ABOUT GLOBEFISH

Required citation:

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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Dear Readers,

The progression of the COVID-19 outbreak to global pandemic over the first few months of 2020 constitutes an extraordinary event, without precedent in modern times, that has rapidly brought about deep social and economic change on a global scale.

A large proportion of the global population has spent much of the last two to three months in varying states of quarantine, while international travel has been severely restricted. This has seen business activity slow to a near standstill in many sectors while governments scramble to coordinate financial assistance plans. The majority of industries, including fish and fish products, have suffered significant damage.

Shifts in household demands, caused mainly by job losses and general uncertainty, may cause different and varied impacts on production, distribution and sales of fish and fish products. While retail sales of certain non-perishable items have received a boost, the effective shutdown of the Hotellerie-Restaurant-Café (HORECA) sector in many countries will magnify the effects for some specific high-value species. In addition to the market impact, producers, processors, wholesalers, transporters and other upstream businesses are having to contend with multiple challenges associated with the quarantine measures, including labour shortages and logistics delays.

For many businesses and communities dependent on fish and fish products, export revenue will be reduced due to demand effects. The labour force will be reduced due to physical distancing requirements and necessary inputs will face reduced availability. For many countries, the feasibility of keeping monitoring, control, surveillance and management operations in place will have impacts on the sustainability of the resources and increase in IUU fishing.

While the COVID-19 pandemic has inflicted substantial and multi-dimensional damage to the markets for fish and fish products, it is also possible to identify some opportunities. Dramatic changes in circumstance generally act as powerful catalysts for innovation, and we are likely to see the emergence of new approaches to distribution and marketing. On the supply side, reduced import competition represents a potential boost to the commercialization of products at a national or regional level, with eventual benefits for small-scale producers.

In addition to business implications, the pandemic’s effects on food security and the health and livelihoods of vulnerable communities, in regions where the capacity to respond effectively is limited, is a global concern.

FAO reaffirms its role in this unprecedented time to understand and mitigate, wherever possible, the impact of COVID-19 by providing recommendations, policy guidelines and market information to support business, small communities, governments and other international organizations.

More than ever, dissemination of information on markets of fish and fish products is critical for necessary adjustments. GLOBEFISH continues to give a steady contribution to the industry with up-to-date news and information.

Whatever the eventual resolution of the array of uncertainties we are now faced with, we can be confident that the most positive outcome will be achieved through swift, effective and collective actions focused on free markets and reducing the overall negative effects in the society and the economy, with a particular emphasis on the most affected ones.

Sincerely yours,

Audun Lem Ph.D
Deputy-Director
Fisheries and Aquaculture Policy and Resources Division
Fisheries and Aquaculture Department
Food and Agriculture Organization of the United Nations (FAO)
ACRONYMS AND ABBREVIATIONS

ASC  Aquaculture Stewardship Council
PEIXE BR  Brazilian Fisheries Association
CAPPMA  China Aquatic Products Processing and Marketing Alliance
EPO  Eastern Pacific Ocean
FAD  Fish Aggregating Devices
FAO  Food and Agricultural Organization of the United Nations
US Food and Drug Administration
FDA  Fish, Food and Allied Workers
FFAW-Unifor  Fright On Board
FOB  FAO Fish Price Index
FPI  Global Aquaculture Alliance
GAA  Hotellerie-Restaurant-Café
ICES  International Council for the Exploration of the Sea
IMARPE  Instituto del Mar del Peru
IUU  Illegal, unregulated and unreported fishing
MENA  Middle East and North Africa
MSC  Marine Stewardship Council
NQSALMON  Nasdaq salmon index
NOAA  National Oceanic and Atmospheric Administration
United States of America
NOK  Norwegian krone
NSC  Norwegian Seafood Council
RASFF  Rapid Alert System for Food and Feed
Rosselkhoznadzor  Federal Service for Veterinary and Phytosanitary Surveillance
Russian Federation
SADER  Ministry of Agriculture and Rural Development
Mexico
SFP  Sustainable Fisheries Partnership
SUBPESCA  Undersecretariat for Fisheries and Aquaculture of Chile
TAC  Total Allowable Catch
UAE  United Arab Emirates
USDA  US Department of Agriculture
WCP  Western and Central Pacific
COVID-19  Coronavirus Disease 19
The latest estimates for global fish production in 2019 suggest that a drop in capture fisheries volume drove a 1.2 percent decrease in total output for the year. The early closure of the second anchoveta season, reduced catches of cephalopods and tighter supply of certain groundfish species all contributed to the fall in wild catches. Meanwhile, the aquaculture sector registered another year of growth, with total harvests increasing by an estimated 3.3 percent. The major commercial finfish species such as salmon, pangasius and tilapia, all saw strong production increases in 2019. Shrimp harvests grew significantly, boosted by expansion in China, India and Indonesia. Due to the overall decline in fish supply, however, per capita fish consumption fell marginally last year, to around 20.4 kg per capita per year.

Seafood trade contracted in both volume and value terms in 2019, primarily due to geopolitical tensions that dragged down economic growth. In particular, the trade conflict between China and the United States of America, two of the world’s largest traders of seafood, impacted business revenues through tariffs and wider economic uncertainty. This unstable market environment translated into exceptional price volatility across multiple fish commodity categories. Prices hit either record lows or highs for several key species, including tuna, pangasius and salmon. Overall the FAO Fish Price Index fell by around 6 points over the course of the year.

By the end of 2019, the outlook for 2020 was somewhat more positive as the global geopolitical situation looked to be improving. However, the COVID-19 pandemic, unprecedented in modern times, has completely upended the global economy. In an attempt to contain the spread of the virus, governments around the world have introduced an array of measures, including social isolation directives, limitations on business opening hours and travel restrictions. The seafood sector, along with the majority of industries, is having to deal with a bleak demand outlook as well as a range of supply challenges.

With the effective shutdown of the restaurant industry, foodservice demand has evaporated, while retail sales have been marked by extreme volatility as periods of panic buying are followed by
sustained lulls. Demand for canned and frozen products has spiked as households look to stock up on non-perishable food at the expense of fresh seafood options. At the same time, online distributors are reporting increased interest as home-bound consumers explore retail alternatives. Overall, however, demand has been sharply reduced and prices have fallen for many species, particularly those that are important for the restaurant industry. Other consequences of the virus outbreak include the cancellation of key seafood trade events, many of which represent important opportunities for industry networking and sourcing activity.

On the supply side, a labour shortage and other economic challenges including the bleak demand outlook is severely negative affecting seafood production all across the world. Aquaculture harvests are being delayed and stocking targets drastically reduced, while entire fishing fleets are laying idle. Downstream activities including processors have all been affected by the lack of raw material on top of other operational difficulties. At the same time, logistics have become costly and slow as hauliers must contend with closed or restricted road borders and health inspection delays, while the large-scale cancellation of flights has directly affected trade in some high-end fresh products which are transported by air.

Seafood representatives in many countries are calling for financial aid from the government, but such measures may only provide limited relief in the face of widespread upheaval. Industry stakeholders are also calling for regulator flexibility in terms of adjusting catch quotas and raising biomass limits, and emphasizing the need to rapidly understand and plan for long-term changes in the market landscape.

Uncertainty still dominates the outlook, particularly with regard to the duration and severity of the pandemic in different markets. While China has been able to return to near normal conditions after a few months of strict lockdown, this may be more difficult in the European Union and in the United States of America, two of the world’s most important seafood markets. Whatever the timeframe, the wide-ranging impacts of the pandemic mean a prolonged market downturn can be expected even after current restrictions are lifted or relaxed. Luxury products and species that are primarily marketed fresh and through foodservice will be the most heavily affected.
COVID-19 disrupts bivalve production and trade

Last year was very positive for bivalve consumption worldwide, with good demand and generally higher prices. However, COVID-19 changed this picture completely. In early 2020 the Chinese market broke off, and in the coming months European countries and the United States of America followed suit. At present, bivalve trade is almost none existent, with growers keeping the bivalves in the water, hoping for a better trade environment in the second half of the year. In many countries, bivalve growers have requested government assistance for business losses.

Mussels

World mussel trade was stable in 2019 remaining at the levels reached in 2018. Some 370 000 tonnes entered international trade, on par with the corresponding 2018 figure. The main importing countries were France, the Netherlands and Italy. On the export side, Chile is dominating the market, with 76 000 tonnes exported in 2019. Chilean mussel producers had to cope with the civil unrest in the country on top of COVID-19, all of which has caused normal economic activities and logistics to cease. Lower mussel sales were reported in Chile in the last quarter of the year, as social conflict affected trade performance. In fact, exports of mussels from Chile were 9 000 tonnes in the last quarter of 2019, 4 000 tonnes less than in the same period of 2018.

The European Union is one of the main markets for live mussels, but imports decreased in 2019. Some 216 000 tonnes were imported by the European Union last year, which is 4 000 tonnes lower than in 2018.

Oysters

Christmas sales in 2019 of oysters were very strong, even exceeding expectations. Prices went up greatly, as supplies were difficult, especially in France. Oyster trade declined slightly in 2019. Some 70 500 tonnes entered international trade in 2019, some 7 percent less than in 2018. France was the main exporting country, even reporting some increase in sales, despite the disease problems experienced by its oyster producers.

At the end of 2019, there was a very negative impact on French oyster growers following the norovirus problems which negatively affected sales. In the first four months of 2020, the oyster market felt the impact of COVID-19. Easter, which is normally a main sales period for oyster consumption, reported bleak demand for oyster, far lower than in recent years. In addition, most oyster consumption occurs in restaurants, which are all closed in Europe at the moment.

Clams

International trade of clams is concentrated in the Asian market, with Japan and the Republic of Korea as main markets and China as the main supplier. In 2019, trade in clams reached 291 000 tonnes, a 4 percent increase over 2018. In Europe, trade is almost absent, as the domestic markets are supplied by national producers. Clams are mainly used in restaurant trade in southern Europe, but due to COVID-19 restaurant closures, there was practically no demand for this product in early 2020.

Scallops

International trade in scallops is rather limited, not exceeding 150 000 tonnes per year. China is both the main importer and exporter. Total world trade was 170 000 tonnes in 2019, more or less on
par with the 2018 trade. China represents 40 percent of scallop imports and 33 percent of scallop exports.

In 2019, Peru came back as a main scallop exporter, after four rather difficult years. In 2019, some 10 000 tonnes of scallops were exported from Peru, which is 40 percent more than in 2018, and three times the low 2017 figures. Scallop production in Peru had been affected by a strong El Niño in 2016 and 2017.

Some US scallop producing companies that concentrate on the Chinese and Hong Kong SAR market have reported sharp declines in 2020 orders and this trade is unlikely to recover in the near future.
Outlook

Worldwide, producers have initiated longer grow times for their bivalves and are not restocking aquaculture areas. As a result, supply will be far lower than compared with normal production years. The complete closing of the restaurant trade all over Europe has led to the disappearance of normal demand for fresh and live bivalves. Prices are low, and aquaculture companies are closing down, waiting for government support in order to survive.

The gross domestic product in southern Europe is forecasted to decline at least in the first half of the year, and demand for bivalves will suffer from this. The normal tourist season in summer months will not materialize, leading to very low bivalve consumption, likely only 10-20 percent of normal consumption during these months.

In the longer term, many small-size production and trading companies in Europe, Asia and the United States of America are unlikely to reopen their business until 2021, and some may not survive the dire economic impacts of COVID-19 at all.
### BIVALVES

**World imports/exports of clams, cockles and ark shell (1 000 tonnes)**

<table>
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<tr>
<th></th>
<th>2017</th>
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<td></td>
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<tr>
<td>Japan</td>
<td>81</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>64</td>
<td>56</td>
<td>58</td>
</tr>
<tr>
<td>Spain</td>
<td>39</td>
<td>37</td>
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<tr>
<td>Other countries</td>
<td>100</td>
<td>116</td>
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<tr>
<td>Total</td>
<td>283</td>
<td>281</td>
<td>291</td>
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<tr>
<td><strong>Exports</strong></td>
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<tr>
<td>China</td>
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<td>152</td>
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<tr>
<td>Republic of Korea</td>
<td>16</td>
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<td>16</td>
</tr>
<tr>
<td>Canada</td>
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<td>Other countries</td>
<td>74.4</td>
<td>79</td>
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<tr>
<td>Total</td>
<td>268.2</td>
<td>258.7</td>
<td>265.7</td>
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Source: *TDM*

### World imports/exports of oysters (1 000 tonnes)

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<td>France</td>
<td>8</td>
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<td>Honk Kong SAR</td>
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<td>7</td>
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<tr>
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<td>Total</td>
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<td><strong>Exports</strong></td>
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<td>73</td>
<td>75.8</td>
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Source: *TDM*

### World imports/exports of scallops (1 000 tonnes)

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<td>Other countries</td>
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<td>67.8</td>
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<tr>
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<tr>
<td><strong>Exports</strong></td>
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<td></td>
<td></td>
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<td>31.2</td>
<td>30.7</td>
</tr>
<tr>
<td>Peru</td>
<td>3.2</td>
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</tr>
<tr>
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<tr>
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<tr>
<td>Total</td>
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<td>98.9</td>
<td>92.6</td>
</tr>
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</table>

Source: *TDM*

### World imports/exports of mussels (1 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
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</tr>
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<tr>
<td>Italy</td>
<td>51</td>
<td>43</td>
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</tr>
<tr>
<td>Netherlands</td>
<td>36</td>
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<tr>
<td>Other countries</td>
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<tr>
<td>Total</td>
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<td>314</td>
<td>313</td>
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<tr>
<td><strong>Exports</strong></td>
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<td>Chile</td>
<td>79.3</td>
<td>80.6</td>
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<td>Spain</td>
<td>58.9</td>
<td>70.1</td>
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<tr>
<td>Netherlands</td>
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<td>58.4</td>
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<tr>
<td>Other countries</td>
<td>168.1</td>
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<tr>
<td>Total</td>
<td>373.4</td>
<td>362.4</td>
<td>372.3</td>
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</table>

Source: *TDM*
CEPHALOPODS

GLOBEFISH HIGHLIGHTS

Octopus supplies down, improved outlook for illex squid

Octopus supplies will be tighter in 2020 because of more restrictions on the fisheries in Mauritania and Morocco. The outlook for the squid market is more varied, as good catches have been reported from the Falkland Islands (Malvinas), but fishing in Argentina has been very poor, and Japan has set a very low quota for Japanese flying squid.

Octopus

During the first half of 2019, octopus landings in Morocco and Mauritania were down. Both countries have become more restrictive about octopus fishing in order to protect the resource. In July 2019, the European Union ratified a fishing agreement with Morocco, allowing 138 European vessels to fish for octopus in Moroccan waters. However, this does not mean that there will be more octopus on the market, since there are restrictions on this fishery. The European Union was negotiating a similar agreement with Mauritania.

Trade

The COVID-19 outbreak in Italy and Spain, two of the hardest-hit countries in Europe, has been followed by a slow-down in orders for octopus and squid. Restaurants have been closed down, and most octopus consumption in these countries goes through the restaurant sector. However, buying was slowing down in Spain even before the pandemic. In coronavirus-hit Italy it has been difficult to get deliveries because some truck drivers fear becoming infected with the virus.

Japanese imports of octopus declined from 2017 to 2018, but have stabilized in 2019 at 42 624 tonnes. The main supplier was Mauritania, accounting for 12 151 tonnes, followed by China (10 134 tonnes) and Viet Nam (7 788 tonnes).

There was a slight decline in octopus imports to the Republic of Korea, from 78 875 tonnes in 2018 to 71 002 tonnes in 2019. The two main suppliers were China (30 064 tonnes) and Viet Nam (27 911 tonnes).

Vietnamese exports of octopus to the United States of America rose strongly in 2019, and it was expected that shipments would continue to increase in 2020. The COVID-19 pandemic put an end to that rising trend. Viet Nam, the seventh largest supplier of octopus and squid to the United States of America, has captured market shares from China because of the United States of America – China trade conflict.

Squid

The illex squid fishery off the Falkland Islands (Malvinas) started well this year. The season opened on 15 February and will finish on 15 June. Landings so far have been at the highest levels for five years.

The loligo fishery in the same area, on the other hand, has been disappointing, and production is expected to be below landings in 2018 and 2019. The biomass is lower than during the last two years, so a mediocre season is expected.

In Argentina, catches of illex squid have been very bad. As a consequence, prices for illex were rising in the beginning of the season. Argentinian vessel owners sought to have the squid fishery declared as “currently in crisis”. The main reasons for this were dramatic reductions in landings, COVID-19,
and a possible price drop because of the excellent catches around the Falkland Islands (Malvinas). At the end of January 2020, Japan’s Fishery Agency set the TAC for Japanese flying squid (Todarodes pacificus) at 57 000 tonnes, down 15 percent from the 2019 TAC. The season runs from 20 April 2020 to 21 March 2021. In 2019, Japan’s landings of squid fell to 80 percent of the amount recorded in 2018. Lower water temperatures in the East China Sea, increased illegal fishing, and fewer large Japanese squid fishing vessels were the main reasons for this decline. During the past decade the fleet has been halved, to about 60 vessels today.

The Commission of the South Pacific Regional Fisheries Management Organization (SPRFMO) has approved measures to improve the management and conservation of the giant squid (Dosidicus gigas) resource in international waters of the South Pacific. The measures include a requirement to
report monthly catches, install vessel monitoring system equipment, incorporate giant squid fishing vessels in a vessel registry, and increase observer coverage. However, no measures to limit the fishing effort were agreed upon. It is estimated that about 900 000 tonnes of giant squid are caught every year.

Trade

Spanish imports of squid and cuttlefish have been almost flat for the past three years. In 2019, imports amounted to 290 297 tonnes, down 2 percent compared to 2018. The largest supplier was the Falkland Islands (Malvinas), which shipped 79 665 tonnes. Peru came second with 64 305 tonnes and Morocco third with 29 543 tonnes.
CEPHALOPOD

US imports of squid and cuttlefish dropped by 18.4 percent to 65,559 tonnes, down from 80,316 tonnes in 2018. Most of this decline was because shipments from China fell by about 15,000 tonnes, to 33,019 tonnes. Despite this decline, China, by far the largest supplier, still accounted for over 50 percent of the total.

Japanese imports of squid and cuttlefish increased by almost 6 percent last year, to a total of 165,219 tonnes. Again, China was the major supplier, with 100,713 tonnes or 61 percent of the total.

China’s imports of squid and cuttlefish made a big jump in 2019. Imports increased by 69.5 percent, from 229,746 tonnes in 2018 to 389,374 tonnes. But China’s exports of squid and cuttlefish did not increase. On the contrary, exports fell from 521,407 tonnes in 2018 to 484,005 tonnes in 2019 (-7.2 percent). The largest market for China was Japan, which took 21.5 percent of the total. Other important markets were the Republic of Korea and Thailand.

Indian squid traders, who traditionally have exported mainly to Europe, and in particular to Spain, are feeling the competition from Morocco and Mauritania. Last year, Indian exports to Europe declined, and some exporters are now looking for alternative markets, as they do not consider the European market as being good at the moment. Instead, they will focus on China. But other Asian countries are also interesting, including Thailand and Malaysia.

**Outlook**

Octopus supplies will probably be tighter in the coming months, and prices are expected to rise again. However, the COVID-19 outbreak has slowed down consumption dramatically, and it is not foreseen that the pandemic will be over by the European summer holiday season. Tourism will be severely down, and consequently demand for octopus will be very poor in Europe.

The same goes for squid. The outlook for this season’s fishery around the Falkland Islands (Malvinas) is good, and prices have come under some pressure. Still, demand may dwindle because of the pandemic and the sector is in for a very difficult second half of 2020.

As China seems to have the COVID-19 pandemic under control, Chinese demand for cephalopods may increase again. But prices are likely to fall.
CRAB

GLOBEFISH HIGHLIGHTS

Crab fishing season devastated by COVID-19

In 2020, the outlook for the crab industry was quite good. Supplies were strong and demand was increasing. But with the advent of the COVID-19 pandemic, the market situation changed dramatically.

Supplies

The Alaska snow crab quota was increased by 23 percent in 2020 compared to 2019. Canadian catches of snow crab are expected to increase slightly in 2020 to just over 32 100 tonnes, up from 31 707 tonnes in 2019. Global supplies of snow crab are expected to approach 100 000 tonnes.

Demand was also looking very good, especially for snow crab. This can to some extent be attributed to active retail promotions. In fact, almost three times as many stores had promotions of snow crab compared to Dungeness crab in 2019. With strong demand, prices were expected to climb higher.

The 2019 Dungeness crab season in Southeast Alaska was the most valuable on record, with a first-hand value of USD 16.3 million. A total of over 2 400 tonnes were caught during the combined summer and fall seasons. The average price was USD 3.07 per pound, also a record. The previous record was in 2002, when 3 175 tonnes were caught, but the average price at that time was only USD 1.25 per pound.

Despite the high prices for snow crab, demand did not slow down in the beginning of the year. Demand for larger sizes was especially strong but supplies were also expected to pick up later in the season.

International trade

Global imports of crab were almost flat in 2019 compared to 2018 and 2017. Total imports in 2019 amounted to 402 623 tonnes, which was just 1.1 percent lower than in 2018. The United States of America was the largest importer, accounting for 27 percent of total imports. China imported 56 718 tonnes, which was 9.8 percent less than in 2018, while the Republic of Korea imported 56 718 tonnes, 13.2 percent more than in 2018.

COVID-19 has negatively affected Russian crab exports to China. Previously, the total TAC in the Russian Federation was around 100 000 tonnes, with China absorbing 17-19 percent. In February, shipments dropped to almost nothing.

The United States of America’s market, which in 2019 absorbed about 35 000 tonnes of Russian-caught red king crab and opilio snow crab, would probably not be able to replace the Chinese market. Russian exports of live crab to China stopped at the end of January 2020. At that time, some 450 tonnes of live blue king crab and 236 tonnes of live snow crab were on their way to China, but exporters diverted these shipments to the Republic of Korea and other Asian nations. As a consequence of the increased amount being shipped to the Korean market, prices dropped. Other alternative markets such as the United States of America did not appear promising, as the market for live king crab there is rather limited.

The United Kingdom of Great Britain and Northern Ireland’s exports of brown crab to China were also negatively affected by COVID-19, as Chinese imports dried up. This happened at the worst of times, just before the Chinese New Year, which is normally the peak season for crab consumption in China, and for crab exports from Scotland. Each year, exports of brown crab to China amount to about 5 000 tonnes, so the decline of this trade is sorely felt by British crab exporters.
Prices

Prices for Russian crab have dropped significantly since the outbreak of COVID-19. Demand in China declined sharply, and Russian crab prices dropped from USD 15 – 18 per kg last year to about USD 7 per kg in March 2020.

Crab meat prices in the United States of America have been declining since early 2018 but were flat at the beginning of 2020, before the COVID-19 outbreak.

King crab prices were expected to remain high at the start of the year, but the long term outlook is uncertain due to COVID-19. However, supplies of king crab will be tighter this year. Alaska, which is the largest supplier to the US domestic market, had its quota reduced to just 1 450 tonnes in 2020, the lowest quota since 1982. A decade ago, the Alaska quota for king crab was 9 070 tonnes. Most recently, China has been buying more of this resource, both from the Russian Federation and the United States of America, and this is putting pressure on prices.

RECENT NEWS

Scottish exporters of live crab were feeling the pinch in the China trade. The United Kingdom of Great Britain and Northern Ireland accounts for about 90 percent of China’s imports of live brown crab, and as much as 50 percent of this comes from Scotland. Recently, Chinese authorities have introduced tougher restrictions on these imports due to the high cadmium levels in some shipments. According to Scottish authorities, the Chinese use a standard for these inspections that differs from the European Union standards. While the European Union regulations only cover white meat, which is the main edible part for consumers, the Chinese regulations cover all edible parts of the crab, including the brown meat, which normally contains more cadmium. Scottish exporters of live brown crab have traditionally exported to the European market, but the uncertainties related to the Brexit situation led them to focus more on the Chinese market as an alternative.
Outlook

While supplies are expected to be adequate, there will obviously be some changes due to the COVID-19 outbreak in both global demand and trade. Chinese and Russian exports have shifted direction, with the Republic of Korea taking larger amounts compared to the United States of America and China. It is still impossible to foresee when trade patterns will return to normal.

Citing the need for "social distancing", the Fish, Food and Allied Workers Union of Newfoundland and Labrador called for the snow crab fishery to be delayed. As of this writing, the exact start date has not yet been determined due to coronavirus concerns.
As crab is often consumed in restaurants, sales are heavily down due to COVID-19, while sales in the grocery sector are somewhat up. However, grocery sales are not nearly enough to replace sales through restaurants. As a result, there may be a surplus in the market, and prices will likely decline across the board. Supplies of king crab will be tighter in 2020, regardless of the COVID-19 crisis. But this does not automatically mean that prices for king crab will go up. The global trade situation is extremely confused at the moment.
Tighter supplies and rising prices

With the COVID-19 pandemic wreaking havoc on the global economy, the quarantine and curfew in Peru was extended until the end of April. However, the lack of workers and upstream inputs may potentially halt the production of fishmeal and fish oil completely in Peru. As of this writing, the start of the first fishing season of 2020 in Peru has not yet been announced due to COVID-19.

Production

Global production of fishmeal and fish oil in 2019 was lacklustre. The first anchovy fishing season of 2019 in the centre-north region in Peru ended with total landings marginally over 2 million tonnes, nearly 96 percent of the designated 2.1 million tonnes quota. In November 2019, the Peruvian government set the TAC for the second anchovy season at 2.79 million tonnes, up by 38% compared with same season in 2018. However, the high presence of juveniles led to an early closure in January 2020 of the 2019 season, which usually lasts until March/April. Only 35 percent of the total quota was fulfilled.

Global production of fishmeal in 2019 decreased by 27 percent compared to 2018, while global fish oil production was 24 percent less in the major producing countries.

Peruvian fishmeal production in 2019 reached 796 384 tonnes, down by 43.3 percent compared to 2018. This decrease was mainly attributed to the lower quota of anchovies observed for the first season and early closure of the second season.

In Europe, landings of small pelagics were slightly weaker in 2019, thus the combined fishmeal output in Denmark and Norway dropped by approximately 7 percent.

Trade

In 2019, Peru’s exports of fishmeal and fish oil products totalled 1.06 million tonnes, which has levelled off since 2018. Over 70 percent of the Peruvian exports were destined for China. The remaining Peruvian exports were mainly absorbed by Viet Nam, Ecuador, and Japan. In the Nordic region, Denmark and Iceland have been playing key roles in meeting the regional demand.
### Fishmeal & Fish Oil

#### Fishmeal production (1,000 tonnes)

<table>
<thead>
<tr>
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<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
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<td>858.2</td>
<td>632.7</td>
<td>734.9</td>
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<td>480.0</td>
<td>460.0</td>
<td>375.0</td>
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<tr>
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<td>288.0</td>
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<td>Others</td>
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<td>2,590.5</td>
<td>2,798.0</td>
<td>2,814.3</td>
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<td>4,519.5</td>
<td>4,821.6</td>
<td>5,803.0</td>
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Source: IFFO

#### Fish oil production (1,000 tonnes)

<table>
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<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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<tbody>
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<td>99.6</td>
<td>113.9</td>
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<tr>
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<td>936.0</td>
<td>992.5</td>
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</table>

Source: IFFO

### Price

Since late 2019, prices have been on an upward spiral due to the anticipated early closure of the Peruvian fishing season. Furthermore, the upward price trend has continued as the Chinese livestock farming sector begins to recover from the COVID-19 outbreak.

### Outlook

To a large extent, 2020 will see many industries under huge pressure, fishmeal and fish oil would not be an exception. So far, the quota of the Total Allowable Catch (TAC) of 2020 in Peru's first fishing season has not been announced, which is an unknown factor affecting the market. Peru's bleak fishing season will likely translate into a supply shortage for fishmeal supply globally. In addition, to what extent the pandemic will hold back the fishing and reduction industry is still yet to be seen.

From the demand side, with restaurant closures and trade being completely cut off in many countries, there is lower demand for farmed fish, and thus the need for feed. On the bright side, COVID-19 now seems to be under better control in China. Given the huge Chinese demand for fishmeal when the pig farming and aquaculture sectors return to normal, fishmeal trade will recover soon.

In the short term, prices of fishmeal and fish oil are expected to increase due to scarce raw material supply coupled with global transport disruptions caused by COVID-19.
FISHMEAL & FISH OIL

**Peru | Exports | Fishmeal**

*Top three destinations*

Unit: 1,000 tonnes, January-December

- **China**
- **Japan**
- **Viet Nam**
- **Total exports**

![Bar chart showing exports of fishmeal from Peru to China, Japan, and other countries (Viet Nam).](source)

**Peru | Exports | Fish oil**

*Top three destinations*

Unit: 1,000 tonnes, January-December

- **Denmark**
- **Belgium**
- **Canada**
- **Total exports**

![Bar chart showing exports of fish oil from Peru to Denmark, Belgium, and other countries (Canada).](source)

**Norway | Imports | Fishmeal**

*Top three origins*

Unit: 1,000 tonnes, January-December

- **Denmark**
- **Uruguay**
- **Iceland**
- **Total imports**

![Bar chart showing imports of fishmeal to Norway from Denmark, Uruguay, and Iceland.](source)

**Norway | Imports | Fish oil**

*Top three origins*

Unit: 1,000 tonnes, January-December

- **Peru**
- **Denmark**
- **Mauritania**
- **Total imports**

![Bar chart showing imports of fish oil to Norway from Peru, Denmark, and Mauritania.](source)

*Source:* Peru Statistics Office - SUNAT

*Source:* Norway Bureau of Statistic
**FISHMEAL & FISH OIL**

### China | Imports | Fishmeal
Top three origins
Unit: 1 000 tonnes, January-December

- Peru
- Russian Federation
- Viet Nam
- Other countries
- Total imports

Source: *China Customs, estimates*

### Denmark | Exports | Fish oil
Top three destinations
Unit: 1 000 tonnes, January-December

- Norway
- United Kingdom
- Greece
- Other countries
- Total exports

Source: *Eurostat*

### Prices
Fish oil and fishmeal: Europe

**USD/tonne**

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan-15</th>
<th>Jul-15</th>
<th>Jan-16</th>
<th>Jul-16</th>
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Source: *Oil World*

### Prices
Fish oil and rape oil: Europe

**USD/tonne**

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan-15</th>
<th>Jul-15</th>
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<td>Rape oil</td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: *Oil World*
Supplies increasing slightly but outlook uncertain due to COVID-19

Total whitefish supplies are expected to increase by 2 percent in 2020 compared to 2019, however, all of the increase will come from aquaculture. Cod supplies will decline a little. The present COVID-19 pandemic is affecting trade and consumption very strongly, as it is shifting from restaurants to home, which means that fresh sales are declining while frozen sales are increasing.

Supplies

Global groundfish supplies, including aquaculture production, are expected to be somewhat higher in 2020 than in 2019. Estimates for total groundfish indicate an increase of about 300,000 tonnes, all of which will come from aquaculture, which is estimated to be 13.8 million tonnes, while capture fisheries will be 7.37 million tonnes. Haddock supplies are expected to increase by 30,000 tonnes, and saithe supplies will rise by about 18,000 tonnes. Atlantic cod supplies will probably decline by 12,000 tonnes, while Pacific cod is expected to decline by 22,000 tonnes and hake by over 21,000 tonnes.

In the Russian Federation, observers are expecting a gradual decline in the total allowable catch for Alaska pollock by 5 percent per year until 2025. Russian landings of Alaska pollock may be reduced by as much as 300,000 tonnes by 2025, to 1,455,000 tonnes. In 2020, the quota is 1,764,000 tonnes. Catches of Alaska pollock in the Sea of Okhotsk looked promising in the beginning of the year. As of 10 March 2020, a total of 601,800 tonnes had been caught, an increase of 12.7 percent when compared to volume at the same time in 2019.

The beginning of the A season for Alaska pollock in the United States of America was good, and market demand for Alaska pollock fillet blocks was booming. The 2020 quota for the Bering Sea was set at 1.425 million tonnes, up 2 percent from 1.4 million tonnes in 2019.

Groundfish stocks in the Barents Sea are in very good condition, with quotas for Atlantic cod, haddock and saithe remaining well above the average for the period from 1998 through 2020. However, since 2014 there has been a decline in the total quota for cod, from 1 million tonnes in 2014 to 738,000 tonnes in 2020. The haddock quota for 2020 is set at 215,000 tonnes. The saithe quota in 2020 is set at 172,000 tonnes, which is just above the average for the period from 1994 to 2020.

The Russian Federation is becoming a major force in the cod sector, but at present, neither the fleet nor the processing and distribution infrastructure are capable of exploiting the resource to its full potential. However, this is in the process of changing. Russian authorities have announced plans to renew the fleet with modern catcher-processor vessels, and to upgrade the port facilities with regard to landings, storage and processing. Currently, about 90 percent of the Russian Federation's cod exports consist of round fish with practically no value addition. In the future, the Russian Federation aims to export processed products such as cod fillets and mince to China, as well as chilled Alaska pollock and fillets to the Republic of Korea, and klipfish products (salted and dried whitefish) to southern Europe.

Markets

At the beginning of the year, there was optimism about the global outlook for cod. The COVID-19 pandemic has changed that. While demand in the upper end of the market (i.e. restaurants and foodservice) has dried up completely, demand in the retail sector is strong, as more is being consumed
at home. In the face of this development, the foodservice sector has come up with solutions which can keep them in business, such as “no-contact” home delivery, which is increasing in popularity.

China appears to have been able to contain COVID-19, and life is slowly returning to normal in the country. The pandemic delayed the processing of imported whitefish, but it was expected that Alaska pollock processing capacity would be back at 100 percent by the end of March. According to recent reports, many processing plants have already started operations.

Norway’s “skrei” fishery (spawning cod caught in northern Norway) started earlier than normal this year. Usually, the skrei season runs from late January until April, but this year it started when the first cod arrived in early January.
**Trade**

In January, Norway reported a good start to exports of fresh cod, with an increase of 32 percent by volume to 6,100 tonnes compared to January 2019. In the same period, average export prices rose and so the value of this trade increased by 42 percent, to NOK 328 million. At the same time, Norwegian exports of frozen cod declined by 48 percent to 5,100 tonnes with a FOB value of NOK 231 million.

Norwegian exports of frozen whole cod grew to 57,852 tonnes in 2019, which represents a 9 percent increase compared to 2018. The major market was China, which accounted for 27,900 tonnes or 48 percent of the total. Other major markets were Lithuania and the United Kingdom of Great Britain and Northern Ireland.

Most of the whole cod imported by China is for processing and re-exports. In 2019, China imported 174,400 tonnes of frozen whole cod, which was 8.2 percent less than in 2018. Most of this reduction was caused by a major drop in imports from the United States of America, which declined by 24.7 percent to 26,400 tonnes. Chinese exports of frozen cod fillets remained practically the same as in 2018 at 121,800 tonnes.

Russian exports of whole frozen Alaska pollock increased by 9.1 percent in 2019 compared to 2018. There was a healthy increase of 25.8 percent in exports to China, while exports to the Republic of Korea went up by 31.7 percent. China imported 690,000 tonnes of whole frozen Alaska pollock, 20.3 percent more than in 2018. Imports from the United States of America dropped by 30.5 percent, while imports from the Russian Federation and Japan increased by 24.5 percent and 212.8 percent, respectively. China's exports of Alaska pollock fillets increased by 10.5 percent, to 265,400 tonnes. About half of those exports (123,090 tonnes) were sent to Germany. This represented a 32.2 percent increase compared to 2018.

At the start of 2020, Russian exporters of Alaska pollock experienced a sharp decline in demand from China. Each year, the Russian Federation exports about 600,000 tonnes of Alaska pollock to China, where most is processed and re-exported to other markets. As COVID-19 shut down processing in China, exports dropped like a rock, and the Russians started looking for alternative markets. Some quantities were diverted to Viet Nam for processing and re-exports, and to the Republic of Korea. But the quantities were tiny compared to the Chinese imports. In March 2020, imports by China from the Russian Federation recovered strongly.

**Surimi**

The surimi market is just about disappearing. Many sushi restaurants are closed, while numerous other restaurants have had to introduce measures which reduce their capacity. However, practically all consumption is happening at home. Retail sales of sushi trays are picking up a little, but not enough to compensate for the sharp decline in restaurant demand. In Japan, there are an estimated 41,500 sushi restaurants, and the pandemic is certainly bad news for Japanese business owners.

**Prices**

Prices for H&G Alaska pollock rose in the latter part of March 2020 as Chinese processing factories resumed activities, and China started importing raw material again. At the same time, there was rising uncertainty about the finished product markets in the United States of America and the European Union as the epicentre of the pandemic shifted from China to Europe and later to the United States of America.
Outlook

Total supplies of groundfish are expected to be slightly higher than in 2019, while cod supplies may decline a little. Prices for wild-caught marine whitefish will likely continue to rise, while farmed whitefish will suffer falling prices.

The outlook for the rest of 2020 is extremely uncertain. While China was able to return to near-normal conditions after just a few months, this cannot be expected to happen in the European Union or in the United States of America.

For the rest of 2020, demand is expected to continue to shift from the restaurant and foodservice sector to the retail and home sector, thus favouring frozen products. Prices are likely to decline a
little, and trade may be more restricted than previously expected. There is a lot of uncertainty about cod prices, but the general consensus seems to be that they will stay high or go higher, both because of a slightly tighter supply situation, and because of market demand.

Brexit seems to have been almost forgotten in the time of COVID-19. But Brexit will have an effect on the groundfish market. The United Kingdom of Great Britain and Northern Ireland is a major consumer of groundfish, especially from Iceland and Norway, but trade agreements are still up in the air. The British pound has depreciated against the Euro but appreciated against the Norwegian krone. Consequently, British imports of groundfish from the European Union may decline, while imports from Norway and Iceland may increase because of the currency exchange rate situation.

### China imports of Alaska pollock, frozen whole (1 000 tonnes)

<table>
<thead>
<tr>
<th>Imports</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian Federation</td>
<td>595.1</td>
<td>512.1</td>
<td>636.4</td>
</tr>
<tr>
<td>United States of America</td>
<td>59.8</td>
<td>51.3</td>
<td>35.7</td>
</tr>
<tr>
<td>Japan</td>
<td>4.5</td>
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<td>10.5</td>
</tr>
<tr>
<td>Other countries</td>
<td>12.1</td>
<td>6.5</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>671.7</td>
<td>573.4</td>
<td>689.9</td>
</tr>
</tbody>
</table>

Source: TDM
COVID-19 sending lobster market into collapse

At the beginning of the year, the outlook for the lobster industry was indeed rosy. Demand was strong, prices were high, and production looked promising. Then came the COVID-19 outbreak, and the main market, China, closed just as the most important consumption period, Chinese New Year, was beginning. Since then, market conditions have deteriorated, and prices have fallen. But there is light at the end of the tunnel. China is slowly opening up again, demand is picking up, and trade is beginning to recover.

Supplies

COVID-19 is having the same effect on all lobster producers, resulting in lower production, due to extremely weak demand. State authorities in Maine, United States of America, have stopped enforcing the rule that lobster traps must not be left in the water for more than 30 days. The reason is that they want to discourage harvesting as well as encourage social distancing during the COVID-19 pandemic. The Maine Department of Marine Resources does not close the fishery, but strongly discourages harvesting, as market demand has dropped dramatically, and a further supply is expected to put pressure on prices.

In South Africa, lobster harvesting came to a virtual standstill in February, as the Chinese market closed. As much as 90 percent of the South African rock lobster catch is exported to China. In Canada, there has also been calls for stopping harvesting temporarily until the market recovers.

Australian exporters were equally affected, as China is by far the dominating market for Australian rock lobster. As much as 95 percent of South Australia’s lobster exports go to China. In Tasmania, authorities have announced that they will allow a quota roll-over to next year. Therefore, lobster harvesters who had not caught their quota due to the sudden market changes will be allowed to add this amount to their quota for the next season, which started on 1 March 2020.

International trade

Global lobster trade declined slightly in 2019 compared to 2018. Chinese imports increased moderately, while American imports were stable. On the exporting side, Canada took over market share from the United States of America.

Canadian exports increased by 14 percent in 2019 over 2018, to 97 500 tonnes, while American exports declined by almost 21 percent, to 42 400 tonnes. The United States of America’s exports to China were almost halved and dropped to just under 5 000 tonnes. In the European Union, imports were stable at almost 25 000 tonnes, the major supplier being Canada.

Exports of lobster to China stopped in late 2020, when China closed its borders, and both Maine and Canadian exporters felt the crunch. Shipments to Europe are also down significantly as restaurants closed down in several countries due to COVID-19. In addition, domestic sales of lobsters in the United States of America have dropped because many states and cities have also closed all restaurants.

Now, China seems to be in control of the situation, and has re-opened its border for shipments. Nova Scotia exporters have sent the first shipments on a trial basis to test the Chinese market. As Tasmanian lobster exporters were shut out of the China market, they turned their attention to the local market, and to their surprise found that local demand was indeed very good. Apparently, lobster traders have been too focused on the China market and have ignored the local market potential.
Jamaican exporters have shipped live lobster to China for some time but are now instead shipping some quantities as frozen lobsters. However, the closing of the Chinese market has led to reduced activity and lay-offs of local workers in Jamaica.

**Prices**

With lobster sales shrinking, inventories have grown. This is also not good for prices, as large inventories put pressure on prices all over.

Export prices for Vietnamese lobster to the Chinese market dropped in February, and Vietnamese traders had to turn to the local market, where they sold their lobsters at a loss. Some improvements were recorded for March 2020, as the Chinese market was slowly recovering.

The United States of America’s lobster prices hit four year low levels just as Chinese New Year was starting, a period normally characterized by strong demand and high prices. Maine lobster prices have dropped by 20 percent since January 2020. Wholesale prices for New England “halves”, a whole lobster weighing 1.5 lb, dropped by almost 20 percent to a little over USD 8.00 per lb, the lowest since 2016.

Unlike Maine, Florida produces spiny lobster and has seen prices and demand crash in the wake of the COVID-19 pandemic. Prices tumbled from USD 10 to USD 6 per lb at a time when prices would normally be high, even as high as USD 20 per lb during Chinese New Year.

**Outlook**

Life will return to normal. It could take many months, depending on how the COVID-19 pandemic is handled in Europe and North America. The worst appears to be over in China, as trade is slowly resuming.

The economic effects of the pandemic are still largely unknown. For a typical luxury product like lobster, the market consequences of an economic downturn will be dramatic. The economic impacts of COVID-19 are still unknown in China, the major world market for live lobster.
For the major producers, the effects will be varied. American lobster exporters will continue to be hurt as a result of the China – US trade conflict, which is expected to continue with changing conditions, and initiatives by the two parties. Canadian exporters stand to benefit from this trade conflict and will probably strengthen their position on the Chinese market. In Europe, recovery from the pandemic is expected to take longer than in China, and therefore sales are not expected to recover as rapidly as in China. The same goes for the American market, where the pandemic has not yet reached its peak. The COVID-19 pandemic is expected to get dramatic in the United States of America, and both purchasing power and trade will be suffering.
PANGASIUS

GLOBEFISH HIGHLIGHTS

Pangasius prices hit bottom as COVID-19 shuts down core markets

After peaking in 2018 at record heights, a strong supply response in 2019 and the economic devastation inflicted by the COVID-19 pandemic in early 2020 has seen pangasius prices collapse. Vietnamese industry stakeholders are now calling for farmers to reduce stocking to tighten the market.

Production

In Viet Nam, the world’s largest producer of pangasius, total harvests in 2019 are estimated to have reached some 1.4 million tonnes. This would represent an increase of around 3.5 percent compared with the previous year. At the same time, total farming area increased 22 percent to approximately 6,600 hectares. Spiking prices in 2018, along with a generally positive outlook for the global pangasius market, were the primary causes behind this increase in capacity. Subsequent market developments, however, have seen this optimism evaporate as the COVID-19 pandemic is taking a heavy toll on producer profits and dragging down international prices.

In addition to the market slowdown, the array of COVID-19 measures taken by governments aimed at slowing the spread of the virus, including business closures and travel restrictions, have hampered business activities all along the supply chain. Other producers of pangasius (mainly India, Indonesia, Bangladesh and China) are significantly less dependent on export revenue than their Vietnamese counterparts. However, domestic market sales in these countries have also suffered as a result of the restrictions and this will translate into more conservative business decisions by producers and other industry participants.

A FAO-supported pilot project in Indonesia to help farmers producing low-cost pangasius feed, implemented from 2017 to 2019, has reportedly produced positive results. Indonesian production has been steadily increasing and survey respondents at the 2019 Global Aquaculture Alliance (GAA) event estimated 2019 production at 590,000 tonnes.

Trade and markets

Viet Nam exported pangasius worth an estimated USD 2.03 billion in 2019, a drop of 10 percent compared with 2018. This significant shortfall is a reflection of sharp declines in price levels and sales of almost 50 percent to the US market, where exporters have had to contend with regulatory barriers and anti-dumping duties for some years now. Consumption of pangasius in the United States of America has also been dropping, with the species now ranked behind shrimp, salmon, tuna, tilapia and Alaska pollock. Exports to the European Union have also been stagnant, although the European Parliament’s ratification of a trade agreement between Europe and Viet Nam in early 2019 has now laid the groundwork for expansion in this market.

As sales to the United States of America and the European Union have declined, China has become an increasingly important target market for the Vietnamese industry. China, with Hong Kong SAR, accounted for 36 percent of the total value of Vietnamese pangasius exports in 2019, compared with 13 percent for the United States of America, 12 percent for the European Union and 11 percent for the Association of Southeast Asian Nations (ASEAN) region as a whole. In early 2020, however, buying interest from China dropped off rapidly as increasingly tight restrictions on business and social activity were introduced in the wake of the initial COVID-19 outbreak in Wuhan. China was one of the first countries to begin loosening these restrictions at the end of March, but traders in Viet Nam were still reporting limited activity and weak prices as of mid-April.
Prices

In 2019, farm-gate prices for pangasius dropped to their lowest levels since 2016, to USD 0.76 per kg. Frozen fillet prices (FOB Ho Chi Minh) followed the same trend, falling to USD 2.2 per kg by the end of 2019. In early 2020, the downward trend has continued as demand has dried up from all major markets.

Outlook

However, as of early 2020, activity in both American and European markets has been heavily subdued by the effective shutdown of the restaurant industry, business closures and the imposition of strict social distancing measures.

The steep price decline, the evaporation of demand in major markets, and the introduction of COVID-19 containment measures in Viet Nam itself have all combined to heavily dampen prior optimism in the farmed pangasius sector. Farm-gate prices are barely at break even levels and most processors are maintaining minimal operations only. Producers are very hesitant to stock any significant quantities given the broader situation, and raw material is starting to dry up. Overall retail sales have not been too heavily affected but foodservice demand is likely to remain very weak for some time to come. Tightening supply can be expected to slow the downward price trend, but market recovery is going to be a gradual process marked by caution and uncertainty.
Salmon’s upward growth trajectory grinds to a halt over COVID-19

Although 2019 was marked by severe salmon price volatility, full year figures confirm another solid 12 months for the sector. This year, however, the wide-ranging impacts of the unprecedented COVID-19 pandemic are set to take a heavy toll on market participants all along the supply chain.

Production

Atlantic salmon

Total global production of farmed Atlantic salmon is estimated to have increased by some 7 percent in 2019, to around 2.6 million tonnes. This marks the third consecutive year of strong supply growth, following an increase of around 5 percent in 2018. The three major contributors to this expansion were Norway, Chile and Scotland. Norway registered a year-on-year increase of 6.5 percent, while the Chilean annual total was some 10 percent more than in 2018. Scotland, meanwhile, rebounded from a poor year in 2018 with 20 percent growth. Canada was the only large producer of Atlantic salmon which saw a drop in harvest volumes by around 2 percent.

In Norway, the supply effects of algal bloom mortalities earlier in the year were not felt until 2020, resulting in steep price declines in the second quarter. The Norwegian authorities also recently updated the traffic light system to “green” for 9 out of the 13 production zones, meaning that farmers in those regions will now be able to increase capacity by 6 percent. The major factor inhibiting growth in the remaining zones is high levels of sea lice, which are also pushing up production costs. This is one of the main causes of tightening margins in Norway despite the high prices that have persisted for some years now.

Meanwhile, the Chilean salmon sector continues to face difficulties. In the last quarter of 2019, the industry faced an array of challenges associated with social unrest which included delays in the distribution chain, blockades and more logistical challenges. Despite these obstacles, 697,400 tonnes of Atlantic salmon were harvested during 2019, 53 percent of total Chilean aquaculture harvests and 73.2 percent of salmonids.

In 2020, the COVID-19 outbreak is affecting both domestic production and foreign trade. Salmon companies are implementing health and safety protocols to help combat the spread of COVID-19, following the recommendations of the authorities.

Other farmed salmonids

Supply of Norwegian trout continued its upward trajectory, with reported standing biomasses in December 2019 some 14 percent higher than December 2018. Total production is estimated to have increased by around 24 percent for the year. In Chile, production of coho salmon totalled 176,400 tonnes in 2019 (+28.4 percent). Coho salmon accounted for 13.4 percent of total aquaculture production and 18.5 percent of salmonid harvests. For rainbow trout, the cumulative harvest as of December 2019 was 79,500 tonnes, 10.3 percent higher than in 2018. Trout represented 6 percent of national aquaculture harvests and 8.3 percent of salmonid output.

Wild salmon

In 2019, the major wild salmon seasons in Alaska and the Kamchatka peninsula in the Russian Federation ended with a combined harvest around 13 percent lower than in 2018 and 4 percent below 2017. This was largely due to reduced pink salmon catches. In 2020, the Alaskan sector,
heavily dependent on a seasonal influx of workers from outside the state, is having to consider the economic impact of much reduced activity this year due to COVID-19 restrictions.

**Markets**

The global salmon market last year was characterized by steady growth in volume terms and a marginal decline in value terms as prices dipped steeply in mid-2019. Of the three largest markets, the United States of America led the European Union and Japan in revenue growth but this was partially explained by a strong US dollar. Salmon continues to consolidate its spot as the top seafood choice amongst US consumers, having overtaken tuna in 2013. Generally speaking, global demand for Atlantic salmon, coho and trout, and the wild salmon species remained solid in 2019 across
both traditional and emerging markets. China, a fast developing market with enormous potential, continues to be an important target for salmon exporters.

**Trade**

Supply growth, a weakening Norwegian krone, and good demand were the main factors behind strong growth in Norwegian salmon export revenues in 2019. According to the Norwegian Seafood Council (NSC), salmon exports for the year totalled 1.1 million tonnes worth NOK 72.5 billion (USD 8.24 billion). This represents an increase in volume of 6 percent and an increase in value of 7 percent compared with 2018. Norway’s access to the lucrative Chinese market has been steadily improving and the industry is optimistic about a future free trade agreement. Norwegian exports to Asia as a whole (excluding Japan) increased 20 percent in value and 18 percent in volume in 2019. Exports to the European Union, which account for some 70 percent of Norway’s salmon export revenue, were up 3 percent in value and 4 percent in volume.

In Chile, the Undersecretariat for Fisheries and Aquaculture (SUBPESCA) reported a delay in publishing the annual total exports statistics for 2019, but exports are expected to be on par with 2018. The Atlantic salmon fillet market in the United States of America, the coho market in Japan and the fresh whole Atlantic market in Brazil all showed stable growth in 2019. In 2020, access to the Russian market has improved as temporary import restrictions previously imposed by the Russian Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor) on four Chilean salmon plants have been lifted and guarantees of compliance with Russian requirements have been obtained. All salmon shipments to China, however, have been suspended until the health situation is considered under control. The Chinese market has been increasing in importance for Chilean exporters and now ranks fifth with a share of approximately 5 percent of total exports during 2019. Shipments previously destined for China are now being redirected to other markets, such as Brazil, the United States of America and Southeast Asia. Aquaculture companies’ strategies to deal with the changing market environment are varied, and include freezing the bigger fish and delaying stocking.

According to the National Oceanic and Atmospheric Administration (NOAA), salmon imports in the United States of America in 2019 totalled 426 500 tonnes valued at USD 4.3 billion. These figures reflect increases of 5.82 percent in terms of volume and 3.76 percent by value compared with 2018. Chile’s share of the US market continued to increase year-on-year in 2019, while Canada’s share followed a declining trend.
SALMON

Prices

In 2019, farmed salmon prices exhibited some extreme swings, even for a market where price volatility is commonplace. During last year’s third quarter, high volumes of Norwegian salmon hit the market, pushing export prices for fresh fish on the Nasdaq salmon index (NQSALMON) down to NOK 39 (USD 4.33) per kg, some 40 percent compared with the beginning of the year. However, tightening supply and strong seasonal demand sent prices soaring to near-record heights towards the end of the year. Chilean prices were relatively more stable, but average fresh fillet export prices to the US market over the course of the year were marginally lower compared with 2018 at USD 10 per kg. In 2020, despite somewhat lower supply growth projections, global salmon prices are falling as demand weakens due to the profound market impact of the COVID-19 outbreak.

Outlook

In 2020, the market situation has been completely transformed by the COVID-19 pandemic. Social distancing measures, business closures and travel restrictions all have direct implications for the salmon sector. Salmon companies as a whole are expected to see a major drop in earnings, as most businesses are now operating at reduced capacity. The restaurant industry, which typically absorbs substantial quantities of salmon, has been effectively shut down in the most important markets. Analysts are estimating a global salmon demand drop of at least 15 percent.

At the same time, the quarantine measures imposed around the world have significantly affected retail salmon sales. House-bound consumers prefer frozen and processed options over perishable fresh seafood items. As a result, retail sales in these categories spiked when restrictions were first introduced, but tapered off as soon as households had stocked up. Online distributors are also reporting increased sales in many countries as interest in alternative distribution channels increases. Meanwhile, logistics have become significantly more challenging, adding to market woes. Hauliers must contend with closed or restricted road borders and health inspection delays. The large-scale cancellation of flights has directly affected trade in some high-end products which are transported by air, such as fresh Norwegian and Chilean salmon destined for the United States of America and China. In 2020, there has been little relief, with the COVID-19 outbreak affecting both domestic production and foreign trade. Chilean authorities have designated the salmon industry an essential service, despite some protests meaning that trucks supplying the remaining air freight routes to the United States of America and China are still running.

The economic effects of the ongoing COVID-19 crisis are expected to be severe and uncertainty is widespread. Although some important markets, such as China, have begun relaxing some restrictions, substantially reduced economic activity is foreseen for at least several more months. Despite strong demand for farmed salmon at the beginning of 2020, the COVID-19 situation is generating uncertainty and volatility. In particular, it will take some time before foodservice demand returns to pre-pandemic levels. Some analysts have cautioned that projections for China may be overly optimistic given that salmon, while popular in Japanese style restaurants, is still not an everyday item in Chinese food baskets.

According to figures from Kontali, total output growth for farmed Atlantics is expected to drop to 2 percent in 2020. The forecast for Norway and Chile is down 2 percent and 5 percent respectively, with Norway in particular grappling with high production costs. Although tightening supply will support prices to an extent, the persisting lower demand will likely push prices close to the breakeven level. If this happens, salmon aquaculture companies can be expected to take a significant earnings hit and
export revenues will fall. At the end April 2020, forward prices at Fish Pool were hovering at around NOK 50 (USD 4.77) per kg. For the wild salmon sector, COVID-19 restrictions may have significant implications for the upcoming season, although Alaskan authorities have not yet stated plans to close any of the summer fisheries.
Difficult times for bass and bream sector as COVID-19 hits hard

At the end of 2019, the outlook for the Mediterranean bass and bream was improving as supply looked to be finally tightening and prices were expected to pick up. The COVID-19 outbreak and the associated economic impact has hit the sector hard, however, and badly needed summer demand is likely to be severely weakened.

Production

Growth in farmed bass and bream harvests in the Mediterranean slowed significantly in 2019 due to a sharp reduction in juvenile stocking levels. Farmers have become much more cautious in their production planning after the upward supply trajectory began to negatively impact the market. Estimates for the year put combined harvests of both species at around 450,000 tonnes, with bream making up marginally more than half this total.

The two largest producers, Greece and Turkey, have throttled back production, although export figures suggest that growth is still positive. In Turkey, falling market prices and more restrictive business conditions in a sluggish economy have slowed previously rapid expansion. Following a lengthy consolidation process, the Greek farmed bass and bream industry underwent significant transformation resulting in a clear consolidated structure. It is hoped that increased production efficiencies and coordinated marketing efforts will help to stabilize a Greek sector that has long struggled with profitability.

Trade and markets

Although export volumes increased for both species in 2019, a fall in export prices saw a relatively smaller increase in revenues. In euro terms, Greece export value rose to 3.7 percent to EUR 466 million while Turkish value increased 9 percent to EUR 363 million. It should be noted however, that these figures do not include fillets, which are making up an increasing proportion of the market, particularly in Turkey's case. Of the two species, bream accounted for a slight majority of revenue, partially due to relatively higher values. On the market side, Italy is by far the largest importer, recording EUR 343 million total import value in 2019. This is a 3 percent increase year-on-year and 28 percent of total imports. Spain was the second largest importer, with a 17 percent increase year-on-year and 13 percent of total imports. In 2019, Spanish import value grew to EUR 160 million.

Prices

Before the COVID-19 situation, both bass and bream prices were slowly rising after being given a boost by the Spanish losses caused by the powerful storm "Gloria". In the second quarter, however, price dynamics changed entirely as sales have dropped sharply, logistical costs have spiked and biomasses are building up at farms.

Outlook

The somewhat brighter outlook for the bass and bream sector that was emerging at the end of last year has deteriorated once again in 2020. First, storm Gloria in the Western Mediterranean saw the Spanish sector lose almost 50 percent of fish in the pens to escapes. Although this could have translated into tighter supply and lifted prices, the wider market impact brought about by COVID-19 has seen demand evaporate and quickly pushed the vulnerable Greek industry into dangerous financial territory. Bass and bream are popular dishes in European restaurants, particularly in the
Mediterranean countries, and the enforced closure of all restaurants and bars in these markets has removed a very important source of revenue. Restrictions on flights is also affecting supply of fresh fish to retail. Amongst other damaging effects are the contraction of the European tourism industry and the added costs of cross-border logistics. The Greek sector has warned that it will require assistance as market conditions worsen. With backed up biomasses and an uncertain path to economic recovery, sector profitability is set to be severely impacted.
Turkey | Exports | Seabass | Fresh
Top three destinations
Unit: 1 000 tonnes, January-December

Source: Turkey Statistical Institute

Italy | Imports | Sea bass | Fresh
Top three origins
Unit: 1 000 tonnes, January-December

Source: ISTAT - National Institute of Statistics

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

Source: ISTAT - National Institute of Statistics

Turkey | Exports | Seabream | Fresh
Top three destinations
Unit: 1 000 tonnes, January-December

Source: Turkey Statistical Institute
COVID-19 dampens the initially positive shrimp forecast for 2020

Strong imports in China cushioned the demand shortfalls of traditional large markets where imports were rather stagnant throughout 2019. However, even with lacklustre imports, the United States of America emerged as a price setter in the global market for shrimp trade. Due to the coronavirus 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

Compared with 2018, the estimated global production of farmed marine shrimp increased by 17 percent to 4.45 million tonnes in 2019. Nearly 85 percent of global farmed shrimp harvests took place in the Asia-Pacific region, with increased production in China, India, and Indonesia. Ecuador was the top producer in Latin America, harvesting over 600 000 tonnes of farmed Vannamei in 2019 which was 13-15 percent higher than 2018.

International trade

An estimated 3.05 million tonnes of shrimp and prawn entered the international trade in 2019. Despite lower prices than in 2018, there was little or negative import growth in the traditional markets of the United States of America, the European Union, and Japan. Encouraged by strong Chinese demand, farmed shrimp production and exports increased in Asia and Latin America during the second half of 2019. Shrimp imports in China increased by almost 180 percent in 2019.

Exports

In 2019, the focus of shrimp exporters worldwide was on China, where imports increased by 2 to 3 digits from many sources. India reported an over 300 percent rise in exports to China. Increase in exports to China were also reported from Ecuador (+261 percent), Thailand (+58 percent), and Viet Nam (+177 percent) and many other sources. With the exception of Argentina and Canada, imports into China increased from most of the sources.

Imports

In 2019, the top three import markets were the European Union, China and the United States of America.

European Union (Member Organization)

The 2018 weaker market trend continued in 2019, and shrimp imports in the European Union registered a 3.9 percent decline to 807 660 tonnes in 2019.

All the top European markets registered less imports in 2019, with decreasing imports in Spain (-1.2 percent), France (-3.5 percent), the Netherlands (-9 percent), Denmark (-1.8 percent), Italy (-7.5 percent), and the United Kingdom of Great Britain and Northern Ireland (-2.7 percent). Extra-EU sources supplied close to 73 percent of total shrimp imports into the European Union, 2 percent less than in 2018. Among the top six sources, supplies declined from all except Ecuador (+27.3 percent) and Bangladesh (+3.8 percent).

Outside the European Union, shrimp imports increased in the Russian Federation (+10 percent to 47 195 tonnes), Norway (+11 percent to 16 800 tonnes) but declined in Switzerland (-12.5 percent to 7 025 tonnes).
SHRIMP

World production of farmed marine shrimp (Pacific white and black tiger) (1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2016</th>
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<th>2018</th>
<th>2019 (e)</th>
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<td>Total Asia-Pacific*</td>
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<td>3 100</td>
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<td>World Total</td>
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Source: INFOSH World Shrimp Trade Conference 2019, Aqua Culture Asia Pacific Magazine and industry sources
Notes: *includes also Myanmar, Australia, Iran, Saudi Arabia.
** Ecuador, Mexico, Brazil, Peru, Nicaragua, Colombia and others

World top exporters of shrimp (all types, 1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>% change 2019/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>617.4</td>
<td>672.2</td>
<td>+8.9</td>
</tr>
<tr>
<td>Ecuador</td>
<td>508.9</td>
<td>647.8</td>
<td>+27.3</td>
</tr>
<tr>
<td>Viet Nam (e)</td>
<td>570</td>
<td>390.1</td>
<td>-31.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>196.9</td>
<td>270.2</td>
<td>+2.6</td>
</tr>
<tr>
<td>Argentina</td>
<td>185.4</td>
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<td>-11</td>
</tr>
<tr>
<td>China</td>
<td>202.3</td>
<td>155.3</td>
<td>-24.2</td>
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<tr>
<td>Thailand</td>
<td>171.6</td>
<td>168</td>
<td>-7.3</td>
</tr>
</tbody>
</table>

Note: (e) estimate

World top importers of shrimp (all types, 1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2018</th>
<th>2019</th>
<th>% change 2019/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>832.7</td>
<td>807.7</td>
<td>-3.9</td>
</tr>
<tr>
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<tr>
<td>Japan</td>
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<tr>
<td>Viet Nam*</td>
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<tr>
<td>Republic of Korea</td>
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</tr>
<tr>
<td>Canada</td>
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<td>55.1</td>
<td>-1</td>
</tr>
</tbody>
</table>

Note: ** including estimated imports through border trade with Viet Nam and Myanmar

Europe Union imports/exports of shrimp (1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ecuador</td>
<td>96.7</td>
<td>104.3</td>
<td>106.6</td>
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<tr>
<td>Argentina</td>
<td>80.5</td>
<td>81.2</td>
<td>76.6</td>
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<td>Viet Nam</td>
<td>65.5</td>
<td>74.7</td>
<td>69.2</td>
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<td>Other countries</td>
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<tr>
<td>Total</td>
<td>812.4</td>
<td>832.6</td>
<td>807.6</td>
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<tr>
<td>Exports</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
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<td>40.3</td>
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<td>33.2</td>
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<tr>
<td>Morocco</td>
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<td>29</td>
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<tr>
<td>Other countries</td>
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<tr>
<td>Total</td>
<td>330.3</td>
<td>344.3</td>
<td>384.4</td>
</tr>
</tbody>
</table>

Source: Eurostat

Source: China Customs, estimates
China

With strong imports, China has become the focus of shrimp exporters worldwide. According to the China Customs authority, shrimp imports in 2019 increased by 179 percent to 722 000 tonnes. In addition, an estimated 90 000 to 100 000 tonnes of shrimp likely entered China from Viet Nam and Myanmar through unreported border trade, resulting in total estimated shrimp imports at 812 000 tonnes. The leading suppliers to the Chinese market were Ecuador, India, Thailand, Viet Nam, Argentina, and Saudi Arabia. Imports increased from all except from Argentina. According to the China Aquatic Products Processing and Marketing Alliance (CAPPMA), per capita consumption of shrimp in China reached 2 kg in 2019.

United States of America

In comparison with 2018, US shrimp imports increased marginally (+0.4 percent) to some 700 000 tonnes in 2019. Supplies increased from India (282 840 tonnes, +13.7 percent), Viet Nam (61 000 tonnes, +3.5 percent) and Ecuador (83 000 tonnes, +9.3 percent). Imports of raw shell-on and peeled shrimp increased but declined for processed shrimp (-19 percent).

In December 2019, import orders increased in the US market following good consumer demand throughout 2019, reduced domestic inventories, and lower import prices, particularly from Ecuador in that month and expected good spring demand in 2020. These increased supplies reached the market in January-February 2020 with cumulative imports of 117 000 tonnes, some 20 percent more than the same period in 2019.

Japan

In 2019, Japan imported 221 650 tonnes of shrimp (+1 percent) of which 30 percent were value-added products. Thailand, Viet Nam, Indonesia, and China were the main suppliers of this type of shrimp. Raw shrimp experienced slow growth, due to higher coldwater shrimp arrivals.

Asia/Pacific and others

Among the other markets in Asia/Pacific, shrimp imports increased in the Republic of Korea, Taiwan Province of China, Malaysia, Singapore, and New Zealand but declined in Hong Kong SAR during 2019.

Frozen shrimp imports in Viet Nam declined sharply (-94 percent) in 2019 as the Chinese authority continues its stringent import control on illegal re-exports from Viet Nam to China. Direct exports of shrimp to China from the producing countries also increased significantly since 2018.

Imports were also low in Australia (-10 percent at 28 500 tonnes) due to the devastating bushfires season and a weakened economy.

In the Middle East and North Africa (MENA), where the United Arab Emirates (UAE) is the largest market, imports increased from Saudi Arabia, Iran and India.
Prices

Shrimp prices in the international trade remained weak in 2019, but firmed up marginally during August to December. Despite lackluster imports, the United States of America emerged as the price setter. Prices weakened again during January to February 2020 and continued to be soft until April despite the lower production forecast during the first half of 2020.

Outlook

The COVID-19 pandemic will severely dampen global shrimp production in 2020, with worldwide demand for fresh and frozen shrimp declining significantly. In Asia, the early season’s farming
activities slowed down considerably with lower density of stocks and delayed stockings of ponds in most producing countries. As of early May 2020, pond stocking in India’s largest Vannamei producing state Andhra, declined by 60 percent compared to the same period of last year. The aquaculture season in Asia, which generally begins in April, is now pushed towards June/July. In Latin America, supplies will be seasonally low until May/June. The situation has led to a general forecast of a 30-50 percent fall in global shrimp production during 2020.

The situation is also grim in the export processing sector. In addition to raw material shortages in the producing countries, social distancing rules and other control measures adopted to combat the COVID-19 pandemic continue to hamper processing and shipments of the existing import orders.

The COVID-19 pandemic has already severely affected shrimp demand in the international and domestic trade since the beginning of 2020. During the first quarter of 2020, most celebrations and public gatherings were cancelled in shrimp consuming countries worldwide. In particular, the impacts of COVID-19 are severe in the restaurant and hospitality industries following the lockdown measures. Although there have been significant increases in retail grocery sales and takeout delivery as the majority of the population prefers staying at home, over all consumption in the markets has declined because of the almost total shut down of restaurant and catering trade worldwide. This trend is likely to continue for the rest of the year.

Considering the forecast of a global recession, rising unemployment and subsequent fall in consumer disposable income, 2020 demand for shrimp will likely weaken significantly both in developed and developing markets.

Current demand in the western markets of North America and Europe is mostly seen in the retail trade. Hence compared with other years, there will be increased demand for retail/consumer packs for frozen products irrespective of product forms (raw shell-on, peeled, other semi-processed and processed shrimp). Dining out is unlikely to be the norm in the near future which will seriously reduce import demand for large sizes of shrimp (U15 to 21/25) in 2020.
Producers and exporters of large sized farmed shrimp, Vannamei and black tiger shrimp will be adversely affected by the falling business in the restaurant and hospitality sectors.

In Japan, shrimp demand is likely to be good for value-added shrimp (breaded tempura shrimp, cooked boiled other processed shrimp) compared with raw frozen shrimp. However, the main exporters of these products (Thailand, Viet Nam, China) are also affected by cancellations of orders from Japan, North America, the European Union and Australia during the first quarter of 2020.

Interestingly shrimp imports in China during the first quarter of 2020, increased by 27.6 percent (176 255 tonnes) year-on year with higher supplies from the top source Ecuador (+84 percent at 88 700 tonnes). Imports also increased from the other major sources during this period except from India and Thailand. Although it is too early for any prediction, this could be the silver lining over the 2020 shrimp trade.

Exporting countries who are heavily depended on the traditional Western markets need to seriously review consumers buying power these markets, where shrimp is not an essential item in the food basket.

Shrimp producing countries with domestic sales opportunities would be able to cushion the impacts of their shrinking export trade to some extent. However, in view of the falling GDP worldwide, consumer demand for shrimp will be more price sensitive compared with the previous years, even at lower supplies.
Global landings expected to grow by 4 percent in 2020

Total landings of small pelagics are expected to increase by about 4 percent in 2020 compared to 2019. But there will be some variation between species. Mackerel supplies will go up, while supplies of herring and anchovies will decline. The overall effects of the COVID-19 pandemic are still unknown but it is expected that they will be considerable, also in the small pelagics sector. Purchasing power will be reduced for many people, and this may lead to consumers purchasing more cheap products like small pelagics.

Total production of small pelagics is expected to be 21.2 million tonnes. Supplies for human consumption are expected to be about 4 percent higher than in 2019 at about 9.7 million tonnes. The main reason for the increased supplies is the higher quotas for mackerel and anchovy. Atlantic herring, on the other hand, will have a smaller quota in 2020.

In recent years, the pelagic sector has tended to overfish the quotas considerably. Mackerel was overfished by 14 percent in 2014, but this increased to 33 percent in 2019. The Norwegian spring spawning herring quota was overfished by 35 percent in 2019, and blue whiting quota was overfished by 29 percent in 2019.

Mackerel

Based on recommendations from the International Council for the Exploration of the Sea (ICES), the total quota for 2020 was set at 922 064 tonnes, a 20 percent increase from 2019. Iceland set its mackerel quota unilaterally at 16.5 percent of the total (i.e. 152 000 tonnes), up from 142 000 tonnes in 2019.

Mackerel consumption in both Japan and the Republic of Korea is rising. In Japan, consumption in 2019 amounted to 315 000 tonnes, up 2 percent compared to 2018. In the Republic of Korea, consumption of mackerel reached 115 000 tonnes. This was slightly up compared to 2018, but down compared to 2017. Both countries are seeing a decline in domestic production, and consequently the need for imports is growing.

Chinese imports of frozen mackerel increased from 141 280 tonnes in 2018 to 150 116 tonnes in 2019. The main supplier was Norway, which accounted for 55 509 tonnes or 37 percent of the total. Both Norway and the Russian Federation showed moderate increases in shipments of frozen mackerel to China (+3.3 percent and +9.6 percent, respectively), while Ireland increased its exports to China by 33.1 percent to 15 754 tonnes.

Herring

The Atlanto-Scandic herring fishery will likely lose its Marine Stewardship Council (MSC) certification in 2020. Countries fishing for this herring have failed to agree on a total catch and instead have set unilateral quotas, which combined exceed the advice from ICES.

The North Sea herring fishery has MSC certification and is not likely to lose it, so herring from this fishery would be able to command a premium price compared to the Atlanto-Scandic herring.

The herring fishery in Norway was off to a promising start in January 2020. Total landings were 180 778 tonnes, compared to 169 459 tonnes in January 2019 (+6.7 percent). Prices were also up a bit, from NOK 4.02 per kg in 2019 to NOK 5.47 per kg in 2020.

Herring consumption in Europe is falling, with levels reportedly down for all European countries. In particular, young people are staying away from herring altogether. In Germany, however, consumption...
is falling in all age groups, while in Poland consumers above 50 are still finding herring attractive. High prices may be one cause, however, there has been a general shift away from herring over the years.

Demand for herring roe from Japan and other Asian countries is very strong. Consequently, demand for herring among the processors is very good, and competition for raw material is fierce because the capelin fishery has been stopped for 2019 and 2020 in the area around Iceland and in the Barents Sea. Iceland and Norway have no capelin quotas for 2020. Therefore, Asian buyers who usually buy capelin roe, have to settle for herring roe at the moment.
Capelin

In late February 2020 an Icelandic vessel reported that it had found large amounts of capelin off the east coast of Iceland. The Marine Research Institute sent a survey vessel to the area and estimated almost 90 000 tonnes of capelin in the area. However, these findings have not resulted in any changes in the quota advice, and the capelin fishery is still closed.

With no capelin quotas in Iceland or in Norway for 2020, prices for capelin products still in storage are likely to rise. The most valuable product from capelin is its roe, and Icelandic export prices of capelin roe soared last year, from about EUR 4.50 per kg in January 2019 to just under EUR 10.00 per kg in September 2019.

Icelandic exports of capelin to Japan dropped in 2019 compared to 2018. Exports of total capelin declined from 22 891 tonnes in 2018 to 7 272 tonnes in 2019. However, exports of capelin roe fared somewhat better, with exports falling from 10 993 tonnes in 2018 to 7 625 tonnes in 2019. The outlook for 2020 is very bleak, as no capelin is allowed to be caught in Iceland.

Anchovy/Sardines

The second Peruvian anchovy season of 2019 was closed on 15 January 2020, with just 36 percent of the quota or just over 1 million tonnes caught. The Maritime Institute of Peru (IMARPE) initiated a survey to determine the status and biomass of the anchovy resource. This study is essential in order to set a new quota for the new season.

Outlook

During the North Atlantic Seafood Forum in March, two possible scenarios were presented for the pelagic sector. If the practice of overfishing the quotas continues, this may lead to stable or slightly
SMALL PELAGICS

reduced quotas, lack of Marine Stewardship Council (MSC) approval, no new markets in Europe, and relatively stable prices. However, if coastal states reach an agreement for sustainability, the quotas will be reduced considerably during the first year, and then gradually increased in later years. This would lead to higher prices and MSC approval.

With demand for herring falling in Europe, and the Russian market still closed to European producers, the outlook for herring is one of declining supplies but also declining prices.

For mackerel, the picture is very different. Supplies will increase, and demand from Asia is also going up, so normally one would expect to see prices either staying level or going up. But the effects of the COVID-19 pandemic are still unknown. Although the worst seems to be over in China and to some extent in the Republic of Korea, a more dramatic situation is expected in Europe and North America. No capelin available for roe production will make capelin roe extremely expensive, if any can be found. Consumers will shift to herring roe instead, so the price for this commodity should also go up. The lack of capelin for reduction purposes (fishmeal and oil) seems to have little effect on the price of fishmeal and fish oil. Poor landings of anchovies by Peru during early 2020 are likely to have a more significant impact on those prices.
Tilapia exports hit hard by COVID-19

The Chinese tilapia sector, which has been struggling to make headway in a lukewarm US market for several years, was hit hard by a 25 percent tariff on US-bound imports in 2019. Although these tariffs were lifted in April 2020, the COVID-19 outbreak is negatively affecting both markets and suppliers.

Production

The most recent estimates for global farmed tilapia production in 2019 are those reported at the Global Aquaculture Alliance (GAA) conference in Chennai, India in late October, which put the year's total at around 6.5 million tonnes. This would represent an increase of some 3-4 percent compared with 2018, driven by increased harvests in the major producing countries despite some disease-related losses in Asia. China remains the largest supplier by some distance, accounting for around 26 percent of total production, but more rapid expansion has been taking place in other countries such as Brazil and Indonesia. Chinese product is typically low priced frozen tilapia destined primarily for the US market. This low margin industry is beginning to be squeezed out by other sectors in the competitive development environment in South China and particularly in Hainan province. Meanwhile, Brazil's powerful agriculture industry has been investing in tilapia production and in 2019 Brazilian harvests increased by some 8 percent to reach 432 149 tonnes. Tilapia now represents more than half of the country's total aquaculture production.

Markets and trade

Imports into the United States of America, the world's largest tilapia market, totalled 172 533 tonnes of tilapia worth USD 591.7 million in 2019. These figures represent a decrease of 8.5 percent in terms of volume and 13.9 percent in terms of value compared with 2018. Frozen tilapia fillets accounted for 61.7 percent of the share in terms of volume (172 534 tonnes) and 66 percent in terms of value at USD 390.4 million. This product form showed declines in both import volume (-13.7 percent) and value (-15.7 percent). Fresh fillets also showed lower import figures when compared to 2018 (-8.12 percent in tonnes and -16 percent in USD).

A general weakening of demand for tilapia, compounded by the 25 percent tariff on Chinese origin imports, was driving the downward trend. Consumption has been stagnating as tilapia struggles to compete with other seafood options.

In the European Union, a period of low prices combined with the Chinese tilapia tariff in the United States of America, led to a 22 percent increase year-on-year in both import volume and value in 2019, reaching 29 600 tonnes worth EUR 67 million. China's share of this value jumped from 67 percent in 2018 to 75 percent in 2019 as exporters sought to offload volumes that would otherwise be destined for the US market.

Compared with 2018, the volume of tilapia exports increased by 19 percent. In terms of value, fillets make up the majority of Brazil's exports, accounting for 57 percent of the total. By volume, by-products, such as skins, scales, oils and meals are the most heavily traded product, representing 80 percent of the volume. The United States of America, importing mainly fresh tilapia fillets, remains the most important market for the Brazilian tilapia export industry.

Prices

Tilapia prices have been following a downward trend over the last year, with 500-800g and 300-500 g fish falling to around USD 1.05 and USD 0.77 per kg respectively in Guangdong, China as
of the end of 2019. These prices represent declines of USD 0.28 for the larger size and USD 0.42 for the smaller size compared with the peaks in 2019. Meanwhile, export prices for frozen whole tilapia fell some 9 percent year-on-year to just above USD 2 per kg. In early 2020, a drop in volumes out of China has seen prices increase somewhat.

**Outlook**

In early 2020, the COVID-19 outbreak in China and the containment measures that followed led to delayed tilapia production, feed shortages, limited processing activity and weakened markets worldwide. Although the situation had improved by March, many factories were slow to return to full operational capacity as of the end of April due to restrictions on worker movements and lack of demand. As a result, mature fish were left in the ponds and many farmers have been unable to stock juveniles for the next farming cycle.

Before the COVID-19 outbreak, tilapia production forecasts for 2020 were for an increase of around 4.4 percent. All stakeholders have been affected by the restrictions in 2020, however, and significant adjustments must be made to the outlook. Uncertainty is dominating business activities due to the wide-ranging impact of the global COVID-19 pandemic and prices are weak. Although foodservice demand has been hit, marketers are reporting good demand for frozen retail products due to the COVID-19 restrictions keeping people at home. In the long run, economic contraction is likely to increase demand to lower priced seafood options such as tilapia.

In Brazil, the Brazilian Fish Farming Association (PEIXE BR) urged the government to implement emergency measures to contain the spread of COVID-19 and prevent an economic crisis. PEIXE BR
China exports of frozen tilapia fillets (1 000 tonnes)

<table>
<thead>
<tr>
<th>Frozen fillets</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>57.9</td>
<td>50.6</td>
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</tr>
<tr>
<td>Mexico</td>
<td>21.1</td>
<td>18.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Israel</td>
<td>13.1</td>
<td>14.8</td>
<td>9.7</td>
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<tr>
<td>Other countries</td>
<td>44.4</td>
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</tr>
<tr>
<td>Total</td>
<td>136.6</td>
<td>112.7</td>
<td>77.0</td>
</tr>
</tbody>
</table>

Source: TDM

China exports of frozen whole tilapia (1 000 tonnes)

<table>
<thead>
<tr>
<th>Frozen tilapia</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>22.5</td>
<td>24.1</td>
<td>20.4</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>27.3</td>
<td>26.4</td>
<td>20.1</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>7.5</td>
<td>7.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Other countries</td>
<td>74.1</td>
<td>77.4</td>
<td>60.9</td>
</tr>
<tr>
<td>Total</td>
<td>131.5</td>
<td>135.1</td>
<td>109.2</td>
</tr>
</tbody>
</table>

Source: TDM

requested to immediately suspend some taxes on producers to reduce the additional price burden. Credit access for farmers was also requested. Due to lower travel confidence globally, Mexican tilapia production will decline by 80% as this production is targeting mainly the restaurant sector in tourist areas.

Chinese producers and processors saw operations slow considerably during the worst of the pandemic and even as the restrictions have been loosened market activity has remained subdued both domestically and abroad. At the same time, however, the lifting of the 25 percent tariff on Chinese imports into the United States of America equates to a significant margin boost to the Chinese industry that may soften the blow somewhat. Alternative suppliers such as the Latin American producers are still focusing primarily on fresh tilapia fillets, while potential competitors in the Chinese dominated frozen segment are wary of investing heavily considering the temporary nature of the current situation.
Tuna sector faces uncertainty

*Fresh and frozen tuna trade weakened during the first four months of 2020. In contrast, household demand for affordable and shelf-stable canned tuna increased in the traditional markets. However, most of the canneries are running at low capacity due to the implementation of social distancing measures to combat COVID-19. Prices of frozen fish were on the rise until April, but have started to soften since.*

Supply

In 2019, global supplies of frozen skipjack remained stable at record low prices. In the Western and Central Pacific Ocean (WCPO), tuna catches were moderate, except during the FAD fishing closure (July-September). Overall catches in the Eastern Pacific Ocean (EPO) remained low. In Ecuador, tuna canners faced raw material shortage until April 2019 with some improvements occurring from May to July 2019. Again, fishing efforts were low during the IATTC “veda” fishing closures (29 July to 8 October 2019 and 9 November 2019 to 19 January 2020). Catches in the Indian Ocean also fluctuated from low to moderate between July to December 2019.

In the Atlantic Ocean, tuna catches were reasonably good from April to July and October to November 2019, but weakened during the low catch periods of August and December.

Raw Material Imports

Due to larger carry-over stocks from 2018, total frozen tuna imports in Thailand declined by 1.5 percent to 629 000 tonnes in 2019. Nearly 36 000 tonnes of Thai imports consisted of semi-processed cooked loins.

Spain imported 255 500 tonnes of tuna raw material for the canneries, consisting of 155 800 tonnes of whole tuna and 100 000 tonnes of cooked loins.

Compared to 2018, imports of frozen tuna were higher in Ecuador (168 175 tonnes), due to lower regional catches in the Eastern Pacific. Frozen skipjack imports increased significantly by 371 percent to 145 600 tonnes in 2019. Frozen tuna imports also increased in the Philippines (+27.7 percent to 179 000 tonnes). In contrast, Chinese annual imports of raw frozen tuna in 2019 declined by 16.5 percent to 89 000 tonnes.

Fresh and frozen tuna market (non-canned)

This market segment worldwide – small and large – reported stable growth in 2019. Unfortunately this growth has started to halt since January 2020 due to the COVID-19 pandemic. By April 2020, sales at restaurants and hospitality trade plummeted by 80 to 90 percent worldwide as in-dining is barred in many countries as part of the lockdown.

Japan

In 2019, Japan imported an estimated 150 000 tonnes of high-value tuna (fresh and frozen), an increase of 10 percent compared with 2018. Imports of bluefin (fresh and frozen/ including fillets) increased by 13 percent to 39 660 tonnes. Imports increased particularly during the fourth quarter of 2019 in anticipation of good business associated with the Spring Festival celebrations, the coronation of the New Emperor in April/May and also the Tokyo Summer Olympics in July 2020.
**TUNA**

**United States of America**

Total imports of fresh and frozen tuna into the United States of America reached 72,000 tonnes in 2019, an increase of 14.2 percent compared to 2018. Overall the share of this product in total tuna imports in the United States of America increased from 23 percent in 2018 to 25 percent in 2019.

**Other Markets**

Imports of non-canned tuna, particularly frozen tuna loins, were on the rise in the European Union. The market imported 36,625 tonnes of frozen tuna loins in 2019. The top five markets were Spain, France, Italy, the Netherlands and the United Kingdom of Britain and Northern Ireland.

In the Russian Federation, frozen tuna loin imports increased by 70 percent to 5,700 tonnes during 2019. Republic of Korea, the second largest market in Asia after Japan, imported 5,800 tonnes (+3 percent) of frozen tuna fillet in 2019. In China, imports of high value non-canned tuna increased to 1,800 tonnes (+15.6 percent), of which 654 tonnes were the high value bluefin species.

**Exports**

Thailand, the world major canned tuna exporter, shipped 34 percent of its canned tuna exports to the Middle East and North African (MENA) region, and increased supplies to North America (24.5 percent) in 2019. Ecuador shipped 67 percent of its exports to Europe. Year-on-year exports...
from Indonesia increased to the European Union, Middle East, Japan and Australia, while exports declined from the Philippines as more products entered the domestic trade. Taking advantage of low skipjack prices, China, Ecuador, Indonesia, and Viet Nam exported more cooked loins to European reprocessors in 2019.

**Imports**

**North and South America**

In the United States of America, total imports of processed tuna (including cooked loins) in 2019 reached 213,000 tonnes (+2.4 percent). Imports of products for direct consumption increased by 7.3 percent to 132,480 tonnes, of which 35 percent (45,100 tonnes) were valued added products.
In Canada, canned tuna imports in 2019 increased by 3.5 percent to 34 000 tonnes. There were mixed trends in South America. Imports of canned tuna declined in Colombia, Argentina, Mexico, Panama, Uruguay, but increased in Peru, Chile, and Costa Rica.

**European Union (Member Organization)**

In general, demand for canned tuna was dormant in the European Union during 2019. However, imports increased because of low prices of skipjack. The Community market imported 748 130 tonnes of processed tuna consisting of 590 000 tonnes (+1.3 percent) of canned/pouched tuna meant for direct consumption and 158 130 tonnes (+6.7 percent) of cooked loins for reprocessing. Spain, Italy, France and Portugal had a 96 percent share in cooked loin imports.

The top markets of canned tuna were Spain, France, Italy, the Netherlands and the United Kingdom of Great Britain and Ireland.

**Others in Europe**

Outside the European Union, the Russian Federation was the leading importer in 2019, with some 5 700 tonnes of canned tuna imports (+70 percent).

**Asia/Pacific and Others**

In 2019, imports of canned tuna in Saudi Arabia and Egypt were 48 500 tonnes each, with a 12 percent increase in Saudi Arabia and 4 percent decline in Egypt. There were increased imports in the other medium and small markets in the MENA region supported by lower prices of canned skipjack, mostly supplied by Thailand, Indonesia, the Philippines, and Oman.

Stable domestic production of canned tuna in Japan continued in 2019 while imports weakened marginally (-0.1 percent) compared with 2018 to 65 000 tonnes.
Affected by wild fires since July 2019 and the weaker economy many Australian consumers have moved away from high value canned tuna (mostly produced in Thailand) to the conventional packs imported from Indonesia and Viet Nam.

Demand for canned tuna remains low in Malaysia, Singapore, Hong Kong SAR, and China as consumers still prefer fresh fish.

Prices

The average price of frozen skipjack in 2019 was 39 percent lower year-on-year at USD 930 per tonne. During the periods of July to August and October to December 2019, prices even fell below the annual average. By mid-April 2020, frozen skipjack prices for delivery to Thailand increased by 35 percent to USD 1 550 per tonne from the start of the year, but remained on par with the April 2019 price. Prices of yellowfin have also increased. In May, prices weakened again, as demand for canned tuna levelled off.

Outlook

Global demand for canned, pouched and processed tuna remained strong worldwide during the first quarter of 2020 as consumers, particularly in the western and Middle Eastern markets, continued to buy and stock shelf-stable products in view of the COVID-19 pandemic and subsequent lockdowns.

During the first quarter of 2020, household demand for canned tuna increased throughout Europe, particularly in the lockdown countries of Italy, Spain, France, Germany. In Italy, canned tuna sales increased by 35-45 percent during February to March 2020. Production plants owned by Italian tuna giant Bolton group remain fully operational in procurement and shipment of goods.

Considering the gloomy economic outlook worldwide, limited employment opportunities and falling disposable income, demand for more affordable conventional canned tuna is likely to be good in the traditional western markets and also in the emerging markets of the Middle East and North Africa. This did not result in immediate stronger imports, as the main consuming markets were holding sufficient stocks to cater for the demand.

In terms of raw material supplies, tuna packers in Southeast Asia have reportedly been less affected by lower catches as many have been holding sufficient raw material bought in 2019. However, supplies in the coming months may slowdown if catch activities reduce due to the measures implemented to combat COVID-19. In the Western and Central Pacific Ocean, the 3-month FAD fishing closure will take place from July to September 2020. With this closure and likely COVID-19 impacts, frozen tuna prices are forecasted to firm up in the coming months.

Travel restrictions worldwide are causing disruptions in fresh tuna exports, with major airlines cancelling most international flights to the major tuna markets (namely Japan, the United States of America and Europe). In this market, demand will certainly be affected by the global financial slowdown and looming recession. In Japan, the world’s largest sashimi market, demand has weakened considerably and is expected to stay bleak following the cancellation of Spring Festival celebrations and the rescheduling of the Tokyo Olympics from 2020 to 2021.

In the United States of America, demand for non-canned tuna will also be tampered in the spring and summer months, as the national unemployment curve continues to show upward movement.
Detentions and rejections of sardines in Canada, the European Union, Japan and the United States of America

The main importing countries of sardines\(^1\) by value in 2017 were the United States of America, South Africa and France\(^2\). The major producing countries in 2018 were Morocco, Mauritania and the Philippines. This analysis describes border rejections of sardines in the four United Nations members where data is available, that is Canada, the European Union, Japan and the United States of America. Rejections are categorized by chemical, microbiological and other risk categories\(^3\).

**Canada**

Border rejections of sardines totalled 24 cases, representing two percent of total detentions of fishery and aquaculture products during 2018. This compares to 41 cases in 2017. The main causes of rejections and detentions of sardines at the Canadian borders in 2018 were labelling and packaging issues with 12 cases each. Both types of rejections can be found in the “other causes” category. In 2017, among the 41 detentions of sardines, 35 cases were due to labelling issues. In Canada, most labelling issues are linked to mandatory dual language requirements (French and English) for technical specifications.

<table>
<thead>
<tr>
<th>Causes</th>
<th>Number cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labelling</td>
<td>12</td>
</tr>
<tr>
<td>Packaging</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Source: [Canadian Food Inspection Agency](https://www.inspection.gc.ca/en/)

**European Union (Member Organization)**

There were seven alerts and border rejections of sardines in the European Union in 2018, representing two percent of total rejections of fishery and aquaculture products at the European border in 2018. The main reason for rejections was due to the “other causes” category with five cases. Two cases of histamine above maximum levels were also recorded.

Among other causes, the main problems were related to poor temperature control and packaging issues with two cases each. These were followed by one case due to improper health certificate.

In 2017, alerts and border rejections of sardines were eight, mostly related to the presence of histamine above the maximum levels.

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1 The generic name “sardine” includes the following: Brisling or sprats, fresh or chilled, frozen; European sardine, fresh or chilled or frozen or prepared or preserved, not minced, in oil and nei; Pilchards (Sardinops spp.), prep. or pres., not minced, in oil, in tomato sauce or nei; Pilchards(Sardinops spp.) and Sardinellas, fresh or chilled or frozen; Sardines, sardinellas, brisling or sprats, fresh or chilled or frozen or prepared or preserved, not minced in oil or nei; South African pilchard, prep. or pres., not minced; and sprat, prepared or preserved, not minced


3 The “other causes” category includes general issues such as packaging, labelling, improper health certificate and allergens. In general, it refers to all causes not included under chemical, microbiological, histamine and parasite.
Food Safety Issues

Sardines rejected at the European borders in 2018 by hazards

<table>
<thead>
<tr>
<th>Causes</th>
<th>Number cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Histamine</td>
<td>2</td>
</tr>
<tr>
<td>Packaging</td>
<td>2</td>
</tr>
<tr>
<td>Poor temperature control</td>
<td>2</td>
</tr>
<tr>
<td>Improper health certificate</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Source: RASSF

Japan

In 2018, the Ministry of Health, Labour and Welfare in Japan did not report cases of border rejections of sardines. Whereas in 2017, there was only one case recorded due to the presence of Escherichia coli.

United States of America

Sardines detentions and rejections at American borders were 23 in 2018, representing two percent of total rejections of fishery and aquaculture products at the border. Most rejections were due to other causes (18 cases), followed by histamine (5 cases). Within the category of “other causes”, the major causes of rejections were due to adulteration of the product and as a subcategory called “filthy” with six cases each. They were followed by the “insanitary”4 subcategory and no process with three cases each. In 2017, 22 cases of rejections of sardines were reported, with similar types of causes as in 2018.

Sardines rejected at the American borders in 2018 by hazards

<table>
<thead>
<tr>
<th>Causes</th>
<th>Number cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adulteration</td>
<td>6</td>
</tr>
<tr>
<td>Filthy</td>
<td>6</td>
</tr>
<tr>
<td>Histamine</td>
<td>5</td>
</tr>
<tr>
<td>Insanitary</td>
<td>3</td>
</tr>
<tr>
<td>No process</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

Source: FDA

4 According to the Import Refusal Report of the Food and Drug Administration of the United States of America, Insanitary refers to articles that “appear to have been prepared, packed or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health.”
References:

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