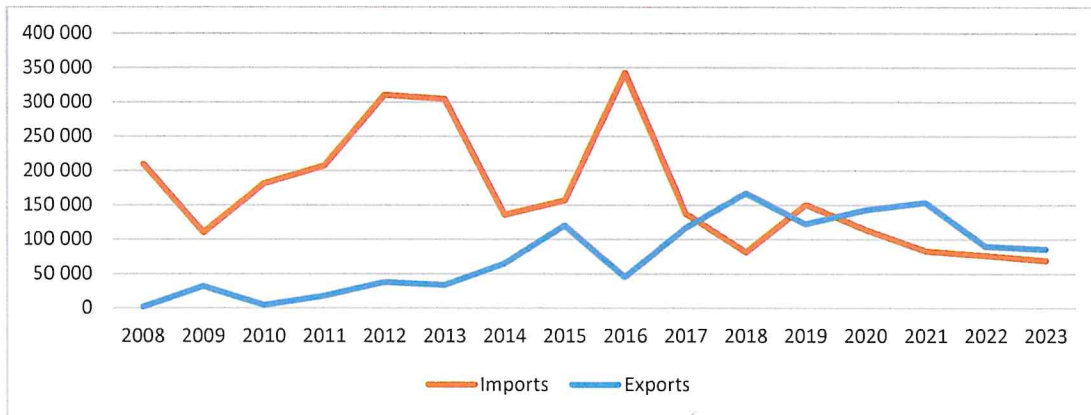


Brazil's Transition from Net Importer to Net Exporter of Dry Beans



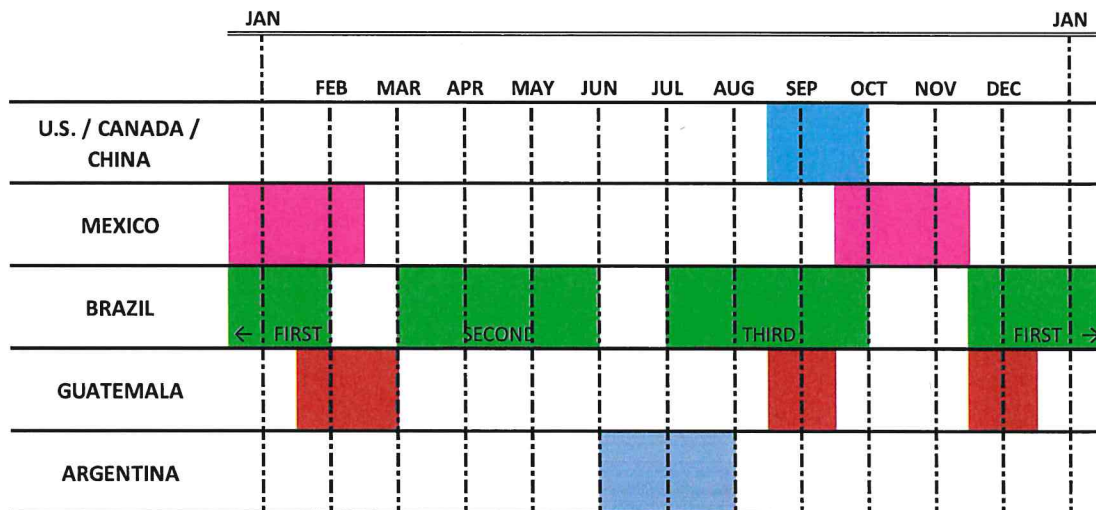
Source: Trade Data Monitor

A NOTE ON CARRYOVER ESTIMATES: It has become increasingly difficult to arrive at reliable carryover estimates by bean type. For this reason, this information has been removed from the charts in this report. In instances where we do have reliable carryover data, we have included it in the text and in tables and cited the source.

Black Bean Production

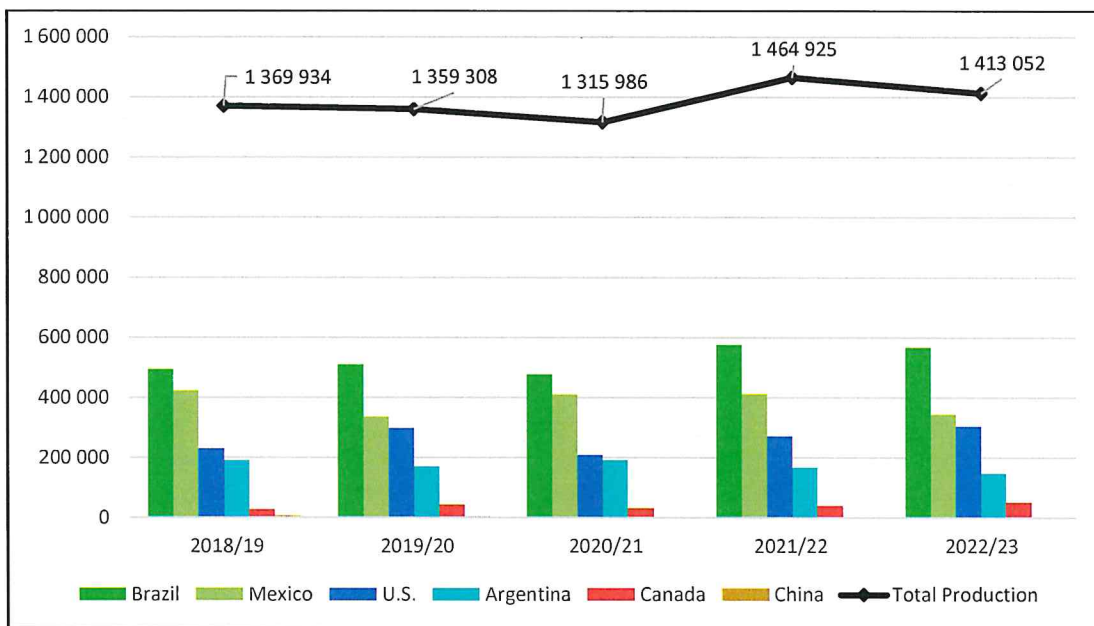
The following chart shows the harvest period in the main black bean-producing countries. Tropical and subtropical countries, such as Guatemala and Brazil, have three crops per year, while temperate countries have one crop per year and Mexico has two. In Central America and Mexico there are no harvests between March and mid-August, and imports are usually needed to fill that gap.

Harvest Period in the Main Black Bean Producing Countries



The following chart shows the combined black bean production of the main black bean-producing countries. Guatemala has been omitted because the latest official figures the USDDBC received from the Ministry of Agriculture (157,100 MT for 2023) do not coincide with historic production figures and domestic consumption estimates. We are presently seeking a reliable source of information on Guatemalan dry bean production. Looking at the five-year average (2019-2023), Brazil is the largest producer of black beans (524,180 MT), followed by Mexico (384,379 MT), the U.S. (262,086 MT), Argentina (173,624 MT) and Canada (37,972 MT). Brazil, Guatemala, and Mexico are important black bean consumers and most of their production is consumed domestically. Argentina and Canada export almost all their production, while the U.S. is both an important consumer and exporter.

Combined Black Bean Production in MT (Excluding Guatemala)



Source: Data from USDA, CLERA, CONAB, USDDBC Mexico representative, GPC and Industry members

United States

The USDA's January 12, 2024 Crop Production Annual Summary reports 477,530 ha. were seeded to dry beans in 2023, of which 468,181 ha. were harvested. Both figures represent a 5% decrease from the previous year (502,215 ha. seeded and 493,393 ha. harvested in 2022). In terms of production, the 2023 dry bean crop amounted to 1,084,539 MT, a 7% decrease from the prior year (1,167,275 ha.).

In the case of black beans, however, production was up 12% on the year, from 270,885 MT in 2022 to 303,952 MT in 2023. A total of 116,549 ha. were seeded to black beans in 2023, a 7% increase over 2022 (108,860 ha.). On average, black bean crops yielded 2.6 MT/ha. in

2023, up from 2.49 MT/ha. the prior year. A breakdown of production by state as reported in the Crop Production Annual Summary is included below. Carry-in figures were arrived at in consultation with industry members.

U.S. Black Bean Production (MT)

Country	2020 production	2021 carry-in	2021 production	2022 carry-in	2022 production	2023 carry-in	2023 production (projected)
United States	297,330	51,000	208,607	508	270,885	1,449	303,952

Source: USDA reports and industry members

U.S. Black Bean Production by State, 2019-2023 (MT)

State	2019	2020	2021	2022	2023	22/23 % change
California	(D)	(D)	(D)	(D)	(D)	(NA)
Idaho	6,623	5,171	3,992	3,221	4,218	31%
Michigan	87,726	134,445	108,227	133,810	140,251	5%
Minnesota	47,537	63,458	47,038	68,629	85,865	25%
Nebraska	0	4,763	(D)	(D)	1,996	(NA)
North Dakota	77,384	81,511	35,562	53,025	61,054	15%
Washington	6,441	0	7,076	5,670	8,029	42%
Wyoming	0	1,179	953	1,089	1,542	42%
Other States	3,946	6,804	5,761	5,443	998	-82%
U.S. Total	229,658	297,330	208,607	270,885	303,952	12%

(D) Withheld to avoid disclosing data for individual operations. Withheld amounts are included under "Other States".

Source: USDA Crop Production Annual Summary, January 12, 2024.

Canada

In its December 15, 2023, Outlook for Principal Field Crops, Agriculture and Agri-Food Canada estimated total dry bean production in 2023 at 339,000 MT, consisting of 83,000 MT of white pea bean types and 256,000 MT of colored bean types. This represents an 8% increase over 2022 (313,000 MT). An estimated 129,000 ha. were seeded to dry beans in 2023, all of which were harvested, compared to 120,000 ha. seeded and 117,000 ha. harvested in 2022. Yields averaged 2.63 MT/ha. compared to 2.67 MT/ha. in 2022. For 2023/24, the average Canadian dry bean price is forecast to increase to \$1,180 per MT due to lower North American supply.

Based on consultations with industry members, we estimate black bean production at 51,000 MT and carry-out at no more than 2,550 MT due to strong demand from Mexico.

Canada Black Bean Production (in MT)

Country	2021 carry-in	2021 production	2022 carry-in	2022 production	2023 carry-in	2023 production	2024 carry-in (projected)
Canada	2,000	30,700	1,500	39,500	3,500	51,000	2,550 MT

Source: Industry members

Mexico

Mexico grows two dry bean crops per year: the spring-summer crop (May to November) and the fall-winter crop (October to February).

According to USDBC consultant Vicente Mendoza, the 2023 spring-summer cycle was one of the worst in the last 20 years due to poor climate conditions (late rains and drought), necessitating increased bean imports in MY 2023/24. He estimates 2023 spring-summer production at 239,988 MT, which is 37% below SIAP's projection of 386,623 MT and 70% below the historic average of 791,655 MT (from 2016-2022). Out of this total, he estimates a black bean crop of 142,804 MT, which is 45% below the previous spring-summer cycle.

The fall-winter crop, which will be harvested in February, constitutes 25% of Mexico's annual dry bean production, according to the December 18, 2023 crop report from the USDBC Mexico representative. Yellow bean varieties (peruano, mayocoba, and azufrado) typically make up 70% of the fall-winter crop, with black and speckled beans making up the remaining 30%. The states of Sinaloa and Nayarit are the top two producers of fall-winter beans. In Sinaloa, 80-90% of bean crops are seeded on irrigated fields; in Nayarit and other states, beans are sown on dryland. Approximately 50,000 bean hectares were seeded in Sinaloa this fall-winter season under good conditions, but well levels are low and water shortages are a concern as the growing season unfolds. In Nayarit, the expectation was that an additional 50,000 ha. would be seeded to beans, but planting progress has been slow; growers worry about insufficient precipitation to reverse drought conditions and the risk of frost for late-seeded beans. Nayarit was expected to increase the area seeded to black beans this fall-winter cycle. In both Sinaloa and Nayarit, temperatures have been cooler than expected and there are also concerns of early frosts in December and January. The government expectation is for 232,752 ha. to be seeded to dry beans this fall-winter cycle, with production amounting to 335,102 MT based on an average yield of 1.44 MT per ha.

Mexico Black Bean Production (in MT)

Mexico	2020 SS + 2021 FW	2021 SS + 2022 FW	2022 SS + 2023 FW	2023 SS + 2024 FW	5-year average
Spring/Summer Production	326,020	332,240	313,600	142,804	315,915
Fall/Winter Production	82,959	80,000	30,000		68,464
Mexico Total Black Bean Production	408,979	412,240	343,600		390,145

Source: SIAP & USDBC Mexico Office reports

Brazil

Brazil produces three dry bean crops a year. The first crop is typically harvested from November through January, the second crop is harvested from March through June, and the third crop is harvested from July to October.

In its January 2024 crop survey, CONAB (Brazil's National Supply Company) estimates total dry bean production for 2023/24 at 3,029,600 MT, about the same as in 2022/23 (3,036,600). This total includes 553,600 MT of black beans, down 2.3% from 2022/23 (566,500 MT).

CONAB reports the seeding of the first bean crop of 2023/24 is nearing its conclusion and has been impacted by excessive rains, late seeding, re-seeding, and the use of low-level technology, resulting in a reduction in the seeded area. The black bean area is estimated at 123,800 ha., a decrease of 7% compared to the first crop of the previous cycle (133,400 ha.). The first black bean crop is projected to amount to 188,500 MT, down 14% from the first crop of 2022/23.

The tables below summarize the information on black beans presented in CONAB's January 2024 crop survey.

Brazil 2023/24 Black Bean Crop, CONAB January 2024 Estimates

Crop	Ha. 2022/23	Ha. projected 2023/24	% Change	Production 2022/23 (MT)	Production projected 2023/24 (MT)	% Change
First	133,400	123,800	-7.2%	219,600	188,500	-14.2%
Second	202,400	218,700	8.1%	332,300	350,600	5.5%
Third	14,400	19,400	34.7%	14,600	14,500	-0.7%
Total	350,200	361,900	3.3%	566,500	553,600	-2.3%

Source: Conab January 2024 crop survey

Brazil black bean production (MT)

Country	2022 Carry-In	2021/22 Production	2023 Carry-In	2022/23 Production	2024 Carry-In	2023/24 Production (Estimate)
Brazil	25,160	575,800	67,914	566,500	329,900	553,600

Source: CONAB crop surveys

China

China used to be an important producer and exporter of black beans. However, according to trade data, it is fading from the global dry bean scene. According to data from the Trade Data Monitor, China's bean exports have been trending downward since 2019/20, from 457,615 MT that MY to 285,083 MT in 2022/23.

The USDBC China representative explains that this precipitous drop-off is due to the government's continuous granting of subsidies to grain farmers and the increased cost of production in general. For 2024, China's black bean production is expected to be nil.

China black bean production (MT)

Country	2020/21 Production	2022 Carry-In	2021/22 Production	2023 Carry-In	2022/23 Production	2024 Carry-In	2023/24 Production
China	0	0	0	0	0	0	0

Source: USDBC China reports

Guatemala

Dry bean production figures provided by Guatemala's Ministry of Agriculture for 2023 appear to utilize a new methodology and do not coincide with historic production data or consumption expectations. The USDBC is currently seeking out a reliable source of information on Guatemalan dry bean production.

Guatemala harvests three crops a year. In 2023, the high cost of agricultural inputs combined with sparse rains contributed to poor production. Neighboring Mexico also had a poor bean crop, resulting in a reduction of contraband beans from that origin. In response to the need for imports, the government of Guatemala increased its 5,000 MT duty-free quota for black beans by an additional 10,000 MT.

Guatemala black bean production (MT)

Country	2020 Production	2021 Production	2022 Production	2023 Production
Guatemala	251,304	231,305	230,000	157,100*

* The USDBC is skeptical about the figure it received from Guatemala's Ministry of Agriculture this year. It is well below the historic average and does not coincide with consumption expectations.

Source: Guatemala Ministry of Agriculture and GPC.

Argentina

The following information is drawn from the USDBC's Argentina Crop Monitoring reports, available [here](#).

This year, planting intentions were higher than last year, but hot and dry climate conditions curbed the number of hectares that were sown to beans. The planted area figures in the table that follows are based on field visits and conversations with members of Argentina's dry bean industry. It is important to note that these are planted area figures and do not represent the number of hectares that were actually harvested. Over the course of the growing season, some bean hectares were lost to hot and dry conditions, while others were lost to flooding. Based on CLERA's estimated planted and harvested area, about 13% of the overall bean area was lost. This loss is included in the yield calculations used to arrive at our estimates of exportable supply. Yields were below average for the second consecutive year.

Brazil is the major buyer of Argentine black beans. In recent years, however, the country has transitioned from a net importer to a net exporter of dry beans. Despite this development, the Argentine dry bean industry remains confident that Brazil will remain its primary client. They cite two reasons for this. Firstly, Argentina's port of Rosario is closer to Brazil's markets than some of Brazil's own origination points such as Mato Grosso, giving Argentina's beans a competitive advantage. Secondly, Argentine black beans generate a broth that is popular in Brazil and that Brazilian consumers cannot get with national product. Nonetheless, as Brazil's exports continue to increase, Argentina is likely to find itself competing with Brazil in other dry bean markets.

Argentina's black bean production

Bean Class	Planted Area				Yield (MT/Ha)			
	2021	2022	2023	2022/23 % change	2021	2022	2023	2022/23 % change
Black	160,000	185,000	185,000	0%	1.20	0.9	0.8	-11%

Bean Class	Gross Production (MT)				Exportable Supply (MT)			
	2021	2022	2023	2022/23 % change	2021	2022	2023	2022/23 % change
Black	192,000	166,500	148,000	-11%	172,800	149,850	133,200	-11%

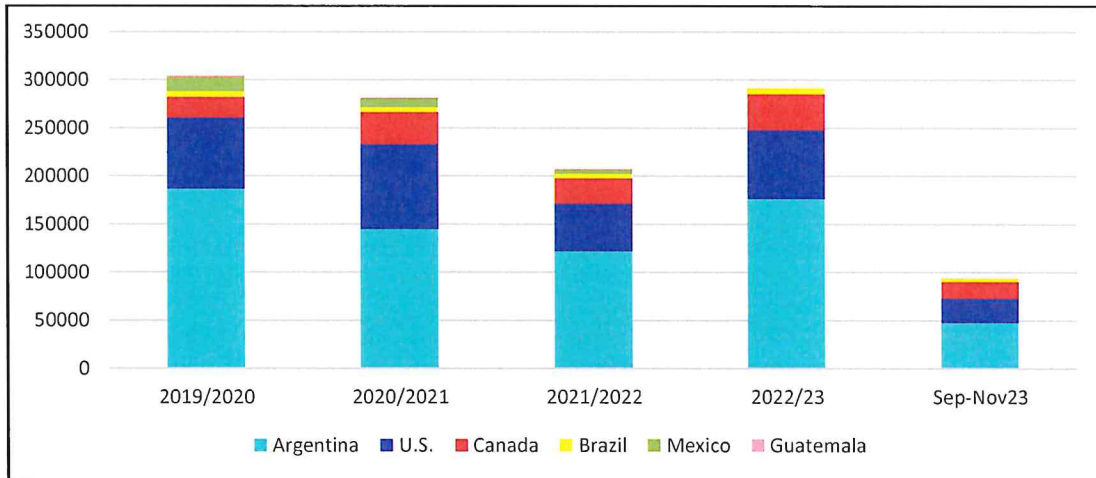
Source: USDBC Argentina crop monitoring reports

Global Black Bean Exports

The following chart shows the exports of the major black bean-producing countries by U.S. marketing year (Sep-Aug). Although other countries have marketing years that begin and end on different months, for the sake of uniformity we decided to use the U.S. marketing year across the board to allow for comparisons between countries. The other charts in this section are organized by the marketing year that corresponds to the reporting country. Even though Brazil and Guatemala export relatively small amounts, they are included on this chart because, as in the case of Mexico, they may become suppliers in years of overproduction.

From September through November 2023, global black bean exports totaled 93,229 MT, up 40% compared to the same period the previous MY (66,730 MT). Argentina is the leading black bean exporter (47,545 MT), followed by the U.S. (25,142 MT), Canada (17,091 MT), Brazil (3,441 MT) and Guatemala (10 MT).

Black Bean Exports from Major Producing Countries (MY Sep–Aug, in MT)



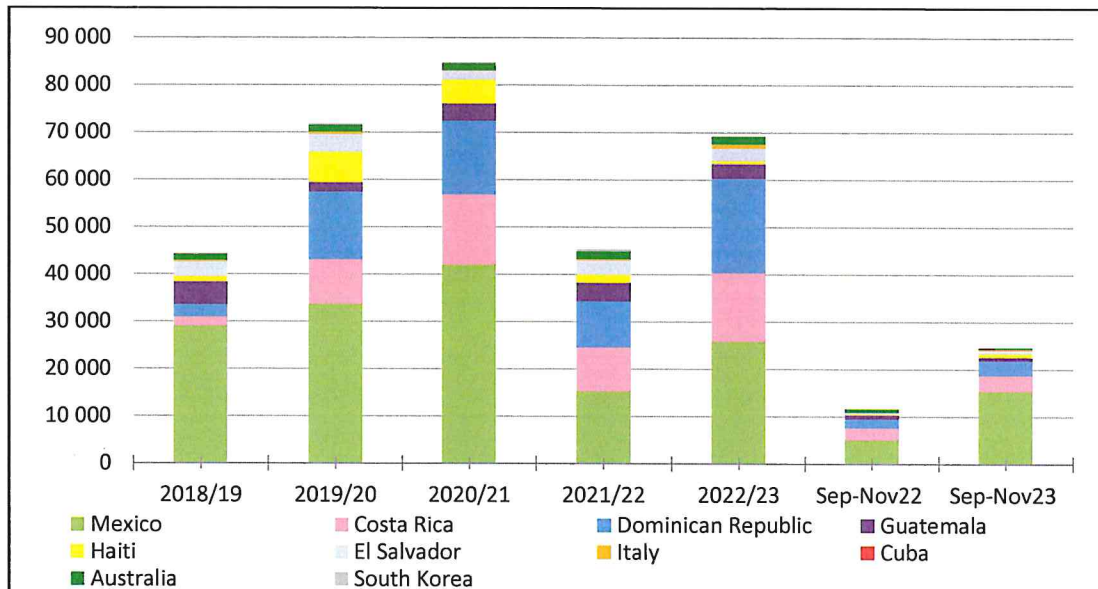
Source: Trade Data Monitor

United States

From September through November 2023, the U.S. exported 25,142 MT of black beans, up 103% compared to the same period the previous MY (12,356 MT). The top destinations for U.S. black beans were Mexico (15,289 MT), Costa Rica (3,475 MT), the Dominican Republic (3,095 MT), Guatemala (750 MT), Haiti (698 MT), El Salvador (621 MT), Italy (379 MT), Cuba (157 MT), Australia (140 MT) and South Korea (139 MT). These exports were valued at \$28.2 million FOB, bringing the average price to \$1,121 FOB per MT. Over the same period as the

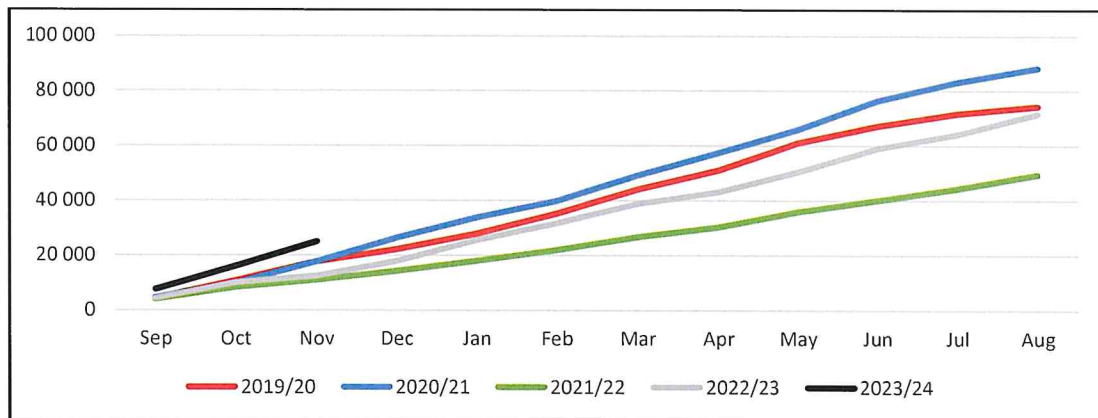
previous MY, U.S. black bean exports were valued at \$14 million, with an average price of \$1,138 FOB per MT.

Top Destinations for U.S. Black Beans (MY Sep-Aug, in MT)



Source: U.S. Census Bureau

Pace of U.S. Black Bean Exports, Sep-Aug Marketing Year (MT)



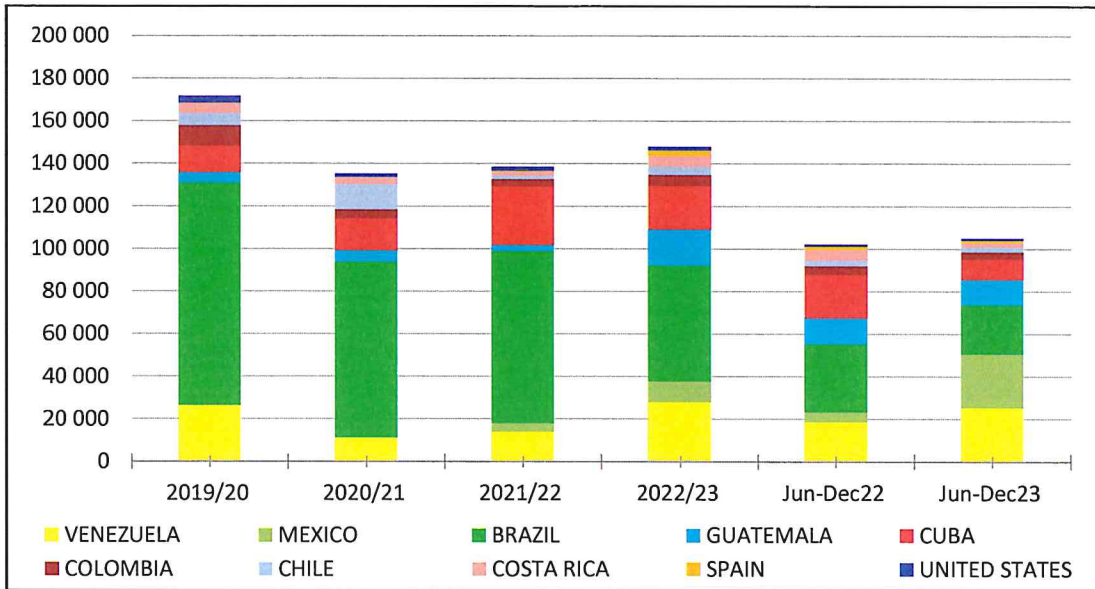
Source: U.S. Census Bureau

Argentina

Argentina’s MY runs from June to May. From June through December 2023, Argentina exported 110,964 MT of black beans, down 2% compared to the same period the previous MY (113,347 MT). The top markets for Argentine black beans were Venezuela (25,411 MT), Mexico (25,208 MT), Brazil (22,958 MT), Guatemala (12,163 MT), Cuba (9,553 MT), Colombia (3,202 MT), Chile 2,234 MT), Costa Rica (2,128 MT), Spain (1,152 MT) and the U.S. (1,072 MT). These exports were valued at nearly \$69 million FOB, bringing the average price

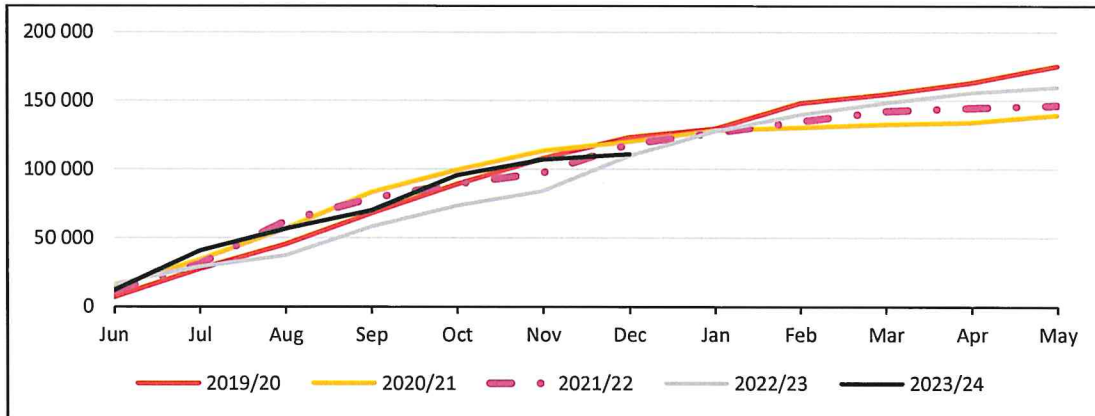
to \$622 FOB per MT. Over the same period the previous MY, black bean exports were valued at \$72.9 million, bringing the average price to \$643 per MT.

Top Destinations for Argentine Black Beans, Jun-May Marketing Year (in MT)



Source: Softrade

Pace of Argentine Black Bean Exports, Jun-May Marketing Year (in MT)



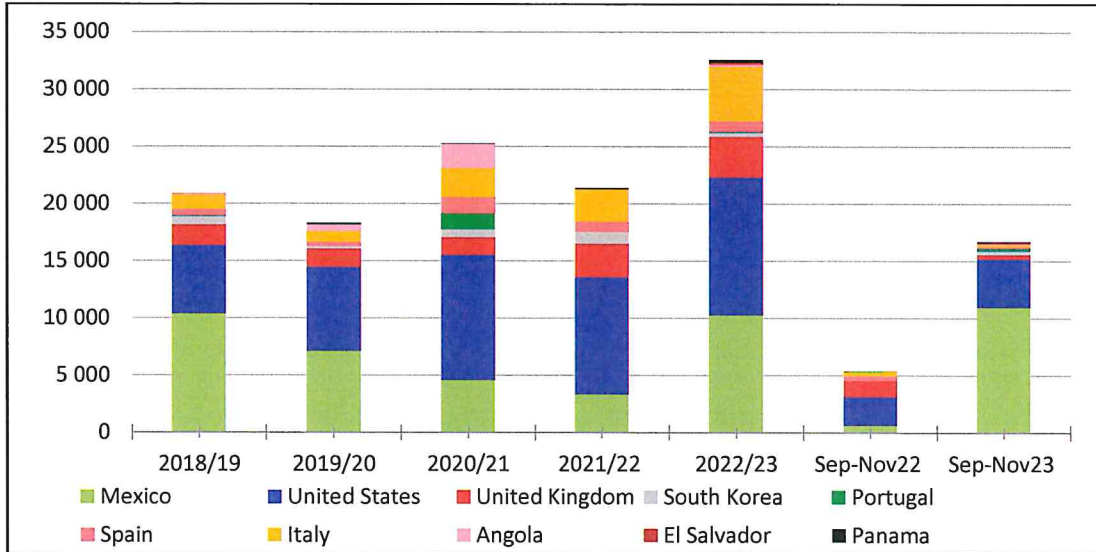
Source: Argentina National Institute of Statistics

Canada

Canada's black bean exports are off to another strong start in 2023/24. In just the first three months of the new MY, it has exported 45% of the total exported over the entire 2022/23 MY. From September through November 2023, Canada exported 17,091 MT of black beans, up 162% compared to the same period the previous MY (6,509 MT). The top destinations for Canadian black beans were Mexico (10,960 MT), the U.S. (4,208 MT), the U.K. (405 MT), South Korea (306 MT), Portugal (249 MT), Spain (140 MT), Italy (131 MT), Angola (119 MT),

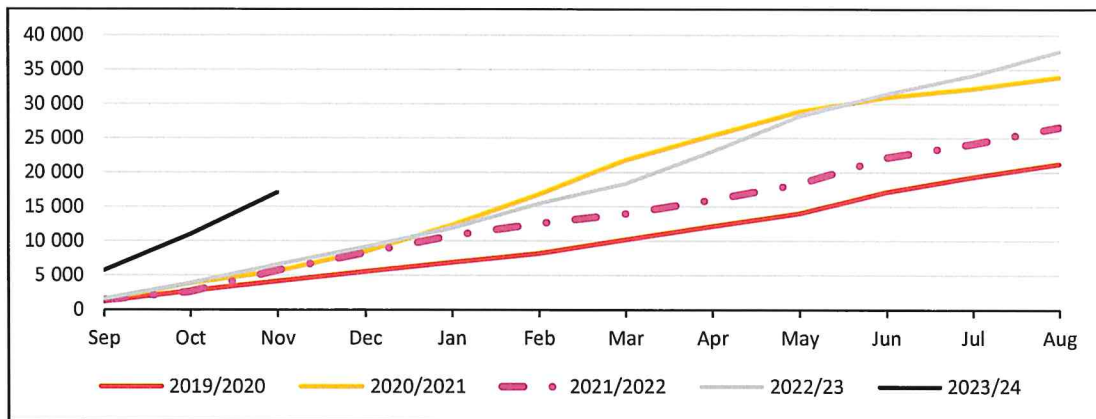
El Salvador (118 MT) and Panama (81 MT). These exports were valued at \$17.2 million, bringing the average price to \$1,007 per MT. Over the same period the previous MY, black bean exports were valued at \$5.6 million, bringing the average price to \$863 per MT.

Top Black Bean Export Destinations for Canadian Black Beans (MY Sep-Aug, MT)



Source: Statistics Canada

Pace of Canadian Black Bean Exports (MY Sep-Aug, in MT)



Source: Statistics Canada