



# **Small, Medium, and Large White Bean Production-Export Panorama**

**Prepared by USDBC Regional Representative Alejandro Leloir**

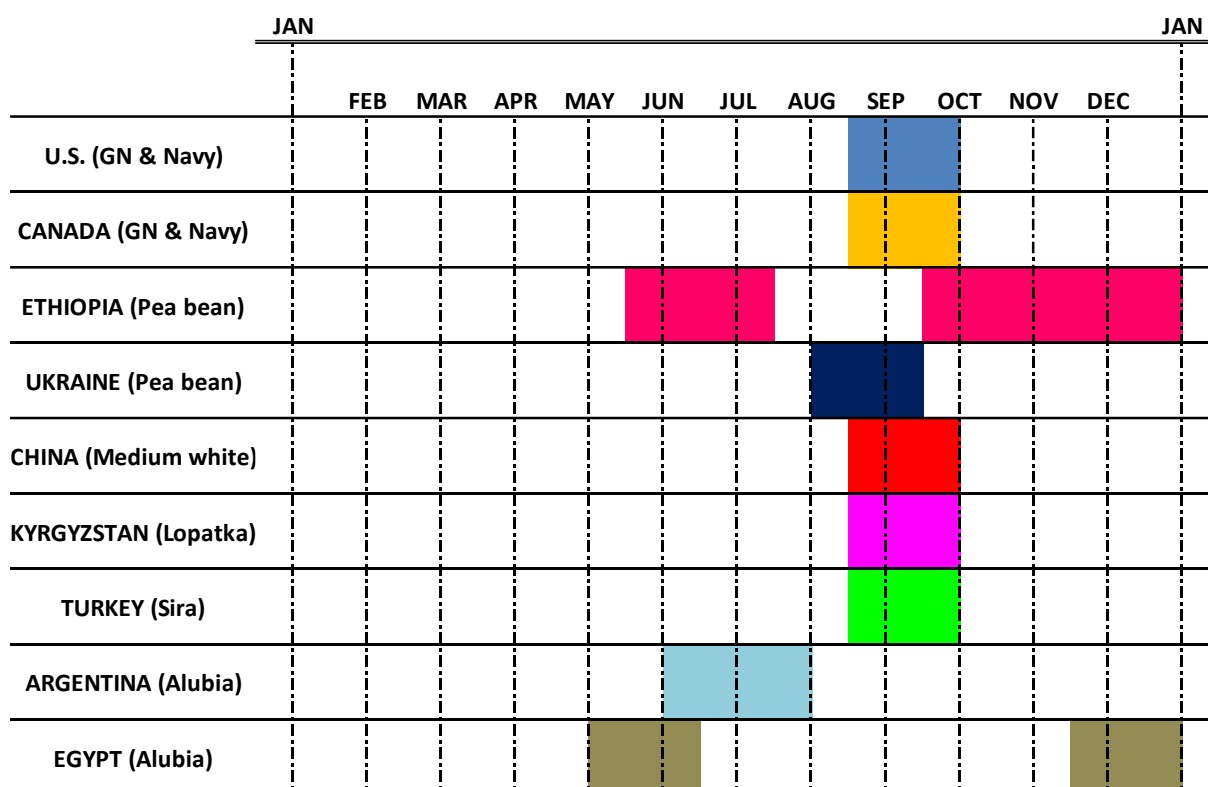
**September 7, 2020**

## Global White Bean Production

Explanation of the harvest period and production charts:

- ✚ The main white bean producing countries shown on the harvest period chart are:  
The U.S., Canada, Ethiopia, Ukraine, China, Kyrgyzstan, Turkey, Argentina, and Egypt.
- ✚ The production charts show the combined production of white beans, clustered as small, medium, and large.
  - ✚ Small white includes: Navy beans from the U.S. and Canada, pea beans from Ukraine and Ethiopia, and various small white beans from China.
  - ✚ Medium white includes: Great Northern, Baby Lima, and Large Lima from the U.S. that have been added together. Great Northern beans from Canada, Lopatka beans from Kyrgyzstan, Sira beans from Turkey, and various medium white bean types from China.
  - ✚ Large white includes alubias from Argentina and Egypt, and white kidney beans from China.

### *Harvest period in the main large white bean producing countries*

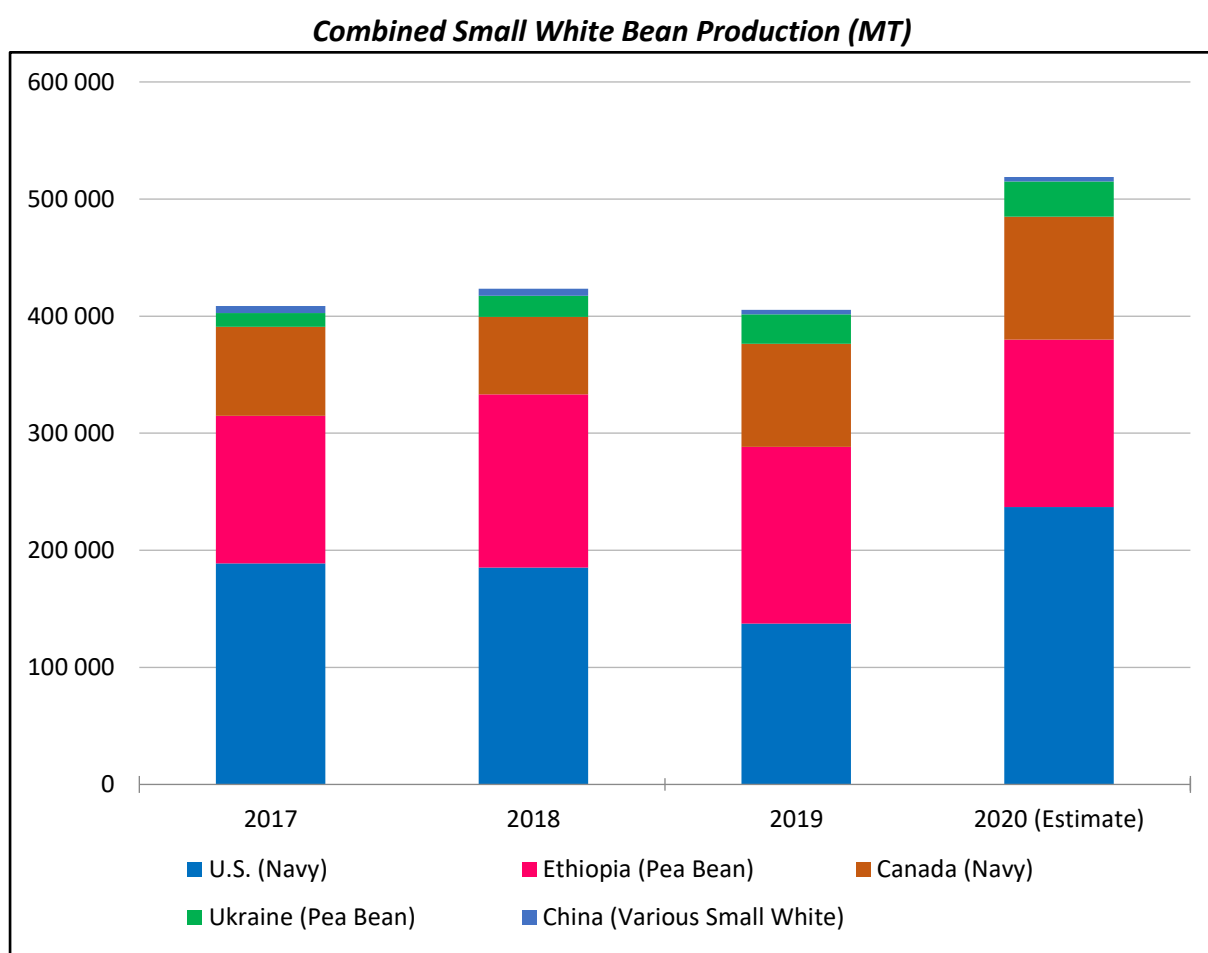


The main small white bean producing country is the U.S. with a four-year average of navy bean production of 187,092 MT, followed by Ethiopia (pea bean, 142,000 MT), Canada (navy bean, 83,750 MT), Ukraine (navy bean, 21,250 MT), and China (pea bean, 5,000 MT).

Notably, Ukraine navy bean production has been steadily increasing from 12,000 MT in 2017 to 30,000 MT projected for 2020.

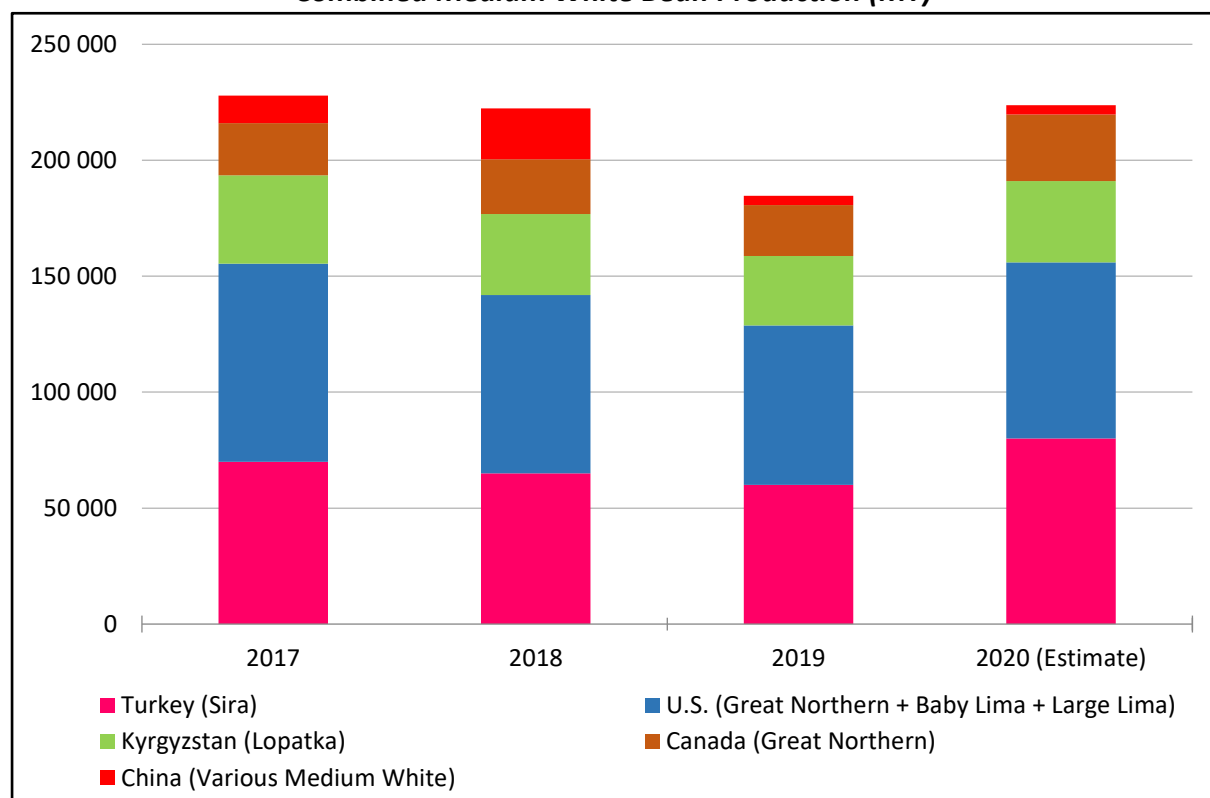
The U.S. is the main medium white bean producing country with a four-year average production of 56,402 MT of Great Northern, 10,802 MT of large lima, and 10,275 of baby lima, totaling 76,759 MT; followed by Turkey (Sira 68,750 MT), Kyrgyzstan (Lopatka, 34,500 MT), Canada (Great Northern, 28,800 MT), and China (10,500 MT). Notably, China medium white production has decreased sharply since 2018 and is projected to be of 4,000 MT in 2020.

Considering the last four-year average production, Argentina is the main large white bean producing country with 184,875 MT of alubias, followed by Egypt (127,500 MT), and China (29,000 MT).



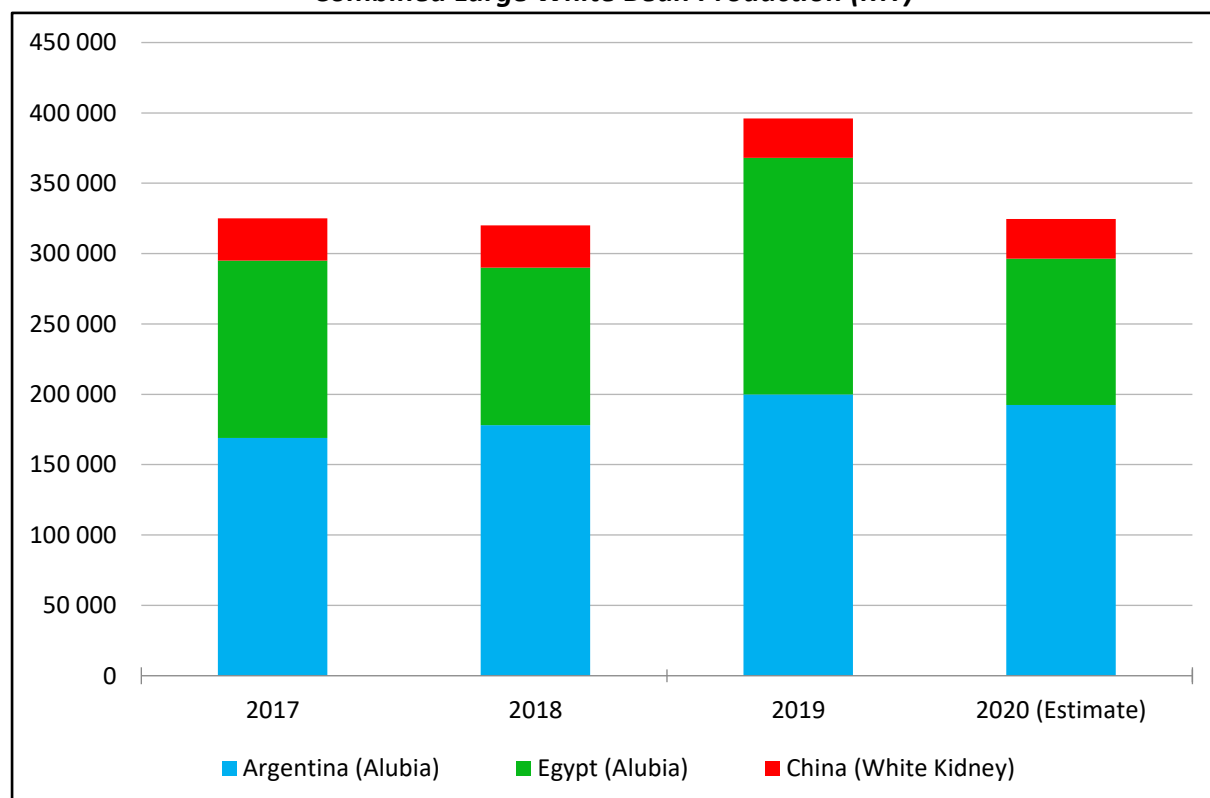
***Source: Data from USDBC's reports, USDA, Statcan, Crop Insurance Canada, GPC and Industry members.***

**Combined Medium White Bean Production (MT)**



**Source: Data from USDBC's reports, USDA, Statcan, Crop Insurance Canada, GPC and Industry members.**

**Combined Large White Bean Production (MT)**



**Source: Data from USDBC's reports, and GPC**

Markets for each bean kind tend to be specific, in the sense that navy bean consumers will not substitute that bean kind for alubias or great northern. Nevertheless, in times of scarcity that might happen up to a certain point.

Most white bean producing countries don't have updated official production statistics and therefore it was not possible to add trustworthy carry-over stock figures to the charts. Nevertheless, most sources agree that for the current year and for most bean types, 2019 carry in stocks will be historically low.

### United States (Great Northern, navy)

According to the USDA's August 2020 Crop Production Report, the area planted in the current year is 658,829 Ha, up 26% compared to 2019 (520,993 Ha). US dry bean production in 2020 is projected at 1,488,100 MT, 58% more than in 2019 (943,971 MT). U.S. national average yield in 2020 is projected to be 2,344 kg/ha compared to 1,983 kg/Ha in 2019.

Navy bean planted area is 94,777 Ha, up 36% compared to 2019 (69,808 Ha). Great northern planted area is 25,010 Ha, down 1% compared to 2019 (25,293 Ha). Baby Lima planted area is 2,469 Ha, down 34% compared to 2019 (3,764 Ha). Large Lima planted area is 3,521 Ha, down 2% compared to 2019 (3,602 Ha). 2020 production estimations were done considering an average yield of 2.5 MT/Ha.

#### U.S. White Bean Production

U.S.	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Great Northern	85,457	76,884	68,720	75,974	76,759
Large lima	11,975	10,614	8,936	8,802	10,082
Baby lima	9,843	12,474	12,610	6,172	10,275
Navy	188,740	185,292	137,395	236,943	187,092
Total	296,015	285,264	227,661	327,891	284,208

Source: USDA

### Canada (Great Northern, navy)

According to the latest data available, Canadian Great Northern production will be 28,800 MT, up 31% compared to 2019 and up 19% compared to the last four-year average. 2020 Navy bean production is estimated to be of 105,000 MT, up 19% compared to the previous year and up 25% compared to the last four-year average. Total white bean production is estimated at 107,950 MT, up 22% compared to last year and up 24% compared to the last four-year average.

### Canada White Bean Production

Canada	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Great Northern	22,500	23,500	22,000	28,800	24,200
Navy	76,000	66,000	88,000	105,000	83,750
Total	98,500	89,500	110,000	133,800	107,950

*Source: Statscan, industry survey and crop insurance data*

### Ethiopia (small white, pea beans)

Pulses play an important role in Ethiopia's food security and economy. Most Ethiopians eat pulses every day, especially chickpeas, in a variety of traditional dishes. Pulse exports are the third most important for Ethiopia, after coffee and oilseeds. The main region for white bean production in Ethiopia lies east of Lake Ziway, in the central Rift Valley. Production is done in a traditional way, with a low level of technification on plots of 0.7 to 12 acres. According to the Ethiopian Central Statistics Agency, close to three-quarters of pulse production is consumed on the farm as food, feed, or seed, with nearly 10 percent being sold into the local market and about 14 percent going for export, although this percentage should be higher in the case of white beans, since they are not part of the traditional Ethiopian diet, and are not widely consumed locally.

The main growing season lasts from June to October, with output marketed from September to March. Since the cleaning process of beans has a low level of technification, it takes several months from harvest until beans are ready for export. There is also a smaller crop that comes out around June.

### Ethiopia pea bean production

Ethiopia	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Pea bean	126,000	148,000	151,000	143,000	142,000

*Source: GPC*

### Ukraine (small white, pea beans)

According to USDBC's research, grain, and oilseed production, including sunflower oil, corn, barley, and wheat are the main crops that make Ukraine an agricultural powerhouse. Pulses are still considered a niche-market crop in Ukraine. Dry peas are the leading pulse product, with 775,600 MT produced in 2018, followed by 71,190 MT of dry beans, 53,560 MT of garbanzos, and 19,620 MT of lentils. Although dry bean production volumes are currently low in Ukraine, top-quality North American navy bean seed has been acquired by certain farming interests and navy bean production is steadily increasing in the country.

Most pulse crops are grown in the Northern and Eastern regions of Ukraine and are transported by truck and rail down to Black Sea ports. Dry bean production is driven by export demand, not by the domestic market. Most dry bean production in Ukraine consists of navy bean types and small amounts of dark red kidney bean types.

#### **Ukraine pea bean production**

Ukraine	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Pea Bean	12,000	18,000	25,000	30,000	21,250

*Source: GPC*

#### **Kyrgyzstan (medium white, lopatka)**

Dry beans are relatively new crop in Kyrgyzstan where farmers have been growing them since the 1990s. The main dry bean-growing region is Talas, in the Northwest of the country, where over 50,000 Ha of dry beans are planted. The dry bean production is mainly destined for export since the per capita consumption is quite low from 0.18 to 0.39 Kg per person per year.

According to Kyrgyzstan dry bean industry members contacted by the USDBC, Kyrgyzstan production breakdown by type is 45% white beans, 45% red beans, and 10% of other bean kinds. The local white bean variety is called Lopatka and is similar to a Great Northern bean. The current crop is reportedly developing under optimum conditions.

#### **Kyrgyzstan Lopatka Bean Production**

Kyrgyzstan	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Lopatka	38,000	35,000	30,000	35,000	34,500

*Source: GPC*

#### **China**

According to USDBC's representative in China, given the increasing price of soybean, it is expected that farmers would have more incentive to grow soybean against dry beans (except DRKB, that might increase its planted area due to the high prices seen since the beginning of the year) in China northwest which is the key production area for light speckled kidney beans (LSKB), red and purple speckled kidney beans, black beans and various white beans. Moreover, since early July 2020, floods have severely affected large tracts of central and eastern provinces of China due to heavy rains caused by the regional rainy season, primarily around the Yangtze basin and its tributaries, with over 14 million people affected across the worst hit provinces of Hubei, Hunan, Jiangxi, Anhui and Zhejiang. Some analysts expect that stronger incentive policies would be imposed to growth of soybean in the major soybean production areas such as Heilongjiang and Jilin. In that case, the planting area and production of dry bean in China northeastern provinces will likely continue to decline.

The following chart shows China's white bean production over the last four years:

#### China White Bean Production

China	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Small white	6,000	6,000	4,000	4,000	5,000
Medium white	12,000	22,000	4,000	4,000	10,500
Large white	30,000	30,000	28,000	28,000	29,000
Total	48,000	58,000	36,000	36,000	44,500

*Source: USDBC China reports*

#### Turkey (Sira bean)

Production of all pulses in Turkey has been decreasing over the last decade, making Turkey, once a net exporter of dry legumes, a net importer. The reasons for the decrease are numerous, including lack of an effective national agricultural policy, the shrinking size of farms, seed degeneration, an absence of research into seed improvement, and more profitable competing crops. To stop seed degeneration, Turkey is importing Great Northern beans from North America for planting purposes. Nevertheless, a considerably large crop is still grown in that country and is therefore included in this report.

Currently, Turkey's dry bean production has stabilized at around 60,000 MT – 70,000 MT per year. Most of the production are Sira beans, which are similar to the Great Northern. According to sources contacted by the USDBC, an additional 1,000 MT of dry beans are grown in Turkey, between Redondo beans, alubias and LRKB. 2020 crop is expected to be up by 20% compared to 2019 and up 16% compared to the last four-year average, due to an increase in planted area this year.

#### Turkey White Bean Production

Turkey	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Sira	70,000	65,000	60,000	80,000	68,750

*Source: GPC*

#### Argentina (alubia)

It has been a challenging planting season in Argentina, disrupted by dry spells and affected by frosts, all of which reduced the yields of the current alubia crop (30% decrease compared to last year). Yet, exportable supply was only reduced by 22% because the 2020 planted area was up compared to 2019, encouraged by good prices during last year.

The most abundant size is 210 grains/100 gr. 2020 crop quality is very good, with even color, good hydration parameters, and no wrinkle damage. Buyers need to pay a premium to get



bigger calibers (if available), and prices are lower for beans around 250 gr/grains. 2020 Argentine alubia production cost was around US\$635 per hectare.

#### **Argentina Alubia Bean Production**

Argentina	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Alubia	169,000	178,000	200,000	192,500	184,875

*Source: USDBC's reports*

#### **Egypt (alubia)**

Alubias are more of an export commodity for Egypt, since around 85% of the production is normally exported. The main pulse consumed in the country are Faba beans, of which there is a domestic production of around 120,000 MT per year and imports of around 550,000 MT per year. Faba beans are only grown during the summer crop.

Egypt grows two crops per year, winter, and summer crop, being the second one the most important. Summer crop is harvested at the end of May, and its characterized by smaller caliber alubias. The winter crop, on the other hand, is smaller but alubias from that crop are bigger in caliber and whiter than those obtained from the summer crop, although moisture tend to be higher.

#### **Egypt Alubia Bean Production**

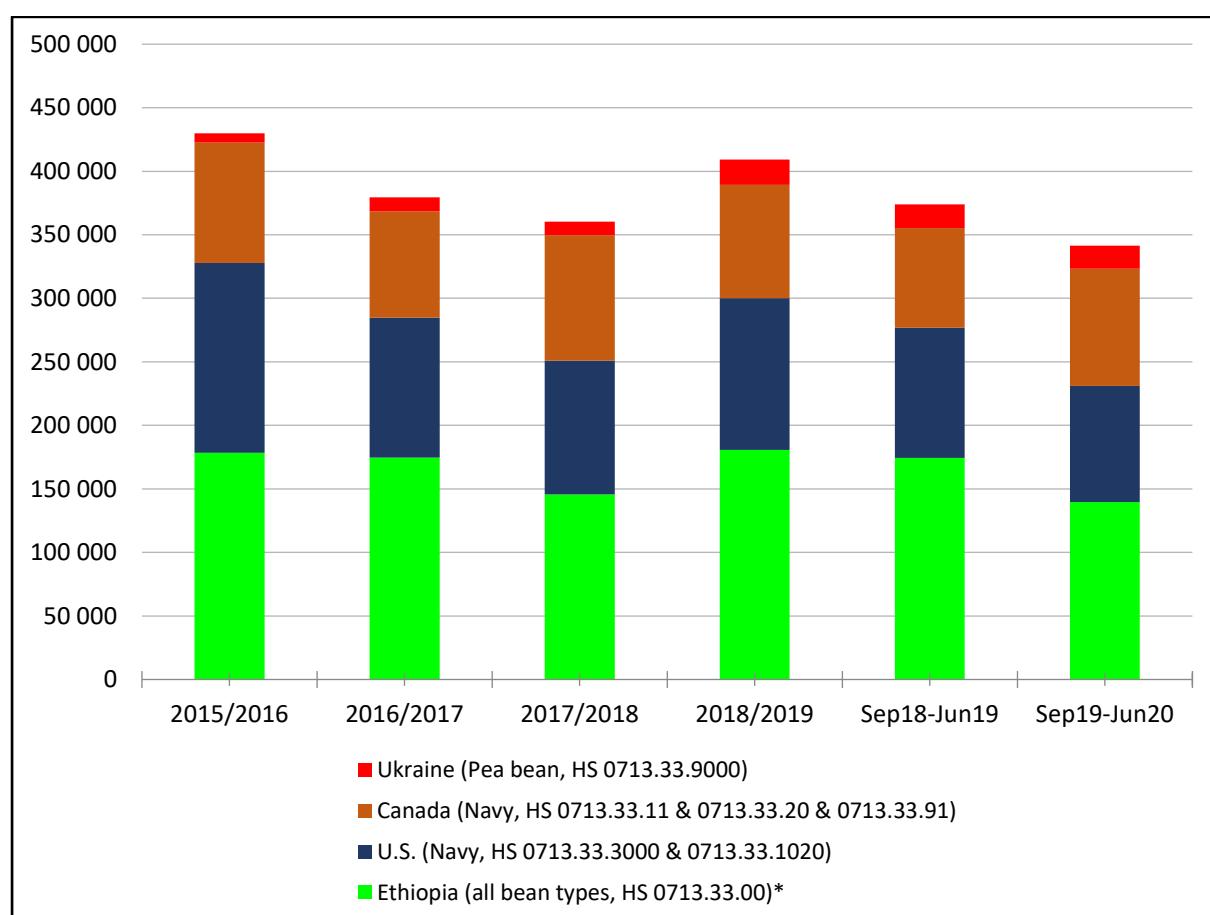
Egypt	2017 Production	2018 Production	2019 Production	2020 Production (Estimate)	Average Production
Alubia	126,000	112,000	168,000	104,000	127,500

*Source: GPC*

## Global White Bean Exports

The following charts show the export statistics of the main white bean producing countries. The period (September-August) does not necessarily match the marketing year in every country but has been adapted to the U.S. marketing year. China's exports were not included, because all Chinese beans are exported under the same HS code (0713.33.90) along with black beans and all other *Phaseolus vulgaris*, therefore it would distort greatly the world panorama. Alternative export estimation methods are being sought for that country.

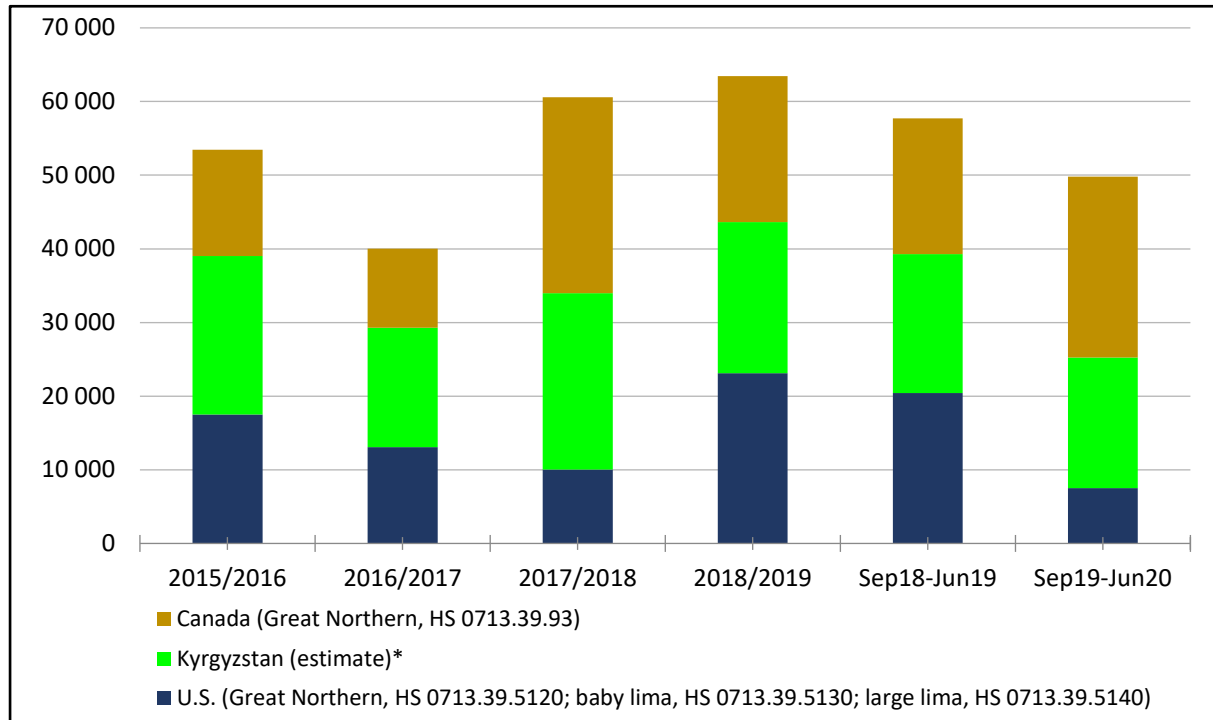
**Main Small White Bean Exports, September – August (MT)**



**Source: FAS GATS, Statistics Canada, Ukraine State Customs Committee, and Ethiopia Revenue and Customs Service**

\* Ethiopia exports all *Phaseolus vulgaris* bean classes under HS code 0713.33.00 and therefore exports shown in the chart above are overestimated since Ethiopia also export red beans.

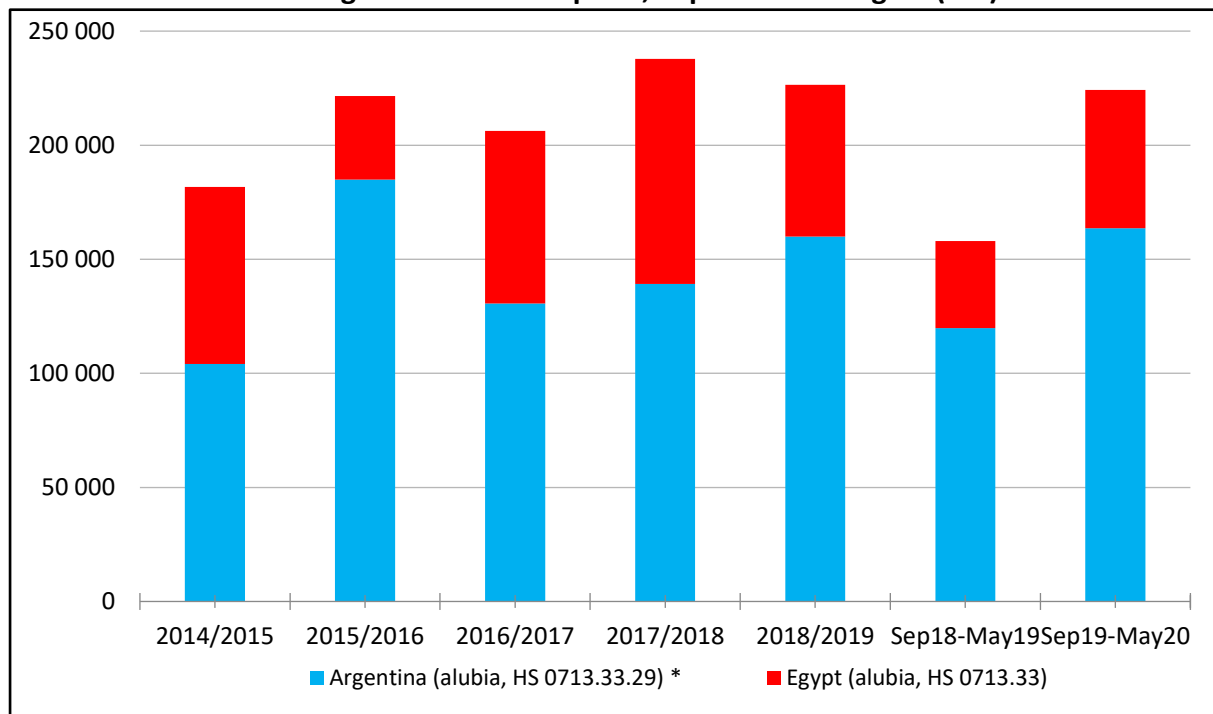
### Main Medium White Bean Exports, September – August (MT)



**Source: FAS GATS, Statistics Canada, TDM**

\*Kyrgyzstan white bean exports were estimated as 45% world imports from Kyrgyzstan, since that country does not have updated export statistics. The 45% ratio was used to reflect the proportion of lopatka beans against total production.

### Main Large White Bean Exports, September – August (MT)



**Source: Softrade, Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS)**

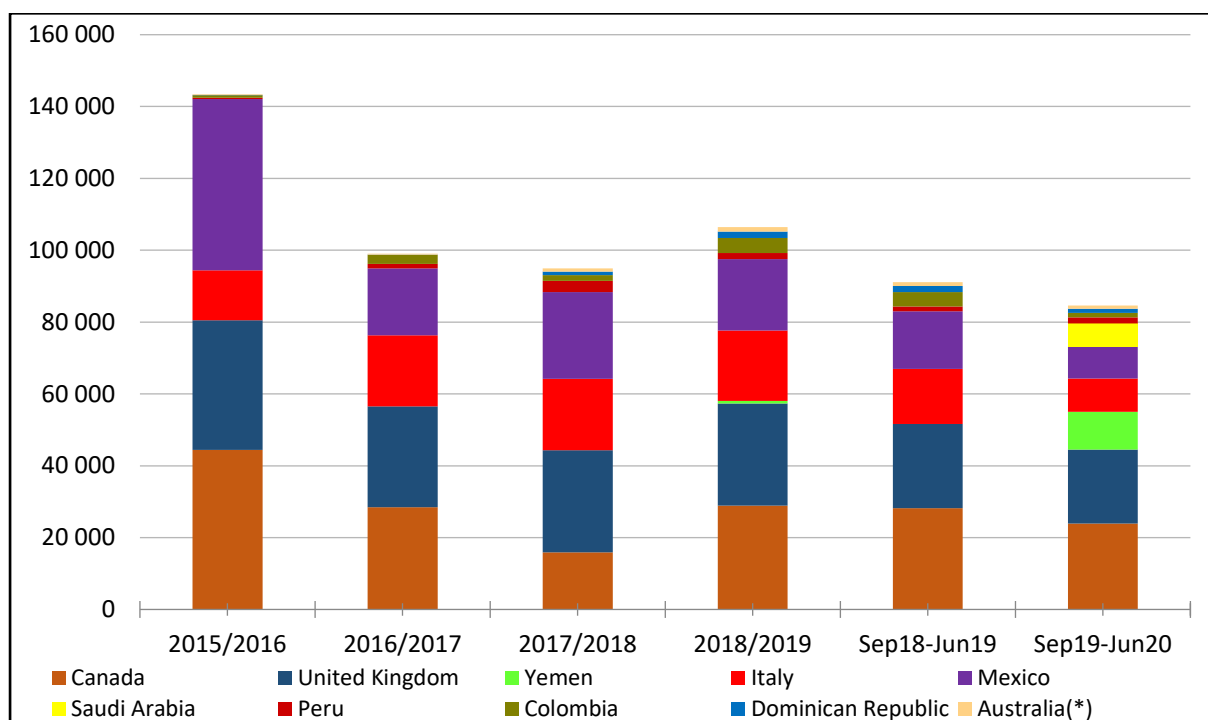
\* Argentina exports period was changed to September-August to be comparable with Egypt.

## United States

### Navy Beans

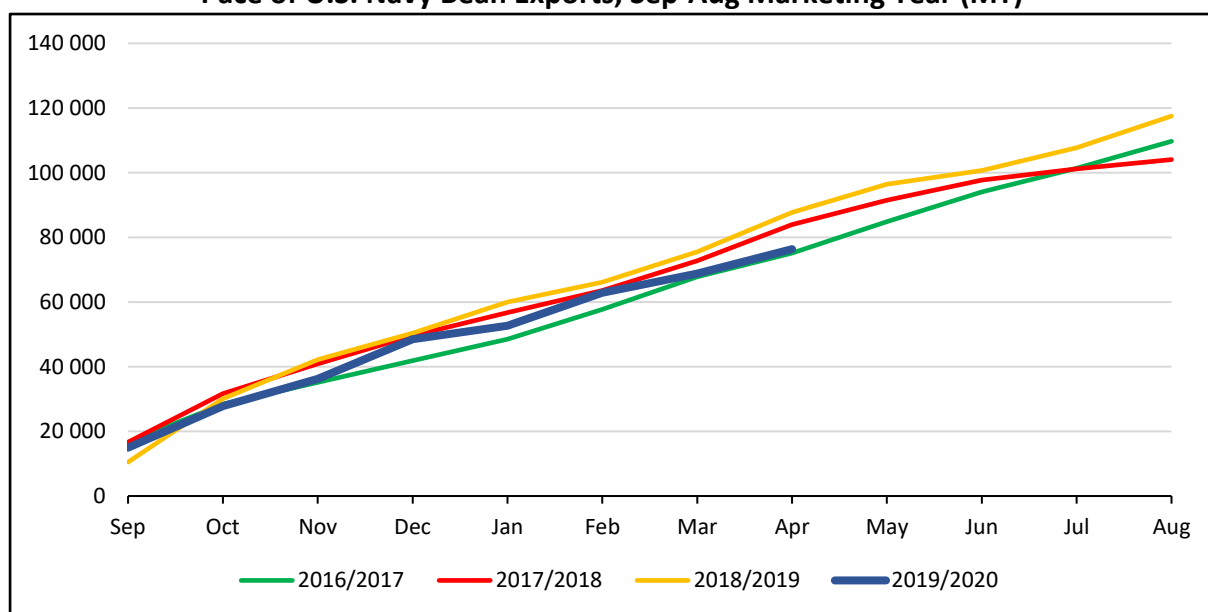
From September 2019 through June 2020, the U.S. exported 91,362 MT of navy beans, down 11% over the same period the previous MY (102,112 MT). The top destinations were Canada (23,905 MT), the U.K. (21,454 MT), Yemen (10,535 MT), Italy (9,234 MT), and Mexico (8,985 MT).

**U.S. Top Navy Bean Export Destinations (Marketing Year Sep-Aug, MT)**



Source: FAS GATS

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

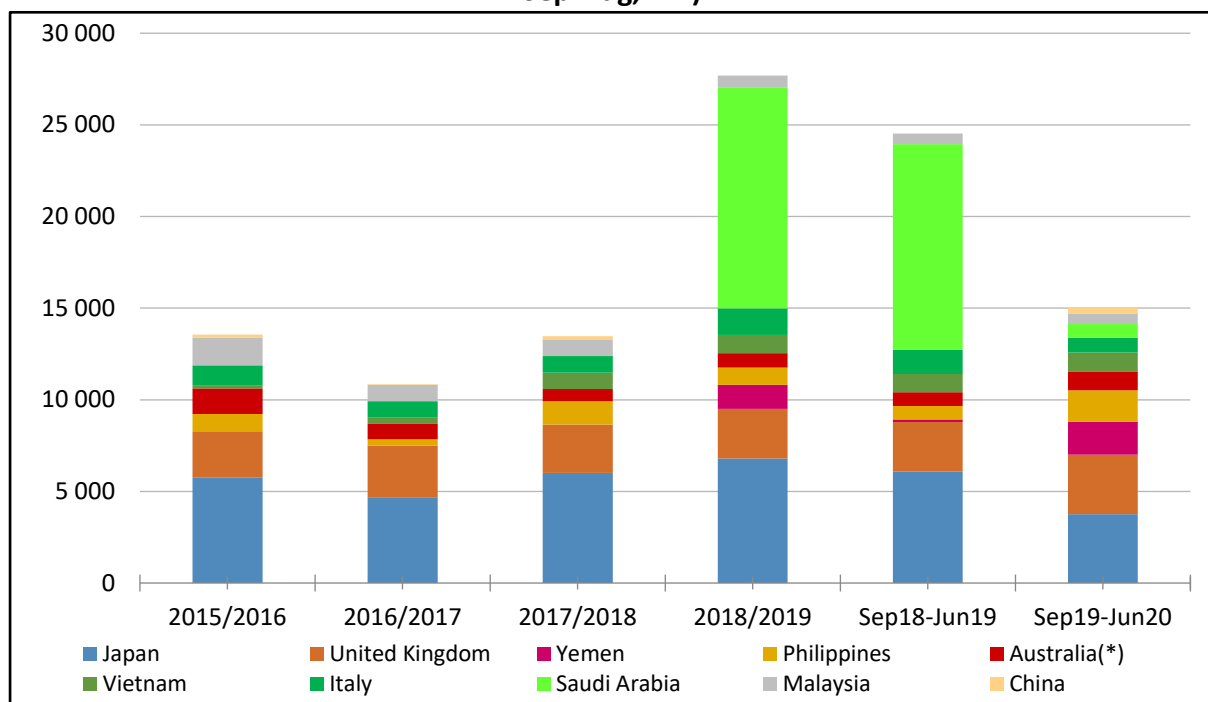


Source: U.S. Census Bureau

## Great Northern, Lima, and Baby Lima Beans

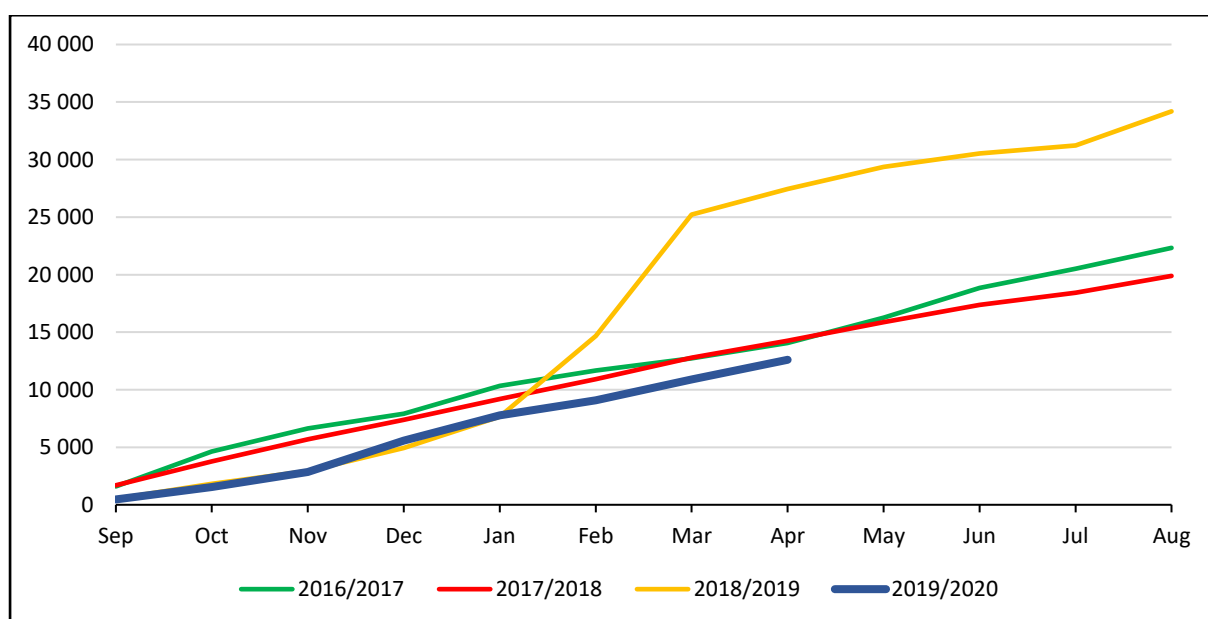
From September 2019 through June 2020, the U.S. exported 16,144 MT of Lima, Baby Lima, and Great Northern beans, down 47% over the same period the previous MY (30,523 MT). The top destinations were Japan (3,761 MT), the U.K. (3,236 MT), Yemen (1,802 MT), Philippines (1,713 MT), Australia (1,039 MT), and Vietnam (1,018 MT).

### U.S. Top Great Northern, Lima, and Baby Lima Bean Export Destinations (Marketing Year Sep-Aug, MT)



Source: FAS GATS

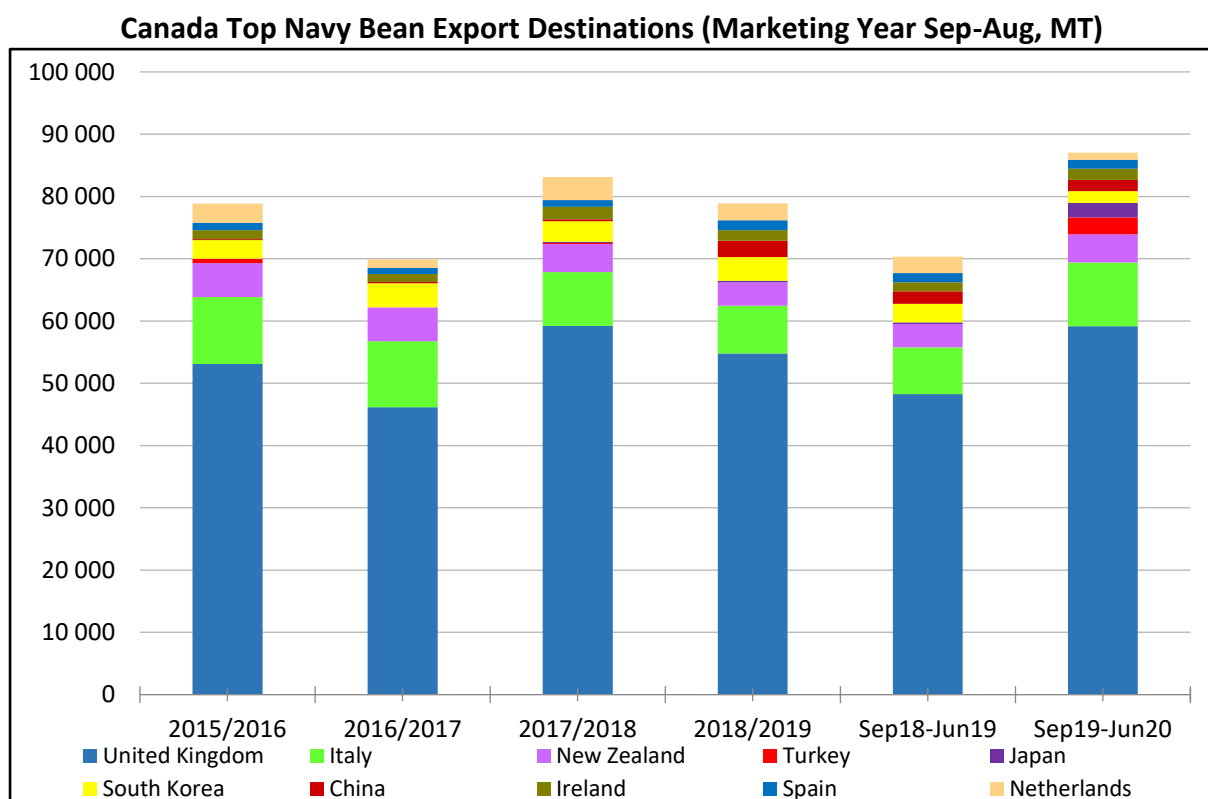
### Pace of U.S. Great Northern, Lima, and Baby Lima Bean Exports, Sep-Aug Marketing Year (MT)



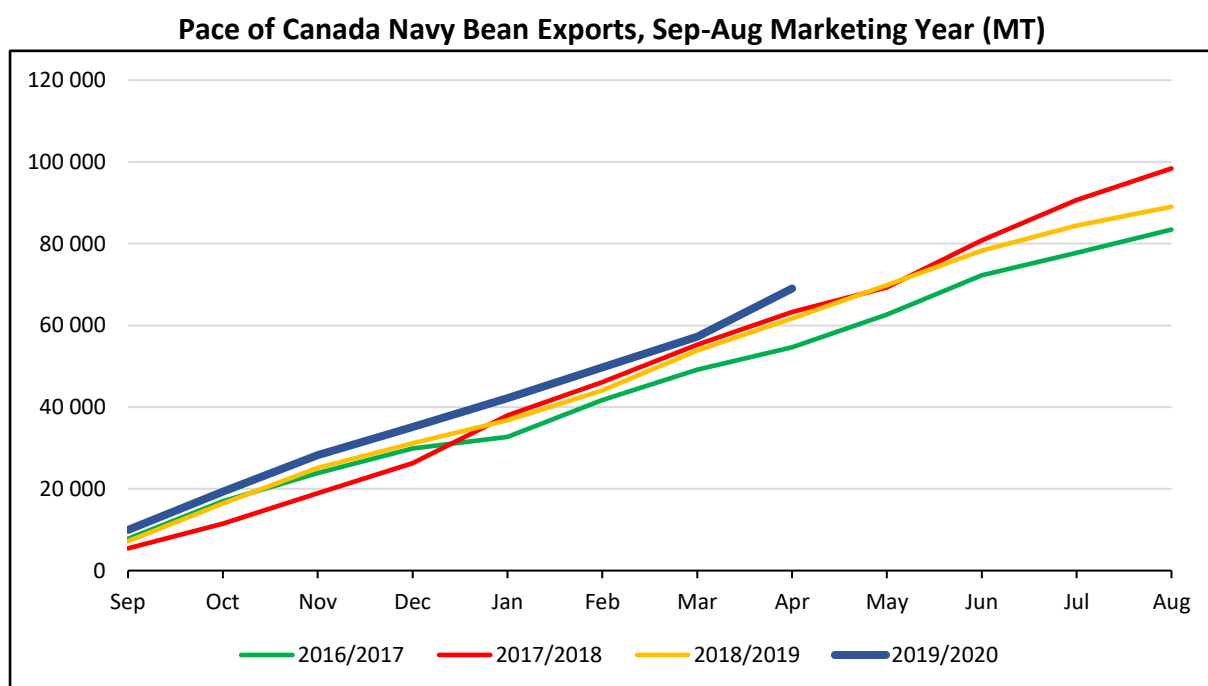
Source: U.S. Census Bureau

## Canada, Navy Beans

From September 2019 through June 2020, Canada exported 92,425 MT of navy beans, up 18% over the same period the previous MY (78,319 MT). The top destinations were the U.K. (59,180 MT), Italy (10,222 MT), New Zealand (4,494 MT), Turkey (2,729 MT), and Japan (2,352 MT).



Source: Statistics Canada

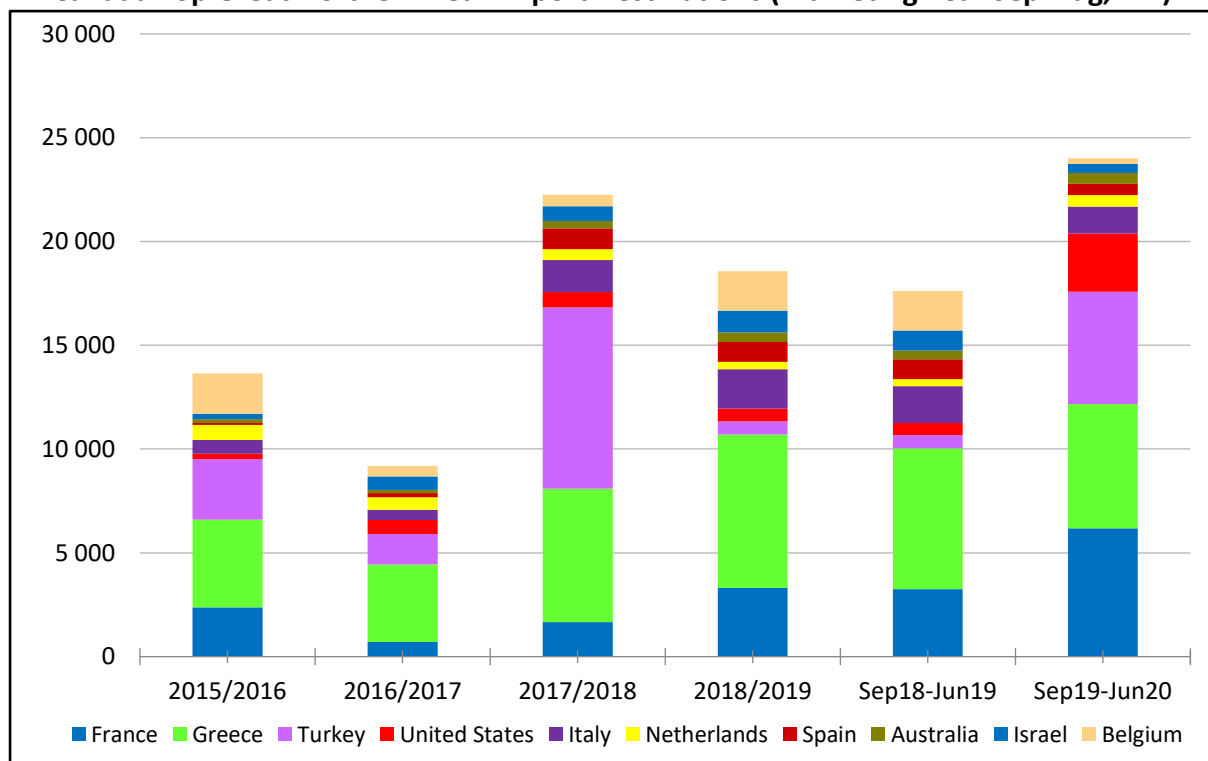


Source: Statistics Canada

## Canada, Great Northern

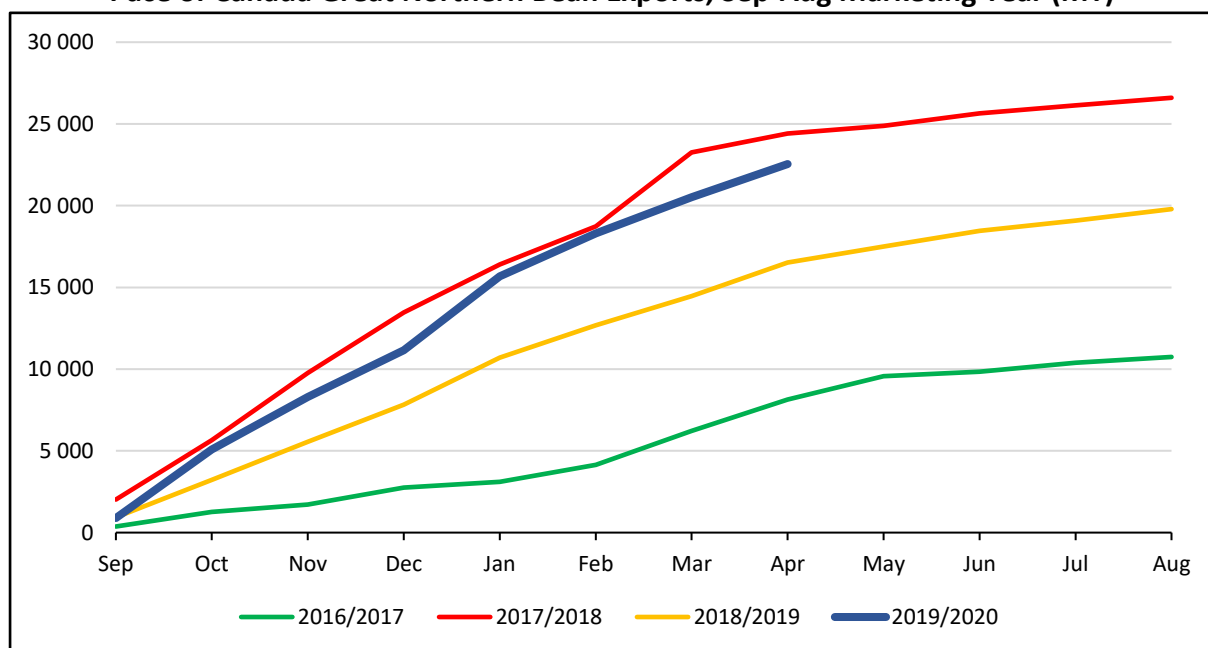
From September 2019 through June 2020, Canada exported 24,557 MT of Great Northern beans, up 33% over the same period the previous MY (18,452 MT). The top destinations were the France (6,189 MT), Greece (5,976 MT), Turkey (5,408 MT), the U.S. (2,818 MT), and Italy (1,291 MT).

**Canada Top Great Northern Bean Export Destinations (Marketing Year Sep-Aug, MT)**



Source: Statistics Canada

**Pace of Canada Great Northern Bean Exports, Sep-Aug Marketing Year (MT)**



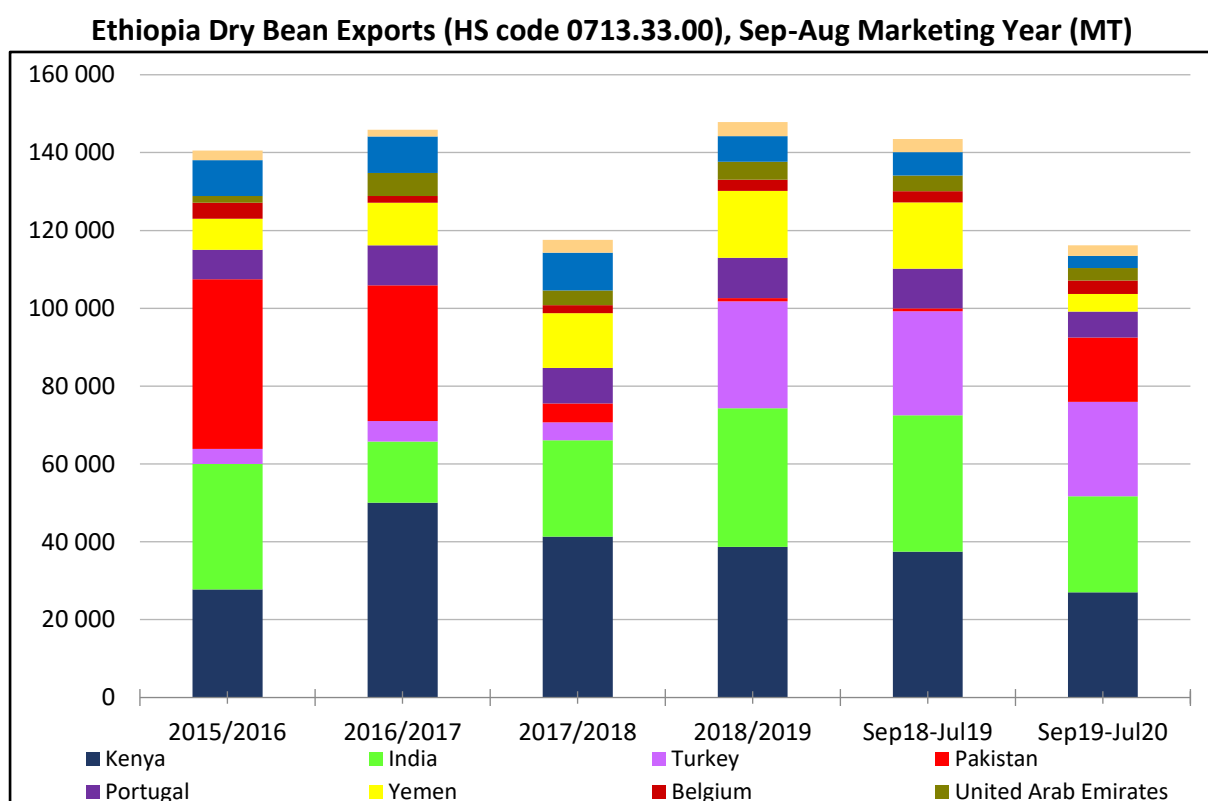
Source: Statistics Canada

## Ethiopia, Pea Beans

Ethiopia exports all *Phaseolus vulgaris* bean classes under HS code 0713.33.00. A method or data source that allow to discriminate by bean kind is being looked for. Nevertheless, since most dry beans produced and exported by Ethiopia are pea beans, total dry bean exports under the previously mentioned HS code is valuable to estimate pea bean exports.

Nevertheless, it is important to note that it is an overestimation.

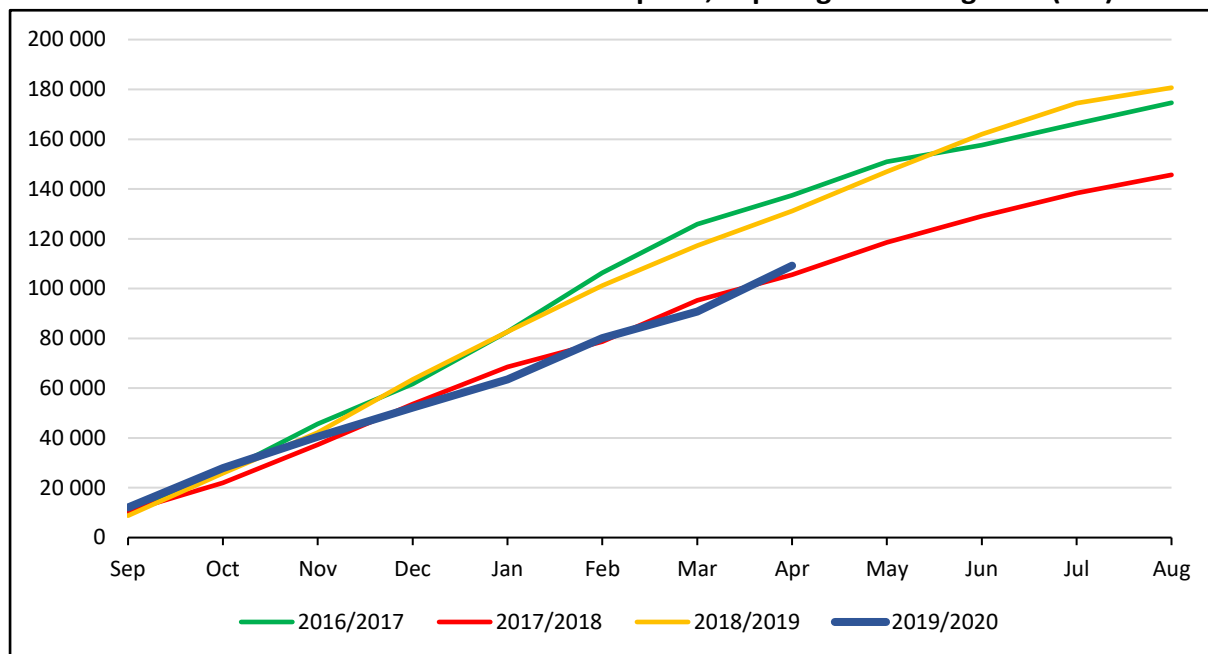
From September 2019 through July 2020, Ethiopia exported 139,619 MT of dry beans, down 20% over the same period the previous MY (174,494 MT). The top destinations were the Kenia (27,021 MT), India (24,663 MT), Turkey (24,263 MT), Pakistan (16,527 MT), and Portugal (6,673 MT).



Source: Ethiopia Revenue and Customs Service



**Pace of Canada Great Northern Bean Exports, Sep-Aug Marketing Year (MT)**

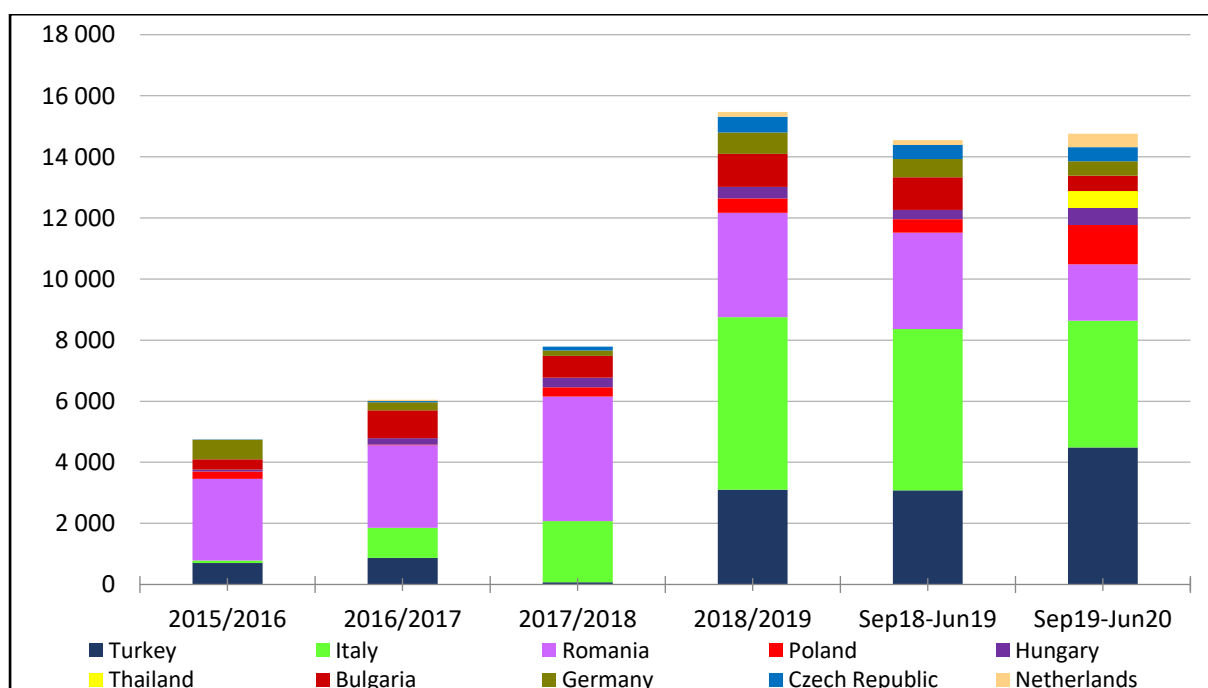


Source: *Ethiopia Revenue and Customs Service*

### Ukraine, Pea Beans

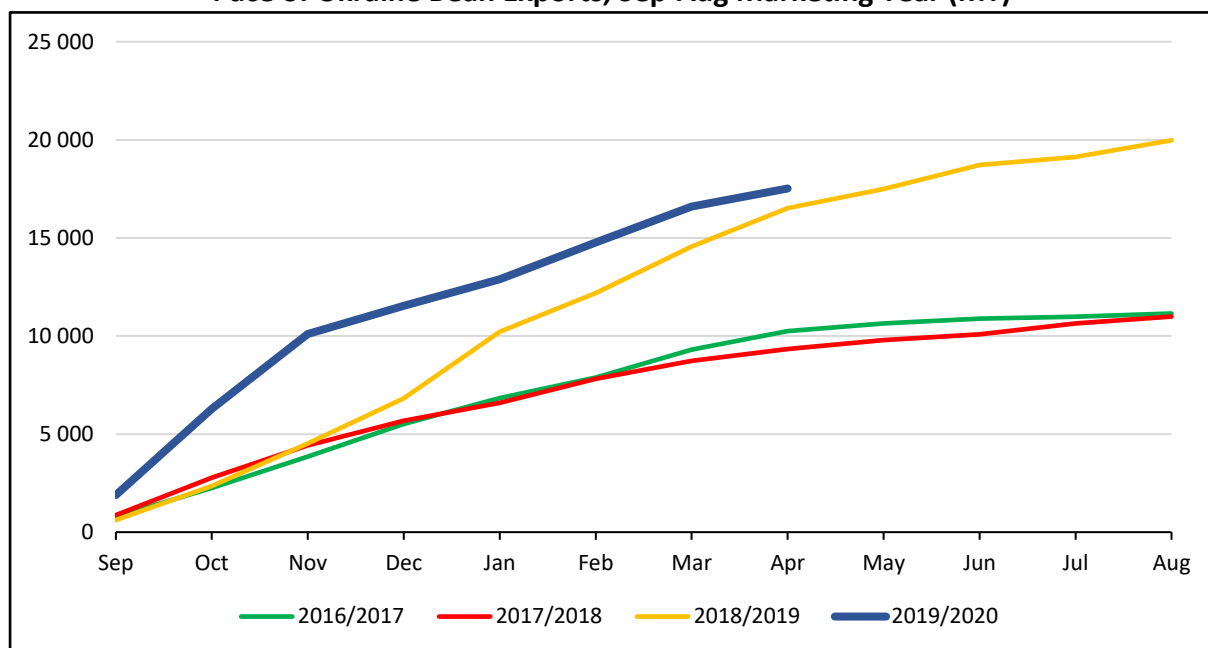
From September 2019 through June 2020, Ukraine exported 18,020 MT of pea beans, down 4% over the same period the previous MY (18,712 MT). The top destinations were the Turkey (4,491 MT), Italy (4,141 MT), Romania (1,852 MT), Poland (1,286 MT), and Hungary (559 MT). Ukraine pea bean export have been steadily increasing over the last years, along with its production.

**Ukraine Pea Bean Exports (HS code 0713.33.00), Sep-Aug Marketing Year (MT)**



Source: *Ukraine Customs State Committee*

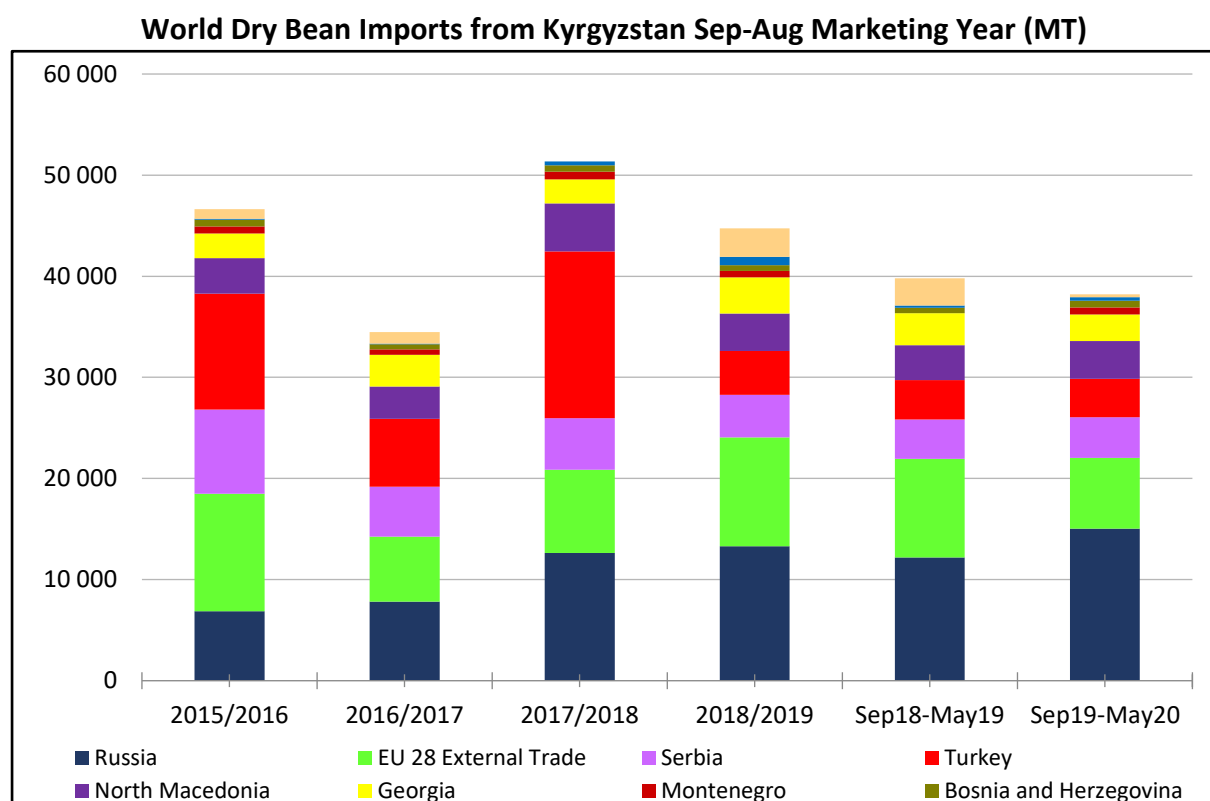
**Pace of Ukraine Bean Exports, Sep-Aug Marketing Year (MT)**



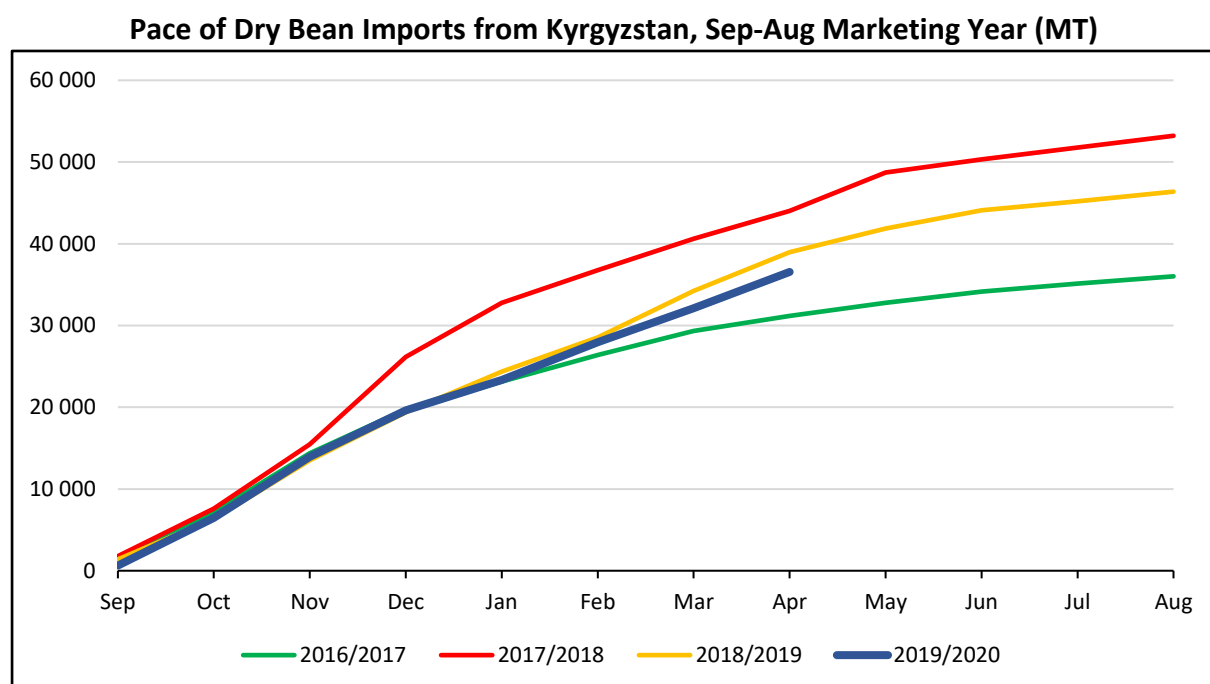
Source: *Ukraine Customs State Committee*

### **Kyrgyzstan, all dry beans kinds**

Kyrgyzstan does not have updated export statistics; therefore, exports were estimated as World imports from Kyrgyzstan. All bean kinds under HS code 0713.33 are considered, being white beans approximately 45% of all imports. From September 2019 through May 2020, 39,441 MT of dry beans were imported from Kyrgyzstan, down 6% over the same period the previous MY (41,863 MT). The top importers were Russia (15,030 MT), the E.U. (7,013 MT), Serbia (4,006 MT), Turkey (3,804 MT), North Macedonia (3,737 MT), and Georgia (2,636 MT).



Source: Trade Data Monitor

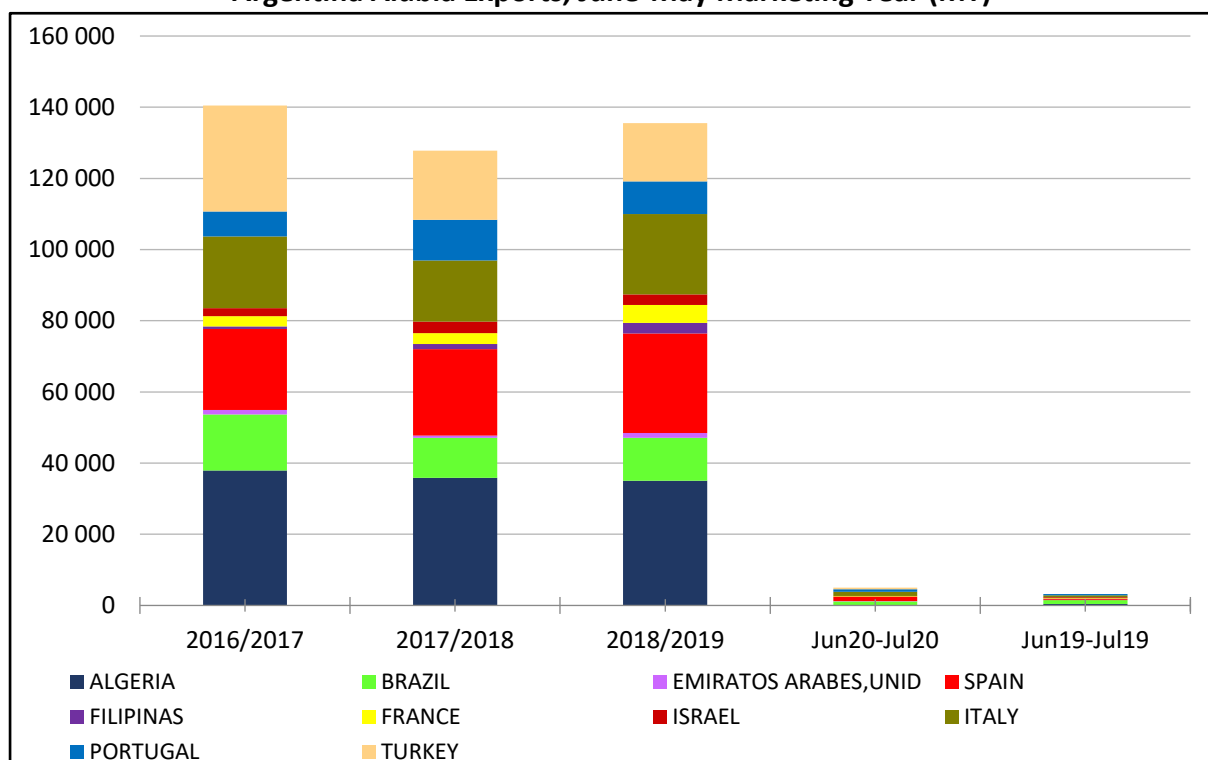


Source: Trade Data Monitor

### Argentina, Alubia

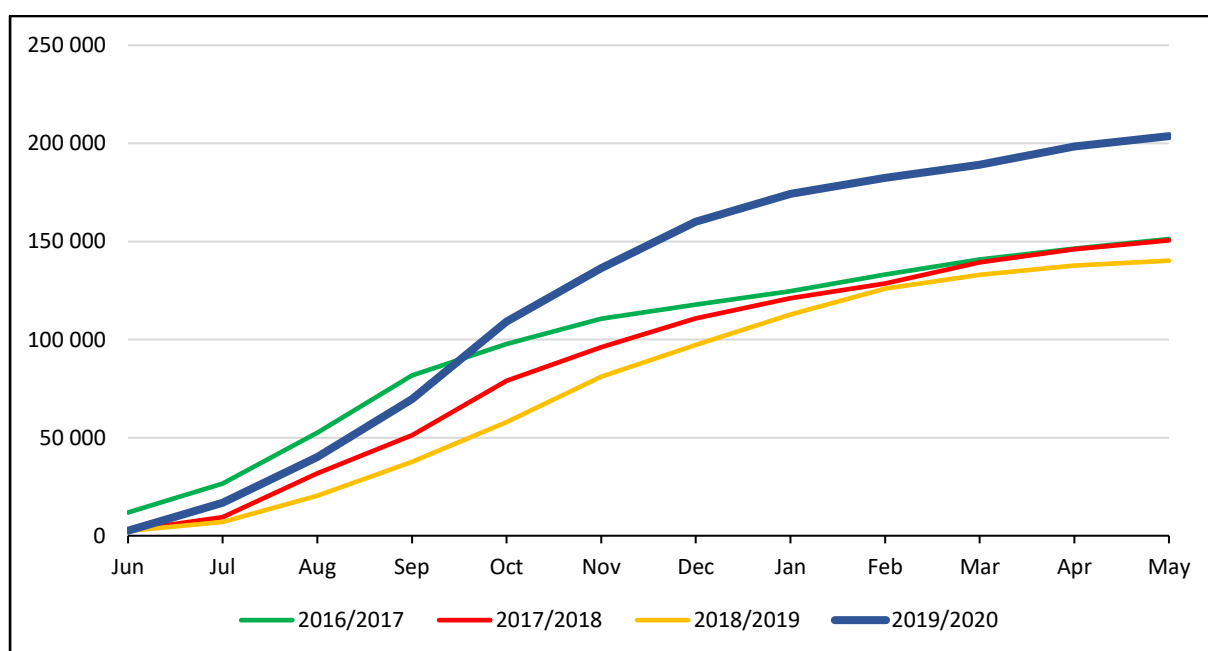
During the first two months of its MY (June – May), Argentina exported 3,516 MT of alubias, down 52% over the same period the previous MY (7,316 MT). The top destinations were the Brazil (1,086 MT), Italy (550 MT), Algeria (375 MT), Portugal (347 MT), and Spain (302 MT).

**Argentina Alubia Exports, June-May Marketing Year (MT)**



Source: Softrade

**Pace of Argentina Alubia Exports, June-May Marketing Year (MT)**



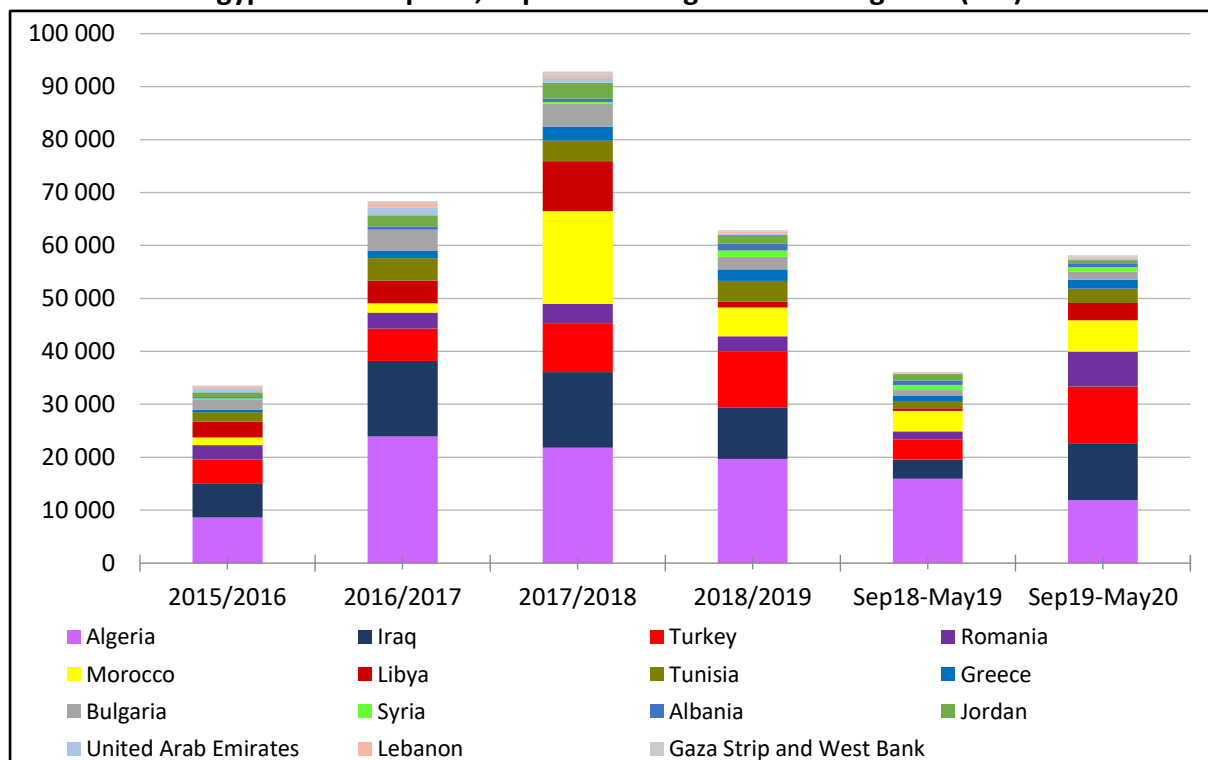
Source: Trade Data Monitor

### Egypt (Alubia)

From September 2019 through May 2020, Egypt exported 60,587 MT of alubias, up 59% over the same period the previous MY (38,120 MT). It appears to be a mistake on the

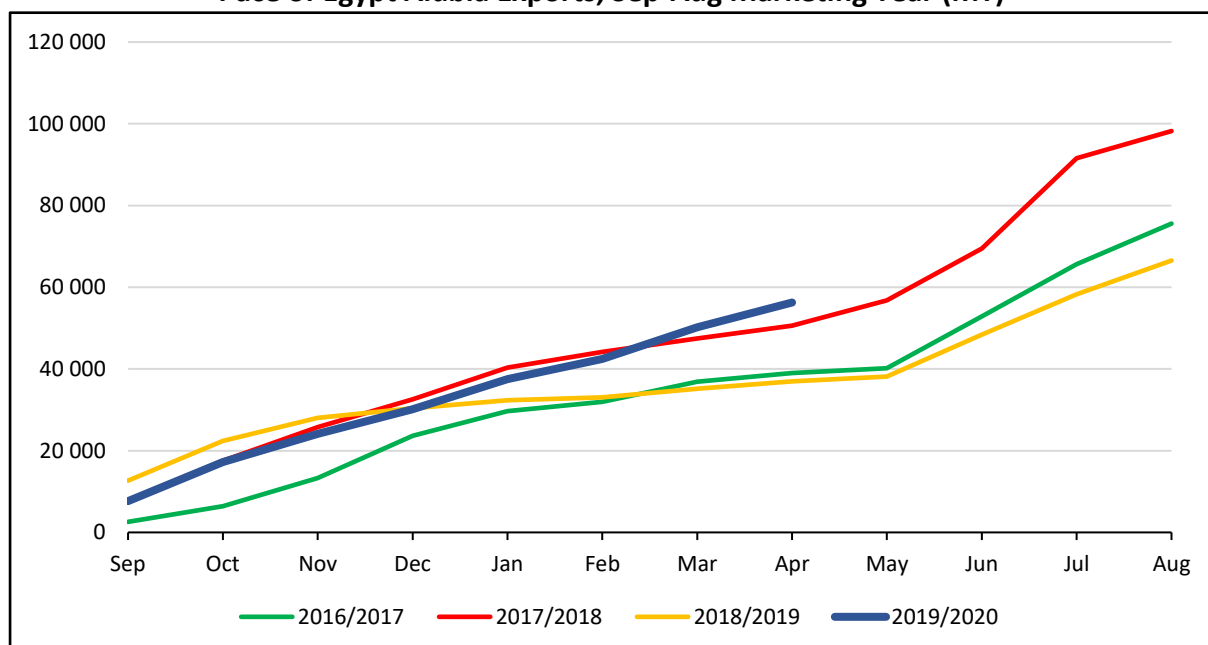
exports to Iraq and Syria during the last MY, and therefore the exports were replaced by the average exports to those two countries over the last 4 years. The top destinations were Algeria (11,861 MT), Turkey (10,714 MT), Romania (6,592 MT), Morocco (5,914 MT), Libya (3,259 MT), and Tunisia (2,713 MT).

**Egypt Alubia Exports, September-August Marketing Year (MT)**



Source: Central Agency for Public Mobilization and Statistics (CAPMAS)

**Pace of Egypt Alubia Exports, Sep-Aug Marketing Year (MT)**



Source: Central Agency for Public Mobilization and Statistics (CAPMAS)

## Conclusion

Most white bean crops are harvested during the second half of the calendar year, and production is concentrated in the Northern hemisphere, except for Argentina. Both small and medium white bean productions are up compared to 2019 and four-year production average. Large white global production, on the other hand, is down compared to last year and four-year average, driven by the poor result of alubia production in both Argentina and Egypt.

Regarding trade, notable changes include:

- The retaliatory tariffs imposed by the EU to the U.S. impacted navy and Great Northern exports to that market, which was partially compensated by exports to Yemen and Saudi Arabia.
- The decrease in the relative importance of China as a white bean producer and exporter, which will probably become a net importer in the near future.
- Ukraine pea bean exports are increasing at a high rate, along with its production, taking advantage of its privileged geographical position.