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

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

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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>ABC</td>
<td>Allowable Biological Catch</td>
</tr>
<tr>
<td>APA</td>
<td>Alaska At-Sea Processors Association</td>
</tr>
<tr>
<td>ASC</td>
<td>Aquaculture Stewardship Council</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>ASMI</td>
<td>Alaska Seafood Marketing Institute</td>
</tr>
<tr>
<td>CDC</td>
<td>US Center for Disease Control and Prevention</td>
</tr>
<tr>
<td>CFR</td>
<td>Cost and Freight</td>
</tr>
<tr>
<td>CIF</td>
<td>Cost, insurance and freight</td>
</tr>
<tr>
<td>CONAPESCA</td>
<td>National Commission of Aquaculture and Fisheries</td>
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<tr>
<td>DFO</td>
<td>Canadian Department of Fisheries and Oceans</td>
</tr>
<tr>
<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug administration</td>
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<td>FIAM</td>
<td>Products, Trade and Marketing Branch of the Fisheries and Aquaculture Department</td>
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<td>FSIS</td>
<td>Food Safety Inspection Service</td>
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<tr>
<td>GAA</td>
<td>Global Aquaculture Alliance</td>
</tr>
<tr>
<td>GOAL</td>
<td>Global Outlook for Aquaculture Leadership of the Global Aquaculture Alliance</td>
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<td>HPP</td>
<td>Hydrostatic Pressure Processing</td>
</tr>
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<td>IATTC</td>
<td>Inter American Tropical Tuna Commission</td>
</tr>
<tr>
<td>IBGE</td>
<td>Brazilian Institute of Geography and Statistics</td>
</tr>
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<td>ICES</td>
<td>International Council for the Exploration of the Sea</td>
</tr>
<tr>
<td>IFFO</td>
<td>Marine Ingredient Organization</td>
</tr>
<tr>
<td>IFREMER</td>
<td>French Research Institute for Exploitation of the Sea</td>
</tr>
<tr>
<td>IMARPE</td>
<td>Instituto del Mar del Perú</td>
</tr>
<tr>
<td>MSC</td>
<td>Marine Stewardship Council</td>
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<tr>
<td>NEFMC</td>
<td>New England Fisheries Management Council</td>
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<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<td>NSC</td>
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<td>PRODUCE</td>
<td>Peruvian Ministry of Production</td>
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<td>Subpesca</td>
<td>Chilean Subsecretariat of Fisheries and Aquaculture</td>
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<tr>
<td>TAC</td>
<td>Total Allowable Catch</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
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<td>VASEP</td>
<td>Viet Nam Association of Seafood Exporters and Producers</td>
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October 2018

Greece Exports | Seabream | Fresh
Italy Imports | Seabass | Fresh
Italy Imports | Seabream | Fresh

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Chile Exports | Salmon | Frozen
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Top global producers of fish oil
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Peru Exports | Fish oil
Norway Imports | Fishmeal
Norway Imports | Fish oil
Denmark Exports | Fish oil
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Prices Fish oil and rape oil: Europe

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China | Exports | Crab 65
Russian Federation | Exports | Crab 65
Prices Crab: USA, Japan 65
Global fish production is expected to increase by some 2.1 percent in 2018. Capture fisheries production growth will remain limited, while a continuation of the 4–5 percent annual increase in aquaculture production means the sector is now close to becoming the major source of fish for all purposes.

Aquaculture already provides us with around 55 percent of the fish we consume directly and it is the increased availability of farmed fish together with strengthening demand in developing economies that is driving a 1 percent increase in per capita consumption of fish per year, accompanied by a simultaneous rise in the proportion of production utilized for direct human consumption.

International seafood trade is set to expand by 7.5 percent in US dollar terms in 2018, due to the combined effect of a weaker US currency, record high prices for a number of species and generally favourable economic conditions in key markets. This is largely in line with last year, despite escalation of the trade war between the United States of America and China, which has seen tariffs applied to multiple seafood items in both countries. Given their considerable combined importance, this is a development with significant consequences for the wider seafood market, but the full impact is unlikely to be felt until 2019 when the scheduled tariff hike in the United States of America takes effect. For individual species, the implications will depend on the relative global diversity of producers and markets. A reduction in trade is likely wherever alternative options are limited. It also appears that fish exported by the United States of America to China for processing and re-export, such as salmon and Alaska pollock, will generally be exempt from the tariffs.

The FAO Fish Price Index fell back slightly in the second quarter of 2018 after hitting record heights in March this year, but in relative terms, prices remain high for a range of heavily traded species groups. Producers of salmon, cephalopods, groundfish, small pelagics and pangasius are all seeing export revenues rise as a result. Norway continues to benefit from good prices for salmon, cod and small pelagics, in addition to favourable currency trends. Export value is also expected to increase for shrimp producers such as India, Viet Nam, Indonesia and Ecuador in 2018, but this is driven more by farmed shrimp production hikes rather than higher price levels. In China, the world’s largest exporter of seafood, high prices and good demand from regional trading partners is forecast to see the total value of China’s exports rise by some 6 percent in 2018.

EU28 imports of fish and fish products are expected to continue growing in US dollar terms in 2018 as generally stable economic conditions prevail, though the strengthening of the euro versus the US dollar compared with last year is a significant contributing factor to the increase. In the United States of America, import growth is projected to
# World Fish market at a glance

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td>170.9</td>
<td>175.1</td>
<td>178.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Capture fisheries</td>
<td>90.9</td>
<td>91.5</td>
<td>91.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>142.5</td>
<td>83.6</td>
<td>87.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Trade value (exports billion USD)</td>
<td>133.3</td>
<td>153.1</td>
<td>165.8</td>
<td>8.3</td>
</tr>
<tr>
<td>Trade volume (exports live weight)</td>
<td>59.5</td>
<td>60.5</td>
<td>60.8</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Total utilization</strong></td>
<td>170.9</td>
<td>175.1</td>
<td>178.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Food</td>
<td>151.2</td>
<td>154.4</td>
<td>157.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Feed</td>
<td>14.6</td>
<td>15.6</td>
<td>15.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Other uses</td>
<td>5.1</td>
<td>5.1</td>
<td>5.2</td>
<td>2.9</td>
</tr>
</tbody>
</table>

## SUPPLY AND DEMAND INDICATORS

| Per caput food consumption | 20.3 | 20.5 | 20.7 | 1.0 |
| From capture fisheries (kg/year) | 9.5 | 9.4 | 9.3 | -1.2 |
| From aquaculture (kg/year) | 10.7 | 11.1 | 11.4 | 2.9 |

Totals may not match due to rounding.

---

## FAO Fish Price Index

(100=2002-2004)

Source: Norwegian Seafood Council
slow somewhat in 2018, but remains significantly positive due in large part to strong demand for salmon and a recovery of the canned tuna market. Meanwhile, Asian growth continues to be led by China in absolute terms, but percentage gains are higher in the Republic of Korea and fast-evolving seafood markets in the ASEAN bloc. Globally, seafood consumers are increasingly concerned with both sustainability and convenience, offering opportunities for differentiation and product innovation in an increasingly competitive global marketplace.

Reduced quotas and generally tighter supply is expected to continue in 2019 for various important wild stocks, including cod, Alaska pollock, octopus, mackerel, herring, squid and octopus. The outlook for the second anchoveta fishing season in 2018 remains good following positive biomass assessments, but a possible El Niño event may negatively affect the outlook for 2019 for this key South American fishery.

Production growth is slowing in the medium-term for many important farmed species, including salmon, tilapia and pangasius. This tightening of supply for many important species is expected to support prices for most fish and fishery products at relatively high levels in 2019, although plentiful harvests of shrimp worldwide make it a notable exception. On the downside, a forecast slowdown in economic growth in many markets and the introduction of tariff barriers in the United States of America and China is likely to slow the current rate of expansion in international seafood trade, particularly if the Chinese yuan weakens significantly. In the short-term, end-of-year demand will kickstart upward trends in prices for many seafood items as we move through the last quarter of 2018.
Shrimp trade sustained reasonable growth despite the price crash in April and lower than targeted production in India during 2018

Prices of vannnamei shrimp declined to record lows in April 2018, recovered marginally in June and then remained stable, resulting in increased imports across the global markets. Demand grew in most of the markets during the first six months of 2018. There have been extraordinary developments in direct imports by China during this period.

Supply

Shrimp farmers in Asia slowed down production of vannnamei shrimp since April, particularly in China, India and Thailand, as low prices made production unprofitable. In support, the Indian government reduced the tariff on electricity for shrimp farmers. The weaker Indian Rupee against the US dollar also lessened burdens on exporters. However, farmers’ overall income declined, forcing many to reduce production, particularly in the southern states of India where processors have had to bring raw material from as far as West Bengal.

Shrimp farmers in Thailand reduced stocking density in ponds starting in June. Some farmers shifted to black tiger farming which was less affected by the price crush and also has brisk demand from China. The share of black tiger in Thai shrimp aquaculture is relatively small at only 3–5 percent.

Many farmers in Viet Nam and Indonesia also have gone into black tiger aquaculture. Their target markets are Japan and China. Compared with 2017, overall shrimp production looks steady and even increased in both these countries.

In Malaysia 40–50 percent shrimp farms have switched over to black tiger shrimp that commands better sales opportunities locally and abroad.

According to the Ministry of Aquaculture and Fisheries in Ecuador, farmed shrimp production in the country increased by 24 percent to 263 600 tonnes between January and June, compared with the same period in 2017.

The sea catch in Argentina has been affected by unfavourable weather and fishers’ strike. Landings declined by 15 percent to 74 000 tonnes during the first six months of 2018, compared with the same period in 2017. There has been a higher proportion of small shrimp in the catches this year.

The US domestic shrimp landings during the first half of the year have declined by 6.3 percent to 17 500 tonnes, compared with the same period in 2017. This has been the lowest catch recorded since the first half of 2013.
**International Trade**

There have been interesting developments in global shrimp trade during the first half of 2018 since China opened up its market with lower import tariff. Shrimp exporters worldwide now focus more on the Chinese market with encouraging results so far in 2018.

**World top Export and Imports of shrimp (all types) 2017–2018**

<table>
<thead>
<tr>
<th></th>
<th>January-June</th>
<th>percent change 2018/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exporters</strong></td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>(1 000 tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>178.4</td>
<td>241.2</td>
</tr>
<tr>
<td>Viet Nam*</td>
<td>137.1</td>
<td>148.2</td>
</tr>
<tr>
<td>Ecuador</td>
<td>212.7</td>
<td>242.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>83.2</td>
<td>95.1</td>
</tr>
<tr>
<td>China</td>
<td>88.9</td>
<td>85.6</td>
</tr>
<tr>
<td>Argentina</td>
<td>95.1</td>
<td>78.2</td>
</tr>
<tr>
<td>Thailand</td>
<td>57.0</td>
<td>63.8</td>
</tr>
<tr>
<td><strong>Importers</strong></td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>(1 000 tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU28</td>
<td>323.9</td>
<td>363.2</td>
</tr>
<tr>
<td>USA</td>
<td>287.2</td>
<td>303.6</td>
</tr>
<tr>
<td>Viet Nam (e)</td>
<td>200.0</td>
<td>220</td>
</tr>
<tr>
<td>China**</td>
<td>59.0 (200**)</td>
<td>113.6 (186**)</td>
</tr>
<tr>
<td>Japan</td>
<td>99.1</td>
<td>94.0</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>31.1</td>
<td>35.8</td>
</tr>
<tr>
<td>Canada</td>
<td>21.1</td>
<td>23.2</td>
</tr>
</tbody>
</table>

Source: National data. Note: * Exports to 29 markets; (**) including estimated unreported border trade; (e) estimate

**Exports**

Among the top seven players, exports increased from India, Viet Nam, Ecuador, Indonesia and Argentina during the first half of 2018, compared with the same period of 2017, though growth rates in the second quarter of 2018 have been slower than in the first quarter of 2018.

India’s exports to China increased significantly during the first six months of the year (+181 percent at 13 900 tonnes) compared with the same period in 2017. However, export growth to its top two markets of the United States of America and Viet Nam slowed down from 35 percent to 14 percent and from 58 percent to 35 percent respectively, compared with the same period in 2017.

Ecuador’s exports of shrimp have shifted during the review period, as China emerged as its third largest export market, after the EU28. During this period, Viet Nam also increased shrimp exports to the EU28 by almost 50 percent, as well as to the Republic of Korea, Hong Kong SAR and Australia. Reportedly, supplies from Viet Nam to China through illegal border trade have started to diminish, while direct exports increased.

Indonesian exports of shrimp grew by 14 percent during the first six months of the year, due to the 124 percent and 75 percent export rises to China and Malaysia, respectively. Exports also increased to the top three markets of the United States of America (+14 percent), Japan (+3 percent) and the EU28 (+11 percent), but declined by 53 percent to Viet Nam as a result of increased direct exports to China.

China’s exports decreased during this period due to the lower aquaculture production and rising domestic demand of shrimp.

Thai shrimp exports also suffered due to raw material shortage from domestic production, while the import ban on farmed shrimp continues since 2017 to protect local farmers.

**Imports**

During the first half of the year there have been significant changes in Asian shrimp imports. Direct imports of shrimp to China increased by a hefty 93 percent from global sources during this period, supported by the 2 percent import tariff and strict measures against illegal imports from Viet Nam. Subsequently shrimp imports in Viet Nam slowed down with decreased supplies from Ecuador, Indonesia, Thailand and Argentina.

Imports into the EU28 also increased during the review period, as a result of record low shrimp prices ahead of the summer consumption season.

**United States of America**

The US economy and stock market posted positive trends between January and September, with good disposable income that has boosted overall shrimp consumption in the market. Vannamei has been the cheaper and dominant species and summer demand was good.

Amidst the well-supplied market, shrimp imports registered its first year-on-year decline in May after 14 months of continuous growth. During the first six months of the year, imports increased by 5.7 percent, a rate lower than the growth rate during the same period in 2017. The affected product group was raw shell-on shrimp (-3 percent). Imports of raw peeled shrimp increased by 11 percent and of prepared shrimp were up by 10 percent during the first half of the year, compared with the same period in 2017.
Japan

Shrimp demand in Japan is seasonal. Despite the falling market prices, consumer demand failed to improve in 2018.

The earthquake in Hokkaido and strong typhoon in Osaka overshadowed the summer holiday seasons in July and August. Osaka is well known as a good market for black tiger and wild caught shrimp, for which there seemed to be supply shortage this year due to strong demand from China. Elsewhere in Japan, shrimp consumption was reasonably good during O-bon holidays in July and August.

Imports during the review period declined by 4.4 percent to 95,300 tonnes, compared with the same period in 2017. Among the top three suppliers, imports fell from Viet Nam (-9 percent at 23,200 tonnes) and Thailand (-6 percent at 17,300 tonnes), but increased from Indonesia (+6.5 percent) and marginally from India (+1 percent at 10,200 tonnes).

European Union (Member Organization)

Supported by a stable economy and lower shrimp prices, overall imports improved in the EU28 during the first half of 2018. Among the top seven suppliers (Ecuador, Viet Nam, India, Greenland, Argentina, Canada and China), cumulative imports increased from all except from India. The decrease from India was due to a more than 50 percent cargo detention for compulsory inspection of Indian shrimp due to an antibiotic alert.

Ecuador continues to benefit from its ‘zero tariff’ status and imports increased by 8.5 percent during the first half of the year, mostly consisting in raw shell-on and peeled shrimp. EU28 imports from Viet Nam also increased (+46 percent), mainly comprising value-added shrimp.

In early September, a tax was put on Argentine exports to the EU28, which will contribute to a further price rise of Argentine shrimp in the EU28.
Asia/Pacific and other markets

Shrimp demand remained reasonably good in East Asian markets, supported by the low prices. Domestic consumption has been strong in most of the regional markets.

While China remained the market focus for shrimp exporters worldwide, imports also increased in the Republic of Korea, Hong Kong SAR, Taiwan Province of China and Malaysia, for domestic consumption. Viet Nam continued imports for reprocessing and re-exports but at a slower pace compared with 2017, due to the tightening of illegal border trade with China. While Vietnamese imports from its top supplier Ecuador fell by 3 percent to 102 000 tonnes during the first half of 2018, strong supplies persisted from India, Iran and Argentina during this period, making total imports by Viet Nam higher by almost 10 percent (220 000 tonnes).

During the first six months of 2018, direct imports of shrimp to China increased by 92 percent to 113 000 tonnes, with increased supplies from Ecuador (+341 percent at 41 400 tonnes), India (+183 percent at 13 900 tonnes), Thailand (+28 percent at 8 300 tonnes), Indonesia (+125 percent at 3 100 tonnes) and Argentina (+99 percent at 17 100 tonnes). Total imports during this period were estimated to be 6.5 percent lower because of the strong crackdown on illegal supplies from Viet Nam.

The popularity of Argentinean shrimp has increased significantly in China. According to INFOFISH, local sales of jumbo size Argentine red shrimp shot up by 20 percent during the first half of 2018, marketed through 3 000 supermarkets.

The trade war between the United States of America and China resulted in a 25 percent import duty on US seafood including shrimp, effective since June 2018.

Price trends

Vannamei shrimp prices declined to record low levels in April, but stabilized at higher values in June. The trend remained stable during the peak harvesting period between July and September. In comparison, black tiger shrimp prices remained firm as a result of increased demand from China and Japan, but also due to a shortage in supply.

Meanwhile prices of all types of sea-caught shrimp, both tropical and cold water, remained firm and even increased due to the strong demand from China. Prices of Argentine shrimp, particularly large sizes, increased lately as a result of a 15 percent reduction in catches.
Outlook

The main farming season ended in Asia at the end of October and raw material prices are showing upward trends.

According to the Global Aquaculture Alliance (GOAL) forecast, the 2018 output for Ecuador, Indonesia and Vietnam may reach nearly 500,000, 550,000, and 600,000 tonnes, respectively, while Indian production may fall below 600,000 tonnes. Thai production is likely to be below 300,000 tonnes. To ease the raw material shortage, Thai exporters continue to lobby for lifting the import ban on farmed shrimp.

In the market place, the US stock exchange and economy show positive signs reflecting high consumer confidence and good disposal income, indicative of a positive consumption trend for shrimp throughout Christmas and New Year. This in turn will stimulate inventories’ movement in the wholesale trade. The trend is expected to be similar in Europe, as consumers will have access to cheaper tropical shrimp in 2018.

In Japan, the typhoon damages are gradually diminishing, and shrimp consumption is expected to improve starting in the autumn and peak between mid-December and New Year. Demand for processed shrimp in particular will be higher at supermarkets, convenience stores, family restaurants and lunch box manufacturers.

In China, the positive trend in direct imports of shrimp is likely to continue and illegal imports from Vietnam will slow down further. In East Asian markets including China, prices of black tiger shrimp and all types of sea-caught shrimp will also increase from now until the Lunar New Year celebration in early February of 2019.
Global trade for canned and non-canned tuna improved during the second quarter of 2018

The price of frozen skipjack fell 12–15 percent below last year’s during the first half of 2018. Unexpectedly, it declined further to a record low of USD 1 250 per tonne in August and bounced back to USD 1 650 per tonne in October 2018.

Global trade for canned and non-canned tuna improved during the second quarter of 2018

Raw Material Supply

In the Western and Central Pacific, the FAD fishing closure was implemented from July to September. In the Eastern Pacific, the IATTC ‘veda’ was enforced from 29 July to 8 October, when 41 percent of the fleet abstained from fishing. Despite overall low landings during this period, skipjack delivery price to Thailand dropped to USD 1 250–1 450 per tonne between July and September but reached nearly USD 1 700 per tonne by mid-October 2018.

In the Indian Ocean, catches were moderate between April and September, but lower in September due to the yellowfin tuna quota. In the Atlantic Ocean, catches were poor in July due to unfavourable weather, but they have improved since September.

By early July the cold storage capacity was full in Thailand, as raw material imports increased significantly during the first half of 2018. Frozen skipjack imports during this period amounted to 339 600 tonnes, representing an increase of 44 percent (+100 000 tonnes) compared with the same period in 2017. Even with lower imports of yellowfin and bigeye tuna, total imports of frozen tuna reached 436 600 tonnes, 30 percent more than last year.

Raw material imports during the first half of 2018 were also higher in Spain (+8.5 percent at 100 000 tonnes for whole tuna and 52 000 tonnes for cooked loins), in the Philippines (+11.6 percent at 86 500 tonnes) and in Ecuador (+39 percent at 23 700 tonnes).

Fresh and frozen tuna market (non-canned products)

An estimated 120 000 tonnes of frozen tuna fillet/loins entered the international trade for non-canned usages (sashimi and non-sashimi) in 2017. The top markets were Japan, the United States of America and the EU28, but another 10–15 countries imported 1 000–2 000 tonnes each. Imports increased in these markets during the first half of 2018, but other markets were also positive.

United States of America

Summer demand for non-canned tuna was good in the United States of America, particularly for fillets and steaks. The US market is also the world’s largest importer of fresh/chilled tuna, with a total volume of 11 600 tonnes during the first half of 2018, which is almost twice the volume imported by Japan during the same period in 2017. Japan is still the largest sashimi tuna market in the world.

During the review period, there was a notable 26 percent rise in high-value bluefin tuna imports in
the United States of America. Overall supply of air-flown tuna fell by 4 percent due to lower catches of yellowfin and bigeye tuna in the supplying countries.

Imports of the popular tuna fillet (mostly frozen tasteless smoked and carbon monoxide treated products) also increased by 15 percent to 16,000 tonnes during this period. The leading suppliers were Indonesia, Viet Nam, the Philippines and Thailand. There was also a 51 and 7 percent increase in high quality sashimi grade fillet imports from Spain (350 tonnes) and Japan (343 tonnes), respectively.

Japan

This year’s unusual hot summer weather (35–41°C) coupled with natural catastrophes (earthquake and super typhoon in July and August) affected sashimi tuna consumption in Japan. Supermarkets refrained from the customary promotional sales during this year’s summer holiday season. Japanese imports of fresh tuna during the first half of 2018 were the lowest in recent history at 6,490 tonnes (-11 percent).

Strong market preference for frozen tuna fillet and loins persisted in the Japanese sashimi market. Subsequently, imports of frozen tuna fillet rose by 12 percent to 29,200 tonnes during the review period.

The largest shares of Japanese imports were frozen bluefin tuna loins (48 percent, supplied by Malta, Turkey, Mexico, Croatia and Spain), followed by yellowfin (25 percent) and bigeye (14 percent) loins supplied mainly by the Republic of Korea and Indonesia.

The Canadian market was stable for non-canned tuna products and increased its imports of frozen fillet by 25 percent to 274 tonnes during the first six months of the year. Canada is a leading supplier of high value jumbo bluefin tuna (whole/dressed) to Japan.

Frozen tuna fillet imports also increased by 9 percent in the EU28 totalling 12,300 tonnes during the review period, compared to last year. The top markets of Spain, France and Italy all had increased imports.

Among other European markets, summer demand for frozen tuna loins was good in the Russian Federation, where imports increased by 58 percent to 851 tonnes.

Turkish imports of tuna loins reached almost 900 tonnes during the first half of 2018, compared with only 170 tonnes of imports a year ago, mainly supplied by China and Viet Nam.

The largest market for this type of tuna product in developing Asia is the Republic of Korea, which imported 2,185 tonnes during the first half of 2018. In addition, the high sea tuna fleet of the Republic of Korea also supply loins to the domestic market, so that market is actually larger.

In spite of the efforts of Japanese and other Asian exporters, consumer demand for non-canned tuna (whole and fillet) in China is still insignificant in the world’s largest seafood market.
The first quarter's weaker trend in global processed tuna trade reversed during the second quarter of 2018, particularly for products meant for direct consumption. This was reflected in exports from Thailand and Ecuador, from where exports increased by 5 percent and 4 percent respectively during the second quarter of 2018, compared with the same period in 2017. Their negative trends for the cumulative exports during the review period were the result of lower sales in the first three months of 2018.

Exports from the Philippines and Indonesia also increased. Spanish exports during the first six months of 2018 were stable at last year’s level during the same period.

### Imports

Demand for canned and pouch tuna in the big consumer markets of the United States of America, Japan, Egypt and Saudi Arabia, which generally depend on imported supplies, remained positive during the first half of the year in comparison with the same period in 2017, while the negative import trends persisted in the EU28. Imports have also increased in other markets in the Middle East and South East Asia.

### North and South America

Import demand for canned tuna increased in the Americas during the first half of 2018 compared with the same period in 2017.

The US canned tuna market continues to recover in 2018, with strong demand for high value tuna products. Imports increased from the top suppliers, namely, Thailand (+19 percent), China (+16 percent), Ecuador (+4 percent), but declined from Viet Nam (-17 percent). Processed tuna imports amounted to 102,000 tonnes, of which 75 percent (76,500 tonnes) was ‘tuna in cans and in pouch’ for direct consumption.

During the first six months of 2018 high value ‘tuna in-pouch’ imports increased by 44 percent for white-meat albacore to 2,800 tonnes and 30 percent for light-meat (skipjack and yellowfin tuna) to 18,900 tonnes. The import trend for the conventional canned tuna in brine was also good during the review period, reaching nearly 44,000 tonnes, compared with 30,000 tonnes during the same period in 2017.

Among other markets in the Americas, Colombia emerged as the second largest importer during the first half of 2018, purchasing 17,600 tonnes of canned tuna (+42 percent) and overtaking Canada (-7 percent at 15,000 tonnes) followed by Argentina (+19 percent at 9,900 tonnes), Chile (-15 percent at 8,700 tonnes) and Mexico (+16 percent at 7,400 tonnes).

### European Union (Member Organization)

Tuna prices in general have been soft in 2018 compared with 2017, though that has not had any visible impact on demand in the EU28 markets, either for canned/pouched tuna or for cooked loins for reprocessing. The market is holding more than sufficient stocks from 2017 purchases and possibly reached a saturation point for conventional canned tuna products. During the first six months of 2018, total EU28 imports of processed tuna decreased by 5.4 percent to 362,700 tonnes, compared...
to the same period in 2017. About 24 percent (86 700 tonnes) of these were cooked loins usually reprocessed in Spain, Italy, France and Portugal. The leading markets were the United Kingdom, Germany, the Netherlands and Belgium. In the individual EU28 countries, there were increased imports in Germany, Belgium, Austria and Sweden.

The EU28 canned tuna market was largely supplied by external sources (72 percent), largely supplied by Ecuador, the Philippines, Mauritius, Seychelles, Papua New Guinea and China.

Others in Europe

Following the 2018 first quarter’s trend, Swiss imports remained weak at 5 100 tonnes (-5 percent) during the review period. Positive trends continued in the Russian Federation (+ 8 percent at 2 000 tonnes), Norway (+ 25 percent at 1 000 tonnes) and Ukraine (+14 percent at 450 tonnes) through the first half of 2018, compared to the same period in 2017.

Asia/Pacific and other markets

Among the top three markets in the Asia/Pacific region, demand for processed tuna remained positive in Japan with a 5 percent rise in imports to 31 200 tonnes, but declined in Australia (-5 percent at 23 000 tonnes) and in New Zealand (-15 percent at 2 600 tonnes). The lower prices induced reasonably good imports in Malaysia, Singapore, the Philippines, the Republic of Korea, and Hong Kong SAR.

Among the large markets of the Middle East, imports increased in Egypt and Saudi Arabia, but declined in the United Arab Emirates, Libya and Yemen, mainly supplied by Thailand and Indonesia.

Since May 2018, Sri Lanka put a ban on canned fish imports from China including canned tuna due to the presence of worm parasites in some consignments detected earlier in 2018, as reported by INFOFISH. Nonetheless, canned tuna imports in Sri Lanka increased by 240 percent to 110 tonnes during the first half of 2018 compared to the same period in 2017. Sri Lanka is the largest import market for canned tuna in South Asia.

Prices

During the first half of 2018, frozen skipjack prices remained 12–15 percent below 2017 prices. Following the usual norm, the price was expected to firm up during the low catch period in the Pacific between July and September. However, skipjack price fell to a record low of USD 1 250 per tonne in August. Only since September, the market showed a general upturn reaching USD 1 650–1 700 per tonne CFR Bangkok by mid-October. The corresponding price in Manta (Ecuador) was USD 1 850 per tonne.
Outlook

Tuna catches worldwide are expected to improve in the coming months with some easing in prices.

As of mid-October, catches were moderate in the Western Pacific. The skipjack prices reached in October might be the highest this year and they may weaken in the coming months along with improved catches. In the Eastern Pacific, the IATTC ‘veda’ fishing ended on 8 October, but frozen inventories at the canneries were low despite imports from other fishing zones. Prices in other fishing areas and frozen tuna markets will follow the trend set in the Bangkok market.

The positive demand trend for processed tuna is likely to continue worldwide during the second half of the year. Between January and August imports increased in many markets, both traditional and emerging, except in the EU28 where the demand remains weak.

Thailand, the largest producer of canned tuna, maintained its export growth at 10 percent between January and August, indicating a positive market trend in general.

In Japan, the seasonal revival in demand for sashimi tuna is expected during the end of the year and New Year celebrations, while the existing strong demand for canned tuna is likely to continue. The upcoming summer season in Australia and New Zealand between December and March 2019 may stimulate demand for canned tuna in these markets. The positive import trends in East Asia are likely to persist if prices do not shoot up too much.
Alaska pollock and cod prices on the way up

Lower quotas and some unexpected shifts in trade patterns are pushing prices up. The trade war between the United States of America and China is affecting trade and prices, but at least in the short term, it is to the disadvantage of the United States of America. Surimi sales in Asia are increasing, US demand is good, while surimi sales in Europe are stagnating. Prices are on the way up.

Resources

During the summer, ICES recommended a 47 percent cut in the North Sea cod quota, from 53 058 tonnes in 2018 to 28 204 tonnes in 2019. The North Sea cod stocks have not yet fully recovered after the historic low point in 2006, although there has been a slight improvement. One of the difficulties in this recovery is the use of non-selective fishing methods like bottom trawl in some North Sea fisheries, such as the plaice and sole fisheries, which scoop up everything including undersized cod, resulting in a large by-catch of young cod.

The cod fishery in the North Atlantic coast of the United States of America is not doing well again. Cod landings in Maine were at a record low of 36 tonnes in 2017, compared to 9 500 tonnes in 1991. Other New England states fared no better. The US Atlantic cod fishery has all but disappeared. In 1980, a total of 53 600 tonnes of Atlantic cod were landed in the United States of America. In 2016, this total dropped to just 1 500 tonnes.

Landings of Pacific cod have grown remarkably. In 1980, total US landings of Pacific cod amounted to 8 900 tonnes, while in 2016 this total reached 321 400 tonnes. The Groundfish Forum estimates that landings will decline marginally from 385 000 tonnes in 2018 to 367 000 tonnes in 2019.

Surimi

The European market for surimi has stagnated recently, especially in France; surimi sales are declining and raw material prices have been rising. The US surimi industry is facing the same problems as Europe when it comes to raw material prices, as the cost of Alaska pollock and Pacific whiting have risen. There is a high global demand for these species, and that has been pushing prices up. The Alaska pollock industry in the Russian Federation is now shifting to fillet production, leaving less raw material for surimi production.

US demand for surimi is generally good during the summer months. Surimi is often used in salads and picnic baskets during the summer, and the higher prices do not seem to have discouraged consumers. Every year about 90 000–100 000 tonnes of surimi are sold in the United States of America, where there has also been some product development, such as shredded surimi with mayonnaise or surimi flakes.

Demand for surimi in Asia is growing noticeably. The Asian surimi sector uses other species as raw material, such as itoyori, flying fish, sea bream.
and ribbonfish, supplied mainly from China, India, Indonesia, Malaysia, Thailand and Viet Nam. Product innovation there is high and surimi makers offer a diversity of products, such as fish balls, fish cakes, dried surimi products and flavoured products. Surimi prices on the Asian market have been rising due to this increasing demand.

**Trade**

The trade war between the United States of America and China is escalating. In July, Chinese seafood products entering US borders were hit by a 10 percent tariff, including Pacific cod, Alaska pollock, shrimp, salmon and tilapia.

In September, US President Trump announced that 10 percent tariffs would be imposed on Chinese goods worth about USD 200 billion. Fillets of cod and Alaska pollock were taken off the list of products subject to these duties, but Trump also announced that tariffs would be increased to 25 percent, effective 1 January 2019.

China retaliated immediately, imposing new tariffs of 10 percent on imports of US goods worth USD 60 billion. Seafood was not much affected by these counter-measures, since only smoked Pacific salmon and fishmeal/pellets were included in China’s list.

US exports of Alaska pollock went up by volume as well as value during the first six months of 2018. Total Alaska pollock exports (including surimi) amounted to 244,000 tonnes worth USD 671.8 million, representing a volume increase of 9.5 percent and a value increase of 12.9 percent.

Exports of Alaska pollock fillets from the Russian Federation more than tripled to 31,300 tonnes during the first half of 2018. This growth resulted from an increase in value-added products and increases in fillet prices. Exports of frozen Alaska pollock fell by 7 percent to 437,600 tonnes and cod exports fell to 53,400 tonnes (-5.4 percent). Exports of cod fillets fell by 44.3 percent to 9,300 tonnes. Exports of haddock fillets were stable at 2,300 tonnes. Exports of minced products including surimi doubled to 6,700 tonnes.

Norway registered a decline in export volumes of fresh and frozen cod during the first half of the year, but the value of cod exports increased. Total exports of fresh cod decreased to 53,000 tonnes at a fob value of NOK 1.9 billion, representing a 5 percent decline in volume and a 3 percent increase in value. Exports of frozen cod also decreased to 43,000 tonnes at a fob value of NOK 1.6 billion, down by 5 percent in volume and up 5 percent in value. Exports of traditional whitefish products, like klipfish, salted fish and stockfish, were up by volume and value during the first half of 2018. For klipfish, Portugal and Brazil are the most important markets, while the main outlets for salted fish are Portugal and Italy. For stockfish, the major markets are Nigeria and Italy.
UK retailers are experiencing rising sales of Alaska pollock products. During a 12-month period ending in early August 2018, retail Alaska pollock sales increased by 10.6 percent to GBP 115.4 million (USD 149.2 million). Prices were up compared to earlier, so the volume only increased by 6 percent over the same period. The most popular product form is Alaska pollock fish fingers, which grew by 7.5 percent to GBP 56.2 million. The product that increased the most was chilled Alaska pollock meals, up by 73 percent to GBP 835,000.

Prices

Wholesale Alaska pollock prices in the Russian Federation have risen by 24 percent in Russia’s Far East and by 25 percent in Central Russia. There is an increased demand for Alaska pollock products in China, and to a lesser degree, in the EU28.
Outlook

It is expected that Russian Federation exports of Alaska pollock fillets will continue to grow during the second half of 2018. Landings of Alaska pollock from the Sea of Okhotsk are expected to reach about 140,000 tonnes in November and December. Alaska pollock prices are set to increase everywhere, partly as a result of the trade war. Russian Federation Alaska pollock prices will also remain firm or edge further upwards. The international demand for Alaska pollock is good, the Russian Federation ruble is weak against both the Euro and the US dollar, and Alaska pollock fishing in the Bering Sea has been poor lately, putting pressure on supplies and prices. There is a growing demand on the domestic market, which also contributes to price pressure. As the B season is well underway, observers now believe that Alaska pollock prices will climb from the relatively low levels of the previous five years. It seems that the times of cheap Alaska pollock are over.

Cod prices are also expected to go up. There will be quota cuts for next year in the North Atlantic and the Barents Sea, and the cod-fishery on North America’s Atlantic coast is very poor and not improving.

The trade war between the United States of America and China will trigger some changes in the structure of international seafood trade. The Russian Federation is expected to supply China with more product, as is Norway, and US exporters may turn to other countries, such as Cambodia, Thailand and Viet Nam, to process their raw materials.

Trump’s Trade War could backfire, according to Alaska’s At-Sea Processors Association (APA). It could end up favouring Russian Federation (and Chinese) exporters at the expense of Alaska processors. Because Alaska exporters will face high tariff on their exports to China, Russian Alaska pollock exporters can send their Alaska pollock for processing in China, because fillets of cod and Alaska pollock were removed from the original US list of products subject to the penalty tariffs. Chinese processed Alaska pollock fillets with Russian Federation origin can be exported to the United States of America with tariff-free access. Not only Russian Federation suppliers could do this, other large suppliers of whitefish, as for example Norway, could do the same. Thus, Alaskan processors could end up with a competitive disadvantage due to Trump’s Trade War.

Alaska’s fish exporters to Latin America are ready to break new ground. Current exports to Brazil are about 2,000 tonnes per year, but the Alaska Seafood Marketing Institute (ASMI) hopes to double this within five years. The expansion plans are mainly targeting Alaska pollock and salmon. Brazil is a very important market for Portuguese and Norwegian salted and dried cod (klipfish), and the Alaskans want to enter this market through cooperation with Portuguese processors. The European surimi market has come to a standstill. In fact it has been declining for the past seven years, while demand in Asia is growing, and Asian producers are introducing new products based on surimi from local species. Tropical surimi in Europe is declining. Surimi consumption in the United States of America is high, and will probably continue to grow, especially as new products are being introduced. But consumer surimi prices will continue to rise, partly due to higher raw material prices, and partly because of growing demand and limited supplies.
Tight supply situation continues

Supplies of both octopus and squid are getting tighter. There is now an urgent need to improve the management of these resources. Overfishing on the high seas and in areas adjacent to national Exclusive Economic Zones (EEZ) is becoming a serious problem. Demand is rising globally, and prices are going through the roof.

Octopus

The 2018 start of the Moroccan octopus fishery was delayed by one month, until 1 July, due to the high presence of juvenile octopus in some areas. The Moroccan Fisheries Directorate expressed concern about the difficult biological situation of this fishery and the alarming decline of the resource. By delaying the start of the fishery, authorities hoped to improve the condition of this resource. Due to this action and the general scarcity of octopus, prices have been going up.

In spite of this delay, the quotas for the 2018 season were only slightly below the 2017 quotas. The quota for octopus frozen at sea was set at 8,190 tonnes, for coastal trawlers set at 1,430 tonnes, for artisanal fishers in Dakhla set at 3,380 tonnes, and for the artisanal fishers in Boujdour set at 800 tonnes. Thus the total quota for 2018 amounted to 13,800 tonnes, compared to 14,000 tonnes last year. This does not mean that one may expect this amount to be landed. Last year, the offshore fishery only managed to land 48 percent of its quota, the coastal fishery 69 percent, while artisanal fishers landed 99 percent of their quota.

**Cephalopods production (2016)**

- Squid: 77%
- Cuttlefish: 11%
- Octopus: 11%
- Others: 1%

Source: FAO

**Japan | Imports | Octopus**

Top three origins

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<th>Unit: 1,000 tonnes, January-June</th>
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Source: Japan Customs

**Republic of Korea | Imports | Octopus**

Top three origins

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Source: Korea Trade Statistics Promotion Institute
Trade

Octopus prices have been high in all landing areas in Morocco, Mauritania and Spain. Landings have been relatively low. Some of this can be attributed on unfavourable weather conditions. Moroccan octopus prices have been rising, as the growing demand worldwide has not been met due to falling supplies both from North Africa and the Mediterranean. Demand continues to grow in the United States of America and it is strong in Japan and Europe.

The high prices have had an effect on consumer behaviour in southern Europe. Consumers have started to buy lower quality octopus at a cheaper price because of reduced purchasing power. High quality octopus has become a luxury product for example in Spain, and frozen product is consequently difficult to find in stores. Some Spanish retailers have stopped carrying octopus altogether because of the risk of being stuck with unsold product.

The supply shortage is clearly reflected in the trade figures. Japanese imports of octopus during the first half of the year dropped to 20 700 tonnes, 26.1 percent less than in the same period in 2017. The biggest declines were in Morocco and Mauritania supplies, which decreased their exports to Japan by 49.8 percent and 36.3 percent, respectively.

Imports into the Republic of Korea declined to 33 900 tonnes, down 8.5 percent compared to the same period in 2017. This decrease was accounted for by its largest supplier, China, which delivered 14 800 tonnes, some 17.8 percent less than in the same period last year.

The elevated octopus prices have forced some small and medium operators out of the market because the margins have become too slim. Last year, octopus prices hit a high point and they have continued to rise since then.

Squid

Squid has become an increasingly important species in the global seafood market in recent years. Squid catches increased from 3.1 million tonnes in 2000 to almost 4 million tonnes in 2015, but then dropped to 2.8 million tonnes in 2016, causing experts to worry about the state of the resource. During this period the prices have risen dramatically.

Some of the biggest industry players are now joining forces to see what can be done to improve squid fisheries management. One of the problems is that the three most important squid species (jumbo flying squid, Argentine shortfin squid, and Japanese flying squid) all span national EEZs as well as the high seas. This allows vessels to fish for these species on the high seas where no quotas are enforced, which results in overfishing and the possible depletion of the resource.
Twenty percent of global landings of squid are from distant water fleets, mostly operating off the coasts of South America. Only the US East Coast fishery for longfin loligo squid has been certified as sustainable by Marine Stewardship Council (MSC). Squid may become a scarce and very expensive commodity in the future, unless all the major players in this sector reach some agreement.

The Technical Commission of the Maritime Front in Argentina banned all squid fishing in the common fishing zone between Argentina and Uruguay since 31 August. The reason given was to protect the resource. There have been concentrations of juvenile squid in the area and by closing down the fishery, the Commission hopes to allow the resource to recover for future seasons.

Chilean authorities have taken an initiative to limit the giant squid fishery by introducing regulations on fishing gear for this species. Fishing of the species Dosidicus gigas or giant squid can only be done with the use of a jig (group of hooks joined together) and/or a hand line. Other types of gear are prohibited in order to protect the resource, according to the Commission of Maritime Interest, Fisheries and Aquaculture. The Chilean government announced in early August that it would propose a 25 percent increase in the giant squid quota. Of this quota, 80 percent is allocated to artisanal fishers, while the industrial sector gets the remaining 20 percent.

In late August, the Argentine undersecretary of fisheries said the country would not issue new squid fishing permits to Chinese vessels. He explained that the resource is not biologically fit to support more vessels to participate in this fishery. The Chinese are eager to source squid for their domestic market, but they nevertheless rejected a proposal to lower export tariffs for Argentine products to China.

Landings of Japanese flying squid (Todarodes pacificus) have been next to zero this season. Normally, the season runs from July until October, but as of the beginning of September, almost nothing had been landed in Chinese ports. The fishery in the Yellow Sea and the Sea of Japan has been in decline for the past 3–4 years, but this year catches have dropped dramatically. As a consequence, prices are very high. Some Chinese traders have tried to use the Argentine short-fin squid as a substitute. However, consumer acceptance is slow. The Chinese consumer is not used to this species, which has not yet been well accepted by the market. But the test marketing continues.

Trade

China is now the major exporter of squid and cuttlefish in the world. During the first half of 2018, China’s exports of squid and cuttlefish amounted to almost 250,000 tonnes, up by 3.2 percent compared to the same period in 2017. Japan, the largest market, imported 8.4 percent less than in 2017 (46,400 tonnes), while the Republic of Korea increased imports by 162.4 percent (44,000 tonnes).

China imported 26.7 percent more squid and cuttlefish (152,000 tonnes) during the review period than in 2017. Argentina, the main supplier, increased shipments to China by 87 percent to 43,000 tonnes. Indonesia also increased exports to China by a massive 73.7 percent to 33,000 tonnes. There have been slight increases in US exports of squid and cuttlefish to China amounting to 10,900 tonnes (+6.9 percent) during the first half of 2018. This is expected to decline during the second half of the year because of the new tariffs.
Spain increased squid and cuttlefish imports by 6 percent to 153,600 tonnes, while US imports increased by 1.1 percent to 17,700 tonnes.

Prices

Prices for squid have been rising sharply over the past two years, mainly as a result of the decline in landings in 2016 and in 2017, but also because of strong demand. In general, cephalopod prices have doubled in two years. In early 2018, there was a slight downward correction, mainly in connection with the first fishing season (March–April) in the Falkland Islands (Malvinas), where landings were good. Nevertheless, the Argentine Illex squid season was short and not very good this year, which brought squid prices back up. At the same time, fishing for Illex squid in international waters has not been very good, pushing prices further up. With the state of the resources being what it is, and demand still growing, one must expect very tight supplies and rising prices also for squid.

Outlook

Octopus demand continues to grow, while supplies continue to be tight, translating into higher prices. The situation is similar or even worse for squid. Judging by landed catches over the past few years, it appears that during this period the stocks have been reduced. Supplies of squid will be falling short of demand and prices will be high.
TiLAPIA

GLOBEFiSH HiGhLiGhTS

Trade war between the United States of America and China is shaking up the tilapia market

After its inclusion in the latest USD 200 billion dollar list of tariffs put forward by the US President Trump’s administration, tilapia from China has been subject to a 10 percent duty as of 24 September, rising to 25 percent in January 2019. The US market for tilapia is the largest in the world and China is the largest supplier, so the implications for the wider market are potentially significant.

Global tilapia production is expected to rise 3–4 percent in 2018, reaching around 6.3 million tonnes. Around 30 percent of this volume comes from China, although the majority of production growth is concentrated in smaller producing countries. Ongoing private and public investment into tilapia aquaculture in Latin America and Africa is expected to see this trend continue in the future. The relative importance of the large traditional players is also diminishing on the market side as tilapia consumption is declining in the United States of America and demand becomes more geographically diversified. Consumer appetite for the species in markets such as Mexico, Saudi Arabia, Canada, Côte d’Ivoire and the Russian Federation, is driving an increasing proportion of international trade.

Global tilapia prices have been declining steadily since early 2015 as the US market has faltered. However, the additional demand from emerging markets has been helping to hold tilapia prices marginally above last year’s levels so far in 2018, despite the disruption resulting from the imposition of the new tariff regime in the United States of America. The price of frozen whole tilapia imports into the United States of America averaged USD 1.81 per kg (CIF) in the first 6 months of the year, compared with USD 1.70 in the same period in 2017, while prices for frozen fillet were flat at USD 3.40 per kg (CIF). Prices for fresh tilapia fillet in the United States of America were up around 2 percent for the same period, to USD 6.63 per kg (CIF), compared to last year.

Asia

A survey of Global Aquaculture Alliance members estimated China’s total tilapia production at 1.75 million tonnes in 2018, approximately on par with 2017. China’s dependence on the US market continues to decline. In the first quarter of 2018, volumes destined to the United States of America accounted for around 33 percent of the total value of Chinese tilapia exports. This proportion has been steadily decreasing since 2015, when it was around 50 percent. A weaker yuan in the second half of 2018 is unlikely to prevent a further drop in volumes destined to the United States of America resulting from the tariffs that Chinese exporters must now contend with. Markets in Latin America, Africa and the Middle East are now absorbing a higher share of Chinese production. Higher wages and increased domestic production are also contributing to an overall drop in Chinese export volume while a reduction in export subsidies is also having an effect. Exporters in China benefit from VAT rebates (VAT paid in production, distribution and sales) for exported products including tilapia, and a reduction in VAT rates in May this year equates to a reduction in these rebates.

Meanwhile, Indonesia is expected to see a small decline in production volumes in 2018, to around 830 000 tonnes, the vast majority of which will be sold on the domestic market. Smaller Asian producers such as Viet Nam, the Philippines, Thailand and India are expected to register a net increase in harvests.
United States of America

The major concern for tilapia importers in the United States of America at present is how consumers will react as tariff costs are passed down the supply chain. Demand amongst US consumers has been suffering in recent years due to negative public perception of the species and the market is unlikely to react well to a price hike. While frozen tilapia from China still constitutes a major proportion of US imports of tilapia, there is a growing number of alternatives for US buyers. Taiwan Province of China and Indonesia supply frozen tilapia, while premium fresh fillets are provided by Honduras, Colombia and Costa Rica. The US market already absorbs the vast majority of the production from these countries and it seems that some price increase at the consumer level as a result of the tariffs cannot be avoided. While this effect may be dampened by the high price of directly competing products such as pangasius, there is a threshold where consumers will shift to alternative proteins such as chicken.

Latin America

Tilapia production continues to increase in Latin American countries. Tilapia ranks second in terms of the number of aquaculture establishments in Brazil, according to preliminary data from the survey of the Brazilian Institute of Geography and Statistics (IBGE). There are 110,072 sites in total, concentrated in particular in the South (55.6 percent) and Southeast (23 percent). Tilapia is the most commercialized aquacultured species and the potential offered by plentiful water resources in Brazil has seen it grow to become the fourth largest producer globally.

Colombia surpassed Honduras and became the main supplier of fresh fillets to the United States of America. According to the National Oceanic and Atmospheric Administration (NOAA), Honduras exported USD 24.1 million to the United States of America between January and June of this year, 9 percent less compared to the same period of last year. The Colombian Ministry of Agriculture is actively promoting tilapia internationally and sales abroad rose 37.6 percent over this period. In Honduras, lower rainfall has created favourable conditions for tilapia production, both for domestic consumption and export. The Honduran industry is targeting tilapia exports worth USD 50 million in 2018.

Aquaculture production in Mexico is growing at a rate of 13 percent per year, well above the worldwide average rate of 6 percent, according to the National Commission of Aquaculture and Fisheries (CONAPESCA). Half of the 9,000 aquaculture sites operating in Mexico are tilapia farms. Nevertheless, local producers are concerned about the “unfair competition” represented by the imported product from China. While Mexican tilapia is sold in the market at 60 pesos per kg, the imported product is sold at 40 pesos per kg, and according to farmers glazing exceeds 30 percent.

European Union (Member Organization)

The EU28 market for tilapia continues stagnant and a stronger euro versus the yuan has failed to stimulate importer demand. Total EU28 imports in the first half of 2018 were 6 percent less than in the same period in 2017, even as average euro prices of those imports fell by 8 percent. The majority of tilapia sold in the EU28 is cheaper frozen tilapia from China, but some retailers have turned to premium tilapia products in order to try to regain some of the market.
Tilapia trade between China and the United States of America picked up sharply since mid-2018, the peak production season in China, as exporters scrambled to ship volumes before the effective dates of the new tariffs (6 July). After the new regime of further tariff increases comes into force in September and January, however, US imports will likely fall back and resume their declining trend, while the Chinese industry will increase its focus on alternative markets and domestic consumption. Any other producers not already entirely dependent on the United States of America will see this as an opportunity. Meanwhile, upward trends in production and consumption in emerging economies in Latin America, Africa and Asia will lead overall growth in the sector. Total production growth in the medium term is likely to remain positive but slow compared with the relatively rapid rate of expansion observed in the last five years or so.
Viet Nam on track for USD 2 billion annual pangasius export target as high prices continue

Viet Nam’s farmed pangasius industry, the largest in the world, took in just over USD 1 billion in export revenue over the first six months of 2018, boosted by particularly strong sales in China and record high prices. Production growth in Viet Nam is now expected to slow and the relative importance of other producers is set to increase. The most recent industry stakeholders’ estimates for global pangasius production growth in 2018 are around 7–8 percent, but this is seemingly insufficient to rein back the steep upward price trend which has been the major feature of the market since mid-2017. While anti-dumping duties and stricter inspection procedures have hindered US pangasius imports in recent years and the long-lasting impact of negative media coverage has done the same in the EU28, demand from China and other Asian markets, particularly in the ASEAN bloc, is strong and strengthening. This has pushed global prices to record levels, with pangasius fillets out of Viet Nam selling at USD 3.35 per kg (FOB Ho Chi Minh City) as of October 2018, almost 30 percent above the same month in 2017. In addition to the traditional role of pangasius as a commodity whitefish, the species is also gaining traction as a premium seafood option. Efforts continue on all fronts to improve the sustainability of the production process and to effectively communicate these improvements to the consumer through ecolabelling and the associated standards.

Viet Nam

According to statistics published by the Vietnam Association of Seafood Exporters and Producers (VASEP), the respective shares of Vietnamese pangasius export value over the first six months of 2018 were 25.1 percent for China (including Hong Kong SAR), 19.6 percent for the United States of America and 11.7 percent for the EU28. The total value of exports directed to these same markets over the same period was, respectively, USD 251 million, USD 197 million and USD 117 million, equating to increases of 46.7 percent, 11.6 percent and 16.2 percent. China’s rapid growth is helped by Viet Nam’s significant trade links with China and the fact that Chinese importers are generally less stringent in terms of the product requirements than they are with the US and EU28 markets, though each present their own set of difficulties. Meanwhile, sales to the ASEAN bloc rose by 37.7 percent in the first half of 2018 compared with the same period in 2017, led by Thailand, Singapore and the Philippines. The United Arab Emirates was another notable growth market, registering a 130 percent increase to reach USD 27 million.

Vietnamese farmed pangasius production is forecast to reach around 1.3 million tonnes in 2018, but growth potential over the next two years or so is expected to be limited. Fingerling quality is reportedly low and mortalities are high, which will affect future output and possibly contribute to further price rises. Progress is being made in addressing disease...
concerns, as a large-scale vaccination program is underway that will potentially reduce dependence on antibiotics. On the market side, the pangasius industry is pursuing a more coordinated marketing strategy at the national level, funded jointly by some 20 Vietnamese pangasius exporters, with the primary goal of improving the image of the species abroad.

**United States of America**

Anti-dumping duties of USD 3.87–7.74 per kg, depending on the specific exporter, remain a major obstacle to the importation of Vietnamese pangasius into the United States of America. The high prevailing prices are another factor reducing the appeal of the species from a buyer's perspective and volumes have fallen this year even as the total value rose. Viet Nam’s access to the US market is set to become easier, after the Food Safety Inspection Service (FSIS) of the United States Department of Agriculture (USDA) announced the completion of on-site food safety inspections in Viet Nam in mid-September. All pangasius products will be subject to re-inspection at points of entry. The regulatory responsibility for ensuring standards for products derived from Siluriformes (catfish) was transferred to the USDA from the Food and Drug administration (FDA) in 2017.

**China**

China’s rapidly growing share of the global pangasius market reflects both a fast-maturing seafood market and insufficient domestic production levels. Growing demand for a widening variety of whitefish products is a prominent trend with broader expansion of the seafood market within China. The versatility of pangasius and the extensive trade links between China and Viet Nam ensures its appeal. Chinese buyers’ popularity with Vietnamese exporters is also due to their relatively less stringent requirements and their willingness to compete with EU28 and US importers even as prices reach extreme heights. However, as Vietnamese producers are aware, various risks remain, because Chinese requirements may tighten in line with consumer preferences and the market’s supply from domestic sources may increase.

**European Union (Member Organization)**

EU28 imports of pangasius continue a decade-long downward trend with a decrease in volume to 35 600 tonnes imported in the first half of 2018, about 13 percent less than last year during the same period. Due to a significantly higher average price, the drop in value was only 9 percent. The spiking prices may be exaggerating the extent of any weakening in underlying demand. Around 98 percent of the pangasius absorbed by the EU28 market is produced in Viet Nam, whose marketers have struggled with the long-lasting effect of negative media coverage.

**Other markets**

Latin American markets have been losing the battle for increasingly expensive pangasius on the global market. After strong volume growth over the last few years, imports in the first half of 2018 fell back significantly. For the largest three Latin American markets of Mexico, Brazil and Colombia, VASEP reported a decrease of 13 percent in volume for the latter period, while the drop in volume terms was around 24 percent.
Outlook

Flat or minimal growth in Viet Nam’s pangasius output over the next 2 years will be offset to some extent by growth in other producing countries such as India, according to survey respondents at the recent Global Outlook for Aquaculture Outlook (GOAL) event. However, Viet Nam is by far the dominant exporter and the relative lack of Vietnamese supply combined with the pace of growth in China and the ASEAN region is likely to maintain prices at a relatively high level for the foreseeable future. If there is some shock to consumer demand in China, or a tightening of import requirements by Chinese authorities, the effect on market stability could be significant.
Focus on Turkey as economic worries dominate

Runaway inflation, a severely weakened currency and the Turkish central bank reaction to these issues are factors that increasingly concern the Turkish seabass and seabream aquaculture industry, as wider market prices remain depressed by supply surplus.

The rapid growth rate of Turkey’s seabass and seabream output in recent years has been putting increasing pressure on market prices. The price peaks normally associated with mid-summer demand in Europe were noticeably absent this year. Greek 300–450 g seabass were selling on the Italian market at EUR 4.50 per kg in July this year, EUR 1 lower than the same month in 2017. The supply and demand situation is somewhat more balanced in the case of seabream but prices were still down by EUR 0.40 per kg over the same period. In Turkey’s case, the state of the currency has also been contributing to the downward pressure on euro-quoted prices of what is already a cheaper product. Average EUR export prices for bass and bream out of Turkey in the third quarter of 2018 were down 20 percent and 15 percent respectively, compared with the same quarter in 2017. The same comparison in terms of Turkish lira translates into increases of 19 percent and 27 percent for seabass and seabream respectively, illustrating the pronounced difference in price levels from the perspective of a EU28 buyer and a Turkish exporter.

More generally, the underlying instability in the Turkish economy that has been driving the exchange rate trend adds an additional layer of complexity to the market situation and represents a significant source of risk to the financial wellbeing of the Turkish aquaculture sector. Interest rate hikes have increased the cost of borrowing, while industry reports confirm that consumer demand is suffering in the domestic market and companies dependent on domestic sales are losing money. This is likely to significantly dampen the risk enthusiasm of an industry that has been expanding aggressively in recent times and is likely to lead to more conservative stocking plans in the medium term. In the longer term, it is possible that a sustained period of low prices and a challenging financial environment will be the catalyst for consolidation in the Turkish industry as smaller producers struggle with costs.

Turkish exporters have seen the composition of their trading partners shift dramatically in recent years. In the first six months of 2018, Turkish exporters have decreased their overall dependence on the two large EU28 markets of Italy and the Netherlands, and increased export volumes to Spain and Greece, as well as the United States of America, the Russian Federation and Lebanon. The fact that Greece and
Spain are significant producers of both seabass and seabream, reflecting the widening divergence between prices of fish produced in the EU28 and Turkish product. For seabass, the combined share of Greece and Spain of Turkey’s export volume in the first half of 2018 was 20 percent, up from 8 percent for the same period two years ago. Their share of Turkish seabream exports rose from 12 to 23 percent over the same time frame.

In Greece, the details of the acquisition of Nireus and Selonda by a group of investors led by private equity firm Amerra capital were finalized in mid-June. Nireus and Selonda are two of the largest Greek aquaculture companies, and it is hoped that this acquisition will help to increase production efficiencies and coordinate marketing efforts by the Greek seabass and seabream sector. Greece remains heavily dependent on a relatively small selection of major EU28 markets, with Italy, Spain, France and...
Portugal accounting for 84 percent of seabass export volume and 82 percent of seabream export volume in the first half of 2018. These proportions have been increasing since 2016, likely as a result of the difficulties faced by Greek exporters in competing with significantly lower priced Turkish fish in markets where origin is not of primary importance to buyers.

In a market threatened by rapidly growing production volumes in the low-price environment, companies have been increasingly focusing on frozen, ready-to-cook and ready-to-eat products in order to cater to demand for convenience-oriented, value-added options. Other avenues for differentiating products include origin certification schemes and marketing campaigns, as well as ecolabels that communicate the sustainability of production processes to the consumer. In mid-September, the Aquaculture Stewardship Council (ASC) officially launched new standards for seabass, seabream and meagre. From the launch date, companies have a six-month effective period to have audits conducted before the new standard can be applied to their products. The ASC states that the scope of the standard will extend to “impacts on biodiversity, feed use, escapes, nutrient loading and carrying capacity, benthic impacts and siting, disease and parasite transfer, chemical inputs and social impacts (i.e. labour and community impacts).”

Italy

Italian imports of seabass were up by 10 percent in volume in the first half of 2018 compared with the first half of 2017, while imports of seabream rose by 6 percent over the same period. Average unit values were down 6.9 percent and 4.5 percent respectively, for the same period, as a result of lower prices across all origins. Greece remains the primary supplier to the Italian market, accounting for 54 percent of seabream and 57 percent of seabass supply in the first half of 2018. Overall demand for seabass and seabream is relatively solid amongst Italian consumers, but excess import supply is keeping prices down despite stable domestic production.

Spain

The Spanish market situation is comparable to that of Italy, with low to zero growth in domestic production but substantially reduced prices due to increased availability of fish on the international market, particularly from Turkey. Seabass prices at wholesale markets in Madrid and Barcelona were up to 20 percent below last year’s levels in August, while seabream prices also dipped below 2017 equivalents by about 3–4 percent.

France

Slowing economic growth and a drop in consumer confidence in France does not seem to have had a significant negative impact on demand for seabass and seabream, although these effects may have been offset by weaker price levels. Seabass wholesale prices have fallen by about 12 percent for smaller sizes and up to 25 percent for large sizes in 2018 on the back of increased import volumes, particularly from Greece.

Other markets

The plentiful supply of cheaper fish, particularly seabass, is evidenced in the higher import volumes at lower prices reported by the United Kingdom and the Russian Federation. Demand for both species is seemingly weakening in Germany, where volumes were down in the first half of 2018. Meanwhile, imports of seabass by the United States of America continue to climb, reaching 4 100 tonnes in the first six months of 2018, with Turkey supplying around 45 percent and Greece about 36 percent.

Outlook

Total production of seabass and seabream is expected to increase by 6 percent this year to around 400 000 tonnes, with the bulk of the additional volumes consisting of seabass supplied by Turkey. The market can be expected to slow as we move into the last few months of the year and prices are likely to fall further. Profit margins will remain under threat for the foreseeable future, meaning that production efficiency gains and market development are key priorities for all stakeholders. Consolidation of the sector in Greece can be expected to contribute to this objective, but the economic situation in Turkey is a significant source of uncertainty. One likely impact of continued instability is a reduction in overall production growth rates as companies adopt more conservative approaches to business planning, which may then help to support global market prices at more sustainable levels.
Profitable growth continues in the global salmon sector despite price volatility

Biological challenges at farm level are the notable negative in what otherwise remains a generally positive outlook for the global salmon industry. Production growth is slowing but steady and prices are high across the board, pushing up export revenues in the first half of the year.

Norway

Salmon

A projected 5 percent increase in total farmed Atlantic salmon production during 2018 in Norway has seen a slight drop in average salmon export prices in the first half of the year, with fresh whole Atlantic salmon selling for NOK 64.28 (USD 8.09) per kg, around 3 percent below the same period in 2017. This period was marked by considerable price volatility, with record heights of around NOK 80 (USD 9.90) per kg breached at the end of April as demand peaked and supply tightened due to cold water temperatures. The summer months saw a steep downtrend to the mid-to-high NOK 50s (USD 6.70–7.10) per kg, however, as farmers were pushed to harvest large quantities of fish relatively earlier than normal, prompted in part by high sea lice levels at several sites.

Currency trends play an important role in Norway’s salmon export flows and in 2018 the depreciation of krone versus the euro saw the proportion of exports directed to the EU28 market increase significantly, at the expense of the US and Asian markets. According to the Norwegian Seafood Council (NSC), the total NOK value of exports rose 9 percent on the back of a 13 percent increase in volume. In euro terms, growth in exports to the EU28 was approximately flat year on year for the same period, suggesting that underlying demand growth is limited. According to NSC’s analysis, Norway’s share of global salmon markets, particularly in Asia, is declining as its growth rate lags that of other producers such as Chile. In the
first half of 2018, the volume of Norwegian exports to Asian markets fell by 8 percent, equating to an 11 percent drop in NOK terms.

With biomasses in Norway now reduced, year on year supply growth is expected to be significantly lower at the end of 2018, and Fish Pool forward prices reflect expectations of high NOK 60s (USD 8.20–8.30) per kg as the year-end approaches. Norwegian output is expected to rise again in 2019, with market research firm Kontali estimating a 6 percent increase for the year and consensus forward prices for 2019 as a whole are on par with 2018 at NOK 63.70 (USD 7.75) per kg. However, reports of sea lice problems are still emerging from industry sources, and this represents a potential limitation on the rate of output growth.

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**Trout**

After 2 years of tight farmed trout supply and high prices, biomasses at Norwegian trout farms have returned to healthy levels and exports have risen substantially in 2018. Prices have also fallen on increased volumes, with fresh whole trout selling at an average of NOK 62.64 (USD 7.90) in the first six months of the year, down 15 percent from the same period in 2017. Belarus and the United States of America are the two key growth markets for the Norwegian trout exports, together accounting for almost 40 percent of exported value in the first half of 2018.

### Latin America

**RECENT NEWS**

The Chilean salmon industry is concerned about the escape of 690 000 fish from a Marine Harvest farming site in the south of the country. Some of these fish were treated with incomplete course of antibiotics and are not suitable for human consumption, with the potential to cause severe environmental damage. Health authorities requested a cessation of operations at the site for a period of 30 days for precaution. As of early October, Marine Harvest has reported that 5.7 percent of escaped salmon have been recaptured.

According to the latest report on fisheries and aquaculture of the Chilean Subsecretariat of Fisheries and Aquaculture (Subpesca), salmonid harvests during the first half of 2018 rose by 19 percent reaching 384 700 tonnes. Atlantic salmon accounted for 81.6 percent of this volume, followed by rainbow trout with 10.3 percent and Pacific salmon (mainly Coho) with 8.1 percent. The value of Chilean exports have been rising on the back of high prices and rising output, with the United States of America, the Russian Federation and China as the standout growth markets. Chile is the only major producer that increased its share of exports of Atlantic salmon to the US market during the period.

### Recent News

In March 2018, the Argentine government announced a cooperation agreement with Norway to study the feasibility of developing salmon farming in the country, specifically in the Beagle Channel, Tierra del Fuego. Environmentalists, scientists and inhabitants have organized opposition to the idea of developing salmon farming on the grounds that this activity will negatively impact the environment, tourism and local fishery production.
Global wild salmon catches were good in 2018, with the Alaskan and Russian Federation fleets producing an estimated 915,000 tonnes of all species combined. The major component of this total was a record-breaking pink salmon harvest in the Russian Federation, totalling 510,000 tonnes. Pink salmon have a life cycle of two years, which sees genetically distinct populations return to the rivers of their birth in odd and even years. This 2018 figure is around 93 percent higher than pink salmon catches in the last comparable year, 2016, and the excess volumes of fish are reportedly straining the processing infrastructure capacity in the Kamchatka peninsula in the Russian Far East. Prices for pink salmon at the Russian Federation wholesale markets have reportedly fallen 37.5 percent in October 2018, to RUB 95 (USD 1.45) per kg compared with the same period in 2017. In Alaska, total catches of pink salmon were 40 percent below forecast at around 74,000 tonnes, approximately on par with 2016. Meanwhile, combined Russian Federation and Alaskan fleet catches of sockeye salmon were down 5 percent year on year in 2018.

United Kingdom

Scottish salmon production is expected to drop some 20 percent in 2018, following a 16.5 percent increase in 2017. Total salmon export value fell 22.5 percent in the first half of the year compared with the first half of 2017 but the continued weakness of the British pound lifted the average export price for Scottish fresh whole Atlantic salmon to GBP 6.77 per kg for the same period, GBP 0.11 above the 2017 equivalent. France, China and Ireland all increased their shares of UK salmon export value at the expense of the US market. Addressing fish health problems, scrutiny from media and regulators over the industry’s environmental impact and the implications of the imminent Brexit are the main focus areas for the industry at present.

Markets

While demand growth in the large traditional markets of the EU28, the United States of America and Japan is slowing, rising salmon consumption in emerging markets continues to drive upward trends in export revenues for the world’s salmon producers. Exporters are particularly focused on Latin American and Southeast Asian markets, which still have considerable growth potential. Overall, the pace of growth of global demand for salmon is such that the market can absorb an increase in supply of 6–7 percent per year and still maintain price levels, according to a recent analysis from Norwegian bank Nordea. However, the market’s value is also determined by consumer demand for different types of products. Increased appetite for fresh salmon is being reported in many large markets, particularly in the EU28. At the same time, rising demand for products that are prepared and packaged for convenience is a trend applicable to a broad range of species and salmon is no exception. The same can be said for ecolabelling, provided by independent certification bodies such as the ASC.

France

France remains the leading consumer market for salmon in Europe in 2018 and demand is solid, with imports up in both volume and value terms in the
first six months of 2018. Currency advantages have partially mitigated the rising price of salmon for French importers. Overall high prices appear to have had limited impact on fresh salmon sales at retail level, although smoked salmon volumes fell some 13 percent in 2017. Rising demand for ecolabelled farmed salmon and a shift towards fresh product are two of the most significant trends characterising the French salmon market at present. Fresh salmon still trails the smoked segment in terms of market size, with FranceAgriMer estimating fresh and smoked total sales at EUR 397 million versus EUR 525 million, respectively in 2017.

**Germany**

According to FischInformationszentrum, salmon represented 19 percent of the German seafood market in volume terms in 2017, translating into around 78 600 tonnes. This figure is approximately on par with 2016, as German consumers are relatively price-sensitive and high prices have seen import volumes decline in 2017 and in the first half of 2018. Nevertheless, salmon’s share of the German seafood market has increased markedly over the last five years. In line with other EU28 markets, the popularity of fresh salmon is increasing in Germany, even though preserved items such as smoked and canned products still dominate the market.

**United States of America**

The US imports of whole fish and fillets have increased to record levels, while prices continue to exceed the three-year averages despite dipping below last year’s levels. Chilean exporters have been the main beneficiaries of strong US demand, but imports from Canada, Norway and China also rose in the first half of 2018.

**Japan**

Prices of Chilean farmed Coho salmon spiked in Japan in 2017 despite a significant rise in supply, and these levels have largely continued into 2018. The value of Japanese imports of Coho salmon rose around 2 percent in the first six months of 2018, after a 37 percent year on year rise in 2017 as a whole. Improved demand is a factor in this trend, but it is also likely driven by price hikes for other salmon species preferred by Japanese buyers, namely farmed Atlantic salmon from Norway and wild sockeye salmon from the Russian Federation and Alaska. Overall, total salmon imports into Japan are rising and the outlook is cautiously positive.
Outlook

Farmed salmon harvest volumes in Europe have been weighted towards the first half of 2018 and thus supply will tighten in the last quarter. Demand will also increase towards the end of the year and forward markets indicate that higher prices can be expected in the short term. In 2019, farmed Atlantic salmon production is expected to increase by around 4 percent, a slight slowdown compared with 2018, driven primarily by a significant drop in Chilean output. This should see prices rise somewhat compared year on year, so long as economic conditions remain relatively stable in key markets. Proliferation of ecolabelled products, a shift towards the fresh fish segment and an emphasis on convenience remain the characterising trends in salmon markets globally. On the industry side, identifying effective solutions to biological challenges, particularly sea lice, will remain a core focus.
Promising mackerel season, but uncertain outlook for 2019

In Iceland the autumn mackerel season was off to a promising start. However, the outlook for 2019 may not be that good. Several herring fisheries are looking uncertain, and catches may be reduced next year, with prices rising.

Mackerel

The mackerel population in the North Atlantic has increased sharply in recent decades. The population is estimated to have reached at least 57 billion individuals, more than six times a previous estimate by the International Council for the Exploration of the Sea (ICES). The abundance of mackerel is becoming problematic for other species, though. In the area around Scotland, observers are concerned about the future for wild salmon, as large shoals of mackerel are outcompeting young salmon for food.

ICES seems to contradict this statement, as in late September, ICES advised a catch of no more than 318,403 tonnes, which represented a 42 percent reduction from the recommended limit for 2018. However, fishing nations have not announced any quotas by mid-October. The stock index for mackerel in the Norwegian Sea was down 40 percent in biomass and 30 percent in total number of individuals. Norwegian Sildelaget (the pelagic sales organization) expects quotas for next year to be dramatically reduced. Landings in 2018 are expected to fall by about 200,000 tonnes compared to 2017.

Icelandic fishers reported in late July that the mackerel season looked promising this year. The mackerel arrived in Icelandic waters a little later than usual, and the season started a bit slow, but it picked up later, despite the lower than usual sea temperatures. In Icelandic waters mackerel catches were strong in September. According to Icelandic processors the mackerel is of good quality with an average weight of 450–470 g.

In Norway, the beginning of the mackerel fishery in mid-September was off to a slow start. Norwegian and foreign vessels fishing in Norwegian waters reported small catches.

In 2017, the Nigerian government introduced imports restrictions to boost local fish production, after assessing that imports of mackerel, sardinella, hake, croaker and herring were increasing rapidly. Nigeria has been importing more mackerel than before the import restrictions were introduced in 2017, with estimated imports reaching over 700,000 tonnes per year. Demand for fish in Nigeria is estimated to be around 3.2 million tonnes per year, with a domestic production of about 1.1 million tonnes and a deficit of 2.1 million tonnes that has to be imported to satisfy demand.

Herring

The Norwegian herring fishery neared the end of the season in mid-September, with relatively good catches and an average weight of about 210–215 g per fish. Foreign vessels in Norwegian waters approached the end of their quotas. Norwegian vessels started to prepare for mackerel fishing. As of mid-September around 75 percent of the Norwegian herring quota was caught, totalling 134,000 tonnes.

In New England, herring catch has been declining since 2013, and it’s set to decline further in 2018 and 2019. In August, the National Oceanic and Atmospheric Administration (NOAA) cut the New England herring quota to 110 million pounds (49,895 tonnes), severely below the original 240 million pounds (108,862 tonnes) set at the beginning of the year. The purpose for this massive cut in the quota was to reduce the probability of overfishing in 2018, and to give the resource a chance to recover in 2019–2021. NOAA has stated that further reductions will be necessary. In the face of this development, the New England Fisheries Management Council (NEFMC) decided on 25 September to introduce new management rules for the herring fishery. Recent assessments of this fishery have concluded that the resource could be on the brink of a collapse and drastic measures are needed to save it. NEFMC introduced the allowable
biological catch (ABC) control rule as a guiding principle to set the quotas. By introducing this rule, the total allowable catch (TAC) for Atlantic herring in New England should be reduced from 49,895 tonnes to 21,266 tonnes in 2019. Each year, the ABC can be different and should be set on the basis of the most recent herring stock assessment and short-term projections for the stock. Herring and lobster fishers are strongly protesting. Most of the catch is used as bait in the lobster industry, and such a cut would have a dire effect on the bait availability. Herring fishers claim that such cuts would make it impossible for them to make a living from this fishery.

Catches of North Sea herring picked up in August and September as the herring returned to Norwegian and EU28 waters. Most of the herring caught in Norwegian waters was used for reduction purposes, while herring caught in EU28 waters was mostly directed to human consumption, due to its higher content of high quality roe.

### Anchovies/Sardines

The General Secretariat of Fisheries in Spain announced in July that the Iberian sardine fishery would be open from 1 August to 30 September, with a combined catch limit of 4,728 tonnes for Spain and Portugal.

The Portuguese Minister of Marine Affairs motioned quota reductions for sardine in 2019, but assured the fishery would not completely close. The quota for 2018 is 14,600 tonnes and even though next year’s quota will be lower it is not yet decided by how much. According to the Portuguese Minister, the stock is improving but it needs time to fully recover.

Mexico has 98 sardine vessels and more than 3,500 individuals directly or indirectly employed in this industry. Sardine fishing is now the most
important fishery in Mexico, with annual landings of about 720,000 tonnes, according to the National Commission of Aquaculture and Fisheries (CONAPESCA).

The Mexican sardine fishery in Baja California is important to the economy and the state government is now supporting the development of an export industry. There are 24 active vessels participating in this fishery, but landings have been going fluctuating due to effects of El Niño. In 2013, landings were down to 38,100 tonnes, jumped to 90,400 tonnes in 2014, then dropped to 37,500 tonnes in 2015, and increased to 51,100 tonnes in 2016. Landings peaked at 98,600 tonnes in 2017.

The sardine fishery of Guaymas in northern Mexico has also been good this year, with landings reaching 403,800 tonnes, around 26 percent more than the previous season. This sardine fishery is now larger than the mackerel or anchovy fisheries in the region.

On 10 August, the Peruvian Ministry of Production (PRODUCE) ordered the closure of the first anchovy fishery in the north-central area. Earlier on 30 July, around 3.14 million tonnes of anchovy or 95 percent of the catch limit had already been landed. Of this total, about 81 percent was caught by the industrial steel fleet and 19 percent was caught by the industrial wood fleet.
Outlook

The small pelagics industry may be facing a supply shortage in 2019. Mackerel and herring quotas will be reduced, and the sardine and anchovy fisheries are also uncertain. Consequently, prices are bound to increase.

The mackerel market in Asia is growing, and once the Chinese consumers acquire a taste for Atlantic mackerel, demand will probably grow very rapidly. Rather than being reprocessed and exported, more imported mackerel will go to the domestic Chinese market and prices are likely to go up.

The European Commission has proposed to cut catches of Baltic Sea herring dramatically in 2019, by 18 percent to 296,511 tonnes if this proposal is approved. The Western herring catches are proposed to be cut by 63 percent to 6,404 tonnes, and the central herring catches by 26 percent to 170,360 tonnes.

ICES advised a reduction by almost 40 percent in the 2019 quota for North Sea herring. The recommendation included a direct catch quota of 291,040 tonnes and a by-catch quota of 20,532 tonnes, a total of 311,572 tonnes for 2019. For the current year, ICES advised a total quota that included by-catch of 517,891 tonnes, but the final agreed-upon quota was set at 600,588 tonnes. It is expected that the assessment of the Norwegian spring-spawning herring will be rather disappointing, too.

These pessimistic expectations may lead to a surge in herring prices, in spite of the fact that at the moment, it is a buyer’s market with plenty of herring available. But this might change in 2019.
FISHMEAL & FISH OIL

GLOBEFISH HIGHLIGHTS

Good landings expected to continue based on successful first fishing season in Peru

In the first anchovy fishing season in Peru, the world’s major fishmeal producing country, more than 95 percent of the catch quota (3.32 million tonnes) has been taken. This Total Allowable Catch (TAC) was the highest since 2011. Almost all of this catch goes to fishmeal production. The market expects a positive second fishing season and the outlook for next year is also very positive.

Production

The first fishing season of anchovy and longnose anchovy in the north-central area of Peru ended officially on 10 August, with more than 95 percent of the quota fulfilled. In comparison to the first fishing season in 2017, this year saw an increase in both the quota and the landings.

The Marine Ingredient Organization (IFFO) held its 58th annual conference in Rome in October. The main message delivered was the stable status of the fishmeal and fish oil industry worldwide, particularly in Peru. So far the good fishing performance in Peru is attributable to governmental decisions. The industry is monitoring whether there will be another El Niño, but overall the market is stable and is expected to stay so in the near future.

Globally, fishmeal production during the first eight months of this year increased by 13 percent, compared with the same period of 2017, except a slight decrease in Denmark and Norway. The growth is greatly credited to Peru, where approximately 960,000 tonnes of fishmeal were produced for the first two thirds of this year, up by 32 percent compared to the same period in 2017. Some progress was also made in the United States of America as there was a good amount of trimmings from salmon and other fish for processing to fishmeal and there were good landings of menhaden, an important raw material for fishmeal and fish oil production.
Exports

Peruvian exports of fishmeal were around 565,000 tonnes during the first half of 2018, about 10 percent less than during the same period in 2017. China was the dominant market for Peruvian fishmeal, absorbing more than 85 percent of Peruvian exports.

Peru’s exports of fish oil decreased to 68,000 tonnes, following the trend of fishmeal, but the proportion destined for Denmark increased by 24 percent to 28,000 tonnes in the first six months of the year, compared with the same period last year.

Markets

At the end of September 2017, Chinese fishmeal stocks in the main ports reached a record high of 200,000 tonnes due to the low fishmeal price and sufficient shipments from Peru. However, the stock this year is much lower. High temperatures and heavy rains are likely to be the reason for this. In addition, the African swine fever occurrences in some parts of China added to the slowdown of the imports of fishmeal.

In the context of the trade war between China and the United States of America, an update of particular interest is that under the second amendment of the Asia Pacific Trade Agreement, China unveiled a plan to remove or reduce import tariffs on goods including soybeans from several Asian countries, namely India, Republic of Korea, Bangladesh, Laos and Sri Lanka. The cuts effective on 1 July indicated that China has been taking steps to reduce its dependence on US soybeans amid the mounting trade dispute between the two countries. Soybeans are China’s biggest agricultural import from the
United States of America by value. Both soybean and fishmeal are important ingredients for feed and therefore the raised price of soybean in China could have repercussions on the fishmeal market, but to what extent the market is going to be affected is still unclear.

**BACKGROUND**

The Asia Pacific Trade Agreement, formerly known as the Bangkok Agreement, signed in 1975 and renamed in 2005, has been the oldest preferential trade agreement among economies in the Asia-Pacific region. Formed by six member countries, the trade agreement covers a population of 3 billion people.

The tariff cut occurs less than two weeks after China said on 16 June it would levy an additional 25 percent tariff on 659 goods worth USD 50 billion from the United States of America, including soybeans and automobiles, in response to Washington's plan to impose tariffs on USD 50 billion of Chinese shipments.

Chinese imports of fishmeal during the review period slightly decreased to approximately 700,000 tonnes, compared with the same period in 2017.

Norwegian fishmeal imports were stable, mostly sourced in Iceland. Norwegian imports of fish oil during the first half of the year were levelled off, but with a more diverse array of suppliers.
Price

The high quota set for the first fishing season followed by massive landings, gave the market a sense of relief and the market price for fishmeal and fish oil products started to decrease in February this year. The price normalized as the first fishing season ended.

Current FOB Peruvian super prime fishmeal price is around USD 1,600 per tonne. The price is likely to stabilize at this level for a while, at least until the announcement of the quota for the second fishing season.

Outlook

The successful first fishing season in Peru confirmed its leading role in the global fishmeal industry. In the second half of the year, sea conditions are reported as optimal and good reproduction is reported, thus a quota for the second fishing season of 2.0–2.5 million tonnes is reasonable.

The market is optimistic for the coming fishing season in Peru. Fishmeal and fish oil prices are stable now and are anticipated to remain at current levels in the near future provided the quota for the second fishing season is set at the expected level.
Canada taking over the Chinese market

The trade war between the United States of America and China is changing trade patterns for lobster. With the US lobster subject to a 25 percent tariff in China, Canada is taking over US market shares. At the same time there are rumours of US exporters dumping lobster on other Asian markets. Demand and prices are expected to go up.

International trade

US imports of lobster have been rather stable over the last few years. During the first half of 2018, imports amounted to 29 800 tonnes, 3.4 percent higher than during the same period in 2017. US exports of lobster increased by 18.2 percent to 11 700 tonnes. During the first half of 2018, China was by far the largest market for US lobsters, accounting for almost half of total US exports. Canada was still the largest supplier of lobster to China during this period, and will surely increase its market share during the second half of the year. In total, Canada exported 42 000 tonnes of lobster during the first half of 2018, of which 6 000 tonnes went to China and as much as 27 200 tonnes (65 percent) went to the United States of America.

The on-going trade war between China and the United States of America is causing some traders to use illegal means to get US lobsters into China. According to reports from China, there are plenty of small-sized soft shell US live lobsters on the Chinese market, often labelled as Canadian lobster, sometimes shipped through Vietnam in order to avoid the 25 percent import tariff on US lobsters in China.

The Lobster Council of Canada is concerned about this practice because it could damage the Canadian lobster brand. The rules of origin are quite clear though: if a lobster is caught in US waters it is of US origin, even if it is shipped out of a Canadian airport.

A Chinese seafood conglomerate claims that US lobsters are being dumped on Asian markets at low prices because of the 25 percent tariff imposed on US lobsters in China. They claim that US lobsters, known as Boston lobster, is being sold at USD 1.00 lower than Canadian lobsters in Hong Kong, Taiwan Province of China and Malaysia. However, US lobster exporters deny that this is happening, although they admit that the trade war is having a negative effect on the US lobster market. US lobster exporters are looking for alternative markets, while Canadian

World imports/exports of lobster (January-June)

<table>
<thead>
<tr>
<th></th>
<th>2016 (1 000 tonnes)</th>
<th>2017 (1 000 tonnes)</th>
<th>2018 (1 000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>29.0</td>
<td>28.8</td>
<td>29.8</td>
</tr>
<tr>
<td>China</td>
<td>10.0</td>
<td>11.5</td>
<td>19.2</td>
</tr>
<tr>
<td>China, Hong Kong SAR</td>
<td>3.0</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Other countries</td>
<td>22.7</td>
<td>37.5</td>
<td>20.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>64.8</td>
<td>81.0</td>
<td>73.4</td>
</tr>
<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>41.2</td>
<td>41.4</td>
<td>42.0</td>
</tr>
<tr>
<td>United States of America</td>
<td>12.1</td>
<td>9.9</td>
<td>11.7</td>
</tr>
<tr>
<td>Australia</td>
<td>5.4</td>
<td>5.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Other countries</td>
<td>18.3</td>
<td>18.7</td>
<td>15.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77.1</td>
<td>75.4</td>
<td>75.1</td>
</tr>
</tbody>
</table>

Source: FAO

Source: Trade Data Monitor, estimates
lobster exports to China have increased sharply since the 25 percent tariff was introduced in July.

**Prices**

Despite the trade changes, the current trade war does not seem to have any major effect on US lobster prices. Prices for Maine lobster have dropped marginally by USD 0.25–0.50 per lb since 6 July, the day the 25 percent tariff went into effect. Lobster landings normally peak in the period from July to October, with August being the main production month.

Prices on the US domestic market are quite seasonal, but there was a marked drop in June 2018. On the European market, there was a similar drop, although not as pronounced as in the United States of America. The long-term price trends are pointing moderately upwards.

### Prices

**Lobster tails: United States of America**

<table>
<thead>
<tr>
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<tr>
<td></td>
<td>22.0</td>
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<td>20.0</td>
<td>18.5</td>
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**Source:** INFOFISH Trade News

**EXW prices of frozen lobster tails**

### US imports/exports of lobster (January-June)

<table>
<thead>
<tr>
<th></th>
<th>2016 (1,000 tonnes)</th>
<th>2017 (1,000 tonnes)</th>
<th>2018 (1,000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>26.5</td>
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<td>27.2</td>
</tr>
<tr>
<td>Bahamas</td>
<td>0.4</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Honduras</td>
<td>0.5</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Other countries</td>
<td>1.7</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>29.0</td>
<td>28.8</td>
<td>29.8</td>
</tr>
<tr>
<td>Exports</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>China</td>
<td>2.4</td>
<td>2.5</td>
<td>5.5</td>
</tr>
<tr>
<td>China, Hong Kong SAR</td>
<td>0.8</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Italy</td>
<td>1.5</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Other countries</td>
<td>7.5</td>
<td>5.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>12.1</td>
<td>9.9</td>
<td>11.7</td>
</tr>
</tbody>
</table>

**Source:** US Census Bureau
Outlook

It is obvious that the trade war between the United States of America and China will continue to have a major impact on the global lobster market. Canada will take over a larger market share of the Chinese market, and the United States of America will have to direct its exports to other countries. There is also the risk of price cuts as US exporters try to find alternative markets for their lobster. In the longer run it is expected that the global lobster market will grow and, with the supply situation being relatively stable, this will translate into higher prices, especially for live lobster.

A report released in October by Ireland-based market research company Research and Markets predicted that the global lobster market will increase by 5.6 percent annually until 2022. Lobster is increasing in popularity and the report also points out that some product development is expected in the period until 2022.
**European mussel production good this year**

Bivalves are becoming a very popular seafood item. The environmentally sensitive consumer gets a product that is good for the environment. Bivalves do not need expensive feed to grow and are not a burden to the environment as other cultured seafood species. They are cheap and easy to cook and take very little time to prepare. Bivalves are very nutritious and go well with a multitude of flavours. As a result, bivalves have been more sought after by consumers, particularly the young generation. Further increase in demand and in prices can be expected in the coming months.

**Mussels**

France is the second major producer of mussels in Europe, just behind Spain. Locally produced bouchot mussels take the highest price, but in periods of low domestic mussel production, mussels from Spain and the Netherlands also enter the market. For several years it has been possible to purchase mussels on the Internet directly from the producer and sent home to the buyer. The price of this product is about 50 percent higher than the normal wholesale price, but home delivery makes this type of trade more appealing to the consumer. French imports were about stable at 31 000 tonnes in the first half of 2018 when compared with the same period of last year.

Dutch bottom mussel harvest started in early August, a month later than usual, due to slow spring growth. Therefore Dutch mussels are smaller this year, but meat content is reported to be good and prices have been strong.

Italian imports of mussels declined sharply this year. Demand for imported mussels was lower because domestic production was very good, after an unfavourable 2017, when drought and high water temperatures created a negative environment for mussel production.

New Zealand experienced a difficult year for in mussel production. Warnings against collecting shellfish have been extended for parts of the country after the spread of toxic algae. The algal blooms stopped one of the Marlborough Sounds’ biggest...
industries for three months and temporarily closed more than 100 mussel farms. The unusual aspect of this toxic algae bloom was that it happened during the winter months.

Scallops

US scallop landings on the East Coast have been record high in 2018, with about 20,000 tonnes landed in the first nine months of the year. Estimates put the total annual production at 30,000 tonnes, which would represent a nearly 13 percent increase from last year. Despite the production boost, scallop prices are on a rise. Between July and September, prices went up by almost 40 percent at wholesale level.

Scallop production in Peru is returning to normal after two years of low production. Total production in 2018 is expected to reach between 2,000 and 2,500 tonnes. The main market for Peruvian scallops is traditionally France, but the production problems during the last two years have driven France to search for alternative suppliers in the world market. French imports of scallops have declined from 6,800 tonnes in the first half of 2017 to 5,200 tonnes in the same period of 2018. The Peruvian share in the French scallop imports declined from more than 10 percent in 2016 to less than 8 percent in 2018. Earnings of Clearwater, a major player in the scallop business, were negatively impacted by the massive US scallop production and the declining demand in Europe.
Clams

Japan and the Republic of Korea reported substantial declines in clam imports during the first half of the year, compared to 2017. This was mainly due to lower supplies from China, where cold winter weather led to a weakened production in the first months of the year.

The positive business climate for clam producers and importers continued during the summer months in Europe. Clam production was good in Italy and imports were substituted by domestic production. Imports have been declining sharply from 2,300 tonnes in the first half of 2016 to 930 tonnes in the first half of 2017 and to just 685 tonnes in the first half of 2018.

Oysters

Oyster production in France was lower in the first six months of 2018 than in the same period of 2017. Despite this decline, exports from France increased slightly in the first half of 2018 to 5,400 tonnes from the 5,200 tonnes exported in the same period of 2017. Summer months are not a major oyster consumption period in Europe, so the weakening in French production is likely to be felt by the market around Christmas, the main sales period for this bivalve.
Outlook

Winter is not a main mussel consumption period in southern Europe, whereas in the northern part of the continent, mussel is more of a winter product. Demand for mussel products is expected to stay strong in Europe, with stable prices as production is higher this year than last year. For the Christmas period, mussel prices are expected to be 5 percent higher than during Christmas of 2017. In the East Coast of the United States of America, scallop production is expected to exceed the already record high production of 2018. Despite the increase in production, scallop prices are likely to go up also next year. Demand in France for scallops is reported as sluggish and therefore prices are expected to go down by 23 percent in November, when the Peruvian production will reach the market.

Canada’s Department of Fisheries and Oceans (DFO) confirmed that the remaining 25 percent of the surf clam fishery quota, for which it had previously sought a new entrant, will be fished by the current holder for both 2018 and 2019. This means that Clearwater Seafoods will hold 100 percent of the total allowable catch until 2020, when DFO intends to “identify a new participant” for the fishery, probably a first nations group.

According to the French scientific institution IFREMER, the average cumulative mortality rate of oysters is 67.5 percent at the national level for seed oysters. Juvenile and adult oyster mortalities are reported as being around 12.1 percent and 9.2 percent, respectively. These 2018 values are higher than 2017 and in consequence, prices are expected to be firm towards the end of this year.

World imports/exports of oysters (January-June)

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<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<td>China, Hong Kong SAR</td>
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<td>30.7</td>
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<td><strong>Exports</strong></td>
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<tr>
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<td>France</td>
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<td><strong>Total</strong></td>
<td>27.6</td>
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<td>36.3</td>
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Source: Trade Data Monitor, estimates

Prices

Mussels: France

EUR/kg

<table>
<thead>
<tr>
<th></th>
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</table>

Monthly average consumer prices in metropolitan France

Source: European Price Report

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Higher total allowable catch for Alaska snow crab

The total allowable catch for Alaska snow crab has been increased by 47 percent for the 2018/19 season. This will improve the supply situation and possibly put some pressure on prices. Dungeness crab prices are expected to rise in China as US exporters are hit by higher tariffs.

Supplies

The Alaska Department of Fish and Game set the TAC for snow crab (Chionoecetes opilio) at 12 620 tonnes for the 2018/2019 season. This represents a 47 percent increase from the 2017/2018 season. The new TAC is based on a recent stock assessment that indicated a biomass increase of 136 percent compared to last year for mature male snow crab, to 198 400 tonnes and for mature females of 55 percent, to 165 000 tonnes.

This increase in the quota will most likely have an impact on market prices. When the 2017/18 TAC was set representing a 50 percent cut, prices increased to the highest levels since 2004, when ex-vessel prices were as high as USD 4.07 per lb.

International trade

Global trade of crab is increasing slightly again, after a small decline in 2017. During the first half of 2018, total imports of crab (all types) increased to 185 700 tonnes, about 1.3 percent more than for same period in 2017. China increased imports by 7.0 percent to 39 400 tonnes, while the United States of America decreased imports by 9.2 percent to 54 200 tonnes. Most of the US imports came from Canada (23 400 tonnes or 43.2 percent of total imports).

Russian Federation exports of crab increased marginally to 30 500 tonnes during the first six months of 2018. The main market for Russian Federation crab was the Republic of Korea (19 100 tonnes or 62.6 percent of the total). Chinese crab exports increased slightly to 27 600 tonnes, around 7.4 percent more than during the same period in 2017. Republic of Korea was also the largest market for Chinese crab, accounting for 9 400 tonnes or 34 percent of the total crab exported from China.

In July, the US Center for Disease Control and Prevention (CDC) issued a warning about eating
Atlantic blue crab meat from Venezuela, as incidents of *Vibrio parahaemolyticus* had been reported. This was bad news for US importers and wholesalers. The supply for these species has been tight and demand is growing, so the warning to not use Venezuelan blue crab made supply tighter and pushed prices up.

After stopping imports of Venezuelan blue crab for a couple of weeks, US importers resumed sourcing blue crab treated with hydrostatic pressure processing (HPP) in early August. This non-thermal technology is reported to kill *vibrio, listeria, salmonella, E. coli, norovirus* and a number of other viruses and parasites.

**Prices**

The high prices for snow crab that have prevailed for the past two years finally dropped a little in August, mainly for the smaller sized crab (5–8 oz). The cause for this is seen to be the withdrawal of Japanese buyers from the market. Earlier in the year, Japanese buyers were quite active and kept prices high, but after they pulled out, prices started to slide a little.

The market for Dungeness crab in China is good and it has been relatively stable throughout the year so far. Since the trade war between the United States of America and China has been escalating, supplies are getting very tight. US exports of Dungeness crab were hit by higher tariffs, which increased to 25 percent in July. The volumes that Canadian exporters can supply are not sufficient to satisfy the Chinese market demand. Prices in China are on the rise and have come as high as USD 32.0 per kg. The weakening of the Chinese currency is also contributing to the higher prices, as Chinese importers are paying for Dungeness crab in either US or Canadian dollars.
Outlook

Snow crab supplies are expected to improve during next year, especially the supplies from Alaska, which will likely lead to declining prices. The trade war between the United States of America and China is putting a halt on exports of crab from the United States of America to China and as demand in China is good and growing, prices may be pushed up. Demand for Dungeness crab in China is good, especially in the south, but Canadian exporters cannot supply enough to satisfy demand.

High prices are thought to have caused buyers to buy less snow crab and look for other seafood items instead. Therefore prices may continue to decline in the coming months. The substantial increase in the Alaska TAC for 2018/19 will improve the supply situation and prices will come down.
The main importing countries of bivalves in 2017 were the United States of America, China and Japan. The major producing countries were China, Japan and United States of America. This analysis describes border rejections of bivalves in the four United Nations members where data is available, that is Canada, the European Union (Member Organization), Japan and the United States of America. Rejections are categorized by chemical, microbiological and other risk categories. In addition, general causes such as packaging issues, allergens, improper health certificate, poor temperature control and labelling issues will be described.

Canada

Bivalves' detentions and rejections in Canada amounted to 74 in 2017, representing 6 percent of the total rejections at the border.

The main causes of border rejections of bivalves at the Canadian borders in 2017 were labelling issues, accounting for 58 percent of bivalves' rejections.

Bivalves rejected at Canadian borders in 2017 by causes (number of cases)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
<td>5</td>
</tr>
<tr>
<td>Microbiological</td>
<td>68</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Canadian Food Inspection Agency

Bivalves rejected at Canadian borders in 2017 by hazards

- Labelling: 9
- Container integrity: 8
- Food information regulations requirements: 5
- Sensory evaluation: 43
- Net weight determination: 2
- Non permitted additives: 2
- Can coding: 1
- Sterility: 1
European Union (Member Organization)

Bivalves’ detentions and rejections in the EU28 totalled 37 in 2017, representing 10 percent of the total rejections at the border.

The main reasons for border rejection of bivalves were microbiological causes, followed by toxins, and others causes. The main microbiological issues were *Escherichia coli*, *Norovirus*, *Salmonella* and not specified bacteria. Among the 10 rejections due to toxins, amnesic shellfish poisoning was the group of marine biotoxins that appears to be the largest with seven cases recorded, mainly found in scallops. The other group of marine biotoxins detected were diarrhetic shellfish poisoning with two cases in mussels and one case of paralytic shellfish poisoning in oysters. The three cases due to other causes were related to poor temperature control.

Bivalve molluscs rejected at EU28 borders in 2017 by causes (number of cases)

<table>
<thead>
<tr>
<th>Source: Rapid Alert System for Food and Feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

Japan

Bivalve molluscs detentions and rejections in Japan amounted to 6 cases in 2017, representing 4 percent of the total rejections of seafood at the border.

The only reason for rejection was due to microbiological causes, with four cases for presence of live bacteria, mostly recorded in clams, and two cases for presence of coliforms in scallops.

Bivalves rejected at Japanese borders in 2017 by hazards (number of cases)

<table>
<thead>
<tr>
<th>Source: Ministry of Health, Labour and Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coliform</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
United States of America

Bivalve molluscs detentions and rejections in US borders amounted to 26 in 2017, representing 2 percent of the total rejections of fish and fishery products at the border.

The majority of rejections were due to other causes, followed by microbiological causes. Among the other causes, the products categorized as “filthy” were the most rejected with 13 cases. According to the FDA Violation Code Translation, “filthy” is defined as a condition where “the article appears to consist in whole or in part of a filthy, putrid, or decomposed substance or be otherwise unfit for food.” Other rejections were due to misbranding (9 cases), adulteration (3 cases) and insanitary conditions (1 case). Under the microbiological category the causes of detention were due to Salmonella (3 cases) and Listeria monocytogenes (1 case).

Bivalves rejected at US borders in 2017 by causes (number of cases)

- Others: 4
- Microbiological: 22

Source: Food and Drug Administration

Bivalves rejected at US borders in 2017 by hazards

- Filthy: 13
- Misbranding: 5
- Adulteration: 3
- Salmonella: 3
- Insanitary: 1
- Listeria monocytogenes: 1

References:

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

GLOBEFISH HIGHLIGHTS

**FAO GLOBEFISH talks value of seafood sustainability and traceability in Shanghai**

FAO and Shanghai Ocean University join forces to address challenges and opportunities for seafood traceability

The International Seminar on Sustainable Seafood Value Chain: Traceability, will take place from 28–30 November 2018 in Shanghai, China and will be comprised of a two-day seminar and a one-day field visit. Traceability, on international or national levels, is especially important given recent changes in legislative requirements of the major international markets for seafood that require identification of legally caught fish. The event is jointly organized with FAO’s Fisheries and Aquaculture Department and Shanghai Ocean University and will focus on engaging participants in a global dialogue on seafood traceability.

Representatives from ten countries, non-governmental organizations and intergovernmental initiatives with ongoing activities in seafood traceability will be invited to elaborate on the current situation in seafood traceability. To drive seafood supply chains towards sustainability, participants will identify national and international constraints/challenges and opportunities in this regard and propose solutions and collaborative interventions for effective and efficient traceability.

The seminar will address a variety of topics pertinent to the sustainable seafood value chain, including: current systems and principles of a good traceability system; blockchain and seafood traceability; current situation and constraints in seafood traceability in countries such as the United States of America, the Republic of Korea, Senegal, Sri Lanka, Spain, Thailand, Tanzania, Oman, China and Chile. The seminar will be an invaluable opportunity for international experts to discuss challenges and exchange expertise on seafood traceability on both policy and practical levels.

GLOBEFISH will contribute to the discussions with its expertise in the field of sustainability in the fisheries sector on the first day of the event, Wednesday 28 November. Mr John Ryder, FiAM Head, will provide an inaugural speech and later lead the discussion on international trade and markets for fisheries and aquaculture products. Moreover, Ms Nada Bougouss, Market Analyst for Globefish, will present “FAO work on seafood traceability”, which will be followed by a discussion on development and implementation of the voluntary guidelines on Catch Documentation Schemes given by Mr Nianjun Shen, Fishery Industry Officer, FAO.

**Traceability 101:**

**Why is seafood traceability so important?**

Fisheries and aquaculture, as a food production industry, have been advancing rapidly over the last decades in both production and trade. Fish has become the most internationally traded food product with some 37 percent by volume traded internationally.
Traceability simply means the ability to fully trace a product from the point of sale back to its point of origin, with information available about all movements in between. Given that the seafood industry is becoming more globalized, consumers are increasingly interested in knowing exactly where their fish is coming from.

According to Audun Lem, Deputy-Director of FAO’s Fisheries and Aquaculture Department, traceability is important for two main reasons. “The first is related to quality and safety issues. If we know the origin of the fish, we can trace it back across the entire value chain to when it was first caught or farmed and ensure that in every stage proper hygiene and safety standards were followed. The second important aspect of traceability is to ensure legality – making certain that the fish were fished within agreed quotas, by licensed fishermen and women in keeping with rules and regulations and that all importers and exporters were licensed and followed national and international rules and regulations in delivering the fish to the end consumer.”

For more information, please see our related publication: Seafood traceability for fisheries compliance

CHINA’S FISHERY PROFILE AT A GLANCE:

China is a key country in the fish trade sector, and produced 66.8 million tonnes of fish in 2016. According to FAO’s State of World Fisheries and Aquaculture report China has been responsible for most of the growth in fish availability, owing to the dramatic expansion in its fish production, particularly in aquaculture. China is also the largest exporter of fish and fishery products and a major importer, due to outsourcing of processing from other countries to China, as well as growing domestic consumption of species not produced locally. FAO’s report also forecasts an expansion of total world fisheries production reaching 196 million tonnes in 2025, with China alone accounting for 62 percent of world output. Fish consumption, which is nowadays higher than ever with 20 kg per capita, is expected to increase alongside with population growth and major increases are projected particularly for Brazil, Peru, Chile, Mexico and China. More resources, statistics, indicators can be found in the FAO fishery country profile for China

International Seminar on Sustainable Seafood Value Chain: Traceability
Date: 28–30 November 2018
Location: Shanghai Ocean University
For more information please contact:

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