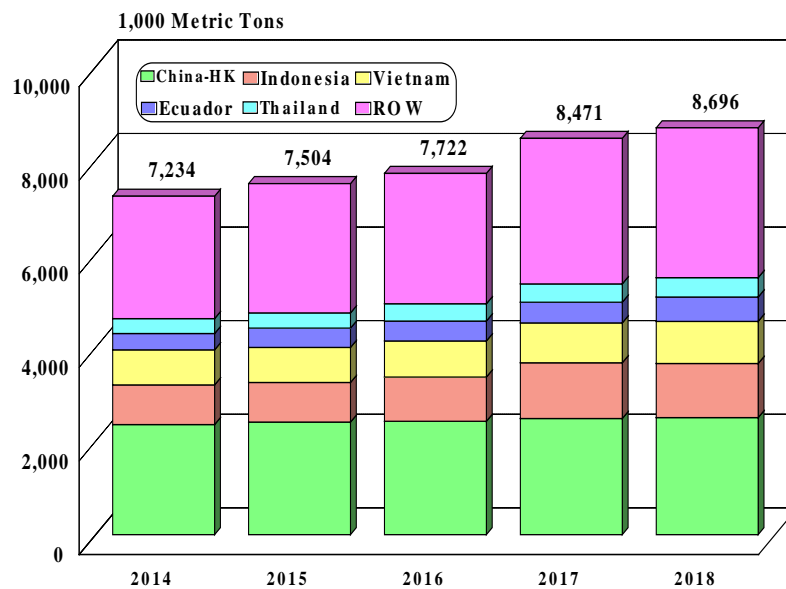




GLOBAL MARKETS FOR TEXAS SHRIMP¹

World production of shrimp was 9.5 million metric tons (MMT), of which 8.7 MMT was marine caught. The United States and major competitors produced 6.6 MMT of total shrimp production, 69.5 percent, and 5.9 MMT of marine caught shrimp, or 67.8 percent. The United States produces between 1.4-1.8 percent of the total world shrimp production, 132 thousand metric tons (TMT) in 2018 all of which is marine caught.

World Shrimp Production, 2014-2018



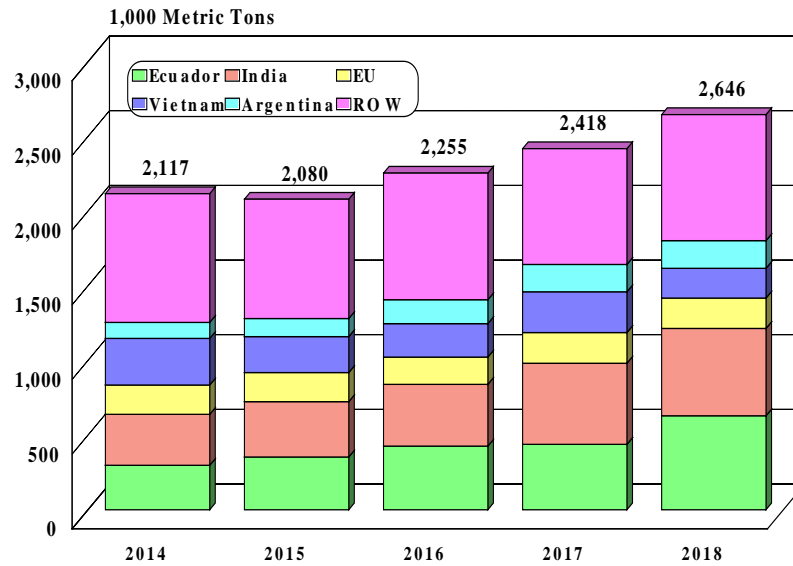
Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

Global exports of frozen and non-frozen shrimp have increased since 2015. Frozen shrimp exports during 2018 were 2.65 MMT. The largest exporters of frozen shrimp are Ecuador and India. Ecuador, which has increased frozen shrimp production from 298 TMT in 2014 to 629 TMT in 2018, saw rises in exports of more than 50 TMT during four of the five years, with the largest being a 90 TMT increase from 2017 to 2018. India also had major growth in shrimp production during this time, increasing from 341 TMT to 584 TMT. There has been a 30 to 40 TMT increase of exports every year, except in 2017 when there was a 129 TMT increase in Indian shrimp exports. These two countries have accounted for between 30 to 45 percent of

¹ *Global Markets for Texas Shrimp* is a report of the project Export Market Analysis for Selected Texas Commodities, funded by the Texas Department of Agriculture. For more information, please contact the Center for North American Studies, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, College Station, TX, 77843-2124. 979-845-3070.

frozen shrimp exports. The EU, Vietnam, and Argentina had similar frozen shrimp exports during 2018, nearly 200 TMT each. While other major countries had increases in exports for the most part, Vietnam has seen shrimp exports decrease each year with the exception to 2017. Together, these countries are the source of between 59 and 68 percent of world frozen shrimp exports.

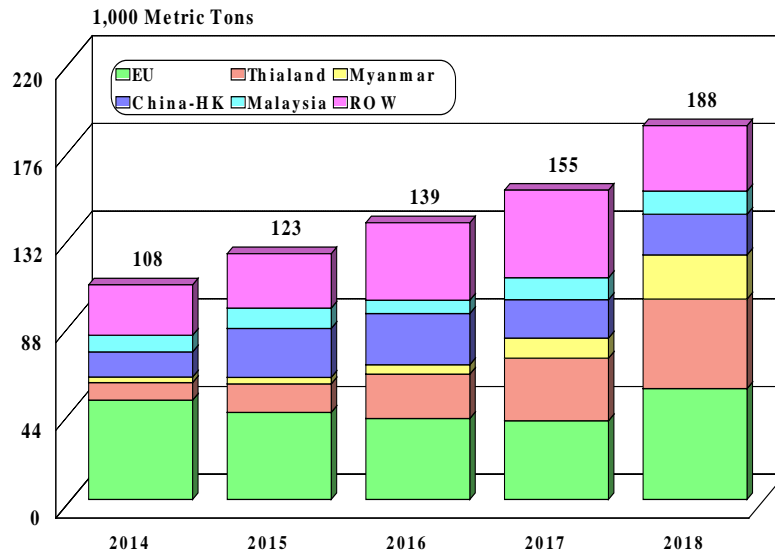
World Frozen Shrimp Exports, 2014-2018



Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

The world market for non-frozen shrimp exports at 188 TMT is considerably smaller than frozen, but has grown each year since 2014. The largest exports of non-frozen shrimp are the EU and Thailand. The EU has grown slightly in their non-frozen shrimp exports to arrive at 55 TMT of non-frozen shrimp exports during 2018, but Thailand has increased exports from 8.8 TMT in 2014, to 45 TMT. Similar large growth can be seen in Myanmar. The EU, Thailand, Myanmar, China-HK, and Malaysia make up between 71 and 82 percent of non-frozen shrimp exports.

World Non-Frozen Shrimp Exports, 2014-2018

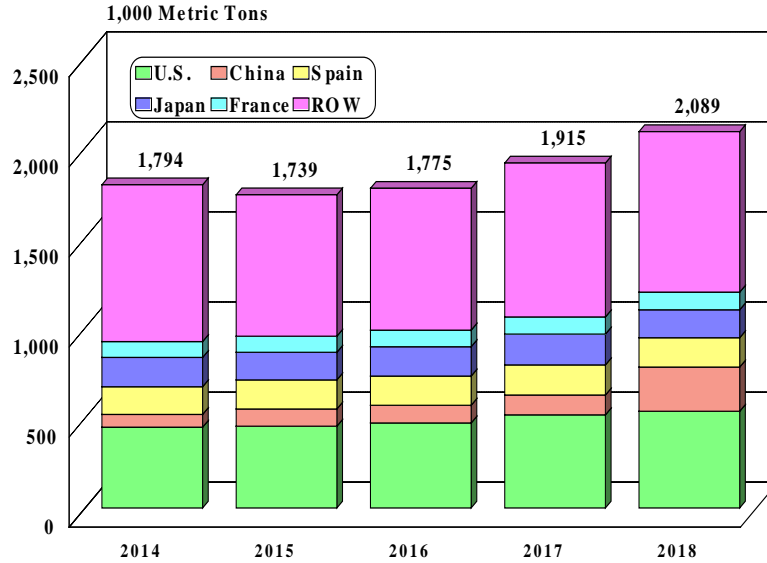


Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

World Frozen shrimp imports in 2018 were 2,089 TMT. The United States is the world's largest importer of frozen shrimp totaling 536 TMT, just over 25 percent of total frozen imports. U.S. frozen shrimp imports have averaged 450 TMT since 2010. Following the United States are China, Spain, Japan, and France. In 2018, these countries imported a total of 661 TMT. The rest of the world imported the remaining 891 TMT in 2018, 47 percent of total frozen shrimp.

Frozen shrimp imports in 2018 were the highest since 2010, but imports have increased every year since 2013. The United States has seen a 100 TMT increase in imports of frozen shrimp from 2014 to 2018, or a 20 percent increase. China also had a 193 TMT increase in frozen shrimp imports over that time, a 245 percent increase, while all importers after the top five increased by an additional 21 TMT, or 2 percent. Health perception of shrimp has been a major driver for increasing demand in China in addition to portions of the population shifting from vegetarian diets to consuming more animal proteins.

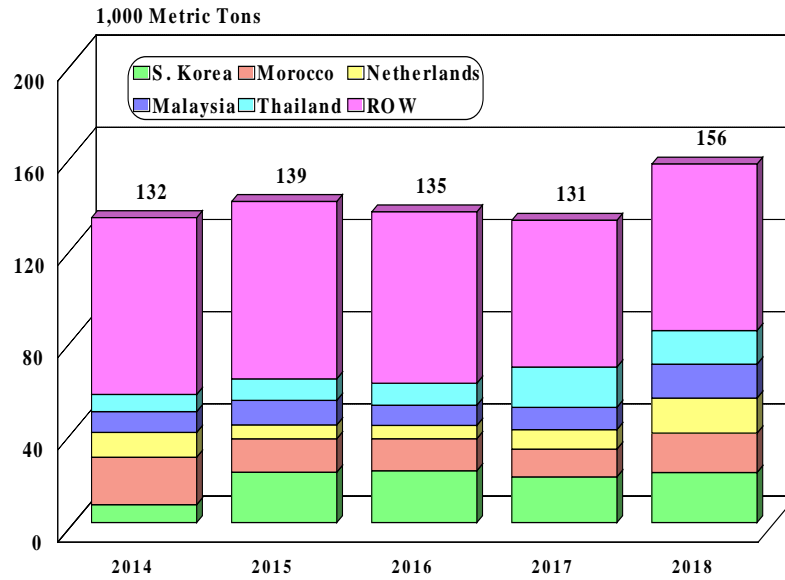
World Frozen Shrimp Imports, 2014-2018



Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

World non-frozen shrimp imports have historically been less than frozen shrimp, in 2018 non-frozen imports totaled 156 TMT. World imports of non-frozen shrimp have averaged 139.6 TMT since 2010. The five largest import markets of non-frozen shrimp are South Korea, Morocco, the Netherlands, Malaysia, and Thailand. Together these countries accounted for 83.3 TMT, or 53 percent, of non-frozen shrimp imports in 2018. Each of the countries mentioned are relatively close to the high-production Asian countries where much of their non-frozen shrimp is sourced. Please note that total imports of frozen and non-frozen are estimated to be 600 TMT lower than exports this is assumed to be due to differences in how countries report exports and imports.

World Non-Frozen Shrimp Imports, 2014-2018



Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

U.S. Shrimp Production and Exports

The United States production of shrimp is very highly concentrated in the Gulf Coast region. During 2018 the states using the Gulf of Mexico amounted to nearly 75 percent of all U.S. shrimp production. Louisiana led U.S. production with just under a third of total U.S. shrimp at 41.1 TMT. This is followed by Texas which produced 32.7 TMT. Texas and Louisiana along with Alabama, Mississippi, and the west coast of Florida make up the states which rely on the Gulf Coast for shrimp production, these states together totaled 97.7 TMT. With shrimp primarily being caught in the Gulf of Mexico, the focus of this paper will be on shrimp imports from non-cold water.

U.S. Shrimp Production by State, 2018

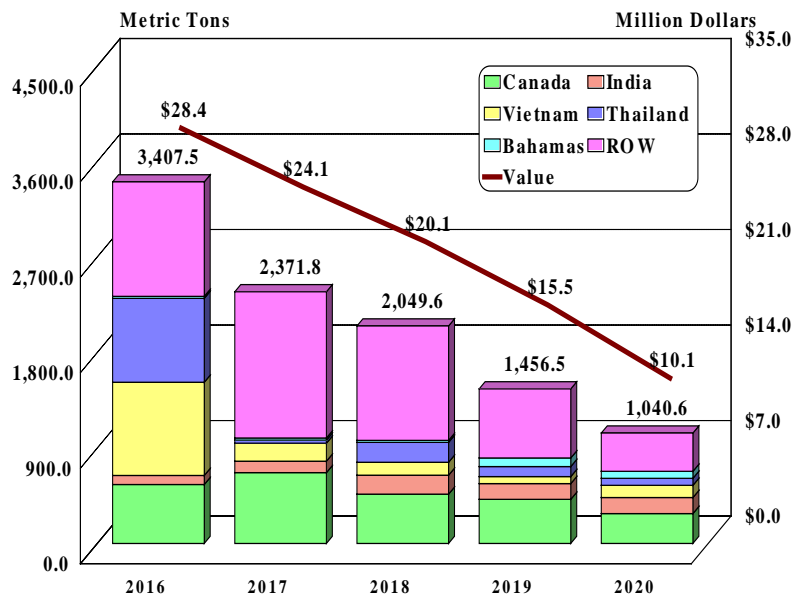
	1,000 MT	Percent Change (2017)
Louisiana	41.1	-3%
Texas	32.7	-4%
Alabama	12.8	16%
Florida West Coast	6.6	6%
Mississippi	4.5	-3%
Oregon	16.2	55%
Washington	4.2	24%
California	2.8	37%

Other States	10.3	
Total Production	131.2	2%

Source: Fisheries of the United States Annual Report, 2018

U.S. exports of frozen shrimp have been declining since 2016 as U.S. shrimp production is consumed domestically. In 2020, frozen shrimp exports amounted to 1,040.6 MT valued at \$10.1 million. Canada has been the largest importer of U.S. frozen shrimp since 2016. Canada is the market for 16–28 percent of U.S. frozen shrimp exports. Other countries that are major markets for U.S. frozen shrimp include India, Vietnam, Thailand, and the Bahamas.

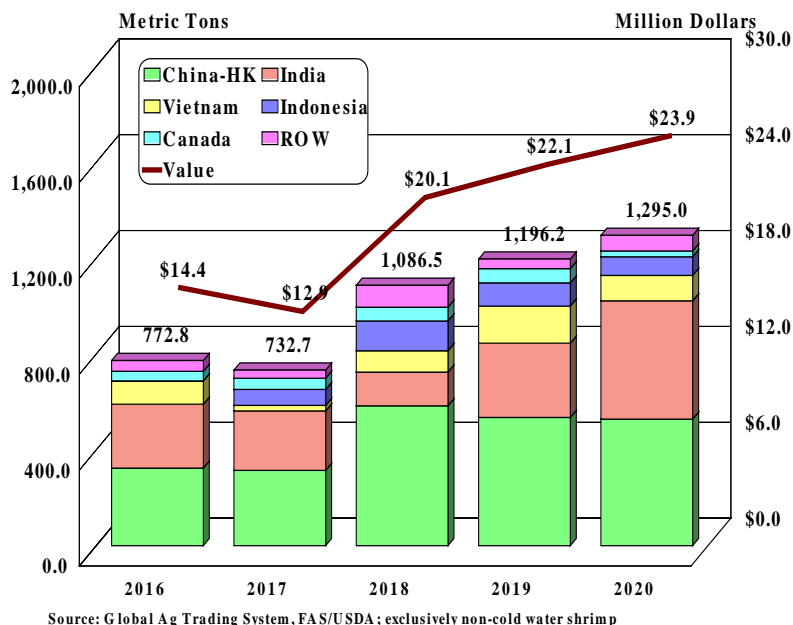
U.S. Frozen Shrimp Exports, 2016-2020



Source: Global Ag Trading System, FAS/USDA; exclusively non-cold water shrimp

U.S. non-frozen shrimp exports are primarily sent to China–Hong Kong and India. Vietnam, Indonesia, and Canada are also notable markets for U.S. non-frozen. In 2020, 1,295 MT of non-frozen shrimp were exported from the United States, valued at \$23.9 million. The value for 2020 exports is near double both quantity and value of what was seen in 2016. Exports of non-frozen shrimp have been on the rise since 2017, despite exports of frozen shrimp decreasing. During the past year non-frozen exports even surpassed frozen shrimp exports.

U.S. Non-Frozen Shrimp Exports, 2016-2020



France is one such country that has been seen to have shifting preferences from frozen shrimp to the non-frozen variety. An article in *Seafood Source* talks about these shifting preferences:

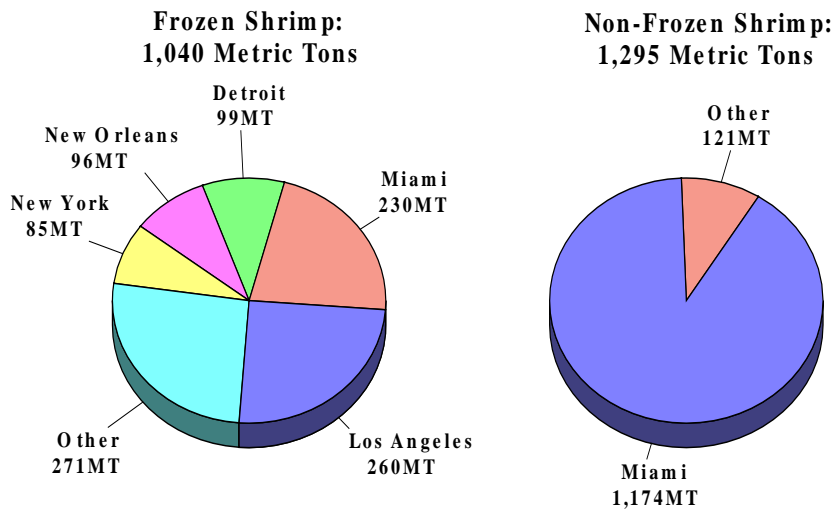
“Most tropical shrimp are still marketed whole in France, but demand for easy-to-cook and convenience food products is growing, resulting in a rise in sales of headed and peeled cooked and chilled shrimp, and marinated shrimp products.”

Increased consumer demand for easy-to-cook products is likely a major reason for increased exports of non-frozen shrimp.

Total U.S. exports of non-cold water shrimp during 2020 were 2,335 MT with slightly more than half of those exports being non-frozen shrimp as mentioned earlier. Nearly half of frozen shrimp exports left through the port of Los Angeles or from Miami. With Los Angeles supplying much of the Asian markets supply of U.S. frozen shrimp and Miami being the source of most of the EU market. Non-frozen shrimp exports went almost entirely through the port of Miami, 1,174 MT or 90 percent with the primary destinations being India and China-Hong Kong. Following Miami was the port of Houston and Dallas-Fort Worth which together were responsible for 87 MT of the remaining 121 MT of exports.

Despite Louisiana and Texas being the two largest producers of shrimp in the United States, only a small portion of shrimp is exported through Texas or Louisiana port districts. During 2018, total shrimp exports were 3,135 MT, but total production in the United States was 131,000 MT so exports accounted for only 1.08 percent of total production of shrimp.

U.S. Shrimp Exports by Port District, 2020



Source: U.S. Census Bureau from WiserTrade; exclusively non-cold water shrimp

Barriers to Trade

Canada and India have no tariff on U.S. shrimp imports. Meanwhile, the EU has set a 12 percent tariff on U.S. shrimp and in China U.S. face a 32-42 percent tariff rate, though exporters can apply for an exclusion. Also, Russia has tariffs of 3-6 percent on U.S. shrimp. Despite facing low tariffs in the Russian market, U.S. shrimp have been unable to enter the Russian market due to a ban on many U.S. products, which includes shrimp, since 2014.

India has no permit or certification requirements on imported shrimp. China, Vietnam, and Russia each have requirements for a bilingual health certificate. Canada requires both a health certificate and import permit (IP) depending on the species of shrimp.

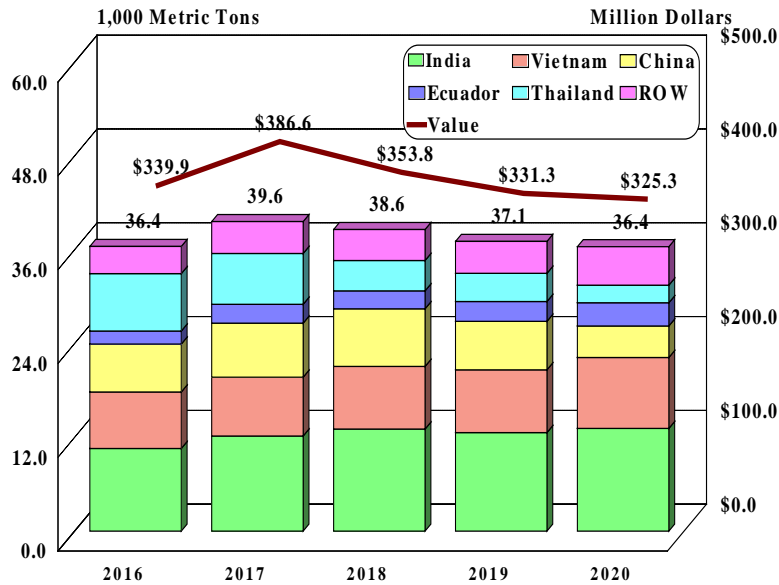
Foreign Importers are responsible for obtaining an IP. For more information about specific country import requirements contact the National Oceanic and Atmospheric Administration who has compiled foreign country import requirements of fish and fishery products.

<https://www.fisheries.noaa.gov/national/seafood-commerce-certification/foreign-approved-lists>

U.S. Shrimp Exports to Canada

During 2020, Canada imported 36.4 TMT of frozen shrimp that was valued at \$325.3 million. U.S. frozen shrimp exports to Canada during 2020 totaled 288.1 MT valued at \$2.51 million, or 0.8 percent of Canadian frozen shrimp imports. The bulk of Canadian frozen shrimp imports came from India, Vietnam, China, Ecuador, and Thailand.

Canada Frozen Shrimp Imports, 2016-2020



Source: WisierTrade; StatCan, Statistics of Canada; exclusively non-cold water shrimp

Canada non-frozen shrimp imports decreased 183 MT in 2017 to a total of 71 MT. During 2020, Canada imported 117 MT of non-frozen shrimp valued just over one million dollars. The largest competition that the United States faces in the Canadian non-frozen shrimp market is the Philippines. During 2020, the U.S. exported 31 MT of non-frozen shrimp to Canada. While the majority of Canadian non-frozen shrimp imports come from the Philippines and the United States, there is also competition from China, South Korea, and Thailand.

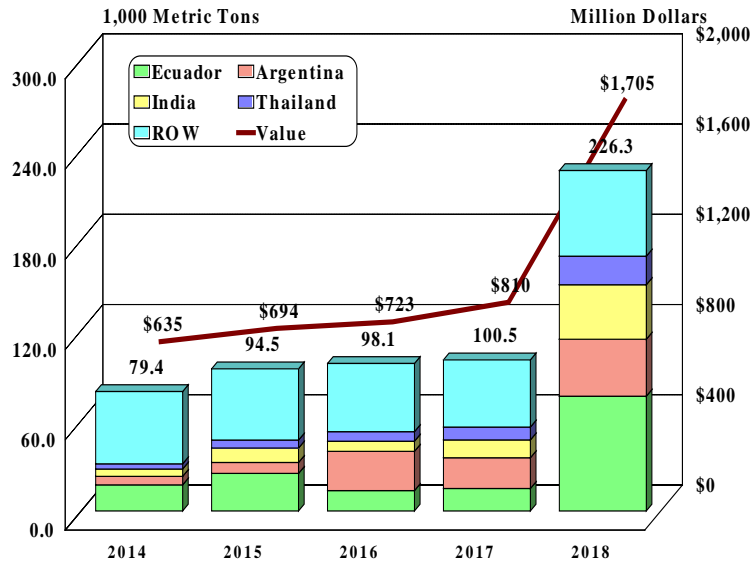
U.S. Shrimp Exports to China-Hong Kong

During 2018, China imported 226.4 TMT of frozen shrimp valued at \$1.7 billion. Ecuador is the largest exporter of frozen shrimp to China and saw a 60 TMT increase in exports there during 2018 to 76 TMT. Argentina, Thailand, and Vietnam also saw increases in frozen shrimp exports to China over these two years. The United States exported 109 MT of frozen shrimp worth just under \$1.1 million to China during 2018.

The large increase in imports of frozen shrimp could possibly be attributed to the population in China looking for healthier food alternatives, and shifting preferences to consume more fish and seafood.

China imports of non-frozen shrimp is a small fraction of total shrimp imports. During 2018, the total of 14.3 TMT was less than five percent of shrimp imports into China. Thailand is the largest exporter of non-frozen shrimp to China. In 2018, Thailand was the source of over half of total non-frozen imports to China-Hong Kong. During this same time, U.S. shrimp exports to China were 393 MT and valued at \$18 million, doubling the amount exported in the year prior.

China-HK Frozen Shrimp Imports, 2014-2018

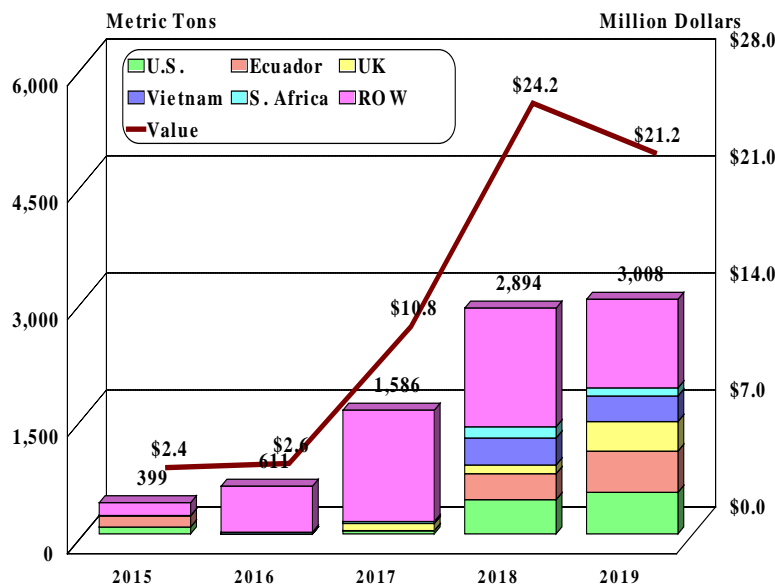


Source: Global Ag Trading System, FAS/USDA; exclusively non-cold water shrimp

U.S. Shrimp Exports to India

While India, along with Ecuador, is one of the world's largest exporters of shrimp, India also has a robust market of shrimp imports. Many countries are competing in the Indian frozen shrimp market. In 2018 and 2019, total exports of frozen shrimp to India were led by the United States. During 2019, the United States exported 533 MT valued just under five million dollars, a slight increase from 2018. Ecuador and the UK have both also seen a rise in their participation in this market, these countries were the source of 908 MT during 2019 which is double their aggregate amount for 2018.

India Frozen Shrimp Imports, 2014-2019



Source: Global Ag Trading System, FAS/USDA; exclusively non-cold water shrimp

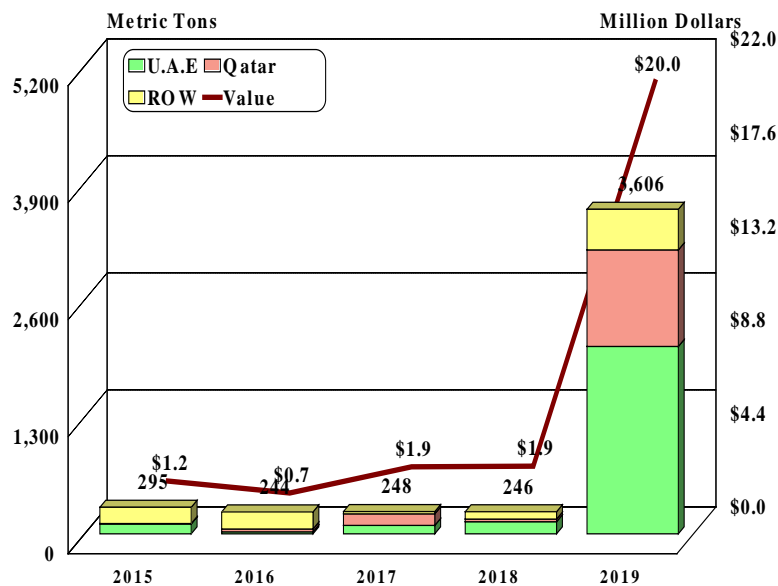
The Indian non-frozen shrimp market is dominated by both the United Arab Emirates and Qatar, who together compose two thirds of Indian imports. Thailand is also a competitor for the Indian non-frozen shrimp market, supplying relatively similar amounts as the United States. During 2019, U.S. non-frozen shrimp exports to India were 23.2 MT.

Notice the large increase in Indian imports of non-frozen shrimp during 2019. *GlobeFish*, the UN Food and Agriculture Organizations Fishery service, published an article that may explain where some of the increased demand for non-frozen shrimp originates:

“In India, pond seeding in Andhra during the first half of 2019 was 30–50 percent less than in the same period in 2018, resulting in lower harvests. Nearly 20–30 percent drop in production was reported in Tamil Nadu, Gujarat, Odissa and West Bengal. The extreme hot weather and ‘no rain’ during April–June also affected shrimp aquaculture in India.”

This decrease in Indian aquaculture production, which amounts to nearly a quarter of total shrimp produced annually, is likely the source of much of this rise in demand.

India Non-Frozen Shrimp Imports, 2015-2019



Source: Global Ag Trading System, FAS/USDA; exclusively non-cold water shrimp

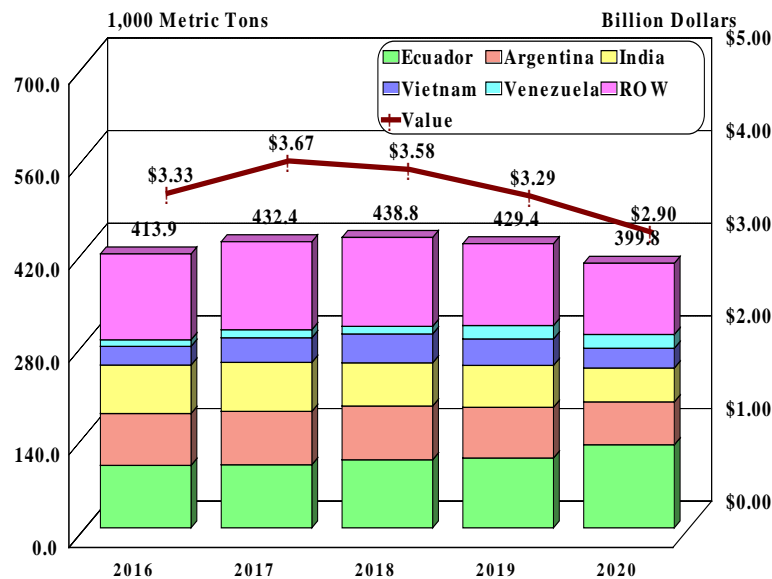
U.S. Shrimp Exports to the European Union

The largest markets for shrimp in the EU are Spain, France, Italy, the Netherlands, and Denmark. Spain, France, and Italy together accounting for over half of all the shrimp imports of the EU. Both Spain and France rank in the top five world importers of frozen shrimp. Italy, the Netherlands, and Denmark each also rank in the top ten frozen shrimp imports. Non-frozen shrimp have a smaller market in the EU. The Netherlands ranked below South Korea and

Morocco in their imports of non-frozen shrimp and is nearly four times the level of import of the next closest EU country, Germany.

Frozen shrimp imports for European countries fell 40 TMT after 2018 to 399.8 TMT in 2020 and value of imports fell from \$3.58 billion to \$2.9 billion. The largest exporter of shrimp is Ecuador. During 2020, 125 TMT of frozen shrimp were exported to the EU from Ecuador, a 25 TMT increase from the year before. Argentina exports accounted for 76 TMT during 2019 that was valued at \$506 million, and fell to 64.5 TMT during 2020. India also had similar happen, falling from 63 TMT to 51 TMT from 2019 to 2020. The United States plays a smaller role in EU’s frozen shrimp market compared to Argentina and Ecuador. 2019 was the highest year of U.S. exports at 265 MT valued at \$1.8 million. While Ecuador, Argentina, and India fill much of the frozen shrimp demand, Vietnam, Venezuela, and intra-EU trade also make up a fair amount of the EU’s frozen shrimp imports.

EU Frozen Shrimp Imports, 2016-2020



Source: WiserTrade; Eurostat; exclusively non-cold water shrimp

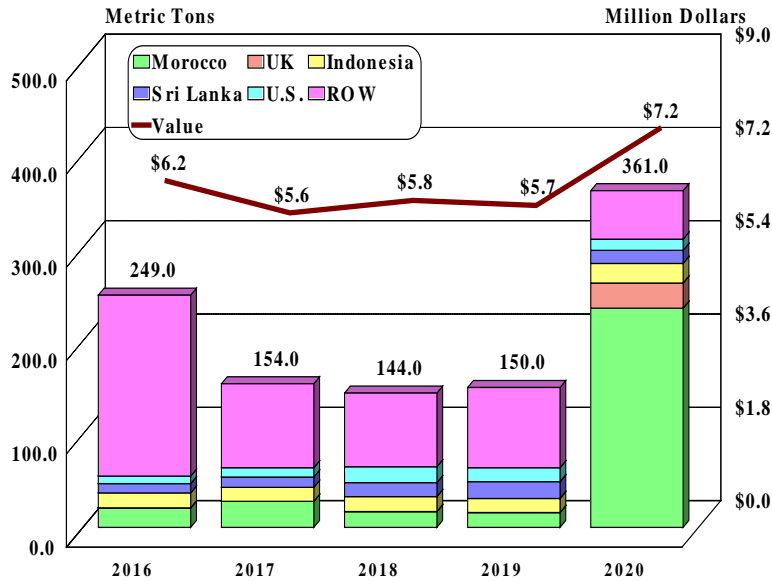
During 2020, non-frozen shrimp imports for the EU were 361 MT valued at \$7.2 million. During this year a very high amount of imports came from Morocco, 235 MT. Morocco’s proximity to major markets in Europe helps to lower transportation costs faced by many of the other major exporters to the EU. U.S. exports of non-frozen shrimp have ranged between 8 to 17 MT since 2016. Along with Morocco, the United States faces competition from the UK, Indonesia, Sri Lanka, and trade between EU members. It can be observed a decrease in non-frozen imports from 2016 to 2017 that stay low through 2019 and rise back in 2020. *Shrimp Insights* had this to say about the rise in EU imports in 2020:

“Restaurants in the EU were allowed to reopen from May and June. To prevent overcrowded situations, restaurants expanded outdoor terraces. Consumers spending their holidays at home were dining out more often than they would normally do. Due to this jump in demand from the restaurants, by the end of August, many wholesalers had

largely made up for their losses in April and May and, thanks also to the strong start of 2020, were still ahead of 2019.”

Note: Intra-EU trade is not counted in imports, explaining why the UK became a major exporter during 2020 after leaving the EU.

EU Non-Frozen Shrimp Imports, 2016-2020



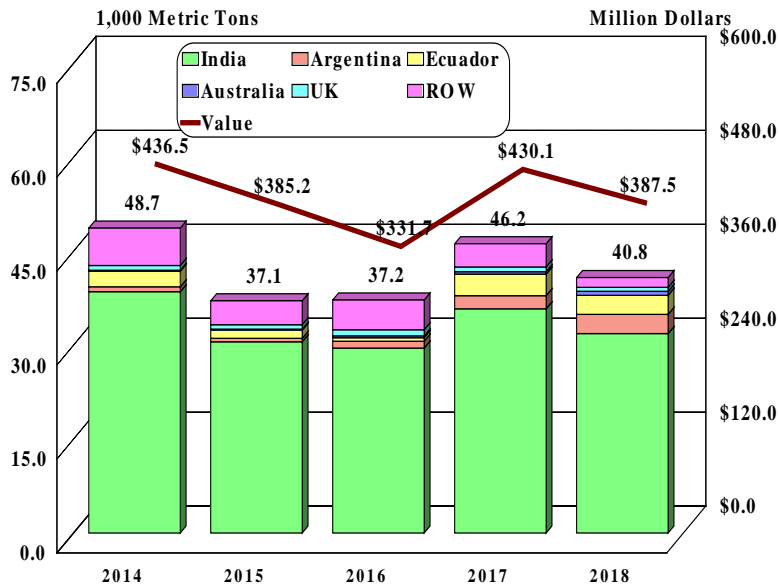
Source: WiserTrade; Eurostat; exclusively non-cold water shrimp

U.S. Shrimp Exports to Vietnam

Vietnam imported 40.8 TMT of frozen shrimp during 2018 which was valued at \$387.5 million. This was dominated by India who was the source of over 75 percent of Vietnam’s frozen shrimp imports. During 2018, the United States exported 73 MT of frozen shrimp to Vietnam which was valued at \$688 thousand dollars. Historically, the United States has reported much higher levels of exports to Vietnam with over 100,000 MT during 2015.

Meanwhile, the United States plays a larger role in Vietnam’s much smaller non-frozen shrimp market. During 2018, Vietnam reported 1,100 MT of non-frozen shrimp imports, 573 MT of which was shipped from the United States and were valued at \$9.5 million. The United States is the largest exporter of non-frozen shrimp to Vietnam, followed by Thailand and Singapore.

Vietnam Frozen Shrimp Imports, 2014-2018



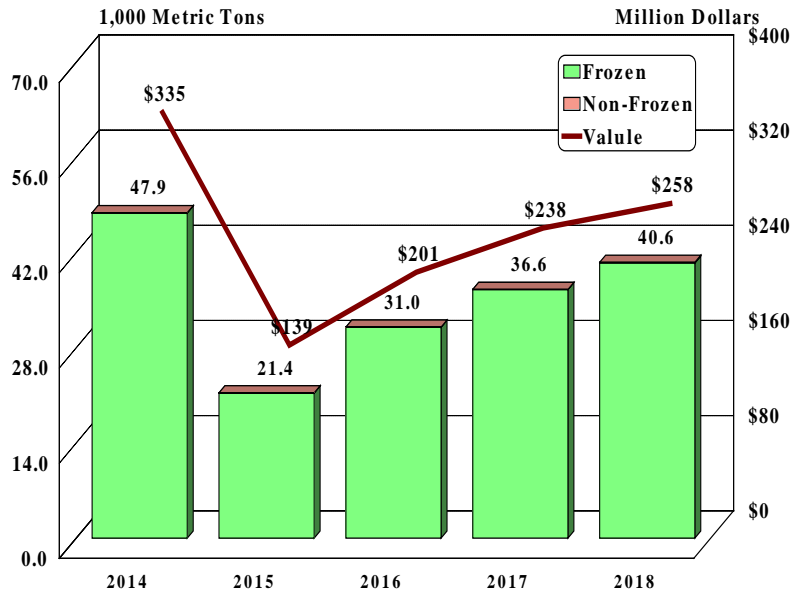
Source: Global Ag Trading System, FAS/USDA; exclusively non-cold water shrimp

The Russian Market for Shrimp Exports

Russia is a market that is primarily focused on frozen shrimp imports with less than one percent of total shrimp imports being non-frozen. During 2018, Russia imported 40.6 TMT of shrimp which was valued at \$258 million; the largest exporters of shrimp to Russia were India, China, Argentina, and Ecuador. Indian exports in 2018 were nearly a quarter of the total at 9.4 TMT.

The United States has not been involved in the Russian shrimp market since being banned in 2014. This annual ban on many U.S. products, including shrimp, has been extended each year and is set to expire again at the end of 2021. This leads to an opportunity for the United States to re-enter into a market that is a large importer of shrimp.

Russia Shrimp Imports, 2014-2018



Source: FAO - Fisheries and Aquaculture Information and Statistics Branch; Exclusively marine caught shrimp

Conclusion

Frozen and non-frozen shrimp have very large markets all across the globe. Tariffs for many of the countries examined are set at relatively lower levels, with few non-tariff barriers in place through most markets. There is also the added benefit of U.S. shrimp having been exported to many different countries in the past. Russia is another avenue of potential shrimp trade to be examined if changes to the current legislation on many different U.S. products were to occur.

The world shrimp market is thriving and demand has been increasing. The main problem that prevents U.S. shrimp from competing as largely in other foreign markets is not through barriers to trade, but working to fill the domestic demand for shrimp which can be seen by the decreasing level of exports over time. The United States is the largest importer of shrimp in the world and domestic production is directed primarily toward U.S. consumers, but markets are present across the globe. Canada is the largest current market for U.S. shrimp and there is much potential in other markets examined where the United States is already an exporter.

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