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GLOBEFISH HIGHLIGHTS

A QUARTERLY UPDATE ON WORLD SEAFOOD MARKETS

JANUARY 2020 ISSUE, with Jan. - Sep. 2019 Statistics

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Food and Agriculture Organization of the United Nations
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ABOUT GLOBEFISH

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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).

Helga Josupeit and Marcio Castro de Souza were responsible for quality content review, and Fatima Ferdouse and Weiwei Wang created statistical figures. The Norwegian Seafood Council provided data support for the FAO Fish Price Index. Illustrations were sourced from the Food and Agriculture Organization of the United Nations, Original Scientific Illustrations Archive.

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GLOBEFISH Highlights

A quarterly update on world seafood markets

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Dear Readers,

Fisheries, including aquaculture, provide a vital source of food, employment, recreation, trade and economic well-being for people throughout the world, both for present and future generations, and should, therefore, be conducted in a responsible manner.

The Code of Conduct for Responsible Fisheries (CCRF), unanimously adopted by FAO member countries at the FAO Conference in October 1995, is a powerful tool for countries and fish operators to promote sustainable fisheries and aquaculture, within a global and comprehensive scope.

This Code establishes general principles for responsible fisheries and fishing activities, based on sustainable practices and international law. Despite being adopted in 1995, all of its principles and its overall objectives are still highly relevant today in achieving sustainability in its three dimensions for fisheries and aquaculture.

Over its past 25 years, the Code has been bolstered with FAO instruments and guidelines, including the International Plans of Actions, guideless for eco-labeling, and the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (SSF Guidelines). In the area of combatting illegal, unreported and unregulated (IUU) fishing, the Port State Measures Agreement (PSMA), the catch documentation schemes (CDS) and the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record) are more recent instruments perfectly matching the 1995 Code.

The Code continues to be a reference framework for national and international efforts, including for other legal and institutional frameworks and instruments or in the formulation of policies to ensure sustainable fishing, production and trade of aquatic living resources.

In July 2020, in the upcoming session of the Committee on Fisheries - COFI (<http://www.fao.org/about/meetings/cofi/en/>), FAO will celebrate the 25th anniversary of the Code. More than ever, the principles contained in the Code are closely associated of having and promoting a sustainable environment for the production and trade of fish and fishery products, with the positive corollaries of better income distribution and social inclusion, benefitting the society at large in term of food availability and nutrition.

To create a sustainable production and trade of fish and fishery products is a common interest supported by the Code and its principles, backed by FAO instruments in the area of fisheries and aquaculture.

Let's celebrate responsible fisheries!

Sincerely yours,

Audun Lem Ph.D

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ACRONYMS AND ABBREVIATIONS

GLOBEFISH HIGHLIGHTS

ADF&G	Alaska Department of Fish and Game
APROMAR	Spanish Association of Marine Aquaculture Producers
ASC	Aquaculture Stewardship Council
ASF	African swine fever
PEIXE BR	Brazilian Fisheries Association
CETA	Comprehensive Economic and Trade Agreement
FAD	Fish aggregating devices
FAO	Food and Agricultural Organization of the United Nations
FDA	United States of America Food and Drug Administration
FIPs	Fisheries improvement projects
FOB	Freight on Board
FPI	FAO Fish Price Index
FTA	Free trade agreement
GAA	Global Aquaculture Alliance
GAPP	Genuine Alaska Pollock Producers
GAPs	Good agricultural practices
ICES	International Council for the Exploration of the Sea
IMARPE	Instituto del Mar del Peru
IUU	Illegal, unregulated and unreported fishing
MSC	Marine Stewardship Council
NEFMC	New England Fishery Management Council
NSC	Norwegian Seafood Council
RASFF	Rapid Alert System for Food and Feed
SADER	Ministry of Agriculture and Rural Development
SDG	Sustainable development goal
SFP	Sustainable Fisheries Partnership
SPF	Specific-pathogen-free
SSA	Southern Shrimp Alliance
SSPO	Scottish Salmon Producers Organisation
SUBPESCA	Subsecretariat for Fisheries and Aquaculture of Chile
SSP	Sustainable Shrimp Partnership
TAC	Total allowable catch
TINRO	Pacific Fishery Scientific Research Centre
USDA	United States of America Department of Agriculture
WCP	Western and central Pacific
2019-nCoV	2019 Novel Coronavirus

GLOBAL FISH ECONOMY

GLOBEFISH HIGHLIGHTS

2019 gives way to a more uncertain outlook for 2020



Global fish production growth is expected to be approximately flat year-on-year in 2019, for a total of 177.8 million tonnes. The fast evolving aquaculture sector continues to follow a steady upward growth trajectory, with farmed harvests estimated to have increased 3.9 percent last year. Most commercially important farmed finfish species, including salmon, tilapia and pangasius achieved solid production gains in 2019, although the picture for farmed shrimp is less clear due to sluggish growth in Asia. The increase in aquaculture production was offset by an estimated 3.4 percent drop in wild catches, largely driven by the steep decline in anchoveta catches in Peru. Elsewhere, supplies of cephalopods have been tight and cod catches have also been limited. Tuna production has been better, however, and supply pressure has been dragging prices downwards. Wild fish now accounts for 45 percent of the fish we eat, and its share continues to decline.

Last year was a challenging one for global trade. The world's two largest economies, China and the United States of America, have been locked in a trade conflict and progress in negotiations has been slow. The various phases of the Brexit process have been marked by uncertain direction and political tension. Business confidence is suffering and slowdown has been evident in many large economies. The global seafood market is highly sensitive to wider economic conditions, and the combination of faltering demand, tariffs and drawn-out uncertainty took a major toll on international seafood trade in 2019. After 4 percent growth in 2018, total trade value contracted in American dollar terms in 2019, dropping 1.42 percent to USD 160.5 billion, with reduced volumes a relatively more important factor than falling prices. At the same time, however, a generally stronger American dollar also contributed to a decline in export revenues as measured in other currencies.

World fish prices exhibited exceptional levels of volatility in 2019, due to a combination of supply variability and trade uncertainty. Multi-year lows and highs were recorded for a number of important

World Fish Market at a Glance (million tonnes)

	2017	estim. 2018	estim. 2019	Percent change 2019/18
World balance				
Production	172.6	177.7	177.8	0.0
Capture fisheries	92.5	94.5	91.3	-3.4
Aquaculture	80.1	83.2	86.5	3.9
Trade value (exports USD billion)	156.5	162.9	160.5	-1.4
Trade volume (live weight)	64.9	65.1	64.3	-1.2
Total utilization	172.6	177.7	177.8	0.0
Food	153.4	155.7	158.2	1.6
Feed	14.6	17.5	15.0	-14.2
Other uses	4.7	4.6	4.6	0.0
Supply and demand indicators				
Food fish (kg/year)	20.3	20.4	20.5	0.6
From capture fisheries (kg/year)	9.7	9.5	9.3	-2.0
From aquaculture (kg/year)	10.6	10.9	11.2	2.8

Source: FAO FIAS 2020

Totals may not match due to rounding

traded species, both wild and farmed. Atlantic salmon prices fell steeply mid-year before staging a remarkable recovery to reach near-record heights by the end of 2019. In the last quarter of the year, good tuna catches in the Pacific pushed frozen skipjack prices down to levels not seen in a decade. In Viet Nam, record pangasius prices in 2018 served as a powerful catalyst for rapid expansion in the Mekong Delta, but the spiking volumes saw export prices fall back by some 35 percent over the course of 2019. Overall, the FAO Fish Price Index fell by around 10 points from September 2018 to September 2019.

The impact of the United States of America-China trade conflict saw China's seafood exports take a significant hit in 2019, while United States of America imports also fell. Shrimp producers, such as India and Thailand, also experienced export revenue declines. Combined, Asian seafood exports fell by an estimated USD 1.55 billion in 2019. Brexit-related economic challenges and trade issues also contributed to a general slowdown in seafood trade in the European Union, the world's largest single market for seafood. In South America, export growth was maintained in 2019, due in large part to a substantial increase in Ecuador's exports of shrimp to China. China's recent crackdown on smuggling from Viet Nam has helped boost imports from alternative suppliers.

After a difficult year of supply swings, price volatility, geopolitical tension and economic challenges, the outlook for 2020 is somewhat less uncertain. Although Brexit has finally happened, the precise terms of the United Kingdom of Great Britain and Northern Ireland's future trading relationship with the European Union are still not clear. For the most important traded commodities, supply growth is expected to slow or remain steady, and if demand improves this should see prices rise once again. On the downside, the United States of America-China trade conflict is still far from being resolved and the negative impact of the recent 2019-nCoV outbreak on global trade may be significant, particularly in China.



BIVALVES

GLOBEFISH HIGHLIGHTS

Strong demand for oysters and scallops during the Christmas season

In 2019, sales of seafood, and especially bivalves, for the Christmas period started a bit later than usual in Europe and North America. By mid-December, traders were suddenly looking for bivalves, especially live oysters and scallops, and prices skyrocketed, exceeding levels reached in December 2018. In January 2020, prices went back to normal levels, and are likely to stay stable at least until early April, when Lenten demand will materialize. Bivalves are not a traditional item for the Chinese New Year, so unlike other seafood, bivalves will not increase their market presence in China.

Mussels

World mussel trade was stable in the first nine months of 2019 when compared with the same period of 2018. Some 237 000 tonnes entered international trade, on par with the corresponding figure in 2018. The main importing countries were France, the Netherlands and the United States of America. On the export side, Chile is dominating the market, with 67 000 tonnes exported in the first nine months of 2019, the same amount as in 2018. In the last quarter of the year, social up-roar affected the Chilean mussel industry, as all other economic activities.

The European Union is one of the main markets for live mussels, but imports went down slightly in the first nine months of 2019. Some 108 000 tonnes were imported by the European Union in this period, compared to 110 000 tonnes and 115 000 tonnes in the same period of 2018 and 2017 respectively. This type of trade is mainly an intra-European Union trade, with France as main importer, and Spain and the Netherlands as key suppliers.

Oysters

In 2019, Christmas sales of oysters were very strong, even exceeding expectations. Prices increased drastically, as supplies were tight, especially in France. According to industry reports there may be a shortage of #2 oysters and a higher availability of #4 in the French market.

According to SeafoodSource, ties between French and Irish oyster production remain numerous. In France, the rise in summer water temperatures summer has led French oyster producers to invest in Irish production, with one-third of oyster farms in Ireland now being French-owned. Many of the oysters grown in Irish waters are now being packed in France as French oysters.

Clams

International trade of clams is concentrated in the Asian market, with Japan and the Republic of Korea as main markets and China as a main supplier. From January – September 2019, the trade volume was stable at 200 000 tonnes, compared to the same period of 2018. In Europe, trade is almost absent, as the domestic markets are supplied by national producers.

The European Union has approved the extension for clam fishing of minimum size in Italy. Thanks to it, only Italy for 2020 will be able to fish for the small clam known as lupine, with a minimum size set at 22 mm. In the rest of Europe the minimum size for clams is 25 mm.

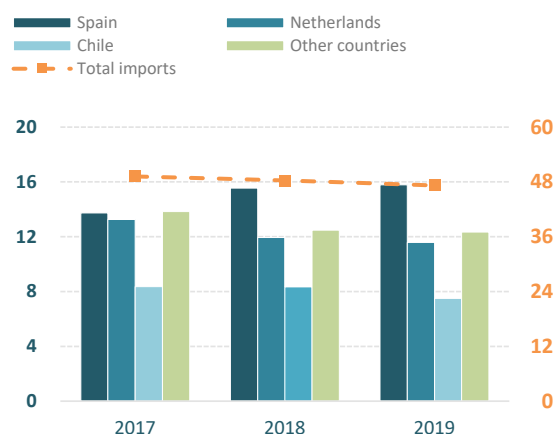
The whole Italian sector is important, representing an annual production of 20 000 tonnes of fish with a value of EUR 60 million, which increases to EUR 140 million when considering the whole value chain. Clam fisheries in Italy has a long tradition, with more than 100 years of history.

BIVALVES

France | Imports | Mussels

Top three origins

Unit: 1 000 tonnes, January-September

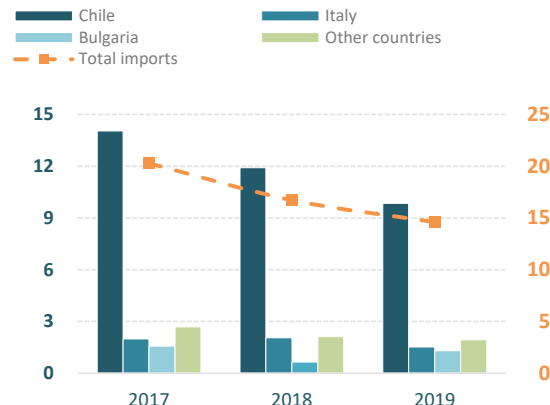


Source: Eurostat

Spain | Imports | Mussels

Top three origins

Unit: 1 000 tonnes, January-September

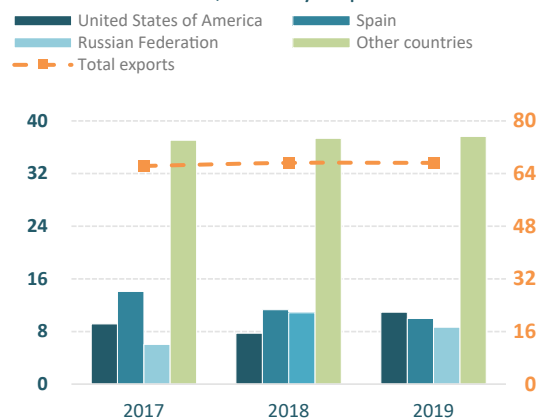


Source: Agencia Tributaria

Chile | Exports | Mussels

Top three destinations

Unit: 1 000 tonnes, January-September

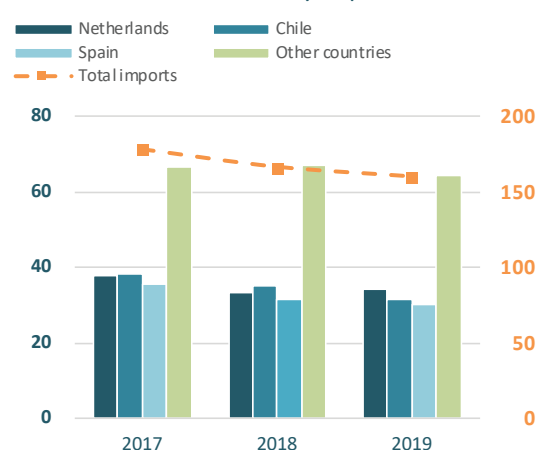


Source: Chile National Customs Office

European Union | Imports | Mussels

Top three origins

Unit: 1 000 tonnes, January-September



Source: Eurostat

There are ongoing discussions between Italian producers in the Adriatic and Spanish producers in the Gulf of Cadiz on the minimum legal size of clams. The Spaniards claim that the minimum size of 25 mm as presently enforced by the European Union is adequate and protects the resource. Italian fishermen, however, claim that clams mature quickly in the Adriatic Sea, and the present high temperature leads to the reproduction of small clams. Therefore, clams of 22 mm size are mature. Spanish clams sell at a higher price (EUR 5.50-6.00 per kg) than those from Italy (EUR 2.50-3.00 per kg).

BIVALVES

World imports/exports of clams-cockles and ark shells (January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
Japan	58.7	51.3	50.4
Republic of Korea	43.9	37.1	37.7
Spain	28.2	27.6	27.4
Other countries	75.3	84.9	91.0
Total	206.0	200.9	206.4
Exports	(1 000 tonnes)		
China	116.5	105.1	105.8
Republic of Korea	13.7	13.4	13.9
Canada	9.9	9.4	9.7
Other countries	53.4	58.6	61.0
Total	193.5	186.4	190.4

Source: TDM

World imports/exports of scallops (January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
China	29.4	63.6	51.3
United States of America	14.5	14.8	11.6
France	10.1	8.4	9.3
Other countries	50.2	47.6	50.4
Total	104.3	134.5	122.7
Exports	(1 000 tonnes)		
China	22.8	21.2	21.3
Peru	2.4	2.7	6.0
Canada	4.6	4.8	5.6
Other countries	44.0	40.8	32.8
Total	74.0	69.6	65.9

Source: TDM

World imports/exports of oysters (January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
United States of America	9.0	9.5	7.9
Japan	4.8	5.2	5.3
France	4.8	4.2	4.7
Other countries	30.6	27.1	28.7
Total	49.2	46.1	46.5
Exports	(1 000 tonnes)		
France	8.5	8.5	9.9
Republic of Korea	7.7	8.8	9.4
China	6.8	6.2	5.6
Other countries	29.4	29.4	26.1
Total	52.6	53.0	51.0

Source: TDM

World imports/exports of mussels (January-September)

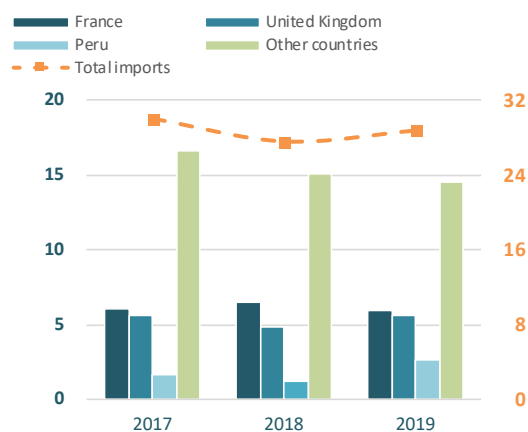
	2017	2018	2019
Imports	(1 000 tonnes)		
France	49.2	48.3	47.2
Netherlands	26.2	32.9	30.1
United States of America	28.5	23.1	28.7
Other countries	145.4	134.1	130.8
Total	249.3	238.4	236.8
Exports	(1 000 tonnes)		
Chile	66.3	67.2	67.2
Netherlands	49.0	42.0	43.0
Spain	35.9	43.9	39.9
Other countries	125.2	120.3	128.2
Total	276.4	273.5	278.4

Source: TDM

BIVALVES

European Union | Imports | Scallops Top three origins

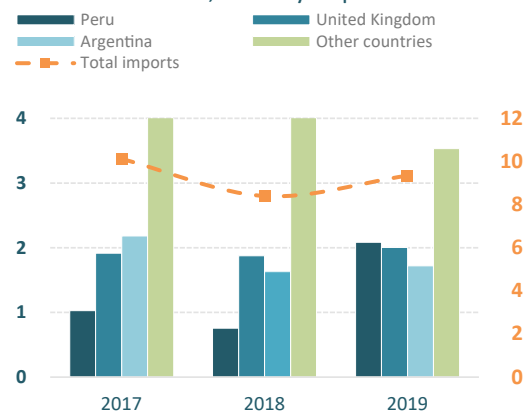
Unit: 1 000 tonnes, January-September



Source: Eurostat

France | Imports | Scallops Top three origins

Unit: 1 000 tonnes, January-September



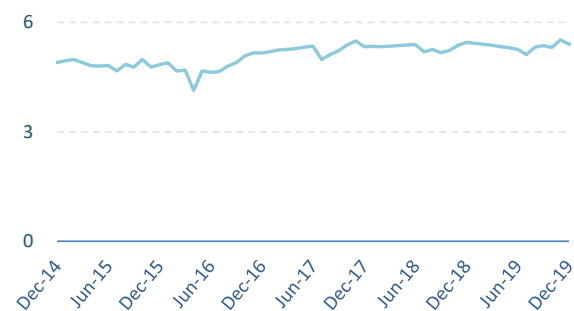
Source: DNSCE



© unsplash/matthewlejeune

Prices Mussels: France

EUR/kg



Monthly average consumer prices in metropolitan France
Source: European Price Report

BIVALVES

Scallops

International trade in scallops is rather limited, not exceeding 150 000 tonnes per year. China is both the main importer and exporter. Peru came back as a main scallop exporter in 2019, after four rather difficult years.

The New England Fishery Management Council (NEFMC) has approved changes that would allow American harvesters to land about 23 500 tonnes of Atlantic scallops in 2020, roughly 17 percent less than in 2019. The ex-vessel value is about USD 2.20 per kg. Despite the decline in the quota, the overall catch in 2020 will be well ahead of the historical average. The resource is considered healthy.

The recovery of the Peruvian scallop fisheries continued in 2019. In the first eleven months of the year some 8 500 tonnes of scallops were exported from Peru, which is 59 percent more than in 2018, and three times the low 2017 figures. Scallop production in Peru was affected by a strong El Niño in both 2016 and 2017. Export prices declined in line with higher availability. While Peruvian scallops in 2017 had a unit value of USD 16.85 per kg, this went down to USD 12.70 in 2018 and finally to USD 9.30 per kg in 2019.

Outlook

Demand for bivalves is growing, and supply is generally good. Prices are coming down for some products sold especially in Christmas periods, such as oysters and scallops. The good harvest from Peru is affecting the scallop market in the European Union, with unit values likely to go down even further. Mussels and clams are in good supply, and prices are expected to stay stable.



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CEPHALOPODS

GLOBEFISH HIGHLIGHTS

Volatile octopus prices and uncertainty in the squid industry

Landings of octopus declined in the two most important producing countries (Morocco and Mauritania) in 2019. At the end of the year supplies became a little tight, while prices edged upwards after a continuous decline since late 2018. In the squid sector, Brexit may impact landings and trade in 2020 and beyond.

Octopus

During the first half of 2019, octopus landings in Morocco and Mauritania declined, mainly as a result of authorities being more restrictive in an effort to protect the resource. Last July, the European Union ratified a fishing agreement with Morocco that will allow a total of 138 vessels to fish within Moroccan waters. However, the agreement includes restrictions on the fishery. A similar agreement between the European Union and Mauritania is expected to be ratified soon.

Supplies of octopus became tighter as Christmas approached. The Maya octopus fishery in Mexico ended on 15 December 2019, and landings dropped by 34 percent to just 25 000 tonnes compared to 2018. The fishing season in Morocco did not start until the first week of January rather than in December as in previous years. These factors, combined with high demand before the Christmas season, put pressure on supplies, and prices increased.

Both demand and consumption of octopus have grown in recent years. This is especially true for the United States of America, where octopus is now a regular item on seafood restaurant menus. This growth in demand has pushed up prices, which peaked in the summer of 2018.

A STEP IN THE RIGHT DIRECTION FOR OCTOPUS

Most octopus fisheries are not properly managed, and only a tiny part of the octopus fishery is considered sustainable.

Major octopus traders, in cooperation with the Sustainable Fisheries Partnership (SFP), have now joined forces with Sustainable Fisheries Partnership (SFP) – an NGO that aims to place itself on the side of the fisheries sector to achieve better sustainability practices - to finance various fisheries improvement projects (FIPs) for octopus. At the moment, only 0.01 percent of octopus products come from fisheries that are considered sustainable. The fisheries improvement projects focus on the major fishing nations – Morocco, Mauritania and Mexico, where FIPs have been launched in order to save the octopus fishery in the long run.

One of the problems which make the fishery so difficult to manage, is the fact that many small artisanal vessels are involved. In Morocco, for example, it is estimated that some 13 000 small vessels that are not registered or licensed fish octopus at certain times of the year.

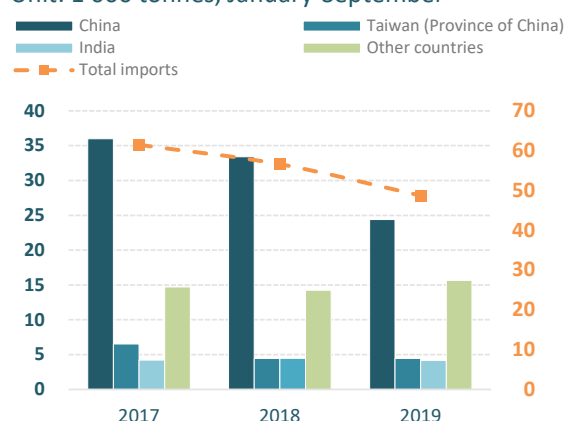
The Western Australia octopus fishery was the first of its kind in the southern hemisphere to be certified by Marine Stewardship Council (MSC) standards. In 2017, landings from this fishery amounted to only 189 tonnes, but it would be possible to increase it sustainably to 1 000 tonnes. The fishery now includes 26 vessels with 32 licences.

It may be a small step, but it is a start. Octopus fisheries need to be better managed and controlled, and any such improvement, however small, is welcome.

CEPHALOPODS

United States of America | Imports | Squid and cuttlefish Top three origins

Unit: 1 000 tonnes, January-September



Source: NMFS

China | Imports | Squid and cuttlefish Top three origins

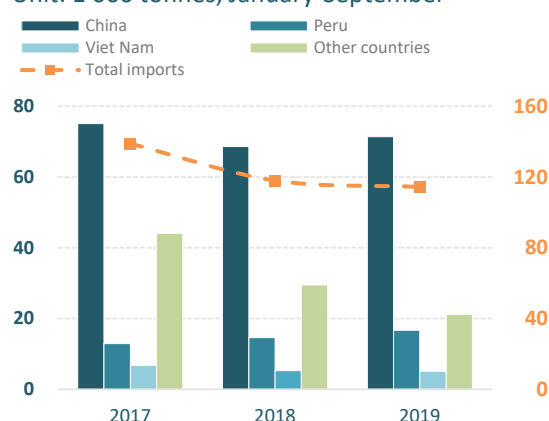
Unit: 1 000 tonnes, January-September



Source: China Customs

Japan | Imports | Squid and cuttlefish Top three origins

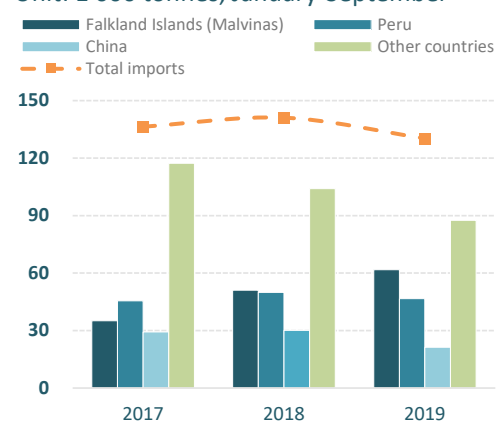
Unit: 1 000 tonnes, January-September



Source: Japan Customs

Spain | Imports | Squid and cuttlefish Top three origins

Unit: 1 000 tonnes, January-September



Source: Agencia Tributaria, Spain

Trade

During the first nine months of 2019, Viet Nam's exports of octopus to the United States of America skyrocketed. The export volume of Vietnamese octopus increased from 547 tonnes in 2018 to 1 246 tonnes in 2019 (+127.8 percent), while export value increased from USD 2.8 million to 6.7 million (+138.9 percent). This increased trade is seen as a result of the United States of America–China trade conflict. The United States of America was forced to seek alternative suppliers, and this represented a golden opportunity for Viet Nam.

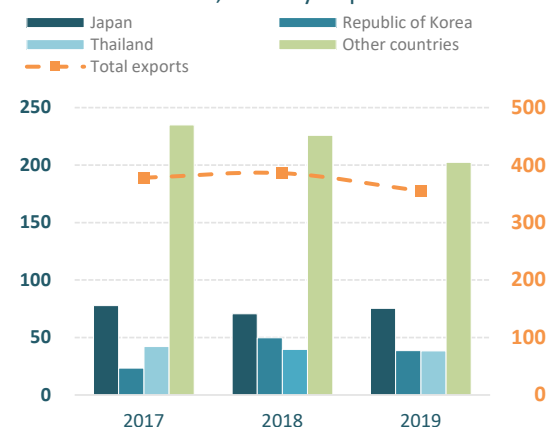
In 2018, octopus prices reached record levels, with the largest sizes hitting EUR 17.00 – 17.50 per kg in August/September 2018. However, since then prices have dropped, and for the largest sizes they fell as low as EUR 10.00 per kg in October 2019. The price drop was partly caused by Spanish

CEPHALOPODS

China | Exports | Squid and cuttlefish

Top three destinations

Unit: 1 000 tonnes, January-September

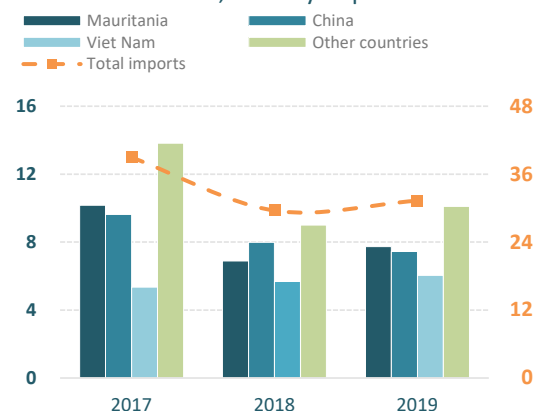


Source: China Customs

Japan | Imports | Octopus

Top three origins

Unit: 1 000 tonnes, January-September

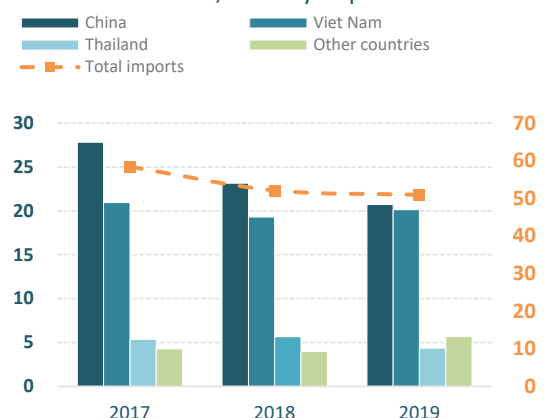


Source: Japan Customs

Republic of Korea | Imports | Octopus

Top three origins

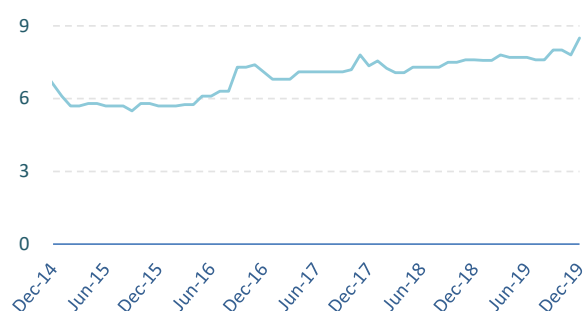
Unit: 1 000 tonnes, January-September



Source: Korea Trade Statistics Promotion Institute

Prices Squid: Italy

EUR/kg



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

buyers holding back on purchases, as their inventories were quite high. However, in December prices went up again in line with Christmas demand in Spain.

Japan's octopus imports, which declined from 2017 to 2018, showed signs of growth during the first nine months of 2019. Total octopus imports increased from 29 572 tonnes in the first nine months of 2018 to 31 315 tonnes during the same period in 2019 (+5.9 percent). The largest suppliers were Mauritania, China and Viet Nam, each shipping between 7 700 and 6 000 tonnes to Japan.

Japanese imports of frozen small octopus declined from 28 874 tonnes in 2018 to 25 617 tonnes in 2019 (-11 percent). The largest supplier by far was Viet Nam, which accounted for about 80 percent (20 551 tonnes), followed by Thailand (3 628 tonnes), and Indonesia (515 tonnes).

CEPHALOPODS

Octopus imports by the Republic of Korea continued their modest decline during the first nine months of 2019, falling from 52 117 tonnes to 50 960 tonnes. The two largest suppliers were China and Viet Nam, each accounting for about 40 percent of the total.

Squid

The first Falkland Islands (Malvinas) squid season of 2019 (February to May) closed with 51 000 tonnes landed, an increase of 10 000 tonnes compared to the first season of 2018. In contrast, the second season (August to October) was a disappointment with only 24 748 tonnes landed, a 31 percent decline from the same season in 2018. The 2019 season was closed early because of low catches. Naturally, the low catches pushed prices up.

California's coastal waters are under threat. The water is acidifying twice as fast as the rest of the oceans, and this fast acidifying is having a very negative effect on various marine animals, such as crab, lobster and squid. California's fisheries production account for about 10 percent of the total production of the United States of America.

In California, the Loligo squid fishery has been diminishing over the past few years. In 2017, the total volume landed stood at 137 million lbs (62 100 tonnes). In 2018, landings dropped to 73 million lbs (33 100 tonnes), and during the first eight months of 2019, only 7.1 million lbs (3 220 tonnes) were landed. The total catch limit for this season, which runs from 1 April 2019 to 31 March 2020, amounts to 236 million lbs (107 000 tonnes).

Squid landings in the Canadian province of Newfoundland and Labrador were up by 40 percent during the first eight months of 2019, compared to the same period in 2018.

Trade

Brexit is beginning to worry Spanish squid fishers. Spain risks losing half of its fishing income in the Falkland Islands (Malvinas). The Spanish squid fleet holds a near monopoly on squid fishing around the Falkland Islands (Malvinas). The fleet consists of 24 large freezer trawlers plus 19 vessels of British/Falkland Islands (Malvinas) owners, flying the island's flag.

But after Brexit, and until a fishing agreement is negotiated between the European Union and the United Kingdom, the Spanish fleet would not be able to operate in these waters. As much as 94 percent of the squid fished in the Falkland Islands (Malvinas) is actually exported from the port of Vigo in Spain, and one third of the Loligo consumed in Europe comes from this fishery. At present, there is no customs fees on squid from the Falkland Islands (Malvinas) as both Spain and the United Kingdom are members of the European Union. If the United Kingdom is not able to secure a free trade agreement with the European Union by the end of 2020, supplies from this fishery could be subject to tariffs and trade would be hampered. Moreover, many jobs both in the Falkland Islands (Malvinas) and in Spain could be in danger.

Japan's imports of squid and cuttlefish fell by 3 percent during the first nine months of 2019, to 114 436 tonnes. The two largest suppliers, China and Peru, both increased shipments to Japan during this period. The trend has been spiralling down for some time, and although imports fell less in 2019 than in 2018, the trend is still down.

CEPHALOPODS

China, on the other hand, increased its imports of squid and cuttlefish substantially during this period. Imports went from 179 030 tonnes during the first nine months of 2018 to 269 282 tonnes (+50 percent) during the same period in 2019. Peru and Argentina sent larger shipments (+93 percent and +100 percent, respectively), while Indonesia, the former major supplier, suffered a small reduction.

While Spanish imports of squid and cuttlefish increased slightly in the first nine months of 2018, they fell back a little during the same period in 2019. Total Spanish imports amounted to 217 160 tonnes during this period in 2019, with 28 percent coming from the Falkland Islands (Malvinas), 21 percent from Peru and 10 percent from China.

American imports of squid and cuttlefish continued to decline in the first nine months of 2019, to 48 708 tonnes, down 14 percent compared to the same period in 2018. China was the largest supplier, accounting for about half of the total volume.

Outlook

Demand for octopus continues to grow, but supplies are getting tighter, for several reasons. The two most important supplier countries, Morocco and Mauritania, are tightening regulations in an effort to protect the future of the species.

With growing demand and limited supplies, one would expect prices to go up. But octopus prices reached a peak in 2018, and have been declining a bit since then, even though the Christmas 2019 trade saw a temporary rise in prices. At present, prices are volatile, and may stay that way for the medium term.

Brexit looms over the squid industry and may bring important structural changes to the industry, both in fishing and trade. Uncertainty could also cause a supply shortage, which would push prices upwards in 2020.



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Tighter supplies of red king crab

As predicted, Alaskan king crab quotas for the 2019 – 2020 season were reduced but the snow crab quota was increased by 23 percent. Thus, supplies of snow crab will rise in 2020, and prices may fall.

Supplies

In October, the Bristol Bay red king crab quota for the 2019 – 2020 season was set at 1 772 tonnes, down by 10 percent from the 1 904 tonne quota in the 2018 – 2019 season.

At the same time, the Alaska Department of Fish and Game (ADF&G) announced that the quota for the 2019 – 2020 season for Alaska snow crab (*Chionoecetes opilio*) in the Bering Sea was increased by 23 percent to 15 431 tonnes, up from 12 510 tonnes for the 2018 – 2019 season.

The king crab, which was released in the Barents Sea by the Russian Federation decades ago, has spread from Russian waters westward and southward along the Norwegian coast. Now there are signs that the king crab may also move north. While most of the king crab resource in the Barents Sea is thought to be on the Russian side, researchers are now seeing signs of it moving west and north to Bear Island and further to Svalbard, which it is expected to reach by 2030.

In December 2019, it was announced that the Oregon Dungeness crab season would be postponed until the end of 2019. The decision was based on the results of crab tests that revealed too small sizes and low meat. The crab season usually runs until the end of the summer, but most of the landings are in the beginning of the season.

RECENT NEWS

A firm in Sabah, Malaysia, has successfully managed to breed three species of deep-sea crab on a commercial scale. A total of 1.2 million fingerlings of giant mud crab, rock crab and blue swimming crab have been successfully hatched in Sabah on Borneo. Two other species, mud crab and the crucifix crab are still in the research and development stage. The Minister of Agriculture and Food Industry hopes that Sabah will develop a lucrative crab farming industry in the future, producing about 100 000 crabs per year.

International trade

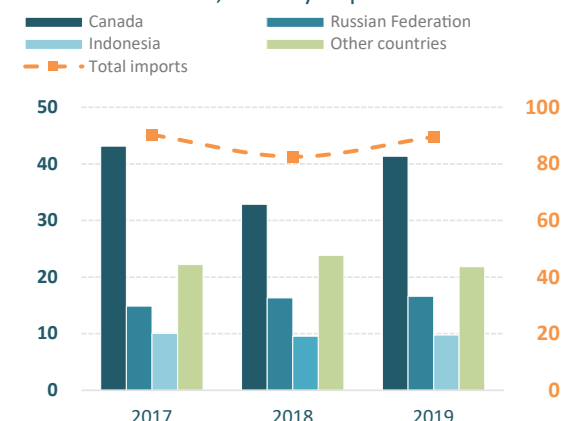
Global trade of crab is relatively stable at the moment. Since 2017, import volumes have been steady, with only very minor fluctuations. Total global crab imports increased by 1.6 percent during the first nine months of 2019 compared to the same period in 2018. The largest importer, the United States of America, increased imports by 8.4 percent to 89 524 tonnes during the nine month period compared to the same period in 2018. Of the other major importing countries, the Republic of Korea had the strongest growth (+26.5 percent) at 38 339 tonnes, while China's imports declined by 6.5 percent to 57 772 tonnes.

Chinese tariffs are having an effect on Alaskan sales of crab to China. United States of America's crab exporting firms are now reporting an 80 percent decline in exports of live king crab to China. These problems favoured Russian exporters, who have been able to fill the gap and compete strongly on price.

CRAB

Top three importers of crab | Imports | Top three origins

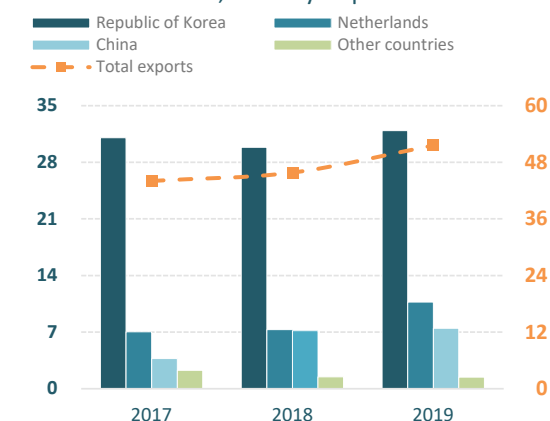
Unit: 1 000 tonnes, January-September



Source: United States of America Census Bureau

Russian Federation | Exports | Crab Top three destinations

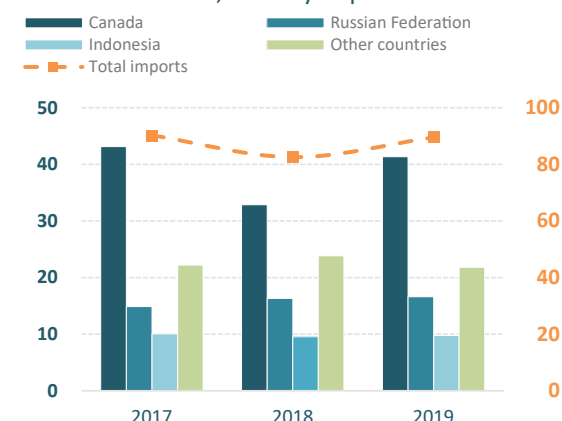
Unit: 1 000 tonnes, January-September



Source: Federal Customs Service of Russia

United States of America | Imports | Crab Top three origins

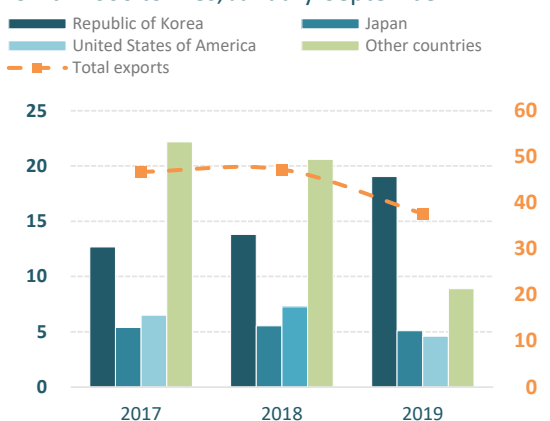
Unit: 1 000 tonnes, January-September



Source: United States of America Census Bureau

China | Exports | Crab Top three destinations

Unit: 1 000 tonnes, January-September



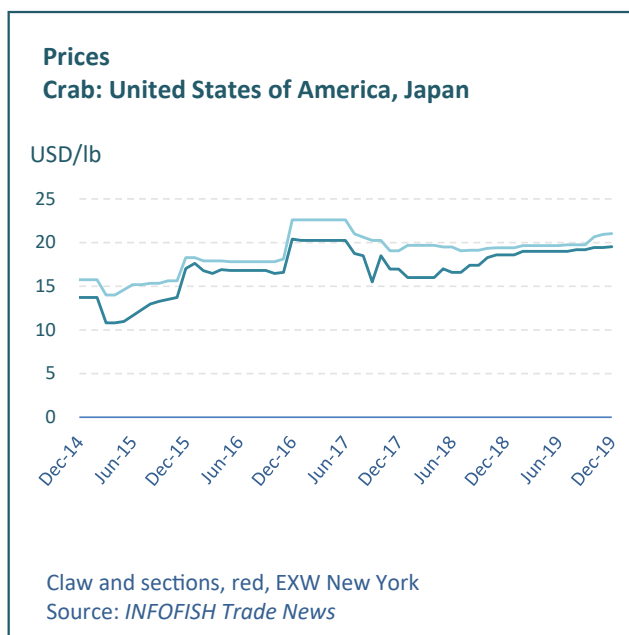
Source: China Customs, estimates

Canadian and European crab exporters were busy supplying crab to China ahead of Chinese New Year, which started on 26 January 2019. From January-November 2019, China imported 5 516 tonnes of live, fresh or chilled crab from the Netherlands, Ireland and the United Kingdom, an increase of 29 percent compared to the same period in 2018.

Canadian exports of crab to the United States of America increased during the review period by almost 26 percent to 41 339 tonnes, accounting for over 46 percent of total United States of America's crab imports during the first nine months of 2019.

Russian crab exports during the first nine months of 2019 increased to 51 570 tonnes, up by 12.5 percent compared to the same period in 2018. The largest market for Russian crab was the Republic

CRAB



of Korea, which accounted for almost 62 percent of total Russian crab exports. However, the steepest growth was recorded for shipments to the Netherlands, where 10 732 tonnes of Russian crab were imported during this period, up by 47 percent compared to the same period in 2018. Russian crab exports to China during this period increased just marginally, from 7 179 tonnes in the first nine months of 2018 to 7 494 tonnes during the same period in 2019.

From January – September 2019, Chinese crab exports dropped by 20 percent to 37 661 tonnes compared to the same period in 2018. Shipments to Japan and the United States of America declined by 7.8 percent and 36.5 percent, respectively, while exports to the Republic of Korea increased by an impressive 37.8 percent.

Prices

Japanese import prices for red king crab have been climbing upwards over the past five years. However, since the beginning of 2018 prices have been relatively flat. With increasing demand from China, some upward price movement is expected. Snow crab prices are expected to weaken somewhat.

Outlook

The supply outlook for 2020 is varied. The Dungeness crab fishery on the United States of America's West Coast has been delayed and will probably be lower than last year. However, the fishery has faced problems for several years now.

King crab supplies will be tighter, with a 10 percent reduction in the Bristol Bay fishery, but a stronger supply from the Barents Sea. Snow crab supplies, on the other hand, will likely be stronger in both Alaska and in the Barents Sea.

Russian crab exporters seem focused on live crab in early 2020. There is increasing demand for live crab in the Chinese market, especially in connection with the Chinese New Year.

CRAB

Demand was strong in anticipation of Chinese New Year, but demand for crab in China has been increasing steadily for some time now. Demand for live crab is particularly strong.

However, the 2019-nCoV outbreak in China during the end of January has put a serious damper on trade, including crab trade. Chinese New Year celebrations have been toned down, eating out has been seriously reduced, and travel restrictions were imposed. This has also had an effect on international seafood trade.



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FISHMEAL & FISH OIL

■ GLOBEFISH HIGHLIGHTS

Early closure of the Peruvian fishing season pushes prices up

Due to high juvenile presence, Peru's Ministry of Production announced the end of the second anchovy fishing season in the centre-north region on 15 January 2020. This early closure is a preventive measure to maintain the sustainability of the species and environment.

The second anchovy fishing season of 2019 in the centre-north region of Peru began in November 2019, with a total allowable catch set at 2.79 million tonnes, up 38 percent from the second session of 2018. However, in the second half of December 2019, abnormal weather conditions caused a high presence of juvenile fish along the coast and fishing activities were subsequently suspended in January 2020.

Production

The first anchovy fishing season in Peru concluded in July 2019, with zero catching activities occurring in the centre-north region until November 2019. For the first nine months of 2019, 2.43 million tonnes of anchovy were landed, a 41.5 percent decrease compared to landings during the same period of 2018. Consequently, the shrinkage of raw materials corresponded to an identical drop of fishmeal yield in Peru, registering only 564 122 tonnes in January-September 2019 when compared to the same period in 2018.

Other reduction fisheries experienced similar declines during the review period, although not as significant as in Peru. In Chile, fishmeal production levelled off, while decreased landings from the Nordic countries is contributing to a global shrinkage of fishmeal production.

The plunge in fish oil production did not come as a surprise. For the first nine months of 2019, Chile was the leading supplier of fish oil, with more than 100 000 tonnes recorded. Following in second place, Peru produced 98 295 tonnes from January-September 2019, in contrast to 171 359 tonnes in the same period of 2018.

Exports

Peruvian fishmeal exports registered a healthy gain in the first half of 2019, up 12 percent (627 000 tonnes) when compared to the same period in 2018. However, this positive trend did not continue in the third quarter of 2019, as the final figure for the first nine months of 2019 (859 000 tonnes) recorded a 9.75 percent decrease from the same period in 2018. The decline in exports can be largely attributed to the outbreak of African Swine Fever (ASF), which has slowed down the pace of China's imports in the third quarter of 2019.

Peru's exports of fish oil for the first nine months of 2019 were down 12 percent. Elsewhere, Denmark's exports of fish oil remained steady, with 76 percent of exports destined to the Norwegian market.

Markets

In China, approximately 54 percent or 645 000 tonnes of fishmeal imports were sourced from Peru in the review period, a slight decrease (-1 percent) compared with the same period in 2018. Currently, the stocks at Chinese ports have been rapidly absorbed by the market partly due to the bleak performance of Peru's second fishing season. On the other hand, a traditional peak in pork consumption is expected with the onset of the 2020 Spring Festival. In order to boost supply, the Chinese government has implemented a set of favourable industry policies, including farm subsidies and preferential tax treatment. Moreover, the rebound of the pig farming industry is also likely to absorb more fishmeal.

FISHMEAL & FISH OIL

Fishmeal production (January-September)

	2015	2016	2017	2018
	(1 000 tonnes)			
Peru	858.2	632.7	734.9	1405.5
China	480.0	460.0	375.0	520.0
Thailand	386.6	313.9	287.7	391.4
Chile	322.1	234.4	331.0	371.8
Vietnam	285.0	288.0	295.0	300.0
Others	2487.6	2590.5	2798.0	2814.3
Total production quantity	4819.5	4519.5	4821.6	5803.0

Source: *IFFO*

Fish oil production (January-September)

	2015	2016	2017	2018
	(1 000 tonnes)			
Peru	99.6	113.9	98.7	227.0
Viet Nam	150.0	150.0	155.0	185.0
Chile	107.2	81.0	120.2	151.2
United States of America	83.0	100.8	76.6	94.0
Japan	60.6	62.3	78.0	79.0
Others	448.8	423.0	459.0	547.1
Total production quantity	949.2	936.0	992.5	1283.3

Source: *IFFO*

Norway's imports of fishmeal decreased by 13 percent, while fish oil imports increased by almost 20 percent. By the end of September 2019, the standing biomass of salmon, which requires high inputs of fish oil for their feed, was on track for 6.7 percent growth year-on-year, albeit due to higher average weights.

Prices

Fishmeal prices have hovered at around USD 1 500 per tonne since June 2018 with occasional oscillations. However, from June 2019 onwards, fishmeal prices have shown an obvious downward trend. The price decline was attributed to several factors such as the positive prospect for the second fishing season, high stocks in China, and a weaker Chinese yuan.

However, the descending trend of fishmeal prices did not last long, as prices picked up momentum in November 2019. The poor performance of the second Peruvian fishing season translated into a global supply shortage of fishmeal and fish oil. Prices are trending upward, due to a shortage of supply and increasing demand from China.

Outlook

At 2.9 million metric tons, the fishing quota announced for Peru's second anchovy season of 2019, is one of the largest ever. However, due to the high presence of juveniles, preventive early closure of the season is having a repercussion on global fishmeal and fish oil price. It is expected that prices will go up in the coming months, at least until the Peruvian government announces the quota for the first fishing season in early 2020.

The outbreak of 2019 Novel Coronavirus (2019-nCoV) in China is having a great impact on the animal farming sector. Firstly, the Chinese government has prolonged the holiday and most workers are staying home. Secondly, the virus was thought to have originated from a seafood market, although not scientifically examined, and people started to fear purchasing animal products, including fish. In addition, many cities have now suspended all public transportation and outdoor activities, hindering the distribution of fish and fishery products. It is still unknown to what extent the 2019-nCoV outbreak will affect the animal feed sector, however weaker demand is foreseen in the short-term.

FISHMEAL & FISH OIL

Peru | Exports | Fishmeal

Top three destinations

Unit: 1 000 tonnes, January-September

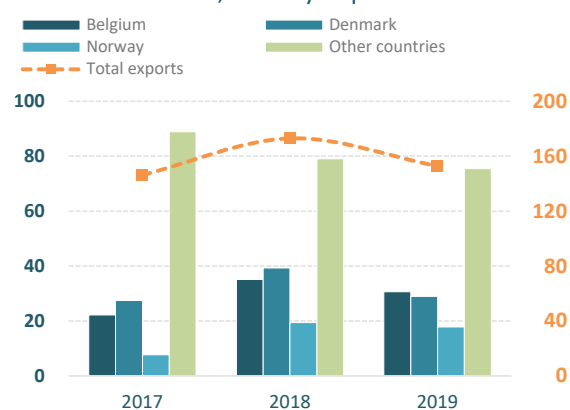


Source: Peru Statistics Office - SUNAT

Peru | Exports | Fish oil

Top three destinations

Unit: 1 000 tonnes, January-September

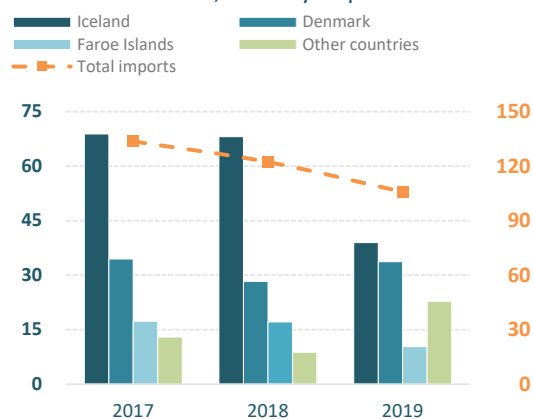


Source: Peru Statistics Office - SUNAT

Norway | Imports | Fishmeal

Top three origins

Unit: 1 000 tonnes, January-September

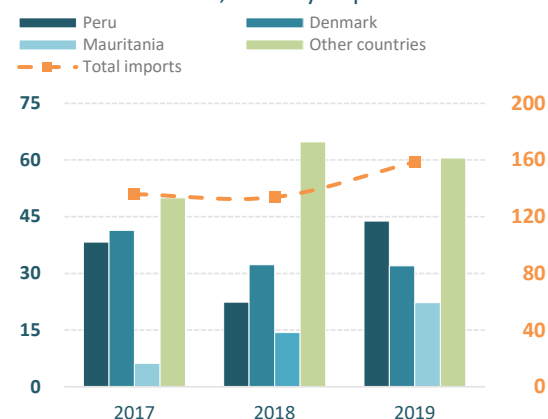


Source: Norway Bureau of Statistic

Norway | Imports | Fish oil

Top three origins

Unit: 1 000 tonnes, January-September



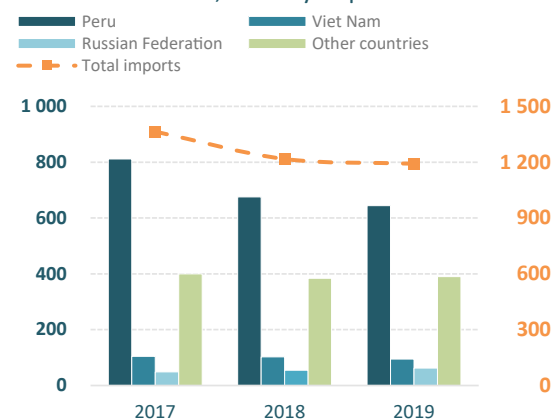
Source: Norway Bureau of Statistic

FISHMEAL & FISH OIL

China | Imports | Fishmeal

Top three origins

Unit: 1 000 tonnes, January-September

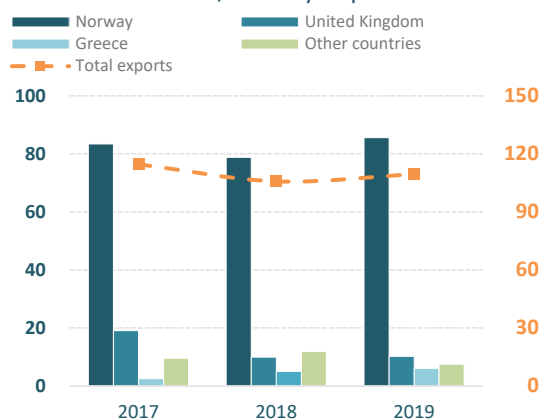


Source: China Customs, estimates

Denmark | Exports | Fish oil

Top three destinations

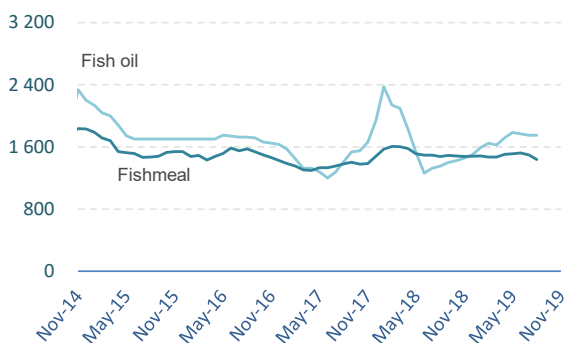
Unit: 1 000 tonnes, January-September



Source: Eurostat

Prices Fish oil and fishmeal: Europe

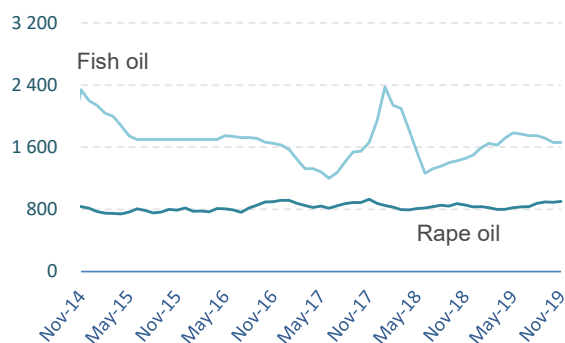
USD/tonne



Source: Oil World

Prices Fish oil and rape oil: Europe

USD/tonne



Source: Oil World

GROUND FISH

■ GLOBEFISH HIGHLIGHTS

Supplies slightly up, prices remain high

Total supplies of groundfish are expected to be relatively stable in 2020. Forecasts show that cod supplies will edge up by 2 percent, while Alaska pollock will remain at 2019 levels. There will also be some increases for haddock and other species. Demand is strong, hence prices are expected to remain high or even rise.

Resources

At the International Groundfish Forum in October 2019, forecasts released for 2020 showed a slight increase in total groundfish supplies (including farmed whitefish) to 7.290 million tonnes, up from 7.288 million tonnes in 2019.

Total supplies of Alaska pollock, by far the largest species, are expected to decline slightly from 3.451 million tonnes in 2019 to 3.442 million tonnes in 2020. Landings of Atlantic cod are expected to increase marginally, from 1.131 million tonnes to 1.132 million tonnes, while haddock is expected to rise from 299 000 tonnes in 2019 to 340 000 tonnes in 2020, and saithe from 351 000 tonnes to 369 000 tonnes.

Hake and Pacific cod catches, on the other hand, are expected to decline in 2020. While hake supplies will slide from 1.273 million tonnes to 1.250 million tonnes, landings of Pacific cod will decline from 387 000 tonnes to 365 000 tonnes.

The Joint Russian – Norwegian Fisheries Commission in October 2019 agreed to a 738 000 tonne quota for Barents Sea cod for 2020, up by 13 000 tonnes or almost 2 percent compared to 2019. At the same time, the Barents Sea quota for haddock was set at 215 000 tonnes, up 20 percent from 172 000 tonnes in 2019.

The European Union and Norway ended up agreeing on a major cut in the North Sea cod quota for 2020, which was set at 17 679 tonnes, down 40 percent from the 29 437 tonnes in 2019. However, this is still 70 percent above the 10 457 tonnes proposed by ICES.

For the first time ever, the Pacific cod fishery in the Gulf of Alaska will be closed for the 2020 season. It has been known for some years that the stocks were in trouble. In 2014, stocks stood at 114 000 tonnes, but dropped to just 46 000 tonnes in 2017. Soaring water temperatures appear to be causing the rapid decline in stocks. Higher water temperatures already occurred in 2014 and became known as “the Blob”, a very large area of super-heated ocean off the coast of Alaska.

While the US TAC for Pacific cod is set to drop in 2020, the Russian TAC will increase. In December 2019, Russian authorities set the final TAC for Alaska pollock at about 3 million tonnes, up from 2.84 million tonnes in 2019.

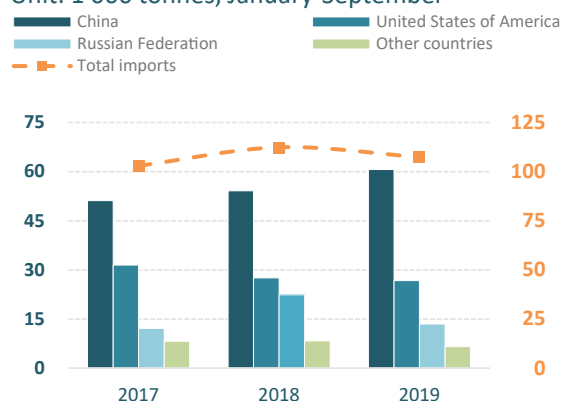
According to the Pacific Fishery Scientific Research Centre (TINRO), the total Russian biomass of Alaska pollock is 12 million tonnes, which is higher than the average level in recent years. The North Pacific Fishery Management Council in December 2019 set the TAC for Eastern Bering Sea Alaska pollock at 1.425 million tonnes, up 2 percent from 1.397 million tonnes in 2019. Total Alaska pollock supplies from the North Pacific have been declining slightly over the past five years, from 3.476 million tonnes in 2016 to 3.442 million tonnes in 2020. Of the 2020 quota, 1.528 million tonnes were allocated to the United States of America, 1.7 million tonnes to the Russian Federation and 214 000 tonnes to Japan, Republic of Korea and others.

GROUND FISH

Germany | Imports | Alaska pollock | Frozen fillets

Top three origins

Unit: 1 000 tonnes, January-September



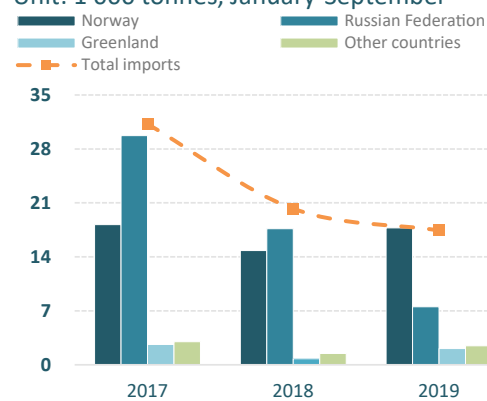
Source: Germany Statistical Office-Destatis

Netherlands | Imports | Cod

Frozen whole

Top three origins

Unit: 1 000 tonnes, January-September



Source: Eurostat

Russian Federation | Exports | Alaska pollock | Frozen whole

Top three destinations

Unit: 1 000 tonnes, January-September

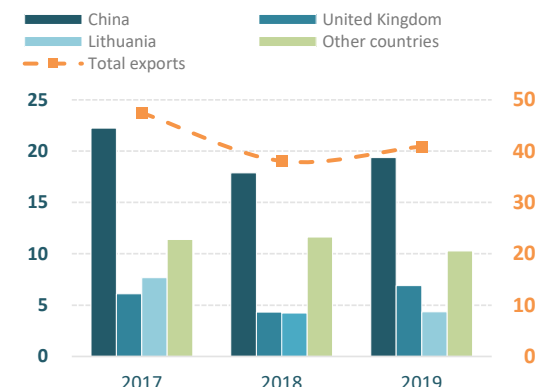


Source: Federal Customs Service of Russia

Norway | Exports | Cod | Frozen whole

Top three destinations

Unit: 1 000 tonnes, January-September



Source: Norway Bureau of Statistics

Trade

World groundfish trade is dominated by two species: Alaska pollock and cod. During the first nine months of 2019, it was noted that traded volumes of cod were down, while traded volumes of Alaska pollock were up.

However, Norwegian exports of frozen whole Atlantic cod increased slightly, from 38 085 tonnes during this period in 2018 to 40 903 tonnes in the same period in 2019 (+7.4 percent). Norwegian cod exports in 2019 were quite low compared to both 2017 and 2018. In the first nine months of 2017, Norwegian frozen whole cod exports amounted to 47 453 tonnes, or 16 percent higher when compared to 2019.

GROUND FISH

Dutch imports of whole frozen cod during the first nine months of 2019 continued to decline, from 34 720 tonnes in 2018 to 29 879 tonnes in 2019 (-14 percent). Chinese imports of whole frozen cod also went down during this period, from 147 248 tonnes during the first nine months of 2018 to 132 184 tonnes during the same period in 2019 (-10.2 percent). This decline was not completely reflected in the figures for exports of frozen cod fillets from China, though, as there was only a very slight decline (-1 percent). Chinese frozen cod fillet exports increased to all countries except the United States of America.

For Alaska pollock, the picture was quite different. Russian exports increased by 11.7 percent to 672 326 tonnes. China's imports of round frozen Alaska pollock went up by 22 percent, to 598 947 tonnes. It seems that some of these imports are actually consumed in China, because re-exports of frozen Alaska pollock fillets did not increase as much as could be expected.

Consumption

United States of America domestic Alaska pollock fillet consumption (114 680 tonnes) appears to have increased by some 50 percent during the first ten months of 2019. This is based on United States of America trade statistics, which show that US production of Alaska pollock products for 2019 was up by 7 percent to 215 500 tonnes. At the same time, exports were down by 8 percent to 131 210 tonnes, and imports of double frozen blocks from China were up markedly.

RECENT NEWS

The Genuine Alaska Pollock Producers (GAPP) is very pleased with the position of Alaska pollock on the domestic market. Now, GAPP wants to turn its attention to Europe, where it hopes to be able to build a stronger demand for this fish. The GAPP board has allocated USD 1 million for a second round of the North American partnership programme, in which efforts to promote Alaska pollock in Europe will be quite central.

Iceland is registering an impressive increase in its haddock exports. During the first nine months of 2019, the country's haddock exports were up by 52 percent to 14 441 tonnes. Fresh whole haddock is the main product, but exports of frozen haddock fillets were also increasing.

The United Kingdom is the main market for Icelandic haddock, with a share of almost 80 percent. However, for fresh haddock fillets, the United States of America is the primary market.

Surimi

Surimi production in Japan's Hokkaido region rose by 32 percent during the first ten months of 2019, to 17 900 tonnes. At the same time, inventories were also very high at 2 441 tonnes, or two times higher than at the same time in 2018.

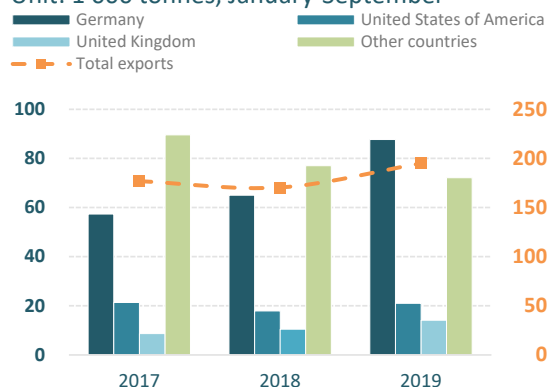
Imports of surimi into the Republic of Korea decreased during the first ten months of 2019. Imports of Alaska pollock surimi (all from the United States of America) went down by 14 percent to 18 235 tonnes, while Korean imports of other types of surimi declined by 13 percent to 80 697 tonnes. All supplying countries except Indonesia registered declines in shipments.

GROUND FISH

China | Exports | Alaska pollock | Frozen fillets

Top three destinations

Unit: 1 000 tonnes, January-September

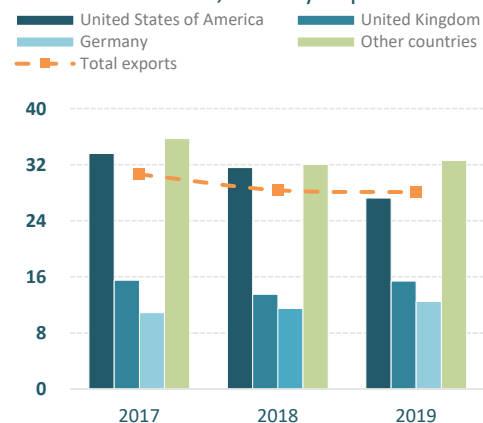


Source: China Customs, estimates

China | Exports | Cod | Frozen fillets

Top three destinations

Unit: 1 000 tonnes, January-September

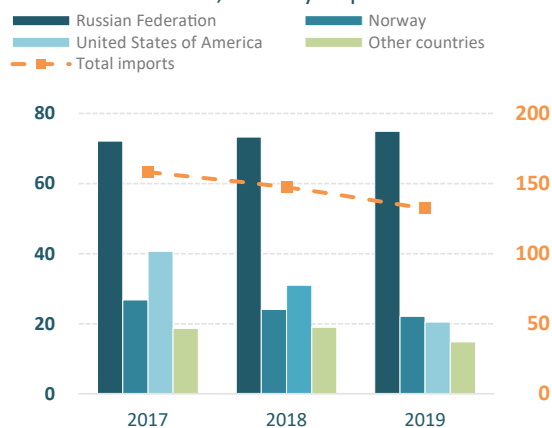


Source: China Customs, estimates

China | Imports | Cod | Frozen whole

Top three origins

Unit: 1 000 tonnes, January-September

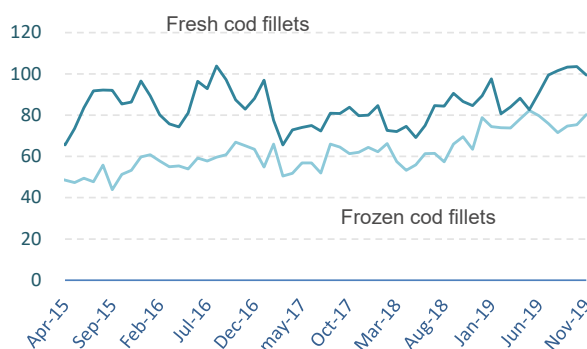


Source: China Customs, estimates

Export price

Cod: Norway

NOK/kg



Source: Norwegian Seafood Council

In the United States of America, exports of other surimimis were down by 23 percent by volume during the first eight months of 2019, to 6 553 tonnes, of which 35 percent were exported to Spain, and 24 percent to the Republic of Korea.

Prices

Global cod prices have been on an upward spiral for about five years. Fresh cod prices from Norway increased by 26.4 percent in September 2019 compared to a year ago, and for the period from January - September 2019, prices for fresh Atlantic cod were up by 16.8 percent. Demand for cod, especially fresh cod, is increasing, and this will inevitably keep prices high. For 2020, one must

GROUND FISH

expect that cod prices will continue high, or even higher, especially in view of the supply outlook. With prices for H&G Atlantic cod being so high, observers expect buyers will look to the cheaper Pacific cod or haddock as an alternative. The Atlantic cod quota is up by 2 percent in 2020, but the haddock quota is going up 25 percent. With more haddock on the market, the price difference between cod and haddock will become greater than historically, when the differential was around 10 percent. For Pacific cod, the picture is more diffuse. While the United States of America TAC is set to drop, the Russian TAC will increase by 15 percent, and thus the price for Pacific cod is expected to stay at present levels or somewhat lower.

Outlook

There will not be any drastic changes in the groundfish market in 2020. Supplies will rise slightly, with a very modest increase for cod, and a more massive increase for haddock. Alaska pollock supplies are expected to be practically the same as in 2018.

The main changes will probably be for prices. Cod prices are expected to stay high or even rise, due to strong demand. Demand for Alaska pollock fillets appears to be increasing in North America, but it is not so strong in Europe.

**China imports of Alaska pollock, frozen whole
(January-September)**

	2017	2018	2019
Imports	(1 000 tonnes)		
Russian Federation	530.9	451.5	556.0
United States of America	41.2	33.6	28.5
Japan	3.7	3.1	7.3
Other countries	10.6	2.4	6.9
Total	586.4	490.8	598.9

Source: *TDM*



© unsplash/natnoe

LOBSTER

GLOBEFISH HIGHLIGHTS

Lobster demand continues to grow, but supply weakens

North American lobster landings, especially in Canada, have been high over the past decade, but now seem to be declining. Maine, the largest producer of lobster in the United States of America, seems especially hard hit. At the same time demand is growing, and the result is a rising price trend.

Supplies

During the first nine months of 2019, Maine lobster landings dropped by about 40 percent compared to the same period of 2018. The main reason for this decline was the late molting in 2019, due to changing water temperatures. Cost of lobster bait went up due to limited availability and this factor also negatively affected landings.

Catches further north seem to be improving. For the fourth consecutive year, catches on Quebec's North Shore rose by about 15 percent compared to 2018. However, these increased landings may also be the result of increased fishing effort.

The lobster season in Canada's Lobster Fishing Area 35 started in mid-October, but results have been mixed. Although landings have been slow everywhere, fishers reported that the lobsters were of good quality and a big size.

Brazil's lobster industry has been subject to new laws and regulations since 1 January 2019. One change is that harvesters will only be allowed to deliver whole lobsters to processing plants, and any form of commercialization or transport within the domestic market will be prohibited between February and April. The lobster fishing season will start on 1 May and run until 31 October.

International trade

The United States of America – China trade war caused Canadian lobster exports to focus strongly on China, and this paid off. In 2018, Canada took over market share from United States of America exporters, and increased their lobster exports to China by over 81 percent compared to 2017.

Nonetheless, this focus on China came at the expense of Canada – European Union trade. The Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union entered into force at the end of 2017, and includes the removal of the 8 percent import tariff on Canadian lobster. Even so, Canadian lobster exports to the European Union in 2018 declined by 3.4 percent compared to 2017.

However, in 2019 it seems that Canadian exports to the European Union are slightly up again. During the first nine months of 2019, exports to the European Union increased by 12.2 percent, to 117.4 million CAD.

Experts predict that once the United States of America - China trade war comes to an end, United States of America exporters will retake about 50 percent of the trade that Canada had acquired, which would mean more lobster from Canada going back to Europe.

Maine politicians are asking the American government to take action on the trade situation with the European Union. American lobster is still subject to between 16 and 20 percent imports taxes, which should be removed.

LOBSTER

World imports/exports of lobster (January-September)

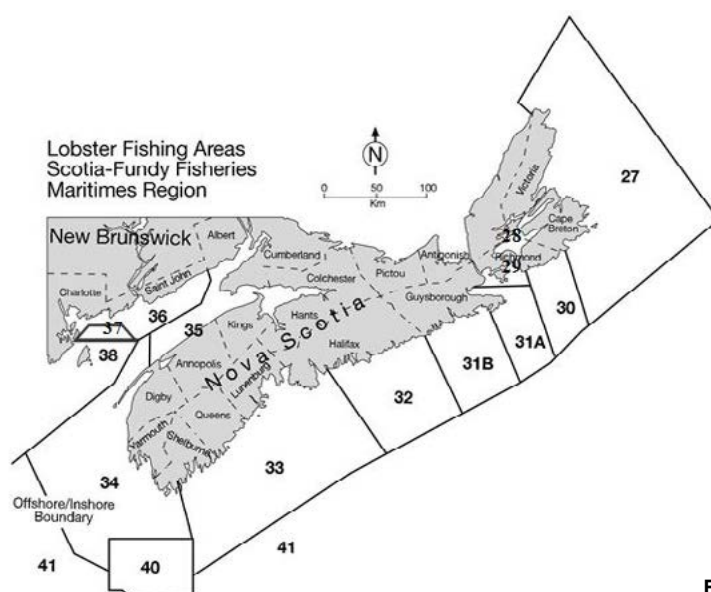
	2017	2018	2019
Imports	(1 000 tonnes)		
United States of America	42.0	43.5	41.3
China	17.9	28.9	34.6
Canada	14.8	18.7	14.0
Other countries	56.9	40.6	40.7
Total	131.5	131.6	130.6
Exports	(1 000 tonnes)		
Canada	62.4	65.0	75.3
United States of America	30.3	35.0	25.0
Egypt	0.2	18.4	0.0
Other countries	38.5	35.5	32.7
Total	131.4	153.9	132.9

Source: TDM, estimates

United States of America imports/exports of lobster (January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
Canada	36.6	38.7	36.5
Brazil	0.7	0.8	1.0
Honduras	0.8	1.0	0.7
Other countries	3.8	3.1	3.1
Total	42.0	43.5	41.3
Exports	(1 000 tonnes)		
China	14.5	18.4	13.7
Canada	4.7	6.8	3.1
China, Hong Kong SAR	1.5	2.2	1.7
Other countries	9.4	7.6	6.5
Total	30.2	34.9	24.9

Source: US Census Bureau



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Fisheries and Oceans Canada

Global trade with lobsters declined slightly during the first nine months of 2019 compared to the same period in 2018, from 131 634 tonnes to 130 550 tonnes. The United States of America remained the largest importer, accounting for 31.6 percent of the total world lobster imports. American imports declined by 5.2 percent, while Canadian imports increased by 20 percent.

Following the same pattern, total global exports declined by 13.6 percent. Canada increased lobster exports by 15.7 percent from 65 044 in 2018 to 75 263 tonnes 2019, whereas American lobster exports fell from 34 970 tonnes to 24 979 tonnes during the same period (-28.6 percent).

LOBSTER

The European Union registered a slight decline in imports during the first nine months of the year, from 14 080 tonnes in 2018 to 13 450 tonnes in 2019. The largest European Union importer was the United Kingdom. There was a significant increase in Chinese imports, from 28 860 tonnes in the first nine months of 2018 to 34 647 tonnes during the same period in 2019 (+20 percent). Canada, by far the main supplier, accounted for 68 percent of total Chinese lobster imports.

Prices

Maine lobster landings dropped by 40 percent in 2019 compared to 2018, and this has caused prices to increase. Nova Scotia lobstermen indicated that they noticed a considerable increase in demand, leading to higher prices. As consequence, prices also went up for spiny lobster from the Caribbean.

Outlook

There is growing demand for lobster on world markets, especially in Asia. At the same time, the North Atlantic lobster industry is facing declining landings, and the supply outlook for the next 5 – 10 years appears to be rather bleak. Consequently, North American lobster prices will certainly go up. However, this may leave markets for other species, such as the Australian rock lobster and various spiny lobsters.

The University of Maine recently released two studies on the effects of climate change on the Maine lobster industry. The main conclusion is that landings in the Gulf of Maine are expected to fall to historically low levels over the next decade. It is also expected that there will be no recovery in the



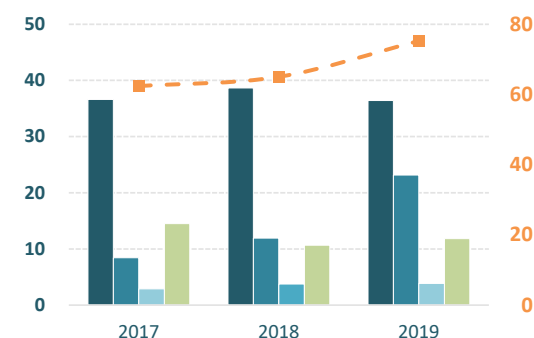
LOBSTER

Canada | Exports | Lobster

Top three destinations

Unit: 1 000 tonnes, January-September

United States of America China
Republic of Korea Other countries
Total exports



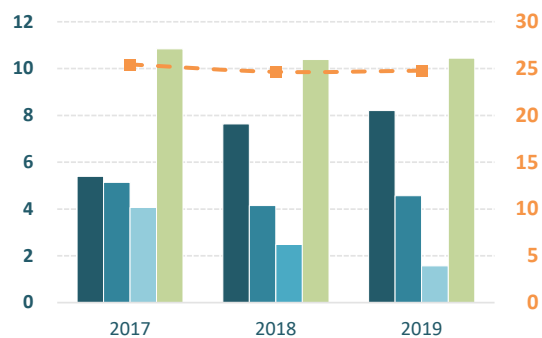
Source: Canada Statistics

European Union | Imports | Lobster

Top three origins

Unit: 1 000 tonnes, January-September

Canada United Kingdom
United States of America Other countries
Total imports



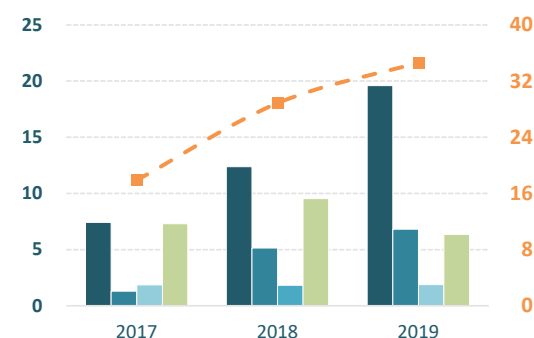
Source: Eurostat

China | Imports | Lobster

Top three origins

Unit: 1 000 tonnes, January-September

Canada Australia
New Zealand Other countries
Total imports

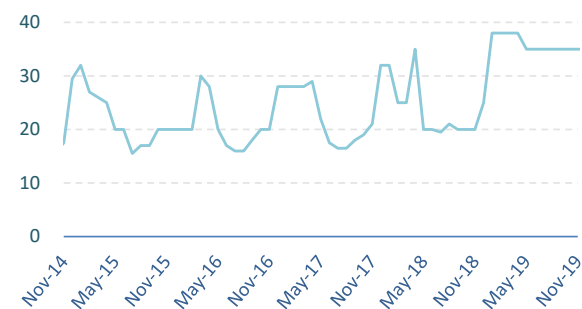


Source: China Customs, estimates

Prices

European lobster: Europe

EUR/kg



Live, origin: Ireland; 400–600, 600–800 g/pc

Source: European Price Report

south of New England.

The Maine lobster boom, which started in 1990 and reached its peak in 2016 with 60 000 tonnes), is predicted to end in the next five years. Prior to 1990, annual catches of about 9 071 tonnes were the norm, but since 2010, catches of more than 45 360 tonnes have been recorded. The study predicts that over the next five years, landings will return to average levels.

Supply overcorrection sees pangasius prices drop by a third in 2019

After strong price gains in 2018, the Vietnamese pangasius sector responded with heavy investment and rapid expansion across the main farming regions. In 2019, however, full inventories and trade challenges in the United States of America and the European Union (Member Organization) meant that core markets were left oversupplied.

Production

Spiking farm-gate prices for pangasius in 2018 and good availability of cheap fingerlings were powerful catalysts driving aquaculture development along the Mekong Delta in South Viet Nam in 2019. This expansion continued despite excess inventories reported in the United States of America and in the European Union markets. A number of new hatcheries and farming sites have sprung up in the farming regions, including a 600 hectare project in An Giang province with a remarkable capacity of 120 000 tonnes. Towards the end of 2019, however, the price situation had worsened significantly and producers found it increasingly difficult to shift volumes at a profit. In response, many farmers delayed harvests and average harvest weights increased sharply as a result.

Viet Nam, both the largest producer and exporter of pangasius, continues to drive global output growth. In 2019, total Vietnamese production is estimated to have reached approximately 1.4 million tonnes, an increase of some 3.5 percent over 2018. Supply growth from other Asian countries such as India, Indonesia and Bangladesh, the next three largest producers, has been somewhat sluggish in recent years although the pace of development is picking up.

Trade and markets

Viet Nam is expected to take in USD 2.3 billion in pangasius export revenues in 2019. This would represent only a marginal increase over 2018 despite the hike in harvest volumes, reflecting the steep drop in prices over the course of the year. Overall the market situation remains challenging, particularly in the European Union where Viet Nam is still subject to a yellow card issued due to failures to address Illegal, Unregulated and Unreported (IUU) fishing. A statement by the European Union inspectors at the end of 2019 points to evidence of improvement but the yellow card warning will remain at least until the situation is reassessed in mid-2020.

In the United States of America, the Vietnamese fishing industry received a boost in 2019 after the United States of America Department of Agriculture (USDA) officially recognized Viet Nam's Pangasius Food Safety Control systems as compliant with American standards after three years of negotiations, as well as reducing anti-dumping duties.

Elsewhere, China continues to increase its share of the global pangasius market on the back of strong consumer demand for the species, with imports from Viet Nam supplemented by growing domestic production. In the first nine months of 2019, China registered a 26 percent increase in the value of its pangasius imports to USD 277 million.

Prices

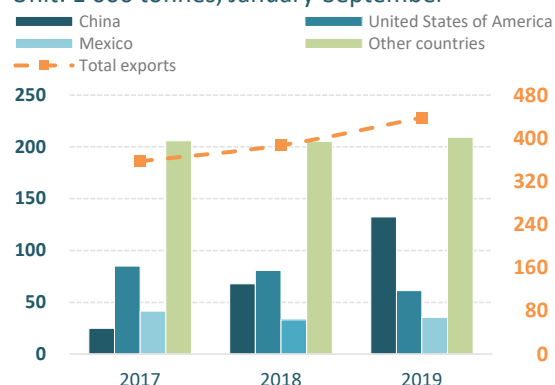
By the end of 2019, export prices (FOB Ho Chi Minh) for fillets were USD 2.20 per kg, marking a steep downward trend from the peak of USD 3.40 per kg reached in 2018. In the United States of America, the average import price over the first nine months of the year dropped by 11 percent to USD 4.00 per kg.

PANGASIUUS

Viet Nam | Exports | Catfish | Frozen fillets

Top three destinations

Unit: 1 000 tonnes, January-September



Source: TDM, estimates



© pixabay/tpsdave

Outlook

Global pangasius production is expected to increase by some 3.8 percent in 2020 to around 2.7 million tonnes. Vietnamese production, usually representative of total international supply, is forecast to rise marginally. Although challenges in the United States of America and the European Union markets will persist in the medium term, the long-term outlook is more optimistic. When considered in conjunction with the rapid growth of the Chinese market and the upward demand trajectory in emerging markets, the conditions are right for a recovery from the current price lull.

Markets grapple with Atlantic salmon price rollercoaster

Good production in both Norway and Chile in the first half of 2019 saw farmed Atlantic salmon prices fall steeply throughout the summer. Subsequently, this trend was sharply reversed and prices soared to near record heights, driven by ever strengthening demand in traditional and emerging markets such as China.

Production

Atlantic salmon

Global production of farmed Atlantic salmon is estimated to have increased by some 7 percent in 2019, to just over 2.6 million tonnes. This growth was mainly driven by Norway and Chile, the two leading producing countries. Norwegian harvests totalled around 1.4 million tonnes while the final figure from Chile is around 700 000 tonnes. Elsewhere, farmed Atlantic production in Scotland bounced back strongly from the poor 2018 when an 18 percent decline from 2017 was reported. The Scottish Salmon Producers Organisation (SSPO) is expecting a total production in 2019 of nearly 190 000 tonnes.

In Norway, farmed Atlantic supply was not significantly affected by the algal bloom experienced earlier in 2019 and by mid-year the huge quantity of fish hitting the markets took buyers somewhat by surprise. The Norwegian government is nevertheless taking measures to minimize the damage inflicted by future algal bloom events, allocating NOK 10 million (USD 1.1 million) for research in this area. It is reported that the Norwegian salmon industry earned some NOK 19-20 billion (USD 2.1-2.2 billion) in profits before tax in 2019. However, this is lower than previous years and 17 percent lower than 2016's peak, due to high production costs and lower prices during mid-year.

In Chile, the Subsecretariat for Fisheries and Aquaculture of Chile (SUBPESCA) reported a 7.4 percent year-on-year increase during January – September 2019 period to 514 300 tonnes. However, since then the situation has changed completely. In the closing months of last year, logistics and farming operations of salmon were impeded by road barricades that blocked access to harvest centres and processing plants for several days. This translated into increased sanitary risks, and industry sources reported losses of almost 800 000 fish in the sea and several tonnes of salmon decaying in processing plants. These large product losses contributed to the steep price spike for Chilean salmon towards the end of the year.

Other farmed salmonids

In Norway, farmed trout production is estimated to have increased by around 24 percent in 2019, with standing biomasses as of the end of November were some 15 percent higher than the previous year. A comparable increase is expected in Chile, with rainbow trout harvests increasing 18.1 percent year-on-year to 65 600 tonnes during the first nine months of 2019. Meanwhile, Chilean coho salmon reached 71 900 tonnes in the first nine months of 2019, up 47.1 percent from the same period in 2018.

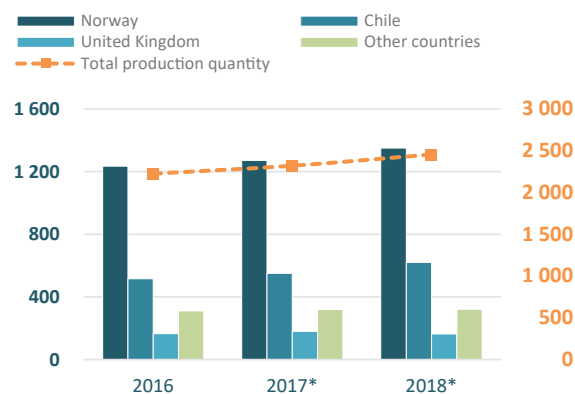
Wild salmon

The major wild salmon seasons in Alaska and the Kamchatka peninsula in Russia are typically over by the end of summer, and 2019 combined catch was around 13 percent lower than in 2018 and 4 percent below 2017. This reduction was primarily the result of a lower pink salmon run than

SALMON

Top three global producers of farmed Atlantic salmon

Unit: 1 000 tonnes

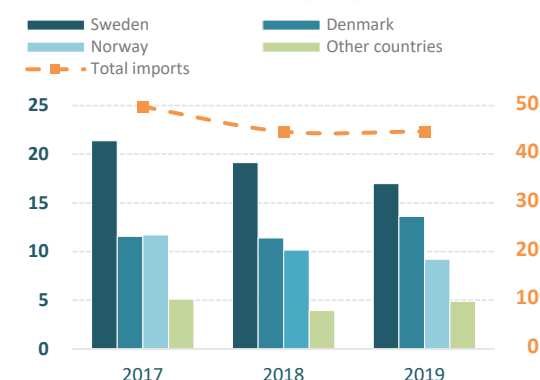


Source: FAO (until 2016), *estimate

Germany | Imports | Salmon | Fresh whole

Top three origins

Unit: 1 000 tonnes, January-September

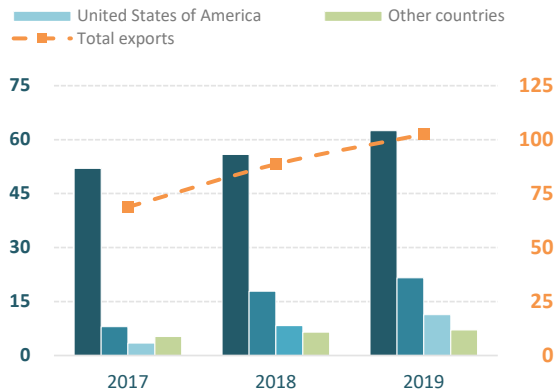


Source: Eurostat

Chile | Exports | Salmon | Fresh whole

Top three destinations

Unit: 1 000 tonnes, January-September

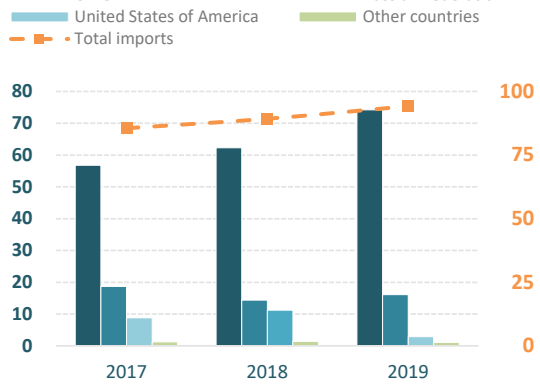


Source: Chile National Customs Office

Japan | Imports | Salmon | Frozen whole

Top three origins

Unit: 1 000 tonnes, January-September



Source: Japanese Ministry of Finance and the Customs

expected. Elsewhere, reports from Canada at the end of 2019 suggest record numbers of wild salmon caught in the Arctic Circle, with researchers suggesting warming water temperatures are playing a role in shifting fish migration patterns with more wild salmon heading towards the Arctic.

Markets

Of the three largest global markets for salmon, the United States of America led the European Union and Japan in market growth in US dollar terms during the first nine months of 2019. In the European Union's case, however, this is partially accounted for by the weakening Euro versus the American dollar over the same period. In general, aggregate demand for salmon products across all world markets shows no sign of weakening, as evidenced by the exceptionally rapid rebound of prices in

late 2019 as supply tightened. This applies not only to farmed Atlantic salmon, representing by far the largest market segment, but also to other salmonid options such as farmed coho, trout and wild species such as sockeye.

In China, prior market access restrictions for Norwegian exporters are now loosening. Moreover, the possibility of a Free Trade Agreement (FTA) between China and Norway is a powerful catalyst for frenzied market development activity by the Norwegian industry. Since 2016, Norwegian exports to China have increased by more than 700 percent, although Chinese destined volumes only account for around 2 percent of Norway's total export volume. Both Scottish and Chilean farmed salmon already have a foothold in the Chinese market, and Chinese domestic production is also on the horizon, but the potential size of the market is so enormous that it is an inevitable target of intensive salmon marketing efforts. Within China, distributors are competing fiercely to position themselves to secure a share of the fast-growing market. The development of distribution infrastructure is ongoing, with e-commerce making up an increasingly larger share of Chinese salmon retail sales.

Some observers have expressed concern that the adoption of salmon as an everyday food item in Chinese households is still some way off and growth projections need to be tempered. Nevertheless, farmed Atlantic salmon is already a staple of increasingly popular Japanese style sashimi restaurants. Fresh Atlantic salmon fillets make up the majority of Chinese salmon imports. Air-flown salmon is expected to be supplemented in 2020 by a transcontinental train route from Norway to China.

Trade

Once again, salmon was the major contributor to record Norwegian seafood exports in 2019, as good harvest volumes, strong demand and a weaker Norwegian krone all combined to boost export revenues. According to NSC figures, Norway exported salmon worth NOK 52.3 billion (USD 6 billion) in the first nine months of the year, a 6 percent increase when compared to the same period in 2018. The European Union countries remain the core of Norway's global salmon exports, but the market share of Asian markets, particularly China and the Republic of Korea, is growing. China has been accelerating its approval of export licenses for Norwegian regions, and it is also hoped that the terms of a free trade agreement (FTA) between China and Norway can be agreed in 2020. This would see the 10 percent import duty that is currently paid on Norwegian salmon imports removed, allowing Norwegian exporters to consolidate and expand their share in the Chinese market.

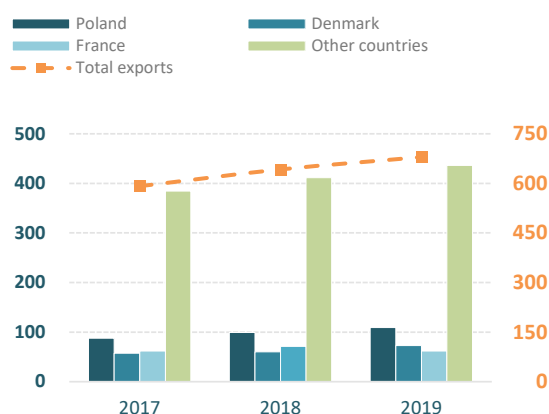
Chile's salmon exports increased by some 4 percent in value terms in the first nine months of 2019, to USD 3.15 billion. The majority of this increase was driven by export revenue gains in Chile's two main markets, the United States of America and Japan. However, full year figures are likely to be affected by the social unrest in Chile, which exploded in the last quarter of 2019. Delays in the distribution chain resulted from this unrest including a blockade at Santiago de Chile airport, the closure of seaports and difficulties unloading trucks. These logistical challenges have been negatively impacting the Chilean export industry, including the salmon farming sector.

According to NOAA, United States of America imports in the first nine months of 2019 totalled 317 645 tonnes of salmon worth USD 3.2 billion, an increase of 6.25 percent in terms of volume and 6.15 percent in value compared with the same period last year. Chile's share of the American market continues to increase year over year, primarily at the expense of Canada. The United Kingdom has also been increasing its salmon exports to the United States of America, although Scottish-origin salmon fillets have recently been placed on a list of products that may be subject to tariffs if the United

SALMON

Norway | Exports | Salmon | Fresh whole Top three destinations

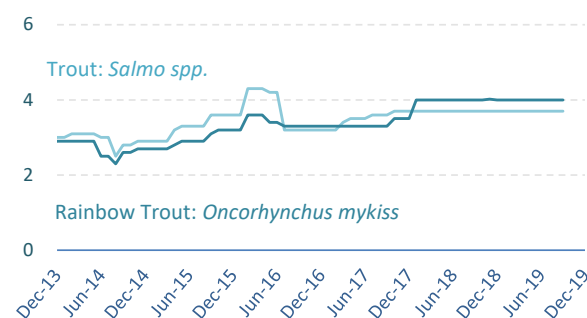
Unit: 1 000 tonnes, January-September



Source: Norway Bureau of Statistics

Prices Trout: Italy

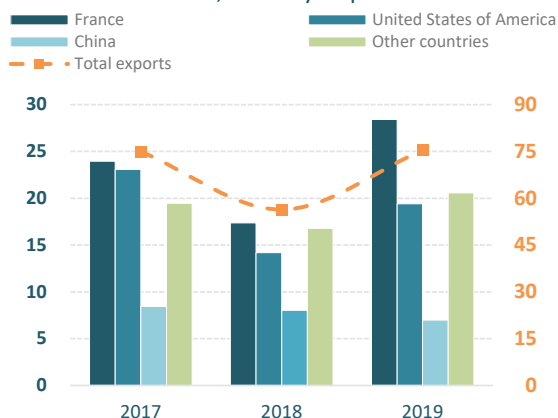
EUR/kg



Ex-farm price from Norway
Source: European Price Report

United Kingdom | Exports | Salmon | Fresh whole Top three destinations

Unit: 1 000 tonnes, January-September



Source: Eurostat



© unsplash/lu_pl_ph

States of America-European Union trade tensions escalate. Of course, this will only be applicable if the United Kingdom is still part of the European Union when these measures are imposed.

Prices

Norwegian salmon prices began a rapid decline in the third quarter of 2019 as backed-up volumes began to hit the markets, dropping to the low NOK 40s (USD 4.4) per kg as of the beginning of September 2019. These numbers represented a temporary blip in the Norwegian salmon market, however, as stabilizing supply and strong end-of-year demand combined to push prices back

upwards, catching the market by surprise. Prices of fresh Atlantic fillets exported from Chile to the American market follow a similar but less extreme trajectory, registering a 1.3 percent decrease over the first nine months of the year at an export price of USD 10.29 per kg.

Outlook

Forecasts for global Atlantic salmon production are for 4-5 percent global growth in 2020, representing somewhat of a slowdown compared with 2019. These predictions would be more in line with the long-term trend. Moderate growth is expected in both Norway and Chile, and a slowdown is also projected for the majority of other producers. Wild salmon catch forecasts are always imprecise, but the Alaskan authorities are predicting a weak pink harvest in 2020.

With both demand and prices reaching near record levels in late 2019, the outlook for the industry remains positive. Forward prices at FishPool for the first half of 2020 are indicating an average level of around NOK 68 (USD 7.66) per kg, although expectations are for a decline towards the NOK 50s (USD 5.63) per kg towards the end of the year. In the longer-term, the variety of alternatives to open net pen farming methods continue to evolve. Currently, land-based sites with a total of 700 000 tonnes of capacity have been planned globally according to a report from Rabobank. Meanwhile investment and research into technology for offshore farming has been picking up, both in traditional farming countries such as Norway and in new industry players such as China.



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SEABASS & SEABREAM

GLOBEFISH HIGHLIGHTS

Mass consolidation transforms bass and bream sector

After a long process of negotiation and regulatory review, the newly consolidated structure of the Greek farmed bass and bream industry is now clear. The hope is that scale-driven efficiencies and coordinated, modern marketing strategies will help to lift the sector from its current lull.

Production

Some recent reports suggest that total production for 2019 is slightly above 2018, beating forecasts earlier in the year for 462 000 tonnes. The Spanish Association of Marine Aquaculture Producers (APROMAR) also reported a 3.6 percent year-on-year increase in juvenile production in 2018, for a total of 1.362 billion units, on par with estimates from the research firm Kontali. This has direct implications for 2019 production levels, as bream typically reach marketable size in 12–18 months, and bass in 18-24 months. Once again, the bulk of the increased harvests in 2019 have come from Turkey, which has led production growth in the sector for some years now.

RECENT NEWS

In 2019, Andromeda Seafood Group acquired both Nireus and Selonda, two of the largest sea bass and bream players. The new merger has a combined capacity of 75 000 tonnes, equating to sales of EUR 420 – 450 million. However, as part of the European Union regulatory conditions, 20 percent of the group's assets, supporting production of around 16 000 tonnes and 85 million smolts, were sold off to another investment firm to allow for the establishment of a viable competitor, Philosofish.

With sector consolidation underway in Greece amidst a poor market environment, the Turkish industry has also been encountering challenges. Harvest volumes continue to grow in the face of insufficient demand, while the Turkish economy is only slowly recovering from a period of high inflation and financial instability. This has pushed prices down sharply in international trade, while economic conditions have also affected the domestic market, with many companies struggling financially. There have been reports that loans are provisional on stocking targets, exasperating the excess supply problem as companies aim for higher harvests even as prices fall.

Trade and markets

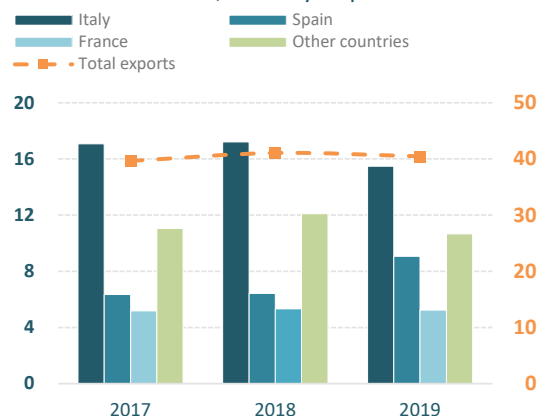
In the weak price environment, bass and bream marketers have been focusing their efforts on value-adding activities such as processing and branding, particularly sustainability certification. Fillets and Aquaculture Stewardship Council (ASC) certified products are making up an increasing proportion of total sales.

With average traded prices significantly down, the total value of seabass and bream exports increased by only 2 percent in the first nine months of 2019 in euro terms, despite an 11 percent increase in total exported volume over the same period. Turkey and Greece, the two largest producers, supplied 38 percent and 36 percent of total exported volume respectively, with Spain in 3rd place with almost 5 percent. The majority of this supply was directed to the European Union markets, with Italy and Spain reporting respective increases of 11 and 21 percent in volume terms over the same review period. Combined, these two markets accounted for 42 percent of total reported imports, in both volume and euro terms. From January-September 2019, smaller markets such as Greece imported 40 percent more in volume, almost all of it from Turkey. Over the same period, both the United States

SEABASS & SEABREAM

Greece | Exports | Seabream | Fresh Top three destinations

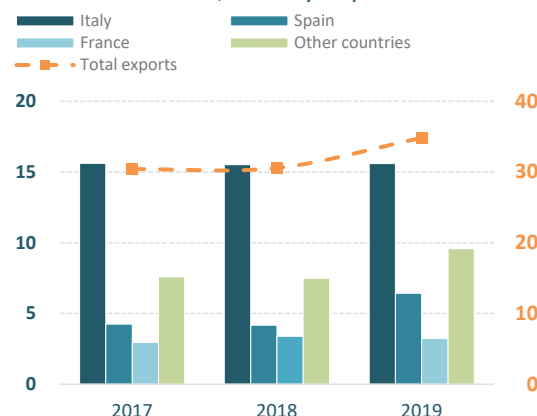
Unit: 1 000 tonnes, January-September



Source: Eurostat

Greece | Exports | Seabass | Fresh Top three destinations

Unit: 1 000 tonnes, January-September



Source: Eurostat



©FAO/Rocco Rorandelli / FAO

Top global producers of seabass and seabream

Producers	2015	2016	2017	2018*	2019*
Turkey	52.3	52.3	61.6	67.5	71.0
Greece	47.9	47.9	56.3	59.0	61.0
Egypt	16.9	16.9	36.3	36.0	34.0
Tunisia	13.5	13.5	20.0	19.0	18.0
Spain	16.8	16.8	18.2	18.9	18.5
Italy	7.73	7.7	8.6	9.5	9.0
Others	22.0	22.0	28.6	28.5	28.5
Total	177.2	198.6	229.9	238.4	240.0

Refers to European seabass and Gilthead bream only

Source: FAO (until 2017) (*) Estimate

of America (+18 percent in volume) and the Russian Federation (+20 percent in volume) showed significant growth in 2019. United States of America imports consist primarily of seabass, from both Greece and Turkey, while Turkey is by far the leading supplier of seabass and seabream to the Russian Federation accounting for over 99 percent of the volume on the market.

Prices

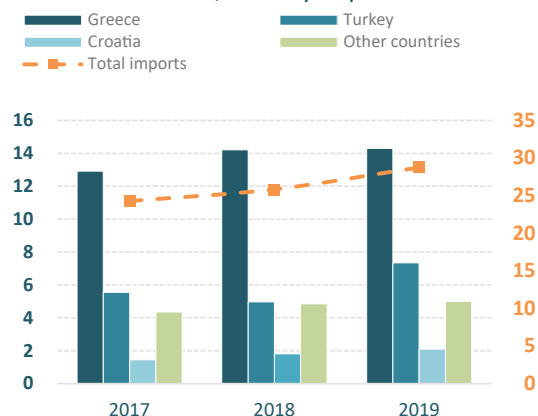
The average unit value of fresh whole bass exports by the major producers was down by around 13 percent in the first nine months of 2019, dropping to EUR 4.37 per kg. Bream equivalents were at EUR 4.26 per kg, reflecting a 6 percent drop. For Turkish exporters, prices in lira terms rose slightly in the review period, up 2 percent for seabass and 11 percent up for seabream, a reflection of the downward exchange rate trend.

SEABASS & SEABREAM

Italy | Imports | Seabream | Fresh

Top three origins

Unit: 1 000 tonnes, January-September

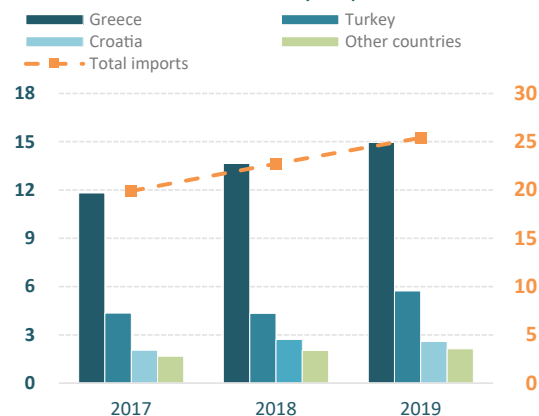


Source: ISTAT - National Institute of Statistics

Italy | Imports | Seabass | Fresh

Top three origins

Unit: 1 000 tonnes, January-September

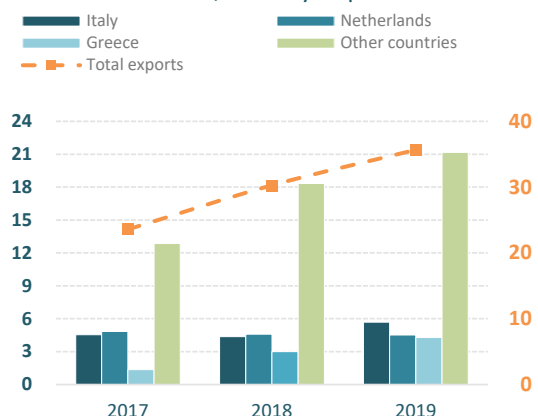


Source: ISTAT - National Institute of Statistics

Turkey | Exports | Seabass | Fresh

Top three destinations

Unit: 1 000 tonnes, January-September

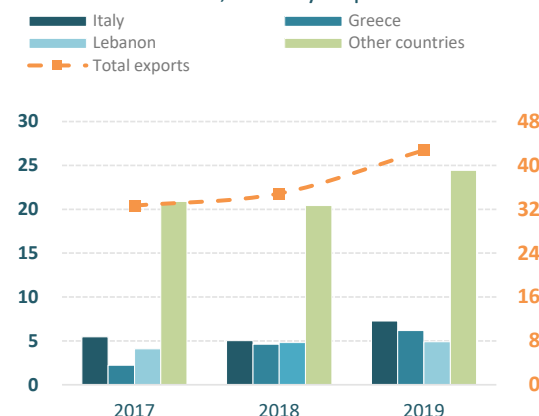


Source: Turkey Statistical Institute

Turkey | Exports | Seabream | Fresh

Top three destinations

Unit: 1 000 tonnes, January-September



Source: Turkey Statistical Institute

Outlook

Juvenile production in 2019 is estimated to have dropped compared to 2018, although there is a lack of consensus on the percent decrease. Most observers expect this to translate into a drop in total production in 2020, with supply relatively tighter for seabream. With the approach of summer, seasonal demand is expected to spike and the tighter supply-demand balance is expected to lift prices to more sustainable levels for producers. Productivity gains, innovation, revamped branding strategies and sales channel diversification will be key areas of focus of the newly restructured Greek aquaculture sector.

Farmed shrimp stayed stable in Asia, increased production in Latin America

Strong imports in China cushioned the demand shortfalls of traditional large markets where imports were rather stagnant throughout 2019. However, even with lackluster imports, the United States of America emerged as a price setter in the global market for shrimp trade. Due to the corona virus outbreak in China, less shrimp than normal was consumed during the New Year Celebrations, and the forecast is for a depressed market in coming months.

Supply

Preliminary industry reports for 2019 indicated slightly lower supply in Asia and increased production in Latin America compared with 2018. In general, farmers in Asia have been adversely affected by the weak price trends and occurrence of diseases in certain areas.

In China, the world's largest producer of farmed shrimp, vannamei shrimp production fell below 2018 levels. In India, production in the major farming regions of Andhra and Tamil Nadu was below 2018 levels due to the general price weakening. However, overall production in India stayed slightly above 2018 levels due to increased production in central and eastern regions of the country. Domestic production in Viet Nam improved in 2019, but imports of frozen raw material declined significantly compared with 2018.

In 2019, Thai shrimp farmers struggled against environmental and economic factors, such as disease in their breeding programmes and low market prices, resulting in less production when compared to the previous year.

Elsewhere, in Latin America, the two-digit export growth in Ecuador, Peru, Mexico during January-September 2019 suggested increased supplies of farmed shrimp in these countries compared with 2018. The largest producer in that region, Ecuador, harvested over 550 000 tonnes of shrimp in 2019.

For sea-caught shrimp, the Southern Shrimp Alliance (SSA) reported lower shrimp landings from the American Gulf of Mexico during the first ten months of 2019, totalling 31 388 tonnes, the lowest level recorded since 2002.

In Argentina, shrimp catches in 2019 were estimated to be at 210 000 tonnes, or about 15 percent lower than in 2018.

Exports

During the third quarter of 2019, the seasonal surge of farmed shrimp and strong imports from China helped maintain positive export curves in many shrimp producing countries.

Ecuador remained the top shrimp exporter with strong growth (+28.8 percent), followed by India where the growth rate was marginal. In contrast, Vietnamese shrimp exports (30-40 percent consisted of processed shrimp) increased significantly during the first nine months of the year. In Indonesia, processed shrimp exports, including breaded shrimp, increased to Japan and the American markets, in comparison with raw frozen products.

Mexico's export growth was significantly high (+ 41 percent) during the review period, supported by strong demand from China and the Republic of Korea. Shrimp exports also increased in Peru (+11.2 percent), albeit at a more moderate level.

SHRIMP

European Union imports/exports of shrimp
(January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
Ecuador	70.2	75.3	77.7
Vietnam	42.6	54.6	51.1
India	54.7	49.8	47.4
Other countries	397.9	414.3	403.0
Total	565.5	594.2	579.3
Exports	(1 000 tonnes)		
Germany	30.5	28.4	31.8
France	25.8	23.3	23.4
Morocco	10.6	15.4	20.7
Other countries	167.5	177.4	172.1
Total	234.5	244.7	248.2

Source: Eurostat

China imports/exports of shrimp (January-September)

	2017	2018	2019
Imports	(1 000 tonnes)		
Ecuador	12.4	57.3	217.4
India	7.8	25.0	108.0
Thailand	10.1	16.8	25.9
Other countries	51.0	78.6	127.3
Total	81.5	177.9	478.7
Exports	(1 000 tonnes)		
United States	35.0	37.4	22.1
Japan	23.6	19.8	16.2
Taiwan	12.2	15.8	11.8
Other countries	75.2	78.7	67.9
Total	146.1	151.8	118.2

Source: China Customs, estimates



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Imports

China's strong presence in the global shrimp market continued in 2019. Official imports of shrimp in the country increased by almost 170 percent during January-September 2019 compared with the same period in 2018. On the other hand, illegal and unreported imports through border trade with Viet Nam decreased significantly following stringent border control by the Chinese authorities. Total imports of shrimp in China during this period (including unreported border trade) is estimated to have exceeded 500 000 tonnes in the first nine months of 2019.

United States of America

Consumer demand for shrimp in the domestic market was good during the 2019 summer supported by stable supplies and cheaper prices. Nonetheless, compared with a year ago, imports increased marginally (+1.1 percent) at 496 287 tonnes from January – September 2019, suggesting more than sufficient local stocks. Among the top suppliers, exports increased from India, Ecuador and Viet Nam but declined from Indonesia, Thailand and China. There were higher imports from Mexico and Argentina.

Under the raw shrimp category, imports of shell-on shrimp grew by 12 percent at 169 000 tonnes. Demand was good for large sized shrimp and peeled shrimp imports also increased to 223 750 tonnes, an increase of 3.2 percent when compared to the same period in 2018. For the popular breaded shrimp, imports increased by 2.4 percent at 36 440 tonnes. The supply shortfall of breaded shrimp from China was more than compensated by increased imports from Viet Nam, Thailand, and Indonesia.

Japan

In the Japanese shrimp market, consumer demand improved in 2019 due to Japan's celebration of the Emperor Coronation. In general, there was greater demand for processed shrimp, while demand for raw shell-on shrimp weakened.

Overall, imports during the first nine months of 2019 remained the same as 2018 at 154 280 tonnes, of which 31 percent or 46 645 tonnes were value-added products such as tempura shrimp, sushi and cooked shrimp. With a 43 percent share in imports of value-added shrimp, Viet Nam was the top exporter, followed by Thailand, Indonesia and China.

During the review period imports of raw shell-on and raw peeled shrimp declined to 106 260 tonnes, in comparison with 108 070 tonnes imported during the corresponding period in 2018.

European Union (Member Organization)

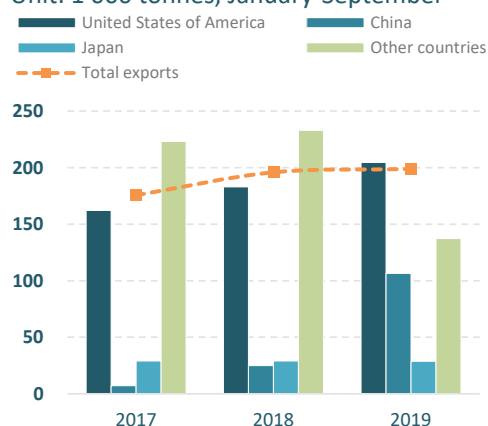
Stable supplies of tropical shrimp and low import prices had little positive impact on shrimp demand in the European Union, particularly in the larger markets (Spain, France, Denmark, Italy, the Netherlands). Import trends were negative in the five largest markets during the review period. There were higher imports registered in the Eastern European markets (Poland, Bulgaria, Czech Republic), but not enough to offset the overall decline. Subsequently, total shrimp imports in the European Union declined by 2.5 percent to 579 400 tonnes during the first nine months of 2019 compared with the same period in 2018.

SHRIMP

India | Exports | Shrimp

Top three destinations

Unit: 1 000 tonnes, January-September

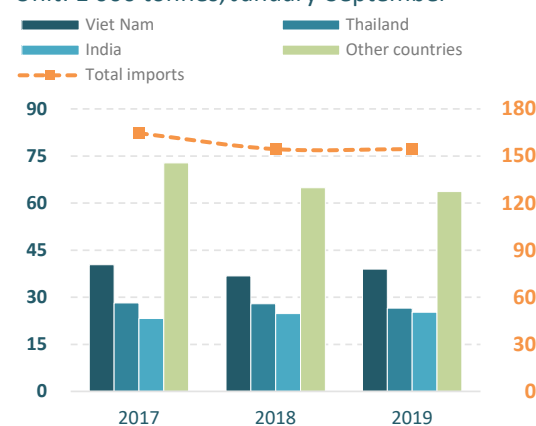


Source: Ministry of Commerce, India

Japan | Imports | Shrimp

Top three origins

Unit: 1 000 tonnes, January-September

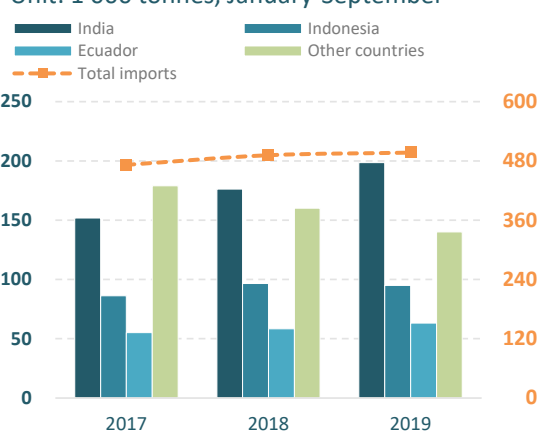


Source: Japanese Ministry of Finance

United States of America | Imports | Shrimp

Top three origins

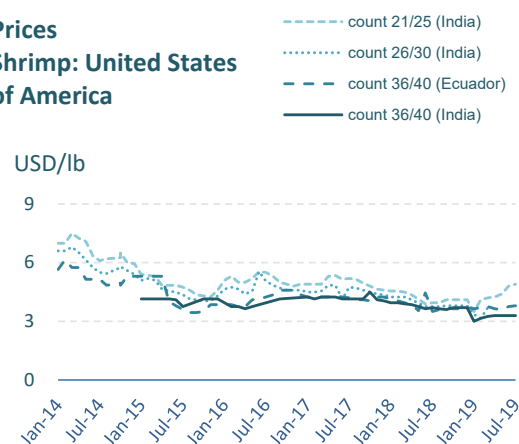
Unit: 1 000 tonnes, January-September



Source: US-NMFS

Prices

Shrimp: United States of America



Headless, shell-on farmed vannamei, Ex-warehouse, New York, United States of America
Source: INFOFISH Trade News

During the review period, supplies from extra-European Union imports were 73.2 percent of total European Union imports, at 423 880 tonnes (-1 percent). Of these imports, nearly 20 percent (81 165 tonnes) were processed shrimp, a product for which imports increased by 9 percent during the review period.

Asia/Pacific

In 2019, China remained Asia's top shrimp importer with an estimated 520 000 tonnes of shrimp imports from January-September 2019, or 3 times more than Japanese imports in the same period. Following stringent border control from China, illegal imports from Viet Nam declined by almost

SHRIMP

75 percent to 40 000 tonnes, while direct imports from all other countries increased by 169 percent to 478 365 tonnes. The top five exporters to the Chinese market were Ecuador, India, Thailand, Saudi Arabia and Viet Nam. During the review period, there were significant increases in China's farmed shrimp imports, but imports of capture cold-water shrimp from Argentina and Canada declined.

Frozen shrimp imports in Viet Nam fell by almost 70 percent to an estimated volume of 103 000 tonnes during the review period as re-exports of these shrimp to China through unreported border trade are being curbed by the Chinese authorities.

Shrimp imports increased moderately in the Republic of Korea (60 000 tonnes; +6.7 percent) and in Taiwan Province of China (35 000 tonnes; +7.5 percent) but declined by 7 percent in China, Hong Kong SAR due to prolonged political unrest in the territory. In Australia, the market remained weak and imports declined by 13 percent to 20 300 tonnes during the review period.

Prices

In 2019, United States of America importers remained the dominant market price-setters in international shrimp trade. Average import prices of shrimp in the United States of America during the first nine months of 2019 were USD 8.45 per kg compared with USD 8.95 per kg in the same period of 2018. In the American domestic trade, wholesalers and distributors were able to maintain lower prices that helped to improve sales volume locally.

In Asia, ex-farm prices of vannamei shrimp remained soft during the peak farming season (July-October 2019) but started to firm up from late October.

Outlook

The global shrimp outlook for 2020 has been overshadowed by the outbreak of 2019-nCoV in China during late December 2019. In preparation for the Lunar New Year celebrations in January 2020, shrimp imports in China were high during the last three months of 2019, while annual imports surpassed 700 000 tonnes.

However, because of the disease outbreak and subsequent precautionary measures throughout China, authorities cancelled Lunar New Year celebrations. In order to control the epidemic, families were instructed to reduce outdoor activities. This has resulted in drastic sales declines in restaurants and hotels following numerous cancellations of trips and dinners, as cities across China have become ghost towns. Reportedly, current inventories of unsold shrimp are high in the market and there is no sign of these levels declining in the near future.

In China, one of the largest markets for farmed shrimp in Asia, production planning for 2020 has become extremely difficult for Asian shrimp farmers, where the season will begin in March-April. The situation is similar for Latin American producers, where supplies are large at the seasonal end in February and the next harvesting season will begin in May-June. Considering these factors, global aquaculture production particularly during the first half of 2020 is likely to be lower than last year.

In international trade, there will be heavy leaning on the American and European markets by shrimp exporters until consumption in China returns to normal. Shrimp prices will certainly be under pressure from these markets and are likely to weaken.

SHRIMP

In general, shrimp demand in Japan usually weakens after the New Year. However, demand pattern for peeled shrimp (widely used in noodle shops) looks good during the winter months in 2020. Demand for all types of processed or value added shrimp is expected to improve during the Spring festival season in April-May 2020.



SMALL PELAGICS

GLOBEFISH HIGHLIGHTS

Stronger mackerel supplies, herring supplies slightly up in 2020

There has been a dispute about the state of mackerel stocks in the North Atlantic, and the end result may be a strong increase in the TAC for 2020. The herring TAC will also be up, although by much less. Heavy supplies spell lower prices.

Mackerel

In October 2019, the European Union, Norway and the Faroe islands agreed on the 2020 TAC for mackerel. The total quota was set at 922 064 tonnes, a 41 percent increase from 2019. This TAC is in line with advice from the International Council for the Exploration of the Sea (ICES). In 2019, Iceland, Greenland and the Russian Federation set their own unilateral quotas, and this is a grave concern to the management of this resource.

Iceland increased its unilateral quota from 107 000 tonnes in 2019 to 140 000 tonnes in 2020.

The unilateral quotas caused the MSC to suspend its certification for 2020, therefore mackerel from this fishery cannot bear the MSC logo. This, in turn, becomes a problem for the United Kingdom's processors who are not able to get supplies of MSC mackerel. Distributors in Europe and Japan use the MSC logo on product packaging, but will not be able to obtain enough MSC certified mackerel.

Both TAC and landings of Northeast Atlantic mackerel followed ICES advice closely until 2005. Landings dropped to 318 000 tonnes in 2006, below the ICES recommendation of 441 000 tonnes, and then from 2010, landings were far above the ICES advice, mainly as a result of the unilaterally quotas set by Iceland, Greenland, Ireland and the Russian Federation. Mackerel landings peaked in 2014, but have been declining ever since. ICES increased its quota advice in 2019, and again in 2020.

During the first nine months of 2019, Norway's exports of mackerel amounted to 101 128 tonnes with a FOB value of NOK 1.66 billion (USD 185 million). This represented an increase of 15.6 percent by volume and 53 percent by value.

Norwegian mackerel exports to China increased from 10 528 tonnes during the first nine months of 2018 to 19 653 tonnes during the same period in 2019 (+86.7 percent). Shipments to the Republic of Korea and Viet Nam also increased, while exports to Japan declined by almost 13 percent.

China is being targeted by the Norwegian Seafood Council (NSC) to promote mackerel. Some consumer interest already exists, but Chinese consumption lags far behind Japan's 160 000 tonnes per year. About 95 percent of mackerel sold in China is through the food service industry, primarily Japanese restaurants. Thus, mackerel is often perceived as a Japanese product in China. Most of the 115 000 tonnes of mackerel sold in China is Pacific fish, with only about 10 percent from the Atlantic. Pacific mackerel is regarded as a low-value product, and Norwegians want to position their mackerel as a higher value product.

After a decline in 2018, China exports of whole frozen mackerel registered a 23.4 percent increase in the first nine months of 2019. There were strong increases in shipments to Egypt (+320 percent) and Thailand (+146 percent), while exports to the Philippines fell by 44 percent compared with the same period of 2018.

Russian exports of whole frozen mackerel during the first nine months of 2019 fell by 15 percent when compared to the same period of 2018, to 113 866 tonnes. The main market was China,

SMALL PELAGICS

China | Exports | Mackerel

Frozen whole

Top three destinations

Unit: 1 000 tonnes, January-September



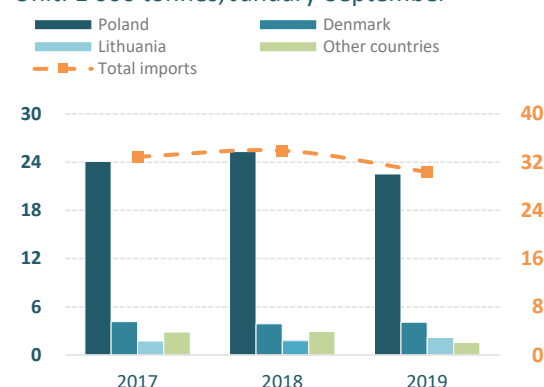
Source: China Customs, estimates

Germany | Imports | Herring

Prepared/preserved

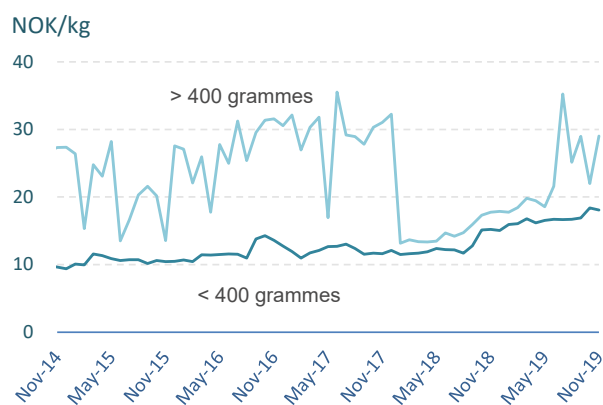
Top three origins

Unit: 1 000 tonnes, January-September



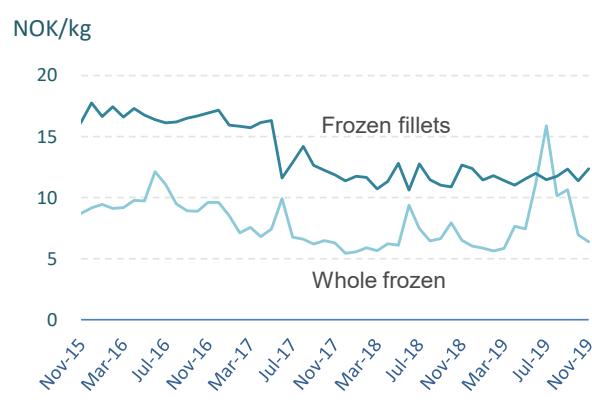
Source: Eurostat

Export prices Mackerel: Norway



Source: Norwegian Seafood Council

Export prices Frozen herring: Norway



Source: Norwegian Seafood Council

which took just under 60 percent of the total. The Republic of Korea accounted for 24 111 tonnes (21 percent), and Nigeria 8 820 tonnes (7.7 percent of total Russian exports).

Herring

In October 2019, Norway, the Faroe Islands, Iceland and the Russian Federation agreed on the quota for Atlanto-Scandinavian herring at 525 594 tonnes for 2020, representing an 11 percent cut compared to 2019. Of the 2020 quota some 399 451 tonnes, or 76 percent, will be caught by Norway.

As the Norwegian spring-spawning herring season was winding down in late November. Cumulative landings from January through November 2019 were 375 055 tonnes, up 36 percent compared to the

SMALL PELAGICS

Russian Federation | Exports | Herring | Frozen whole

Top three destinations

Unit: 1 000 tonnes, January-September



Source: Federal Customs Service of Russia

Norway exports of small pelagics (frozen whole) (January-September)

	2017	2018	2019
Mackerel	(1 000 tonnes)		
China	28.2	10.9	19.9
Republic of Korea	7.4	8.2	14.0
Viet Nam	6.6	8.8	10.4
Other countries	90.1	63.1	59.1
Total	132.4	91.2	103.5
Herring	(1 000 tonnes)		
Egypt	10.7	14.3	26.4
Lithuania	10.7	13.3	17.1
Netherlands	10.2	10.7	11.2
Other countries	50.1	48.3	43.4
Total	81.8	86.8	98.2

Source: TDM

first eleven months of 2018, when 274 906 tonnes were landed. With such an increase in supplies, prices fell to NOK 4.33 per kg, compared to NOK 4.62 in 2018. Fishing was also good in Iceland, with record landings in October and November. As landings dried up in December, prices rose a little.

German imports of preserved and prepared herring in the first nine months of 2019 fell slightly to 30 370 tonnes, down from 33 908 tonnes in the same period of 2018. Poland was the dominant supplier, accounting for almost 74 percent of the total import volume. Since decades the German herring processors are processing the fish in Poland, due to lower labour costs there.

During the first nine months of 2019, Norway exported 115 076 tonnes of fresh and frozen herring, an increase of 7.5 percent over the same period in 2018. Prices went up a little, too. In addition, Norway exported 68 227 tonnes of frozen herring fillets, compared to 77 184 tonnes during the same period in 2018 (-11.6 percent).

Anchovy/Sardines

Peru's second anchovy season in the north central region started in November 2019, with a total quota of 2.79 million tonnes. This represented a 33 percent increase over the second season in 2018, when the quota was 2.1 million tonnes. Almost all of the 2018 quota was caught. The quota was lifted in 2019 after estimates by Instituto del Mar del Peru (IMARPE) were published in October 2019, showing a biomass of 8.34 million tonnes.

Good catches of anchoveta south of El Rincon in Argentina may revive the salted fish sector. Around a dozen vessels are involved in this fishery, and land their catch in the port of Mar del Plata. There are about ten salted fish plants that have started receiving the anchoveta, and they have hired temporary staff to meet the demand.

SMALL PELAGICS

Capelin

Russian and Norwegian research vessels have registered low stocks of capelin in the Barents Sea during recent cruises, according to the Institute of Marine Research in Bergen. Two concentrations of capelin were registered; one east of Edge Island near Svalbard, and the other to the far east of the fisheries protection zone at Svalbard. Very little capelin was registered on the Russian side of the Barents Sea. The results do not bode well for the capelin fishery in the near future. Capelin is a very important source of food for cod, and it is important to re-build the capelin resource also for future cod fisheries.

Icelandic ocean researchers have recommended a zero capelin quota for 2020. The Marine Research Institute of Iceland suggests that capelin fishing will not be able to recommence until 2021.

Outlook

There will be much stronger supplies of Atlantic mackerel in 2020, with a 41 percent increase in the TAC. Mackerel prices have been on an upward trend since the beginning of 2018, but are now likely to decline, given increased supply.

Herring supplies will also increase, albeit at a lower (+11 percent) rate. Supplies from herring fishery on the east coast of North America are expected to all but disappear as fishing restrictions were imposed by United States of America authorities. Most of these supplies have gone to bait for the lobster industry. Prices for whole frozen herring are somewhat seasonal, with a peak during the summer months. For the rest of the year, prices are likely to hover around present levels, with the normal peak during the summer for whole frozen fish. For frozen fillets, prices are expected to stay flat.

Capelin fishing in the Barents Sea is likely to be severely reduced, if not discontinued altogether.



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Major tilapia markets weaken as supply increases

Tilapia has been one of the most heavily affected casualties of the United States of America-China trade conflict. The 25 percent tariffs have accelerated the decline of the American demand and stripped away much of China's competitive advantage as a supplier.

Production

Annual production figures are not yet available for 2019, but the most recent survey by the Global Aquaculture Alliance (GAA) indicated expectations for a global total of 6.5 million tonnes. This is an increase of 3-4 percent compared with 2018 driven by gains across all major producers despite reported disease-related losses of some 300 000 tonnes in Asia. China remains the dominant producer and exporter, accounting for around 26 percent of total supply in 2019. However, the weakened American market and reuse of tilapia aquaculture zones for tourism and real estate development has set in motion a sustained industry decline. Still, there are many other countries in Asia, Africa and Latin America that are increasingly responsible for driving global growth of the farmed tilapia sector.

Tilapia production in Brazil, one of the top suppliers worldwide, is expected to set a new record for 2019, exceeding 450 000 tonnes, an increase of 12.4 percent compared with 2018. According to the Brazilian Fisheries Association (PEIXE BR) Yearbook, tilapia production growth in Brazil has exceeded growth rates of other farmed fish species, driven by heavy investment and strong demand both domestically and abroad. Tilapia now represents around 55 percent of Brazil's total aquaculture production.

RECENT NEWS

In the Dominican Republic, there is great potential to develop aquaculture at an exportable level, with tilapia being the most obvious candidate for export growth over the coming years. The most important target market is the United States of America. Apart from exports, the country is also targeting the important domestic market. The Dominican Republic currently imports some USD 25 million in tilapia annually and is seeking to replace imports with local production.

In the Philippines, the volcanic eruption at Lake Taal led to the loss of around 6 000 tilapia cages, equating to financial damages of around USD 31.4 million. Meanwhile, in Ghana, a mass tilapia vaccination program is now underway after heavy losses in the Volta Lake region were linked to viral diseases.

Markets and trade

The 25 percent price hike for Chinese-origin frozen tilapia has exasperated an already weakening American market situation. Current tariffs aside, uncertainty over the outcome of trade negotiations is creating a difficult business environment. At the same time, seafood opportunities in China's domestic market are growing, and the sector's dependence on the American demand is lessening. China still accounts for around 70 percent of American tilapia imports (all frozen), but it is increasingly evident that alternative suppliers are taking a larger share of the lucrative American market.

The United States of America imported 124 784 tonnes of tilapia worth USD 439.4 million from January – September 2019. These figures represent a decrease of 4.6 percent in terms of volume and 9.17 percent in terms of value compared with the same period of last year. In particular, imports of Chinese tilapia decreased by 10.3 percent in volume and 17 percent in value.

Prices

Continuing production growth, weakening underlying demand in the United States of America and the impact of the United States of America-China trade conflict are all combining to push tilapia prices downwards. Import prices for Chinese frozen whole tilapia reached multi-year lows of USD 1.31 per kg in the United States of America market by the end of July, while prices in China also fell sharply. Prices for 300-500 g live tilapia delivered to the factory in Guangdong, China dropped to CNY 5.42 (USD 0.79) per kg at the end of 2019, marking an almost 20 percent decline from a year prior.

Outlook

The United States of America-China trade conflict has now been ongoing for almost two years, and there appears to be no relief in sight for tilapia traders. This will mean continued weak demand for Chinese tilapia and a low probability of any significant price recovery. At the same time, China's emphasis on agriculture in some key coastal zones has dropped, meaning the decline in China's share of total supply is set to continue. Indonesia and Latin American producers will make up some of the shortfalls on export markets, while the bulk of Brazil's production will be absorbed by its domestic market for the foreseeable future. Elsewhere, the World Bank is also lobbying for further tilapia sector development in India and other parts of Asia.

RECENT NEWS

Latin American producers remain almost entirely dependent on the American market for export revenue. In Mexico, however, the industry is working to intensify its commercial relationship with Qatar over the next years, due to heightened interest in importing Mexican products like tilapia. In response, the Ministry of Agriculture and Rural Development (SADER) announced that it is working on sanitary protocols and transport logistics to expand exports of Mexican fishery products to the Qatar market.

China exports of frozen tilapia (January-September)

	2017	2018	2019
Frozen tilapia	(1 000 tonnes)		
United States of America	16.0	17.1	17.4
Cote d'Ivoire	22.1	20.8	15.8
Burkina Faso	5.9	5.8	5.4
Other countries	55.7	58.8	44.8
Total	99.8	102.6	83.5

Source: TDM

China exports of tilapia frozen fillets (January-September)

	2017	2018	2019
Frozen fillets	(1 000 tonnes)		
United States of America	43.2	33.9	28.7
Israel	9.1	11.4	9.3
Mexico	14.6	13.3	8.7
Other countries	33.4	21.5	18.8
Total	100.4	80.3	65.6

Source: TDM

TILAPIA

United States of America imports of tilapia frozen fillets
(January-September)

	2017	2018	2019
Frozen fillets	(1 000 tonnes)		
China	79.8	75.5	67.3
Indonesia	4.8	4.7	5.6
Mexico	0.4	1.0	1.8
Other countries	2.8	2.1	3.3
Total	88.0	83.5	78.1

Source: TDM

United States of America imports of frozen tilapia
(January-September)

	2017	2018	2019
Frozen tilapia whole	(1 000 tonnes)		
China	14.0	15.6	16.6
Taiwan, Province of China	5.3	4.5	6.4
Viet Nam	0.9	1.0	0.9
Other countries	0.8	0.6	1.1
Total	21.2	21.9	25.0

Source: TDM



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Frozen skipjack prices plummet to record lows but recovery in sight

Frozen skipjack prices in the Western Pacific dropped to decade-low levels in December 2019, making fishing uneconomical. However, prices recovered in January 2020. Processed tuna imports increased in many markets, while traditional markets such as the European Union and United States of America were reluctant to buy canned tuna. Demand was strong in the Middle East.

Raw Material Supply

Following the three-month ban on fish aggregating devices (FAD) in the Western and Central Pacific (WCP), normal fishing resumed in October 2019 with good catches. Shipments to Thai canners increased while the delivery price weakened from USD 1 350 in September to USD 1 000 per tonne in October. Import demand from Thailand weakened in November 2019 resulting in a further price drop to USD 850 per tonne in December - a price level not seen since October 2009. Subsequently fishing efforts have slowed down considerably in the WCP region and prices recovered quickly in January 2020.

In the Eastern Pacific, the first 2-month IATTC 'veda' fishing ended on 8 October 2019. The second 2-month closure was enforced from 9 November 2019 to 19 January 2020 with 58 percent of the fishing fleet staying at ports during this period. As of December 2019, fishing was moderate-to-good for skipjack but poor for yellowfin. Canneries in Manta (Ecuador) reported sufficient stocks of raw material.

During September–December 2019, tuna catches remained moderate in the Indian Ocean and stocks were also moderate with regional tuna packers. Skipjack prices weakened following the prices in Thailand. Yellowfin supplies were low due to reduced fishing efforts to follow the quotas. Catches were also moderate in the Atlantic Ocean, but slowed down by December. However, raw material stocks with the regional canners were healthy.

Raw Material Imports

There were mixed trends in raw material imports among the large tuna processing countries in Asia and Europe during the period of July – September 2019. In particular, market demand for cooked frozen loins has improved.

In the first nine months of 2019, cumulative imports of whole frozen tuna were at 466 540 tonnes in Thailand, 20 percent lower compared with the same period of 2018, while cooked loin imports increased by 44 percent to 27 500 tonnes during the review period.

In line with this overall trend, Spanish raw tuna imports fell by 7.8 percent to 130 370 tonnes, while cooked loin imports increased by 8.5 percent to 81 000 tonnes.

Ecuador imported a record level of skipjack at 132 500 tonnes, while total imports of frozen tuna were 157 550 tonnes during the review period.

Fresh and frozen tuna market (non-canned)

Positive demand persisted in the non-canned tuna market worldwide during the third quarter of 2019. Particularly during the summer months, demand for deep frozen dressed tuna (headed and gutted), tuna loins and steaks was good in Japan, the United States of America and Europe. Frozen tuna fillets market niches are also evolving in East Asia and the Middle East.

TUNA

World top 6 exporters of canned and processed tuna (January-September)

Exporters	2017	2018	2019	Percent change 2019/18
Thailand	362.5	373.2	393.2	+5.4
Ecuador	167.9	169.5	181.4	+7.1
China	61.2	76.3	91.0	+19.3
Spain	81.6	82.7	81.1	-2.0
Indonesia	55.3	59.5	70.4	+18.2
Philippines	59.8	61.6	54.9	-10.8

Source: National Statistics

World top 6 importers of canned and processed tuna (January-September)

Exporters	2017	2018	2019	Percent change 2019/18
European Union	558.1	560.4	576.9	+ 2.9
United States of America	138.9	149.9	153.1	+2.1
Japan	47.2	48.9	48.2	-1.6
Egypt	22.8	32.6	37.6	+15.0
Saudi Arabia	26.6	30.0	36.9	+23.3
Australia	34.7	34.7	32.5	-6.5

Source: National Statistics



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Top European Union importers of canned and preserved tuna (January-September)

	2017	2018	2019
(1 000 tonnes)			
Ecuador	114.0	106.1	118.7
Spain	79.8	86.5	84.1
Mauritius	40.4	40.0	40.1
Other countries	323.7	327.6	333.9
Total	558.1	560.4	576.8

Source: Eurostat

Japan

In 2019, demand for sashimi tuna improved in Japan compared with 2018 due to the Japanese celebration of the Emperor's Coronation. As normal, consumer demand for raw fish was sluggish during the hot summer months. The cumulative imports of air-flown tuna during January-September 2019 were 9 115 tonnes, a 12.2 percent decrease from the same period in 2018.

The market remains stable for frozen sashimi grade tuna largely due to its longer shelf life. Imports of both deep-frozen and southern bluefin were stable at 8 430 tonnes during the review period. The market imported 41 200 tonnes of frozen tuna fillet in the first nine months of 2019, about 6.10 percent more than during the same period of 2018, of which nearly 50 percent were higher value bluefin fillet.

United States of America

United States of America consumer demand for non-canned tuna generally improves in the summer season. Subsequently, imports of dressed tuna, fillet and steaks increased by some 16 percent to 52 765 tonnes during the first nine months of 2019 compared with the same period in 2018.

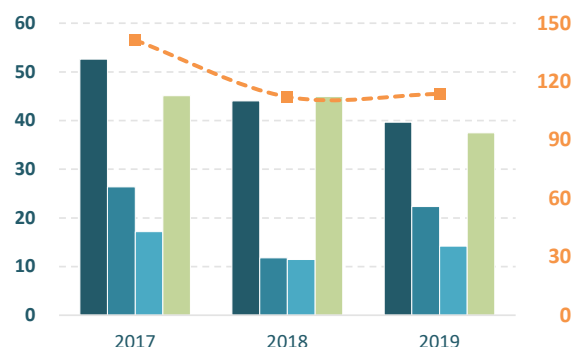
Although fresh tuna imports were 5 percent lower at 16 950 tonnes due to lower catches of albacore and yellowfin worldwide, there was a 22 percent rise in fresh bluefin (Atlantic, Pacific, Southern bluefin) imports reaching nearly 2 000 tonnes. Fresh bigeye imports also increased slightly by 1.70 percent to 2 500 tonnes.

Strong market preference for frozen fillet persisted in the American market with a 25 percent increase in imports at 31 434 tonnes during the review period. Indonesia, Viet Nam, the Philippines and Taiwan Province of China were the main frozen tuna fillet suppliers.

Japan | Imports | Tuna | Frozen whole Top three origins

Unit: 1 000 tonnes, January-September

■ Taiwan Province of China ■ Indonesia
■ China ■ Other countries
- - - Total imports

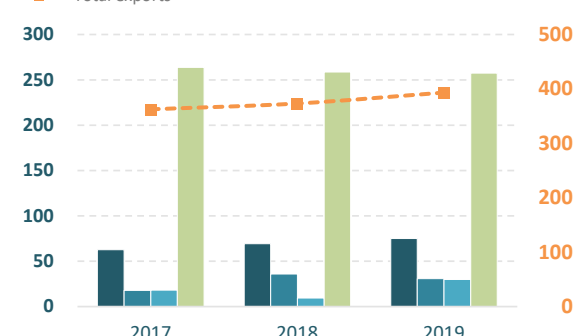


Source: Japanese Ministry of Finance and the Customs

Thailand | Exports | Tuna | Canned/processed Top three destinations

Unit: 1 000 tonnes, January-September

■ United States of America ■ Egypt
■ Libya ■ Other countries
- - - Total exports

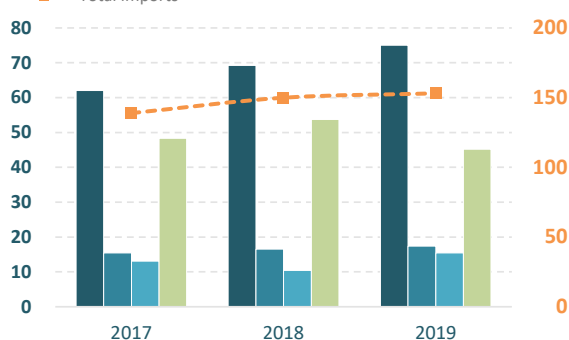


Source: Thai Customs

United States of America | Imports | Tuna | Prepared/preserved Top three destinations

Unit: 1 000 tonnes, January-September

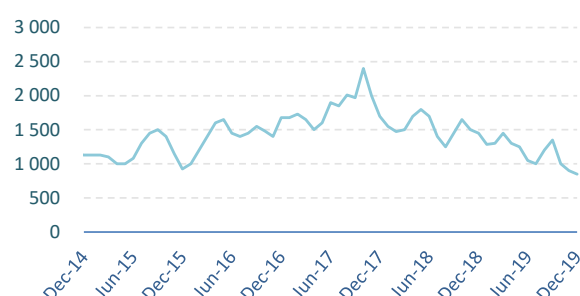
■ Thailand ■ Ecuador
■ Vietnam ■ Other countries
- - - Total imports



Source: NMFS

Prices Skipjack: Thailand

USD/tonne



1.8Kg lb/pc & up, CFR Bangkok, origin: Western Pacific
Source: INFOFISH Trade News

Other Markets

Good demand persisted for tuna fillet in the European Union. During the first nine months the year, imports of frozen tuna fillet were about 28 000 tonnes in the European Union, and the top markets were France (6 840 tonnes; +6 percent), Spain (6 750; -17 percent), Italy (3 590 tonnes; +11 percent) and the Netherlands (2 340 tonnes; +18 percent).

In addition, France and Spain also imported 5 300 tonnes (+9.2 percent) and 8 670 tonnes (+44 percent) of fresh tuna respectively during this period.

The Russian Federation, an emerging market in Europe, imported 3 575 tonnes (+35 percent) of



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frozen tuna fillet from China, Viet Nam and Indonesia during January-September 2019. Republic of Korea, the second largest market after Japan, imported 4 445 tonnes (+17.6 percent) of frozen tuna fillet during the first nine months of 2019.

China imported 555 tonnes (+40 percent) of air-flown tuna, mostly bluefin, during the reporting period. However, demand for non-sashimi grade tuna is quite negligible in this market.

Canned Tuna Trade

Canned tuna producers and marketers expanded their trade worldwide in 2019, as raw material prices remained record low throughout the year. However, its impact on the traditional developed markets in North America, Europe and Asia/Pacific was relatively limited. For tuna canners in Asia, the strong Middle Eastern market prompted positive export trends in 2019.

Exports

During the first nine months of 2019, Thailand and Ecuador remained the world's top exporters of canned and processed tuna. China overtook Spain and moved to third position through increased supplies of cooked loins, mainly to the European Union and Thai canners.

Thailand increased exports of processed tuna to the United States of America (+ 8.2 percent) and also in most markets in the Middle East. For Ecuador, exports increased to the European Union (+11.8 percent), the United States of America (+4.5 percent) but declined in Latin America (Colombia, Argentina, Chile, Brazil).

Nearly 30 percent of China's exports (mostly consisting of cooked loins) went to the European Union markets with a 41 percent increase in supply during the review period.

Imports

There was very little improvement in demand for canned tuna in the top five import markets (United States of America, the European Union, Japan, Egypt, Australia) but growth occurred in Middle Eastern markets (Egypt, Saudi Arabia, Libya). Despite lower market prices, imports declined in East Asia and Latin America.

North and South America

During the first nine months of 2019, American imports of canned and pouched tuna increased by 6.2 percent to 102 235 tonnes for light-meat products (yellowfin and skipjack). For the white-meat category (albacore) imports were steady at 25 457 tonnes, while cooked loin imports were slightly lower at 35 377 tonnes (-2.7 percent). In Canada, canned tuna imports increased marginally to 25 100 tonnes (+2 percent).

Imports declined in Colombia (23 680 tonnes; -6.4 percent) and Argentina (9 500 tonnes; -39 percent) but increased in Peru (17 043 tonnes; +78 percent) and Chile (16 815 tonnes; +18.71 percent).

European Union (Member Organization)

Total imports of processed tuna (canned /pouched tuna and cooked loins) were 576 884 tonnes (+2.9 percent) during the review period. The top five markets were Spain, Italy, France, Germany and the Netherlands. The small growth in total processed tuna imports could be linked to better demand for cooked loins rather than for canned tuna. Nearly 23 percent or 130 000 tonnes of total processed tuna imports in the European Union were cooked loins. This product is serving as raw material to the canning industry in Spain (81 000 tonnes; +8.5 percent), Italy (30 300 tonnes; -5.6 percent), France (6 480 tonnes; +12 percent) and Portugal (7 020 tonnes; + 30 percent).

British imports of canned tuna totalled 78 575 tonnes during January-September 2019. the United Kingdom increased imports of canned tuna from Spain, France, Italy and Portugal significantly in 2019. The share of imports of canned tuna from the European Union increased 11 percent (9 194 tonnes) from January – September 2018 to 21 percent (17 212 tonnes) from January – September 2019.

Others in Europe

Swiss imports of processed tuna remained low during the first nine months of 2019, reporting a 19 percent decrease compared to the same period of 2018. Strong import levels were reported in Russia and Norway at 4 460 tonnes (+48 percent) and 2 000 tonnes (+ 34 percent) respectively during this period compared with the same period in 2018.

Asia / Pacific and Others

Japan is an important market for processed and canned tuna in Asia. During the first nine months of the year, Japan imported 48 156 tonnes of processed tuna consisting of 45 156 tonnes of canned tuna and 3 000 tonnes of *Katsuobushi* (boiled, dried skipjack). Imports of canned tuna remained stable but weakened for *katsuobushi* products imported from Indonesia, the Philippines, Maldives, China and Viet Nam. Increased domestic production in Japan caused *katsuobushi* imports to decline (from all but Indonesia) during the reporting period.

Canned tuna imports declined in the first nine months of 2019 in Malaysia, Singapore and China, Hong Kong SAR, while there was also no recovery in the Australian market where canned tuna imports declined to a seven-year low of 32 470 tonnes.

In 2019, brisk demand continued in most of the small and large regional markets of the Middle East. Double-digit import growth persisted in the large markets (Egypt, Saudi Arabia, and Libya) during January-September 2019. Imports also increased in Syria, Lebanon, Kuwait and other markets in the Middle East.

Prices

The global tuna industry experienced a decade low price movement for frozen skipjack at the end of 2019, while yellowfin prices remained stable despite lower catches worldwide. At this price level, many fishing vessels have opted to stay at the ports, which led to steep price increases in January 2020.

Outlook

In Japan, demand for sashimi tuna is expected to be low to moderate during January-March but will likely peak during April-May for the annual Spring festival.

In the United States of America, the Lenten and Easter seasons will generate greater amounts of non-canned tuna in the market, particularly in the West Coast.

The market outlook for canned tuna remains uncertain for 2020. Catches in the Western and Central Pacific are likely to be lower in the coming months due to the uneconomical price levels. Since mid-December, the number of carriers arriving in Thailand declined. For yellowfin, prices may increase due to the fishing ban in the Indian Ocean.

For finished products, international trading is expected to slow down in early 2020 as many markets have sufficient stocks. However adjustments in frozen skipjack prices are not expected to have a negative impact on the market, as the December 2019 price level was 40 percent lower than the December 2018 price.



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SPECIAL FEATURE

GLOBEFISH HIGHLIGHTS

Towards sustainability in the shrimp industry

Shrimp trade plays an important role in international fish trade, representing about 18 percent of total world fish trade in value terms. In order to provide a comprehensive look at the shrimp industry, the INFOFISH World Shrimp Trade Conference was held in November 2019, in Bangkok, Thailand. In recognition of this evolving market environment for shrimp, “Modelling for Sustainability” was chosen as the theme of this conference. This special feature is based on the main findings of this conference and all mentioned figures are sourced from the papers presented during the event.



Global trade of shrimp and prawns is estimated at USD 28 billions per year, coming mostly from farms in Asia and Latin America (mainly Ecuador) producing *Penaeus vannamei*. In general, global shrimp production has been stable but serious disease outbreaks have caused widespread losses to farms in countries such as India, Viet Nam, and Thailand.

Increasingly stringent food safety regulations in major international markets imply that producers and traders must ensure that shrimp on the plates of consumers is free from substances like antibiotics and additives. Failure to do so would result in rejected shipments and brand damage.

Global production and demand

The global farmed shrimp market continues to grow faster than other aquaculture species, with most shrimp being produced in Asia. The main market outside Asia is Latin America, with Ecuador recently overtaking Thailand to become the world's fifth largest shrimp producer.

In Asia, intensification tends to mean higher density stocking at the expense of stringent controls from farm protocols, leading to eutrophication, diseases, and susceptibility to climate change. There have been some positive advancements in biosecurity, and farmers are more aware of the need for greater international cooperation in biosecurity protocols. Over time, Asia will see more farms adopting culture systems with a high degree of control, disease-free postlarvae, recirculation of water, recycling of wastes, and antibiotic free production. Thailand's shrimp farming sector has experienced severe disease outbreaks since the mid-1990s, but it is now one of the pioneer countries to promote bio-secure and probiotic shrimp farming.



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From April to September 2019, Indian shrimp production (90 percent *Penaeus vannamei*) increased to approximately 700 000 tonnes, contrary to expectation of a drop by 20-25 percent. Better yields per hectare, increased hatchery output, and expansion of culture areas were factors contributing to this growth in production. A pilot certification programme for the production of antibiotic-free shrimp seed is due to be launched in the near future.

In Bangladesh, black tiger (*P. monodon*) takes up 71.5 percent of the total shrimp farming area in the country and contributes more than 90 percent of the export earnings for farmed shrimp. The draft National Action Plan proposes to set up 20 Specific Pathogen Free (SPF) monodon hatcheries, and incrementally increase production from traditional farms by using improved cultural practices with an average yield of 330 kg per hectare to 1 200 kg per hectare. International collaboration and investments are expected to enhance breeding technologies, promote organic black tiger markets, as well as develop Standard Operating Procedures (SOPs) and Good Agricultural Practices (GAPs) for disease management in black tiger farming.

In the Middle East, Saudi Arabia is the biggest producer of farmed shrimp (*vannamei*) with over 65 000 tonnes produced in 2018, followed by Iran (46 000 tonnes) and Egypt (7 000 tonnes). Saudi Arabia is also the home of the world's largest single biosecure Recirculating Aquaculture System (RAS) facility, and production is expected to reach 200 000 tonnes by 2025.

Ecuador is expected to have harvested over 550 000 tonnes of shrimp in 2019, up from some 520 000 tonnes when compared to 2018. This figure is likely to rise in coming years as Ecuador continues to promote its shrimp as being highly sustainable, especially with its Sustainable Shrimp Partnership (SSP), a certification program guaranteeing zero use of antibiotics, full traceability and zero negative impact on the environment.

Advances in disease management

Diseases are still a major problem for shrimp aquaculture, particularly in Asia and parts of Latin America, and it seems that every few years, new strains of disease pop up, causing farmers to resort to antibiotics. However, antibiotic-free shrimp farming is doable throughout the culture cycle, with the most common and effective measures being proper waste management, microbiota management, and use of probiotics. Excessive waste nutrients in culture systems are the main culprit for accumulation of hazardous substances in water column and sediments, opportunistic growth of pathogenic organisms, stress to the shrimp, and diseases (approximately 60 percent of losses are caused by viral pathogens and 20 percent by bacterial pathogens). Efficient biosecurity is considered the most effective measure in preventing the entry of pathogenic microorganisms into the shrimp culture system.

Functional diets, prophylaxis, immunostimulants, and fermented feed also have good potential in disease management, as does the incorporation of ecological approaches. In the latter case, for example, polyculture and integrated aquaculture understand that multiple species in the same culture system occupy different nutritional and spatial niches, and that they could be mutually beneficial to each other. In order to achieve sustainable production, shrimp farming must therefore be more science-based, controlled, sustainable, and cost effective, while incorporating the proper protocols for nutrition, health and environment management.

In the event of disease, diagnostics need to be low cost, easy to use, and have a quick turnaround. Based on these requirements, companies and research institutes have been working on alternatives for common diagnostic methods such as polymerase chain reaction, which is not able to test more than three pathogens at a time. Mobile diagnostic kits can test for a wider range of diseases within a couple of hours. For instance, the Shrimp MultiPath, designed by CSIRO (Australia), detects 13 pathogens of commercial relevance in a single test.

Despite increased awareness, antibiotic use is still widespread in the main shrimp-producing regions of Asia. Biosensor technology was developed to easily measure parameters of interest in food safety. The United States of America Food and Drug Administration (FDA) is developing a Strategic Blueprint that will outline plans to leverage technology in order to create a more digital, traceable and safer food system.

The use of artificial intelligence has great potential in farm management, as real-time data collection allows the system to predict diseases, reduce feed costs (real time alerts), and forecast market prices.

Risk assessment and certification

Food fraud in fisheries remains a concern for a large part of the global shrimp industry. The European Union has the highest incidence of fraud for imported seafood, including practices related to unapproved treatment and/or processing (30 percent), replacement, dilution and removal of products (30 percent) labelling (33 percent) and others (7 percent).

Outlook

Global production of farmed shrimp is estimated to be growing at a rate of 6 percent annually, while shrimp is consistently one of the top protein choices for consumers. However, shrimp market trends are influenced by evolving consumer demand, particularly with regard to proof of sustainability in

SPECIAL FEATURE



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the global value chain. Moreover, the concept of sustainability has evolved to encompass social and human rights issues, as well as decent working conditions in the industry.

In addition, new regulations such as the Seafood Import Monitoring Program in the United States of America were introduced, which require buyers and importers to track shrimp from the point of harvest to the point of entry. Moreover, the range of shrimp certification systems, aiming to assure consumers of sustainability and food safety, continues to expand. Meanwhile, diseases continue to wreak havoc every year, which has resulted in farms opting for closed-loop systems and indoor controlled farming with minimal/no use of antibiotics.

To ensure that the shrimp industry continues to thrive, the focus must be on achieving traceability resulting in sustainable production systems, unhindered market access, and the ability to fetch premium prices. Artificial intelligence and smart technology are natural drivers in this process.

FOOD SAFETY ISSUES

GLOBEFISH HIGHLIGHTS

Detentions and Rejections of Tilapia in Canada, the European Union (Member Organization), Japan and the United States of America in 2018

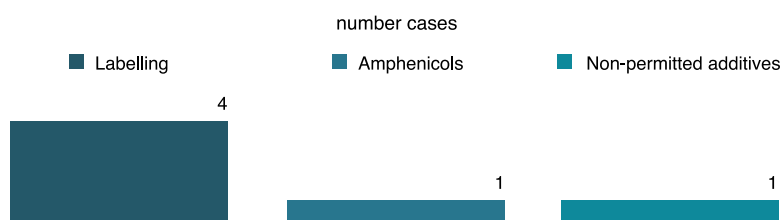
Introduction

The major tilapia producing countries by volume in 2017 were China, Indonesia and Egypt, while the main importing countries by value were by far the United States of America (50 percent of total import value) and Mexico (10 percent). This analysis describes detentions and rejections of tilapia in Canada, the European Union (Member Organization), Japan and the United States of America, where data was available. Rejections are categorized by chemical, microbiological and other risk categories. In addition, general causes such as packaging issues, allergens, improper health certificate, poor temperature control and labelling issues are described.

Canada

Tilapia border rejections in Canada totalled six in 2018, representing 0.6 percent of the total detentions of fish and fishery products during the year. The main cause of detentions was due to others causes with four cases, all related to labelling issues. It was followed by chemical issues with two cases, with one case due to the presence of non-permitted additives and one case due to amphenicols. The number of rejections halved in comparison with 2017 when Canada recorded 12 cases of detentions, mainly due to other causes such as lack of net weight determination and labelling issues.

Tilapia rejected at the Canadian borders in 2018 by hazards



Source: Canadian Food Inspection Agency

European Union (Member Organization)

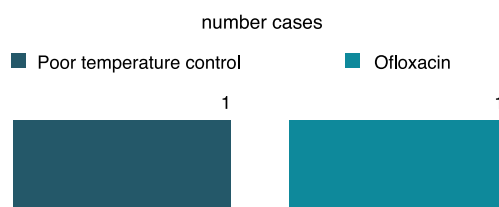
There were only two rejections of tilapia in the European Union in 2018, representing 0.6 percent of the total rejections of fishery products at the European border last year. The causes of rejections were due to poor temperature control and the presence of ofloxacin, an antibiotic, with one case each one.

In 2017, there was only one recorded case of rejection of tilapia due to the presence of *Listeria monocytogenes*. Normally, tilapia is not intended to be eaten raw, which is why the bacteria *Listeria monocytogenes* is not usually tested.

In this case, the alert was for sushi already on the market, and the product was recalled from consumers. However, it was an isolated case and there have not been other alerts or border rejections for that reason in recent years.

FOOD SAFETY ISSUES

Tilapia rejected at the European borders in 2018 by hazards



Source: RASSF

Japan

There were no cases of tilapia rejections recorded in 2018, compared to two cases in the previous year. In 2017, one case was due to the presence of *Escherichia coli* and the other due to the presence of coliform.

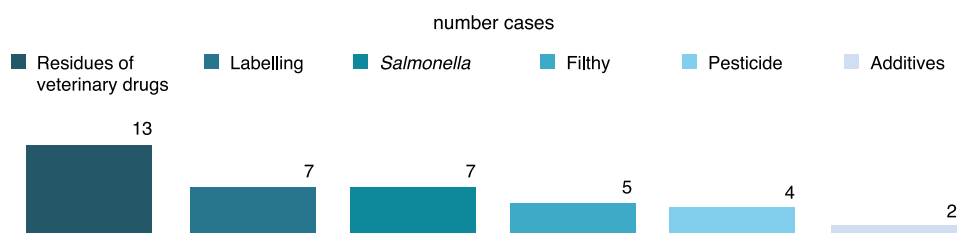
United States of America

In 2018, tilapia border rejections in the United States of America were 38, representing three percent of the total rejections of fish and fishery products at American borders. Rejections were higher because the volume of imported tilapia is greater than other countries. In fact, the United States of America is the main importer of tilapia in the world.

The majority of detentions and rejections were due to chemical issues (19 cases), followed by the “other causes” category (12 cases) and microbiological causes (7 cases) due to the presence of *Salmonella*. Most of the chemical detentions and rejections were due to the presence of residues of veterinary drugs (13 cases), followed by the presence of pesticides (4 cases) and non-permitted additives (2 cases). Within the category of other causes, the leading specific cause was related to labelling issues with seven cases, followed by products being considered “filthy”¹ with five cases.

It is important to highlight that in comparison with the previous year, the number of tilapia detentions in the United States of America decreased significantly. In 2017, 67 cases were recorded, mostly due to the presence of veterinary drugs.

Tilapia rejected at the American borders in 2018 by hazards



Source: FDA

¹ In the Food and Drug Administration (FDA) Violation Code Translation “filthy” is defined as a condition when “the article appears to consist in whole or in part of a filthy, putrid, or decomposed substance or be otherwise unfit for food.”



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Further reading:

- For further information you can visit the following website: www.fao.org/in-action/globefish/fishery-information/border-rejections/en/
- Canadian Food Inspection Agency
- Rapid Alert System for Food and Feed (RASFF)
- Ministry of Health, Labour and Welfare
- United States of America Food and Drug Administration (FDA)

EVENTS

GLOBEFISH HIGHLIGHTS

Tuna 2020 Bangkok | Bangkok, Thailand, 27–29 May 2019

The Thai capital will host the 16th World Tuna Trade Conference and Exhibition, the biggest global event in this year's tuna calendar.

Tuna 2020, the world's leading event dedicated for the tuna industry, will take place from 27 to 29 May in Bangkok, Thailand.

Organized by INFOFISH, the biennial World Tuna Trade Conference and Exhibition serves as a platform to discuss the present challenges and opportunities in creating a socially, economically and environmentally sustainable global tuna market.

This year's event will bring together more than 600 major tuna industry players and stakeholders to explore the latest developments in the global and regional tuna industries.

The three-day conference covers a wide range of topics on resources, fisheries management, markets and marketing, products and quality developments, new technology, trade and food safety as well as sustainability, eco-labelling and environmental issues.

For more information, please visit: <http://tuna.infofish.org/>



FISH AND FISHERY PRODUCTS STATISTICS ¹										
	Capture fisheries production		Aquaculture fisheries production		Exports			Imports		
	2016	2017	2016	2017	2017	2018 estim.	2019 estim.	2017	2018 estim.	2019 estim.
	Million tonnes (live weight equivalent)							USD billion		
ASIA²	48.8	49.2	67.9	71.3	59.2	61.1	59.4	48.6	54.6	57.0
China	16.7	16.3	46.1	47.1	23.1	24.2	22.7	15.9	19.9	22.2
of which China, Hong Kong SAR & Taiwan Province of China	0.1	0.1	0.0	0.0	0.8	0.7	0.6	3.6	3.8	3.5
India	5.1	5.4	5.7	6.2	7.2	6.9	6.6	0.1	0.1	0.1
Indonesia	6.5	6.7	4.9	6.2	4.2	4.5	4.4	0.4	0.4	0.4
Japan	3.2	3.2	0.7	0.6	2.0	2.0	1.8	15.0	15.3	15.5
Republic of Korea	1.4	1.4	0.5	0.5	1.7	1.7	1.8	5.1	5.9	5.7
Philippines	2.0	1.9	0.8	0.8	0.9	0.9	0.8	0.6	0.6	0.5
Thailand	1.5	1.5	0.9	0.9	6.0	6.0	5.7	3.5	3.9	3.7
Viet Nam	3.1	3.3	3.6	3.8	8.5	9.0	9.5	1.7	1.9	2.0
AFRICA	9.3	9.7	2.0	2.1	7.2	7.3	7.2	5.0	5.4	5.5
Egypt	0.3	0.4	1.4	1.5	0.0	0.0	0.1	0.6	0.8	0.9
Morocco	1.4	1.4	0.0	0.0	2.2	2.3	2.3	0.2	0.2	0.2
Namibia	0.5	0.5	0.0	0.0	0.7	0.7	0.6	0.0	0.1	0.0
Nigeria	0.7	0.9	0.3	0.3	0.0	0.1	0.1	0.8	0.8	0.8
Senegal	0.5	0.5	0.0	0.0	0.4	0.5	0.6	0.0	0.1	0.1
South Africa	0.6	0.5	0.0	0.0	0.6	0.7	0.6	0.4	0.5	0.5
CENTRAL AMERICA	2.1	2.3	0.4	0.4	2.8	3.0	2.7	2.0	1.9	1.8
Mexico	1.5	1.6	0.2	0.2	1.3	1.5	1.4	0.9	0.9	0.9
Panama	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1
SOUTH AMERICA	8.1	8.9	2.3	2.5	16.5	18.1	18.4	2.9	3.0	2.9
Argentina	0.8	0.8	0.0	0.0	2.0	2.1	1.9	0.2	0.2	0.1
Brazil	0.7	0.7	0.6	0.6	0.3	0.3	0.3	1.4	1.4	1.3
Chile	1.5	1.9	1.0	1.2	6.0	6.8	6.7	0.4	0.4	0.4
Ecuador	0.7	0.6	0.5	0.5	4.6	4.9	5.4	0.1	0.1	0.2
Peru	3.8	4.2	0.1	0.1	2.8	3.3	3.2	0.3	0.3	0.3
NORTH AMERICA	6.0	6.2	0.6	0.6	12.5	12.1	11.8	24.6	25.6	25.5
Canada	0.9	0.8	0.2	0.2	5.4	5.4	5.5	2.9	3.0	3.1
United States of America	4.9	5.0	0.4	0.4	6.1	6.0	5.5	21.6	22.6	22.4
EUROPE	13.7	14.8	2.9	3.0	55.0	57.9	57.6	61.2	65.3	62.3
European Union ²	5.2	5.6	1.3	1.4	35.5	37.2	36.2	55.8	59.3	56.5
of which Extra-EU	"	"	"	"	6.2	6.6	6.9	29.0	31.0	30.7
Iceland	1.1	1.2	0.0	0.0	2.0	2.4	2.3	0.1	0.1	0.1
Norway	2.0	2.4	1.3	1.3	11.3	12.0	11.9	1.2	1.3	1.3
Russian Federation	4.8	4.9	0.2	0.2	4.5	4.5	5.4	2.0	2.2	2.0
OCEANIA	1.4	1.4	0.2	0.2	3.3	3.3	3.4	2.0	2.0	1.9
Australia	0.2	0.2	0.1	0.1	1.1	1.1	1.0	1.6	1.6	1.5
New Zealand	0.4	0.4	0.1	0.1	1.2	1.2	1.4	0.2	0.2	0.2
WORLD ³	89.4	92.5	76.4	80.1	156.5	162.9	160.5	146.3	157.9	157.0
World excluding Intra-EU	"	"	"	"	127.2	132.3	131.2	119.6	129.6	131.3
LIFDCs	15.0	16.0	11.9	12.8	19.1	19.4	19.7	3.8	4.2	4.3
LDCs	9.2	9.7	3.7	4.0	3.6	3.9	4.1	1.2	1.2	1.2

¹ Production and trade data excludes whales, seals, other aquatic mammals and aquatic plants. Trade data includes fishmeal and fish oil.

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

³ For capture fisheries production, the aggregate includes also 5 229 tonnes in 2016 of not identified countries, data not included in any other aggregates. Totals may not match due to rounding.

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