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# GLOBEFISH HIGHLIGHTS

A QUARTERLY UPDATE ON WORLD SEAFOOD MARKETS

January 2018 ISSUE, with Jan-Sept 2017 Statistics

# ABOUT GLOBEFISH

**GLOBEFISH forms part of the Products, Trade and Marketing Branch of the FAO Fisheries and Aquaculture Department and is part of the FISH INFOnetwork. It collects information from the main market areas in developed countries for the benefit of the world's producers and exporters. Part of its services is an electronic databank and the distribution of information through the European Fish Price Report, the GLOBEFISH Highlights, the GLOBEFISH Research Programme and the Commodity Updates.**

**The GLOBEFISH Highlights is based on information available in the databank, supplemented by market information from industry correspondents and from six regional services which form the FISH INFOnetwork: INFOFISH (Asia and the Pacific), INFOPESCA (Latin America and the Caribbean), INFOPECHE (Africa), INFOSAMAK (Arab countries), EUROFISH (Central and Eastern Europe) and INFOYU (China).**



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# GLOBEFISH HIGHLIGHTS

## A QUARTERLY UPDATE ON WORLD SEAFOOD MARKETS

# ACKNOWLEDGEMENTS

## GLOBEFISH HIGHLIGHTS

This issue of GLOBEFISH Highlights has been prepared by Silvio Alejandro R. Catalano Garcia, Helga Josupeit, Rita Monteiro Pierce, Shen Nianjun, Turan Rahimzadeh and Weiwei Wang with contributions by Shirlene M. Anthonysamy (Pangasius and Tilapia), Felix Dent (Salmon and Seabass/bream), Fatima Ferdouse (Shrimp and Tuna), Erik Hempel (Cephalopods, Crab, Groundfish, Lobster and Small Pelagics), Helga Josupeit (Bivalves), Rodrigo Misa (Salmon, Shrimp and Tilapia regional contributions), Ferit Rad (Seabass/bream regional contributions), Turan Rahimzadeh (Events section), Weiwei Wang (Fishmeal/oil) and Liu Xueguang (Special Feature). Full bios on all contributors are available at www.fao.org/in-action/globefish/background/publication-contributors.

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# ACRONYMS AND ABBREVIATIONS

## GLOBEFISH HIGHLIGHTS

| | |
|---|---|
| ABC | ACCEPTABLE BIOLOGICAL CATCH |
| AIPCE-CEP | EUROPEAN FISH PROCESSORS AND TRADERS ASSOCIATION |
| CETA | COMPREHENSIVE ECONOMIC AND TRADE AGREEMENT |
| CONAPESCA | MEXICAN NATIONAL COMMISSION OF AQUACULTURE AND FISHERIES |
| DFO | CANADIAN DEPARTMENT OF FISHERIES AND OCEANS |
| EMS | EARLY MORTALITY SYNDROME |
| FAD | FISH AGGREGATING DEVICES |
| FAO | FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS |
| GAA | GLOBAL AQUACULTURE ALLIANCE |
| GSP | GENERALIZED SYSTEM OF PREFERENCES |
| IATTC | INTER AMERICAN TROPICAL TUNA COMMISSION |
| ICES | INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA |
| IFREMER | FRENCH RESEARCH INSTITUTE FOR EXPLOITATION OF THE SEA |
| IMARPE | INSTITUTO DEL MAR OF PERU |
| IMTA | INTEGRATED MULTI-TROPHIC AQUACULTURE |
| IUU | ILLEGAL, UNREPORTED, AND UNREGULATED |
| NMFS-NOAA | NATIONAL MARINE FISHERIES SERVICE OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION |
| NPFMC | NORTH PACIFIC FISHERY MANAGEMENT COUNCIL |
| NSC | NORWEGIAN SEAFOOD COUNCIL |
| NVG | NORWEGIAN SPRING SPAWNING HERRING |
| ODFW | OREGON DEPARTMENT OF FISH AND WILDLIFE |
| SIAVRT | SOLOMON ISLANDS ASSOCIATION OF VOCATIONAL RURAL TRAINING |
| TAC | TOTAL ALLOWABLE CATCH |
| TiLV | TILAPIA LAKE VIRUS |

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## LOBSTER

## BIVALVES



## CRAB

# GLOBAL FISH ECONOMY

## GLOBEFISH HIGHLIGHTS

*Positive outlook for global seafood as demand surges for multiple species in markets across the world*

**An estimated 2.3 percent hike in global fish production combined with good market conditions around the world gave a significant boost to trade revenues in the first nine months of 2017. Aquaculture continues to increase its contribution to the world's seafood supply, growing at a steady rate of about 4.5 percent to reach a total harvest of 83.6 million tonnes in 2017. Capture fisheries productions remain stable at 90.4 million tonnes. However, because a significant proportion of wild catches are utilized for fish feed, aquaculture's share in direct human consumption is now 55 percent and increasing with each passing year. Asia, and particularly China, remains the major driver of global seafood development on both the supply and demand side.**

Aggregate global seafood demand picked up in 2017, supported by the improving economic environment in both developed and developing regions, including recoveries of some major emerging markets such as Brazil and the Russian Federation. Consumers typically increase their spending on animal proteins such as seafood at the expense of other food categories as their income increases. The generation of this extra demand has pushed prices upwards even as total supply continues to rise. This effect was so pronounced in the first three quarters of 2017 that the FAO Fish Price Index was higher across all commodity groups by the end of the review period. In particular, poor catches and record cephalopod prices contributed to an 11-point increase in the other fish category, while tight farmed salmon supply in the first half of 2017 translated into a 14-point rise in the salmon sub-index. Prices for cod, pangasius and tuna also trended upwards throughout the majority of 2017.

Of the world's major seafood exporters, India, Peru, Ecuador, Chile and Norway are expected to be the top performers in terms of revenue growth during the first nine months of 2017. In India, good farmed shrimp harvests combined with firming prices saw export sales rise significantly. Peru and Chile benefitted from good anchoveta catches and high salmon prices, respectively. Norway, one of the world's largest producers continues to benefit from high prices for a number of key species, including salmon and cod. A range of other countries in Latin America and Southeast Asia, particularly producers of shrimp and tuna, also saw significant growth in total export value, as seafood-hungry buyers in the large established markets of the United States of America, the EU28 and Japan competed with developing country counterparts for an increasingly wide variety of products. Domestically produced and cheap species such as carp are still an important staple in emerging markets across East and Southeast Asia. However, demand for more expensive species such as lobster and salmon is increasing rapidly, and the potential for future growth in these populous regions is enormous. Together with the recovery of consumer demand in Brazil and the Russian Federation, these macro trends point to the continued development of an ever more diverse array of markets for exporters and producers around the world.

The tightening supply-demand balance evident in international markets for multiple species, combined with a relatively positive global economic outlook for the next couple of years at least, suggest that the widespread strengthening of seafood demand will continue. From the production perspective, there are forecasts of shortages for important species in

# World Fish Market At a Glance

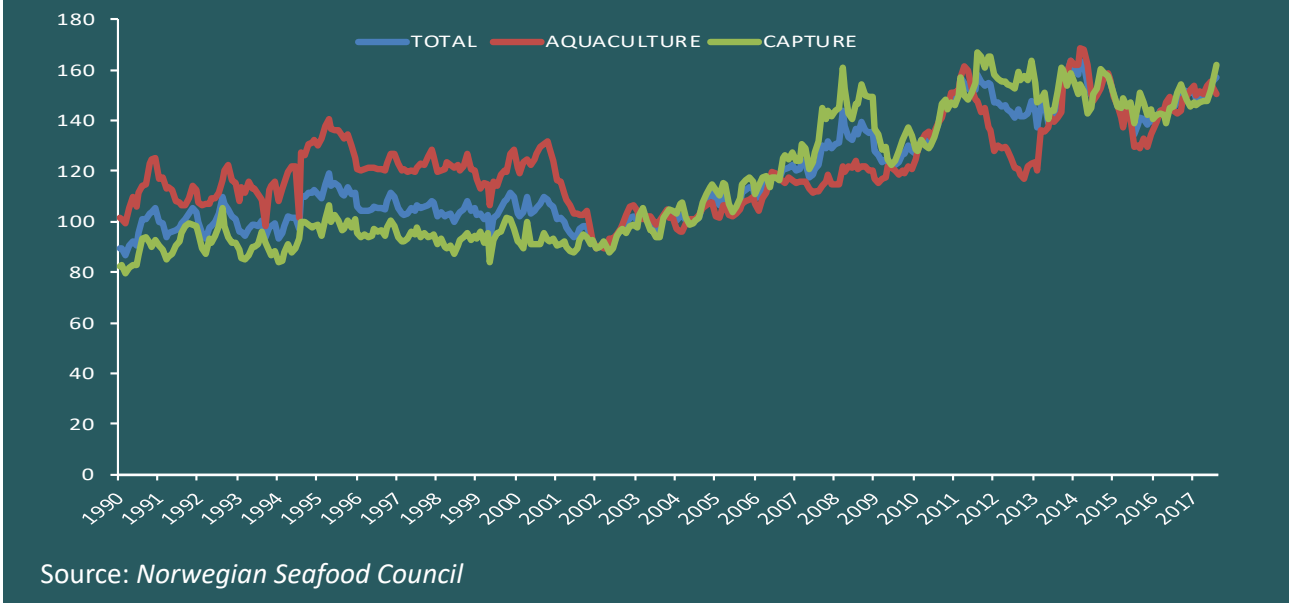
| | 2015 | 2016 estim. | 2017 estim. | Change: 2017 over 2016 |
|---|---|---|---|---|
| | million tonnes | | | % |
| **WORLD BALANCE** | | | | |
| **Production** | | | | |
| | **169.2** | **170.1** | **174.0** | **2.3** |
| Capture fisheries | 92.6 | 90.1 | 90.4 | 0.3 |
| Aquaculture | 76.6 | 80.0 | 83.6 | 4.5 |
| **Trade value** (exports USD billion) | **133.2** | **142.4** | **153.5** | **7.8** |
| **Trade volume** (live weight) | **59.6** | **60.3** | **60.7** | **0.6** |
| **Total utilization** | **169.2** | **170.1** | **174.0** | **2.3** |
| Food | 148.8 | 150.6 | 153.3 | 1.8 |
| Feed | 15.1 | 14.3 | 15.6 | 8.7 |
| Other uses | 5.2 | 5.1 | 5.1 | -0.8 |
| **SUPPLY AND DEMAND INDICATORS** | | | | |
| **Per caput food consumption** | | | | |
| Food fish (kg/year) | 20.2 | 20.2 | 20.3 | 0.7 |
| From capture fisheries (kg/year) | 9.8 | 9.5 | 9.2 | -2.4 |
| From aquaculture (kg/year) | 10.4 | 10.7 | 11.1 | 3.3 |

| **FAO FISH PRICE INDEX** (2002-2004=100) | 2015 | 2016 | 2017 Jan-Aug | Change Jan-Aug 2017 over Jan-Aug 2016 % |
|---|---|---|---|---|
| | 142 | 146 | 152 | 5.9 |

Source of the data for the FAO Fish Price Index: Norwegian Seafood Council (NSC)

Totals may not match due to rounding.

## FAO Fish Price Index
(100=2002-2004)




Source: *Norwegian Seafood Council*

2018. Quota cuts for small pelagics and groundfish will constrict supply and put increasing pressure on prices in these markets, while expectations are for continuing low catches in the cephalopod sector. Although total anchoveta catches were up in the first three quarters of 2017 as a whole, the quota for the second fishing season in Peru was below market expectations and this already led to rising prices in late 2017. The upward trend in seafood commodity prices is not universal, however, with increased supply of farmed salmon in 2018 expected to keep what were previously extremely high prices at more reasonable levels, whereas tuna raw prices ended 2017 heading downwards.

Overall, the increasingly strong competition with domestic markets in some large producing countries will slow the growth rate of trade volume relative to the rate of increase in global production. However, that additional demand will keep prices up in international markets so long as economic conditions remain positive in the majority of consumer countries.

For the average consumer the important topics continue to be sustainability and origin certification, ease of preparation, food safety assurance and the nutritional value of seafood. On the industry side. Widespread consolidation and supply chain integration can be expected to continue.

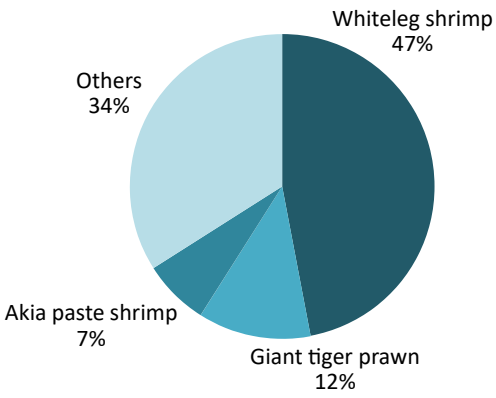
# SHRIMP

## GLOBEFISH HIGHLIGHTS

*Strong imports in East Asia and the United States of America kept global shrimp trade firm*

**The moderate increase in global farmed shrimp production was balanced with large imports in China, Viet Nam, the United States of America, Japan and the Republic of Korea. Export price was stable throughout 2017.**

**Shrimp production by species, both wild and farmed (2015)**




Source: *FAO*

### Supply

The official 2017 data for farmed shrimp production have not been published yet. However, aquaculture industry analysts, including shrimp feed producers, indicated moderate increases in farmed shrimp production during the review period. The major producers were China, India, Ecuador, Viet Nam and Indonesia with varied trends.

Production in China did not recover since the early mortality syndrome (EMS) disease occurrence in 2012. The preliminary estimate suggested 10–20 percent reduction in Chinese farmed shrimp production in 2017, compared with 600 000 tonnes harvested in 2016. Poor quality broodstock and seed coupled with the extreme hot weather affected shrimp aquaculture in the main producing regions of Guangdong, Hainan and Guangxi. Increased production in the northern region was inadequate to offset the overall supply deficit, while domestic demand surged. Subsequently, imports increased in the first nine months of 2017 compared with the same period in 2016.

India reported a production of farmed shrimp of about 500 000 tonnes during the review period, compared with the 400 000 tonnes in 2016. The estimated production in Ecuador was 400 000 tonnes, some 14 percent higher than in the equivalent period in 2016.

According to the Viet Nam News Agency, farmed shrimp production in 2017 totalled 237 000 tonnes in Viet Nam.

The 2017 production in Thailand is likely lower than the earlier forecast of 330 000 tonnes. Affected by unfavourable weather and shrimp health issues, production in Indonesia and Bangladesh also suffered which was reflected in the declining shrimp exports from these countries.

Argentina recorded bumper sea catches of shrimp that exceeded 200 000 tonnes during the first three quarters of 2017.

### Exports

During the first nine months of 2017, exports increased from India, Viet Nam, Ecuador and China compared with the same period in 2016, but declined from Thailand because of supply constraints.

In India, strong demand from North American and East Asian markets supported higher shrimp exports at 420 500 tonnes (+33 percent), making India the

top world exporter of shrimp. During the January-September 2017 period the average monthly exports ranged from 47 000 to 50 000 tonnes, mostly raw shell-on and peeled shrimp. The top destinations were the United States of America, Viet Nam, the EU28, Japan and the United Arab Emirates; exports also increased to China and the Republic of Korea.

Vietnamese exports were estimated at 390 000 tonnes (+11 percent) during January-September 2017, comprising domestic shrimp and imported raw materials. The top market was China, with a 50–60 percent share of the total exports (200 000 to 230 000 tonnes), which was 25 percent more than in the same period in 2016. The other top markets were the United States of America (-7 percent), the EU28 (+14 percent), Japan (+19 percent) and the Republic of Korea (+11 percent). Viet Nam is a leading exporter of value-added shrimp to Japan, the United States of America and the EU28.

Ecuadorian shrimp exports (323 655 tonnes) increased by 17 percent during January-September 2017, due to the increased sales to Asian markets, namely Viet Nam (+37 percent at 162 165 tonnes), China (+42 percent at 13 000 tonnes), the Republic of Korea (+42 percent at 6 300 tonnes), while exports to the EU28 (-2 percent at 70 200 tonnes) and the United States of America (-1.3 percent at 54 900 tonnes) declined marginally.

Compared with the corresponding period in 2016, Chinese exports grew only slightly (+1.5 percent, totalling 137 730 tonnes) during the review period, due to the decline in raw shrimp exports (-5 percent). Around 52 percent of the total shrimp exports (71 000 tonnes) were value-added products, in part produced from imported raw material.

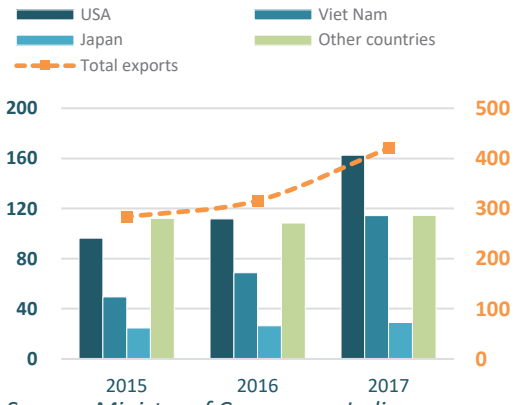
In Thailand, total shrimp exports, of which 46 percent consisted of value-added products, fell by 10 percent. Raw material shortage affected exports to the main market, the United States of America. Supplies to the EU28 declined significantly since the withdrawal of the preferential tariff or Generalized System of Preferences (GSP) on Thai products.

Indonesian exports decreased to the United States of America, Japan and Europe, during the review period. Exports from Bangladesh also dropped, whereas Malaysian exports increased (+9 percent at 27 000 tonnes).

In Latin America, shrimp exports increased in Honduras (+4 percent at 42 300 tonnes) and Mexico (+15 percent at 15 000 tonnes), but declined in Nicaragua (-32 percent at 15 260 tonnes).

Argentina, one of the leading suppliers of sea-caught shrimp, reported a 16 percent export growth at 44 950 tonnes, due to the increased exports to the United States of America, Japan, Viet Nam, Thailand, the Russian Federation, even though exports dropped to the large markets of the EU28 and China (-15 percent each).

**India | Exports | Shrimp**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *Ministry of Commerce, India*

## Imports

The positive trend in global shrimp trade during the first three quarters of 2017 was due to the strong imports in East Asian markets namely Viet Nam, China (Mainland and Taiwan Province), and the Republic of Korea. There were also increased imports in the two large markets of the United States of America and Japan (+6 percent each). Imports also increased in Canada (+10 percent at 34 300 tonnes) and Mexico (+19 percent at 17 000 tonnes).

The 9 percent rise in the EU28 shrimp imports could be attributed to the increased intra-EU28 trade, while the extra-EU28 imports declined by the same percentage. Outside the EU28, imports increased in Norway, Switzerland and the Russian Federation.

China and Viet Nam remained the attractive markets to shrimp producers and exporters worldwide. During the review period, total supply of foreign shrimp to China increased significantly, while imports were high in Vietnam. Although the United States of America and the EU28 remained the largest import markets, East Asian markets mostly absorbed the additional production in Asia and Latin America during the first nine months of 2017.

### Japan

Consumer demand for shrimp in Japan seemed to be recovering after many years, which reflected on higher imports during the first nine months of 2017 (+6 percent at 163 545 tonnes). The market continued to import more value-added products, reaching a 27 percent share of the total shrimp imports during the review period. Imports increased from Thailand, Viet Nam, Indonesia and China. A major share of Japanese raw shrimp imports consisted of semi-processed nobashi or peeled tail-on shrimp, butterfly cut and other types of peeled shrimp used by the catering trade and also in households. There was also a strong demand for top quality head-on

shrimp (large size farmed black tiger and sea caught shrimp) at the high-end catering trade.

Shrimp consumption was good during the end of the year festivities with a business increase in the catering trade.

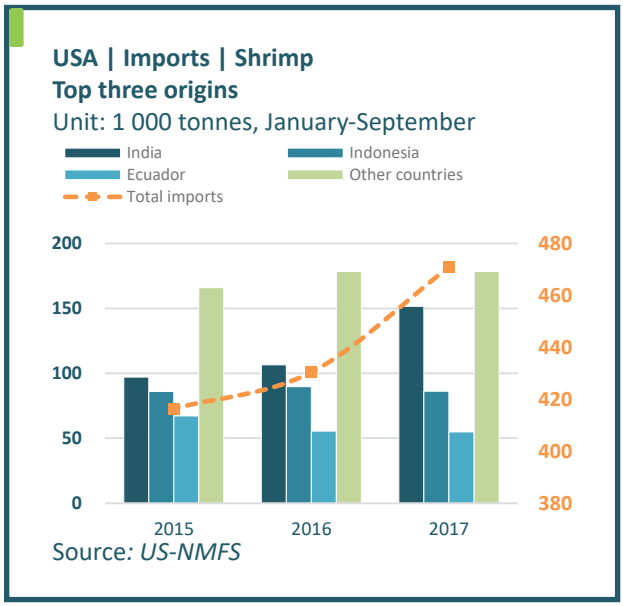
## United States of America

Shrimp remained the most preferred seafood in the United States of America, according to the National Oceanic and Atmospheric Administration (NMFS-NOAA). Per capita consumption in 2016 increased by 2.5 percent to 4.10 lb compared with 2015. This trend is likely to continue as supplies of domestic and imported shrimp were record-high in 2017, supported by strong consumer demand. US consumers experienced increased disposable income in 2017 backed by the rebound of the national economy.

The average retail price of shrimp in 2017 was stable and lower than other popular seafood such as salmon. During January-September 2017, the average import price of shrimp increased by 5.15 percent, whereas the average retail price of shrimp was 3–4 percent higher than 2016.

Shrimp imports increased by 9.6 percent in volume during the review period compared with 2016, while the value rose by 15 percent to USD 4.5 billion. Imports of raw shell-on remained the same as in 2016, but increased for peeled, breaded and other processed shrimp.

India marked a 42 percent increase in exports to the US market. This top seller compensated for the supply declines from Indonesia (-3 percent), Ecuador (-1.4 percent), Thailand and Viet Nam (-7 percent each). Imports from China increased by 39 percent during the review period.




## European Union (Member Organization)

Shrimp imports in the EU28 totalled 547 000 tonnes during the review period. Extra-EU28 imports dropped by 4 percent, totalling 403 800 tonnes, during January-September 2017, which could be an indication of a weaker demand trend in this market. The intra-EU28 imports were mostly re-exports of shrimp sourced from non-member countries.

Imports declined in most of the top markets during the assessment period. Spain imported 111 675 tonnes (-1 percent), followed by France with 79 180 tonnes (-2 percent), Denmark with 8 235 tonnes (-4 percent), the United Kingdom with 55 870 tonnes (-3 percent), the Netherlands with 50 135 tonnes (-18 percent) and Italy with 45 880 tonnes (-9 percent). Except from Viet Nam, Bangladesh and Venezuela, supplies declined from most the sources. During the Christmas season, consumer demand remained low confirming a weaker shrimp market in 2017.

Outside the EU28, there were increased shrimp imports in Norway (+31 percent at 13 700 tonnes) and in Switzerland (+10 percent at 6 000 tonnes). In the Russian Federation, imports increased by 23 percent at 26 000 tonnes, with larger supplies from Greenland, India, China, Ecuador, Argentina and Bangladesh.

## Asia/Pacific

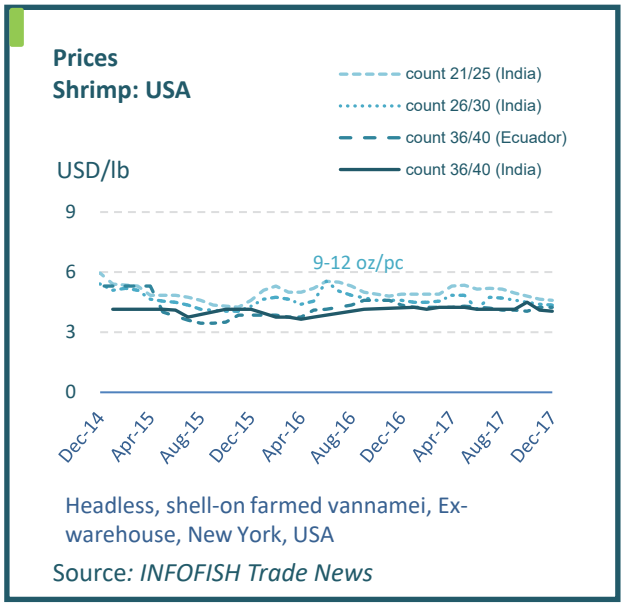
The lower domestic production, strong local demand and strong prices compared with 2015 and 2016, attracted large volumes of farmed shrimp to China from Asia and Latin America. Direct shrimp imports to China declined marginally (-0.25 percent) during the first nine months of 2017 (76 100 tonnes) compared with the same period in 2016. However, imports increased from Canada (+37 percent at 20 331 tonnes), Ecuador (+12 percent at 12 498 tonnes), India (+50 percent at 7 811 tonnes) and Greenland (+133 percent at 7 872 tonnes). Official imports from Viet Nam were only 950 tonnes.

Total shrimp imports in China during this period were estimated to be 275 000 to 300 000 tonnes from Viet Nam alone, including the large volume was imported through border trade from Viet Nam to China.

Viet Nam has emerged as the number one importer of shrimp in Asia, with 60–70 percent of imports being re-exported to China through border trade. During the first three quarters of 2017, nearly 320 000 tonnes of shrimp were imported in Viet Nam, 40 percent more than in the same period in 2016. Around 90 percent of these imports were supplied by Ecuador, India and Thailand.

The Republic of Korea also reported strong imports from Viet Nam (+11 percent at 27 100 tonnes), Ecuador (+35 percent at 6 456 tonnes), Thailand (+20 percent at 4 845 tonnes) and India (+16 percent at 1 610 tonnes). Still, the total imports were reduced

by 4 percent compared to 2016, because of the 70 percent supply deficit from China.




Headless, shell-on farmed vannamei, Ex-warehouse, New York, USA

Source: *INFOFISH Trade News*

**US imports of shrimp (by product)**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Shell-on frozen | 142.7 | 154.3 | 159.5 | 164.3 | 164.3 |
| Peeled frozen | 143.3 | 166.6 | 165.1 | 177.3 | 203.2 |
| Breaded | 26.5 | 29.6 | 32.9 | 31.4 | 34.8 |
| Other products | 51.0 | 57.0 | 59.0 | 57.0 | 68.6 |
| Total | 363.3 | 407.6 | 416.3 | 430.4 | 470.9 |

Source: *NMFS*

## Outlook

Farmed shrimp production in most of Asia will be seasonally low from November 2017 until April 2018, while in Ecuador the season will continue till February 2018. Therefore, supply in general will be limited until the new season in Asia starts in May 2018.

In the United States of America and the EU28, imports will be typically low until April/May 2018. Nonetheless, any serious weakening in prices is not likely during this period, because of the expected high demand for shrimp in East Asia for the Lunar New Year celebration in February.

Effective from 1 December 2017, shrimp imports in China will be subject to reduced import tariff (from 5 to 2 percent for frozen shrimp including (Pandalus borealis). Hence, prior to the Chinese New Year, imports may increase in this market.

**Japanese imports of shrimp (by product)**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Frozen, raw | 131.4 | 109.2 | 104.0 | 112.0 | 119.4 |
| Cooked, frozen | 18.1 | 14.4 | 13.7 | 13.8 | 13.9 |
| Prepared/preserved | 34.1 | 25.7 | 26.7 | 25.5 | 28.1 |
| Sushi (with rice) | 1.8 | 1.3 | 1.7 | 2.0 | 1.9 |
| Total* | 187.4 | 152.4 | 147.1 | 154.4 | 164.5 |

Source: *Japan Customs/INFOFISH, *including others*

**EU28 imports/exports of shrimp**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Imports | | | | | |
| Ecuador | 61.4 | 68.0 | 71.7 | 71.9 | 70.2 |
| India | 44.3 | 59.4 | 54.8 | 57.0 | 54.6 |
| Argentina | 34.7 | 36.4 | 42.0 | 49.2 | 47.4 |
| Others | 398.6 | 394.5 | 374.7 | 322.1 | 374.9 |
| Total | 539.0 | 558.3 | 543.2 | 500.2 | 547.1 |
| Exports | | | | | |
| Intra-EU | 181.1 | 178.0 | 177.4 | 110.2 | 118.2 |
| Extra EU | 56.3 | 53.1 | 48.9 | 44.3 | 38.7 |
| Total | 237.4 | 231.1 | 226.3 | 154.5 | 156.9 |

Source: *EUROSTAT*

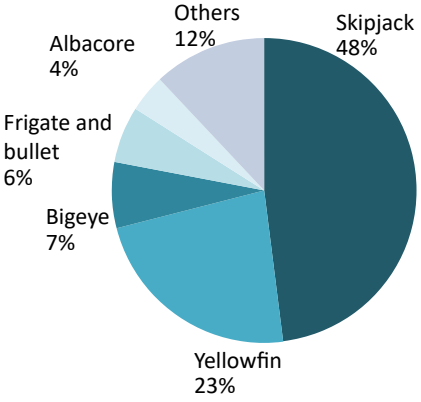
# TUNA

## GLOBEFISH HIGHLIGHTS

*Global canned tuna trade unstable with stagnant US demand and declining Middle Eastern imports, while EU28 imports up moderately*

**Tuna canners in Southeast Asia faced difficult markets worldwide due to increased raw material prices till October 2017. However, since the opening of fish aggregating devices (FAD) fishing in the Western Pacific in November 2017, the delivery prices of frozen skipjack to Thailand dropped sharply.**

**Tuna production by species, both wild and farmed (2015)**




Source: *FAO*

### Supply

Prices of frozen tuna raw material were higher in 2017 compared with the previous three years. The price for skipjack increased by 20–25 percent during the Western and Central Pacific FAD fishing closure between July and October 2017, reaching USD 2 400 per tonne for delivery to Thailand. In November there was an abrupt drop (-20 percent) in frozen skipjack price in the Bangkok market. This market sets the trend for the global tuna canning industry.

In the first nine months of 2017, Thailand imported 510 800 tonnes of frozen tuna as raw material for canning, 5.5 percent less than in the same period in 2016. Imports of frozen skipjack declined by 11 percent compared to the same period in 2016, while the average import price increased by 7 percent. Supplies of skipjack from Western and Central Pacific to Thailand dropped in comparison with 2016, but supplies from the Maldives, Seychelles, Senegal and India increased significantly. Thai imports of frozen yellowfin tuna during this period were 5 percent higher at 85 710 tonnes.

As of early December 2017, fishing in the Western and Central Pacific has been moderate-to-good in most areas (except around Kiribati due to bad weather conditions).

The second phase of the Inter American Tropical Tuna Commission (IATTC) 72 days 'veda' fishing ban in the Central Eastern Pacific was active between 9 November 2017 and 19 January 2018. Supplies are estimated to be lower during this period as 65 percent of the Ecuadorian tuna fleet is expected to stay in the ports. Nevertheless, prices of raw skipjack fell by 17 percent in early November 2017 to USD 2 000 per tonne, due to the already mentioned price decline in the Bangkok market.

**Japanese tuna landings* (by species)**

| | January - September | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| | (1 000 tonnes) | | | | |
| Bluefin | 2.8 | 3.5 | 4.7 | 5.2 | 5.7 |
| Bigeye | 19.6 | 20.6 | 22.9 | 20.6 | 18.7 |
| Yellowfin | 23.4 | 25.4 | 29.0 | 30.7 | 35.1 |
| Skipjack | 215.4 | 198.2 | 185.6 | 170.3 | 154.4 |
| Albacore | 51.8 | 47.1 | 41.0 | 33.1 | 36.1 |
| Total | 313 | 294.8 | 283.2 | 259.9 | 249.9 |

Source: *MAFF, Japan/INFOFISH. *including distant water catches*

Fishing efforts in the Indian Ocean have been reduced with the closure of the yellowfin fishery to the Spanish fleet. However, raw material inventories at local canneries remain healthy. Trans-shipments to Thailand and Ecuador have also dropped and prices of skipjack and yellowfin weakened in line with the overall market situation.

As of early December 2017, catches in the Atlantic Ocean were low, but raw material inventories at local canneries remained at a moderate level. Following the global trends, both skipjack and yellowfin prices decreased. The annual 2-months FAD closure in the Atlantic Ocean came into effect on 1 January 2018.

European prices for both skipjack and yellowfin tuna fell, but the price for cooked double cleaned yellowfin loins remained stable. Trading was slow due to the December holidays and the impending arrival of duty-free quota loins in the EU28 market.

## Fresh and frozen tuna market (non-canned)

### United States of America

During the first three quarters of 2017, US imports of non-canned tuna were nearly 68 000 tonnes, 3 percent higher than in the same period in 2016, confirming a positive consumer demand. In this category, 17 900 tonnes were whole/dressed fresh tuna, 27 360 tonnes were headed and gutted frozen tuna, and 22 620 tonnes were frozen loins and fillets. The marginal decline in fresh tuna imports was a result of lower catches of bigeye in the Pacific; imports of fresh yellowfin were stable. Supplies of the higher value air-flown bluefin tuna increased during this period. The United States of America remained the largest import market for air-flown fresh tuna.

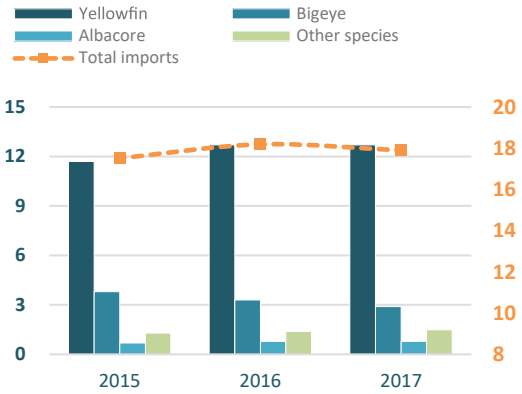
Supported by good market demand, frozen loin/steak imports were 22 600 tonnes (+4.6 percent), supplied mainly by Indonesia, Viet Nam, the Philippines, Thailand and China.

### Japan

In the world's largest sashimi tuna market, Japan continued to import less whole tuna (fresh and frozen) and more frozen loin/fillet, as consumer demand became more and more seasonal, associated with festivals and special occasions.

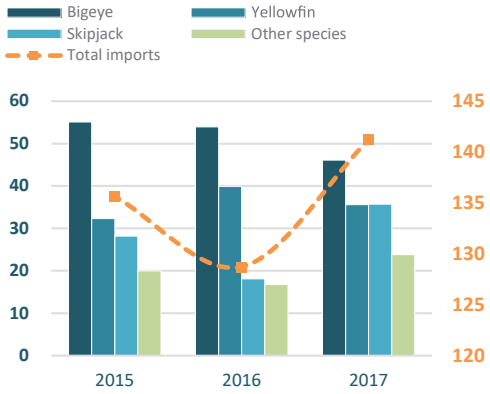
Imports of fresh tuna declined by 23 percent during the first nine months of 2017 compared to the same period in 2016, and by almost half of the quantity imported during the same period in 2013. Imports of frozen sashimi grade tuna (bigeye, yellowfin, bluefin) also dropped during this period. In contrast, imports of deep frozen tuna loins rose to 36 200 tonnes, 16 percent more than during the same

**USA | Imports | Tuna | Fresh**
**Top three species**
Unit: 1 000 tonnes, January-September



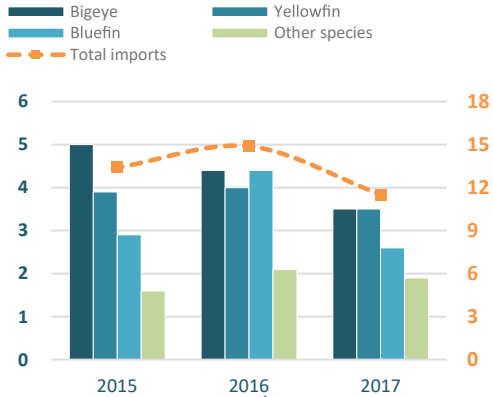

Source: *US-NMFS (includes fresh loins/fillets)*

**Japan | Imports | Tuna | Frozen**
**Top three species**
Unit: 1 000 tonnes, January-September




Source: *Japan Customs/INFOFISH*

**Japan | Imports | Tuna | Fresh/chilled**
**Top three species**
Unit: 1 000 tonnes, January-September




Source: *Japan Customs/INFOFISH*

period in 2016. Japan imported 20 300 tonnes of redmeat quality tuna, 56 percent of the total frozen loin imports, supplied by China, Republic of Korea, Indonesia and Fiji. Imports of high value bluefin loins totalled 12 200 tonnes, which were supplied primarily by Malta, Turkey, Croatia and Spain.

## Canned tuna market

## Exports

Mixed export trends continued in the canned and processed tuna global market during the first nine months of 2017. Thailand continued to be the top supplier in the world market, though exports declined by 11.7 percent. Exports increased from Ecuador (+27.2 percent), Spain (+10 percent) and the Philippines, supported by 'zero' tariff status in the large EU28 market. China had an export loss of 4.5 percent compared with the same period in 2016.

### Thailand

Thai exports to the largest market, the United States of America, declined marginally (0.59 percent) during the review period. Exports to the emerging but large Middle Eastern markets significantly decreased, namely Egypt (-66 percent), Libya (-15 percent) and Saudi Arabia (-19 percent). Thai exports to the EU28 also declined by 19 percent. However, there were increased exports to Australia, Japan, Canada and Peru.

Even though the exported volume of canned and processed tuna from Thailand weakened during the first nine months of 2017 compared with the same period in 2016, the exported value increased by 2 percent to USD 1.49 billion. This can be attributed to the 15 percent rise in export prices because of the high raw material cost.

### Ecuador

In the first nine months of 2017, Ecuador exported 167 900 tonnes of cooked loins and canned/pouched tuna (+27 percent), valued at USD 769.4 million (+46 percent). Supplies to its main EU28 market were up by 29 percent during this period, as a result of the 'zero tariff and no quota' status in the EU28. There were also increases in exports to the United States of America (+13.6 percent at 15 000 tonnes), Argentina (+20 percent at 9 700 tonnes) and Chile (+44 percent at 6 600 tonnes).

### Spain

Spanish tuna canners have been successful in focusing on their main target market, the EU28. They produce high value products for direct consumption. Tuna exports from Spain increased by 10 percent in volume and 23 percent in value during January-September 2017 in comparison with the same period in 2016. The top markets were Italy, France, Portugal, the Netherlands and Germany.

### Philippines

An estimated 60 000 tonnes of canned tuna and cooked loins were exported from the Philippines during the first nine months of 2017. Nearly 65 percent of these products (HS 160414) entered the EU28 markets (+39 percent at 39 000 tonnes). However, other significant Filipino markets did not fare as well. Exports to Japan and the United States of America fell by 13 percent and 39 percent, respectively, during this period.

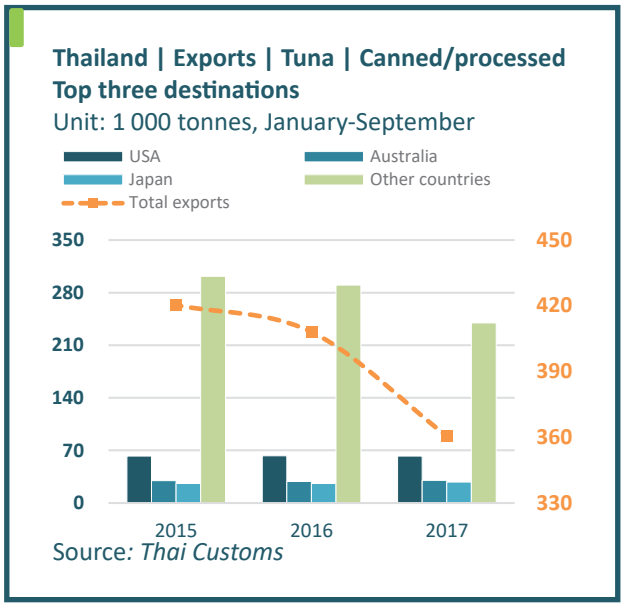
## Imports

During the first nine months of 2017, imports of canned tuna were higher in the EU28 and stable in North America, despite the price rise for raw tuna and processed tuna compared with the previous three years. There were also greater imports in Japan, Australia and New Zealand. However, there have been significant import decreases in the emerging markets of the Middle East, and a stagnant demand in Southeast Asia.

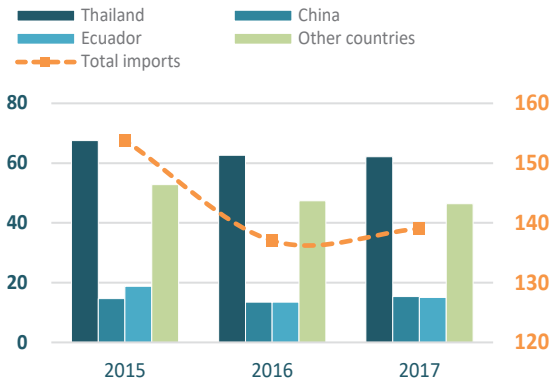
### European Union (Member Organization)

The EU28 is the largest global market for canned and processed tuna. The positive import trend observed during the first half of 2017, continued until September 2017. Imports increased by 10 percent, to 555 940 tonnes, in comparison with the same period in 2016.

Supplies from extra-EU28 sources increased by 8.4 percent to 401 800 tonnes during this period. The top five suppliers were Ecuador, Mauritius, the Philippines, Seychelles and Papua New Guinea, all benefiting from the duty-free status in the EU28.

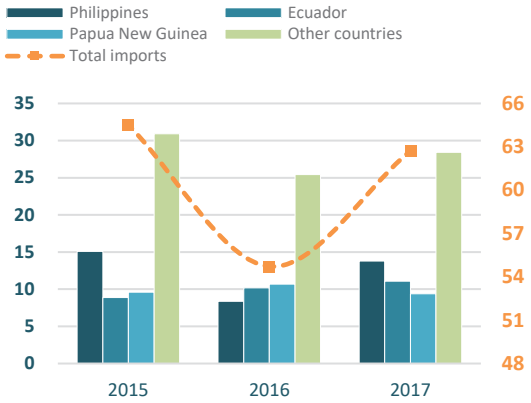


**USA | Imports | Tuna| Canned/prepared**
**Top three origins**
Unit: 1 000 tonnes, January-September



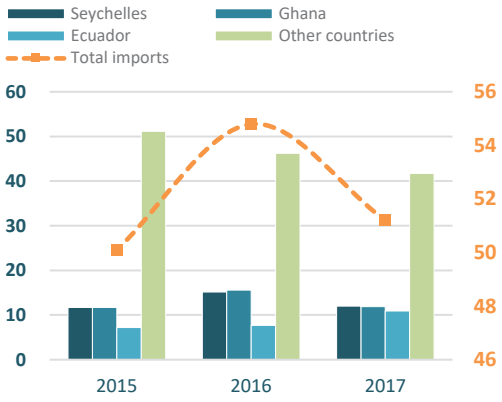

Source: *US-NMFS (includes cooked loins)*

**Germany | Imports | Tuna | Canned**
**Top three origins**
Unit: 1 000 tonnes, January-September



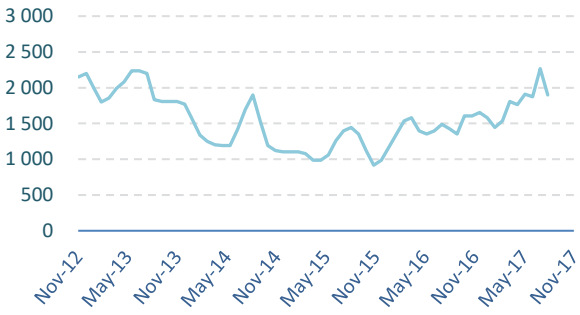

Source: *Eurostat/German Customs*

**United Kingdom | Imports | Tuna | Canned**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Her Majesty's Customs & Excise*

**Prices**
**Skipjack: Thailand**
USD/tonne




1.8Kg lb/pc & up, CFR Bangkok, origin: Western Pacific

Source: *INFOFISH Trade news*

The top six importers in the EU28 in order of ranking were Spain, Italy, France, the United Kingdom, Germany and the Netherlands. Imports increased in all these markets except in the United Kingdom. Spain imports increased by 29 percent to 99 400 tonnes, including 71 200 tonnes of cooked frozen loins for reprocessing. Among the other European markets, imports increased only in Switzerland by 5.4 percent, but declined in the Russian Federation (-23 percent, 3 015 tonnes) and in Norway (-39 percent, 1 600 tonnes), which could be due to the 15—20 percent rise in import prices.

## North and South America

During the first three quarters of 2017, total US imports of processed and canned tuna were stable at 381 438 tonnes (+1.6 percent), while the import value was 10.4 percent higher than in 2016. Imports of canned and pouched tuna for direct consumption increased by 3.7 percent, due to the substantial increase in the white meat albacore imports (+20 percent), both in cans and in pouch. Imports of cooked frozen loins for reprocessing declined from 44 900 tonnes in 2016 to 40 155 tonnes during the same period in 2017.

Canadian imports of canned tuna dropped to 24 800 tonnes (-3.4 percent) because of the high prices of raw material. Supplies from Thailand remained stable, holding 89 percent of the market, but declined from the Philippines (-39 percent) and Viet Nam (-32 percent).

In South America, the bilateral trade agreement between Peru and Thailand sustained increased imports of canned tuna from Thailand to this country (+11 percent). However, there were significant decreases in imports in Colombia (-15 percent) and in Brazil (-20 percent) where supplies mostly came from Ecuador.

## Asia/Pacific

The top three regional markets of Japan, Australia and New Zealand maintained the positive import trends during the review period, largely supplied by Southeast Asian tuna packers. Conversely, demand in other East Asian developing countries faltered because of the rising prices. Similarly, exports from Southeast Asia to most of the Middle East markets, both large and small, were lower due to the high price factor.

## Outlook

Since November 2017, the sharp decline in raw tuna prices has created uncertainty in the global canned tuna market. Most of the markets have completed annual purchases for 2017 and now expect prices of finished material to drop even further in the coming months. Thus global trading of canned tuna is expected to be slow through the end of 2017.

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# GROUNDFISH

## GLOBEFISH HIGHLIGHTS

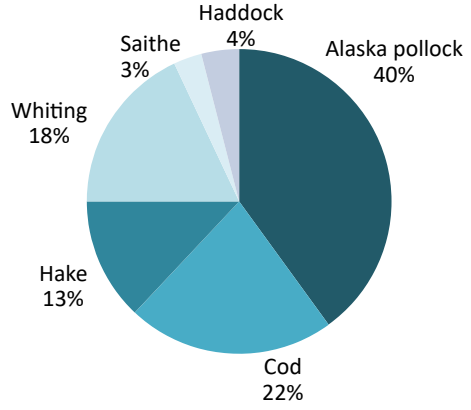
# *Tighter supplies and higher prices*

**The Groundfish Forum predicts a drop in 2018 landings of Alaska pollock and cod. Estimates published during the 2017 Forum indicate a total supply of groundfish amounting to 7.355 million tonnes, a 3 percent drop compared to 2017. Groundfish prices are expected to rise.**

## Resources

The Groundfish Forum predicted that landings of Atlantic cod will amount to 1.245 million tonnes in 2018, down by 6 percent compared to 2017. Haddock landings will drop by 8.8 percent to 331 000 tonnes, Alaska pollock landings will fall by 2.6 percent to 3.4 million tonnes, and Pacific cod will be reduced by 3.8 percent to 410 000 tonnes. Landings of saithe are likely to increase by 12.3 percent to 412 000 tonnes, while Atlantic redfish will be stable at 182 000 tonnes. Hake catches are also expected to be stable at about 1.1 million tonnes. Hoki catches are expected to increase marginally by 3.5 percent to 206 000 tonnes. Southern blue whiting will increase by 14 percent to 57 000 tonnes and Northern blue whiting will jump from 1.2 million tonnes to 1.56 million tonnes (+31.9 percent) in 2018.

**Groundfish production by selected species, both wild and farmed (2015)**




Source: *FAO*

These estimates were presented in January 2018, and since then, several TACs have been set. The Russian Federation and Norway have agreed on a Barents Sea cod quota for 2018 at 775 000 tonnes, which represents a 13 percent cut compared to 2017. However, this is slightly higher than the International Council for the Exploration of the Sea (ICES) recommendation, which was 712 000 tonnes. The haddock quota set by the two countries will be reduced to 202 305 tonnes, down from 233 000 tonnes in 2017.

The Russian Federation reduced the total TAC for Alaska pollock by 5.8 percent to 1.781 million tonnes, according to the Ministry of Agriculture. This reduction was less than what was expected beforehand. In the Sea of Okhotsk, the TAC was set at 966 000 tonnes, while in the western Bering Sea, the TAC was set at 392 800 tonnes.

The quota for Pacific cod in the Gulf of Alaska is likely to fall by as much as 80 percent. The North Pacific Fishery Management Council (NPFMC) called for such a massive reduction recently. The TAC for 2017 was 64 442 tonnes, but NPFMC has suggested that it be cut to just over 13 000 tonnes in 2018. This radical reduction was based on scientists warnings that the stocks may be in danger.

The overall picture for Pacific cod is not quite that bleak. The Groundfish Forum predicted that the US and Canadian catch will decrease from 270 000 tonnes in 2017 to 250 000 tonnes in 2018, while the Russian Federation catch is expected to increase slightly from 96 000 tonnes to 100 000 tonnes.

## Processing

### RECENT NEWS

**New cod handling method**

In an effort to improve quality of fresh cod and to fetch a higher price, Royal Greenland has developed a new method of handling inshore caught cod, inspired by the salmon industry. By placing small floating cages close to the fishing ground, live cod is stored in these cages for later transportation by well boat to processing and packaging plants. The freshness and quality of the cod is thus better preserved. The fish can stay in the small cages for up to a week, and the use of well boats gives the operation a wider geographical range for collecting high quality fresh cod.

### RECENT RESEARCH

Another effort to improve cod quality is being undertaken by the Norwegian National Institute for Nutrition and Seafood Research (NIFES). Researchers searched for the best method of thawing frozen cod, and have concluded that using water rather than thawing in air produces the best results. The implication of the findings is that the fresh cod season can be extended. Tests have also shown that water-thawed cod is of as good (or even better) quality as fresh cod, which often is subjected to days of transport and storage on ice before consumed.

## Trade

Europeans are consuming more whitefish and other seafood. A study published recently by the European Fish Processors and Traders Association (AIPCE-CEP) showed that finfish imports into the EU28 increased by 2.4 percent in 2016, to 9.2 million tonnes. Consumption of seafood per person increased from 23.9 kg per person to 24.5 kg per person per year from 2015 to 2016. While all species showed increases, cod was particularly available in the market. Supplies of Alaska pollock have also been good.

Germany imported 5.4 percent more Alaska pollock during the first nine months of 2017 than during the same period in 2016. German imports amounted to 102 500 tonnes. China alone accounted for 50 percent of that, but even so registered a 10.6 percent drop in its shipments to Germany. US exports of Alaska pollock to Germany increased by 18.2 percent, to 33 500 tonnes.

German cod imports fell slightly to 22 900 tonnes (-3.4 percent). China was the dominant supplier, accounting for almost 65 percent of the total.

Russian Federation exports of Alaska pollock increased during the first nine months of 2017 by 13.7 percent, to 675 300 tonnes. China absorbed 76 percent of this, while the Republic of Korea took almost 22 percent, leaving only 2.3 percent for others.

US imports of cod during the first nine months of 2017 amounted to 47 300 tonnes, up by 3.3 percent from 45 900 tonnes in the same period in 2016. China emerged as the major supplier by far, accounting for 75 percent of the total.

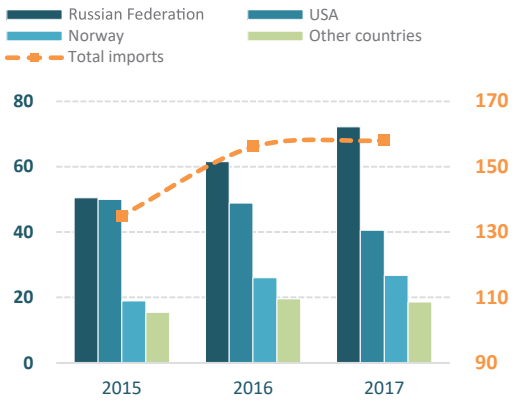
On the UK market, haddock and cod sales were up during the 12-month period from October 2016 to January 2018, according to A. C. Nielsen. Cod sales rose to 48 600 tonnes (+3.2 percent), while haddock sales rose to 20 200 tonnes (+4.1 percent). However, the price rise made the value rise somewhat stronger: +5.2 percent for cod to GBP 399 million (USD 530.8 million) and +5.3 percent for haddock to GBP 205.6 million (USD 273.5 million).

Demand for Alaska pollock blocks on the Russian Federation market is growing fast, according to the Russian Pollock Catchers' Association. During the first six months of 2017, Russian Federation companies sold 27 000 tonnes of Alaska pollock blocks on the domestic market, up by more than 100 percent compared to the same period in 2016, when 13 000 tonnes were sold.

During the first three quarters of 2017, China imported 158 100 tonnes of cod and 582 400 tonnes of Alaska pollock. This represented an increase of 1.3 percent and 13.7 percent, respectively, compared to the same period in 2016. But the country exported less cod fillets and Alaska pollock fillets. This seems to indicate that the difference is diverted to the domestic market, suggesting that the Chinese market for whitefish is growing.

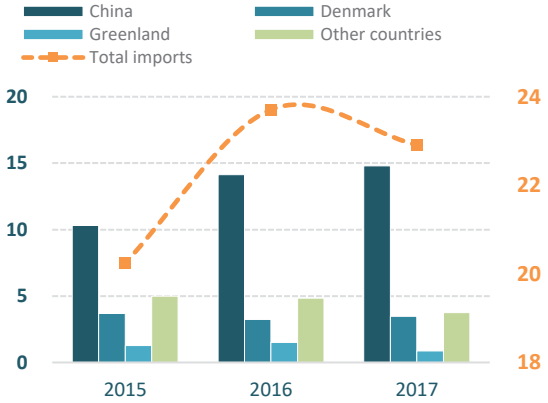
Following the thawing of Chinese-Norwegian diplomatic relations, Norwegian seafood exporters are gearing up for a massive increase in sales to China. The market potential for cod in China appears to be very good, and Norwegian exporters are now expecting a four-fold increase in cod exports to China, from just over 30 000 tonnes in 2016 to over 120 000 tonnes in a few years' time. As the Chinese domestic market for cod develops, it is less likely that processing will be shifted back to Europe.

**China | Imports | Cod | Frozen**
**Top three origins**
Unit: 1 000 tonnes, January-September



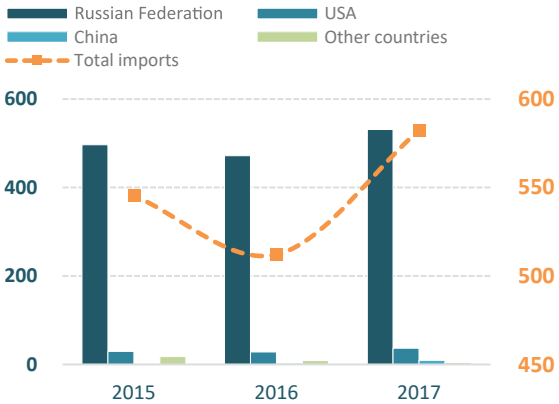

Source: *China Customs*

**Germany | Imports | Cod | Frozen fillets**
**Top three origins**
Unit: 1 000 tonnes, January-September



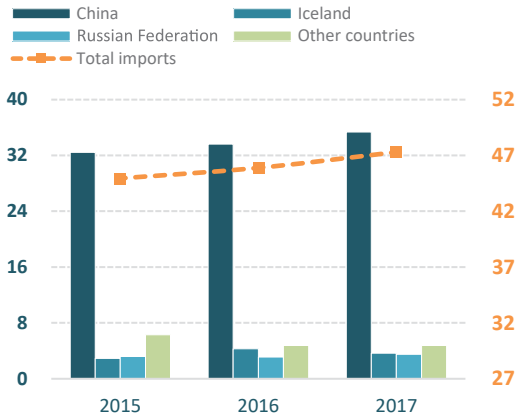

Source: *Germany Customs*

**China | Imports | Alaska pollock | Frozen whole**
**Top three origins**
Unit: 1 000 tonnes, January-September



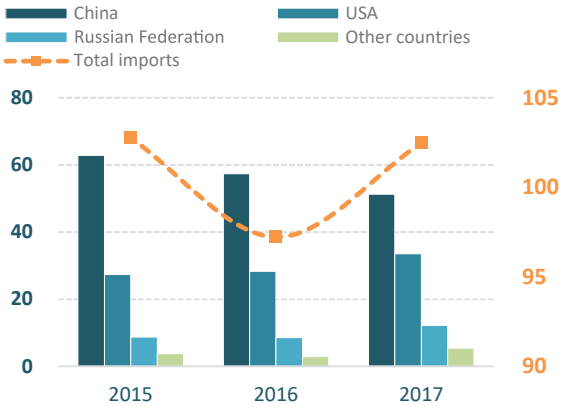

Source: *China Customs*

**USA | Imports | Cod**
**Top three origins**
Unit: 1 000 tonnes, January-September



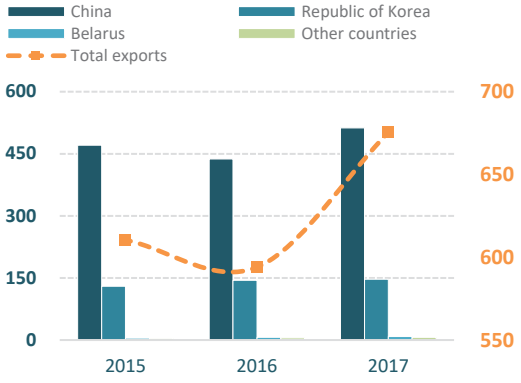

Source: *NMFS*

**Germany | Imports | Alaska pollock | Frozen fillets**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Germany Customs*

**Russian Federation | Exports | Alaska pollock | Whole frozen**
**Top three destinations**
Unit: 1 000 tonnes, January-September



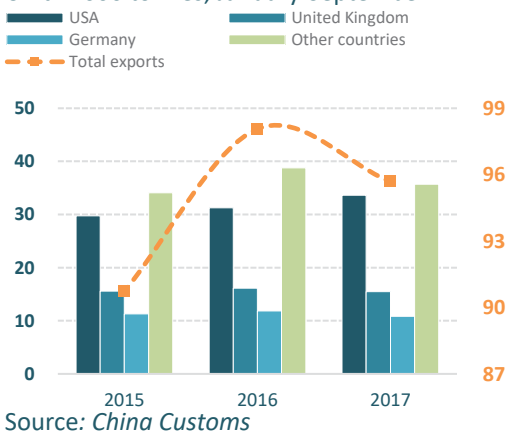

Source: *Russian Customs*

## Surimi

### RECENT NEWS

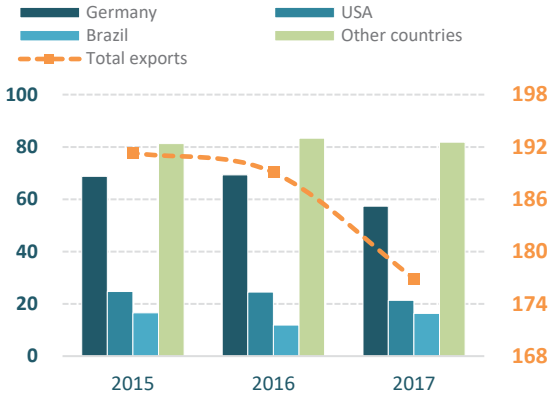
The Indian market for surimi is non-existent. And yet, in the course of 2017, four new surimi plants have been opened in India, each with a production capacity of 80–120 tonnes per day. These new plants have been opened in spite of decreasing supplies of raw material for tropical surimi. It appears that the companies that are behind these new plants have several reasons for moving into the surimi business. One reason is that they want to expand their production activity, rather than being just suppliers of raw material. Another and related reason is the desire to move up in the value chain. A third reason might be that they want to increase exports. It remains to be seen how successful this initiative will be.

**China | Exports | Cod | Frozen fillets**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *China Customs*

**China | Exports | Alaska pollock | Frozen fillets**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *China Customs*

## Prices

Atlantic and Pacific cod prices are likely to increase in 2018 as a result of the reduced quotas, even though the agreed quota decrease was slightly less than predicted. Still, this reduction of 115 000 tonnes will be felt in the growing cod market. Sellers are careful about pushing the price too high, as there is ample competition from other whitefish species, such as Alaska pollock and saithe. The buyers who depend on the spot market are likely to be impacted more than companies buying large volumes on long-term contracts.

Prices for headed and gutted (H&G) Atlantic cod on the Chinese market are rising. In September and October of 2017, the price for 2.5 kg H&G cod in China was about USD 3 650–3 700 per tonne. By November, the price had risen to USD 3 800, and it was expected to soon hit the USD 4 000 mark.

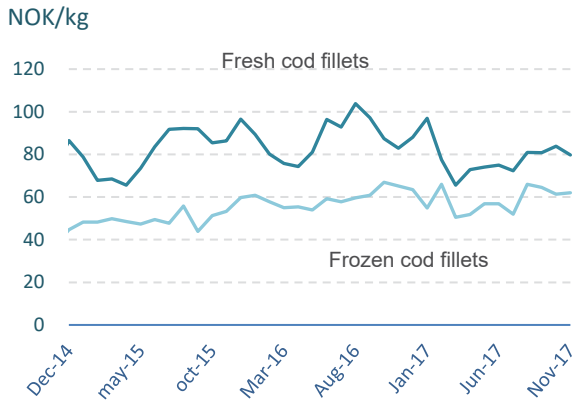
Alaska pollock producers mainly in Alaska are optimistic about price rises, primarily as a result of the growing demand. Demand for surimi has been good for a while, and currently the demand for deep-skinned Alaska pollock fillet block is also increasing. A slight reduction in landings in 2018 will also push prices up.

Alaska pollock producers in the Russian Federation are optimistic about block prices in 2018, due to the effect of the lower quotas and the growing demand on the domestic market and in Europe. Russian Federation production of single-frozen fillets is expected to continue to grow, according to a spokesperson for the Russian Pollock Catchers' Association.

Expectations of a substantial cut in the quota for Pacific cod caused price increases in the US West Coast during the autumn of 2017. Normally, Pacific cod prices have been slightly lower than prices for Atlantic cod, but in October prices for Pacific cod were higher than those for Atlantic cod. Prices for medium-to-large sizes of headed and gutted Pacific

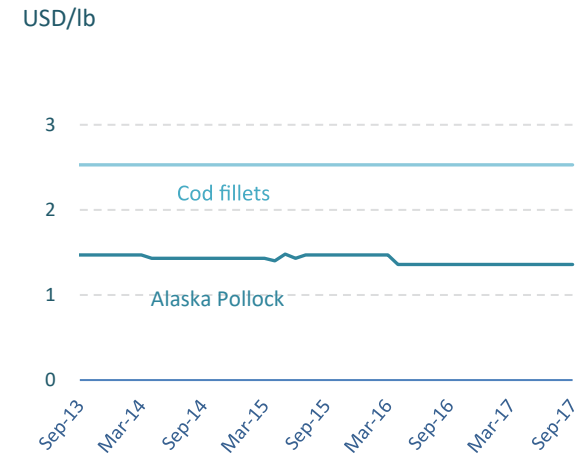
cod bound for the Japanese market were USD 4 500–4 600 per tonne, and about USD 4 600–4 650 per tonne for the European market.

**Export prices**
**Cod: Norway**




Source: *Norwegian Seafood Council*

**Wholesale prices**
**Groundfish: USA**




Source: *INFOFISH Trade News*

## Outlook

The groundfish market will be tighter in 2018 for all the major species, with the exception of saithe, which will be more abundant. Cod and Alaska pollock prices are expected to edge upwards. The reduced cod supplies were largely foreseen, so the effect on prices may not be as pronounced as could be expected otherwise. Demand for the most popular groundfish species is increasing, and this bodes well for the industry in 2018. However, for the fishermen, there will be a harder fight for the resources.

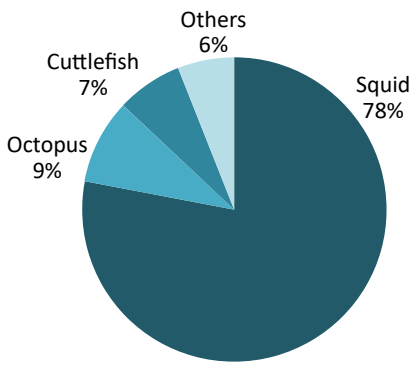
# CEPHALOPODS

## GLOBEFISH HIGHLIGHTS

# *Scarce octopus supplies and record high prices*

**Disappointing catches of octopus in Morocco, Spain and Portugal have pushed prices up significantly. At the same time, demand for octopus seems to be growing worldwide. In South America, the giant squid fishery has collapsed, and supplies are disappearing.**

**Cephalopods production (2015)**




Source: *FAO*

## Octopus

The Moroccan octopus season ended in September with lower catches than in 2016 and consequently higher prices. There is increasing demand, particularly from the growing US consumption. The higher prices are now affecting processors, who see their margins getting slimmer.

Cold storage holdings in Morocco are practically empty, as stock is being sold as soon as it comes in. The winter season had a slow start in December, with mostly smaller sized octopus catches, while demand for larger sizes has been high, especially in the USA. Morocco decided to delay opening the winter season for octopus by a few days until 5 December 2017 in the northern and southern areas. The TAC for the first month of the season was set at 815 tonnes. At the same time, Mauritania opened its winter season. In spite of the relatively high quota for the first month, prices for Moroccan octopus continued to rise.

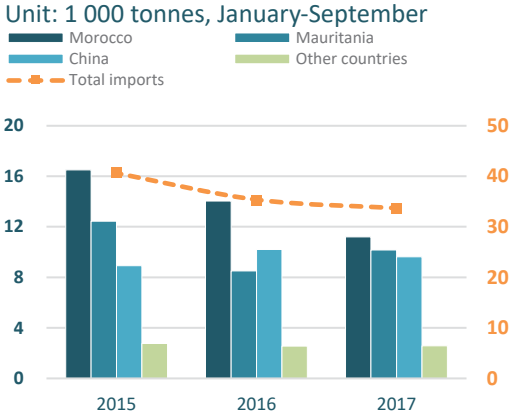
Octopus landings in northern Spain dropped by 47 percent from the beginning of the season in July to the end of September 2017, when Portugal also recognized the scarcity of octopus. Portugal stopped fishing for one month in the last quarter of 2017 to let the stocks recover. The Armalgarve Octopus Fishing Association suggested a longer fishing ban, but the authorities have not reacted to this suggestion.

Octopus prices in Indonesia, India and Pakistan have increased recently, and landings were very scarce. Most of the octopus from India and Pakistan was exported to China, where it was processed and re-exported to other markets such as Europe. Venezuela catches of octopus were reportedly good in 2017, and sold at high prices in the European market.

International trade of octopus was mixed for the first nine months of 2017. Japanese octopus imports dropped by almost 5 percent compared to the same period in 2016, from 35 300 tonnes to 33 600 tonnes. The main suppliers were Morocco, Mauritania and China, which together accounted for 92 percent of the imports during this period.

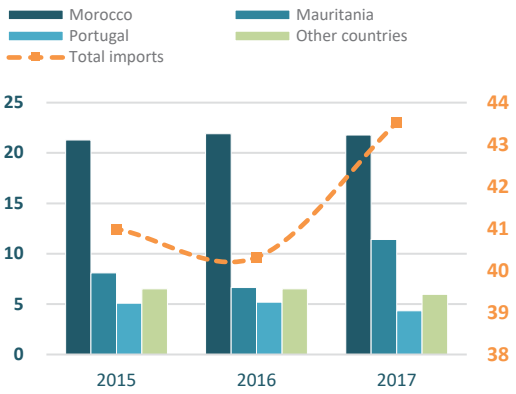
Spanish octopus imports increased 8 percent during this period, to 43 500 tonnes, compared to 2016. The main suppliers to Spain were Morocco, Mauritania and Portugal. Shipments from Morocco slightly declined, while Mauritania significantly increased (+71.4 percent) exports of octopus to Spain.

**Japan | Imports | Octopus**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Japan Customs*

**Spain | Imports | Octopus**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Agencia Tributaria*

## Squid

The giant squid (*Dosidicus gigas*) stocks off Peru and Chile appear to be suffering. Since June 2017, these fisheries have collapsed, and supplies have been scarce. The reason is thought to be the effect of El Niño, which led to a complete fisheries stop also in 2016.

The collapse of the giant squid fishery has brought on an initiative to assess the giant squid biomass. Giant squid is the second largest fishery in Peru, and consequently of great economic importance to the country. In November 2017, the Instituto del Mar of Peru (IMARPE) started a giant squid assessment cruise using acoustic stocks evaluation. The survey will be carried out in the south and the north of the Peruvian Sea.

The Argentine squid industry association, Armadores Poteros Argentinos (CAPA), has requested to anticipate the beginning of the season to 10 January 2018, instead of the planned start on 1 February. The authorities appear to not be opposed to this request. Argentine landings of *Illex* squid by 25 January 2018 stood at 97 000 tonnes, compared to 56 000 tonnes at the same time in 2016.

After recent years of scarce squid landings in California due to the El Niño effect, fishing is now improving. The arrival of La Niña with colder waters reaching southern California has brought the squid back. Since October, fishing has improved somewhat.

The California market squid (*Loligo opalescens*) has become a major species in California fisheries, with a first-hand value of around USD 75 million per year. Prices for Loligo squid in California have been high, with ex-vessel prices as high as USD 1 000 per tonne, while in 2015 prices were at USD 650 per tonne. However, California Loligo prices are expected to decline as the season progresses.

In the Falkland Islands (Malvinas), Loligo squid landings were good in 2017. At the end of the first season of 2017 total catches amounted to 39 400 tonnes. The second season in 2017 brought larger sized squid, which fetch higher prices. In China, prices for Argentine Illex squid, Peruvian giant squid and Japanese flying squid rose from an already high level, while Loligo prices marginally decreased.

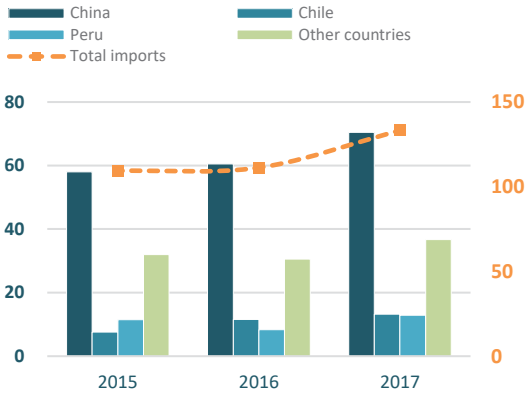
There was a significant increase in Japanese imports of squid and cuttlefish, from 111 000 tonnes during the first three quarters of 2016, to 133 300 tonnes during the same period in 2017 (+20 percent). All the major suppliers increased their shipments: China increased by 16.4 percent to 70 400 tonnes, Chile by 14.9 percent to 13 300 tonnes, and Peru by 53.8 percent to 12 900 tonnes.

Spanish imports of squid and cuttlefish also increased to 221 200 tonnes during this period, albeit by a much more modest factor (+15.4 percent). The main suppliers Peru and the Falkland Islands (Malvinas) registered impressive increases in their shipments to Spain (45 800 tonnes or 21 percent of the total, and 35 100 tonnes or 16 percent of the total, respectively), whereas China shipments (30 700 tonnes or 14 percent of the total) declined by 13 percent compared to the same period in 2016.

The squid and cuttlefish imports into the Republic of Korea increased by 32.3 percent during the first nine months of 2017, to 73 700 tonnes. Supplies from Chile, Peru and China accounted for 93.5 percent of the imports.

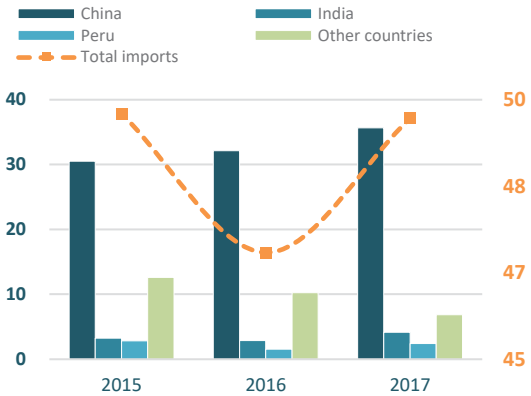
US squid and cuttlefish imports rose by 5 percent during the first three quarters of 2017 to 49 200 tonnes. China dominates this trade, accounting for 72.5 percent of total US imports. India and Peru are the second and third largest suppliers, accounting for 8.5 percent and 5.0 percent of the total, respectively.

**Japan | Imports | Squid and cuttlefish**
**Top three origins**
Unit: 1 000 tonnes, January-September



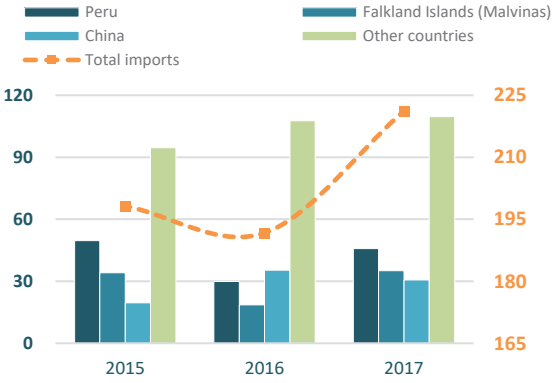

Source: *Japan Customs*

**USA | Imports | Squid and cuttlefish**
**Top three origins**
Unit: 1 000 tonnes, January-September



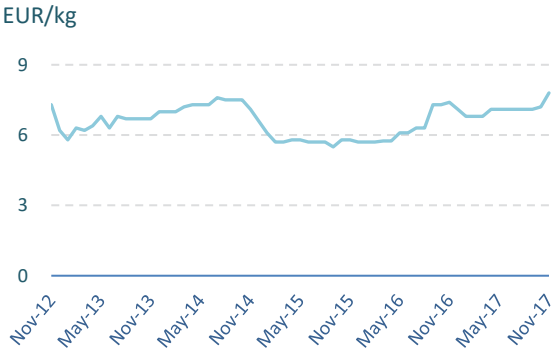

Source: *NMFS*

**Spain | Imports | Squid and cuttlefish**
**Top three origins**
Unit: 1 000 tonnes, January-September



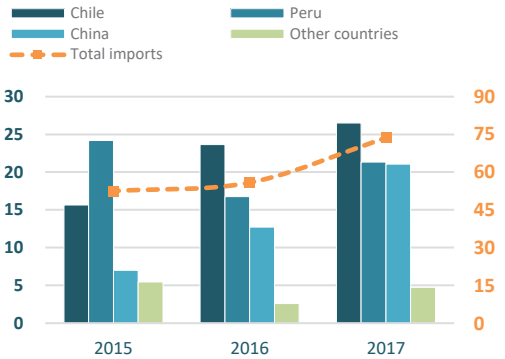

Source: *Agencia Tributaria*

**Prices**
**Squid: Italy**




Whole, FAS, middle size, origin: South Africa
Source: *European Price Report*

**Republic of Korea | Imports | Squid and cuttlefish**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Korea Customs and Trade Development Institution*

## Outlook

There will be a severe shortage of octopus in the market for several months, and prices can be expected to climb even higher than at the moment. Squid prices can also be expected to rise, as the giant squid supplies are disappearing while other squid fisheries look better.

# TILAPIA

## GLOBEFISH HIGHLIGHTS

*Domestic markets remain firm, Chinese tilapia competes with pangasius*

**In the first nine months of 2017, global trade of tilapia declined by about 6 percent. Some of the loss in export markets was compensated by growing demand in domestic markets of producing countries. Despite its decreased demand, the United States of America remains the largest market for tilapia. The negative press of Chinese tilapia in the US market and the increasing competition with pangasius in the Chinese market are among the factors that have contributed to the slowdown in trading. There appears to be some recovery of the EU28 market, which however is still rather small. FAO continues to monitor the situation on Tilapia Lake Virus (TiLV), working with governments and development partners, searching for resources that can be explored in order to assist FAO member countries to address TiLV. There has not been much update on the situation except a recent announcement that Egypt is free from the TiLV. TiLV continues to be a concern among main producing nations, although active surveillance is being conducted**

### China

Total Chinese exports of frozen tilapia continued the growth of the first quarter of 2017 with a 4.4 percent increase in exports during the first nine months of 2017 compared to 2016. The frozen breaded fillet category appeared to grow at a faster pace (+19.3 percent) compared with the whole frozen tilapia (+3 percent), while exports of frozen fillet continued to decline (-5.3 percent). China has been aggressively supplying whole frozen tilapia to the African markets. Approximately 30 percent of the total frozen tilapia from China entered African markets during the review.

Additionally the Chinese domestic market is beginning to face competition with growing imports of pangasius, which have become popular. Tilapia farmers in China are reported to be switching to pangasius due to the growing domestic demand driven primarily by the lower prices compared to tilapia and highly sought after by the foodservice sector.

**Chinese exports of frozen tilapia (by product and destination)**

| | January - September | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| | (1 000 tonnes) | | | | |
| Frozen whole | | | | | |
| Côte d'Ivoire | 13.1 | 14.0 | 11.2 | 21.7 | 22.1 |
| USA | 17.0 | 17.5 | 16.6 | 19.1 | 16.0 |
| Burkina Faso | 2.4 | 5.6 | 5.3 | 2.1 | 5.9 |
| Other countries | 54.5 | 52.2 | 52.9 | 47.0 | 50.1 |
| Subtotal | 87.0 | 89.2 | 85.9 | 89.9 | 94.2 |
| Frozen fillets | | | | | |
| USA | 66.4 | 63.2 | 55.7 | 45.9 | 43.3 |
| Mexico | 19.2 | 15.1 | 15.2 | 20.2 | 14.6 |
| Iran (Islamic Republic of) | 1.7 | 6.8 | 7.7 | 12.4 | 10.3 |
| Other countries | 33.7 | 28.5 | 26.5 | 27.6 | 32.3 |
| Subtotal | 121.0 | 113.5 | 105.1 | 106.1 | 100.5 |
| Total | 208.0 | 202.7 | 191.0 | 195.9 | 194.7 |

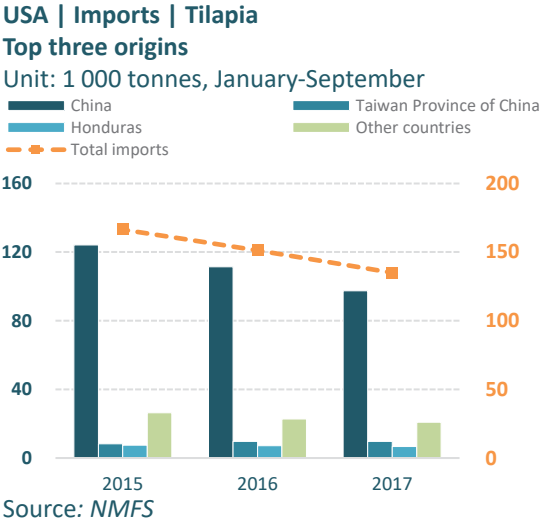
Source: *China Customs*

### United States of America

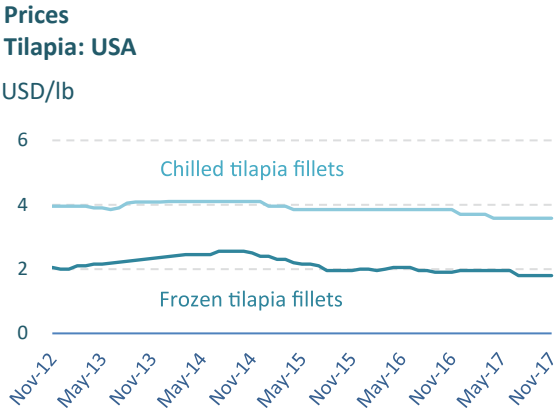
During the first three quarters of 2017, demand for tilapia continued to weaken in the US market, and total imports of frozen tilapia fell by 13 percent, compared to the same period in 2016. US imports dropped for frozen fillet and whole frozen categories.

China continued as the main supplier of tilapia to the US market, notwithstanding the drop in imports from China due to the weakening demand in the United States of America.

During the review period, there was an increase in US imports of whole frozen tilapia from other suppliers, namely Thailand, Viet Nam, India and Bangladesh. In the US market, there was also more frozen fillet from Latin American countries like Ecuador, Honduras and Panama, even though these quantities are marginal compared to those from Chinese and other Asian suppliers.



Source: *NMFS*



Chilled tilapia fillets: Primary wholesale, NY, USA, origin: Costa Rica; Frozen tilapia fillets: 3-5 oz/lb, EXW NY, USA, origin: China

Source: *INFOFISH Trade News*

## Latin America

Latin America is increasingly perceptive of the importance of tilapia and its characteristics. Stakeholders are working hard to increase its production and exports.

In Colombia, the Ministry of Commerce, Industry and Tourism and the Ministry of Agriculture presented a working plan to increase aquaculture exports, particularly tilapia. The first step consists of five technical assistance agreements to prepare the exportable supply of 735 small tilapia producers. In addition, the government presented the first group of 33 fish production units that received certification by the sector for best aquaculture practices, awarded by the Global Aquaculture Alliance (GAA). This could represent an advantage for sales in the international markets, especially the United States of America and Canada.

In Mexico, the National Commission of Aquaculture and Fisheries (CONAPESCA), together with Worldfish, the Tilapia Network Mexico, and producers, researchers and marketers, has been designing strategies to promote the development of tilapia. CONAPESCA emphasized that tilapia was the top species in volume production in Mexican aquaculture in 2016, exceeding 152 000 tones. Mexico has conditions to grow even more in aquaculture production and there are special incentives for both commercial aquaculture in inland waters and for small rural aquaculture projects. Presently, however, Mexico is an important outlet for tilapia, with imports of some 68 000 tonnes of tilapia product (mainly frozen fillets) in 2016, and on par imports in 2017.

Honduras continues to lead exports of fresh and chilled tilapia fillets to the US market holding a third of the market share, despite registering decreases in terms of value (-14.5 percent) and volume (-8.9 percent) in the first nine months of 2017 compared to the same period of 2016.

## European Union (Member Organization)

Positive market trends since the previous reporting period continued in the EU28, as total tilapia imports increased by 8.4 percent during the first nine months of 2017, compared with 2016, to reach approximately 21 000 tonnes. The growth was more prominent in the frozen fillet category (+13 percent), continuously encouraged by the declining average import prices to USD 3.10 per kg (-9 percent). Imports of whole frozen tilapia increased by 3 percent, while average import prices were down by 2 percent from 2016.

China was the leading supplier for both categories, although it supplied less whole frozen tilapia during the review period. Viet Nam was the second largest source of tilapia imports to the EU28. Premium range tilapia was sourced from Indonesia and Taiwan Province of China, with average import prices of USD 5.50 per kg and USD 12.60 per kg, respectively.

## Asia and other markets

Approximately 95 percent of the global tilapia exports (223 600 tonnes) originate in Asia, with China (Mainland and Taiwan Province of China)

as the lead supplier, followed by Indonesia. The region also absorbed a significant amount of its own production into its domestic market.

After the United States of America as the single largest import market for tilapia, Latin America is next followed by Africa. During the review period, Latin American countries imported close to 58 000 tonnes of tilapia, 2.7 percent more than in 2016. African imports declined by 8.9 percent to 31 700 tonnes, though this volume was nearly the double of 2015 imports. The Islamic Republic of Iran and the Russian Federation continue to be potential market areas with a 67 percent increase into Russia.

## RECENT NEWS

**Tilapia farming in the Solomon Islands**

Tilapia farming will soon be introduced to all the Rural Training Centres (RTC) nationwide in the Solomon Islands.

According to a representative from the Solomon Islands Association of Vocational Rural Training centres (SIAVRTC), this follows a three-year partnership development, established with the SIAVRTC and New Zealand Win Tec Waikato School of Technology in New Zealand, under the support of the New Zealand Government. The aim is to strengthen tilapia farming in the country with the utilization of RTC's as a hub for the rural community's access to have the information to increase food production and create a small income to rural households. The focus will be to increase food and income security in rural households from the tilapia production, introduce training on tilapia farming for students in the training centres, to provide access to information to the communities and to encourage the community venture into such development to sustain their livelihood.

## Outlook

Average import prices are not expected to improve much because overall the market remains weak to steady and the global industry remains threatened by TiLV. Meanwhile, tilapia is playing an increasingly important role as part of food security programmes not only in the major producing countries but also in the Pacific region.

# PANGASIUS

## GLOBEFISH HIGHLIGHTS

# *Latin America and Asia remain growth drivers*

**World imports of pangasius are estimated to have reached approximately 420 000 tonnes in the first nine months of 2017, a 14 percent increase from the same period in 2015. Overall there was a marginal decline (-0.2 percent) from 2016, but a significant drop in imports (-10 percent) into the United States of America, the single largest market. Latin America and Asia account for close to 50 percent of the global imports. Shortage in supplies pushed prices to a ten-year high in the first quarter of 2017 and it remained firm since.**

## Viet Nam

Vietnamese exports of pangasius faced difficulties in the US and European markets, but overall exports during the first nine months of 2017 reached USD 1.3 billion, 5.8 percent more than during the same period in 2016. VASEP announced that exports to the United States of America were worth USD 258.3 million during the review period (-9.9 percent). Exports to Europe fell in August (-8.4 percent) and September (-23.7 percent) in comparison with the same period in 2016.

Meanwhile, exports to other markets are growing, offsetting the decline in EU28 and in the United States of America. In the first three quarters of 2017, pangasius exports from Viet Nam to China and Hong Kong SAR were worth more than USD 288 million, an increase of 42 percent year-on-year.

During the review period, Vietnamese pangasius exports to Saudi Arabia reached USD 40.48 million (+4 percent). In 2017, Saudi Arabia became the top four "alternative importing market" of Viet Nam. In 2016, Saudi Arabian imports of pangasius accounted for the largest share in total whitefish imports. Viet Nam was the main supplier of pangasius to Saudi Arabia with 43 percent of total imports into the country, followed by Myanmar, Egypt, Taiwan Province of China, Bangladesh and Thailand. In 2016, the Saudi Arabian import price of pangasius ranged from USD 1.45–1.5 per kg. This price is forecast to have increased by 5-10 percent at the end of 2017, with an export price of USD 1.50—1.75 per kg.

Industry sources revealed that there is an overall shortage in supplies of pangasius since some farmers abandoned their farms after facing continuous losses. This shortage is expected to continue as current high prices firm.

## United States of America

In the first nine months of 2017, total US frozen catfish imports decreased by 9.9 percent compared to the same period in 2016, in line with the drop in frozen pangasius fillet imports from its leading supplier, Viet Nam. More whole pangasius was imported from Viet Nam. Frozen Channel catfish (*Ictalurus sp*) fillet continues a positive a trend following a decline during the previous reporting period with China as the leading and only source.

**US imports of fresh and frozen catfish fillets (by origin)**

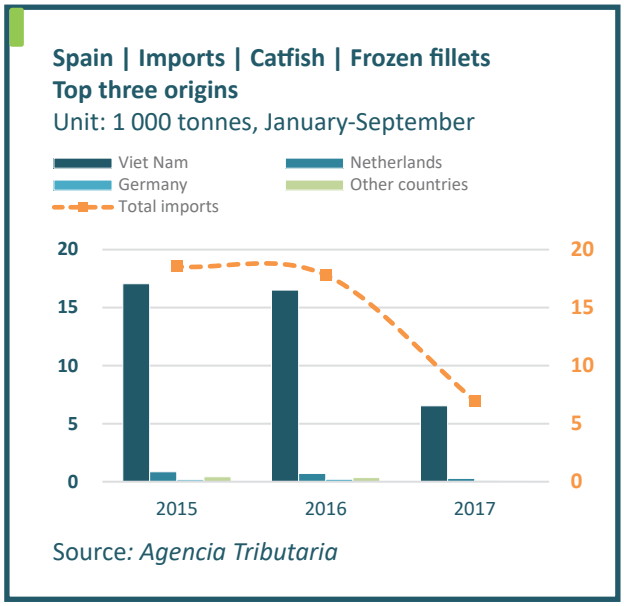
| | January - September | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| | (1 000 tonnes) | | | | |
| Viet Nam | 83.2 | 72.5 | 79.9 | 97.4 | 85.2 |
| China | 4.9 | 5.2 | 3.8 | 3.2 | 5.0 |
| Panama | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Others | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 |
| Total | 88.5 | 77.9 | 83.8 | 100.6 | 90.2 |

Source: *US Department of Commerce, Bureau of Census*

## European Union (Member Organization)

The EU28 demand continued to weaken during the first nine months of 2017, with imports (whole and frozen) adding to 61 600 tonnes, 15 percent less than in the same time period in 2016. Imports declined significantly into the largest markets within the EU28, Spain and the United Kingdom. Frozen fillet imports took the largest share, but whole frozen pangasius imports sourced in Viet Nam and Indonesia registered an impressive increase of 7.4 percent during the review period.

Pangasius imports, which are mostly coming from Viet Nam, to Spain fell by 62 percent to around 6 650 tonnes, during the review period. According to A. C. Nielsen, sales dropped by 50 percent between 1 August 2016 and 31 July 2017. This was particularly drastic in April and May 2017, when Spain imported 500 tonnes compared to the average monthly imports in recent years of almost 2 000 tonnes.




## Asia

During January–September 2017, approximately 95 000 tonnes of frozen pangasius were imported into Asia, 23 percent more than in the same period in 2016. China has emerged as the largest importer in Asia, overtaking Thailand and posting 43 percent growth in imports during the review period. In total, China imported 34 400 tonnes of pangasius product during this period, 65 percent more than the year before. Thailand was close behind, importing a total of 19 200 tonnes. Tilapia farmers in China are reported to be switching to pangasius due to the growing domestic demand driven primarily by the lower prices compared to tilapia.

## Latin America

Latin America imported over 100 000 tonnes of frozen pangasius during the first nine months of 2017, an increase of 12.3 percent from 2016. The continent is the largest importer, comprising approximately 26 percent of the global imports of pangasius. Within the region, Brazil and Mexico are the largest importers.

## Outlook

Persistent demand in Asia and Latin America is growing, in contrast to weakening US and EU28 markets. In the first quarter of 2017 prices reached a 10-year high and it has remained at the peak since then. Industry sources opine that the rising prices will continue into 2018 supported by the strong demand from China and the shortage in supplies.

# BASS & BREAM

## GLOBEFISH HIGHLIGHTS

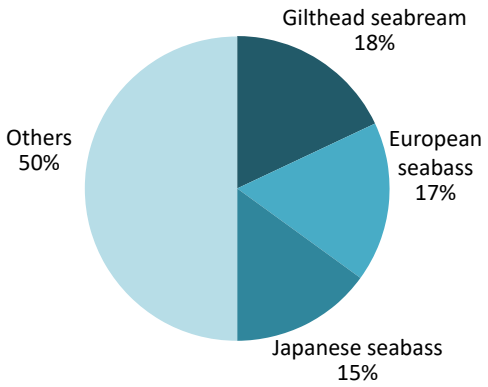
# *Greece at risk as supply surplus continues to threaten price stability*

**With both of the two major Mediterranean suppliers, Turkey and Greece, supplying significantly greater quantities of bass and bream this year, it is the Greek industry for which the outlook is most uncertain. Turkish exporters and producers are relatively safer due to proactive market diversification and product development as well as an ever more favourable exchange rate that has been shielding them from euro price declines.**

A succession of hikes in juvenile production in the Mediterranean bass and bream sector over the past four years have inevitably led to a boost in harvest volumes. These volumes reached their peak in 2017, with an estimated production of 187 500 tonnes of bass and 191 500 tonnes of bream. High water temperatures in 2017 accelerated biomass growth further and fish were very plentiful through the first three quarters. This has kept consistent downward pressure on prices despite a general improvement in economic conditions in major European markets and an increase in sales to newer markets in the United States of America and the Middle East and North Africa region, primarily driven by Turkey. Industry development is also taking place in Greece, and investment in production technology has paid dividends in the form of cost reductions for a number of major aquaculture companies. Consolidation of industry leaders Selonda and Nireus will likely lead to further efficiency gains, while significant investment in marketing to support the Greek aquaculture sector is expected from multiple sources, including the EU28 through MedAID funds. However, in the medium term, it is still not clear that this progress will be sufficient to outweigh the unavoidable impact on prices that will result from the currently available supply.

In Turkey, prices (ex-farm, iced-packed) in domestic markets were down to USD 3.67 per kg for farmed seabream in September 2017 due to panic sale by producers. The resulting reductions in seabream stocks pushed the seabream prices upwards in October 2017, ranging between USD 4.37–4.60 per kg depending on fish size. This positive trend continued in November and December of 2017. Interestingly, seabass prices were weak during the

**Seabass and seabream production (2015)**

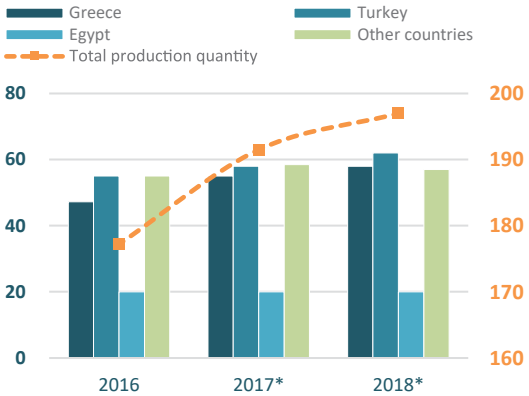



Source: *FAO*

**Top three global producers of seabass**

*Dicentrarchus labrax*

Unit: 1 000 tonnes

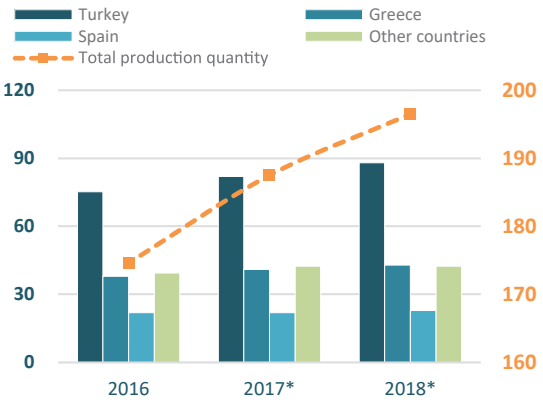



Source: *FAO (until 2015), *Estimate & forecast*

**Top three global producers of seabream**

*Sparus aurata*

Unit: 1 000 tonnes

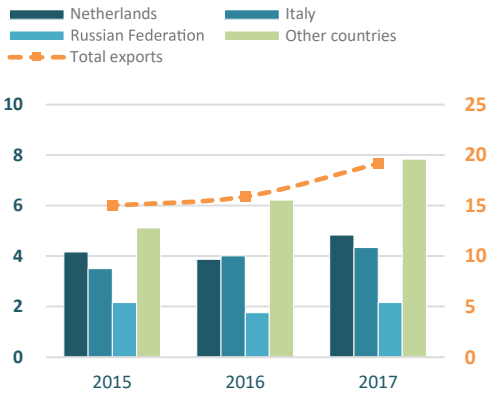



Source: *FAO (until 2015), *Estimate & forecast*

**Turkey | Exports | Seabass | Fresh**

**Top three destinations**

Unit: 1 000 tonnes, January-September

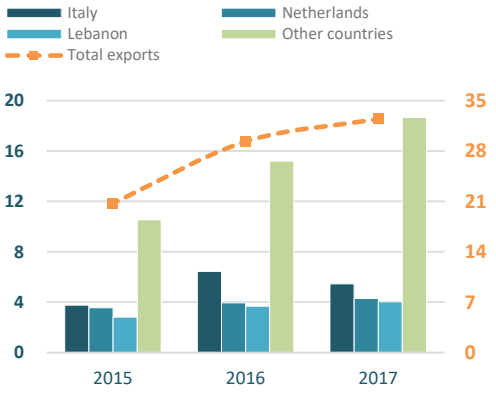



Source: *State Institute of Statistics*

**Turkey | Exports | Seabream | Fresh**

**Top three destinations**

Unit: 1 000 tonnes, January-September




Source: *State Institute of Statistics*

same period. High seawater temperatures (24–25°C) in the main seabass producing sites (Bodrum, Milas, Didim) favored seabass growth rates and stock availability for sales. This pushed down the prices from USD 4.61 per kg to USD 4.37 per kg, corresponding to nearly 11 percent decrease in prices in local currency (Turkish lira).

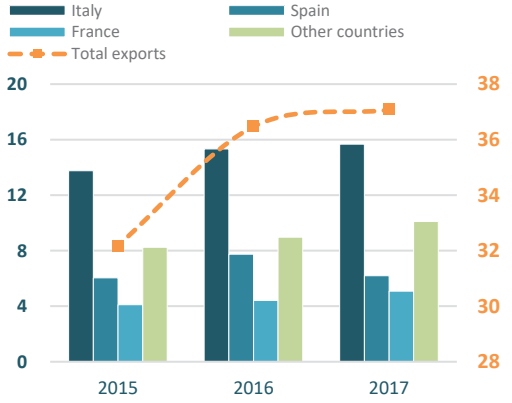
There have been public disputes regarding the allocation of new production sites on the eastern Turkish Mediterranean coast (i.e. Mersin Province) to seabass and seabream farming. In addition, strong opposition by environmentalist groups continues to be a critical issue for the marine aquaculture sector in Turkey. According to industry experts, allocation of new marine production sites is crucial for further development of Turkish seabass and seabream sector. Without access to new production sites, further growth in production volume is practically impossible. In this regard it seems that Turkish supply of seabass and seabream in 2018–2019 will remain stable.

Greek bass and bream exporters continue to focus on the relatively small selection of markets, primarily in Southern Europe, with Italy still accounting for the major proportion of sales. This share has decreased somewhat in 2017, however, mainly as a result of strong demand in Spain that has been fuelled by the falling price level. The presence of Greek fish on non-European markets is still extremely limited, with small but increasing volumes of bass exported to the United States of America, the only trend of note. This restriction to European markets is the consequence of a number of factors, including geography, product pricing and consumer sensitivity to origin, but it should be of some concern to Greek stakeholders when its most significant competitor, Turkey, continues to gain competitive advantage through a steep decline in the value of the lira versus the euro. The Turkish sector also continues to reinforce its presence in a number of increasingly important non-European markets, led by Lebanon, the Russian Federation, the United States of America and Israel. Turkey has also established itself as a key

**Greece | Exports | Seabream | Fresh**

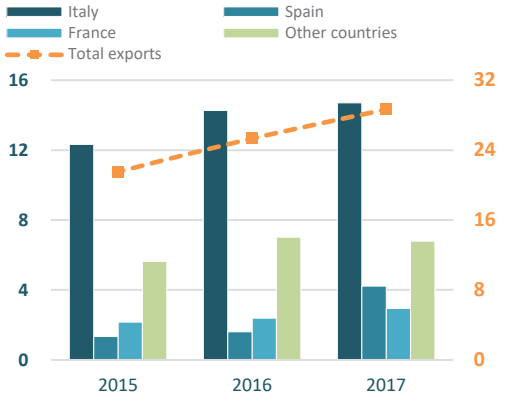
**Top three destinations**

Unit: 1 000 tonnes, January-September



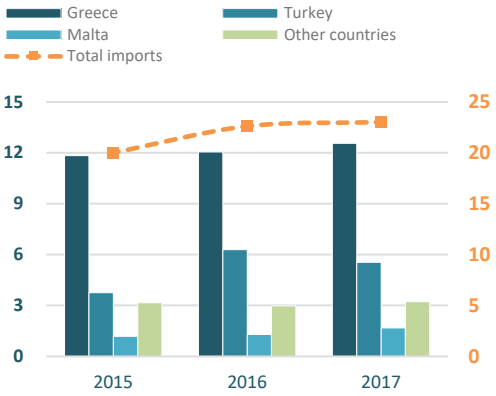

Source: *Eurostat*

**Greece | Exports | Seabass | Fresh**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *Eurostat*

**Italy | Imports | Seabream | Fresh**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Eurostat*

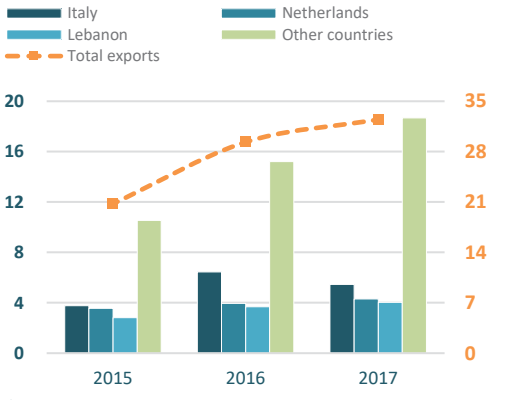
supplier of both fillets and whole fish to Northern Europe, through the Netherlands.

## Italy

Italy is the world's largest market for seabass and seabream, absorbing around 40 000 tonnes of both species combined each year. Domestic production was stable at around 10 000 tonnes per year, with the remainder coming from Greece and Turkey. Greece remains the most popular origin, but Turkey has steadily been eroding this majority share in recent years, while Croatia has also been increasing exports to the Italian market. Italian demand has been relatively strong in 2017 due primarily to improving economic conditions, keeping prices relatively high at wholesale markets for the summer months. In the third quarter, however, the effect of excess supply in the broader market saw prices drop steeply.

## Spain

**Italy | Imports | Seabass | Fresh**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Eurostat*

Spain is another core Mediterranean market where demand has been boosted by economic recovery in the Eurozone, and exports dropped in 2017 as Spanish production of farmed bass and bream was diverted to supply the domestic market. However, as observed in Italy and other major markets, excess volumes, particularly at the end of the summer, pushed prices steeply downwards at wholesale markets in the third quarter. The drop was relatively more pronounced for seabass, for which supply in Spain is more plentiful.

## France

A rebound in tourism in France in 2017 and strengthening domestic demand saw an increase in imports in the first nine months. Greece remains the leading supplier to a market that is typically very origin sensitive, but a decline in supply from Spain has been replaced by fish from Turkey and also from the Netherlands, mainly re-exports of Turkish products. Import prices for both bass and bream generally fell in line with the prevailing price level in the wider market, although a shortage of bream from Turkey going into the fourth quarter resulted in an unseasonal spike.

## Other markets

Besides the major European markets of Italy, Spain and France, the current surplus of fish has seen imports increase in a number of other markets across the continent. Portugal has been growing rapidly, replacing a dip in Spanish supply with imports from Greece and Turkey. In the United Kingdom, the weakness of the pound versus the euro has been offset by the lower price level and overall has had little effect on demand for bass, the more popular of the two species, although bream imports fell during the review period. In Northern Europe, the Netherlands continues to grow its imports of cheaper fish from Turkey, consisting of whole fish and fillets, much

of which is then re-exported to other European markets. Germany, meanwhile, is the one relatively large European market where underlying demand appears to be weakening, even in the face of the low price levels. In the Russian Federation, however, a recovering economy combined with plentiful supply and a weak Turkish lira has seen imports rebound strongly.

## Outlook

After a year of relatively tight supply in the market and prices that have seen struggling, Greek aquaculture companies restore a degree of positivity to their balance sheets, the outlook for the sector is uncertain once again. Without a significant supply shock, total production of bass and bream in the Mediterranean region can be expected to remain at or above 2017 levels over the next couple of years. Up to fairly recently, these kinds of volumes would have certainly been enough to inflict widespread financial devastation across the sector as prices would have dipped well covering the costs of production. Today, however, while there is still potential for losses, particularly in Greece, there are also a number of factors that allow for a more positive outlook. First, economic conditions across almost all major markets have improved and the forecast is generally good, which is perquisite for strong consumer demand. Second, due primarily to the efforts of the Turkish industry, a range of newer markets have been developed which are capable of absorbing some of the excess supply volumes. Third, there is ongoing horizontal and vertical integration of the sector in the major producing countries, particularly Greece and Turkey, as well as rising investment in research and development. Last, prices for multiple competing seafood categories are currently at high levels, potentially making relatively cheaper bass and bream a more attractive item to seafood consumers. Combined, these drivers may be enough to stave off a major price crash this time around, although uncertainty will still prevail for some time to come.

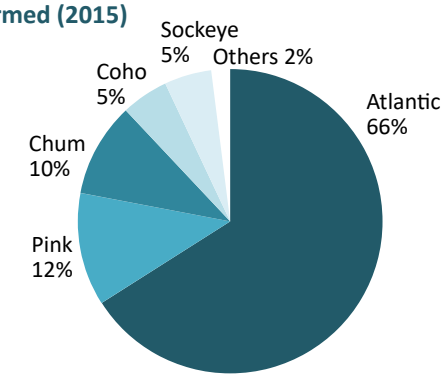
# SALMON

## GLOBEFISH HIGHLIGHTS

# *Global salmon prices come down as farmed harvests flood the market*

**A buildup in harvestable biomass at farms in major producing countries in the second half of 2017 has had a pronounced dampening effect on global salmon prices as these volumes hit the markets. December prices for Norwegian farmed Atlantic salmon were 30 percent below the equivalent period in 2016, when it hit historic highs, and Chilean export prices have also dropped significantly.**

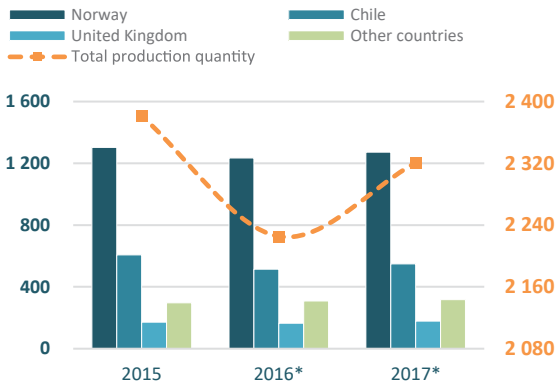
**Salmon production by species, both wild and farmed (2015)**




Source: *FAO*

**Top three global producers of farmed Atlantic salmon**

Unit: 1 000 tonnes




Source: *FAO (until 2015), *estimate*

## Supply

### Norway

After a record-breaking run in late 2016, relatively tight supply from Norway kept prices and revenues high throughout the first half of 2017. However, a somewhat lopsided proportion of younger versus older fish in the pens, combined with excellent biological performance, resulted in an acceleration of biomass growth over the summer and a large excess of harvestable fish in the last six months of 2017. The effect on supply was compounded by a parallel hike in harvest volumes in Chile, the second largest farmed salmon producer in the world after Norway. Although these additional volumes had been widely anticipated, the erosion of consumer demand in some core European markets by the prior period of exceptionally high prices has resulted in a more substantial impact than expected by the suppliers.

However, the effect of the recent price decline on Norway's annual exports will be significantly offset by the extremely favourable export conditions observed earlier in 2017, when the multi-year depreciating trend of the Norwegian krone versus the euro accentuated the revenue boost represented by low harvests and strong demand growth worldwide. According to the Norwegian Seafood Council (NSC), the total value of Norwegian salmon exports in the first three quarters of 2017 was up 10 percent by NOK 4.2 billion (USD 509 million) compared with the same period in 2016. Volume for the same period was flat year-on-year, but 2017 as a whole

will see an increase in both exports and harvests for Norway with total Norwegian production for the year expected to be around 1.27 million tonnes. The US and various Asian markets continued to increase export volumes from Norway, with Viet Nam, Thailand and the Republic of Korea showing particularly strong growth. Exports have decreased to Norway's top consumer market, France, where demand has been particularly affected by high prices.

Considering the effect of the recent supply boost, the increase in production of 8–10 percent forecast for 2018 could well have a more pronounced and sustained effect on prices than previously expected. The market's recognition of this has been evidenced in forward price movements at Fish Pool, with multiple downward revisions of 2018 over recent weeks. The consensus forward price for 2018 as a whole as of mid-December stands at NOK 55.20 (USD 6.62) per kg, somewhat below the 2016 and 2017 equivalents but still well above the year average for 2015. This reflects a market still supported by firm underlying demand globally and steady supply growth, promoting the interpretation of the recent price drop as a return to normality that will prevent excessive demand erosion as opposed to a negative market development.

As well as being the world's largest producer of farmed salmon, Norway, is also one of the largest producers of farmed trout, with both species raised in open-cage farming systems in Norway's fjords. Being exposed to similar environmental conditions, trout saw similarly positive growth rates over the summer months of 2017 but, in contrast to salmon, supply remained tight and prices high as biomasses have been low for some time. Having responded to the Russian Federation trade embargo by successfully establishing a range of new markets across Eastern Europe and Asia, the Norwegian farmed trout sector has seen this demand rapidly deplete available supply, with the NSC reporting declines of 53 and 33 percent for volume and value respectively for the first nine months of 2017.

## Chile

The Chilean salmon industry is going through a quiet period after overcoming the challenges posed by the algal bloom in 2016. Local researchers and scientists are working hard to develop methods to detect these phenomena and avoid important losses for the industry.

Atlantic salmon harvests during the first three quarters of 2017 reached 405 000 tonnes, 8.3 percent higher than in 2016, while rainbow trout registered 55 000 tonnes (+1.6 percent). Pacific salmon harvest reached 42 000 tonnes (+133 percent), a result of measures in the sector to intensify controls on diseases and anticipate possible disasters, in order to take care of the economies of the companies.

Atlantic salmon is the main export product worth

**Norwegian exports of salmon (by product and destination)**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh fillets | | | | | |
| USA | 2.8 | 6.8 | 8.7 | 13.7 | 14.9 |
| Japan | 5.2 | 6.8 | 8.0 | 9.9 | 9.8 |
| France | 14.1 | 13.1 | 14.9 | 11.0 | 7.8 |
| Others | 26.0 | 28.8 | 25.3 | 27.6 | 22.3 |
| Subtotal | 48.1 | 55.4 | 57.0 | 62.2 | 54.8 |
| Frozen fillets | | | | | |
| Sweden | 5.2 | 6.9 | 7.5 | 7.0 | 7.7 |
| USA | 4.4 | 6.9 | 5.6 | 4.9 | 7.1 |
| Germany | 2.9 | 1.7 | 1.7 | 3.2 | 3.1 |
| Others | 18.2 | 18.3 | 18.2 | 17.6 | 17.1 |
| Subtotal | 30.7 | 33.7 | 33.0 | 32.7 | 35.0 |
| Fresh whole | | | | | |
| Poland | 77.1 | 82.0 | 90.3 | 90.6 | 87.8 |
| France | 73.7 | 65.6 | 68.4 | 68.6 | 61.8 |
| Denmark | 44.6 | 49.3 | 54.3 | 50.0 | 57.7 |
| Others | 351.2 | 393.5 | 412.4 | 368.0 | 365.4 |
| Subtotal | 546.6 | 590.5 | 625.5 | 577.2 | 572.7 |
| Frozen whole | | | | | |
| Thailand | 2.8 | 2.5 | 2.0 | 1.5 | 2.4 |
| Kazakhstan | 2.3 | 2.6 | 3.1 | 1.7 | 2.1 |
| Israel | 1.0 | 2.1 | 1.5 | 0.9 | 1.6 |
| Others | 21.7 | 24.0 | 18.3 | 19.7 | 9.4 |
| Subtotal | 27.8 | 31.2 | 24.9 | 23.9 | 15.4 |
| Total | 653.2 | 710.8 | 740.3 | 696.0 | 677.8 |

Source: *Norwegian Seafood Council*
(small shares of other products type like salted not included)

**Chilean exports of salmon (by product and destination)**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh | | | | | |
| USA | 62.9 | 72.7 | 75.4 | 75.2 | 71.7 |
| Brazil | 41.9 | 54.0 | 61.5 | 49.5 | 52.9 |
| China | 0.5 | 2.5 | 4.5 | 10.0 | 8.0 |
| Others | 7.0 | 8.9 | 9.5 | 8.9 | 9.7 |
| Subtotal | 112.3 | 138.1 | 150.9 | 143.5 | 142.3 |
| Frozen | | | | | |
| Japan | 70.9 | 57.6 | 58.9 | 46.4 | 51.0 |
| USA | 20.4 | 24.3 | 22.6 | 24.7 | 25.4 |
| Russian Federation | 21.8 | 32.7 | 42.2 | 31.3 | 25.1 |
| Others | 78.2 | 86.6 | 85.6 | 88.8 | 75.1 |
| Subtotal | 191.3 | 201.2 | 209.2 | 191.2 | 176.6 |
| Total | 303.7 | 339.3 | 360.1 | 334.8 | 319.0 |

Source: *Chile Customs*
(small shares of other products type like salted not included)

USD 2 292.6 million, representing 54.4 percent of the total value of fish and aquaculture exports, and a 19.6 percent increase compared to the same period in 2016. In terms of volume, 263 400 tonnes were exported, down by 10 percent compared to 2016.

By the end of 2017, 760 000 tonnes will have been harvested, 4.4 percent more than in 2016. The aquaculture consultancy firm IndexSalmón foresees low export prices for Chilean salmon during the coming months due to an estimated growth of salmonid production. Their harvest estimates for 2018 exceed 823 000 tonnes, which would approach the harvest registered in 2015. The CEO of IndexSalmón, Reinaldo Vidal, said that although the trend shows that Chilean salmon prices are going to normalize, reaching its lowest level in 2019 due to the oversupply situation, it will depend on how the Norwegian production goes.

## United Kingdom

After a year of severe disease problems in 2016, 2017 has been a good year for UK salmon exporters as production rose in line with soaring prices and boosted by a depreciated currency, equating to something of a revenue windfall for the industry. France is increasingly substituting Norwegian salmon for Scottish salmon, backed by the 'Label Rouge' quality assurance. The United States of America and China complete a well-diversified set of leading export destinations. UK exporters have not entirely escaped the effects of the additional supply volumes in late 2017, but as of October export prices for fresh whole Atlantic salmon were only marginally down from 2016.

While a weaker currency means relatively higher sales prices for exporters, domestic UK consumers are not shielded from the prevailing price level on international markets, and a recent report from the market research firm A. C. Nielsen shows a 9.7 percent decline in retail purchase volumes for multiple salmon categories in response to a 15 percent hike in retail prices. That said, salmon remains the most popular seafood species in the United Kingdom, with total sales of GBP 905 million (USD 1.16 billion) in the 52-week period prior to 4 November covered by A. C. Nielsen, more than twice that of the second most popular species, cod.

**UK exports of salmon (by product and destination)**

| | January - September | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| | (1 000 tonnes) | | | | |
| Fresh | | | | | |
| France | 13.0 | 19.1 | 21.1 | 17.2 | 24.4 |
| USA | 28.4 | 33.5 | 24.7 | 19.7 | 23.7 |
| China | 7.2 | 11.3 | 8.3 | 6.4 | 8.4 |
| Others | 21.6 | 19.8 | 13.8 | 15.5 | 21.1 |
| Subtotal | 70.1 | 83.7 | 67.8 | 58.8 | 77.7 |
| Frozen | | | | | |
| Philippines | 0.0 | 0.0 | 0.3 | 0.8 | 1.6 |
| Thailand | 0.0 | 0.0 | 0.1 | 0.5 | 0.9 |
| China | 0.1 | 0.1 | 0.5 | 1.2 | 0.8 |
| Others | 4.1 | 4.8 | 5.0 | 7.5 | 2.4 |
| Subtotal | 4.2 | 4.9 | 5.9 | 10.0 | 5.7 |
| Total | 74.3 | 88.5 | 73.8 | 68.8 | 83.4 |

Source:*Her Majesty's Revenue & Customs*
*(small shares of other products type like salted not included)*

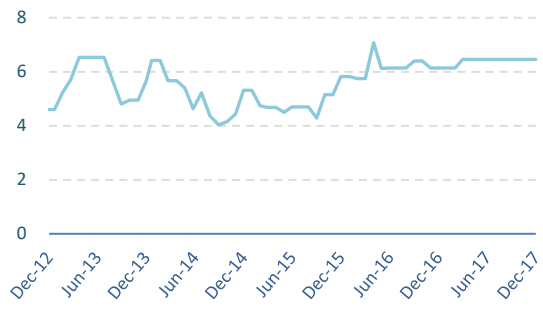
## Wild salmon

The global wild salmon harvest, the vast majority of which is comprised of US and Russian Federation fleet catches, was marginally lower in 2017 compared with 2015 (pink salmon catches are typically significantly higher in odd years). Russian Federation catches came to a reported 347 600 tonnes while Alaskan statistics put the total at around 472 000 tonnes for 2017. Although wild salmon markets are somewhat differentiated from those for farmed salmon, wild salmon producers have nevertheless benefitted as prices for wild species have risen in line with those for farmed in recent years, particularly for sockeye, pink and chum salmon.

## Markets

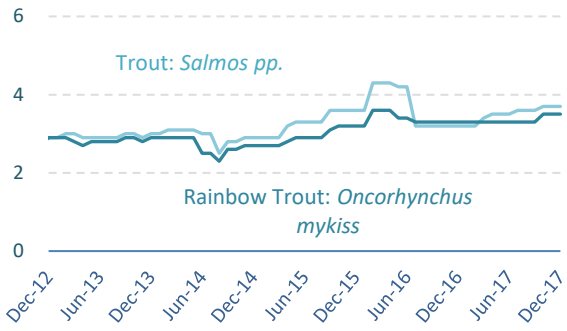
One of the major trends characterising the evolution of the global salmon market over recent years is the geographical expansion and diversification of salmon consumers. In particular, rapid demand growth in East and Southeast Asian markets has seen large quantities of salmon redirected from the traditional core markets of the EU28, the United States of America and Japan. Indeed, when supply began to dry up and buyers in these developed markets balked at soaring prices, sales to emerging markets largely continued unabated, such was the pace of market expansion. However, with production now rebounding and set to stay relatively high for the next two years at least, the question facing the industry is how many consumers in the core developed markets have been lost to high price levels and how long it will take to recover them now that fish are more plentiful and prices have dropped. While lower spot prices will eventually be transmitted down the supply chain to the retail level, retail prices are much more inflexible in the short-term and this can further increase the time it takes to communicate newly reduced prices to consumers that have turned away.

**Prices**
**Salmon: France**
EUR/kg




Fresh, gutted, HO, 3-6 kg/pc, origin*: Norway*
*Source: European Price Report*

**Prices**
**Trout: Italy**
EUR/kg




Ex-farm price from Norway
Source*: European Price Report*

## France

The French market is typically rather price-sensitive and consumer demand was reportedly weak towards the end of 2017, particularly for smoked products. However, the overall performance of the French market in the first 9 months of 2017 was positive, with large volumes absorbed at high prices. This was undoubtedly facilitated by a shift away from Norwegian product towards Scottish salmon, which has a relatively good reputation in France and has been made more attractive for importers by the strength of the euro versus the pound. The outcome of the ongoing Brexit negotiations is potentially important for this trading relationship and market participants will be following the process closely.

## Germany

Germany is another core European market where the price levels of the last two years have taken their toll, particularly in the processed product segments. The fresh salmon segment, promoted and sold primarily through discount retail chains, has been less affected. According to German trade statistics, salmon import volume in the first nine months of 2017 was 14 percent below the total for the same period in 2016 and approximately on par with 2015, but at significantly higher prices. With a stable economic outlook and more attractive pricing that will eventually trickle down to consumers, the long-term outlook for the German market remains positive.

## United States of America

According to NOAA, the United States of America imported an estimated 272 100 tonnes of salmonids during the first three quarters of 2017, worth USD 2 780 million. These figures represent an increase of 2.9 percent in volume and a considerable rise of 19.1 percent in value compared with the same period of 2016. Fresh farmed Atlantic salmon fillet was the main exported product, accounting for 35 percent. US markets were mainly supplied by three countries (74 percent of the total volume): Chile was the leading supplier (100 100 tonnes, worth USD 1 215 million), followed by Canada (67 900 tonnes, worth USD 574 million) and Norway (34 700 tonnes, worth USD 402 million). Chile and Norway registered increases in terms of volume and value, while Canada declined.

## Japan

Japan, the world's largest importer of Pacific salmon, both wild and farmed, has encountered similar market challenges to the other large developed markets of the United States of America and the EU28. High prices for farmed Atlantic salmon has driven consumers in a number of Asian markets to seek alternatives and this has driven up prices for both coho and sockeye salmon, the top two species for Japanese buyers. However, increased supply in the second half of 2017 has had similar effects on raw material costs as it has elsewhere, with prices turning downwards from mid-2017 onwards. In the longer term, with an aging population and significantly slower growth than its Asian neighbours, Japan will be faced with increasing competition for supply as time goes on.

**French imports of salmon (by product)**

| | January - September | | | | |
|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 |
| | (1 000 tonnes) | | | | |
| Fresh whole | 77.7 | 73.1 | 74.6 | 79.9 | 81.8 |
| Fresh fillets | 14.1 | 12.9 | 13.9 | 11.1 | 9.5 |
| Frozen fillets | 17.0 | 17.7 | 14.8 | 16.2 | 14.5 |
| Smoked | 5.9 | 5.1 | 5.7 | 5.3 | 5.7 |
| Others | 4.2 | 3.4 | 4.3 | 4.0 | 4.9 |
| Total | 118.8 | 112.4 | 113.3 | 116.5 | 116.4 |

Source*: DNSCE*
(small shares of other products type like salted not included)

### US imports of salmon (by product and destination)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Fresh fillets** | | | | | |
| Chile | 60.6 | 69.6 | 71.7 | 71.9 | 70.3 |
| Norway | 3.5 | 8.4 | 12.2 | 15.2 | 14.1 |
| Canada | 4.7 | 3.0 | 4.7 | 7.4 | 6.7 |
| Others | 8.8 | 11.2 | 8.5 | 8.9 | 8.9 |
| Subtotal | 77.5 | 92.2 | 97.1 | 103.4 | 100.0 |
| **Frozen fillets** | | | | | |
| China | 25.2 | 29.8 | 25.6 | 23.9 | 26.2 |
| Chile | 20.0 | 22.3 | 21.0 | 21.5 | 22.9 |
| Norway | 4.6 | 6.7 | 6.7 | 5.0 | 7.7 |
| Others | 2.3 | 3.2 | 2.8 | 3.2 | 3.1 |
| Subtotal | 52.0 | 62.1 | 56.0 | 53.7 | 59.9 |
| **Fresh whole** | | | | | |
| Canada | 54.7 | 41.1 | 61.7 | 64.1 | 56.7 |
| Norway | 2.8 | 3.9 | 8.8 | 7.0 | 12.4 |
| United Kingdom | 6.4 | 9.0 | 6.4 | 4.9 | 10.0 |
| Others | 9.9 | 14.2 | 9.6 | 12.7 | 13.7 |
| Subtotal | 73.7 | 68.3 | 86.5 | 88.7 | 92.7 |
| **Frozen whole** | | | | | |
| China | 0.0 | 0.1 | 0.3 | 2.4 | 2.4 |
| Canada | 1.0 | 0.8 | 1.9 | 2.1 | 2.2 |
| Chile | 1.1 | 2.0 | 0.9 | 2.5 | 1.8 |
| Others | 2.1 | 0.9 | 1.1 | 1.0 | 1.5 |
| Subtotal | 4.3 | 3.7 | 4.1 | 8.0 | 7.9 |
| **Smoked** | | | | | |
| Netherlands | 1.3 | 1.6 | 1.7 | 1.1 | 1.0 |
| Chile | 1.7 | 1.0 | 1.1 | 0.6 | 0.7 |
| Greece | 0.0 | 0.0 | 0.2 | 0.7 | 0.7 |
| Others | 0.6 | 0.7 | 0.8 | 0.7 | 0.8 |
| Subtotal | 3.6 | 3.3 | 3.9 | 3.1 | 3.2 |
| Total | 211.3 | 229.5 | 247.7 | 256.9 | 263.7 |

Source: *NMFS*
(small shares of other products type like salted not included)

### German imports of salmon (by product)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh whole | 34.5 | 45.3 | 44.9 | 47.9 | 46.0 |
| Fresh fillets | 6.7 | 7.7 | 10.6 | 11.6 | 9.8 |
| Frozen fillets | 23.4 | 27.7 | 21.5 | 26.7 | 24.2 |
| Smoked | 26.4 | 25.7 | 28.8 | 33.5 | 28.7 |
| Others | 17.7 | 15.0 | 13.2 | 17.6 | 9.3 |
| Total | 108.7 | 121.5 | 119.1 | 137.3 | 118.0 |

Source: *Germany Customs*
(small shares of other products type like salted not included)

### Japanese imports of salmon (by product and destination)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Fresh** | | | | | |
| Norway | 19.3 | 20.0 | 22.0 | 22.5 | 21.6 |
| Canada | 1.1 | 0.4 | 0.5 | 1.5 | 1.2 |
| Australia | 0.6 | 0.3 | 0.6 | 0.6 | 0.5 |
| Others | 1.0 | 1.0 | 0.8 | 0.8 | 1.0 |
| Subtotal | 22.0 | 21.6 | 23.9 | 25.4 | 24.3 |
| **Frozen** | | | | | |
| Chile | 90.0 | 71.9 | 81.5 | 83.0 | 71.7 |
| Russian Federation | 26.0 | 21.1 | 18.5 | 19.4 | 20.9 |
| USA | 4.2 | 6.0 | 15.3 | 13.2 | 10.2 |
| Others | 6.2 | 4.5 | 4.2 | 2.9 | 3.0 |
| Subtotal | 126.5 | 103.5 | 119.6 | 118.5 | 105.8 |
| Total | 148.5 | 125.1 | 143.5 | 143.9 | 130.1 |

Source: *Japan Customs*
(small shares of other products type like salted not included)

### Alaska wild salmon harvest 2017

January - September

| Species | Number of Fish (1000s) | Est. Value USD (1000s) | Tonnes | USD/kg |
|---|---|---|---|---|
| Chinook | 251.0 | 17 797.4 | 1 377.6 | 12.9 |
| Sockeye | 52 384.0 | 325 566.6 | 130 685.3 | 2.5 |
| Coho | 5 123.0 | 37 797.5 | 14 407.3 | 2.6 |
| Pink | 141 597.0 | 167 650.8 | 237 640.9 | 0.7 |
| Chum | 25 196.0 | 128 046.1 | 88 001.0 | 1.5 |
| Totals* | 22 4551.0 | 676 858.4 | 472 112.1 | N/A |

Source: *Alaska Department of Fish and Game*
(small shares of other products type like salted not included)

## Outlook

After 2016's algal bloom mortality supply shock in Chile and unstoppable demand growth in old and new markets, prices have taken some time to retreat from exceptional heights, a period that undoubtedly turned some consumers away from salmon. However, with all major producers now expected to steadily increase production volumes over the next 2–3 years at least, and a relatively large 8 percent increase expected in 2018, some stability can return to the market and prices can be maintained at a more reasonable level. Although it may take some time for consumers to adjust to more plentiful fish and lower prices after the last two years, there is no sign that underlying demand growth is slowing. Globally, the economic outlook is improving, particularly in the rapid expanding Asian market, while moderate recovery continues in the two major salmon markets of the Russian Federation and Brazil. This should prevent prices dipping too far below their current levels in the medium term, even in the face of supply hikes.

# SMALL PELAGICS

## GLOBEFISH HIGHLIGHTS

# *Herring and mackerel quota cut sharply in the North Atlantic*

**The EU28, Norway, the Faroe Islands and Iceland have agreed to cut the herring quota for 2018 to 435 000 tonnes. This is above the ICES recommendation of 384 000 tonnes, but almost 33 percent lower than the 2017 quota. The mackerel quota has also been reduced by 20 percent to 816 797 tonnes.**

After a total ban on capelin fishing in the Barents Sea, the Russian Federation and Norway have now agreed to reopen this fishery with a quota of 205 000 tonnes for 2018. Fishing companies in the Russian Federation are now making plans to enter this fishery. Most of the Russian Federation catch is expected to find its way into its consumer market, where capelin is a traditional fare.

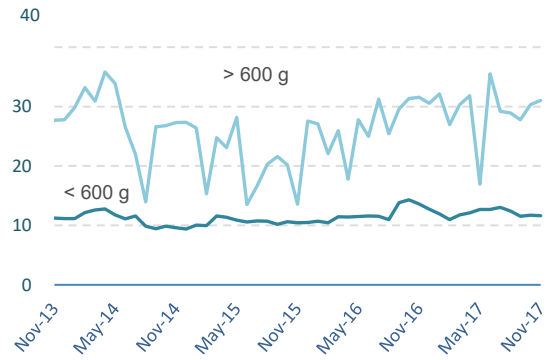
## Mackerel

The EU28, Norway and the Faroe Islands agreed on a total quota for northeast Atlantic mackerel in October. The total quota was set at 816 797 tonnes, a 20 percent reduction from 2017. The quota is divided between Norway (183 857 tonnes), the EU28 (402 592 tonnes) and the Faroe Islands (102 924 tonnes). Other countries fishing in international waters have a quota of 15 percent.

Norwegian landings of mackerel were almost 126 000 tonnes of the 234 472 tonne quota by early October. Record landings of large mackerel (over 600 g) were registered, with prices increasing in October after a drop in the summer. Prices in 2017 are still well below those of 2016: the first-had price in week 39 of 2016 was NOK 12.36 per kg, while in the same week in 2017 dropped to NOK 9.32 per kg.

In mid-October there was a dip in the catches of mackerel, when bad weather hampered fishing effort off the coast of Norway. The mackerel fishery was slowing down markedly by the end of October.

**Export price**
**Frozen mackerel: Norway**
NOK/kg




Source: *Norwegian Seafood Council*

## Herring

ICES recommended that the quota for Norwegian spring-spawning herring (NVG) be cut by 40 percent to 384 197 tonnes in 2018, down from 646 000 tonnes in 2017. The final result was a 33 percent cut to 435 000 tonnes.

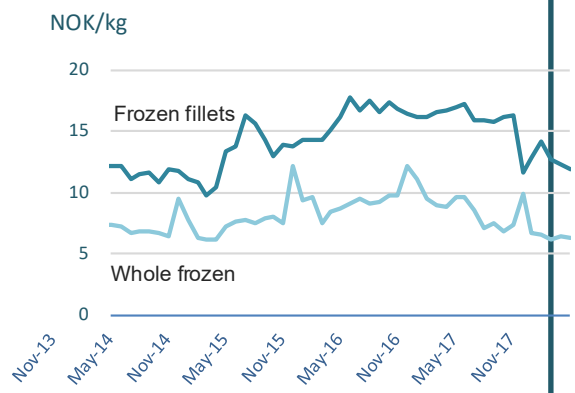
Norway and the EU28 agreed on fishing quotas for Skagerrak, with a total amount of 6 459 tonnes for herring and 1 997 tonnes for sprat.

The herring market was unsettled and slow at the end of October 2017, because prices were low and falling, and many buyers were waiting for further declines. Sellers accused the very few and very large buyers of controlling the prices, and buyers blamed the large amounts of herring entering the market in

2017 for the price collapse. Due to strong catches, the volume of Norwegian herring exports increased by 15 percent during the first nine months of the year, though the value of herring exports fell by 8 percent during this period.

Fishmeal and fish oil producers are now paying higher prices for small herring than buyers pay for the large herring for human consumption. Norwegian fishermen reported that prices for smaller herring are now higher than for larger herring. A greater part of the large catches of herring landed in Norway was allocated to fishmeal production rather than to human consumption.

**Export prices**
**Frozen herring: Norway**




Source: *Norwegian Seafood Council*

## FOCUS

### Oceana invests in canning operations

The South African company Oceana is planning to invest in its canning operations next year. Oceana is marketing canned pilchard under the "Lucky Star" brand, which is very popular in southern Africa. However, during the season of 2016–17, landings of pilchard were down in South Africa and Namibia. The TAC dropped from 64 928 tonnes in 2016 to 23 964 tonnes in 2017. The increased capacity of Oceana's cannery will depend on imported frozen pilchard. The company expects to import as much as 100 000 tonnes in 2018, from a number of countries, including Morocco and Mexico.

## Anchovy

In 2017, Peru introduced an anchovy quota of 300 000 tonnes for direct human consumption for the first time in history, to stimulate human consumption of the species. Anchovy in Peru is largely used to produce fishmeal and fish oil.

The Bay of Biscay had the largest biomass of juvenile anchovy ever registered of about 725 000 tonnes, on par with the record level of 724 000 tonnes recorded in 2014. According to ocean researchers, this is a sign that the anchovy stock is in good health and on its way to recovery after the collapse at the turn of the millennium.

## Trade

Norwegian mackerel exports reached 310 000 tonnes worth NOK 3.8 billion (USD 458 million) in the first nine months of 2017. This represents an increase of 6 percent in volume compared to the same period in 2016 year, but a decline of 1 percent in value.

According to the NSC, the Chinese market for small pelagics like mackerel and capelin is growing. In 2016, about 15 000 tonnes of Atlantic mackerel were consumed in China, mainly in Japanese restaurants. Chinese consumption of capelin is also up significantly. In 2016, 9 000 tonnes of capelin were consumed, 70 percent more than in 2015.

Norwegian exports of frozen mackerel during the first three quarters of 2017 registered some major changes in direction of trade. Exports to China and Turkey increased significantly, by 56.3 percent and 120.8 percent, respectively. Exports to Japan and the Republic of Korea dropped by 41.6 percent and 37.2 percent respectively. Exports to the Netherlands also dropped significantly (-41.3 percent). Total Norwegian exports of frozen mackerel declined by 10 percent, to 129 600 tonnes, compared to 144 700 tonnes during the same period in 2016.

China was the largest single market for Norwegian frozen mackerel during the first three quarters of 2017, and at the same time China increased its exports of this commodity by 7.8 percent, to 173 600 tonnes. The largest markets for Chinese exports of frozen mackerel were Indonesia (45 100 tonnes), the Philippines (40 600 tonnes) and Thailand (15 400 tonnes). While China sold more frozen mackerel to Indonesia and the Philippines during this period than during the same period in 2016, exports to Thailand dropped by 46 percent, from 28 700 tonnes in 2016 to 15 400 tonnes in 2017.

The Russian Federation imports of frozen mackerel increased by 25 percent to 66 900 tonnes during the first nine months of 2017. The largest suppliers were the Faroe Islands (39 200 tonnes), followed by Greenland (12 300 tonnes) and China (7 700 tonnes).

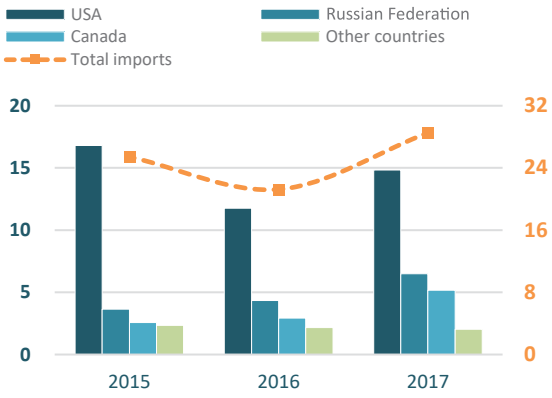
Norwegian herring exports increased during the first

three quarters of 2017 by 13.8 percent in volume, to 81 000 tonnes. However, the value of exports went down by almost 8 percent, from NOK 2.1 billion in 2016 to NOK 1.9 billion in 2017. The largest markets were Ukraine (24.8 percent), Lithuania (13.3 percent), and Egypt (13.2 percent).

The Netherlands also saw a significant increase in its herring exports during this period. Total exports increased by 32.2 percent to 77 100 tonnes. The most remarkable increase was registered for Nigeria, which increased imports from the Netherlands by 79.5 percent to 33 000 tonnes. Exports to Egypt increased by 7.3 percent, while exports to China declined by 4.8 percent to 3 500 tonnes.

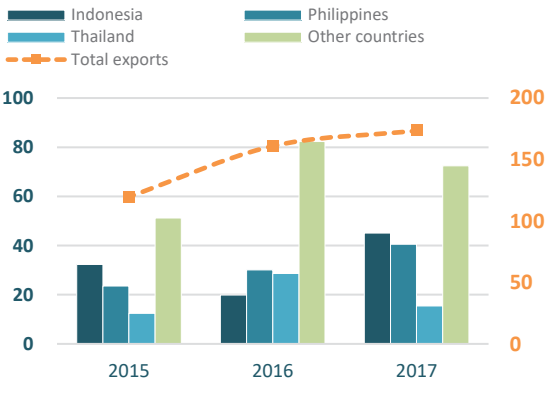
Japan increased its imports of herring by almost 35 percent to 28 500 tonnes during the first nine months of 2017. All major suppliers registered increases in shipments to Japan: the United States of America +26.1 percent (14 800 tonnes), the Russian Federation +49.3 percent (6 500 tonnes), and Canada +76.7 percent (5 200 tonnes).

**Japan | Imports | Herring | Fresh and frozen**
**Top three origins**
Unit: 1 000 tonnes, January-September



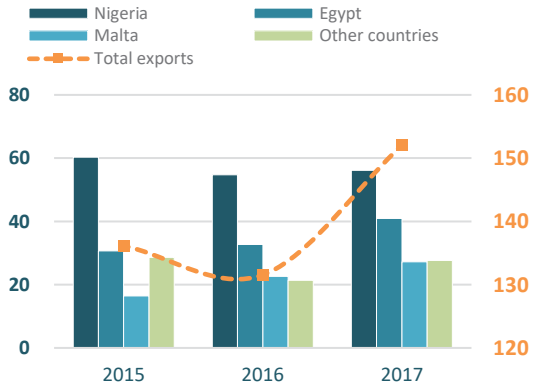

Source: *Japan Customs*

**China | Exports | Mackerel | Whole frozen**
**Top three destinations**
Unit: 1 000 tonnes, January-September



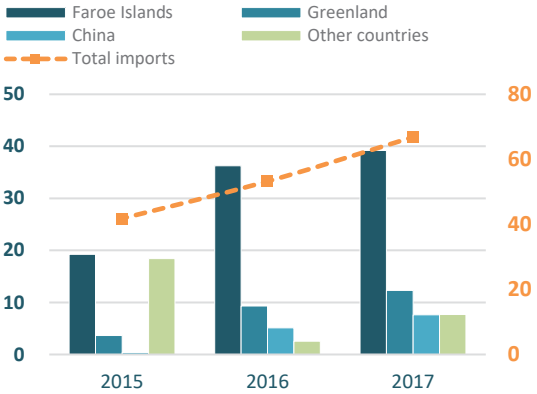

Source: *China Customs*

**Netherlands | Exports | Herring | Frozen**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *Eurostat*

**Russian Federation | Imports | Mackerel | Frozen**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *GTIS*

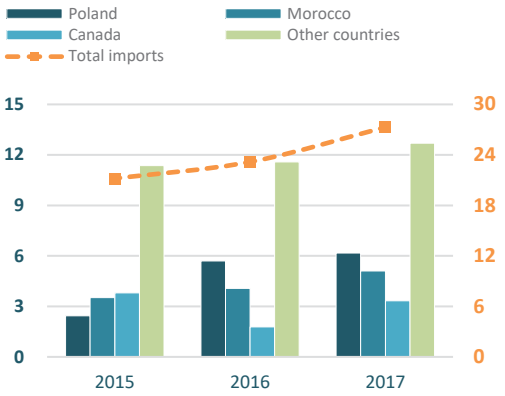
**Norwegian exports of small pelagics (by product and destination)**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Frozen mackerel | | | | | |
| China | 14.8 | 31.4 | 16.3 | 17.9 | 28.0 |
| Turkey | 9.2 | 9.5 | 13.3 | 6.1 | 13.5 |
| Japan | 12.1 | 22.8 | 17.0 | 22.8 | 13.3 |
| Other countries | 59.3 | 90.3 | 95.9 | 97.8 | 74.7 |
| Subtotal | 95.4 | 154.1 | 142.5 | 144.7 | 129.6 |
| Frozen herring | | | | | |
| Ukraine | 19.1 | 20.9 | 16.1 | 22.6 | 20.1 |
| Lithuania | 13.2 | 16.4 | 8.7 | 8.7 | 10.8 |
| Egypt | 9.8 | 3.2 | 10.3 | 12.1 | 10.7 |
| Other countries | 69.6 | 64.0 | 29.5 | 27.8 | 39.4 |
| Subtotal | 111.7 | 104.6 | 64.6 | 71.2 | 81.0 |
| Total | 207.1 | 258.7 | 207.1 | 215.8 | 210.6 |

Source: *Statistics Norway*

**USA | Imports | Sardines | Canned**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *NMFS*

US imports of canned sardines increased by 18 percent to 27 300 tonnes during the first nine months of 2017. Major suppliers were Poland, Morocco and Canada.

## Outlook

Supplies of Atlantic mackerel and herring will be tighter in 2018 as quotas have been cut significantly. This could lead to some increases in prices. Demand for small pelagics in China is on the rise, and this could also push prices upwards.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# FISH MEAL & FISH OIL

## GLOBEFISH HIGHLIGHTS

# *Second fishing season on halt in Peru, with price trending upwards*

**In 2017 there was an overall increase in the global production of fishmeal and fish oil. Peru and Chile benefited from the recovered biomass. Nordic countries also increased landings of small pelagics for production of fishmeal and fish oil. The first anchovy fishing season in Peru was a success, and the second season should have started in November, but because of the high presence of juveniles, the fishing activities were banned for almost the rest of 2017.Uncertainty in the raw material supply is driving the prices upward now.**

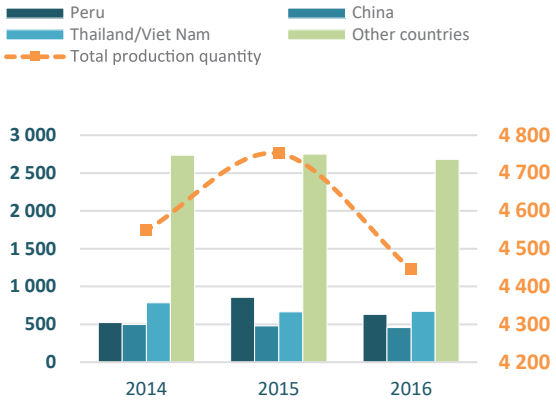
## Production

The first anchovy fishing season in Peru started in April 2017 and reached 85 percent of the total quota, catching 2.4 million tonnes. This was seen as a positive indication of the end of the El Niño, and of a recovered anchovy biomass.

The Peruvian government set the quota for the second fishing season of 2017 in the centre-north area at 1.49 million tonnes, and exploratory fishing started on 23 November 2017. This quota was below the market expectation. Due to the high presence of juveniles, the second anchovy season was temporarily halted, initially for ten days, before more exploratory fishing to assess whether

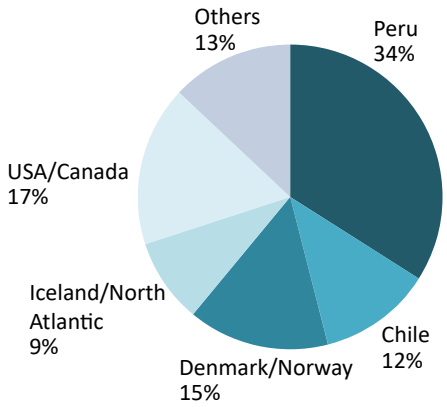
**Top global producers of fishmeal**

Unit: 1 000 tonnes, January-September




Source: *IFFO, Oil world*

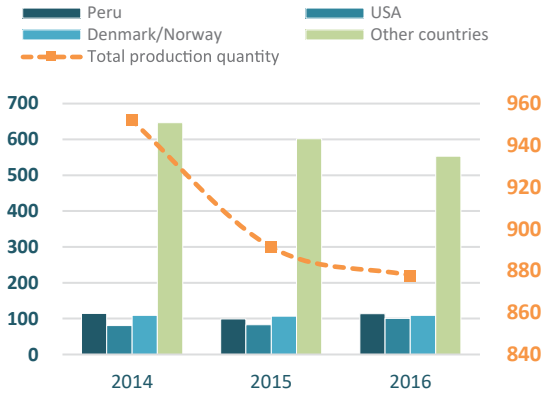
**Fishmeal production by countries* (2015)**




Source: *FAO * refers only to IFFO member countries*

**Top global producers of fish oil**

Unit: 1 000 tonnes, January-September




Source: *IFFO, Oil world*

industrial activities can restart. A four-day Peruvian government research effort involving 23 vessels started on 26 December 2017 to determine if the anchovy biomass in the important centre-north zone is ready for fishing.

The decision to close the second anchovy fishing season in Peru due to the high presence of juveniles has fostered disagreement among fishers, who questioned the unsustainable rationale behind that decision. Overall, the market seems to be concerned about the future output of fishmeal and fish oil. Some Peruvian companies have stopped pre-sales because of the unclear prospects of raw material supply.

Before the announcement of the closure on the second fishing season, the market was expecting a 1.5–2 million tonnes quota, leading to a decline in the price of fishmeal and fish oil. However, due to the current gloomy prospect for the anchovy fishing industry in Peru, the global price is now in a surging trend.

Benefiting from the first strong fishing season in 2017, Peruvian fishmeal production grew during the first three quarters of 2017, reaching 733 500 tonnes of fishmeal, 133 percent more than during the same period in 2016. Since the second fishing season will not resume until early 2018, this amount approximately represents the total Peruvian production for 2017.

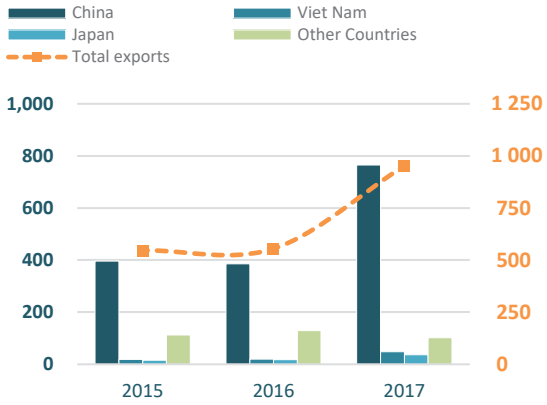
Other major suppliers performed better in 2017 than in 2016 with respect to the review period, specifically Chile (+49 percent), and Denmark and Norway (+31.5 percent). Chilean production increased to 262 700 in 2017, using mostly salmon offal and anchovy as raw material. The Nordic countries were able to increase their production due to a higher supply of certain species. Sand eel harvest in Denmark grew tenfold comparing with 2016; capelin from Iceland, and herring and sand eel from Norway jointly raised the market supply, with a total production of 296 500 tonnes during the same period. This corresponds to 40 percent of the Peruvian fishmeal production.

Fish oil production in Peru doubled from 51 600 tonnes in 2016 to 103 300 in 2017 for the first nine months of the year. Chilean fish oil output also increased by 52 percent to 88 500 tonnes.

## Exports

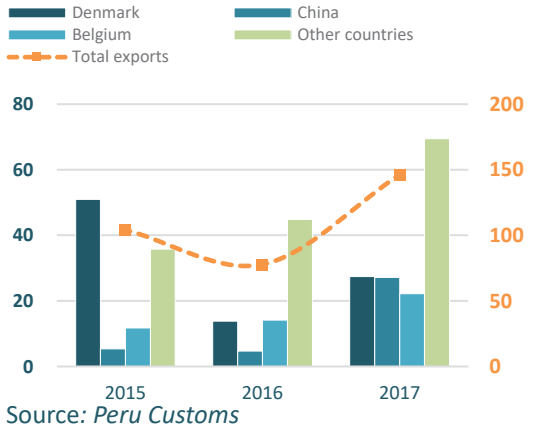
Peru was the main producer and also the main exporter of fishmeal and fish oil, by a far margin over other countries. For the first three quarters of 2017, Peru exported 953 000 tonnes of fishmeal, 72 percent more than in 2016. Nearly 80 percent of the Peruvian exports were destined for China. Viet Nam and Japan absorbed 5 percent and 4 percent, respectively.

**Peru | Exports | Fishmeal**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *Peru Customs*

**Peru | Exports | Fish oil**
**Top three destinaions**
Unit: 1 000 tonnes, January-September

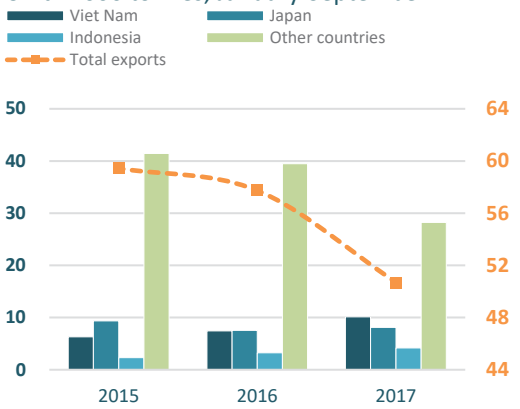



Source: *Peru Customs*

**Chile | Exports | Fishmeal**
**Top three destinations**
Unit: 1 000 tonnes, January-September

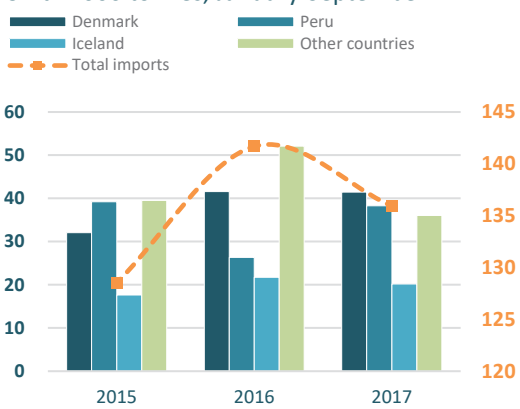

Source: *Boletín de Exportaciones del IFOP*

**Chile | Exports | Fish oil**
**Top three destinations**
Unit: 1 000 tonnes, January-September



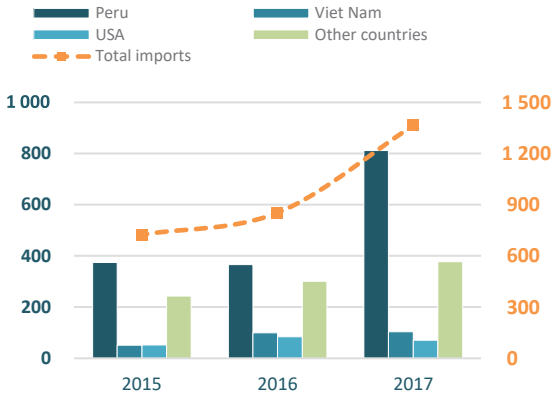

Source: *Boletín de Exportaciones del IFOP*

**Norway | Imports | Fish oil**
**Top three origins**
Unit: 1 000 tonnes, January-September



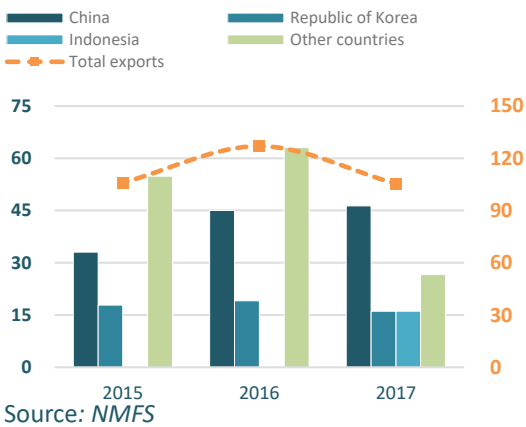

Source: *Statistics Norway*

**China | Imports | Fishmeal**
**Top three origins**
Unit: 1 000 tonnes, January-September



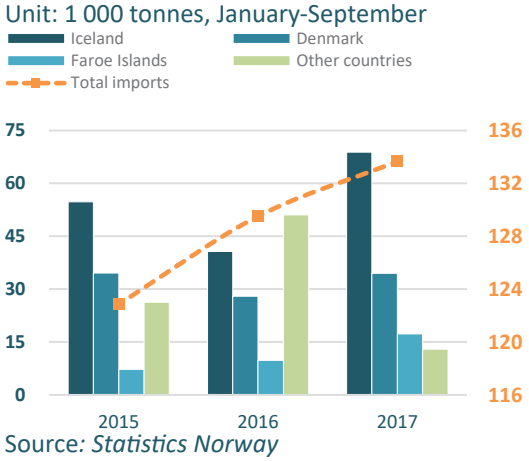

Source: *China Customs*

**USA | Exports | Fishmeal**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *NMFS*

**Norway | Imports | Fishmeal**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Statistics Norway*

The second largest exporter was Denmark, with most of its products shipped within Europe, to countries with marine fish farming, namely Norway (salmon), Greece, Italy and Turkey (seabass and seabream).

Peruvian exports of fish oil reached 146 300 tonnes in the first nine months of 2017, 88 percent more than in the equivalent period in 2016. Denmark and China were the main market for these products.

## Markets

China has consistently been the main consumption market for fishmeal and fish oil products, primarily for its massive aquaculture industry. China has contributed with more than 60 percent of the world's farmed fish and seafood products in recent years.

As the price of fishmeal and fish oil in the first half

of 2017 was relatively low, Chinese buyers imported large amounts of fishmeal that were stored in coastal ports of Liaoning, Shandong and Zhejiang provinces. It is reported that the peak storage quantity reached more than 200 000 tonnes in mid-2017. During the first nine months of 2017, the total amount of fishmeal imported to China reached 1.36 million tonnes, 60 percent more than in the same period in 2016, and ten times more than Norway, which is the second largest importer. Peru was the largest supplier, providing approximately 60 percent of total Chinese imports.

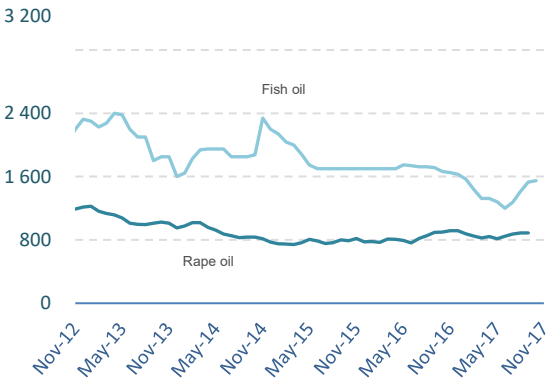
Since 2015, Viet Nam has been a firm supplier of the Chinese import market. In Viet Nam, the offal of pangasius fillet processing is going to fishmeal production.

Norwegian fishmeal imports increased slightly from 129 500 tonnes in 2016 to 133 700 tonnes in 2017. Salmon farming was quite stable in 2017 without negative supply shocks, which led to stable demand for fishmeal and fish oil in this market.

## Price

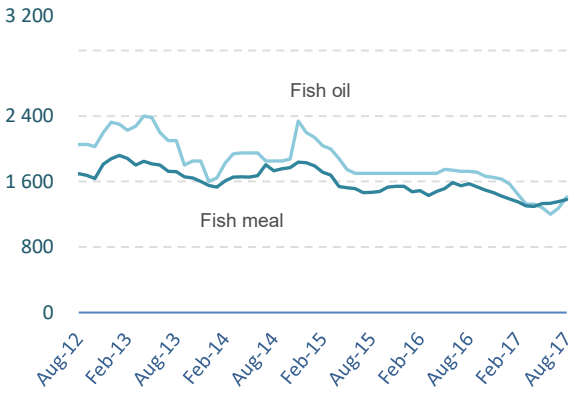
The successful first anchovy fishing season in Peru gave the market confidence and created relatively high expectations for the second season. The lower than anticipated quota for the second fishing season led to increasing fishmeal and fish oil prices on the world market.

**Prices**
**Rape oil and fish oil (Oil World)**
USD/tonne




Source: *Oil World*

**Prices**
**Fish oil and fishmeal: Europe**
USD/tonne




Source: *Oil World*

## Outlook

The second fishing season is vital to the industry; global sellers and buyers observe its development. La Niña phenomenon has been observed along the Peruvian coast, with characteristic colder ocean temperatures, conducive to the proliferation of anchovy schools. If it is confirmed that the juvenile presence is within reasonable range, then the market will not be alarmed and the price of fishmeal and fish oil should remain stable. Otherwise, in the near future, the price will likely keep rising.

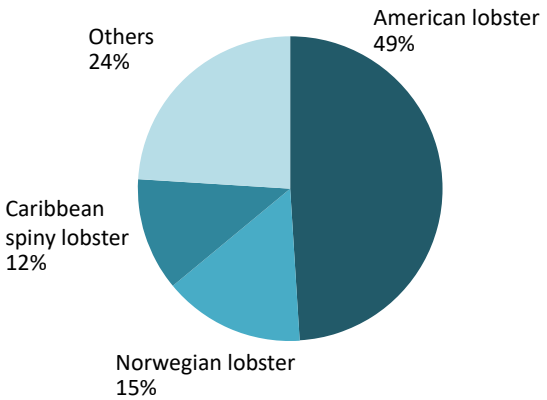
# LOBSTER

## GLOBEFISH HIGHLIGHTS

# *The effect of CETA hits US exporters*

**The Comprehensive Economic and Trade Agreement (CETA) between Canada and the EU28, which went into effect in late 2017, will have a negative effect on US exports of lobster to Europe. US exporters will lose market share, and prices will be lower.**

**Lobster production (2015)**




Source: *FAO*

## Supplies

Very good catches were recorded during the opening of the Canadian lobster season in lobster fishing areas 33 and 34 in December 2017, and prices were also good. The opening price was set at CAD 5.75 per pound (USD 4.47) compared to about CAD 5.50 per pound last year. Bad weather including strong winds caused a one-day delay of the opening of the season in these areas. The delay did not seem to worry fishers, though. The lobster season in this region runs until May 2018.

## International trade

Total world imports of fresh or live lobster during the first nine months on 2017 fell by 4.8 percent compared to the same period in 2016. The United States of America imported about the same amount (20 800 tonnes), while China increased its lobster imports by almost 15 percent to 15 600 tonnes. Canadian imports fell from 18 600 tonnes to 13 700 tonnes (-26.4 percent).

World imports of frozen lobster declined marginally (-1.3 percent) to 34 500 tonnes during the first nine months of 2017. The largest importer was by far the United States of America, also accounting for most of that minor decline.

The New York Times claimed that the Trump administration's trade policies are benefitting Canadian exporters rather than US exporters. The CETA agreement between Canada and the EU28, which gives zero duty access to the lucrative EU28 market, results in an 8 percent tariff advantage over the United States of America. However, US exports reduction to the EU28 cannot yet be blamed on CETA. US lobster exports to several countries, including European countries, have been falling for some time. For example, US lobster exports to France fell by 36 percent to USD 27 million in 2016 compared to 2015, and during the first nine months of 2017, US lobster exports to France fell a further 15.7 percent to USD 12.6 million.

Canadian lobster is popular in China, and the Chinese ambassador to Canada, Lu Shaye, is reported to be pushing for direct flights between Halifax and China in order to facilitate Canadian live lobster exports to China. US lobster exporters are fully aware of this development and they appreciate the importance of maintaining good trade relations between the United States of America and China. With the growth of the Chinese middle class, demand for lobster in China is increasing, and Chinese lobster imports from the United States of America are also growing.

### World imports of lobster (by product and origin)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh / live | | | | | |
| USA | 18.0 | 22.5 | 23.4 | 20.1 | 20.8 |
| China | 8.5 | 11.7 | 11.2 | 13.6 | 15.6 |
| Canada | 18.8 | 17.4 | 16.8 | 18.6 | 13.7 |
| Others | 22.0 | 22.8 | 20.8 | 21.7 | 20.3 |
| Subtotal | 67.3 | 74.3 | 72.1 | 73.9 | 70.4 |
| Frozen | | | | | |
| USA | 17.3 | 16.2 | 16.1 | 15.8 | 15.1 |
| France | 1.8 | 1.7 | 1.8 | 2.2 | 2.3 |
| China | 0.8 | 0.5 | 1.4 | 1.6 | 2.3 |
| Others | 13.8 | 13.5 | 13.9 | 15.2 | 14.7 |
| Subtotal | 33.7 | 31.9 | 33.2 | 34.9 | 34.5 |
| Total | 101.0 | 106.2 | 105.3 | 108.9 | 104.9 |

Source: *GTIS*
(small shares of product type like salted not included)

### US imports of lobster (by product)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh/live | 18.0 | 22.5 | 23.4 | 20.1 | 20.8 |
| Frozen | 17.3 | 16.2 | 16.1 | 15.8 | 15.1 |
| Others | 5.8 | 5.4 | 5.6 | 7.3 | 6.1 |
| Total | 41.1 | 44.1 | 45.1 | 43.2 | 42.0 |

Source: *GTIS*

### US exports of lobster (by product)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh/live | 28.4 | 28.8 | 28.0 | 31.1 | 26.7 |
| Frozen | 3.1 | 3.1 | 2.9 | 2.6 | 2.1 |
| Others | 0.5 | 0.4 | 0.3 | 0.2 | 0.8 |
| Total | 31.9 | 32.3 | 31.2 | 33.9 | 29.7 |

Source: *GTIS*

### EU28 imports of lobster (by product)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh/live | 11.0 | 11.7 | 10.6 | 10.7 | 11.0 |
| Frozen | 8.3 | 8.0 | 7.7 | 9.4 | 9.6 |
| Others | 1.4 | 1.4 | 1.8 | 1.8 | 1.0 |
| Total | 20.7 | 21.1 | 20.2 | 21.8 | 21.6 |

Source: *GTIS*

### Chinese imports of lobster (by product)

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh/live | 6.0 | 5.8 | 4.2 | 4.5 | 15.6 |
| Frozen | 0.8 | 0.5 | 1.4 | 1.6 | 2.3 |
| Others | 2.5 | 5.9 | 6.9 | 9.1 | 0.0 |
| Total | 9.3 | 12.2 | 12.6 | 15.2 | 17.9 |

Source: *GTIS*

### Canadian exports of lobster (by product)

January - September

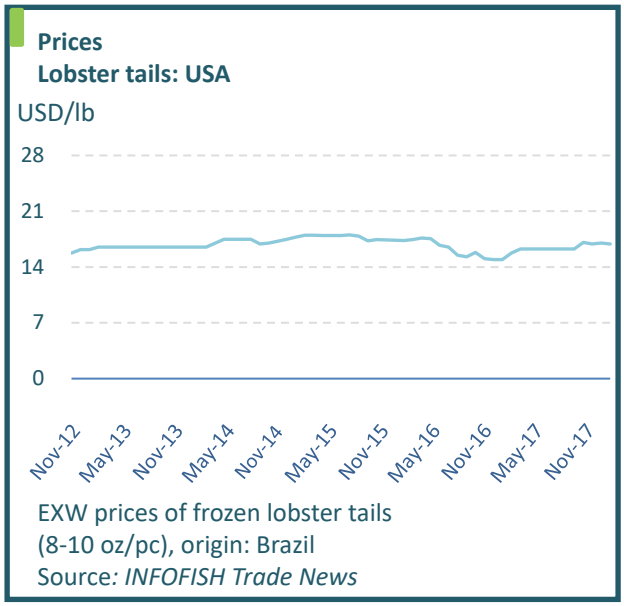
| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| Fresh/live | 23.4 | 30.5 | 34.4 | 32.6 | 34.2 |
| Frozen | 14.9 | 17.4 | 18.0 | 20.3 | 20.6 |
| Others | 6.0 | 5.9 | 6.2 | 7.9 | 6.8 |
| Total | 44.2 | 53.8 | 58.6 | 60.7 | 61.5 |

Source: *GTIS*

## Prices

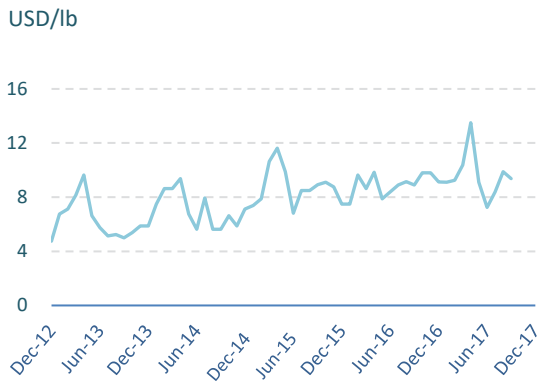
The Maine lobster industry is suffering from low yields and low prices (which are now rising slighty). Prices to the fishers in January 2018 were at about USD 4.00 per pound. Although this was an improvement on prices earlier in the year, it was still 30 percent below price levels at the same time in 2016. Competition from Canada is strong, and it was therefore not expected that prices for Maine lobster would increase much.

Prices for lobster tails in the United States of America have been relatively flat, but with a slim indication of an increase since the end of 2016. Wholesale domestic prices for American lobster dropped dramatically during the summer of 2017, but have since had a minor recovery.



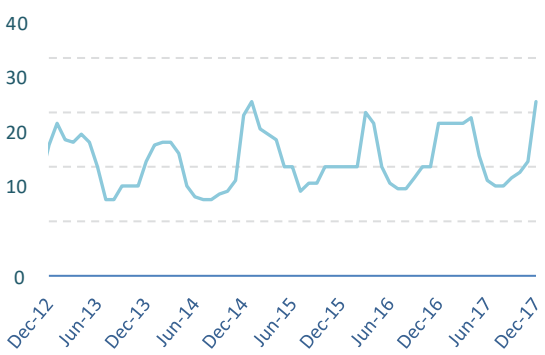

EXW prices of frozen lobster tails (8-10 oz/pc), origin: Brazil
Source: *INFOFISH Trade News*

**Wholesale prices**
**American lobster: USA**




1-1.5 lb live, NY wholesale price
Source*: INFOFISH Trade News*

**Prices**
**European lobster: Europe**




Live, origin*: Ireland; 400–600, 600–800 g/pc*
Source*: European Price Report*

## Outlook

The outlook for the Canadian lobster catch is very positive, in spite of a late start to the winter season. The CETA agreement will negatively impact US exports to Europe. Prices are expected to be lower in 2018 than in 2017 because of the reduced tariff on Canadian lobster, and will also lead to lower US prices.

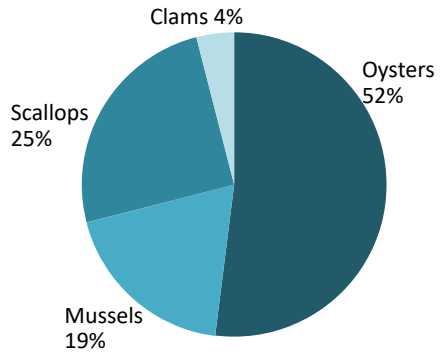
# BIVALVES

## GLOBEFISH HIGHLIGHTS

# *Bivalve trade is growing*

**Demand for bivalves continues strong. Scientific reports suggesting the human health benefits from bivalve consumption, and their eco-friendly image among species coming from aquaculture, have attracted new consumers to this species group. Most of the bivalve production does not enter international trade, but some species travel long distances to reach their customers, such as the green mussel from New Zealand and the mussel from Chile. High demand for bivalves resulted in 5–10 percent price increases in international and domestic trade during the review period. Further demand growth is likely during 2018.**

**Bivalve production by selected species, both wild and farmed (2015)**




Source: *FAO*

## Mussels

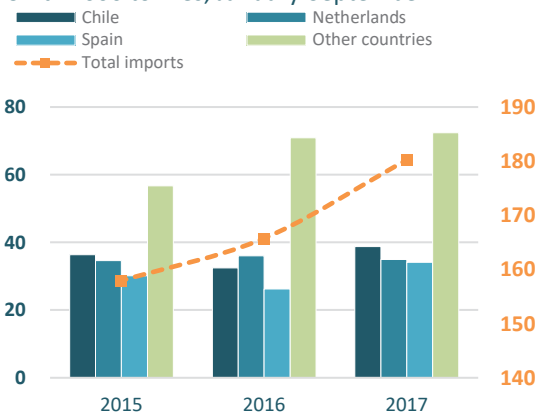
The international trade of mussels was stable in terms of volume in 2017, while the value of mussels increased in all importing countries. The EU28 is the main importer of mussels, accounting for about 70 percent of total imports.

The Chilean mussel industry continues to grow, after a rather difficult year in 2016, when the red tide resulted in lower mussel production. In 2017, on the contrary, a new record of 300 000 tonnes were produced by the Chilean mussel farming industry. This industry is based in the X region, in southern Chile. For the first time in history, Chile has surpassed Spain as mussel producer, becoming the second major producer globally. China, remains the top mussel producer in the world with about 800 000 tonnes produced every year. While China is producing mainly for the domestic market, Chile is exporting most of its production to the international market, being the top mussel exporter in the world.

Following the production increase in 2017, Chile expanded mussel exports by 20 percent in the first nine months, to reach 66 000 tonnes. While the traditional markets Spain and the United States of America continue to be strong buyers, Chile accessed the Chinese market. Since 2015, the country is exporting to China and even though the present level of exports is still quite low (700 tonnes in the first three quarters of 2017), it is expected to become a major outlet in coming years. Chilean exports to Spain grew by 27 percent between January and September 2017 over the same period in 2016, because the bivalve demand in this market is growing. Local Spanish producers, who complained about the invasion of the EU28 market by Chilean product in the past, have been able to diversify the market with their products. Spain is targetting the French market with a fresh product that sells there at competitive prices, and with value added and sophisticated products in the domestic market, such as pre-cooked Galician mussel products in their half-shells.

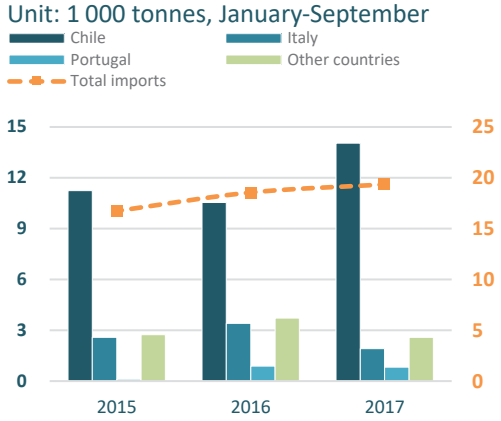
Mussel sales in France are stable, as the winter months are not a typical consumption period. All product forms are well represented, with Spanish mussels selling in the lower price bracket and the French bouchot mussel positioned in the upper price category, selling at around EUR 5.00 per kg.

**EU28 |Imports | Mussels**
**Top three origins**
Unit: 1 000 tonnes, January-September



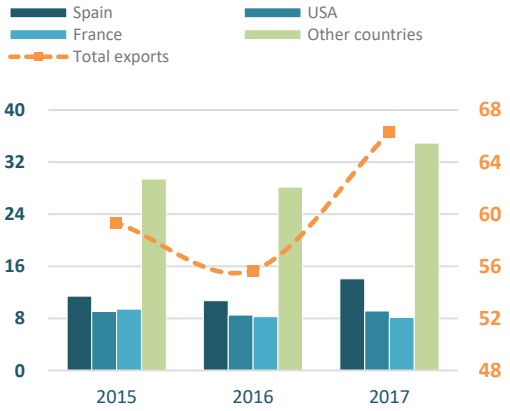

Source: *Eurostat*

**Spain | Imports | Mussels**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *Agencia Tributaria*

**Chile | Exports | Mussels**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *GTIS*

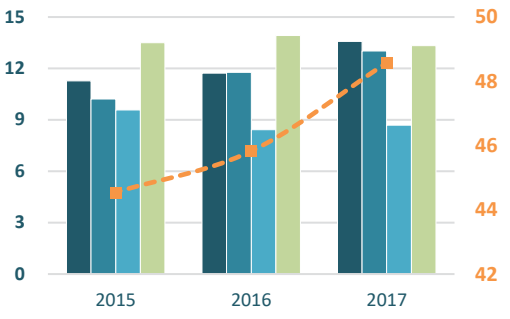
**World imports/exports of mussels**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Imports** | | | | | |
| France | 42.6 | 44.3 | 45.9 | 47.3 | 49.2 |
| Italy | 29.0 | 29.5 | 34.5 | 29.4 | 34.0 |
| Netherlands | 17.9 | 16.6 | 16.6 | 26.1 | 33.0 |
| Others | 124.1 | 122.5 | 130.7 | 119.3 | 128.0 |
| Total | 212.1 | 221.0 | 216.3 | 230.8 | 250.8 |
| **Exports** | | | | | |
| Chile | 60.4 | 61.0 | 64.1 | 60.6 | 72.0 |
| Netherlands | 33.6 | 37.7 | 44.3 | 43.4 | 48.8 |
| Spain | 29.8 | 28.8 | 35.2 | 29.5 | 35.3 |
| Others | 115.6 | 108.9 | 115.0 | 105.5 | 123.9 |
| Total | 232.6 | 242.5 | 249.1 | 257.4 | 283.2 |

Source: *GTIS*

**France | Imports | Mussels**
**Top three origins**
Unit: 1 000 tonnes, January-September




Source: *DNSCE*

## Oysters

During the review period, global oyster imports were 40 000 tonnes, 15 percent less than for the same period in 2016. France was the main oyster exporter, expanding its presence in the global market, with almost 20 percent more shipments in the first nine months of 2017 compared with 2016.

The oyster season picked up during the 2017 festive period. France is the fifth main oyster producer in the world, but the most active in international trade. Overall, according to the French Research Institute for Exploitation of the Sea (IFREMER) monitoring programme, by early-November seed mortalities were similar to 2016 levels whereas juvenile and adult mortality rates were below 2016 levels. Summer oyster growth was disappointing and a shortage of large oysters is expected for the end of 2017. Oysters in France typically sell at EUR 4.60

per kg (number 3 size), but were selling during Christmas period retail at EUR 17.60 by the dozen. Some special oysters during this period can sell for EUR 2.80 each.

## Scallops

Scallop trade dropped sharply in the first three quarters of 2017, mainly due to the lower supply from Peru. The United States of America and China are the main scallop exporters and importers. Peru had three consecutive years of disastrous scallop production. As a result, Peruvian scallop exports, which in the past amounted to around 9 000 tonnes for the review period, were down to only 2 400 tonnes in the first nine months of 2016 and 2017. The sanitary office of Peru closed off the main production area for exports of live scallops to the EU28 in 2017. There are signs that the situation will improve in 2018, because many juvenile scallops have recently been found in the water, so there should be plenty of scallops around for the harvesting season in November 2018. Traders are hopeful that the main production areas will be reopened for exports to the EU28, otherwise exports would be limited to the US market for scallop without roe, and this market segment is well supplied by Chinese products.

## Clams

International trade of clam was stable during the first nine months of 2017 compared with the same period in 2016. Around 170 000 tonnes were exported and 180 000 tonnes were imported. The main importing countries continued to be Japan and the Republic of Korea, both buying mainly from China. China is in the main clam exporter globally, accounting for about 70 percent of world clam exports. A majority of clams is traded in live or fresh form.

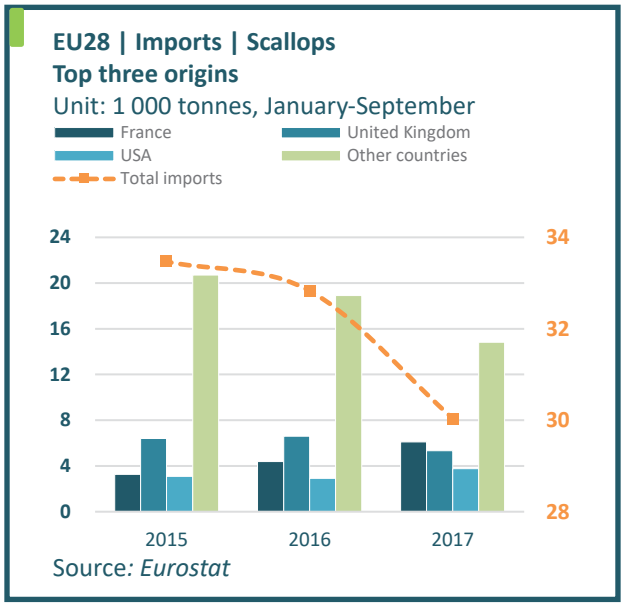
Clams are an important food item, especially in Mediterranean countries. In Italy, Christmas Eve is the day of the year with highest seafood consumption, including clams and anchovies that are generally used in appetizers. Most of the bivalves sold in Italy are produced domestically, in aquaculture (*Ruditapes philippinarum*) and capture fisheries (*Venus gallina*). Decades ago, the exotic species Ruditapes philippinarum practically wiped out the domestic clam (*Tapes decussatus*). Only Tunisia maintains some beds of the original species, mostly exporting to the Italian market, at prices that can reach EUR 25.00 per kg.

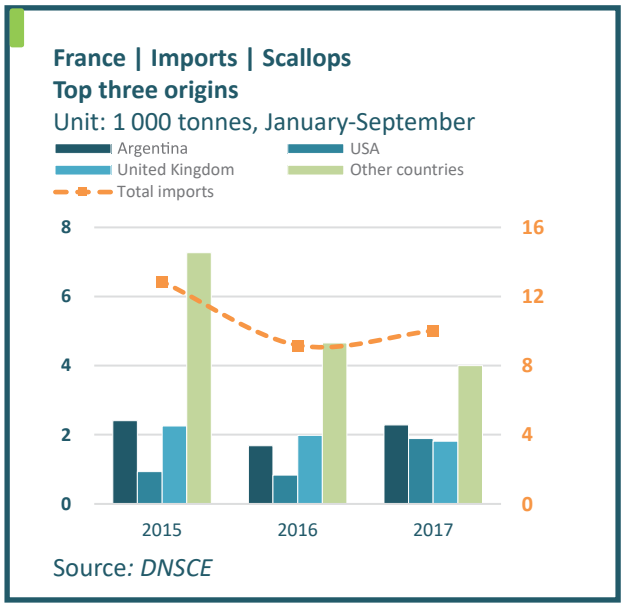
**World imports/exports of oysters**

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Imports** | | | | | |
| USA | 7.5 | 7.7 | 8.9 | 8.7 | 8.3 |
| France | 2.3 | 3.0 | 3.3 | 4.2 | 4.6 |
| Hong Kong SAR | 4.9 | 5.3 | 4.5 | 4.7 | 4.2 |
| Others | 21.5 | 23.3 | 28.6 | 28.6 | 23.1 |
| Total | 36.2 | 39.3 | 45.3 | 46.2 | 40.1 |
| **Exports** | | | | | |
| France | 5.3 | 5.7 | 7.1 | 7.1 | 8.5 |
| China | 6.7 | 6.2 | 6.6 | 7.2 | 6.4 |
| Spain | 0.1 | 0.2 | 0.3 | 0.3 | 5.6 |
| Others | 23.9 | 26.5 | 27.8 | 26.9 | 24.2 |
| Total | 36.1 | 38.6 | 41.7 | 41.5 | 44.8 |

Source: *GTIS*



### World imports/exports of scallops

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Imports** | | | | | |
| China | 22.4 | 27.2 | 51.9 | 37.4 | 29.4 |
| USA | 19.6 | 22.1 | 16.8 | 18.7 | 14.6 |
| France | 14.3 | 14.8 | 12.9 | 9.4 | 10.1 |
| Others | 64.4 | 56.8 | 55.7 | 57.4 | 50.3 |
| Total | 120.7 | 120.9 | 137.4 | 123.0 | 104.4 |
| **Exports** | | | | | |
| China | 21.4 | 28.1 | 24.9 | 25.3 | 22.9 |
| USA | 9.2 | 9.0 | 7.8 | 7.9 | 7.3 |
| United Kingdom | 8.5 | 8.1 | 8.1 | 9.5 | 5.8 |
| Others | 43.9 | 44.1 | 41.0 | 36.6 | 37.5 |
| Total | 83.0 | 89.3 | 81.7 | 79.3 | 73.5 |

Source: *GTIS*

### World imports/exports of clams, cockles, arkshells

January - September

| | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| | (1 000 tonnes) | | | | |
| **Imports** | | | | | |
| Japan | 48.8 | 44.1 | 53.7 | 57.3 | 55.3 |
| Republic of Korea | 41.5 | 49.1 | 47.4 | 43.3 | 41.1 |
| Spain | 18.2 | 21.4 | 22.2 | 25.0 | 23.6 |
| Others | 63.8 | 63.6 | 59.7 | 64.2 | 64.0 |
| Total | 172.2 | 178.2 | 183.0 | 189.8 | 183.9 |
| **Exports** | | | | | |
| China | 99.2 | 105.6 | 110.1 | 107.6 | 112.0 |
| Republic of Korea | 8.3 | 8.9 | 9.7 | 13.3 | 12.6 |
| Italy | 7.0 | 6.7 | 5.8 | 5.1 | 8.0 |
| Others | 45.1 | 50.3 | 48.0 | 52.4 | 43.5 |
| Total | 159.6 | 171.5 | 173.5 | 178.4 | 176.1 |

Source: *GTIS*

## Outlook

There seems to be no limit to the demand for bivalve products in the market. Production of cultured mussels, though expanding every year, can hardly keep up with the consumer demand. Prices are increasing to unprecedented levels, and consumers seem to accept these higher prices without reducing consumption of bivalves. The only constraint to the expansion of bivalve aquaculture production seems to be the stringent EU28 regulation, which allows only a selective group of foreign countries to export live bivalves to the EU28. These supply countries are very well controlled.

FAO GLOBEFISH Team visiting the Centro Agroalimentare Roma
© FAO/G. Bizzarri

Clams ready for distribution at the Rome wholesale market (Centro Agroalimentare Roma)
© FAO/G. Bizzarri

# CRAB

## GLOBEFISH HIGHLIGHTS

## *Mixed supply situation*

**The supply of king crab and snow crab appears to be mixed, with snow crab resources in the Barents Sea growing, while Canadian stocks are declining. The Dungeness crab fishery on the US West Coast has been delayed again.**

### FOCUS

**Fight over crab resources in the Barents Sea**

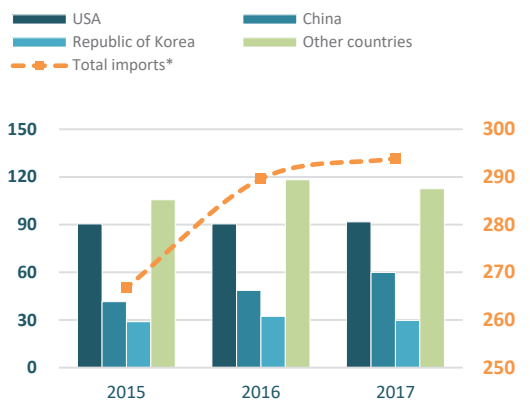
The legal fight for crab resources around the Svalbard area has been going on for a while. The EU28 claims their vessels have the right to catch snow crab in the Svalbard region, while Norwegian authorities claim that this fishery is restricted to Norwegian vessels. Norwegians claim that if EU28 vessels are to be allowed into this fishery, it will have to be as part of a quota exchange.

The basis for economic activity on and around Svalbard is the Svalbard Treaty of 1920. Norway was given sovereignty over the islands, but the treaty also specifies that all signatories to the treaty have the right to engage in economic activity on the islands. As of 2017, a total of 46 countries had signed the treaty.

This is a complicated dispute and will probably end up in an international court of law. In a recent incident, the Lithuanian company Arctic Fishing, which was fishing snow crab in the region, lost its case in the Norwegian High Court. The Court decided that Norway retains sovereign rights over the continental shelf in the so-called Loop Hole. Arctic Fishing was caught fishing snow crab in the area, and was arrested by Norwegian Coast Guard on 15 July 2017. The High Court decision may lead to some form of punishment to the Lithuanian company, according to legal experts.

**Top three importers of crab**

Unit: 1 000 tonnes, January-September




Source: *GTIS*
**estimates*

## Supplies

Snow crab stocks in the Barents Sea are growing. Ocean researchers have identified three new crab fields northwest of Spitsbergen this year. According to these researchers, there will be snow crab throughout this region within ten years. They have suggested increasing the quota to between 4 000 and 5 500 tonnes next year. However, crab fishers claim they will not be able to fill the quota. The 2017 quota for snow crab in Norway was set at 4 000 tonnes, but only 2 800 tonnes were landed by 13 November 2017.

Canada doubled the TAC for snow crab in the Gulf of Saint Lawrence in 2017, to 43 822 tonnes. Most of this quota was filled by mid-July. The Gulf of Saint

Lawrence is the bright spot for the Canadian snow crab arena. Elsewhere in Canada, in Newfoundland the crab resource is declining and it is expected to continue to decline. The Canadian Department of Fisheries and Oceans (DFO) cut the 2017/2018 TAC for the Newfoundland and Labrador crab fishery by 22 percent, to 35 419 tonnes, which caused prices to rise from about CAD 7.00 per lb to over CAD 8.00 per lb.

In 2016, the California dungeness crab fishery was hampered by the presence of domoic acid toxin. Earlier in 2017, the situation was reported to be better. Now it is reported that the fishery in California could be delayed again because of new occurrences of this toxin.

The dungeness crab season in Oregon has also been delayed, due to low meat yields. The season was expected to start on 1 December 2017, but it has been deferred until at least the end of the month, according to the Oregon Department of Fish and Wildlife (ODFW).

## International trade

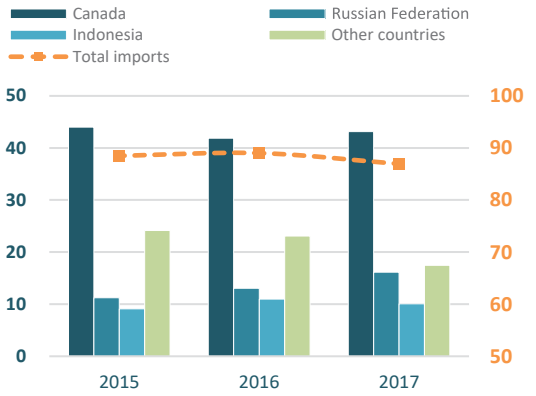
Total world imports of crab increased slightly (+1.5 percent) to 294 000 tonnes during the first three quarters of 2017 compared to the same period in 2016. The main importers were the United States of America (91 700 tonnes), China (59 900 tonnes), Republic of Korea (29 800 tonnes) and Japan (29 200 tonnes). There were significant differences from country to country. Republic of Korean and Japanese imports fell by 8.1 and 16.7 percent, respectively, while Chinese imports increased by 23.2 percent to almost 60 000 tonnes, and Thai imports rose by 58.1 percent to 12 700 tonnes, during this period.

Two of the most significant exporters of crab were the Russian Federation and China. In the Russian Federation, exports of crab rose by almost 29 percent, to 44 000 tonnes, during the first nine months of 2017. The main market was the Republic of Korea, with as much as 70 percent of these exports. In contrast, Chinese exports fell by 9.4 percent during the same period. The Republic of Korea imported less Chinese crab, while Taiwan Province of China imported slightly more.

## Prices

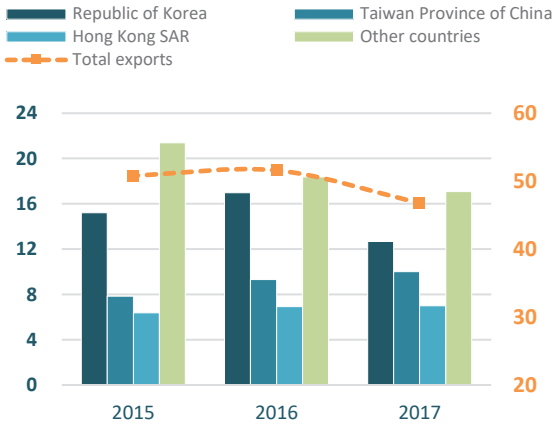
In the Barents Sea, landings of king crab in the Russian Federation and in Norway have been good, lowering the prices from about USD 30 per kg to USD 20 per kg. Canadian prices also went down, from USD 17.60 per kg after the Alaska season to about USD 15.40 per kg later. Prices are expected to stay low until the end of 2017, when the fishing season in the Russian Federation ends. For the smaller edible crab (*Cancer pagurus*) prices were increasing in December 2017, due to limited supply, reaching EUR 3.00 per kg.

**USA | Imports | Crab**
**Top three origins**
Unit: 1 000 tonnes, January-September



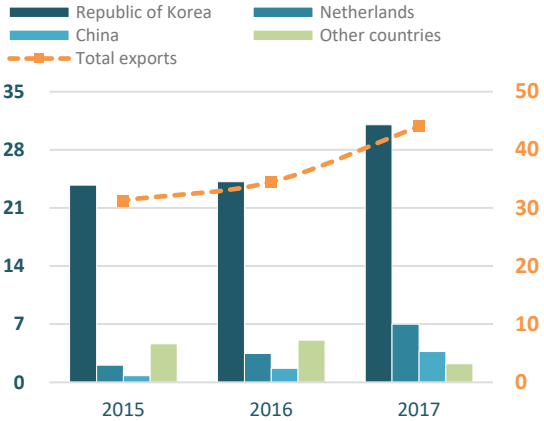

Source: *U.S Department of Commerce, Bureau of Census*

**China | Exports | Crab**
**Top three destinations**
Unit: 1 000 tonnes, January-September



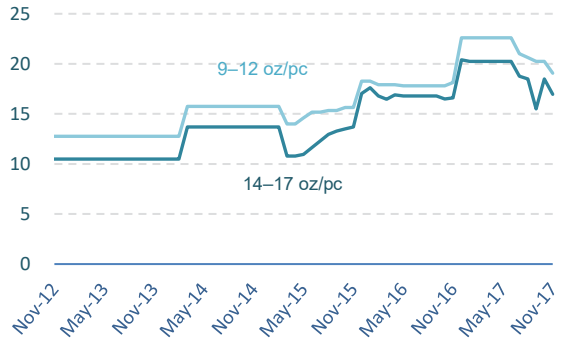

Source: *China Customs*

**Russian Federation | Exports | Crab**
**Top three destinations**
Unit: 1 000 tonnes, January-September




Source: *Federal Customs Service of Russia*

**Prices**
**Crab: USA, Japan**
USD/lb




Source*: Claw and sections, red, EXW New York INFOFISH Trade News*

## Outlook

King crab supplies appear to be good in the Barents Sea, and prices have been down. Prices are expected to rise again, once the fishing season in the Russian Federation is over in January 2018. Snow crab supplies are expected to increase in the Barents Sea, which could put some pressure on prices. However, landings will depend on the current dispute between the EU28 and Norway. If the EU28 gets access to fishing in the Svalbard region, landings could go up significantly. If only Norwegian vessels are allowed to fish here, they would not have the capacity to catch much more than at present. Supplies of tanner crab as well as dungeness crab from the US Pacific are expected to be tight.

GLOBEFISH HIGHLIGHTS

# *Chinese sea cucumber farming ready to bounce back*

**Sea cucumber is a premium product with large popularity in China, the largest producer of this seafood and its related products. The Chinese sea cucumber farming industry showed an overall stable trend in 2017. Farm-gate prices have continued an upward trend in the past two years. Production volumes and stocked amounts have also increased significantly.**

© m.hshen.cn

## Main producing areas of sea cucumber in China

Total production of sea cucumber in China amounted to 200 000 tonnes in 2017. The provinces of Shandong, Liaoning, and Fujian led the national supply, contributing with 100 000 tonnes (50 percent), 70 000 tonnes (35 percent), and 20 000 tonnes (10 percent), respectively. The Hebei province produced 10 000 tonnes, while other provinces accounted for the remainder 5 percent. In 2017, the total output value of sea cucumber products reached nearly CNY 30 billion[1] (USD 4.44 billion ) in China.

Shandong reported the highest yield in domestic sea cucumber production, while Liaoning is recognized for the highest quality. Fujian is becoming the emerging production base of sea cucumber and consumer markets.

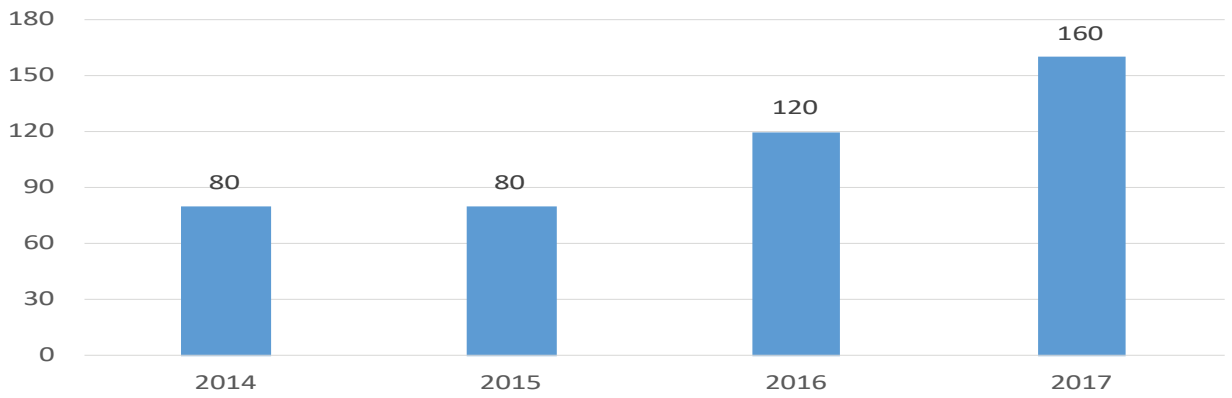
## Chinese sea cucumber production in 2017

### Overall scale of sea cucumber culture tends to be stable

Sea cucumber in the north is mainly farmed in seawater ponds or using bottom culture in coastal areas. The aquaculture production in the north was stable, due to several factors. First, the downward trend of sea cucumber price since 2011 reached a minimum in 2015, and has since increased marginally improving the market conditions. This discouraged the shift of sea cucumber rearing ponds to other species. Second, the approval of marine projects slowed down or ceased due to ecological and shoreline restoration policies by the Chinese government. Third, polyculture technology has largely developed in recent years. Traditional ponds used to produce sea cucumber can now accommodate other species, such as shrimp, jellyfish, and bivalves.

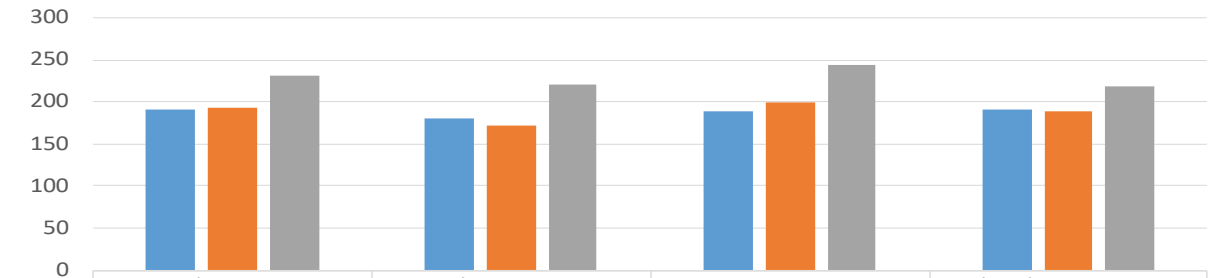
1 1 USD = 6.76 CNY

## Average price of juvenile sea cucumber (Unit: CNY per kg)




Data source: *Liaoning Fishery Technology Extension Station*

## Average farm-gate price in China (Unit: CNY per kg)




| | National average price | Hebei province | Liaoning province | Shandong province |
|---|---|---|---|---|
| 2015 | 192 | 180 | 188 | 192 |
| 2016 | 194 | 172 | 200 | 188 |
| 2017 | 232 | 220 | 244 | 218 |

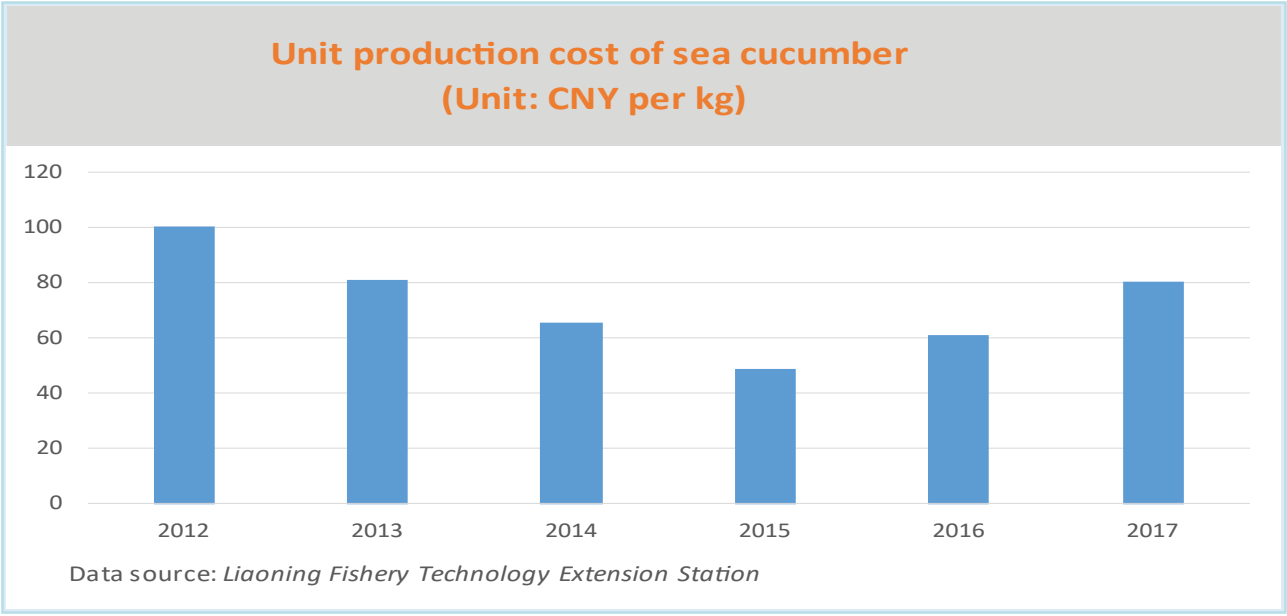
Data source: *Liaoning Fishery Technology Extension Station*

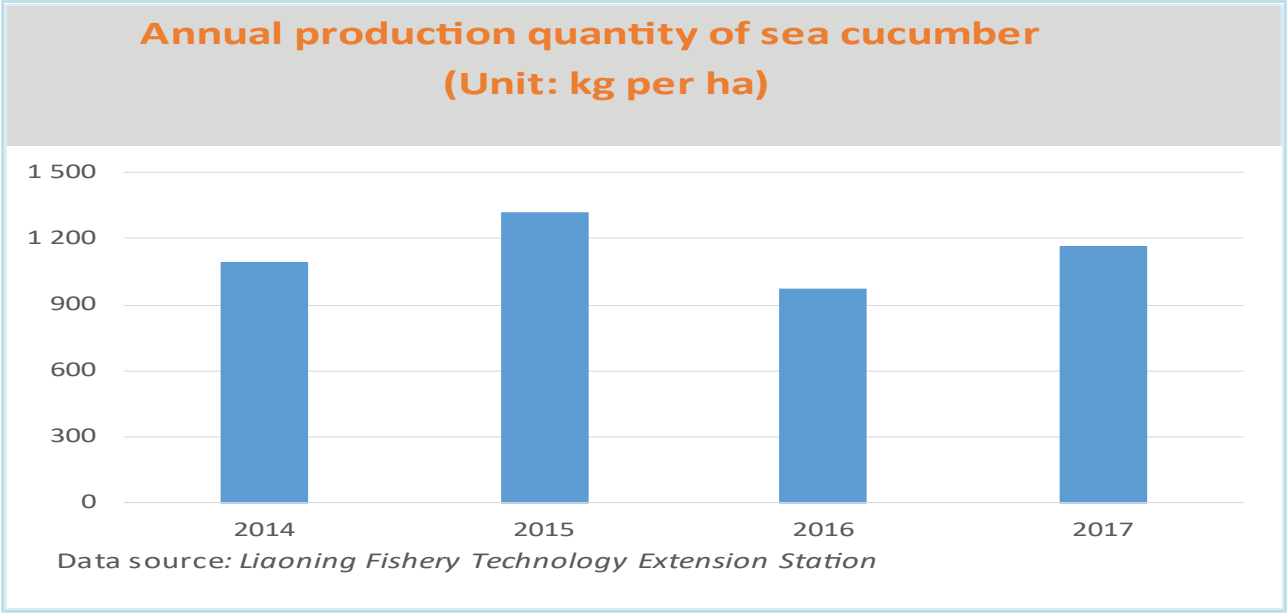
In the south, the sea cucumber farming in the Fujian province has recently slowed down. Sea cucumber rearing in this province reached a peak of 150 000 operating cages in 2015. In 2016, the farming dropped to 120 000–130 000 cages due to increasing costs and it has remained the same through 2017. This drop in Fujian during 2016 and 2017 was a result of several causes. The retail price in this province plunged from CNY 140–160 per kg (USD 21–24 per kg) in 2015 to CNY 74 per kg (USD 11 per kg) in the first half of 2017. In addition, the output of sea cucumber rearing was lower than expected due to low reproduction performance.

The price of juvenile sea cucumber increased by almost 50 percent from 2015 to 2017. These increased prices brought back to business some hatcheries that had previously stopped running in Liaoning, Shandong and Hebei provinces. The stocks of juvenile sea cucumber climbed sharply in 2017 averaging 347 055 pieces per ha. There were outbreaks of disease in some areas due to low temperatures in the spring and high heat in the summer, so supplementary stocking was carried out. It was speculated that because farmers stocked higher amounts, the hatcheries sold juveniles with smaller gauge.

## Increased price coupled with higher landings

In 2017 the annual average farm-gate price of sea cucumber reached CNY 116 per kg, 18.4 percent and 21 percent more than the price in 2016 and 2015, respectively. Throughout the year there was an upward trend in price from the spring to the autumn season.




During 2017, China registered a remarkable increase in total production cost totalling CNY 176 million, 57 percent more than in 2016 and almost double than in 2015. The average production cost reached CNY 80.6 per kg in 2017, an increase of 32 percent and 64 percent compared to 2016 and 2015, respectively.

## Production forecast for 2018

### The national volume of sea cucumber out of the pond continues to rebound

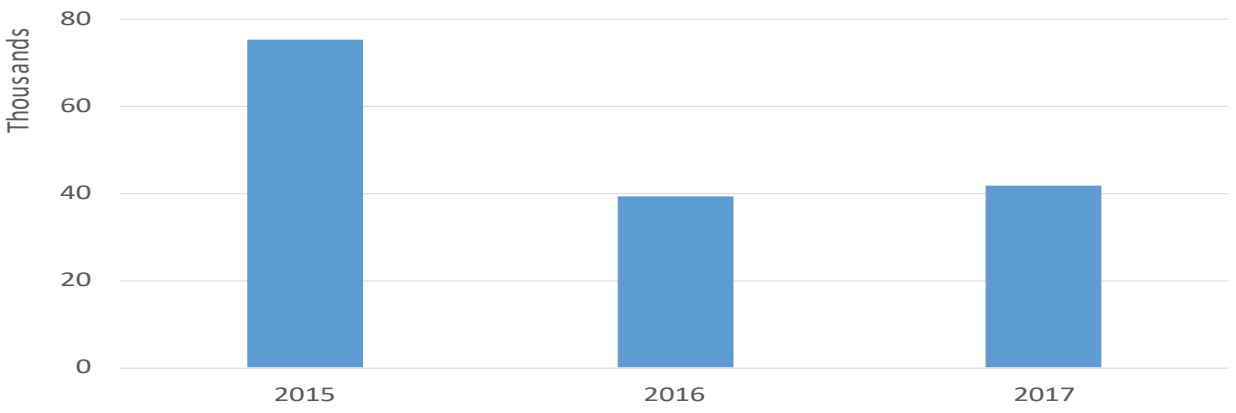
Even though the number of sea cucumber farms is not expanding in Liaoning and Shandong, the stocked amount of juvenile sea cucumber in 2017 was relatively high and therefore landings in 2018 are expected to increase slightly in these two provinces.

The new batch of juveniles added in October 2017 is expected to maintain higher survival rates and it is therefore forecasted that the total landings in 2018 will reach 20 000 tonnes in Fujian on par with the 2017 output.

### Farm-gate price increasing

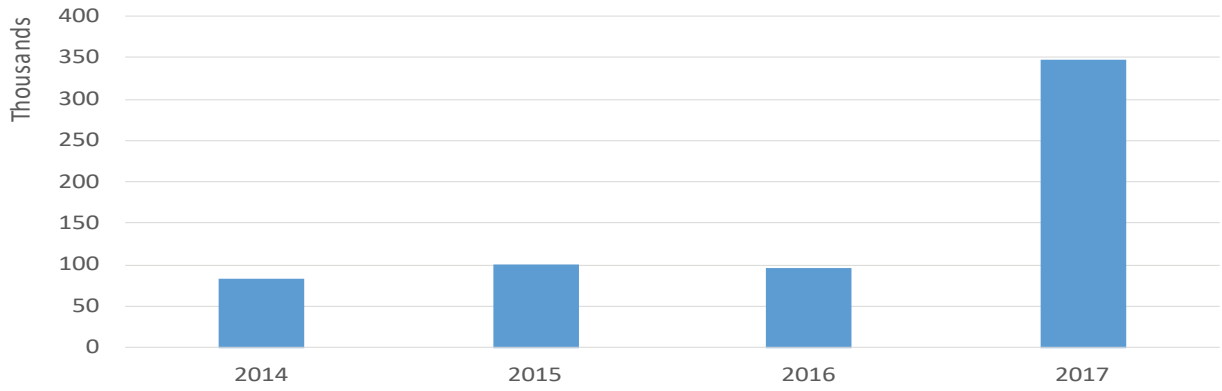
While the prices of bottom-cultured sea cucumber are expected to reach around CNY 200 per kg or higher since both the production and harvest cost are much higher comparing with other aquaculture types. The prices of sea cucumber reared in ponds and cages are predicted to stabilize at around CNY 70–80 per kg in Fujian, and CNY 120–140 per kg in the north of China.

## Average profit of sea cucumber (Unit: CNY per ha)




Data source: *Liaoning Fishery Technology Extension Station*

## Stocked amount of sea cucumber (Unit: pieces per ha)




Data source: *Liaoning Fishery Technology Extension Station*

### The new aquaculture pattern will be further promoted

The ecological hatchery in seawater ponds and the Integrated Multi-Trophic Aquaculture (IMTA) technology will be further established and promoted, especially in Liaoning and Shandong. Currently, sea cucumber-oriented IMTA has contributed with more than half of the total farming area, an increase of more than 30 percent compared with 2016.

### Pressure on aquaculture cannot be neglected

Sea cucumber aquaculture performance is affected by environmental factors or human activities. The natural sea environment is crucial, according to the monitoring results in Liaoning and Shandong during 2017; lower rain levels in Liaoning and Shandong provinces led to relatively high salinity (35–40 parts per thousand) in coastal waters, resulting in slow growth or even death of sea cucumbers. The production environment is also under pressure from anthropogenic factors, as seen by the 2017 prices of juvenile sea cucumber, production materials, related resources and labour force, which were on an upward and uneven trend. Production costs may lead to an intensification of this aquaculture, due to the high market demand.

# EVENTS

## GLOBEFISH HIGHLIGHTS

# *Illegal, Unreported, and Unregulated (IUU) fishing and seafood fraud at the core of the Boston Seafood Expo 2018 experts panel*

**FAO is organizing a panel during the Boston Seafood Expo 2018 aiming to provide an overview of the relevant governance frame-works and regulatory requirements.**


The panel entitled "Fighting IUU fishing and seafood fraud: enhancing traceability and transparency through strengthened governance frameworks" moderated by FAO, will discuss specific approaches to improve international cooperation to ensure the effectiveness of market-related measures. It will cover public-private coordination and the key role of this industry in the broader context of complementary international instruments, regional mechanisms and national laws that make up the global governance framework in the fisheries sector. The panel will address potential market access implications of associated record keeping and reporting requirements; policy, legal and technical assistance efforts for capacity building and facilitation of legal international fish trade.

Trade activities across seafood value chains are truly global, dynamic and complex in nature. Together with the rising demand and value of seafood trade, there are enhanced economic incentives for IUU fishing. Without a strong governance framework, sound regulations and traceability, the source and type of seafood products can remain unknown or falsified, leading to opportunities for IUU products to enter the global market.

In the light of this growing threat of IUU fishing and associated criminality, countries and regional and international actors adopted various measures for strengthened governance arrangements. These include laws, regulations, and standards that include trade and enforcement measures. These efforts and measures set the foundation for greater enforcement, partnership and information sharing opportunities amongst various entities.

FAO's Anna Child and Victoria Chomo at Boston Seafood EXPO 2017




The panel will be composed of officials from crucial importing, exporting and processing states and will be held on 11 March 2018 at the Boston Seafood Expo premises from 12:30 to 1:45pm. More information about the conference programme, panel speakers and their biographies can be found at www.seafoodexpo.com/north-america/session/fighting-iuu-fishing-and-seafood-fraud-enhancing-traceability-and-transparency-through-strengthened-governance-frameworks/

As mentioned, the panel will take place during the thirty-eight edition of the Seafood Expo North America, to be held in Boston from 11 to 13 March 2018. The annual trade show hosts over 1 200 companies showcasing their products. The Expo welcomes professionals from the seafood industry who attend this big event to learn about the latest innovations, to meet and discuss the status of the sector and to make business.

For the second year, GLOBEFISH will participate in the exhibition with a booth, with the purpose of getting more closely in touch with fisheries stakeholders and meet representatives of the seafood industry. In 2017, the GLOBEFISH booth attracted attention from a variety of visitors, including those working in partnership with FAO and those who were not familiar with it. The Expo offered the opportunity to raise awareness about the work FAO does in the fisheries and aquaculture trade sector.

The GLOBEFISH staff looks forward to this significant opportunity to learn about any specific need for marketing information on key topics and to exchange ideas and opinions in an interactive way.

More information on the exhibit can be found at www.seafoodexpo.com/north-america/

# EVENTS

## GLOBEFISH HIGHLIGHTS

# *Brussels Seafood Expo, April 2018*

**One of the largest seafood fairs, the Brussels Seafood Expo, will open on 24 April 2018. This year it will feature more than 1 850 exhibiting companies from 79 countries from around the world and will run until 26 April 2018 with a very full agenda.**


*FAO's Catalano, Castro De Souza and Lem with the FISHINFONetwork Directors at the GLOBEFISH booth during the Seafood Expo Global 2017*

Fish and fisheries products are the protagonists in the seven pavilions dedicated to fisheries and aquaculture. During the three days of the Expo, Brussels will become the perfect venue for fisheries stakeholders to meet and discuss about the current state of the market industry and future perspectives. Innovations in product development and market potential are among the topics covered during the global business core.

Several initiatives take place concurrently at the exposition, such as the Seafood Excellence Global Awards, which confers a prize to the best seafood products in the categories of "Best Retail Product" and "Best Hotel/Restaurant/Catering (HORECA) Product". The competition judges may also decide to award the best products exhibited at Seafood Expo Global for the following categories: innovation, convenience, health and nutrition, retail packaging and seafood product line.

FAO GLOBEFISH will participate in the event at the usual booth location (Hall 6, Booth 1305). We look forward to meet our wide network of correspondents and hold meetings with different industry representatives to discuss topics of mutual interest such as how to raise awareness about fisheries contribution to the UN Sustainable Development Goals (SDGs).


### The Sustainable Development Goals

**The 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. They have been adopted by the 193 Member States of the United Nations on 25 September 2015 and are expected to guide the actions of the international community over the next 15 years (2016-2030).**

**Those particularly relevant to fisheries and aquaculture production consumption and trade are:**

- **SDG 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture**
- **SDG 12 Ensure sustainable consumption and production patterns**
- **SDG 14 Conserve and sustainably use the oceans, seas and marine resources**
- **SDG 17 Revitalize the global partnership for sustainable development**

The event is also the occasion for FAO GLOBEFISH to meet with the Associate Members and Partners, as well as the FISHINFONetwork members, government representatives, associations and international institutions.

Last year's edition of Brussels Seafood Expo was very successful. According to the organizer, it attracted more than 28 500 visitors. The fair participants welcomed the FAO GLOBEFISH booth and showed interested in our range of information.

Please come visit us also this year to share your point of view on the fish market trends or to join our network of correspondents!

Follow on Twitter FAO GLOBEFISH during the Expo

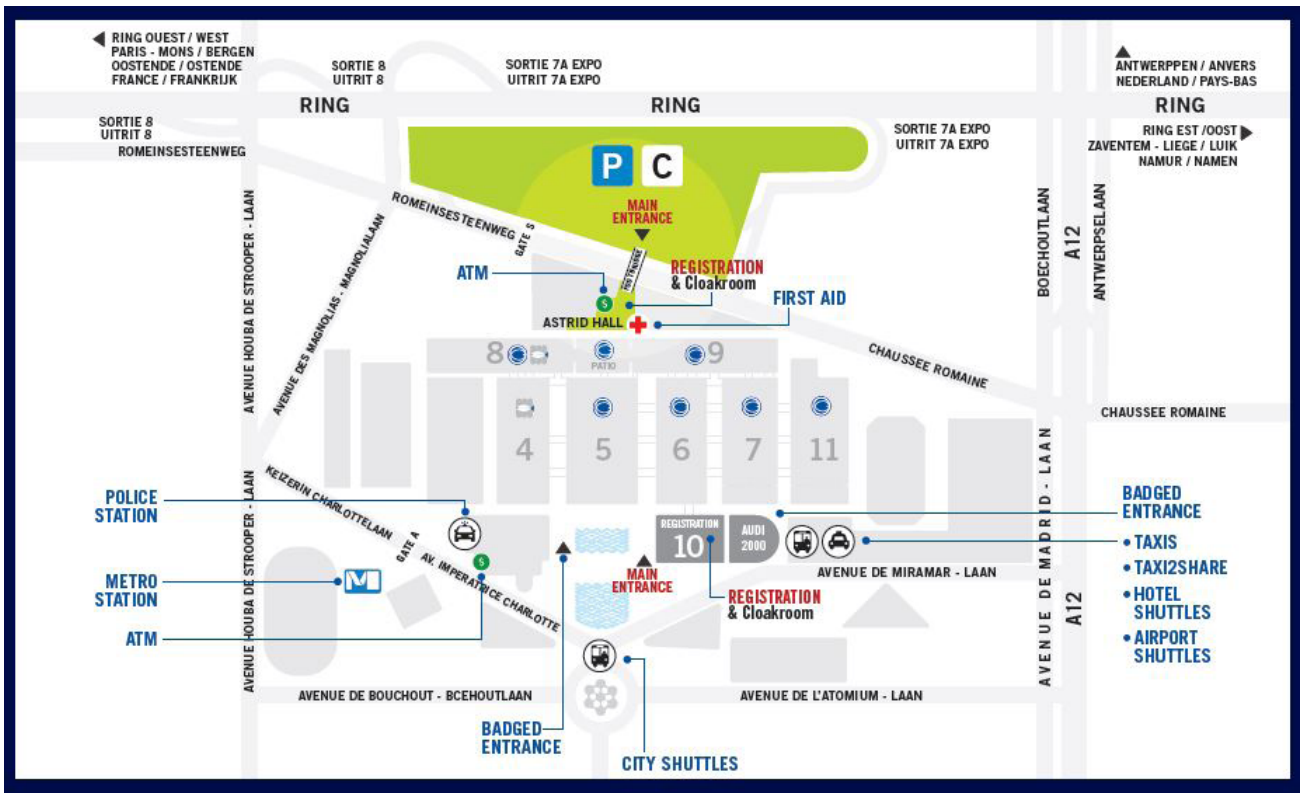
@FAOGLOBEFISH
#SEG2018

Useful links:

Seafood Expo Global website:
www.seafoodexpo.com

Brussels expo venue map:
www.seafoodexpo.com/global/floor-plans





# FISH AND FISHERY PRODUCTS STATISTICS[1]

| | Capture fisheries production | | Aquaculture fisheries production | | Exports | | | Imports | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2014 | 2015 | 2015 | 2016 estim. | 2017 estim. | 2015 | 2016 estim. | 2017 estim. |
| | Million tonnes (live weight equivalent) | | | | USD billion | | | | | |
| **ASIA[2]** | **50.5** | **50.7** | **65.5** | **68.4** | **51.8** | **54.4** | **57.8** | **41.6** | **43.8** | **48.2** |
| China | 18.3 | 18.7 | 45.8 | 47.9 | 22.2 | 22.5 | 22.8 | 13.4 | 14.0 | 15.9 |
| of which China, Hong Kong SAR | 0.2 | 0.1 | 0.0 | 0.0 | 0.8 | 0.8 | 0.7 | 3.6 | 3.8 | 3.4 |
| & Taiwan Province of China | 1.1 | 1.0 | 0.3 | 0.3 | 1.6 | 1.6 | 1.7 | 1.2 | 1.3 | 1.3 |
| India | 5.0 | 4.8 | 4.9 | 5.2 | 4.9 | 5.6 | 7.6 | 0.1 | 0.1 | 0.1 |
| Indonesia | 6.4 | 6.5 | 4.3 | 4.3 | 3.6 | 3.9 | 3.8 | 0.3 | 0.4 | 0.4 |
| Japan | 3.6 | 3.5 | 0.6 | 0.7 | 1.9 | 2.0 | 2.0 | 13.5 | 13.9 | 15.0 |
| Korea, Rep. of | 1.7 | 1.6 | 0.5 | 0.5 | 1.5 | 1.7 | 1.7 | 4.3 | 4.6 | 5.1 |
| Philippines | 2.2 | 2.2 | 0.8 | 0.8 | 0.8 | 0.7 | 0.9 | 0.4 | 0.4 | 0.5 |
| Thailand | 1.7 | 1.7 | 0.9 | 0.9 | 5.7 | 5.8 | 6.0 | 2.5 | 3.1 | 3.6 |
| Viet Nam | 2.7 | 2.8 | 3.3 | 3.4 | 6.8 | 7.4 | 7.7 | 1.3 | 1.3 | 1.3 |
| **AFRICA** | **8.6** | **8.8** | **1.7** | **1.8** | **6.0** | **6.3** | **6.5** | **5.3** | **5.5** | **5.6** |
| Egypt | 0.3 | 0.3 | 1.1 | 1.2 | 0.0 | 0.0 | 0.1 | 0.8 | 0.7 | 0.5 |
| Morocco | 1.4 | 1.4 | 0.0 | 0.0 | 2.0 | 2.1 | 2.1 | 0.2 | 0.2 | 0.2 |
| Namibia | 0.4 | 0.5 | 0.0 | 0.0 | 0.6 | 0.7 | 0.8 | 0.0 | 0.1 | 0.1 |
| Nigeria | 0.8 | 0.7 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 1.2 | 1.2 | 1.3 |
| Senegal | 0.5 | 0.4 | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 |
| South Africa | 0.6 | 0.6 | 0.0 | 0.0 | 0.5 | 0.6 | 0.6 | 0.3 | 0.4 | 0.4 |
| **CENTRAL AMERICA** | **2.2** | **2.1** | **0.4** | **0.4** | **2.5** | **2.5** | **2.8** | **1.7** | **1.7** | **1.9** |
| Mexico | 1.5 | 1.5 | 0.2 | 0.2 | 1.0 | 1.0 | 1.2 | 0.8 | 0.8 | 0.9 |
| Panama | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| **SOUTH AMERICA** | **8.6** | **9.3** | **2.4** | **2.3** | **13.1** | **13.8** | **17.4** | **2.8** | **2.8** | **3.2** |
| Argentina | 0.8 | 0.8 | 0.0 | 0.0 | 1.5 | 1.7 | 2.0 | 0.2 | 0.2 | 0.2 |
| Brazil | 0.8 | 0.7 | 0.6 | 0.6 | 0.2 | 0.2 | 0.2 | 1.2 | 1.2 | 1.4 |
| Chile | 2.2 | 1.8 | 1.2 | 1.0 | 4.8 | 5.1 | 6.3 | 0.4 | 0.3 | 0.4 |
| Ecuador | 0.7 | 0.6 | 0.4 | 0.4 | 3.7 | 3.9 | 4.8 | 0.1 | 0.1 | 0.1 |
| Peru | 3.6 | 4.8 | 0.1 | 0.1 | 2.4 | 2.2 | 3.5 | 0.2 | 0.3 | 0.3 |
| **NORTH AMERICA** | **6.1** | **6.2** | **0.6** | **0.6** | **11.0** | **11.7** | **11.8** | **22.5** | **22.4** | **24.7** |
| Canada | 0.9 | 0.9 | 0.1 | 0.2 | 4.7 | 5.0 | 5.4 | 2.7 | 2.8 | 3.0 |
| United States of America | 5.0 | 5.0 | 0.4 | 0.4 | 5.9 | 6.2 | 5.9 | 19.8 | 19.5 | 21.8 |
| **EUROPE** | **13.7** | **14.1** | **2.9** | **3.0** | **46.0** | **50.7** | **54.1** | **51.9** | **56.9** | **60.1** |
| European Union [2] | 5.4 | 5.3 | 1.3 | 1.3 | 29.8 | 32.8 | 34.7 | 47.2 | 52.1 | 54.9 |
| of which Extra-EU | " | " | " | " | 5.4 | 5.7 | 6.4 | 25.0 | 27.2 | 28.6 |
| Iceland | 1.1 | 1.3 | 0.0 | 0.0 | 2.1 | 2.0 | 1.9 | 0.2 | 0.1 | 0.1 |
| Norway | 2.3 | 2.3 | 1.3 | 1.4 | 9.2 | 10.8 | 11.7 | 1.2 | 1.2 | 1.1 |
| Russian Federation | 4.3 | 4.5 | 0.2 | 0.2 | 3.7 | 3.8 | 4.3 | 1.6 | 1.7 | 2.0 |
| **OCEANIA** | **1.3** | **1.4** | **0.2** | **0.2** | **2.9** | **3.0** | **3.1** | **1.8** | **1.8** | **2.0** |
| Australia | 0.2 | 0.2 | 0.1 | 0.1 | 1.1 | 1.0 | 1.0 | 1.4 | 1.5 | 1.6 |
| New Zealand | 0.4 | 0.4 | 0.1 | 0.1 | 1.1 | 1.2 | 1.2 | 0.2 | 0.2 | 0.2 |
| **WORLD [3]** | **91.1** | **92.6** | **73.7** | **76.6** | **133.2** | **142.4** | **153.5** | **127.6** | **134.9** | **145.7** |
| **World excluding Intra-EU** | " | " | " | " | **108.9** | **115.3** | **125.2** | **105.4** | **110.0** | **119.5** |
| Developing countries | 66.6 | 67.8 | 69.3 | 72.0 | 71.9 | 75.5 | 83.1 | 37.2 | 39.1 | 42.9 |
| Developed countries | 24.5 | 24.7 | 4.4 | 4.6 | 61.3 | 66.9 | 70.4 | 90.4 | 95.8 | 102.8 |
| LIFDCs | 12.3 | 12.2 | 7.6 | 8.1 | 8.1 | 9.0 | 11.1 | 3.2 | 3.4 | 3.6 |
| LDCS | 8.6 | 8.7 | 3.4 | 3.5 | 2.9 | 3.1 | 3.1 | 1.1 | 1.2 | 1.3 |

[1] Production and trade data exclude whales, seals, other aquatic mammals and aquatic plants. Trade data include fishmeal and fish oil.

[2] EU28. Including intra-trade. Cyprus is included in Asia as well as in the European Union.

[3] For capture fisheries production, the aggregate also includes 3 782 tonnes in 2014 and 38 732 tonnes in 2015 of not identified countries; data not included in any other aggregates. Totals may not match due to rounding.

*photo ©FAO/Giulio Napolitano*

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