2	10.5	295.8
July	69.1	14.9	40.5	12.6	1.5	66.9	4.0	23.9	7.3	13.7	254.2
Aug.	51.1	11.1	42.0	13.7	1.3	60.5	6.4	12.4	14.3	13.0	225.9
Sep.	50.1	8.3	42.2	14.2	1.9	60.6	4.6	18.3	15.3	10.1	225.7
Oct.	82.0	5.4	52.0	16.3	4.1	70.8	5.0	30.1	12.5	10.9	289.2
Nov.	81.0	4.1	47.5	14.7	3.4	70.6	7.9	27.3	16.3	11.4	284.0
Dec.	86.2	2.7	48.0	15.0	2.3	62.2	7.7	28.7	19.0	11.7	283.7
Annual	980.3	81.9	543.7	174.6	25.6	757.2	69.3	311.9	156.7	140.3	3,241.5
1999:											
Jan.	87.7	2.1	37.3	14.8	2.0	59.6	8.1	20.6	22.8	11.2	266.2
Feb.	75.8	2.5	43.4	13.2	1.9	58.2	7.8	18.9	22.1	11.0	254.8

1/ Excludes potatoes, mushrooms, and melons. Includes artichokes, asparagus, snap beans, broccoli, brussels sprouts, cabbage, cauliflower, carrots, celery, cucumbers, sweet corn, eggplant, garlic, head lettuce, other lettuce, all chicory, all onions, green peas, peppers and pimentos, spinach, tomatoes, leeks, cassava, sweet potatoes, turnips, and miscellaneous vegetables. 2/ Includes seed. 3/ Excludes potato and pulse seed and mushroom spawn.

4/ Beginning in 1993, includes dried capsicum peppers.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 47--U.S. per capita use of selected, commercially produced, fresh, and processing vegetables and melons, 1991-99

Crop	1991r	1992r	1993r	1994r	1995r	1996r	1997r	1998p	1999f
Pounds, farm-weight									
Asparagus, all 1/	1.0	1.0	1.0	0.9	1.0	0.9	1.0	1.1	1.1
Fresh	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8
Canning	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
Freezing	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Snap beans, all	7.0	7.2	7.3	7.4	7.0	7.3	6.9	7.5	7.3
Fresh	1.1	1.5	1.5	1.6	1.7	1.5	1.4	1.7	1.6
Canning	4.1	4.0	4.0	3.8	3.6	3.9	3.7	3.8	3.7
Freezing	1.8	1.7	1.8	2.0	1.7	1.9	1.8	2.0	2.0
Broccoli, all	5.4	5.8	5.7	6.8	7.0	7.2	7.4	7.7	7.9
Fresh	3.1	3.4	3.4	4.5	4.4	4.6	5.1	5.6	5.7
Freezing 2/	2.3	2.4	2.3	2.3	2.6	2.6	2.3	2.1	2.2
Cabbage, all	9.9	10.1	10.9	10.6	9.8	9.6	10.9	10.3	10.1
Fresh	8.5	8.9	9.5	9.4	8.4	8.6	9.4	8.9	8.9
Canning (kraut)	1.4	1.2	1.4	1.2	1.4	1.0	1.5	1.4	1.2
Carrots, all 3/	11.2	12.3	14.8	17.1	15.6	17.2	18.5	17.9	18.1
Fresh	7.7	8.3	10.9	12.8	11.3	12.6	14.4	13.6	13.9
Canning	1.1	1.7	1.1	1.5	1.7	1.7	1.5	1.4	1.5
Freezing	2.4	2.3	2.8	2.8	2.6	2.9	2.6	2.9	2.7
Cauliflower, all	2.6	2.5	2.8	2.6	2.3	2.2	2.2	2.4	2.2
Fresh	2.0	1.8	2.1	2.0	1.7	1.7	1.8	1.6	1.7
Freezing 2/	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.8	0.5
Celery, all	6.8	7.4	7.3	7.4	6.9	6.4	6.1	6.2	6.5
Sweet corn, all 4/	26.4	27.8	28.0	27.6	28.9	29.5	27.9	27.6	28.2
Fresh	5.9	6.9	7.0	8.2	7.9	8.5	8.4	8.2	8.8
Canning	11.1	11.9	11.2	10.2	10.5	10.5	9.3	9.4	9.1
Freezing	9.4	9.0	9.8	9.2	10.5	10.5	10.2	10.0	10.3
Cucumbers, all	9.7	9.6	9.7	10.2	10.8	10.1	11.8	10.2	10.7
Fresh	4.6	5.0	5.3	5.4	5.7	6.0	6.5	5.8	5.9
Pickles	5.1	4.6	4.4	4.8	5.1	4.1	5.3	4.4	4.8
Melons, all	23.4	25.4	24.7	25.7	26.4	29.3	28.8	28.2	29.4
Watermelon	12.8	14.8	14.3	15.2	15.4	16.8	15.8	14.5	15.5
Cantaloupe	8.7	8.5	8.7	8.5	9.1	10.4	10.7	11.3	11.4
Honeydew	1.9	2.1	1.7	2.0	1.9	2.1	2.3	2.4	2.5
Lettuce, all	30.1	30.6	29.7	31.0	28.5	27.8	33.4	30.2	31.4
Head lettuce	26.1	25.9	24.6	25.3	22.5	21.9	26.7	22.8	24.2
Romaine & leaf	4.0	4.7	5.1	5.7	6.0	5.9	6.7	7.4	7.2
Onions, all	17.3	17.6	19.3	18.1	19.3	19.6	20.0	19.4	19.4
Fresh	15.7	16.2	17.3	17.1	18.0	18.7	19.1	18.3	18.4
Dehydrating	1.6	1.4	2.0	1.0	1.3	0.9	0.9	1.1	1.0
Green peas, all 5/	4.2	4.1	3.5	3.7	3.7	3.4	3.6	3.4	3.6
Canning	1.9	2.1	1.6	1.5	1.6	1.5	1.5	1.5	1.5
Freezing	2.3	2.0	1.9	2.2	2.1	1.9	2.1	1.9	2.1
Peppers, all	11.3	12.9	13.3	12.2	11.3	13.4	11.8	12.6	12.7
Bell peppers, all	5.1	5.7	6.2	6.5	6.3	7.2	6.6	6.4	6.5
Chile peppers, all 6/	6.2	7.2	7.1	5.7	5.0	6.2	5.2	6.2	6.2

See footnotes at end of table.

Continued--

Table 47--U.S. per capita use of selected, commercially produced, fresh, and processing vegetables and melons, 1991-99--continued

Crop	1991r	1992r	1993r	1994r	1995r	1996r	1997r	1998p	1999f
Pounds, farm-weight									
Spinach, all	1.7	1.7	1.6	1.8	1.7	1.7	1.9	1.8	1.8
Fresh	0.8	0.8	0.7	0.8	0.7	0.6	1.1	1.0	1.0
Canning	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.3
Freezing	0.6	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5
Tomatoes, all	92.8	89.2	92.8	93.5	92.7	91.9	91.0	93.0	92.1
Fresh	15.4	15.5	16.4	16.4	17.1	17.7	17.1	17.4	17.9
Canning	77.4	73.7	76.4	77.1	75.6	74.2	73.9	75.6	74.2
Other, fresh	3.5	3.6	3.7	4.0	3.7	4.2	4.1	4.4	4.3
Artichokes, all	0.6	0.6	0.5	0.7	0.5	0.6	0.6	0.6	0.6
Brussels sprouts, all	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Eggplant, all	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Endive/escarole, all	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Garlic, all	1.5	1.5	1.8	1.9	1.9	2.4	2.1	2.5	2.3
Radishes, all	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.4
Green lima beans 7/	--	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Other, canning 8/	1.9	1.7	1.7	2.1	1.9	1.8	2.0	1.6	1.8
Other, freezing 9/	2.0	2.0	2.3	2.4	2.3	2.4	2.4	2.4	2.2
Subtotal, all 10/ 11/	268.2	272.5	280.1	285.1	280.8	285.9	291.7	287.9	290.8
Fresh 11/	134.3	141.6	146.3	153.4	149.3	156.0	164.0	158.3	162.7
Canning 11/	110.8	108.8	109.6	108.6	107.2	105.5	104.4	105.8	104.5
Freezing 11/	21.5	20.7	22.2	22.1	23.0	23.5	22.4	22.7	22.6
Potatoes, all	134.5	130.8	134.8	140.2	138.3	145.4	142.1	145.1	144.6
Fresh	50.4	48.6	49.3	50.3	49.5	50.0	48.5	50.8	48.7
Freezing	51.2	50.2	52.9	57.4	56.9	60.4	59.7	60.7	61.5
Other processing	32.9	32.0	32.6	32.5	31.9	35.0	33.9	33.6	34.4
Sweet potatoes, all	4.0	4.3	3.9	4.7	4.5	4.6	4.5	4.0	4.6
Mushrooms, all	3.7	3.7	3.7	4.0	3.8	4.0	4.0	3.9	4.0
Dry peas & lentils	0.5	0.4	0.3	0.6	0.7	0.5	0.5	0.6	0.5
Dry edible beans	7.3	7.7	7.4	7.8	7.7	7.4	7.6	7.6	7.9
Total, all items	418.2	419.4	430.2	442.4	435.8	447.9	450.4	449.1	452.4

-- = Not available. f = Forecast. p = Preliminary. r = Revised.

1/ "All" refers to all uses (fresh and processing). 2/ Processing broccoli and cauliflower are largely for freezing. 3/ Industry allocation suggests that 27 percent of processing carrot production is for canning and 73 percent is for freezing. 4/ On-cob basis. 5/ In-shell basis. 6/ Largely canning. 7/ Some years are less than 0.05 pounds. 8/ Includes green lima beans, beets, and misc. imports. 9/ Includes green lima beans and miscellaneous freezing vegetables. 10/ Fresh, canning, and freezing data does not add to the total because onions for dehydrating are included in the total. 11/ Excludes potatoes and pulses.

Source: Economic Research Service, USDA.

Table 48--Mushrooms: Quantity of imports by leading countries, 1992-98

Country	1992	1993	1994	1995	1996	1997	1998
-- 1,000 pounds --							
China	31,683	29,255	38,725	75,407	70,207	73,994	53,759
Indonesia	32,863	26,652	31,405	37,102	31,332	36,593	31,885
Hong Kong	21,501	18,210	25,441	9,141	5,622	4,842	1,892
Chile	3,089	7,219	10,664	11,177	9,361	6,672	3,781
Taiwan	12,331	5,078	4,695	5,834	6,459	6,639	10,888
Mexico	1,015	3,295	3,868	3,867	5,726	5,879	7,682
Netherlands	2,495	1,430	12,656	5,433	1,547	1,324	4,483
India	2,493	2,271	4,790	6,061	4,442	10,069	12,914
Others	17,335	14,602	18,784	19,709	17,955	17,841	27,427
Total	124,805	108,010	151,030	173,732	152,651	163,854	154,711

Source: Bureau of the Census, USDC as reported by American Mushroom Institute.

Table 49--Mushrooms: Quantity of imports by product category, 1992-98

Product category	1992	1993	1994	1995	1996	1997	1998
-- 1,000 pounds --							
Fresh or chilled	4,528	2,910	3,478	5,453	9,633	14,957	20,963
Frozen (cooked/uncooked)	2,136	1,155	1,584	1,624	1,151	2,396	2,635
Provisionally preserved	352	1,278	163	615	912	133	181
Dried, all methods	3,177	3,969	3,877	4,724	3,504	4,487	4,529
Straw	8,387	7,617	11,016	12,857	10,570	11,872	14,664
Whole	6,811	5,013	5,677	6,815	5,985	8,131	7,219
Sliced	18,633	15,138	18,628	20,300	25,234	30,520	26,784
Other	80,781	70,929	106,605	121,344	95,662	91,358	77,735
Total	124,805	108,010	151,030	173,732	152,651	163,854	154,710

Source: Bureau of the Census, USDC as reported by American Mushroom Institute.

Table 50--Mushrooms: Value of imports, by product category and country, 1998

Country	Frozen,								Total
	Fresh and chilled	cooked and uncooked	Provisionally preserved	Dried	Straw	Whole	Sliced	Other 1/	
-- Dollars --									
Canada	18,178,647			167,008	9,016	755,324	1,559,020	277,999	20,947,014
Chile				621,893			390,000	3,187,106	4,198,999
China	938,162	1,205,517		6,689,264	572,681	1,799,374	6,436,296	20,601,715	38,243,009
Colombia							231,271	203,548	710,595
France	276,227	276,348		759,352		55,077	18,078	3,204	1,388,286
Germany				595,801					595,801
Taiwan		235,349	22,000	167,611	5,730,894	903,206	464,623	797,581	8,321,264
Hong Kong		8,737		808,076	64,700		166,490	713,908	1,761,911
India		70,520	10,125	645,776	18,000	816,723	3,123,540	6,238,253	10,922,937
Indonesia			54,143		3,651,195	1,354,901	7,941,498	15,108,981	28,110,718
Italy	13,012	287,281		985,289	8,528	9,753	36,577	104,955	1,445,395
Japan	23,638	11,627		5,570,223		63,632	16,405	102,752	5,788,277
Korea	24,387	27,412		189,661		2,400			243,860
Malaysia	3,289		13,125	37,842	242,099	2,540	79,610	37,000	415,505
Mexico	385,016	2,400		3,045		948,556	2,981,577	5,843,614	10,164,208
Netherlands						215,455	771,053	2,892,159	3,878,667
South Africa	172,507			20,120					192,627
Spain		168,001	14,994			40,055	346,640	998,904	1,568,594
Thailand		9,389	2,290		249,143	105,346	17,265	154,665	538,098
Others	199,527	0	0	652,092	0	369,168	65,158	224,762	1,510,707
Total	20,214,412	2,302,581	116,677	17,913,053	10,546,256	7,672,781	24,617,378	57,563,334	140,946,472

1/ Not specified, excludes spawn.

Source: Bureau of the Census, USDC as reported by American Mushroom Institute.

Table 51--Mushrooms: World production, all uses, ranked by top 20 countries, 1991-97

Country	1991	1992	1993	1994	1995	1996	1997
-- 1,000 pounds --							
China, PRC	826,875	917,402	1,020,700	1,082,770	1,121,310	1,128,957	1,128,957
United States	751,099	780,926	759,236	790,582	786,705	787,365	817,559
Netherlands	363,825	419,900	419,900	486,200	441,000	441,000	441,000
France	437,693	434,486	406,726	379,439	361,887	417,131	381,389
United Kingdom	271,877	266,555	270,343	295,791	224,140	234,907	234,616
Poland	223,808	221,000	221,000	221,000	221,000	221,000	221,000
Japan	171,990	169,344	169,728	171,054	164,229	165,688	164,861
Spain	65,473	147,905	148,240	148,326	172,632	157,690	158,728
Italy	175,377	192,298	192,734	148,916	143,925	142,216	142,216
Germany	123,480	132,300	132,600	128,180	125,660	130,069	132,274
Canada	116,918	116,911	117,176	121,479	119,046	121,275	119,046
Ireland	85,995	89,744	89,947	99,450	108,023	119,046	125,660
Australia	56,232	60,803	60,941	85,945	77,038	79,380	79,380
Indonesia	17,640	46,305	46,410	41,990	48,500	48,500	39,682
Belgium-Luxembourg	45,405	45,408	45,511	49,970	48,800	67,883	66,137
New Zealand	15,435	7,735	9,503	13,260	12,125	13,889	16,534
Taiwan	43,577	33,737	28,665	26,460	26,460	26,460	26,460
Korea, Republic	19,827	22,100	22,100	22,100	21,124	20,619	20,061
Thailand	19,625	19,669	19,890	19,890	20,286	20,286	19,841
Denmark	18,081	18,122	19,890	19,845	22,050	22,050	19,149
All others	146,456	158,335	172,576	221,775	191,422	217,323	201,813
World	3,996,688	4,300,985	4,373,816	4,574,422	4,457,362	4,582,734	4,556,363

Source: Food and Agriculture Organization, United Nations, except United States estimates from USDA/NASS.

Table 52--Selected vegetables: U.S. census acres harvested, census years 1982, 1987, 1992, and 1997

Commodity	1982	1987	1992	1997	Change 1895
-- Acres harvested --					
Artichokes	11,204	11,757	9,193	10,821	17.7
Green lima beans	56,113	50,766	43,056	53,180	23.5
Beets	13,983	13,322	10,523	10,993	4.5
Brussels sprouts	6,138	4,421	4,188	3,315	-20.8
Chinese cabbage	5,018	8,724	8,824	12,393	40.4
Chicory	502	422	847	1,379	62.8
Chinese peas	190	122	5,233	8,799	68.1
Collard greens	12,927	15,201	16,062	15,703	-2.2
Endive	2,604	2,729	1,942	5,574	187.0
Escarole	3,239	3,346	2,019	1,115	-44.8
Herbs, fresh	--	--	6,389	11,611	81.7
Kale	3,468	6,186	7,950	5,816	-26.8
Mustard greens	9,746	9,684	12,775	12,254	-4.1
Green onions	20,368	18,431	12,395	14,588	17.7
Okra	5,750	5,712	4,336	3,323	-23.4
Parsley	4,548	5,089	5,439	5,430	-0.2
Chile peppers	20,467	27,990	50,851	45,032	-11.4
Pumpkins	25,985	40,652	63,260	74,354	17.5
Radishes	41,480	45,888	29,893	24,168	-19.2
Rhubarb	884	907	861	1,379	60.2
Spinach	34,915	36,445	40,583	41,360	1.9
Squash	50,806	58,198	69,029	67,458	-2.3
Turnips	8,291	9,531	9,256	6,645	-28.2
Turnip greens	9,637	10,063	10,034	11,103	10.7

Sources: Census of Agriculture, National Agricultural Statistics Service, USDA and Bureau of the Census.

