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Vegetables and Pulses Outlook: December 2024

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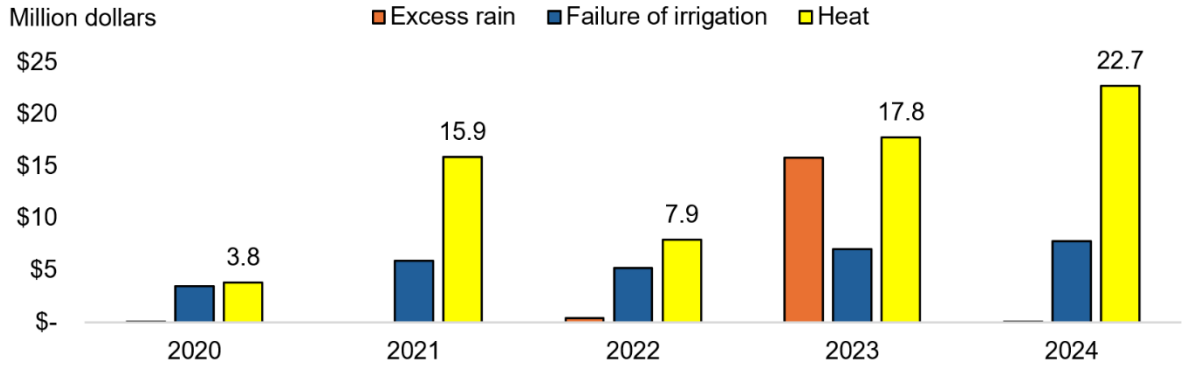
Scorched but Insured: Extreme Heat Roasts Vegetables and Pulses in 2024

In this report:

In late July, temperatures reached 10 degrees (or more) above normal in parts of California's North Coast, the Central Coast, the Sacramento Valley, the San Joaquin Valley, and the Cascade-Sierra Mountains. As of November 2024, USDA's Risk Management Agency had earmarked over $22 million for crop losses incurred by California's vegetable and pulse producers during June, July, and August of 2024. This is 27 percent more than the $17.8 million in heat related indemnity payments allocated for the same period in 2023, and 67 percent more than the 5-year average ($13.6 million).

Summer heat drove increases in indemnity payments to California's vegetable and pulse producers in 2024



Note: Indemnity payments are to California vegetable and pulse producers (RMA crop codes 0013, 0042, 0043, 0044, 0045, 0046, 0047, 0064, 0065, 0067, 0072, 0082, 0083, 0084, 0085, 0086, 0087, 0104, 0105, 0106, and 0156) who incurred crop losses in June, July, or August. "Failure of irrigation" refers to failures of either equipment or supply.
Source: USDA, Economic Research Service calculations using data from USDA, Risk Management Agency.

Approved by USDA's World Agricultural Outlook Board

Industry Overview

Weather impacts: The summer and fall of 2024 brought extreme weather, including above-normal temperatures in parts of California and severe impacts from Hurricanes Helene and Milton, which caused significant losses for Florida's vegetable, melon, and potato producers.

Fresh vegetables: In 2024, the fresh market vegetable sector experienced a mixed year, with notable increases in grower prices for key crops like lettuce, onions, carrots, and tomatoes due to unfavorable growing conditions. Cauliflower and celery experienced stable or declining prices, but overall availability met consumer demand despite regional disruptions.

Processing vegetables: Data from the Bureau of Labor Statistics suggests that prices for processing vegetables decreased slightly in 2024. The Consumer Price Indexes (CPI) for processed fruits and vegetables, frozen vegetables, and canned vegetables decreased by 0.5 percent, 1.3 percent, and 0.6 percent, respectively, from October 2023 to October 2024. As of October 2024, the Producer Price Indexes (PPI) for canned catsup, frozen potato products, and frozen vegetables other than potatoes had fallen 0.5, 0.1, and 0.6 percent, respectively, year over year.

Potatoes: The 2024 U.S. potato production forecast is 417.8 million hundredweight (cwt), down 5 percent from last year. Both harvested acreage (down 4 percent) and yield (down 1 percent) are expected lower year over year. Despite the smaller crop, fresh potato grower prices in the first 3 months of the potato marketing year (September–November) have continued to remain relatively flat.

Mushrooms: In 2023/24 (July–June), domestic producers grew 659 million pounds of mushrooms, valued at $1.09 billion. The 2023/24 crop was 9 percent smaller than the previous season. Total organic mushroom volume represented approximately 10 percent of total mushroom production. The preliminary 2023/24 per capita availability for all mushroom products (including truffles) is 3.3 pounds per person, a 6 percent decline from 2022/23.

Pulses: The pulse market showed diverse trade trends during the 2023/24 marketing year. Production across dry peas, lentils, dry beans, and chickpeas is estimated to increase in 2024. Chickpea exports declined in 2023/24 and are continuing to decline in 2024/25, coupled with imports which are also falling in 2024/25, indicating a domestic focus. In contrast, dry bean, dry peas, and lentils saw increased exports in 2023/24, with growth expected to continue into 2024/25, driven by strong global demand.

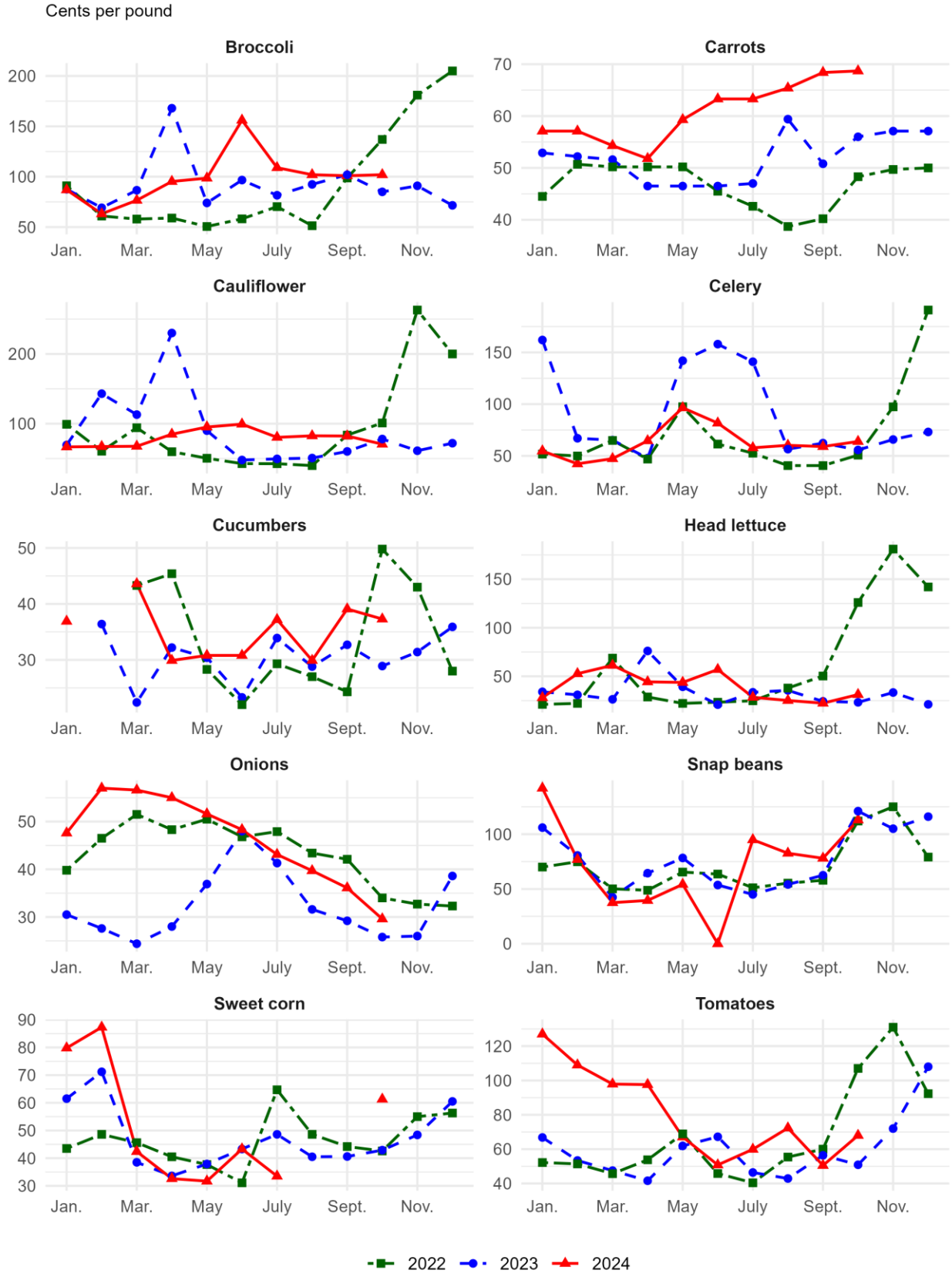
Table 1: U.S. vegetable and pulse industry at a glance, 2021–2024/1

Item	Unit	2021	2022	2023	2024F	Percent change 2023–24
Area harvested						
Vegetables, fresh and processing/2/7	1,000 acres	2,271	2,240	2,175	2,244	3.2
Potatoes/8	1,000 acres	930	918	961	923	-4.0
Dry beans, dry peas, lentils, and chickpeas/3	1,000 acres	3,140	3,068	2,980	3,832	28.6
Mushrooms/4	1,000 acres	3.0	2.6	2.7	2.9	5.0
Total	**1,000 acres**	**6,344**	**6,228**	**6,119**	**7,002**	**14.4**
Production						
Vegetables fresh/2/7	Million cwt	304	309	310	312	0.7
Vegetables processing/2/5	Million cwt	339	338	380	363	-4.4
Potatoes/8	Million cwt	413	402	440	418	-5.1
Dry beans, dry peas, lentils, and chickpeas/3	Million cwt	38	51	52	64	22.8
Mushrooms	Million cwt	7.6	7.0	7.2	6.6	-9.1
Total	**Million cwt**	**1,102**	**1,106**	**1,190**	**1,164**	**-2.1**
Crop value						
Vegetables fresh/2/7	$ millions	11,024	15,171	14,578	14,625	0.3
Vegetables processing/2/5	$ millions	1,970	2,507	3,350	3,239	-3.3
Potatoes/8	$ millions	4,204	5,166	5,393	5,180	-3.9
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	1,312	1,603	1,669	2,172	30.1
Mushrooms/4	$ millions	1,064	1,018	1,128	1,088	-3.6
Total	**$ millions**	**19,573**	**25,466**	**26,120**	**26,305**	**0.7**
Imports/6						
Vegetables fresh	$ millions	9,523	10,004	10,683	11,429	7.0
Vegetables processing/5	$ millions	3,593	3,869	4,394	4,441	1.1
Potatoes (including seed)	$ millions	2,022	2,534	3,093	3,230	4.4
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	315	355	404	415	2.9
Mushrooms	$ millions	595	664	629	635	1.0
Total	**$ millions**	**16,048**	**17,426**	**19,202**	**20,150**	**4.9**
Exports/6						
Vegetables fresh	$ millions	2,307	2,397	2,487	2,388	-4.0
Vegetables processing/5	$ millions	2,038	2,254	2,390	2,419	1.2
Potatoes (including seed)	$ millions	1,869	2,082	2,291	2,323	1.4
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	782	732	664	979	47.3
Mushrooms	$ millions	42	41	32	27	-16.4
Total	**$ millions**	**7,039**	**7,506**	**7,866**	**8,135**	**3.4**
Per capita availability						
Vegetables fresh	Pounds	156.0	158.8	155.7	153.8	-1.2
Vegetables processing/5	Pounds	111.6	110.1	114.7	111.9	-2.5
Potatoes/8	Pounds	112.8	112.8	116.9	116.6	-0.2
Dry beans, dry peas, lentils, and chickpeas/3	Pounds	9.5	11.0	10.5	11.6	10.8
Mushrooms/9	Pounds	3.7	3.6	3.6	3.3	-6.3
Total	**Pounds**	**393.5**	**396.3**	**401.4**	**397.2**	**-1.0**

F = forecast. Hundredweight (cwt) = 100 pounds. $ millions = million U.S. dollars.
1/ Total values rounded.
2/ Utilized production excluding melons.
3/ Includes Austrian winter and wrinkle seed peas where applicable.
4/ Mushroom area equals Agaricus total fillings (multiple crops).
5/ Includes canned, frozen, and dried. Excludes potatoes, pulses, and mushrooms.
6/ All international trade data are expressed on a calendar year basis.
7/ Includes both fresh and processed sweet potatoes.
8/ Includes both fresh and processed.
9/ Mushroom crop year (July–June) ends with the year listed (e.g., 2023/24 = 2024).
Source: USDA, Economic Research Service calculations using USDA, National Agricultural Statistics Service data and U.S. trade data from U.S. Department of Commerce, Bureau of the Census.

Figure 1

Free-on-board (FOB) prices for selected fresh-market vegetables, 2022–2024



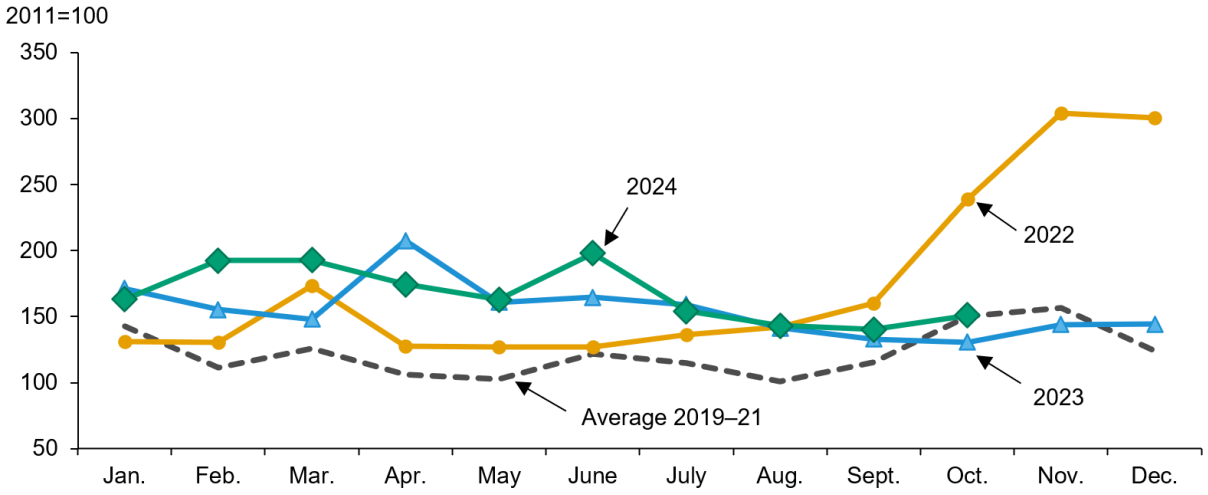
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service.

Fresh Market Vegetables

A Warmer Trend Emerges in Vegetable Prices as Winter Approaches

During the first 4 months of 2024, changes in fresh vegetable prices varied by crop (figure 1). While tomatoes and onions started the year at elevated levels, with tomatoes stabilizing by midyear and onions gradually declining after their early peak, carrot prices have steadily risen beyond the first quarter. Other fresh vegetables, including celery and cauliflower, have generally seen prices rise above their 2023 averages throughout much of 2024. These price increases led to a 7.6 percent increase from September 2024 to October 2024 in the USDA, National Agricultural Statistics Service (NASS) vegetable price index, which represents an aggregate measure of fresh vegetable prices. The October 2024 index was 16 percent higher than last year, but 37 lower than October 2022 (figure 2). Trends in USDA, NASS price index and USDA, Agricultural Marketing Service (AMS) weekly shipping point price data suggest that fresh vegetable prices will remain elevated through the remainder of 2024.

Figure 2
Monthly vegetable price index trends lower in second half of 2024



Source: USDA, Economic Research Service calculations using USDA, National Agricultural Statistics Service, *Agricultural Prices.*

Extreme weather complicated the summer and fall of 2024 for domestic vegetable and pulse producers. In late July, temperatures exceeded 10 degrees above normal in parts of California's North Coast, the Central Coast, the Sacramento Valley, the San Joaquin Valley, and the Cascade-Sierra Mountains. In Florida and the southeastern coast, two hurricanes dominated headlines: Helene (which made landfall on September 26 near Perry, Florida) and Milton (which made landfall near Siesta Key, Florida on October 7). The University of Florida's Institute of Food and Agricultural Sciences (IFAS) preliminary estimates noted that Helene caused between

$10.5 million and $38.2 million in losses to Florida's vegetable, melon, and potato producers. IFAS is in the process of analyzing losses associated with Hurricane Milton.

Weather impacts affected production but did not result in large decreases in supply due to the resilience inherent in specialty crop production with multiple harvest cycles. Ongoing drought and other weather-related events also affected the supply of cucumbers and other fresh vegetables imported from Mexico. Notable events such as Hurricane Helene's impact on Florida in late September, and Hurricane Milton's significant effect on Florida's fresh tomatoes in October led to supply interruptions and temporary price volatility. However, these weather disruptions were largely offset by stable production from other regions and ongoing imports from Mexico.

The following points provide a broad overview of the market situation for select fresh-market vegetable crops. These summaries analyze USDA, AMS *Market News* shipment volumes (table a3), conventional and organic Free on Board (FOB) shipping-point price data (table a4), and advertised retail price data with a comparison of October–November 2024 to the same months in 2023. Additionally, U.S. Department of Commerce, Bureau of the Census import and export data for January through October 2024 are found in table a5.

Broccoli:

- Year-to-date shipment volume in 2024 decreased by 8.3 percent from the same period in 2023. October–November 2024 shipments, with 49 percent sourced domestically, dropped by 7.7 percent compared to 2023, continuing a downward trend (table a3).
- The FOB shipping-point price for conventional crown-cut broccoli averaged $1.10 per pound during October–November 2024, an increase of 31.5 percent from the same period in 2023 (table a4).
- The USDA, AMS *Market News* weekly advertised retail price for crown-cut broccoli averaged $1.84 per pound during October–November 2024, up 10.8 percent compared to the same period in 2023.
- Reduced domestic output was partially offset by increases in imports. The United States has been a net importer of broccoli since 2013, with imports in that year totaling 381 million pounds. In contrast, imports over the past 3 years (2021–23) have averaged 608 million pounds, reflecting a significant upward trend. The United States receives 95 percent of broccoli imports from Mexico. Import volumes from January through October were 8.9 percent lower than a year earlier with declining (down 10.4 percent with 456.5 million pounds) imports from Mexico, outweighing increasing imports from Guatemala reaching 18 million pounds and Canada with 5.2 million pounds.

- U.S. broccoli export volumes (January–October) were 3.9 percent higher year over year. Broccoli exports in the past 2 years (2022–2023) have averaged 34 million pounds, a 78 percent decline from the 155-million-pound broccoli exports in 2021.

Snap (string) beans:

- Shipment volumes declined by 6.1 percent year to date while October–November 2024 shipments (26 percent domestic) were 28.7 percent lower than the same months in 2023.
- The FOB shipping-point price for conventionally-grown beans (round green type) averaged $0.81 per pound during October–November 2024—down 28.7 percent from the same period a year earlier.
- The USDA, AMS *Market News* advertised retail price for round green snap beans averaged $1.94 per pound, a 6.9 percent increase from a year earlier.
- Snap bean import volume (January–October) was up 2.6 percent from 2023. The United States is a net importer of snap beans averaging 235 million pounds from 2021–23. The top two importing countries are Mexico (68.3 percent, averaging 160.9 million pounds) and Guatemala (28.6 percent, averaging 67.3 million pounds) of total snap bean imports into the United States from 2021–23.
- Export volume of snap beans (January–October) was up 0.7 percent lower than year ago, driven by increased shipments to Canada (up 13.4 percent), Mexico (up 20.1 percent), outweighing decreasing exports to Dominican Republic and Costa Rica.

Cabbage:

- Shipment volume for multiple cabbage varieties in 2024 year to date decreased by 9.2 percent compared to the same period in 2023. October–November 2024 shipments, with 55 percent sourced domestically, were down 10.3 percent compared to 2023, continuing a downward trend.
- Shipping-point prices for conventionally-grown cabbage averaged 30 cents per pound—up 2.3 percent from a year earlier.
- The USDA, AMS *Market News* advertised retail price for cabbage averaged $0.68 per pound, 0.7 percent below a year earlier.
- Import volume (January–October) (including Napa cabbage) was 13.5 percent, from a year earlier, reaching 232.8 million pounds. The United States imported nearly three times as much cabbage than it exported in 2021–23 with imports from Mexico represent 51 percent and Canada representing 49 percent.

- Cabbage export volume (January–October) was up 4.5 percent from the same months in 2023 reaching 90.1 million pounds. Over the last 3 years, exports to Canada and Mexico represented 83.6 and 12 percent of exports, respectively.

Carrots:

- The FOB shipping-point price for conventionally-grown generic carrots averaged 48 cents per pound—down 7.1 percent from a year earlier.
- The USDA, AMS *Market News* advertised retail price for baby carrots averaged $1.30 per pound—down 1.8 percent from a year earlier.
- The United States remained a net importer of fresh carrots in January–October with volumes up 5 percent from a year earlier.
- With export prices (unit value) up more than a tenth, export volume (January–October) was down 7.5 percent from a year ago.

Cauliflower:

- Total shipment volume (70 percent domestic) was 9 percent lower than a year earlier.
- The FOB shipping-point price for conventionally grown white cauliflower averaged 67 cents per pound during October and November, down 3.7 percent from a year earlier.
- The USDA, AMS *Market News* advertised retail price averaged $1.55 per pound, up 14 percent from 2023 but down 9 percent from the elevated 2022 levels.
- January–October import volume was down 19 percent from a year earlier with supplies from Mexico down 24 percent from the same period last year.
- Export volume during January–October was 5 percent higher than a year ago, with organic cauliflower volume 1 percent lower.

Sweet corn:

- Shipment volumes decreased by nearly 10 percent year-to-date, but October–November 2024 shipments (84 percent domestic) were 14.4 percent higher than the same months in 2023.
- The conventional FOB shipping-point price for sweet corn (yellow) averaged 56 cents per pound—up 13.6 percent from a year earlier.
- The USDA, AMS *Market News* advertised retail price averaged 61 cents per ear, 3.4 percent higher than a year ago.
- January–October sweet corn import volume was up 9.2 percent from a year earlier reaching 181 million pounds. Shipments from Canada were up 328.4 percent from the same period last year, outweighing a decline in shipments from Mexico. Over the past 3

years, imports from Mexico represent 93.7 percent of total sweet corn imports, Canada represents 5.2 percent, and Guatemala represents 1.1 percent.

- U.S. sweet corn export volume during January–October increased by 5.3 percent from a year ago reaching 148 million pounds, with most of the increase in shipments to Canada (up 3 percent with 134.3 million pounds) and United Kingdom (up 358.7 percent with 3.7 million pounds).

Cucumbers:

- Total cucumber shipment volume (6 percent domestic) was 6 percent higher than a year ago (October–November). Year-to-date (January–November) domestic shipment volume fell 18 percent year over year.
- The FOB shipping-point price for cucumbers averaged 32 cents per pound—up 14 percent from a year earlier.
- The USDA, AMS *Market News* advertised retail price for conventionally field-grown cucumbers averaged 73 cents each, down 2.7 percent from a year ago and down 8 percent from 2022.
- January–October import volume of cucumbers and gherkins increased less than 1 percent from a year earlier.
- Export volume during January–October was 22 percent lower. Exports account for only 1 percent of the disposition of fresh cucumber supply.

Head lettuce:

- October–November 2024 USDA, AMS domestic shipment volume for iceberg lettuce was 3 percent higher than a year ago due to increased shipments from Central California. Year-to-date (January–November) total shipment volumes are down 3 percent from last year.
- The FOB shipping-point price for conventional iceberg lettuce averaged 48 cents per pound—up 76 percent from a year earlier. Higher seasonal prices in mid-November offset lower average prices throughout October, but prices began to ease toward the end of November with increased shipment volumes from Yuma, Arizona.
- The USDA *Market News* retail prices in October–November 2024 averaged $1.70 per lettuce head (up 18 percent from a year ago). Romaine lettuce was down 6 percent to $1.61 per head from 2023 and 8 percent lower the same period in 2022.
- January–October head lettuce imports were down 14 percent by volume and 8 percent by value from a year ago. Imports of all other lettuce types fell 19 percent by volume and 3 percent by value. During this period, head lettuce imports volume (177 million pounds) accounted for 30 percent of all lettuce imports.

- Export volume for all lettuce types (including packaged salad mix) during January–October 2024 was 622 million pounds, up 6 percent from a year ago. The majority of lettuce export volume (454 million pounds) went to top destination Canada.

Onions (bulb):

- Shipment volume for multiple dry bulb varieties in 2024 year to date increased by 1 percent compared to the same period in 2023. Total shipments from October–November 2024, with 85 percent sourced domestically, were up by 4.8 percent.
- The FOB shipping-point price for conventionally-grown dry yellow onions averaged 49 cents per pound—up 13.7 percent from a year earlier.
- The USDA *Market News* weekly advertised retail price for yellow storage onions averaged 86 cents per pound (up 1.4 percent from 2023).
- January–October import volume for onions, shallots, and onion sets decreased by 1.4 percent from a year earlier with decreasing shipments from Mexico (down 6.6 percent with 806.7 million pounds) and Canada (down 4.2 percent with 110.6 million pounds) slightly offsetting the increase from Peru (up 2.3 percent with 208.1 million pounds). Generic onions accounted for 72.4 percent, shallots accounted for 22.6 percent, and onion sets accounted for 5 percent of annual 2023 imports.
- Export volume during January–October of onions, shallots, and onion sets rose 26 percent from a year ago with all three onion categories increasing with shallots (up 19.7 percent with 441.1 million pounds), onion sets (up by 20.6 percent with 93.7 million pounds), and other onions (up by 74.4 percent with 98.8 million pounds).

Sweet (bell) peppers:

- Total shipment volume from January through November 2024 was 6 percent below a year ago. More than two-thirds of shipment volume was imported.
- The domestic FOB shipping-point price for conventional green bell peppers averaged 74 cents per pound from October–November, up 30 percent from a year earlier.
- The USDA *Market News* weekly advertised retail price for green bell peppers averaged $1.97 per pound, up 27 percent from 2023 and 24 percent lower than the same period in 2022.
- January–October bell pepper import volume was 1.4 billion pounds, down slightly (0.8 percent) from a year earlier.
- Export volume for fresh peppers (capsicum and pimiento) during January–October totaled 89.2 million pounds.

Squash:

- Total shipment volume (16 percent domestic) was down 66 percent from a year ago.

- The FOB shipping-point price for zucchini averaged 59 cents per pound—down 14 percent from a year earlier.
- The USDA *Market News* weekly advertised retail price for zucchini squash averaged $1.28 per pound, down 2 percent from the same time a year ago. Acorn squash and butternut squash advertised retail prices averaged $1.03 per pound—both down less than 1 percent from 2023.
- January–October squash import volume was down 4 percent from a year earlier, with zucchini accounting for about 45 percent of the volume. Imports account for two-thirds of U.S. squash availability, doubling from the early 2000s.

Tomatoes:

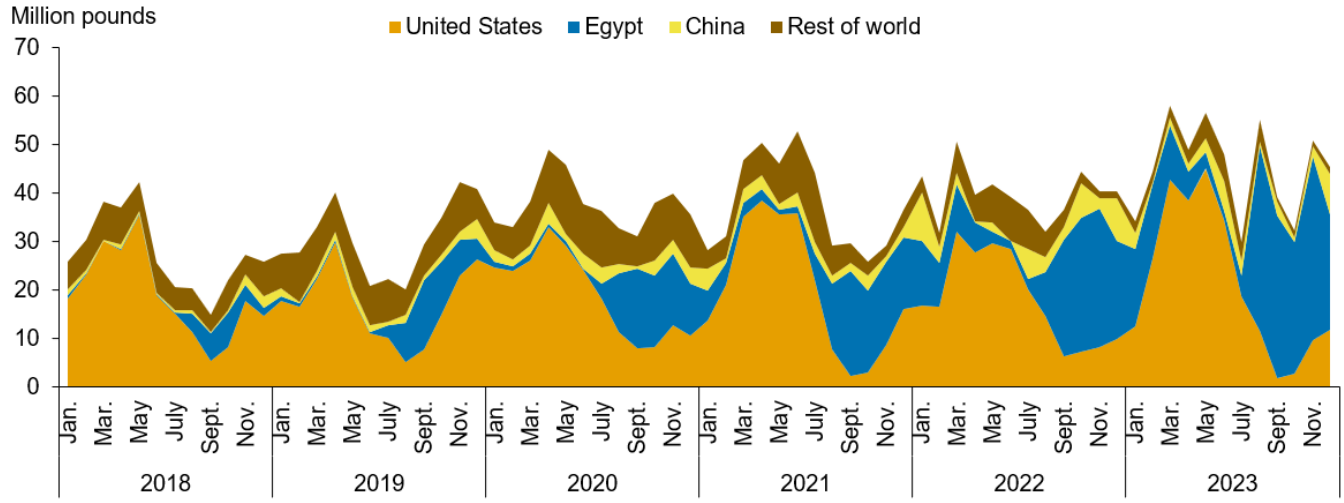
- Total shipment volume from January through November 2024 for all tomato varieties was 3 percent below a year ago with domestic shipments accounting for 24 percent of volume. According to AMS shipment data, Florida is the primary domestic supplier of fresh tomatoes from November through May. In November 2024, domestic fresh tomato shipment volume in Florida was down 81 percent from the same month last year. Industry reports indicate Hurricane Milton led to delayed harvest and replanting in some tomato fields.
- Domestic FOB shipping-point average price for plum/roma type tomatoes in October–November 2024 was 68 cents per pound—down 16 percent from the same period a year ago. Conventional domestic grape tomato FOB prices were down during this period (51 percent year over year) to $1.62 per pound.
- The USDA *Market News* advertised retail price for vine-ripe round tomatoes averaged $1.78 per pound, up 17 percent from 2023 but 15 percent lower than the elevated 2022 price.
- January–October import volume was 3.9 billion pounds, up 3 percent from a year earlier and the largest import volume on record for that period. Mexico was the leading fresh tomato supplier to the United States, accounting for 90 percent of volume.
- All fresh tomato export volume during January–October was up 2 percent from a year ago. Since peaking in 2000, tomato exports have trended lower, with 2023 volume 56 percent below that of 2000.

Sweet potatoes:

- Domestic shipment volume in October–November 2024 was 10 percent lower than the same period last season with increased shipments from Louisiana unable to offset declines in North Carolina, California, and Mississippi.

- Despite lower shipment volumes from the top three sweet potato-producing States, the average FOB price for conventional orange sweet potatoes was 41 cents, down 1 percent from the same period last year.
- Approximately one-fifth of U.S. sweet potato supply was destined for the export market in the past three seasons. January–October 2024 fresh sweet potato export volume was 417 million pounds, down 12 percent from the previous year and the lowest volume since 2015. During this period, almost all U.S. fresh sweet potato exports went to the European Union (EU) (39 percent), Canada (36 percent), or the United Kingdom (22 percent). Trade Data Monitor reports that the EU led the world in fresh sweet potato imports, accounting for 37 percent of global import volume in calendar year 2023. The United States continued to be the largest supplier of sweet potatoes to the EU last year with 47 percent of import volume (256 million pounds). Egypt accounted for 40 percent of EU fresh sweet potato import volume in 2023, up from a 7 percent share in 2018 (Figure 3). EU import volume of fresh sweet potatoes from Egypt has increased 6 years in a row with the majority of volume occurring when U.S. exports to the EU are seasonally low (September–December).

Figure 3
European Union fresh sweet potato import volume: United States loses market share to counter-seasonal imports from Egypt, 2018–23



Note: European Union monthly sweet potato import volume classified under Harmonized System (HS) code 071420.
Source: USDA, Economic Research Service using data from Trade Data Monitor, LLC.

Celery:

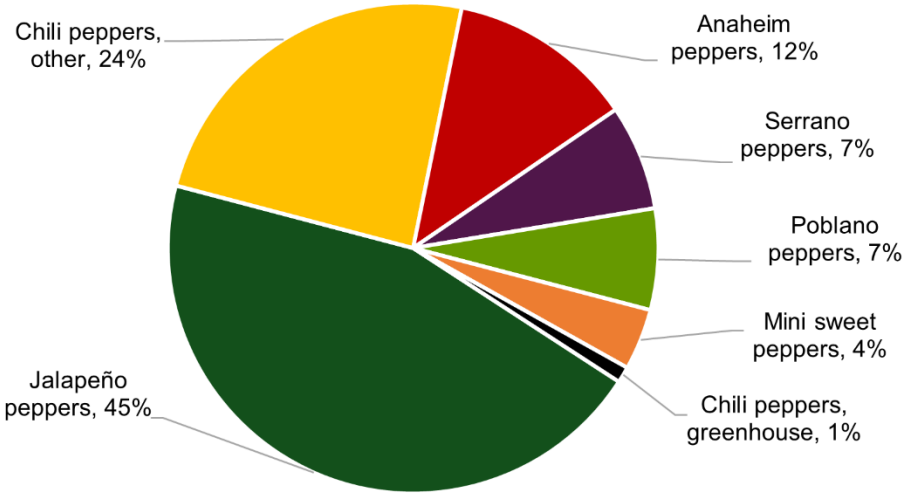
- Total shipment volume (90 percent domestic) was 2 percent higher than a year ago.
- The FOB shipping-point price for celery hearts (October–November) averaged 67 cents per pound—down 7 percent from last year. Shipping-point price for other celery averaged 24 cents per pound—down 14 percent from a year ago.

- The USDA, AMS *Market News* advertised retail price averaged $1.48 per bunch, up less than 1 percent from the same time in 2023.
- January–October import volume (excluding celeriac) was 5 percent lower than a year earlier; export volume was 9 percent higher.

Jalapeño peppers:

- The domestic FOB shipping-point price for jalapeño peppers (October–November) averaged 75 cents per pound—up 22 percent from a year ago.
- The USDA, AMS *Market News* advertised retail price for jalapeño peppers averaged $1.21 per pound (October–November), down 5 percent from the same period in 2023.
- January–October import volume of fresh jalapeño peppers was 5 percent lower with volumes down year over year from major supplier Mexico. In 2023, jalapeño peppers made up 45 percent of all chili pepper imports by volume (figure 4).

Figure 4
Chili pepper import volume by variety, 2023



Note: Chili pepper imports represent Harmonized System (HS) code 0709.60.20.
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Fresh Vegetable Import Share Continues To Rise

The per capita availability of fresh market vegetables has not changed much since the start of the 21st century. The USDA, ERS 2024 *Vegetables and Pulses Yearbook* indicates that each person consumed 149 pounds of fresh vegetables (on average) in 2000 and 150 pounds in 2023. However, the percent of availability accounted for by imports increased substantively over this time period. In 2023, the import share of fresh-market availability was 35.2 percent, down slightly from the peak of 35.4 percent it reached in 2022, but more than twice as high as the 13.3 percent it was in 2000. From January 2024 through October 2024, imports of fresh market vegetables (excluding potatoes) increased by 0.1 percent year over year (table a5).

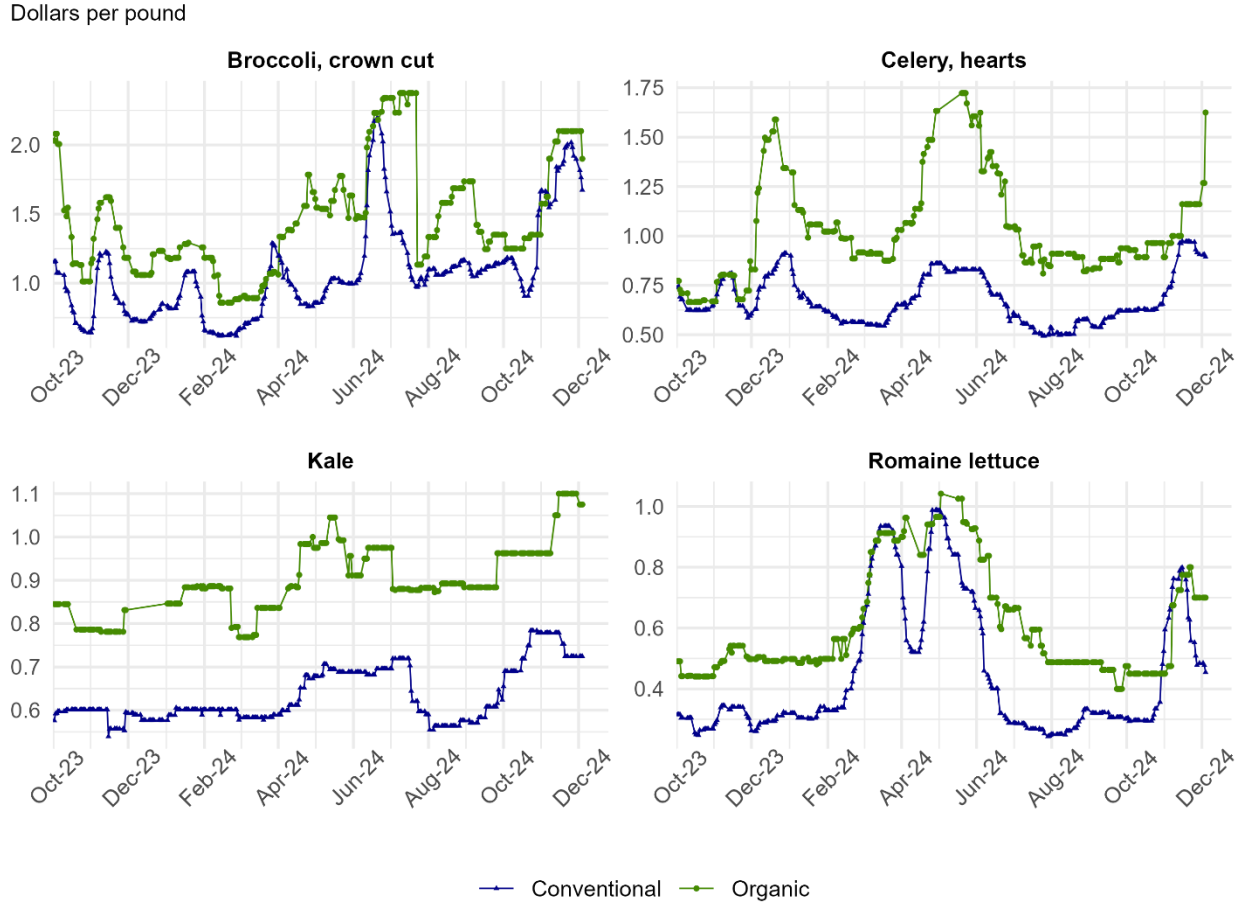
Organic and Greenhouse Vegetables

Winter Fresh Vegetable Prices Tick Up as Production Heads South

Weekly organic and conventional domestic shipping-point prices for fresh vegetables like broccoli, celery, kale, and romaine lettuce began to increase in November 2024 following a decline from summer highs (figure *5*). The increase in shipping-point prices in November coincides with a seasonal transition from Central California, a large producing area for leafy greens, broccoli, and celery, to Southern California and Arizona. Industry reports indicated that higher prices in mid-November also reflected slower lettuce growth due to cool weather in desert growing regions, as well as pest pressure in California broccoli fields. While California and Arizona produce fresh kale during the winter and early spring, USDA, AMS movement data indicates Texas and South Carolina are also major domestic suppliers during this period.

Figure 5

Seasonal flux: Average domestic shipping-point prices for selected organic vegetables



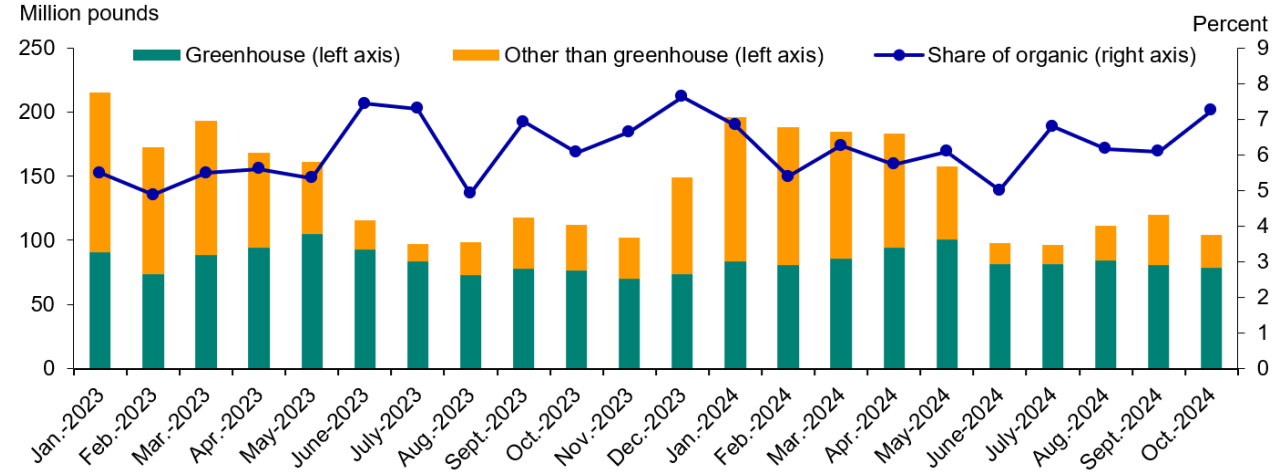
Note: Per pound weight conversions based on container approximate net weights as reported by USDA, Agricultural Marketing Service. Shipping-point price data from October 1, 2023, through December 5, 2024.
Source: USDA, Economic Research Service based on data from USDA, Agricultural Marketing Service, *Market News*.

Greenhouse Bell Pepper Imports Down, Tomato Imports Up in 2024

The U.S. Department of Commerce, Bureau of the Census reports organic and greenhouse trade for some fresh vegetables and pulse crops (table a6 in the fresh vegetable appendix). Here are some highlights:

- In January–October 2024, greenhouse bell pepper (organic and conventional) import volume was down 6.9 million pounds, 8 percent lower than the previous year. Greenhouse bell pepper volume accounted for 59 percent of all fresh bell pepper imports, the same share as last year (January–October 2023). Monthly import volumes of greenhouse bell peppers remained relatively steady between January and October 2024 with volumes ranging between 79 million and 101 million pounds per month (figure 6). By contrast, imports of bell peppers, other than greenhouse-grown (i.e., field-grown) had higher monthly volumes in January–March 2024 (between 99 million and 113 million pounds) and seasonally lower import volumes during June–October 2024 (between 15 million and 39 million pounds). The share of total fresh bell pepper monthly import volume designated as organic fluctuated between 5 and 7 percent in January–October 2024. Organic bell pepper imports during this period were 88.3 million pounds with 67.7 million pounds (77 percent) designated as greenhouse grown.

Figure 6
Fresh bell pepper imports by greenhouse designation, January 2023–October 2024

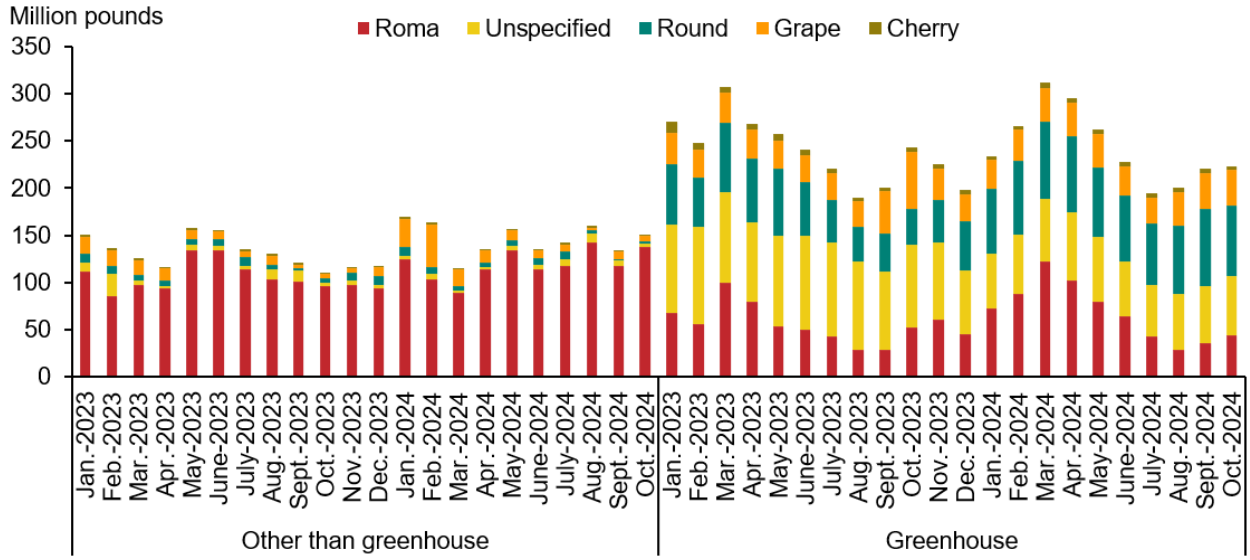


Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

- In January–October 2024, greenhouse tomatoes (organic and conventional) imports were down 0.4 percent (9 million pounds) by volume and up 9.7 percent by value (up $185 million) compared to the previous year. Greenhouse tomatoes accounted for 62 percent of all fresh tomato import volume and 70 percent of value. The round and unspecified tomato categories had the highest share of greenhouse to “not greenhouse”

volume by type (93 and 92 percent, respectively), followed by cherry (76 percent) and grape tomatoes (69 percent) (figure 7). Roma tomatoes represented the largest fresh tomato import volume by type overall, but approximately one-third of total roma import volume (38 percent) was identified as greenhouse. Between January and October 2024, import volume for all organic fresh tomatoes was 174 million pounds (4 percent of total fresh tomato import volume) with 126 million pounds of that organic volume designated as greenhouse.

Figure 7
Fresh tomato imports by type and greenhouse designation, January 2023–October 2024



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

- In terms of U.S. fresh organic vegetable export volume and value, three leafy green categories ranked in the top five in 2023: lettuce (excluding head), spinach, and packaged salad mix. Export volume of these leafy green categories varies seasonally with the lowest volumes occurring between November and March. In January–October 2024, organic spinach and packaged salad export volume were down year over year (23 and 26 percent, respectively) while lettuce (excluding head) was up 1 percent. During this period, Canada and Mexico were the top two destinations for lettuce (excluding head) and spinach, representing more than 95 percent of volume. However, for U.S. organic packaged salad mixes, Taiwan was the top destination (46 percent of volume) followed by Canada (39 percent).

Processing Vegetables

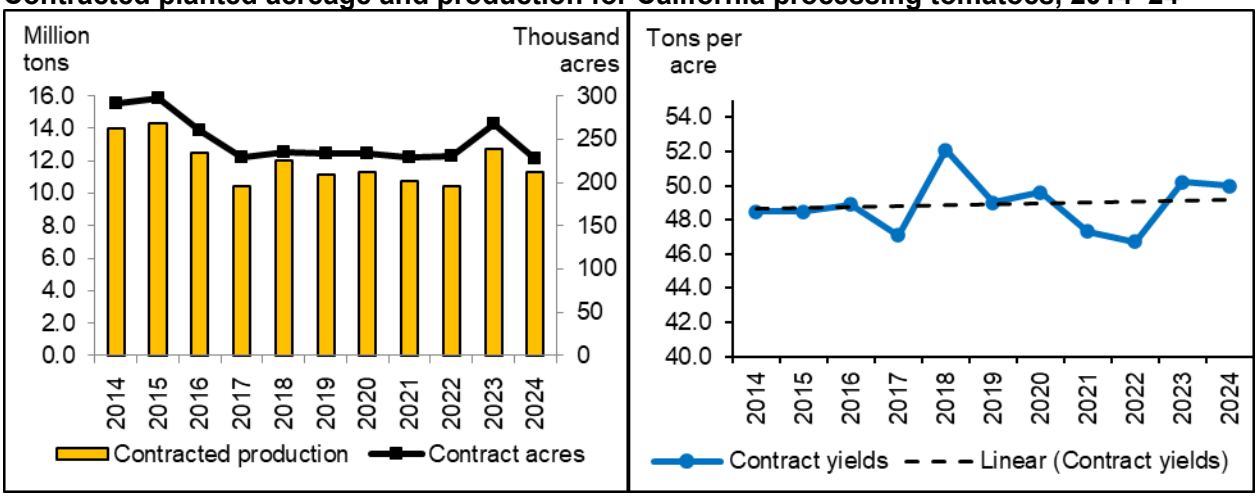
Many U.S. producers grow vegetables intended for processing. These vegetables tend to have thick skins, uniform shapes, and other properties that make harvesting and processing easier. As reported in the December 2023 USDA, ERS *Vegetable and Pulses Outlook*, tomatoes account for 6 out of every 10 pounds of processed vegetables produced and almost 50 cents out of every dollar in value.

Processing Tomatoes Weathered the Heat in 2024, But Quality May Have Been Affected

Data from the 2022 Census of Agriculture indicates that processing tomatoes are grown in nearly every State. However, 94 percent of harvested acreage is in California, where warm weather minimizes damage from freezing. Processing tomatoes, virtually all of which are irrigated, are typically harvested from June through October.

Despite better than average precipitation and groundwater recharge in water years 2022/23 and early 2023/24 (October–September), the California Department of Water Resources (DWR) allocated only 40 percent of the water requested in spring 2024. Nonetheless, USDA, NASS described water availability as adequate for crop development in the May *2024 California Processing Report*. In July, temperatures rose to 12 degrees above normal in parts of the San Joaquin Valley, where domestic processing tomato production is concentrated.

Figure 8
Contracted planted acreage and production for California processing tomatoes, 2014–24



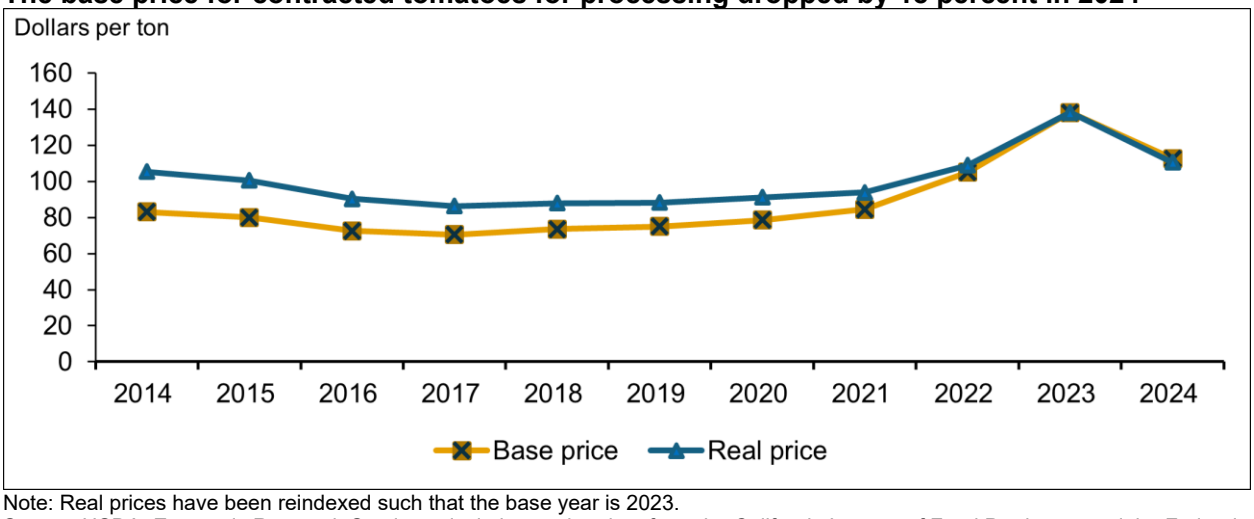
1 ton = 2,000 pounds.
Note: Contract production for 2024 represents processor intentions.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Young plants tend to be more susceptible to damage from extreme heat than mature ones. In 2024, growers reported that the July heat accelerated the development of mature tomatoes (intended for harvest in mid-summer), but did not reduce their yield or quality. By contrast, younger plants (intended for fall harvest) were just setting flowers when the heat wave began. Heat caused some of these plants to drop flowers, decreasing yields and fruit quality. Some growers reported a higher incidence of split set tomatoes (which tend to be greener and moldier than normal). Others reported observing more tomatoes with blossom end rot. In the August *2024 California Processing Tomato Report* USDA, NASS reported that quality was "good for the early crop, but the impact of the heat waves on late season plantings is uncertain."

Despite the extreme heat, USDA, NASS estimates that the average yield for the 2024 processing tomato crop will be 50 tons per acre (figure 8). This is the third highest on record, 0.2 tons per acre below yields in 2023 and 2.1 tons below yields in 2018. Production is currently estimated to be 11.3 million tons, a 200,000 ton (1.7 percent) decrease from the 11.5 million tons predicted by USDA, NASS in May (prior to the summer heat). Notably, though yields were higher than normal in 2024, production was below the 5-year average. This is because only 228,000 acres were contracted in 2024—the lowest contracted acreage since 1987.

In the April 2024 *Vegetable and Pulses Outlook*, USDA, ERS forecast that processing tomato prices would drop relative to 2023's record breaking $138 per ton. Despite an offer of $127.50 per ton by the California Tomato Growers Association (CTGA) in December 2023, the base contract price (for tomatoes at the point of first delivery) was $112.50 per ton (figure 9). The base price for organic tomatoes dropped from $190 per ton in 2023 to $145 per ton in 2024.

Figure 9
The base price for contracted tomatoes for processing dropped by 18 percent in 2024



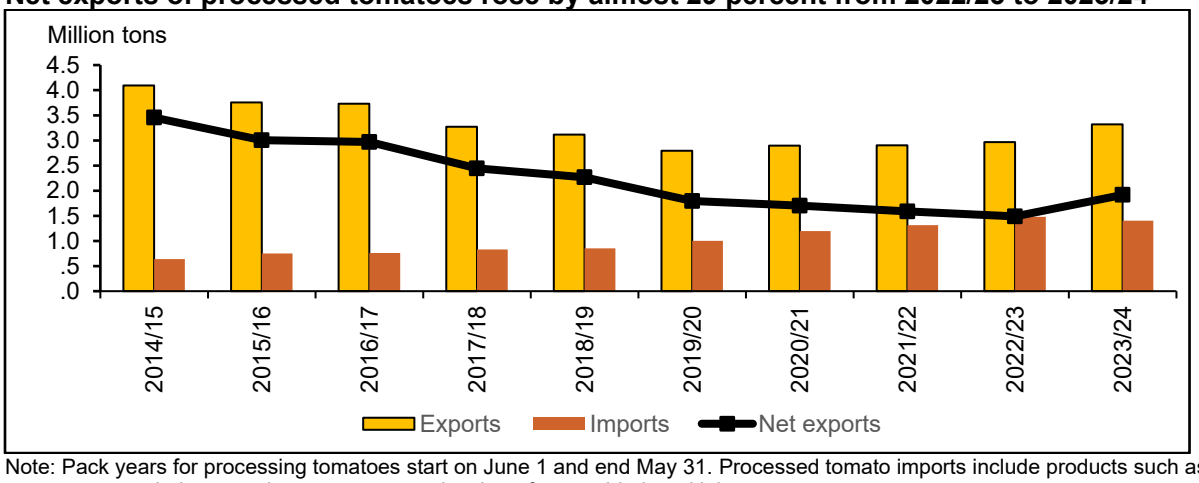
Note: Real prices have been reindexed such that the base year is 2023.
Source: USDA, Economic Research Service calculations using data from the California League of Food Producers and the Federal Reserve Bank of Saint Louis, gross domestic product (implicit price deflator), index 2017=100, annual, not seasonally adjusted.

As reported in the April 2024 *Vegetable and Pulses Outlook*, large inventories are a primary factor depressing processing tomato prices. From 2017 to 2023, the California League of Food Producers reported that the inventory of bulk tomato paste on June 1 (the beginning of the marketing, or "pack" year for tomato paste), had decreased, from 7.7 million tons of bulk tomato paste in 2017 to 3.1 million tons. However, in December 2023, when CTGA made its first bid for the base 2024 contract price, inventories were 36 percent higher than in 2022.

Another factor putting downward pressure on prices is an increase in the global production of tomatoes for processing. Prior to 2022, China and Italy alternated between being the second/third largest global producers of processing tomatoes (producing approximately 6 million short tons per year each). The World Processing Tomato Council (WPTC) reported that China increased production to 8.8 million tons in 2023, well short of the 12.8 million tons produced by the United States that year. In 2024, however, WPTC announced that China was expected to produce 11.5 million tons. If realized, this quantity could exceed the volume expected from California producers (11.3 million tons).

In pack year 2023/24 (June 1, 2023–May 31, 2024), net exports of processing tomatoes increased by approximately 29 percent, from approximately 1.5 million tons to 1.9 million tons (figure 10). Sustained increases in global demand for processing tomato products could bolster export volumes and increase prices in 2024/25. However, changes in trade volumes will depend heavily on macroeconomic factors such as interest rates and the strength of the U.S. dollar, as well as the quality of the 2024 crop (which may have been affected by the summer heat).

Figure 10
Net exports of processed tomatoes rose by almost 29 percent from 2022/23 to 2023/24



Note: Pack years for processing tomatoes start on June 1 and end May 31. Processed tomato imports include products such as sauce, puree, whole canned tomatoes, paste, ketchup, frozen, dried, and juice.
Source: USDA, Economic Research Service calculations using data from U.S. Department of Commerce, Bureau of the Census.

Frozen Vegetable Stocks Down

Through the end of October 2024, frozen vegetable stocks (excluding potatoes) in cold storage warehouses were 5 percent below a year ago (table b9). Stock levels were down year over year for many vegetable crops, including spinach (down 29 percent), cauliflower (down 20 percent), asparagus (down 19 percent), and snap/green beans (down 14 percent). French style green beans and lima beans both hit record low stock levels for the month of October since records began in 1960. Stock levels were up year over year for onions (up 25 percent), with large increases in onion rings in cold storage (up 57 percent). Frozen onion ring stocks hit their highest levels for the month of October since records began in 1973.

Processed Vegetable Import and Export Values Up

During the first 10 months of 2024 (January–October), the value of U.S. processed vegetable imports increased 9 percent from a year earlier to $6.6 billion (table b7). Canada was the top foreign supplier of processed vegetable products to the United States, accounting for about 33 percent of U.S. processed vegetable import value. The value of processed vegetable imports from Canada increased 11 percent year over year, from approximately $1.95 billion to $2.16 billion. The value of processed vegetable imports from Mexico was unchanged ($1.13 billion), while import value from China increased 14 percent (from $337 million to $384 million). During the first 10 months of 2024:

- The value of frozen vegetable imports increased by 7 percent from $3.15 billion to $3.36 billion, driven by increases in frozen potato imports (up 12 percent). Volume is 1.5 percent higher than during the same period last year—during which a record setting 4.63 billion pounds of frozen vegetables were imported. Frozen vegetables accounted for about 54 percent of the volume and 50 percent of the value of processed vegetables over the last 3 years, largely from frozen potato products like french fries.
- The value of prepared or preserved vegetable imports increased 12 percent from $2.24 billion to $2.51 billion. These gains were driven by increases in tomato products (value up 37 percent, volume up 9 percent) and potato chips (value up 25 percent, volume up 10 percent).
- The value of dried and dehydrated vegetable imports increased 4 percent from $616 million to $641.5 million. A notable exception is potato products like flakes, granules, and starch (down 7 percent).

- The value of vegetable juice imports increased 46 percent from $61.5 million to $million, with increases in mixed vegetable juices up 55 percent. Vegetable juice value in the first 10 months of 2024 has surpassed the value of calendar year 2023.

Based on data from January through October 2024, the value of all processed vegetable exports increased 7 percent to $3.2 billion compared to the same period last year (table b8). Canada is the top destination for U.S. processed vegetable exports. Over the first 10 months of 2024, U.S. exporters shipped $818 million in processed vegetables to Canada, up 6 percent from $770 million exported over the same period in 2023. Similarly, the value of processed vegetable exports to Mexico and Japan, the second- and third-largest markets, is higher than last year—up 10 percent and 8 percent, respectively.

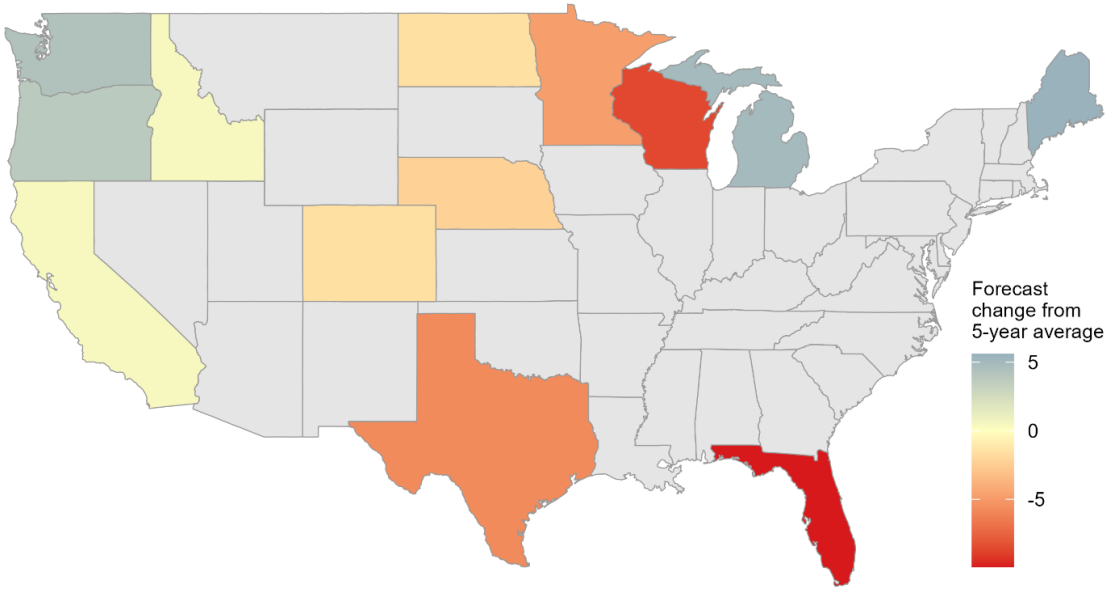
- The value of frozen vegetable exports increased 4 percent from $1.47 billion to $1.52 billion, driven by increases in potato exports (up 3 percent). Potato products made up more than 80 percent of frozen vegetable export value and volume in recent years. Some frozen vegetables (which make up a small portion of total frozen vegetable value) were down significantly, like asparagus (down 32 percent) and green peas (down 16 percent). Frozen vegetable export volume overall was up 1 percent year over year, with higher volumes of frozen potato products, mixed vegetables, and sweet potatoes.
- The value of prepared or preserved vegetable exports increased 12 percent from $1.25 billion to $1.39 billion. Tomato products made up more than 50 percent of prepared and preserved vegetable export value and volume in recent years. These gains in value were driven by increases in tomatoes (up 19 percent), cucumbers (up 26 percent), and other prepared or preserved vegetables (up 10 percent). While comprising a small portion of the market, double-digit gains were also seen in onions (up 67 percent) and snap beans (up 27 percent).
- The value of dried and dehydrated vegetable exports was down 1.4 percent from $273 million to $269 million. Decreases in export value of dried and dehydrated potatoes (down 14 percent) were offset by increases in the value of dried and dehydrated onions (up 10 percent), garlic (up 17 percent), and other vegetables (up 10 percent).
- The value of vegetable juice exports increased 7 percent to $26 million. Tomato juice export value increased 8 percent, and mixed vegetable juice value increased 7 percent.

Potatoes

Production Down in 2024 as Acreage and Yield Drop

USDA's November *Crop Production* reported that 2024 U.S. potato production is 417.8 million hundredweight (cwt), down 5 percent from last year. Both harvested acreage (down 4 percent) and yield (down 1 percent) are expected lower year over year. While the 2024 forecasted U.S. average yield (453 cwt per acre) would be the third highest on record (2019) and rank behind 2020 and 2023, growing conditions across the country were mixed this season. Washington, Oregon, Michigan, and Maine recorded historically high yields. In contrast, yields in Florida and Wisconsin were 10 percent and 9 percent below their previous 5-year average, respectively (figure 11).

Figure 11
Growing conditions mixed: 2024 forecast potato yield change from 5-year average



Note: Annual survey data for potatoes was not published for Alaska or Hawaii from 2019–24; therefore, the States are not shown on the map.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Crop Production* (November 2024).

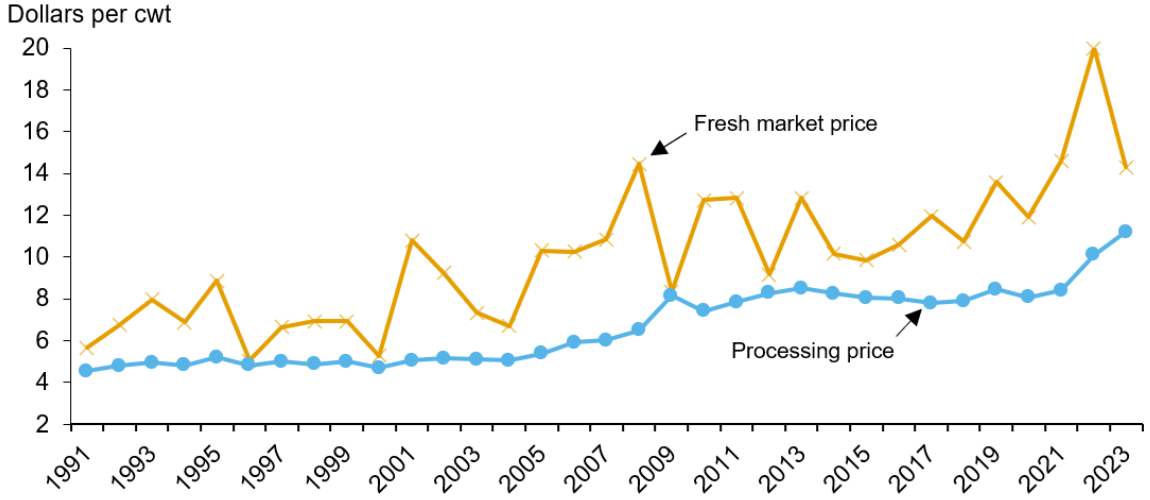
While this year's forecast production would be the third smallest in the last decade, it is still larger than 2021 and 2022. The 2024 crop forecast follows a 2023 crop that was the largest in 5 years and was the largest year-over-year change in the top 13[1] potato producing States since 1996. Highlights from 2023/24 and early 2024/25 potato marketing year (September–August) include:

[1] Top 13 potato producing States include California, Colorado, Florida, Idaho, Maine, Michigan, Minnesota, Nebraska, North Dakota, Oregon, Texas, Washington, and Wisconsin.

State-level production: In 2024, Idaho (which produced 32 percent of the domestic crop) and Washington (24 percent) continued to rank as the top two potato-producing States. Wisconsin is expected to fall behind Oregon to rank fourth in 2024. Growers in Wisconsin reported that spring rains negatively affected yields in low-lying areas, contributing to the lowest average yield in the State (380 cwt per acre) since 2002. Soggy weather early in the growing season also affected potato fields in parts of North Dakota and Minnesota. Only three States are forecast to have year-over-year increases in production (Michigan, Maine, and Colorado) in 2024. Both Michigan and Maine increased planted acres by 2 percent from last year, while a 2 percent decline in planted acres in Colorado was offset by a 3 percent increase in yield.

Grower prices: In 2023/24, the U.S. season average potato price ($12.3 per cwt) fell 5 percent year over year with a 29 percent decline in the average fresh market price more than offsetting an 11 percent increase in the processing price (figure 12). Several large potato product processors indicated they had excess contracted potatoes in 2023/24. About two-thirds of potato sales (production less farm use, feed, loss, and shrinkage) are for processing use. While the fresh potato price is sensitive to changes in production, the processing potato price tends to be less volatile due to grower-processor contracts signed ahead of spring planting. The season average processing potato price also tends to have smaller year-over-year downward adjustments compared to upward adjustments. In the last decade, the largest processing price decrease was less than 5 percent (2020) compared to a 20 percent year-over-year increase (2023).

Figure 12
Fresh and processing potato season-average grower price, 1991–2023



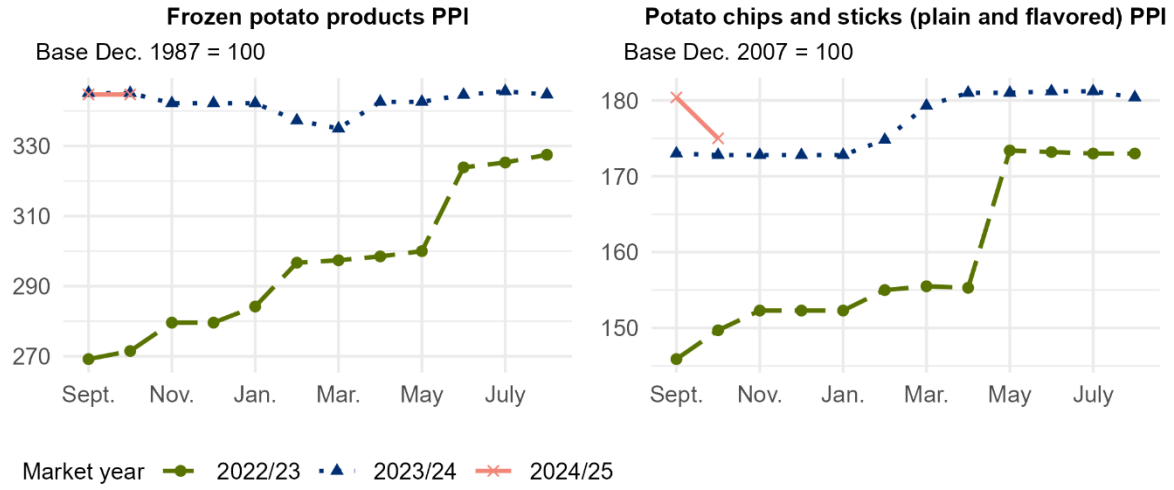
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service.

Monthly fresh grower potato prices in 2023/24 ranged from $10.20 to $12.80 per cwt, well below the monthly price range during 2022/23 ($18.50–$25.90 per cwt). The monthly fresh grower

prices in the first 3 months of the 2024/25 marketing year continued to be relatively flat despite a smaller crop. In September 2024, fresh grower prices exceeded $12.00 for the first time in 12months but fell 14 percent lower in October to $10.50.

Frozen potato products and potato chip PPI: Driven by increases in the prices of potatoes used in processing, the monthly producer price index (PPI) for frozen potato production (mostly french fries) in 2023/24 trended well above 2022/23 levels (figure 13). In the first 2 months of 2024/25 (September–October 2024), frozen potato products were unchanged from a year earlier and 28 percent above the same period 2 years ago. Similarly, wholesale prices for potato chips and sticks (plain and flavored) averaged 3 percent above a year earlier and 20 percent above the September–October PPI 2 years ago. Both the frozen potato products and potato chips PPI have generally mirrored the broader processed fruits and vegetables PPI with average prices beginning to moderate in 2023/24 following a period of increased inflation.

Figure 13
Producer price indices for processed potato products, 2022/23–2024/25



PPI = Producer Price Index.
Note: Potato marketing year starts in September and ends in August of the following year. PPI is not seasonally adjusted. Frozen potato products PPI series ID is WPU024502. Potato chips and sticks (plain and flavored) PPI series ID is WPU028901721.
Source: USDA, Economic Research Service using data from U.S. Bureau of Labor Statistics.

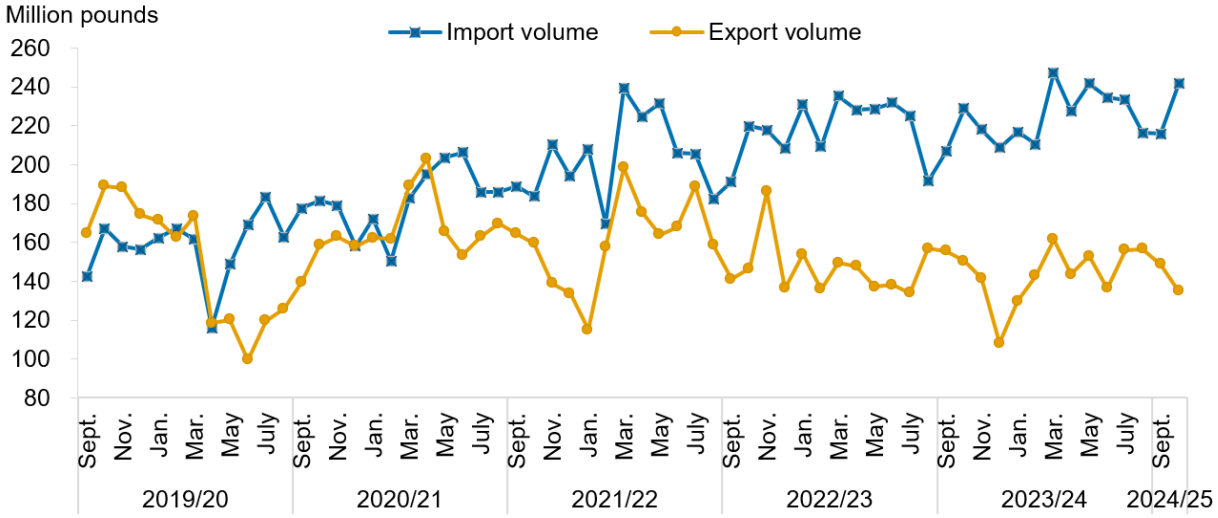
Potato retail prices: Fresh potato retail prices from December 2023 through October 2024, as reflected by Bureau of Labor Statistics (BLS) Consumer Price Index (CPI), have remained below the same period a year ago. The average retail price for potatoes fell seasonally for 3 consecutive months (August–October 2024) after climbing during the summer (Bureau of Labor Statistics, CPI data).

Leading up to the bulk of fall potato harvest, retail sales in July–September 2024 for all potato products were 0.2 percent lower in value and 5.4 percent higher in volume (fresh-weight equivalent) compared with the same quarter last year, according to a Potatoes USA retail sales

report. In terms of grocery store potato sales (July–September 2024), potato chips accounted for 50 percent ($2.3 billion) of total sales dollars, up 3 percent from last year. Fresh potato retail sales represented 22 percent of value ($977 million) with the 5-pound consumer package size continuing to represent more than half of fresh potato sales volume (55 percent). Russets remained the top fresh potato variety of choice with 65 percent of retail volume, followed by yellow (15 percent) and red varieties (11 percent) during the July–September 2024 quarter.

U.S. frozen french fry trade deficit continues in 2023/24 and early 2024/25: In terms of value and volume, frozen french fries rank No. 1 in U.S. potato imports and exports. The 2023/24 marketing year became the fifth season in a row the United States was a net frozen french fry importer by volume and the third season in a row by value (figure 14).

Figure 14
Frozen french fry trade deficit widened in recent seasons



Note: Potato marketing year starts in September and ends in August of the following year.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

U.S. frozen french fry export volume in 2023/24 was 1.74 billion pounds, down 2 percent from 2022/23 and the lowest volume since 2010/11. A 3 percent year-over-year increase in exports to top destinations Japan and Mexico was unable to offset double-digit declines to Saudi Arabia, Malaysia, China, Indonesia, and Australia. U.S. frozen french fry import volume reached a new high in 2023/24 of 2.7 billion pounds, up 3 percent from 2022/23. Canada accounted for 86 percent of french fry volume followed by the European Union at 13 percent. Almost 90 percent of frozen french fry imports from the European Union came from Belgium (65 percent) and the Netherlands (24 percent). In the first 2 months of the 2024/25 marketing year (September–October), U.S. french fry imports and exports have continued to mirror the previous season's trend with exports lower (down 7 percent by volume and 8 percent by value) and imports higher (up 5 percent by volume and 11 percent by value) compared to the same period a year ago.

Mushrooms

Higher Grower Prices Unable To Offset Volume Decline in 2023/24

During the 2023/24 crop year (July–June), the value of all mushrooms (Agaricus and others) was $1.09 billion, down 9 percent ($40.5 million) from 2022/23 (table 2). A 6 percent increase in the average grower price did not offset a 16-percent decline in brown Agaricus (brown button, Portabello, and Crimini) and a 26-percent decline in specialty mushroom production compared with the previous marketing year.

Table 2. Mushroom sales volume, price, and sales value

	---- Volume of sales ----		--------- Price ---------		------ Value of sales ------	
Item	2022/23	2023/24	2022/23	2023/24	2022/23	2023/24
	----- 1,000 pounds -----		*----- Dollars per pound -----*		*----- 1,000 dollars -----*	
Agaricus	**703,108**	**642,831**	**1.47**	**1.56**	**1,035,119**	**1,001,250**
White[1]	487,318	461,713	1.31	1.43	639,979	660,076
Brown[2]	215,789	181,118	1.83	1.88	395,140	341,175
All Specialty	**21,500**	**15,908**	**4.34**	**5.45**	**93,365**	**86,753**
Shiitake	5,652	3,967	3.82	4.90	21,589	19,420
Oyster	7,695	3,717	3.07	4.80	23,591	17,840
Other	8,153	8,224	5.91	6.02	48,185	49,494
Total	**724,608**	**658,739**	**1.56**	**1.65**	**1,128,484**	**1,088,003**

Note: The marketing year for mushrooms begins in July and ends in June of the following year.
1/ USDA, Economic Research Service derives white mushroom statistics using the total Agaricus and Brown statistics.
2/ Includes Portabello and Crimini.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Mushrooms.*

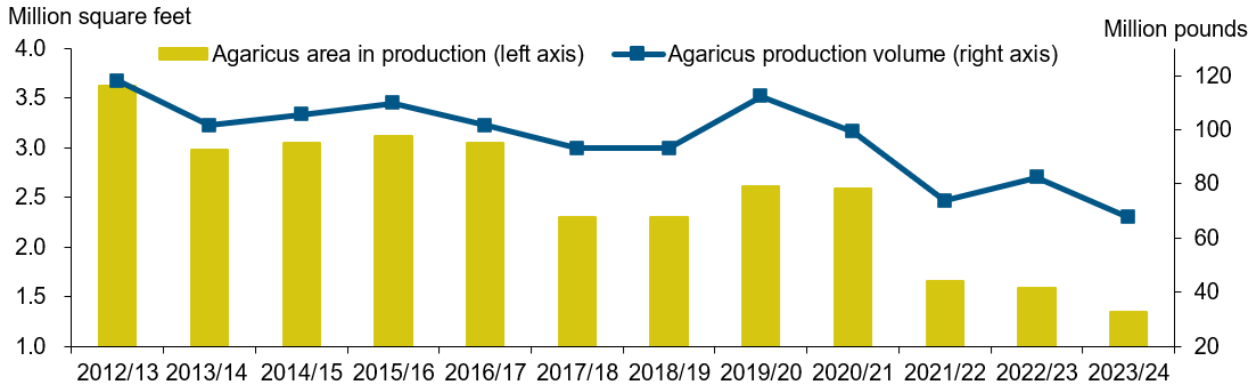
Agaricus (button mushrooms): By market segment, sales of fresh Agaricus mushrooms accounted for 88 percent of total volume in 2023/24. Fresh Agaricus mushroom sales volume fell by more than 7 percent, from 605 million pounds in 2022/23 to 564 million pounds in 2023/24. Processed Agaricus mushrooms volume fell 20 percent year over year (down 19 million pounds) but were 27 percent higher than the previous 3-year average.

In 2023/24, Pennsylvania accounted for 53 percent of U.S. Agaricus production value ($534 million) and 69 percent of volume (441 million pounds). Despite a 12 percent increase in growing area used for Agaricus production in Pennsylvania in 2023/24 compared to last season, lower yields resulted in a 5-percent decline in production (down 24.5 million pounds). Since mushrooms are harvested throughout the year, yield is calculated by dividing total fillings (i.e., the number of square feet filled) by growing area (i.e., the number of square feet in production) during a marketing year. In 2023/24, Agaricus mushroom yield in Pennsylvania was 4.73 pounds per square foot, down 20 percent from 2022/23 and 27 percent lower than the previous 3-year average. Approximately 83 percent of Pennsylvania's 441-million-pound Agaricus

mushroom crop went to the fresh market with the remainder processed (e.g., canned, frozen, dehydrated).

California ranked second in the United States in Agaricus production during 2023/24 with 19 percent of value ($187 million) and 10 percent of volume (68 million pounds). For the third season in a row, California mushroom producers reduced Agaricus area in production. California's 2023/24 Agaricus production area was approximately 1.4 million square feet, down 15 percent from the previous year and 63 percent lower than a decade ago (figure 15). While higher yields in the last decade have offset some of the loss of production area, California Agaricus production has remained under 100 million pounds since the 2020/21 season.

Figure 15
California Agaricus mushrooms: Production area and output trend lower in last decade



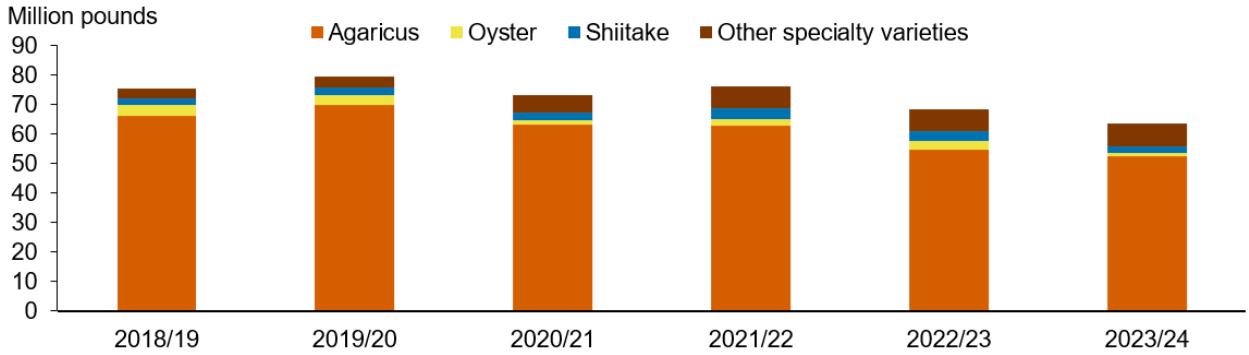
Note: Mushroom marketing year is July through June.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Mushrooms* (various issues).

Specialty mushrooms: In 2023/24, specialty mushrooms (conventional and organic) represented 8 percent of U.S. mushroom production value and 2 percent of volume. Growers reported 2023/24 specialty mushroom sales valued $86.8 million, a 7 percent decrease from 2022/23. In terms of volume, grower sales fell for shiitake (down 30 percent) and oyster (down 52 percent) but rose 1 percent for other specialty mushroom varieties.

Organic mushrooms: Growers sold 63.3 million pounds of certified organic mushrooms (Agaricus and specialty) in 2023/24—the lowest volume since 2015/16. Organic mushrooms represented approximately 10 percent of total mushroom (conventional and organic) grower sales volume, which is on par with the previous 6 marketing years. Organic Agaricus sales volume continued to account for the largest share (83 percent) of organic mushrooms but is lower than the 88 percent average share in 2018/19–2019/20 (figure 16). Specialty organic mushroom sales volume declined year-over-year for shiitake (down 38 percent) and oyster (down 55 percent). Sales volume for other organic specialty varieties increased in 2023/24

compared to the previous season and remained the largest of the three organic specialty mushroom groups with 68 percent of volume.

Figure 16
Organic mushroom grower sales volume, 2018/19–2023/24



Note: Mushroom marketing year is July through June. Sales volume represents volume of mushrooms producers sold as certified organic.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, *Mushrooms* (various issues).

Mushroom per capita availability: The preliminary 2023/24 per capita availability for all mushroom products (including truffles) is 3.3 pounds per person, a 6 percent decline from 2022/23 (3.6 pounds per person). Decreased domestic production coupled with stagnant growth in net imports (fresh-weight basis) resulted in the eighth year-over-year decline in per capita mushroom consumption. After peaking in 2015/16 at 3 pounds, fresh mushrooms per capita availability in 2023/24 is 2.3 pounds per person, representing 69 percent of all mushroom per capita availability. Processed mushroom per capita availability (fresh-weight equivalent) has continued to remain approximately 1 pound per person since 2013/14 with imports partially offsetting a gradual decline in domestic processed production.

Outlook for the 2024/25 mushroom season: According to the USDA, NASS *Mushroom* report (August 2024), growers intend to increase Agaricus bed and tray production area (total fillings) by 22 percent, from 125.4 million square feet in 2023/24 to 152.7 million square feet in 2024/25. Pennsylvania mushroom growers expect to increase Agaricus total fillings by 29 percent in 2024/25, which would offset a 1-percent decline in other surveyed States. However, in the first 2 months of 2024/25 (July–August 2024) domestic monthly shipments lagged last season with an average monthly volume of 51.3 million pounds, the National Mushroom Council reported. Trade data from the U.S. Department of Commerce, Bureau of the Census during the first 4 months of 2024/25 (July–October 2024) indicated fresh mushroom import volume up 4 percent with higher volumes from top supplier Canada more than offsetting declines from Mexico (down 26 percent) and China (down 13 percent). During this period, more than 87 percent of fresh mushroom import volume (56 million pounds) was identified as Agaricus.

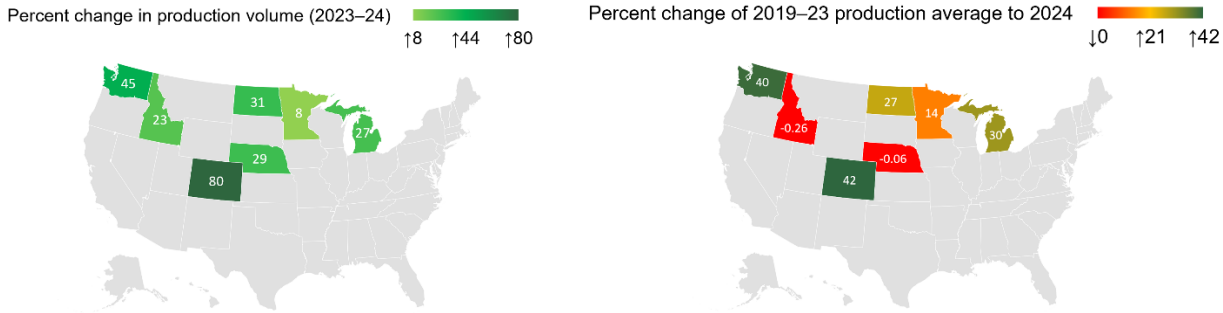
Dry Edible Beans

Dry Bean Acreage Expands While Yield Declines

The latest dry bean planted area and production estimates were released in the October 2024 issue of the USDA, NASS *Crop Production*. Planted area for dry edible beans (excluding chickpeas) increased 33 percent from 2023 to 1.53 million acres in 2024 in comparable States.[2] The increase in planted acreage is estimated to increase production by 27 percent in comparable States from 2023 to 2024 despite a 4.1 percent decline in yield.

North Dakota, Michigan, and Minnesota together accounted for 80 percent of total domestic production, which reached 29.4 million cwt in 2024, reflecting their continued dominance in U.S. dry bean production. To provide a broader perspective, production changes are compared both to last year and the previous 5-year average (2019—23) to capture longer term trends beyond year-to-year variability. The production changes across States showed considerable variation. Minnesota had the smallest year-over-year increase at 8 percent, producing an estimated 5.4 million cwt last year. Colorado, by contrast, is estimated to have the largest dry bean growth at 80 percent from last year. Compared to the 5-year average, production declined slightly in Nebraska and Idaho, both down less than half a percent. Washington also showed continued strong growth, with production 45 percent higher than last year and 40 percent above the 5-year average (figure 17).

Figure 17
Dry bean production percent changes from previous year and previous 5-year average by State



Source: USDA, Economic Research Service, using data from USDA, National Agricultural Statistics Service, *QuickStats*.

Dry bean acreage estimates for 2024 by class from USDA, NASS are expected to be released in early 2025. The top three dry bean classes in terms of planted acreage in 2023 comparable States, excluding “other States,” were pinto beans with 480.4 thousand acres accounting for

[2] Beginning in 2024, dry bean estimates were discontinued in California and Wyoming.

41.8 percent; black beans with 288.5 thousand acres, accounting for 25.1 percent; and navy beans with 134.6 thousand acres, accounting for 11.7 percent. USDA, ERS expects planted acreage for the top three bean classes in 2024 to increase by 15–20 percent above the previous 5-year average. This projection is based on historical planted acreage and price data for dry beans and corn, reflecting the competitive relationship between these crops for acreage accompanied by a 5-year average share distribution of the top classes.

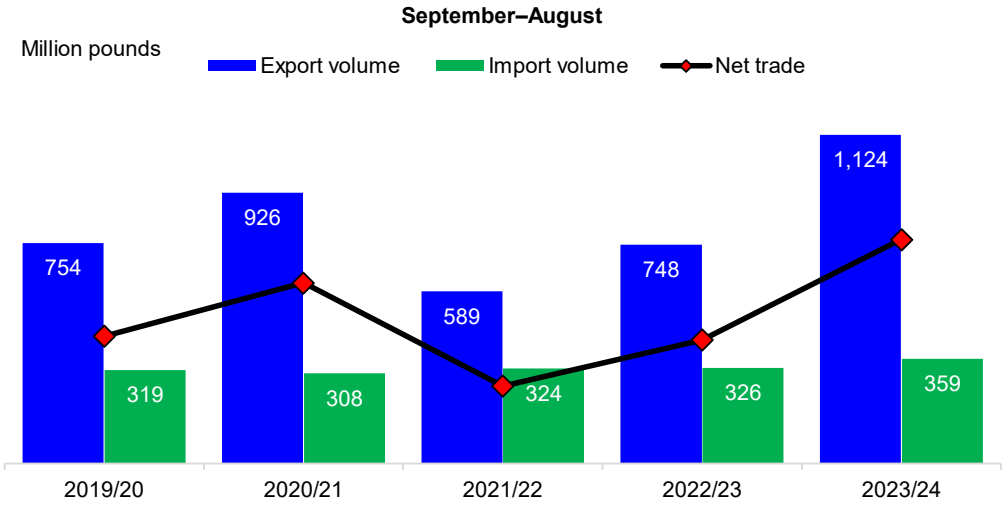
With planted acreage and production levels providing a clearer picture of domestic supply, it is also important to consider the role of trade in balancing domestic demand and international market opportunities.

Dry Bean Imports Up, Exports Decline

The 2023/24 U.S. dry bean marketing year spans September 2023 through August 2024. The United States retains its position as a net exporter of dry beans. The trade balance reflects strong export volumes relative to imports over the past 5 full marketing years, though the October year-to-date net trade gap has modestly narrowed due to increasing imports and decreasing exports when comparing the 2023/24 to 2024/25 partial marketing year.

Figure 18

U.S. dry bean marketing year trade volume 2019/20–2023/24



Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Dry bean imports for the full 2023/24 marketing year increased by 10 percent compared to 2022/23, reaching 359 million pounds (figure 18). Key suppliers for the 2023/24 marketing year include (figure 19):

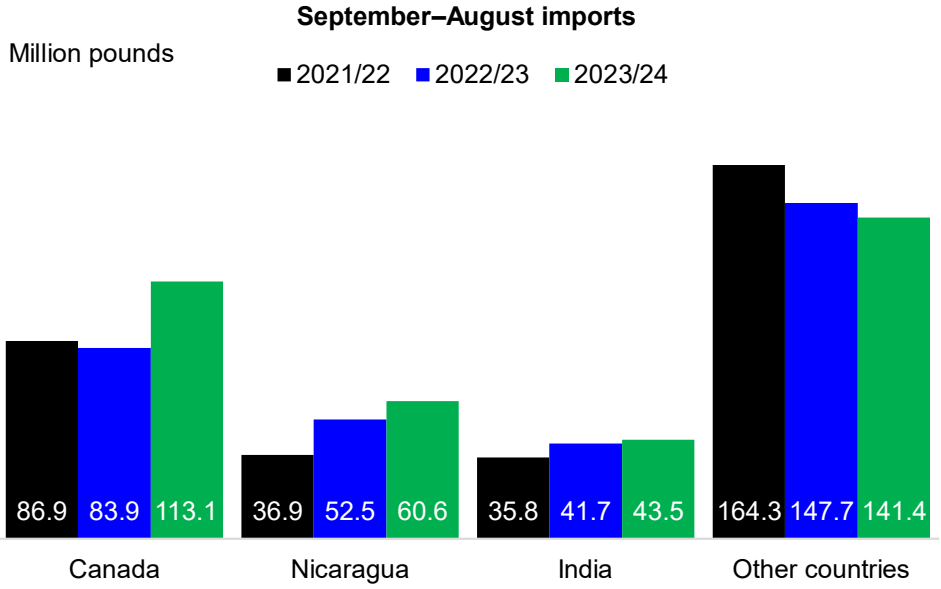
- Canada: The largest import source with 113.1 million pounds, up 35 percent from the previous year.
- Nicaragua: Imports rose by 15 percent to 60.6 million pounds.
- India: Imports increased slightly by 4 percent to 43.5 million pounds.

The increase in imports in the 2023/24 marketing year from the previous year are mostly kidney beans (all types up 34 percent), pinto beans (up 31 percent), and black beans (up 37 percent). This offset declines in small red beans (down 23 percent), blackeye beans (down 35 percent), white beans (down 32 percent), and lima beans (all types down 38 percent) (table d13).

The current marketing year to date for 2024/25 (September–October 2024 only) total 67.7 million pounds of imported dry beans, compared with 59.6 million pounds in 2023/24 (September–October 2023 only). Key origination countries for September–October 2024 include:

- Canada: Remains the top origination country with import volumes up by over 27 percent totaling 21.4 million pounds.
- Nicaragua: Imports up by 7.2 percent, totaling 11.1 million pounds.
- India: Imports fell by 28.8 percent with imports totaling 10.8 million pounds (table d13).

Figure 19
U.S. dry bean marketing year import volume by top three countries 2021/22–2023/24



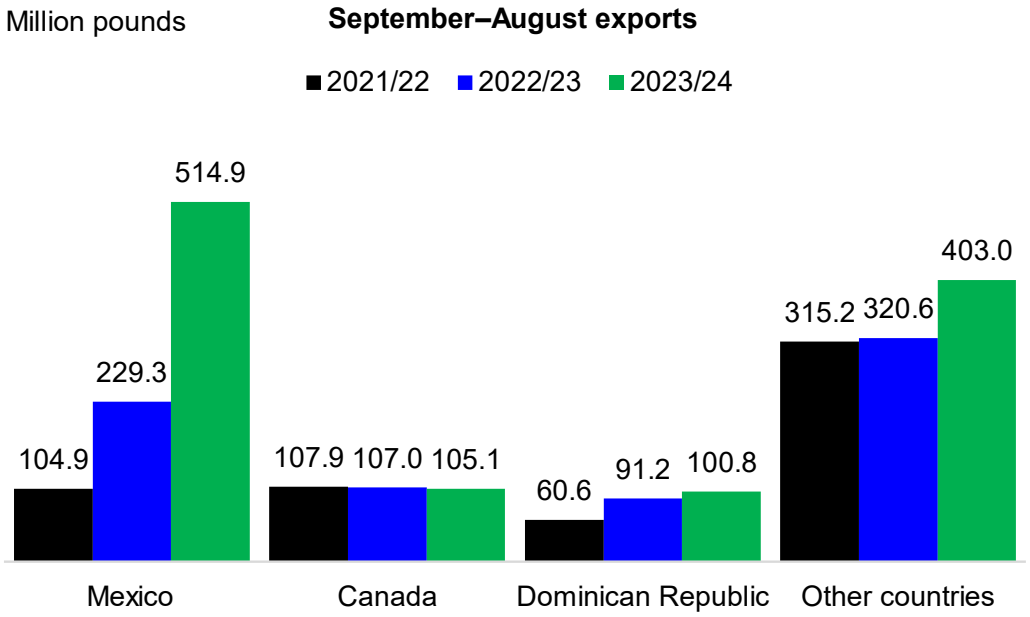
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

Dry bean exports for the full 2023/24 marketing year spiked by 50 percent compared to 2022/23, reaching 1.1 billion pounds (table d12). Key destination countries for the 2023/24 marketing year include (figure 20):

- Mexico: The largest export destination with 514.9 million pounds, increased sharply by 125 percent from the previous marketing year.
- Canada: Exports decreased slightly by 2 percent to 105.1 million pounds.
- Dominican Republic: Shipments increased by 11 percent to 100.8 million pounds.

The overall increase in exports in the 2023/24 marketing year from the previous year ranged from increases in mung beans of 10 percent to increases of 128 percent in pinto beans. Lima beans (all types down 15 percent) were the only declining bean class export from the previous marketing year. Increases in exports were primarily kidney beans (all types up 44 percent), pinto beans (up 128 percent), black beans (up 47 percent), and navy beans (up 23 percent) from the previous marketing year (table d12).

Figure 20
U.S. dry bean marketing year export volume by top three countries 2021/22–2023/24



Note: Trade volume in million pounds. MY = marketing year. MYTD = marketing year to date.
Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

The current marketing year to date for 2024/25 (September–October 2024 only) totaled 185.8 million pounds of exported dry beans, compared with 215.5 million pounds in 2023/24 (September–October 2023 only) (table d12). Key destination countries for September–October 2024 include:

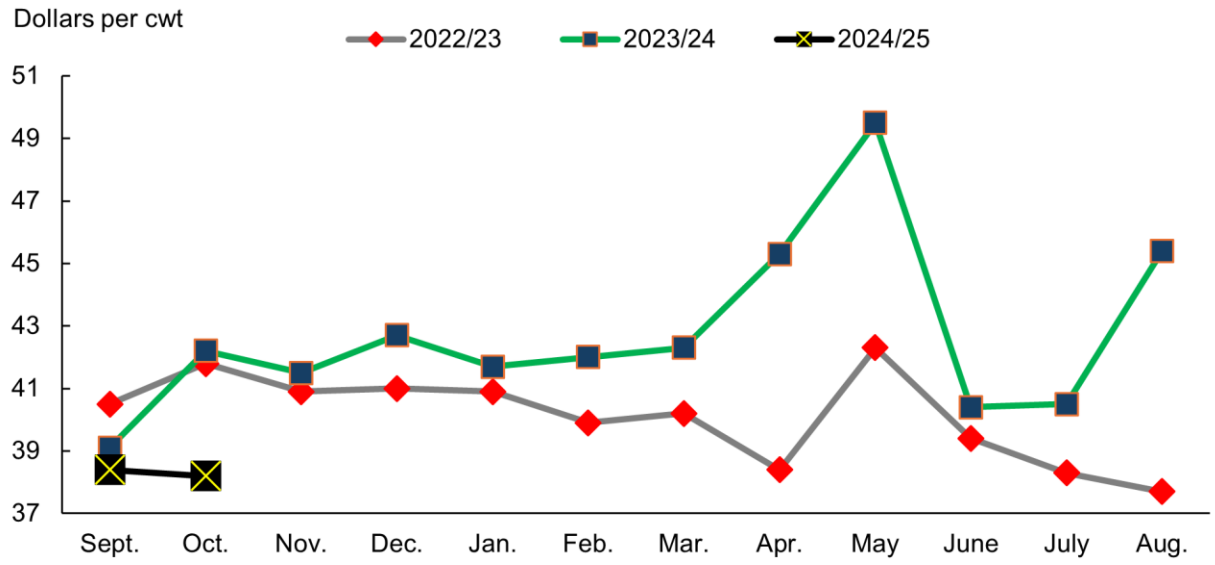
- Mexico: Remains the top destination country despite a decline in export volumes by over 20 percent totaling 76 million pounds.
- Canada: Exports declined by 25 percent from the previous year, totaling 37.3 million pounds.
- Dominican Republic: Exports increased by 26.8 percent with exports totaling 12 million pounds.

Dry Bean Prices Declining Going Forward

Production, yield, and world demand influence markets for each dry bean class and characterize the dry bean price outlook. The all-dry bean price, excluding chickpeas, for the 2023/24 marketing year reached $41.80 per cwt—3 percent above the previous marketing year (table d11). The all-dry bean price, excluding chickpeas, for the 2024/25 marketing year through October 2024 averaged 6 percent below the previous crop year (figure 21).

USDA, ERS forecasts modest price declines in comparison to gains achieved toward the end of the 2023/24 marketing year. USDA, AMS reported declines in average weekly grower prices from September 12, 2024, through November 19, 2024, for pinto beans from 15–22 percent from the previous year. Black bean grower prices are declining by 20–26 percent from the previous year. Navy grower prices are registering more modest declines from 1–7 percent below the previous year. Contrastingly, dark red kidney bean grower prices were 11 percent above the previous year. Assuming continued strong net exports for dry beans, marginally declining yield and significantly increased production in key dry bean States may increase domestic supply and weaken the overall dry bean price prospects in 2024/25 compared to the previous crop year.

Figure 21
U.S. dry edible beans: Average monthly grower prices in 2024/25 trending down



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Source: USDA, Economic Research Service calculations using National Agricultural Statistics Service, *QuickStats*.

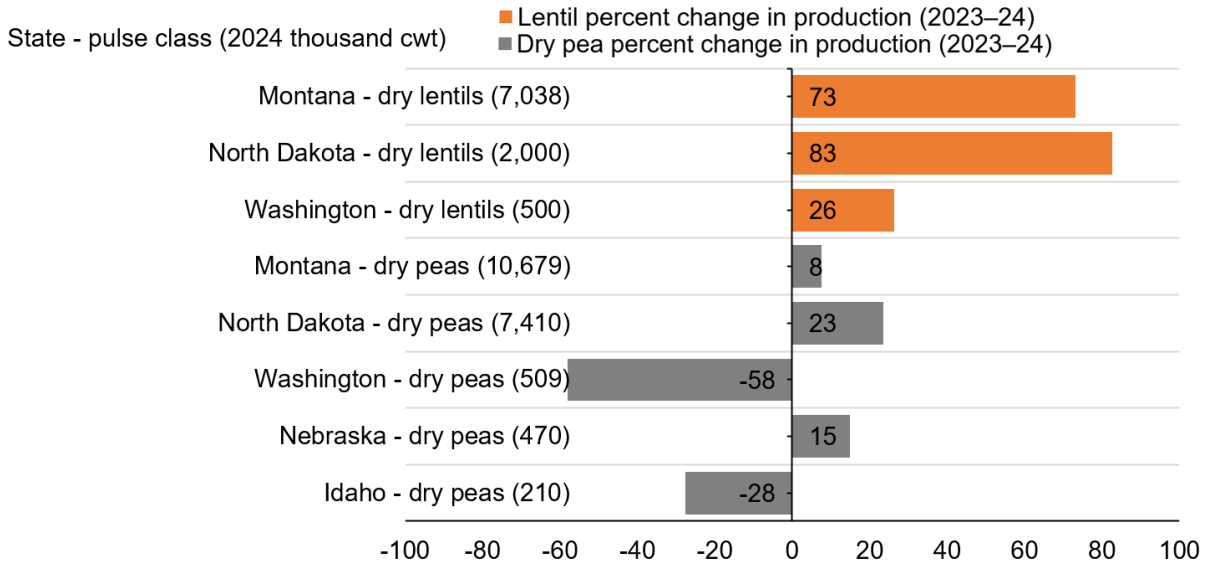
Dry Edible Peas and Lentils

Dry Peas Show Modest Growth, Lentils Lead with Production Gains

The USDA, NASS *Crop Production* report released in November 2024 estimates dry peas and lentils for the 2024 marketing year, July 2024 through June 2025. Percentage changes in acreage, production, and yield are based on comparable States[3] to ensure consistency in year-over-year comparisons.

Dry pea planted acreage increased by 4 percent reaching 988,000 acres. Harvested dry pea acreage rose by 2 percent with 947,000 acres. Dry pea production grew by 8 percent with 19.3 million cwt, supported by a 6 percent yield increase, with an average yield of 2,036 pounds per acre—a gain of 114 pounds per acre from a year earlier. Production increases in Montana (up 8 percent to 10.7 million cwt), North Dakota (up 23 percent reaching 7.4 million cwt), and Nebraska (up 15 percent reaching 470,000 cwt) offset production declines in Washington (down 58 percent to 509,000 cwt) and Idaho (down 28 percent to 210,000 cwt) (figure 22).

Figure 22
Dry pea and lentil production percent changes from previous year by State



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Source: USDA, Economic Research Service, using data from USDA, National Agricultural Statistics Service, *QuickStats*.

USDA, NASS projects significant shifts in lentil production for 2024 across surveyed States in comparable States.[4] Planted lentil acreage is forecast to increase by 77 percent with 936,000 acres, with harvested acreage expected to rise by 78 percent to 900,000 acres. Lentil production is expected to grow by 72 percent reaching 9.5 million cwt across three reported

[3] Beginning in 2024, dry pea estimates were discontinued in South Dakota.
[4] Beginning in 2024, lentil estimates were discontinued in Idaho.

States (Montana, North Dakota, and Washington) (figure 22). Average yield is projected to decline by 38 pounds per acre year over year, driven largely by a 6 percent yield reduction in Montana, which accounts for 74 percent of total surveyed lentil production. Despite this, Montana overcame the yield decline with an 85 percent increase in planted and harvested acreage, potentially reaching a 27-year high of 690,000 harvested acres. Montana's lentil production is projected to reach 7 million cwt (up by 73 percent) and Montana's planted acreage is nearing—but not surpassing—the 2017 record high of 730,000 acres, reaching 720,000 acres in 2024.

National estimates from 2020–24 for acreage, production, crop value, yield, and season average price for dry peas and lentils are available in the appendix in table e14 and table e15.

Dry Pea and Lentil Trade: United States Expanding Net Export Status

The United States is a net exporter of dry peas and lentils. In the 2023/24 marketing year (July–June) most lentil exports went to Canada (41 percent of total exports with 202.7 million pounds). Other top lentil export destinations vary from year to year, but India (11 percent of the total with 53.8 million pounds), and Mexico (9 percent of the total with 46.8 million pounds) ranked second and third for lentil export destinations in 2023/24.

The top three dry pea export destinations accounted for 62 percent of volume in the 2023/24 marketing year. Canada (37 percent of total exports with 272.4 million pounds) was the top destination followed by China (20 percent with 148.8 million pounds), and Democratic Republic of the Congo (5 percent with 37.3 million pounds) (figure 23). Marketing year trade volume by class and country from 2021/22–2024/25 through October 2024 are provided in table e16 for exports and table e17 for imports.

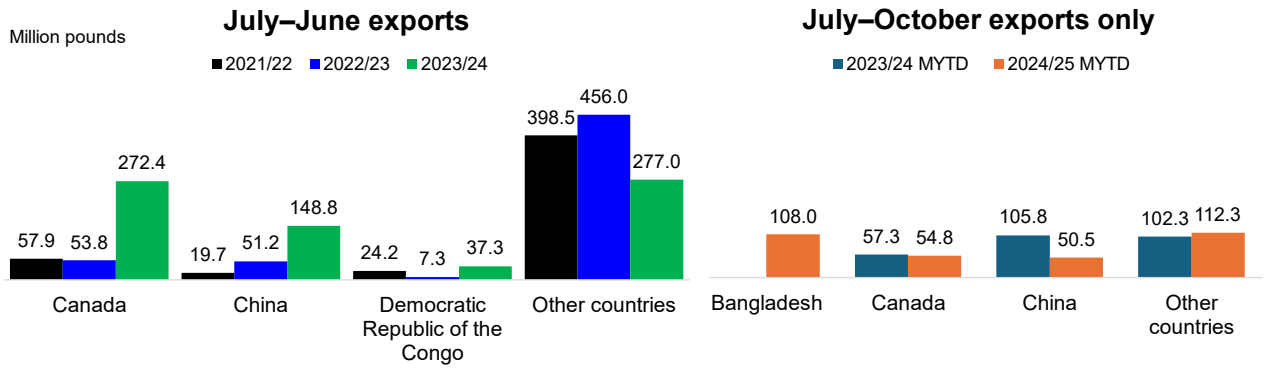
The following points describe trends in dry pea and lentil trade for the first 4 months of the current (2024/25) marketing year (July–October) using the most recent data reported by the U.S. Department of Commerce, Bureau of the Census:

- Dry pea export volume increased 22.7 percent reaching 325.6 million pounds year over year. This growth was largely driven by exports to countries outside the previous full marketing year top importers. The July–October 2024 dry pea export volume for other countries surged by 710.9 percent to 152 million pounds, far outpacing any increases seen among the top 10 importing countries in the same period (table e16). Bangladesh accounted for the majority of this growth, with exports reaching nearly 108 million pounds (figure 23). The unprecedented increase in dry pea exports to Bangladesh during July–October 2024

coincided with a period of political instability and economic challenges in the country. Protests led to the resignation of former Bangladesh Prime Minister Sheikh Hasina in late August 2024 after 15 years in office.

- The dry peas classes exported to all countries in July–October 2024/25 were predominantly split peas (34 percent of the total with 109.8 million pounds), followed by yellow peas (31 percent of total exports) and green peas with 27 percent of the total (table e16).

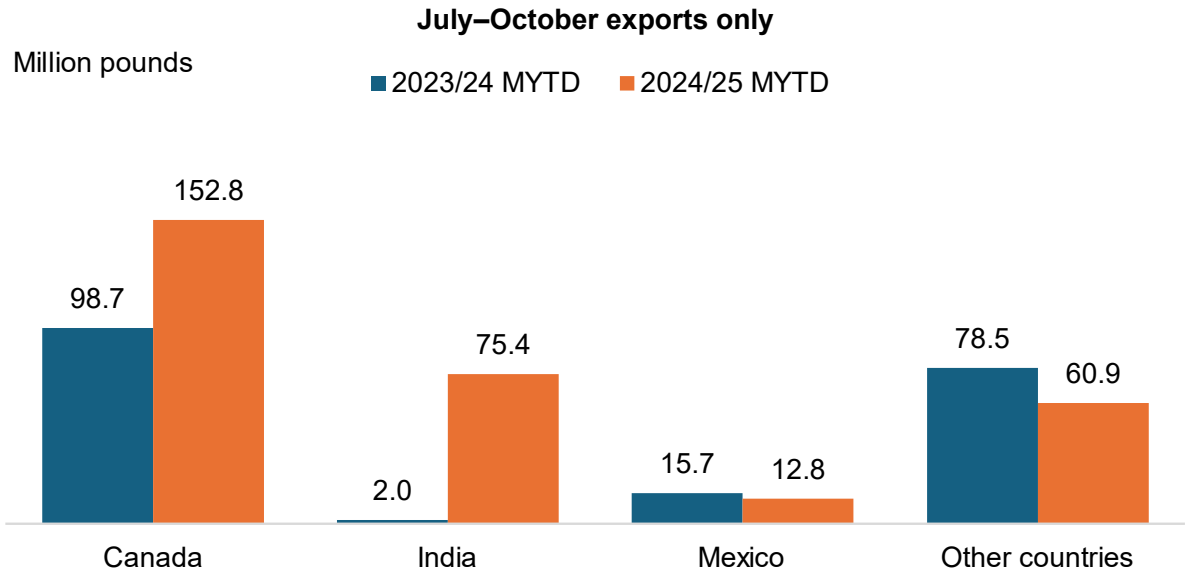
Figure 23
U.S. dry edible pea exports trending up in Bangladesh but trending down in Canada and China in 2024/25



MYTD = marketing year to date.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

- Dry pea import volume during the July–October period of the 2024/25 marketing year decreased 41.9 percent reaching 17.7 million pounds compared with the previous marketing year, driven by decreases in all pea types including split peas (down 43.6 percent reaching 9.3 million pounds), peas, other (down 46.7 percent), yellow peas (down 3.9 percent), and green peas (down 53 percent) (table e17).
- Lentil export volume increased 55 percent from the previous marketing year with 301.9 million pounds during the July–October period of the 2024/25 marketing year. This increase in lentil export volume is driven by a 3,730.7 percent increase to India (75.4 million pounds total) and another significant increase to Canada (up 54.9 percent to 152.8 million pounds) (figure 24). These increases more than offset reductions in volume to Mexico (down 18.2 percent to 12.8 million pounds), Spain (down 39.3 percent to 12.5 million pounds), Colombia (down 34.7 percent to 6.1 million pounds), and Peru (down 36.4 percent with 6.3 million pounds) in the 2024/2025 marketing year (table e16).

Figure 24
U.S. dry lentil exports trending up in Canada and India in 2024/25



Source: USDA, Economic Research Service using data from the U.S. Department of Commerce, Bureau of the Census.

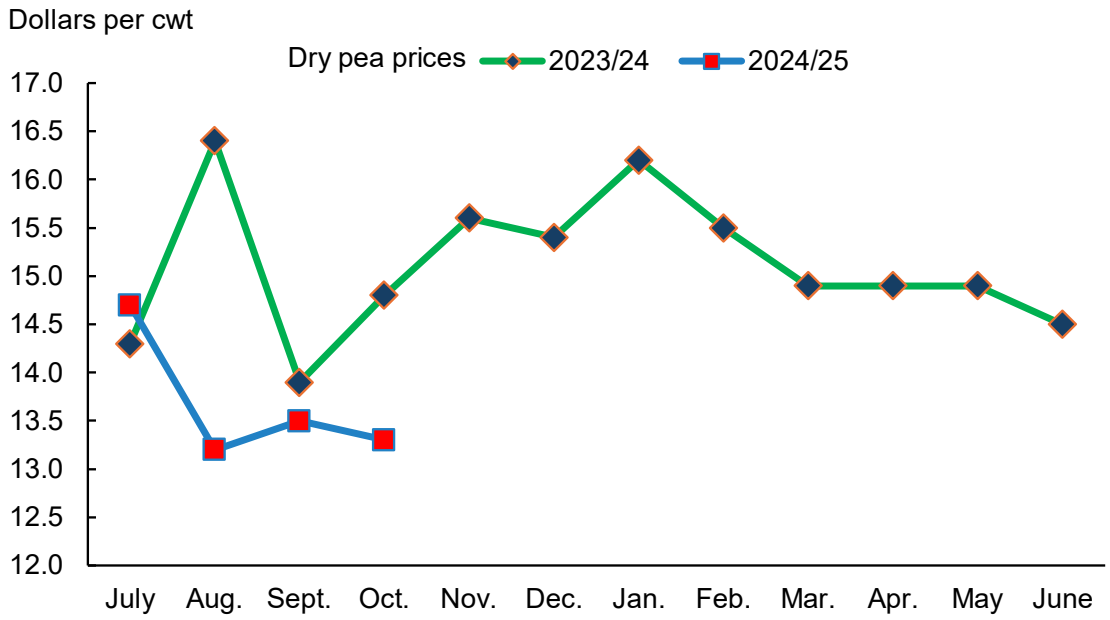
- Lentil import volume in July–October 2024/25 decreased 21.2 percent from the previous marketing year (same time period) with declining green and lentils, other outweighing an increase in red lentils. Much of the lentil import decline stems from reductions in imports from Canada (down 28.9 percent to 18.5 million pounds) and India (down 1.7 percent to 4.5 million pounds), which offset increases in lentil import volume from Turkey, United Kingdom, and Mexico.

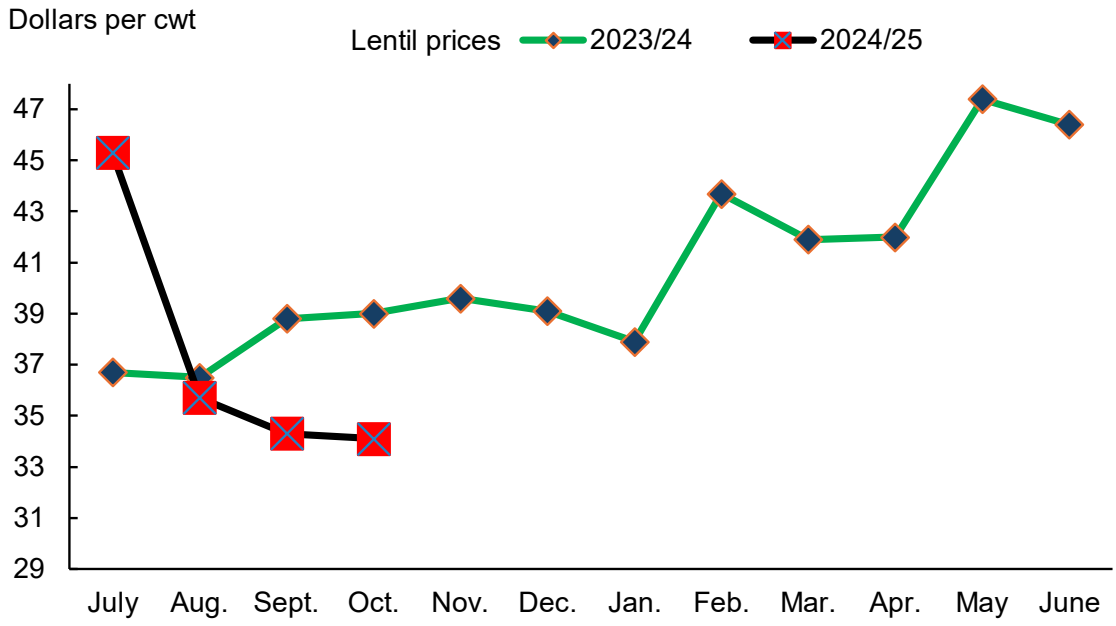
Dry Edible Pea and Lentil Prices Trend Downward

Production, yield, and world demand influence markets for each dry peas and lentils and characterize the price outlook. The dry pea price reported by USDA, NASS for the 2023/24 marketing year reached $15.20 per cwt—5 percent below the previous marketing year (table e14). The lentil price for the 2023/24 marketing year reached $40.40 per cwt—17 percent above the previous marketing year (table e15). Average dry pea monthly prices in early 2024/25 (July–October) are 8 percent below the previous crop year while lentil prices during the same period are down marginally 1 percent from a year earlier (figure 25). Monthly 2024/25 lentil prices remained strong in July 2024 from the end of the 2023/24 marketing year but have dropped considerably in August through October 2024.

Figure 25

Average monthly grower prices in 2024/25: Dry peas down 8 percent, lentils down 1 percent





Cwt = hundredweight, a unit of measure equal to 100 pounds.
Source: USDA, Economic Research Service calculations using National Agricultural Statistics Service *QuickStats.*

- Dry pea grower prices in 2024/25 are anticipated to decline from their 2023/24 levels. The expected price decline is driven by a combination of increased area despite reduced yields elevating production as the dry pea market continues to recover from low yields in 2021 and declining stocks.

Chickpeas

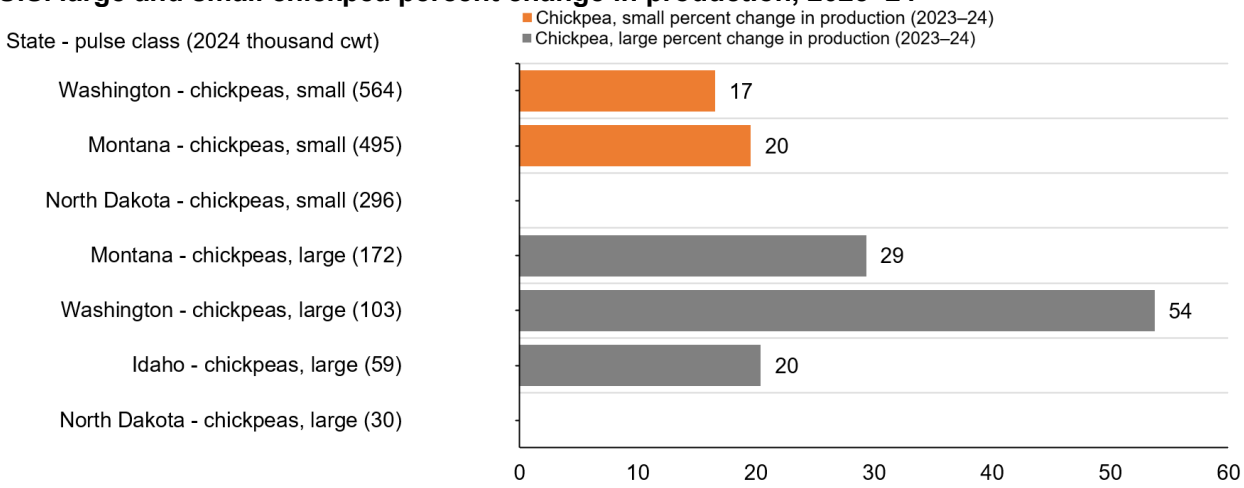
Prospective Chickpea Area and Production Rises in 2024

The USDA, NASS November *Crop Production* indicates that 504,000 acres of chickpeas (all classes) were planted in 2024, a 35 percent increase over the previous year. Chickpea harvest and production are also expected to increase by 38 percent and 30 percent, respectively, while yield is estimated to decline by 6 percent (table f20).

Chickpea production is expected to increase in 2024 across all comparable States.[5] Small chickpea production is expected to increase by 17 percent reaching 564,000 cwt in Washington; Montana production is also estimated to increase by 20 percent to 495,000 cwt. Large chickpea production is expected to increase by 29 percent to 172,000 cwt in Montana, rise by 54 percent in Washington reaching 103,000 cwt, and increase by 20 percent in Idaho with 59,000 cwt (figure 26).

Figure 26

U.S. large and small chickpea percent change in production, 2023–24



Note: North Dakota was added in 2024 thus no percent change is available for comparison to the previous year.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

The following points describe trends in chickpea supply, price, crop value, and trade:

- Estimates of chickpea inventories for June 1 and December 1 are reported by USDA, NASS. The June 2024 chickpea all-class stock level, which reflects inventories at the end of the July 2023–June 2024 chickpea marketing year, was 137.3 million pounds—9 percent below the previous year. Stock levels are steadily trending down following the sharp spike (341 percent) from 88 cwt in June 2018 to 388.5 cwt in June 2019. June 2024 marks the fourth straight year of consecutive declining chickpea stocks since peaking in 2020 with 388.9 cwt.

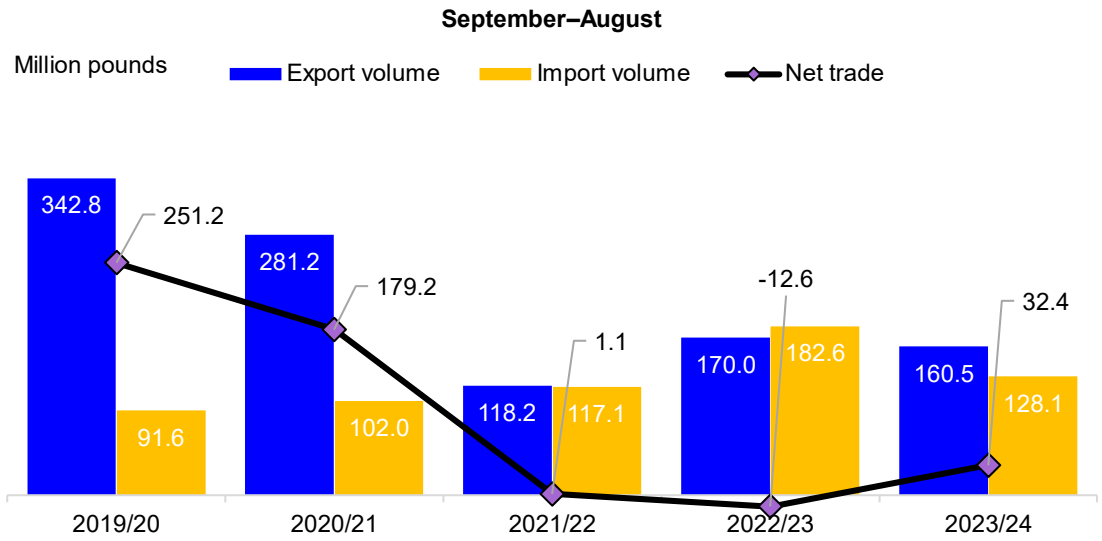
[5] North Dakota was added to the annual chickpea program in 2024; California was discontinued in 2024.

- A comprehensive listing of USDA, NASS reported estimates of area, yield, production, price, and crop value for 2020–24 for chickpea-all classes, large, and small chickpeas is in appendix table f20, table f21, table f22.

Chickpea Imports and Exports in 2023/24

The United States is typically a net chickpea exporter (table f18). However, in 2021/22 exports narrowly exceeded imports by 1.1 million pounds reaching 118.2 million pounds. In 2022/23, imports climbed to 182.6 million pounds while export volume totaled only 170 million pounds. In 2023/24 the United States widened the gap, exporting 32.4 million pounds in excess of imports by exporting a total of 160.5 million pounds (figure 27). The top three destination countries for chickpea exports in 2023/24, which comprised 68 percent of the total chickpea export market share, were Canada (42 percent, reaching 67.8 million pounds), Spain (19 percent, reaching 30.1 million pounds), and Pakistan (7 percent, with 10.9 million pounds).

Figure 27
U.S. chickpea export volume by marketing year months September–August



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

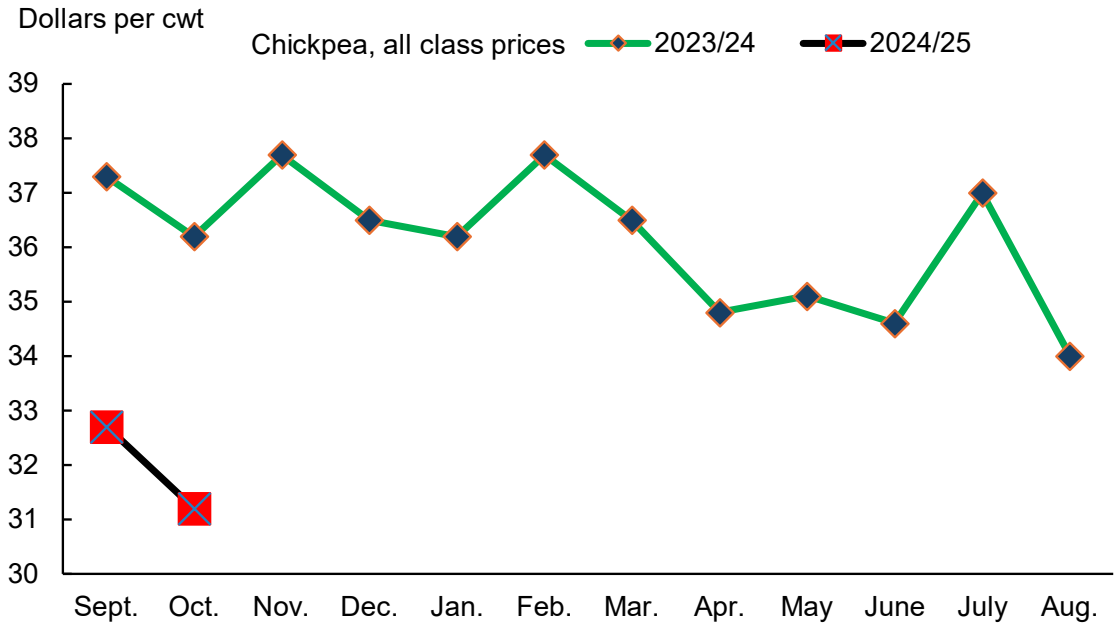
- From September 2023 to August 2024, domestic producers exported 160.5 million pounds of chickpeas. This is a 6 percent decline from the 2022/23 marketing year (table f18).
- Chickpea exports decreased by 12.4 percent in September–October 2024/25 compared with the same period last year totaling 28.8 million pounds (table f18).
- From September 2023 through August 2024, the United States imported 128.1 million pounds of chickpeas, a 30 percent decline from the 2022/23 marketing year total of 182.6 million pounds. This drop was driven by a 28 percent decrease in garbanzo chickpea imports, which fell by 46 million pounds and a 42 percent decline in Kabuli chickpeas.

Chickpea imports from Canada declined by 50 percent to 40.3 million pounds along with a 77 percent decline in Australia to 10.4 million pounds which overshadowed the 73 percent increase in imports from India (table f19) in 2023/24 from the previous marketing year.

Chickpea Prices Trending Down from Last Year

The chickpea all-class price reported by USDA, NASS for the 2023/24 marketing year reached $36.60 per cwt—5 percent above the previous marketing year (table f20). Average chickpea monthly prices through October 2024 are 13 percent below the previous crop year (figure 28). The decline is largely driven by increased domestic supply of small chickpeas with larger price reductions (down 31 percent in 2024/25 compared to a year earlier) while average monthly large chickpea prices are down by 2 percent from a year earlier.

Figure 28
Average monthly grower prices in 2024/25: Chickpeas down 13 percent from last year



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Source: USDA, Economic Research Service calculations using National Agricultural Statistics Service *QuickStats.*

USDA, AMS average conventional grower prices reported through November 2024 reflect price reductions of 11 percent from the previous marketing year reaching $33.40 per cwt in 2024/25. Organic grower chickpea prices reported are steady at $70.00 per cwt, unchanged for the past 3 marketing years. Increases in the global supply of chickpeas are expected to put downward pressure on conventional chickpea prices in 2024/25.

Appendix Tables: Fresh Vegetables

Return to fresh vegetable section

Table a3: Selected U.S. fresh market shipment volumes, October–November 2023–24

Selected commodities	2023 October–November/2		2024 October–November/3		2023–24 Change		
	Domestic	Total	Domestic	Total	Domestic/4	Total/4	Total YTD/5
	Thousand hundredweight/1				Percent		
Artichokes	78	78	78	78	0.0	0.0	-15.7
Asparagus	-	764	-	693	NA	-9.3	-3.2
Beans, snap	174	535	124	485	-28.7	-9.3	-6.1
Broccoli	777	1,668	717	1,472	-7.7	-11.8	-8.3
Brussels sprouts	219	271	278	348	26.9	28.4	-0.5
Cabbage, multiple varieties	1,019	1,724	914	1,647	-10.3	-4.5	-9.2
Cauliflower	686	983	629	893	-8.3	-9.2	-5.5
Celery (hearts/unspecified)	2,355	2,684	2,461	2,737	4.5	2.0	-6.0
Cucumbers	544	3,757	241	3,981	-55.7	6.0	-0.8
Greens, multiple varieties	340	374	264	281	-22.4	-24.9	-20.8
Lettuce, iceberg	3,139	3,448	3,246	3,519	3.4	2.1	-2.8
Lettuce, romaine	2,992	3,146	2,992	3,158	0.0	0.4	1.7
Lettuce, unspecified	328	845	311	826	-5.2	-2.2	-26.7
Onions, dry (multiple varieties)	7,435	8,277	7,377	8,676	-0.8	4.8	1.0
Peppers, bell	895	2,876	815	2,766	-8.9	-3.8	-5.5
Peppers, chile (multiple varieties)	25	2,072	7	2,298	-72.0	10.9	4.1
Spinach	137	211	131	199	-4.4	-5.7	-0.6
Squash (multiple varieties)	88	1,603	89	547	1.1	-65.9	-41.8
Sweet corn	450	550	529	629	17.6	14.4	-9.9
Sweet potatoes (multiple varieties)	903	913	815	823	-9.7	-9.9	2.2
Tomatoes (cherry/grape)	126	933	109	1,034	-13.5	10.8	-0.5
Tomatoes (multiple varieties)	1,928	4,613	1,270	3,926	-34.1	-14.9	-12.3
Tomatoes (plum/roma)	404	3,109	354	3,540	-12.4	13.9	9.3
Selected total	**25,042**	**45,434**	**23,751**	**44,556**	**7.0**	**-1.4**	**-1.0**

1/ Thousand hundredweight = 100,000 pounds.
2/ Includes weekly movement totals for weeks ending October 7, 2023, through November 25, 2023.
3/ Includes weekly movement totals for weeks ending October 5, 2024, through November 23, 2024.
4/ Percent change from October–November 2023–24.
5/ Total YTD is percent change from January–November 2023–24.
Source: USDA, Economic Research Service using data from USDA, Agricultural Marketing Service, Fruit and Vegetable Market News, *Movement Reports*.

Appendix A: Fresh Vegetables

Return to fresh vegetable section

Table a4: Domestic organic and conventional vegetables FOB prices per pound, 2023–24

Selected commodities	2023 October–November/1		2024 October–November/1		2023–24 ------- Change/2 ------	
	Conventional	Organic	Conventional	Organic	Conventional	Organic
	---------- Dollars per pound/3 ----------				---------- Percent ----------	
Beans, round green type	1.13	NA	0.81	NA	-28.73	NA
Broccoli, crown cut	0.83	1.32	1.10	1.46	31.50	10.41
Broccoli, unspecified	0.65	0.99	0.81	1.10	25.26	11.85
Cabbage, round green type	0.29	0.43	0.30	0.57	2.31	31.34
Carrots, unspecified	0.52	0.68	0.48	0.72	-7.15	5.24
Cauliflower, white	0.70	0.94	0.67	1.20	-3.68	27.95
Celery, hearts	0.72	0.98	0.67	1.06	-7.03	8.37
Celery, unspecified	0.28	0.48	0.24	0.51	-14.26	7.77
Corn-sweet, yellow	0.49	NA	0.56	NA	13.61	NA
Cucumbers, unspecified	0.28	NA	0.32	NA	14.07	NA
Kale greens, lacinato (Tuscan)	0.79	0.83	0.76	0.91	-4.49	8.58
Kale greens, unspecified	0.59	0.80	0.65	0.92	10.32	14.29
Lettuce, green leaf	0.26	0.44	0.38	0.54	43.20	21.72
Lettuce, iceberg	0.27	0.40	0.48	0.51	75.76	26.46
Lettuce, romaine, hearts	0.60	0.84	0.92	1.20	53.32	43.04
Lettuce, romaine, unspecified	0.29	0.49	0.48	0.62	65.18	27.50
Onions, dry, yellow	0.43	0.85	0.49	0.95	13.73	12.01
Peppers, bell, green	0.57	NA	0.74	NA	29.77	NA
Peppers, jalapeno	0.61	NA	0.75	NA	21.88	NA
Squash, zucchini	0.68	NA	0.59	NA	-13.84	NA
Sweet potatoes, orange types	0.41	NA	0.41	NA	-0.96	NA
Sweet potatoes, red types	0.83	NA	0.65	NA	-20.87	NA
Tomatoes, grape	3.29	4.52	1.62	NA	-50.67	NA
Tomatoes, plum type, roma	0.82	NA	0.68	NA	-16.35	NA

NA = Not available.
1/ Includes average weekly FOB prices for weeks 40 through 47.
2/ Change in average shipping-point prices from 2023 to 2024.
3/ Per pound conversions based on container approximate net weights in USDA, Agricultural Marketing Service Fresh Fruit and Vegetable Shipments, 2023.
Source: USDA, Economic Research Service calculations using USDA, Agricultural Marketing Service, *Market News* data.

Fresh Vegetables (continued)

Return to fresh vegetable section

Table a5: Selected fresh-market vegetable trade volume, 2021–24/1

Commodities	2021 Annual	2022 Annual	2023 Annual	January–October 2023	January–October 2024	Change 2023–24
Imports, fresh:	---------- Million pounds ----------					-- Percent --
Tomatoes, all	4,276	4,369	4,439	3,783	3,897	3.0
Cucumbers, all	2,315	2,418	2,535	2,120	2,136	0.8
Peppers, bell	1,843	1,793	1,702	1,451	1,439	-0.8
Onions and shallots	1,463	1,452	1,381	1,208	1,191	-1.4
Squash, all	1,220	1,157	1,173	929	896	-3.6
Peppers, chile	1,098	997	1,056	853	866	1.4
Lettuce, all	930	1,113	841	704	581	-17.5
Carrots, all	525	600	633	520	531	2.2
Broccoli, all	553	611	659	537	489	-8.9
Asparagus, all	665	580	511	440	441	0.2
Sweet corn	194	203	202	166	181	9.2
Mushrooms, all	195	202	192	159	168	5.3
Sweet potato	92	144	92	81	157	93.1
Cauliflower, all	237	222	177	156	127	-18.8
Vegetables, other	3,030	3,140	3,266	2,718	2,733	0.6
Subtotal, excluding potatoes	**18,636**	**19,002**	**18,858**	**15,824**	**15,832**	**0.1**
Potatoes (excluding seed)	892	1,205	1,234	1,035	814	-21.4
Total fresh imports	**19,527**	**20,207**	**20,092**	**16,859**	**16,646**	**-1.3**
Exports, fresh:						
Onions and shallots	694	634	660	503	634	26.0
Lettuce, all	740	702	705	589	622	5.6
Sweet potato	590	507	550	475	417	-12.3
Cauliflower, all	274	297	292	233	243	4.5
Carrots, all	209	190	175	154	177	14.9
Celery	222	189	180	141	153	8.6
Tomatoes, all	166	178	182	149	152	1.7
Sweet corn	147	128	153	140	148	5.3
Spinach	106	104	95	80	84	5.1
Asparagus, all	58	59	53	49	54	11.4
Broccoli, all	155	36	32	27	28	3.9
Cucumbers, all	50	31	29	24	19	-21.9
Mushrooms, all	16	13	9	8	5	-33.5
Vegetables, other	760	738	722	589	593	0.6
Subtotal, excluding potatoes	**4,187**	**3,804**	**3,838**	**3,161**	**3,328**	**5.3**
Potatoes (excluding seed)	1,234	1,121	1,191	1,002	1,015	1.2
Total fresh exports	**5,421**	**4,925**	**5,029**	**4,163**	**4,343**	**4.3**

1/ Excludes melons, olives, and dry pulses.
Source: USDA, Economic Research Service calculations using U.S. Department of Commerce, Bureau of the Census data.

Fresh Vegetables (continued)

Return to fresh vegetable section

Table a6: Selected U.S. organic and greenhouse vegetable and pulses trade volume, 2021–24

Commodity	2021 Annual	2022 Annual	2023 Annual	January–October 2023	January–October 2024	Change 2023–24/1
Imports:	---------- Million pounds ----------					---- Percent ----
Bell pepper, conventional, greenhouse	892.4	917.3	921.7	791.5	785.3	-0.8
Bell pepper, organic	16.0	22.3	25.7	20.7	20.5	-1.0
Bell pepper, organic, greenhouse	74.9	75.3	76.7	63.5	67.7	6.7
Cucumber, conventional, greenhouse/2	434.5	532.7	525.1	466.1	814.4	74.7
Chili pepper, conventional, greenhouse	8.9	5.8	11.2	8.7	9.7	11.7
Cucumber, organic	NA	NA	58.7	47.5	44.0	-7.2
Cucumber, organic, greenhouse/2,3	NA	NA	89.7	78.3	143.6	83.5
Dried chickpeas, organic	NA	NA	7.8	6.9	11.1	60.7
Dried lentils, organic	4.6	4.9	11.0	9.7	6.5	-33.2
Dried yellow peas, organic	44.7	49.2	49.9	19.6	18.6	-5.0
Garlic, organic	4.1	4.6	2.1	2.0	3.9	96.9
Onions and shallots, organic	NA	NA	39.4	34.9	40.1	14.9
Potato, organic	NA	NA	69.7	48.6	35.2	-27.5
Tomato, conventional, greenhouse/4	2,252.0	2,177.7	2,577.9	2,171.7	2,309.5	6.3
Tomato, organic/4	NA	NA	37.7	35.2	48.8	38.5
Tomato, organic, greenhouse/4	NA	392.9	289.3	272.5	125.7	-53.9
Exports:						
Asparagus, organic	1.6	1.5	1.7	1.5	1.2	-18.9
Beets, organic	1.9	1.4	1.4	1.2	1.2	-0.5
Broccoli, organic	12.9	4.4	3.6	3.1	4.2	34.9
Cabbage, organic	12.2	15.6	14.1	11.8	12.1	3.1
Carrots, organic	52.0	46.2	49.8	42.5	44.3	4.3
Cauliflower, organic	28.7	24.1	17.6	14.5	14.3	-1.4
Celery, organic	24.4	19.6	13.8	11.0	13.6	23.5
Green peas, organic	9.3	2.4	1.3	1.1	1.4	23.2
Head lettuce, organic	8.0	3.8	7.2	6.3	4.2	-34.2
Onions, organic	13.4	22.1	23.3	14.8	14.8	-0.3
Other lettuce, organic (excluding packaged salads)	49.3	51.2	36.8	32.3	32.7	1.3
Packaged salad mix, organic	16.4	19.9	23.3	20.8	15.4	-25.8
Peppers (Capsicum or Pimenta), organic	2.9	4.5	4.0	3.1	3.9	27.4
Potato, organic	15.8	22.3	20.4	19.0	22.0	15.9
Spinach, organic	30.6	36.5	31.1	28.7	22.1	-22.9
Tomato, fresh, cherry, organic	3.5	1.6	1.7	1.5	1.0	-31.6
Tomato, fresh, roma, organic	2.0	8.9	1.7	1.4	2.5	75.6
Tomatoes, fresh, unspecified, organic	5.5	4.2	3.8	3.3	6.6	101.5

NA = Not available.
1/ Change from January–October 2023–24.
2/ Organic greenhouse cucumber import trade codes added in July 2022.
Before July 2022, conventional greenhouse cucumber imports represent both organic and conventional production.
3/ Organic greenhouse-specific cucumber import trade code for December–February added in January 2024.
4/ Organic greenhouse and non-greenhouse tomato import trade codes added in July 2022.
Before July 2022, conventional greenhouse tomato imports represent both organic and conventional production.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Processed Vegetables

Return to processed vegetable section

Table b7: Selected processed vegetable import value, 2021–24

Item	2021 Annual	2022 Annual	2023 Annual	January–October 2023	January–October 2024	Change 2023–24
	---------- Million dollars ----------					--- Percent ---
Imports						
Vegetables, prepared or preserved	**2,219.4**	**2,563.8**	**2,726.2**	**2,235.3**	**2,508.6**	**12.2**
Tomato	337.8	438.6	623.7	499.1	683.2	36.9
Potato chips	149.9	176.4	260.5	215.5	269.5	25.1
Artichokes	133.6	183.5	142.6	113.1	108.6	-4.0
Mushrooms	145.8	162.7	141.5	120.0	106.0	-11.7
Onions	77.9	98.7	91.5	74.5	94.3	26.7
Cucumber	94.3	99.3	105.2	87.7	85.4	-2.6
Snap beans	38.2	40.2	36.3	30.8	31.8	3.2
Sweet corn	30.4	37.0	35.6	30.8	14.9	-51.4
Green peas	19.6	22.8	19.7	16.1	13.7	-14.7
Sauerkraut	8.3	8.9	8.0	6.4	8.2	27.5
Asparagus	21.3	18.7	13.3	11.1	5.4	-51.0
Other	1,162.2	1,277.1	1,248.1	1,030.2	1,087.5	5.6
Vegetable juice	**77.4**	**78.7**	**76.1**	**61.5**	**89.6**	**45.7**
Tomato	2.4	4.9	5.7	5.3	5.2	-1.7
Other	75.0	73.8	70.3	56.2	84.4	50.1
Frozen vegetables	**2,859.9**	**3,337.9**	**3,770.1**	**3,145.8**	**3,363.3**	**6.9**
Potatoes	1,303.9	1,630.8	2,015.5	1,679.8	1,884.6	12.2
Broccoli	384.5	412.1	461.2	384.7	368.6	-4.2
Snap beans	78.2	88.9	90.8	74.6	79.3	6.4
Cauliflower	80.5	94.3	88.5	74.8	65.3	-12.7
Sweet corn	49.9	51.9	57.0	49.0	54.0	10.2
Green peas	46.5	53.9	55.5	46.9	48.5	3.4
Spinach	42.2	47.1	43.9	35.8	41.7	16.6
Mushrooms	22.3	25.0	20.9	17.9	26.8	49.5
Brussels sprouts	27.2	27.6	21.2	17.4	18.2	4.6
Okra	15.1	13.2	15.1	12.8	11.6	-9.6
Sweet potato	3.1	4.0	5.1	4.6	3.7	-20.4
Other	806.3	889.3	895.4	747.5	761.0	1.8
Dried and dehydrated/1	**667.1**	**774.3**	**725.0**	**616.0**	**641.5**	**4.1**
Potato flakes/granules/dried/starch	191.8	220.9	276.5	237.2	220.1	-7.2
Tomato	23.9	32.1	28.7	23.3	31.6	35.8
Carrots	28.2	36.4	32.3	27.2	26.0	-4.1
Mushrooms	32.7	35.4	32.3	26.2	25.7	-1.6
Onions	18.8	29.8	17.0	15.0	19.2	27.8
Spinach	12.3	14.3	14.5	13.0	14.7	12.7
Garlic	16.6	18.5	16.7	14.1	14.6	3.2
Broccoli	6.6	7.1	4.7	4.0	3.2	-18.6
Celery	3.6	4.1	2.2	2.0	2.1	8.6
Other	332.6	375.6	300.1	254.2	284.3	11.8
Selected processed imports	**5,823.7**	**6,754.7**	**7,297.4**	**6,058.6**	**6,603.0**	**9.0**

Note: This table includes vegetables, potatoes, and mushrooms, but excludes processed olives.
1/ Dried and dehydrated excludes vegetables processed and sold as spices such as paprika and other peppers.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Processed Vegetables (continued)

Return to processed vegetable section

Table b8: Selected processed vegetable export value, 2021–24

Item	2021 Annual	2022 Annual	2023 Annual	January–October 2023	January–October 2024	Change 2023–24
	---------- Million dollars ----------					--- Percent ---
Exports						
Vegetables, prepared or preserved	**1,293.6**	**1,389.6**	**1,496.2**	**1,247.2**	**1,390.7**	**11.5**
Tomato	655.5	690.6	773.2	641.2	765.7	19.4
Potato (chips and other)	295.3	318.1	345.0	288.0	286.2	-0.6
Cucumber	63.3	76.7	81.8	69.8	87.8	25.7
Sweet corn	83.0	94.1	83.0	70.6	57.6	-18.4
Snap beans	7.8	4.8	7.1	5.7	7.3	27.4
Sauerkraut	7.7	7.3	8.8	7.4	5.8	-22.3
Onions	3.8	5.2	4.5	2.7	4.5	67.1
Green peas	5.6	7.0	3.9	3.3	2.3	-29.2
Mushrooms	2.4	2.7	3.3	2.7	2.1	-22.0
Asparagus	0.4	0.2	0.5	0.4	0.1	-66.8
Other	169.0	182.9	185.2	155.3	171.3	10.3
Vegetable juice	**48.5**	**37.6**	**28.1**	**24.3**	**26.0**	**7.0**
Tomato	3.2	2.0	2.5	2.2	2.4	8.0
Other	45.3	35.5	25.6	22.1	23.7	6.9
Frozen vegetables	**1,469.5**	**1,641.9**	**1,734.5**	**1,465.6**	**1,518.4**	**3.6**
Potato	1,174.5	1,338.7	1,451.8	1,231.0	1,269.6	3.1
Sweet corn	100.7	97.2	87.0	73.3	77.8	6.1
Green peas	15.4	16.6	19.3	16.1	13.6	-15.7
Snap beans	7.8	11.5	15.9	12.9	12.4	-3.9
Sweet potato	2.2	16.2	2.8	2.3	8.9	279.7
Spinach	2.4	4.2	2.4	2.1	2.2	6.8
Asparagus	2.4	2.2	3.1	2.5	1.7	-32.1
Carrots	0.5	1.3	0.6	0.5	0.4	-8.2
Other	163.6	154.0	151.7	124.9	131.8	5.5
Dried and dehydrated/1	**325.7**	**334.3**	**327.4**	**272.9**	**269.2**	**-1.4**
Potato	123.0	122.1	155.3	132.4	114.4	-13.6
Onions	81.7	88.3	66.6	54.2	59.6	9.9
Garlic	13.6	15.3	13.0	11.1	12.9	16.5
Mushrooms	4.0	4.6	3.9	3.1	3.1	-2.2
Other	103.4	104.0	88.7	72.0	79.2	9.9
Total processed exports	**3,137.4**	**3,403.4**	**3,586.2**	**3,010.0**	**3,204.3**	**6.5**

Note: This table includes vegetables, potatoes, and mushrooms, but excludes processed olives.
1/ Dried and dehydrated excludes vegetables processed and sold as spices such as paprika and other peppers.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Processed Vegetables (continued)

Return to processed vegetable section

Table b9: Frozen vegetables: U.S. cold storage holding for selected months, 2023–24/1

	2023		2024		-- 2024 Change from:/2 --	
Commodities	**July**	**October**	**July**	**October**	**July 2023**	**October 2023**
	---------- Thousand pounds ----------				-------- Percent --------	
Asparagus	6,226	5,311	5,075	4,279	-18.5	-19.4
Beans, lima	10,988	24,880	8,988	23,417	-18.2	-5.9
Beans, snap/green	142,507	272,149	140,729	233,296	-1.2	-14.3
Broccoli, all	69,142	67,510	65,552	61,047	-5.2	-9.6
Brussels sprouts	10,768	9,822	10,847	9,722	0.7	-1.0
Carrots	148,129	207,028	152,282	212,361	2.8	2.6
Cauliflower	26,317	23,851	19,461	19,186	-26.1	-19.6
Greens, Southern	14,792	17,588	16,521	18,772	11.7	6.7
Okra	26,070	36,553	29,801	37,500	14.3	2.6
Onions, all	67,282	51,773	70,854	64,470	5.3	24.5
Peas, blackeye	2,100	1,482	1,425	1,475	-32.1	-0.5
Peas, green	343,126	284,688	315,127	251,484	-8.2	-11.7
Potatoes, french fried	974,329	985,528	980,772	1,033,305	0.7	4.8
Potatoes, other	235,263	231,360	242,879	233,402	3.2	0.9
Spinach	45,497	35,921	36,868	25,697	-19.0	-28.5
Squash	40,875	52,696	34,271	46,783	-16.2	-11.2
Sweet corn, cob	152,465	370,835	167,468	375,814	9.8	1.3
Sweet corn, cut	334,194	708,292	257,366	697,307	-23.0	-1.6
Vegetables, mixed	63,861	62,980	56,936	59,142	-10.8	-6.1
Vegetables, other	299,544	359,391	280,759	332,836	-6.3	-7.4
Total	**3,013,475**	**3,809,638**	**2,893,981**	**3,741,295**	**-4.0**	**-1.8**

1/ Reported stocks in cold storage at the end of the selected month.
2/ Percentage change in stocks from the previous July and October.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service, *Cold Storage*.

Appendix C: Potatoes

Return to potato section

Table c10: U.S. potato trade volume, September–August 2021/22–2024/25

	----- September–August -----			-- September–October --		Change
	2021/22	2022/23	2023/24	2023/24	2024/25	2023/24–2024/25
Exports	----- Million pounds -----					-- Percent --
Fresh	1,097	1,163	1,200	204	208	1.9
Frozen, all	2,179	2,021	1,978	345	325	-5.9
French fries	1,922	1,763	1,735	306	284	-7.2
Other frozen	257	258	243	39	41	5.0
Chips	107	117	109	21	15	-26.8
Dried and dehydrated	165	235	213	36	27	-24.0
Other prep/preserved	95	101	112	20	18	-11.9
Seed	92	80	83	10	10	-3.6
Starch	14	16	15	3	3	19.9
Total exports	**3,750**	**3,734**	**3,710**	**638**	**606**	**-5.1**
Imports						
Fresh	1,112	1,306	995	145	162	12.0
Frozen, all	2,927	3,180	3,285	526	550	4.6
French fries	2,443	2,617	2,690	436	457	5.0
Other frozen	484	562	594	90	93	2.7
Chips	71	90	108	17	20	18.1
Dried and dehydrated	142	171	136	20	17	-16.6
Other prep/preserved	74	62	50	9	9	0.4
Seed	131	155	168	3	2	NA
Starch	337	334	332	47	51	8.2
Total imports	**4,793**	**5,298**	**5,074**	**768**	**812**	**5.7**

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Appendix D: Dry Beans

Return to dry beans section

Table d11: U.S. dry edible beans: Area, yield, production, price, and crop value, 2020–24/1

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	1,715	1,654	32,380	1,035.76	19.6	31.20
2021	1,386	1,320	22,407	922.95	17.0	41.30
2022	1,241	1,219	25,734	1,053.71	21.1	40.50
2023	1,180	1,157	23,910	999.56	20.7	41.80
2024p	1,532	1,489	29,448	N/A	19.8	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
1/ This table excludes chickpeas.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Dry Beans (continued)

Return to dry beans section

Table d12: U.S. dry edible bean crop-year export volume, 2021/22–2024/25

Commodity	September–August 2021/22	September–August 2022/23	September–August 2023/24	September–October 2023/24	September–October 2024/25	Change/1 2023/24–2024/25
	Million pounds					Percent
By class/2						
Kidney, all	**183.03**	**255.80**	**367.40**	**62.52**	**47.61**	**-23.8**
Kidney, other	66.55	130.48	201.32	38.24	20.86	-45.5
Kidney, dark red	103.38	98.17	111.78	19.15	21.99	14.8
Kidney, light red	13.10	27.14	54.30	5.13	4.77	-7.0
Pinto	45.99	102.73	234.18	43.32	25.44	-41.3
Black	109.09	157.71	231.05	35.59	44.07	23.8
Navy	129.01	132.14	162.14	55.05	49.05	-10.9
Small red	25.52	30.56	36.37	5.58	4.44	-20.4
Dry beans, other/3	34.31	17.13	25.39	6.40	4.44	-30.7
Cranberry	24.31	11.97	18.15	2.33	2.10	-10.2
Great Northern	11.15	8.61	13.27	2.76	2.23	-19.3
Mung	5.22	11.70	12.85	0.34	4.38	1,174.1
Lima beans, all	**13.85**	**14.16**	**12.00**	**0.47**	**1.16**	**147.3**
Lima beans, large	11.96	12.23	10.59	0.20	0.91	362.6
Lima beans, baby	1.89	1.93	1.42	0.27	0.25	-7.1
Pink	3.58	3.10	6.33	0.88	0.66	-25.3
White	1.63	2.09	3.75	0.21	0.15	-28.0
Blackeye (cowpeas)	1.84	0.39	0.93	0.02	0.10	372.6
Total exports	**588.53**	**748.09**	**1,123.81**	**215.48**	**185.83**	**-13.8**
All by destination country						
Mexico	104.9	229.3	514.9	95.5	76.0	-20.5
Canada	107.9	107.0	105.1	49.5	37.3	-24.7
Dominican Republic	60.6	91.2	100.8	9.5	12.0	26.8
Italy	98.8	98.6	98.8	22.5	19.1	-15.0
United Kingdom	44.9	37.7	55.2	9.3	5.6	-40.1
Costa Rica	23.2	38.7	52.6	6.5	6.2	-6.0
Haiti	14.8	10.5	17.3	1.6	1.6	0.2
Guatemala	11.3	10.8	16.0	2.2	2.6	19.6
Colombia	5.4	9.9	15.7	1.9	1.2	-34.9
China	5.9	7.8	15.4	1.1	0.9	-10.4
Other countries	110.8	106.5	132.1	15.9	23.3	46.3
Total exports	**588.5**	**748.1**	**1,123.8**	**215.5**	**185.8**	**-13.8**

1/ Percent change from September–October 2023/24 to September–October 2024/25.
2/ Excludes garbanzo beans.
3/ Beans, other, includes pigeon pea, Bambara, broad and horse bean, and other general bean classes.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Dry Beans (continued)

Return to dry beans section

Table d13: U.S. dry edible bean crop-year import volume, 2021/22–2024/25

Commodity	------- September–August -------			---- September–October ---		Change/1
	2021/22	2022/23	2023/24	2023/24	2024/25	2023/24–2024/25
	---------- Million pounds ----------					----- Percent -----
By class/2						
Kidney, all	**53.39**	**62.59**	**83.65**	**12.28**	**16.16**	**31.6**
Kidney, light red	21.43	35.44	47.79	8.42	8.94	6.2
Kidney, dark red	8.24	9.90	20.70	1.65	4.09	147.7
Kidney, other	23.72	17.25	15.16	2.20	3.13	42.2
Dry beans, other/3	82.73	73.35	78.60	12.43	10.91	-12.2
Mung	68.74	57.27	56.00	11.84	14.26	20.5
Black	30.64	38.49	52.64	6.57	9.63	46.5
Pinto	37.58	32.79	42.80	7.63	7.58	-0.7
Small red	18.77	21.79	16.70	3.16	3.04	-3.9
Blackeye (cowpeas)	12.80	15.40	10.08	2.86	1.69	-40.9
Lima beans, all	**9.73**	**12.66**	**7.80**	**0.91**	**0.26**	**-71.8**
Lima beans, large	8.38	9.13	5.24	0.77	0.22	-71.4
Lima beans, baby	1.34	3.53	2.56	0.14	0.04	-73.6
Navy	3.98	7.57	7.35	1.26	3.24	157.5
White	2.19	2.19	1.48	0.31	0.53	69.3
Great Northern	3.32	1.77	1.42	0.34	0.39	13.0
Total imports	**323.87**	**325.86**	**358.53**	**59.59**	**67.68**	**13.6**
All by origination country						
Canada	86.88	83.93	113.08	16.78	21.35	27.2
Nicaragua	36.87	52.49	60.58	10.40	11.14	7.2
India	35.78	41.73	43.49	11.87	10.83	-8.8
Mexico	49.69	29.72	28.97	3.12	4.74	51.9
Peru	23.36	27.23	16.83	2.34	1.29	-45.1
China	15.77	15.99	13.45	1.56	1.88	20.6
Thailand	21.74	15.27	10.65	2.09	1.30	-37.8
Honduras	4.24	8.53	10.52	1.61	1.43	-11.0
Costa Rica	0.66	3.10	7.70	0.71	2.58	266.4
Argentina	12.50	9.52	7.51	2.47	0.97	-60.7
Other countries	36.38	38.33	45.75	6.64	10.17	53.0
Total imports	**323.87**	**325.86**	**358.53**	**59.59**	**67.68**	**13.6**

1/ Percent change from September–October 2023/24 to September–October 2024/25.
2/ Excludes garbanzo beans.
3/ Beans, other, includes pigeon pea, Bambara, broad and horse bean, and other general bean classes.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Appendix E: Dry Peas and Lentils

Return to dry peas and lentils section

Table e14: U.S. dry edible peas: Area, yield, production, price, and crop value, 2020–24

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	1,022	1,001	22,389	220.11	22.4	9.84
2021	1,010	894	9,161	161.47	10.3	16.20
2022	945	888	15,517	231.56	17.5	16.00
2023	966	941	18,086	275.64	19.2	15.20
2024p	988	947	19,278	N/A	20.4	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Table e15: U.S. lentils: Area, yield, production, price, and crop value, 2020–24

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	522	515	7,473	136.34	14.5	18.20
2021	708	577	3,470	125.32	6.0	35.60
2022	680	619	5,650	189.51	9.1	34.40
2023	546	523	5,742	221.97	11.0	40.40
2024p	936	900	9,538	N/A	10.6	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Dry Peas and Lentils (continued)

Return to dry peas and lentils section

Table e16: U.S. dry edible peas and lentils: Export volume by class 1/

Commodity	July–June			July–October		Change/2
	2021/22	2022/23	2023/24	2023/24	2024/25	2023/24–2024/25
	Million pounds					Percent
Exports by class						
Dry peas, all	**500.23**	**568.35**	**735.55**	**265.35**	**325.56**	**22.7**
Peas, split	194.16	338.23	261.98	141.78	109.75	-22.6
Peas, green	137.90	132.94	254.93	101.56	89.33	-12.0
Peas, yellow	73.93	30.82	188.05	6.42	102.22	1,492.7
Peas, other	92.50	65.13	29.72	15.60	24.10	54.5
Peas, Austrian	1.74	1.23	0.88	N/A	0.15	N/A
Dry lentils, all	**315.82**	**416.18**	**499.05**	**194.76**	**301.92**	**55.0**
Total exports	**816.05**	**984.53**	**1,234.60**	**460.12**	**627.48**	**36.4**
All by destination country						
Dry peas, all exports	**500.23**	**568.35**	**735.55**	**265.35**	**325.56**	**22.7**
Canada	57.90	53.79	272.42	57.31	54.77	-4.4
China	19.67	51.24	148.83	105.76	50.52	-52.2
Democratic Republic of the Congo	24.16	7.32	37.34	2.94	4.56	55.2
Peru	20.01	25.63	36.67	8.90	10.52	18.2
India	0.94	N/A	33.90	N/A	10.52	N/A
Mexico	28.45	35.44	33.56	12.33	5.42	-56.1
Yemen (Sana)	52.71	50.20	30.81	30.81	10.01	-67.5
Ethiopia	130.38	186.59	27.38	15.93	19.83	24.5
Philippines	32.64	20.50	23.17	8.44	7.41	-12.2
Kenya	10.22	21.74	12.17	4.19	0.04	-99.0
Other countries	123.15	115.89	79.30	18.74	151.97	710.9
Dry lentils, all exports	**315.82**	**416.18**	**499.05**	**194.76**	**301.92**	**55.0**
Canada	109.99	169.30	202.66	98.65	152.80	54.9
India	N/A	N/A	53.77	1.97	75.37	3,730.7
Mexico	31.87	45.14	46.79	15.68	12.82	-18.2
Spain	34.41	38.88	44.42	20.60	12.51	-39.3
Colombia	30.16	19.84	42.52	9.39	6.13	-34.7
Peru	13.68	16.54	27.62	9.89	6.28	-36.4
China	6.07	36.55	9.55	7.05	8.89	26.0
United Arab Emirates	2.77	5.22	8.35	4.32	5.15	19.2
Greece	6.86	7.55	7.90	2.81	1.78	-36.8
Italy	8.05	6.91	7.04	4.65	3.56	-23.4
Other countries	71.96	70.25	48.44	19.75	16.62	-15.9
Total exports	**816.05**	**984.53**	**1,234.60**	**460.12**	**627.48**	**36.4**

N/A = not available.
1/ This table excludes planting seed trade.
2/ Dry pea and lentil percent change from July–October 2023/24 to July–October 2024/25.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Dry Peas and Lentils (continued)

Return to dry peas and lentils section

Table e17: U.S. dry edible peas and lentils: Import volume by class 1/

Commodity	July–June			July–October		Change/2
	2021/22	2022/23	2023/24	2023/24	2024/25	2023/24–2024/25
	Million pounds					Percent
Imports by class						
Dry peas, all	**442.331**	**230.139**	**130.136**	**30.427**	**17.688**	**-41.9**
Peas, yellow	313.430	92.631	60.828	3.001	2.883	-3.9
Peas, split	54.806	75.992	38.945	16.540	9.321	-43.6
Peas, green	12.378	24.987	17.705	5.013	2.355	-53.0
Peas, other	61.594	36.269	12.658	5.873	3.129	-46.7
Peas, Austrian	0.123	0.260	N/A	N/A	N/A	N/A
Dry lentils, all	**123.261**	**119.417**	**103.262**	**33.027**	**26.039**	**-21.2**
Lentils, red	28.558	38.697	45.078	8.577	14.297	66.7
Lentils, green	21.880	29.963	37.321	17.385	7.319	-57.9
Lentils, other	72.822	50.757	20.864	7.065	4.423	-37.4
Total imports	**565.592**	**349.556**	**233.398**	**63.454**	**43.727**	**-31.1**
All by origination country						
Dry peas, all imports	**442.331**	**230.139**	**130.136**	**30.427**	**17.688**	**-41.9**
Canada	299.135	151.687	66.461	22.657	10.243	-54.8
Russia	36.687	56.822	45.693	N/A	N/A	N/A
India	5.403	4.608	6.065	2.773	2.489	-10.2
Thailand	2.941	3.712	3.768	2.192	1.998	-8.9
New Zealand	8.477	3.466	2.264	1.424	0.542	-62.0
China	0.794	0.961	1.390	0.323	0.593	83.8
Madagascar (Malagasy)	0.524	1.381	0.714	0.222	0.290	30.5
Myanmar (Burma)	0.336	0.823	0.680	0.188	0.296	57.0
France	0.726	0.549	0.485	0.088	0.232	162.6
Australia	1.502	1.562	0.430	0.011	0.271	2,358.5
Other countries	85.805	4.569	2.185	0.548	0.735	34.2
Dry lentils, all imports	**123.261**	**119.417**	**103.262**	**33.027**	**26.039**	**-21.2**
Canada	106.877	102.497	83.615	25.968	18.466	-28.9
India	7.321	9.947	10.372	4.610	4.530	-1.7
Turkey	5.283	3.767	4.857	1.333	1.392	4.5
Mexico	1.139	1.225	1.361	0.369	0.413	11.9
United Kingdom	0.827	0.145	0.907	0.213	0.630	196.1
France	0.252	0.441	0.403	0.056	0.071	27.5
Italy	0.115	0.009	0.362	0.124	0.031	-75.3
United Arab Emirates	0.183	0.267	0.351	0.104	0.041	-60.9
Myanmar (Burma)	0.138	0.364	0.308	0.073	0.147	100.8
Australia	0.473	0.560	0.183	0.103	0.108	4.4
Other countries	0.651	0.194	0.543	0.074	0.210	183.7
Total imports	**565.592**	**349.556**	**233.398**	**63.454**	**43.727**	**-31.1**

Cwt = hundredweight, which equals 100 pounds.
1/ This table excludes planting seed trade.
2/ Dry pea and lentil percent change from July–October 2023/24 to July–October 2024/25.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Appendix F: Chickpeas

Return to chickpeas section

Table f18: U.S. chickpea: Export volume by class 1/

Commodity	September–August 2021/22	September–August 2022/23	September–August 2023/24	September–October 2023/24	September–October 2024/25	Change/2 2023/24–2024/25
	Million pounds					Percent
Exports by class						
Chickpeas, all	**118.2**	**170.0**	**160.5**	**32.9**	**28.8**	**-12.4**
Chickpeas, garbanzo	118.2	170.0	160.5	32.9	28.8	-12.4
Total exports	**118.2**	**170.0**	**160.5**	**32.9**	**28.8**	**-12.43**
All by destination country						
Canada	35.2	59.3	67.8	16.3	8.3	-49.3
Spain	20.9	44.9	30.1	5.6	5.4	-2.9
Pakistan	12.1	14.3	10.9	1.6	1.6	1.7
United Arab Emirates	3.7	8.3	8.8	2.3	3.2	40.5
Algeria	6.3	1.7	5.6	0.5	N/A	N/A
Peru	2.0	4.8	3.6	0.2	0.1	-74.5
Italy	7.9	2.5	3.6	1.7	1.6	-7.7
Sri Lanka	3.6	0.9	3.5	1.2	1.4	22.3
Lebanon	1.0	2.1	3.0	0.1	0.6	309.9
Turkey	7.8	9.3	2.7	0.3	2.7	948.1
Other countries	17.6	21.8	20.9	3.2	4.0	23.7
Total exports	**118.2**	**170.0**	**160.5**	**32.9**	**28.8**	**-12.4**

Cwt = hundredweight, which equals 100 pounds. N/A = not available.
1/ This table excludes planting seed trade.
2/ Percent change from September–October 2023/24 to September–October 2024/25.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Chickpeas (continued)

Return to chickpeas section

Table f19: U.S. chickpea: Import volume by class 1/

Commodity	-------- September–August --------			---- September–October ---		Change/2
	2021/22	2022/23	2023/24	2023/24	2024/25	2023/24–2024/25
	---------- Million pounds ----------					----- Percent -----
By class						
Chickpeas, all	**117.128**	**182.603**	**128.144**	**22.987**	**14.534**	**-36.8**
Chickpeas, garbanzo	71.094	162.692	116.692	21.436	12.740	-40.6
Chickpeas, kabuli	46.034	19.911	11.452	1.551	1.794	15.7
Total imports	**117.128**	**182.603**	**128.144**	**22.987**	**14.534**	**-36.8**
All by origination country						
Canada	63.219	80.345	40.322	8.694	2.356	-72.9
Mexico	26.068	39.485	38.627	8.596	3.380	-60.7
India	7.231	9.800	16.973	2.356	3.632	54.2
Argentina	3.604	6.767	16.157	0.781	1.522	94.8
Australia	8.221	44.185	10.383	1.894	2.057	8.6
Turkey	7.008	1.001	3.806	0.209	1.444	589.6
Peru	N/A	0.082	0.459	0.004	0.002	-62.8
Myanmar (Burma)	0.056	0.008	0.394	0.196	0.004	-97.7
Italy	0.002	0.081	0.193	N/A	0.011	N/A
United Arab Emirates	0.138	0.205	0.162	0.024	0.029	22.2
Other countries	1.581	0.644	0.666	0.233	0.097	-58.1
Total Imports	**117.128**	**182.603**	**128.144**	**22.987**	**14.534**	**-36.8**

Cwt = hundredweight, which equals 100 pounds. N/A = not available.
1/ This table excludes planting seed trade.
2/ Chickpea percent change from September–October 2023/24 to September–October 2024/25.
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census.

Chickpeas (continued)

Return to chickpeas section

Table f20: U.S. chickpeas: Area, yield, production, price, and crop value, 2020–24

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	254	251	4,093	88.71	16.3	22.20
2021	368	349	2,848	102.31	8.2	36.20
2022	357	342	3,686	128.13	10.8	35.00
2023	372	359	4,722	172.17	13.2	36.60
2024p	504	497	6,132	N/A	12.3	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Table f21: U.S. large chickpeas: Area, yield, production, price, and crop value, 2020–24

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	213	210	3,402	75.05	16.2	23.30
2021	308	296	2,444	89.27	8.3	36.50
2022	276	264	2,601	92.94	9.9	35.60
2023	267	261	3,319	121.05	12.7	36.90
2024p	364	362	4,321	N/A	12.0	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Table f22: U.S. small chickpeas: Area, yield, production, price, and crop value, 2020–24

Year	Planted area	Harvested area	Production	Crop value	Yield per acre	Season average price
	-------- 1,000 acres --------		*1,000 cwt*	*Million dollars*	*Cwt per acre*	*Dollars per cwt*
2020	42	41	691	13.66	16.9	20.20
2021	59	54	404	13.04	7.6	33.30
2022	82	78	1,085	35.19	13.9	32.70
2023	105	98	1,403	51.11	14.3	35.70
2024p	140	135	1,811	N/A	13.4	N/A

Cwt = hundredweight, a unit of measure equal to 100 pounds. p = preliminary. N/A = not available.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

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