GLOBEFISH HIGHLIGHTS
INTERNATIONAL MARKETS FOR FISHERIES AND AQUACULTURE PRODUCTS
SECOND ISSUE 2022, with January–December 2021 Statistics

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

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

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

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New uncertainties likely to slow rate of post-pandemic recovery

The recovery in global fish production in 2021 is expected to continue this year, supported by surging demand and a return to relative operational normality. Total production in 2022 is expected to increase by 1.5 percent, to 184.6 million tonnes. Growth in the aquaculture sector is likely to pick up relative to last year, by 2.9 percent, but persisting caution over stocking and input costs mean the rate remains below the long-term trend of 4-5 percent. For capture fisheries, fuel costs and reduced quotas are contributing to a growth slowdown, to 0.2 percent year-on-year, despite the lessening impact of the pandemic restrictions on fishing fleet activities.

Total export revenue is forecast to climb by 2.8 percent this year, to USD 178.1 billion, while volumes are set to drop by 1.9 percent. While positive, these growth figures remain below the long-term trend, reflecting both the ongoing recovery of the market and the continuing challenges affecting suppliers. In Asia, increased shrimp harvests are boosting export volumes and revenues for most major producers in early 2022. In South America, Ecuadorian shrimp, Brazilian tilapia and the hike in Chilean salmon production are the main drivers of continued export growth. Meanwhile in the major markets in Japan, China, the United States of America and the European Union, growth in terms of USD import value has been more muted, although this is largely a consequence of the steady strengthening of the United States dollar versus most major world currencies.

With the effects of the COVID-19 pandemic now diminishing, dynamics in the global market for fishery products are shifting, although the market is evidently not reverting exactly to its pre-pandemic form. Newly reopened foodservice businesses mean that a traditionally important source of demand is now once again available to suppliers, boosting sales significantly. Meanwhile, the recovery of the tourist industry is another important development contributing to a rapidly strengthening market, particularly for popular restaurant species such as bivalves, lobster, crab, seabass and seabream. Despite its negative impacts, the pandemic has also served as a catalyst for various innovations in delivery, sales, marketing and products which look set to endure in the long term. However, the upward trend in demand has not been uniform across all species, with waning consumer interest evident for some products that became very popular during the pandemic, such as canned tuna.

Upward pressure on prices is being felt from multiple sources. Firstly, rates of inflation are now at very high levels in many countries and rising commodity prices mean more expensive inputs, including feed and fuel. Also contributing to elevated costs are freight rates, which have fallen back from their pandemic peak but remain very high in relative terms. Supply growth for many key species has also been limited, lagging well behind the rate of market recovery. Together with the combined effect of the revitalization of the retail market and the ongoing reopening, these factors are driving prices sharply upwards for many fishery products. For some species, such as salmon and pangasius, prices are now at peaks not seen for several decades. The FAO fish price index has been climbing steeply since the end of 2020, reaching a level of 117 in February, the highest level ever observed.
**Bivalve prices move up**

Demand for bivalve was strong in 2021 compared with 2020, as COVID-19 restrictions were lessened in the main consuming countries. Scallop ex-vessel prices of scallops increased by over 50 percent in the United States of America, while mussel prices in France went up by 10 percent in the course of 2021. International trade in bivalves increased in 2021, to return to pre COVID-19 levels. The first months of 2022 saw a further increase in bivalves price levels, in line with the high inflation rates in European and North American countries.

**Mussels**

Mussel production in France was good in 2021, while the Netherlands reported declining output due to bad weather and low water temperature. The production of the European Union countries barely reaches to cover 80 percent of the demand for mussels, hence the use of Chile and New Zealand to supply the market of this bivalve. These products reach the market in frozen form, generally as half shell products.

France is the main world market for mussels, imports into the country increased during 2021 by 13 percent, but was still 5 000 tonnes short of the 2019 imports. Spain is by far the main exporting country of live mussels to the French market, followed by the Netherlands. The latter experienced only a marginal increase in its exports, due to limited production during 2021.

Total world imports of mussels were 330 000 tonnes in 2021, a 20 percent increase over 2020, and more or less on a par with the 2019 result. During the last year the United States of America emerged as a major importer of mussels, reporting a 10 000 tonnes increase in imports over 2020, but also 6 000 tonnes more than the imports in 2019. Further growth of this market is likely.

**Oysters**

Oyster trade expanded strongly during 2021, even exceeding 2019 results. Some 71 000 tonnes were imported during 2021, which is 15 000 tonnes more than in 2020 and even 6 000 tonnes ahead of 2019 result. This was mainly due to strong increases in oyster imports into the United States of America. This country is the main importer of oysters in 2021, ahead of France and Italy. US imports of oysters increased by some 41 percent during 2021. France imports grew even stronger at 45 percent, while Italian imports were up by 50 percent.

France is the main exporter of oysters to the world market, this exports are mainly going to neighbouring countries such as Italy and Spain, but also to the United States of America. Total exports recovered in 2021, to return to pre-COVID-19 levels. Oyster production in France was impacted by low water temperature during the summer months of 2021.
BIVALVES

Scallops

China is both the main producing, importing, and exporting country of scallops in the world. China managed to grow its scallops exports in 2021 by some 40 percent. It needs to be seen how the COVID-19 lockdowns of this year have an impact on Chinese scallop exports.

Japan is the second major producing country of scallops in the world, both from catches and from aquaculture. Japan is also the main exporting country of scallops to the Chinese market. In 2021 Japanese scallop exports doubled to 2 300 tonnes.

Peru reported a great performance in 2021, after the difficulties experienced in 2018 and 2019. Peru is the second major scallop exporting country with 11 400 tonnes in 2021, a 23 percent increase from 2020. Prices of scallops increased impressively during the past months.

The US scallop industry reported reduced scallop catches in 2021, but prices went up strongly. Higher prices were reported, especially for large scallops. As a result, production in Maine which had declined by 20 percent, reported a 20 percent increase in total scallop value. The 2022 production is likely to be low, which might lead to further growth in scallop price levels in the United States of America.

Clams

The Italian clam market is mainly supplied by domestic production. Prices stayed at high levels, such as EUR 19.99 per kg for Ruditapes species, while wild clams are selling at around EUR 6.99 per kg.

Total trade in clams increased in 2021, but far less than trade in other bivalve species. Some 287 000 tonnes were imported in 2021, 20 000 tonnes more than in 2020, but still 6 000 tonnes short of 2019. This was caused by lower imports into Japan and the Republic of Korea, the world’s major clam importing countries. Similarly to other bivalve imports, the United States of America reported an impressive growth in imports, going from 14 000 tonnes in 2020 to 21 000 tonnes in 2021. China is by far the main supplier of clams to the world market accounting alone for about 50 percent of world exports of this species. Most of these exports go to the Japanese and the Korean market.

Outlook

With the COVID-19 restrictions lifted in both the United States of America and the European Union, demand for bivalves from restaurants is expected to be very strong during summer months. There is an overall tendency to return to tourist outlets, where bivalves are one of the main restaurant products. Demand being strong, while production is reported low due to several reasons, it is likely that bivalve prices continue to increase, even ahead of the high inflation rate in Europe and Northern America. The impact of the conflict in Ukraine is likely to be limited, as mussel exports from Chile to the Russian Federation, which is the main outlet for Chilean mussels, will not be hit by sanctions.
### World imports and exports of scallops January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>69.24</td>
<td>60.08</td>
<td>99.88</td>
</tr>
<tr>
<td>United States of America</td>
<td>16.00</td>
<td>16.56</td>
<td>25.13</td>
</tr>
<tr>
<td>France</td>
<td>14.05</td>
<td>12.43</td>
<td>16.10</td>
</tr>
<tr>
<td>Other countries</td>
<td>73.45</td>
<td>70.31</td>
<td>77.49</td>
</tr>
<tr>
<td><strong>Total imports</strong></td>
<td>172.74</td>
<td>159.38</td>
<td>218.60</td>
</tr>
<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>30.71</td>
<td>27.47</td>
<td>38.56</td>
</tr>
<tr>
<td>Peru</td>
<td>9.84</td>
<td>9.29</td>
<td>11.41</td>
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<tr>
<td>France</td>
<td>6.05</td>
<td>5.69</td>
<td>9.35</td>
</tr>
<tr>
<td>Other countries</td>
<td>47.79</td>
<td>39.26</td>
<td>41.36</td>
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<tr>
<td><strong>Total exports</strong></td>
<td>94.38</td>
<td>81.70</td>
<td>100.68</td>
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</table>

Source: Trade Data Monitor.

### World imports and exports of mussels January–December, 2019–2021 (1 000 tonnes)

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<th>2020</th>
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</tr>
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<tr>
<td><strong>Imports</strong></td>
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<tr>
<td>France</td>
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<tr>
<td>Italy</td>
<td>52.87</td>
<td>38.01</td>
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<tr>
<td>United States of America</td>
<td>35.76</td>
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<td>181.78</td>
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<td><strong>Total imports</strong></td>
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<td><strong>Exports</strong></td>
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<tr>
<td>Chile</td>
<td>76.70</td>
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<td>Spain</td>
<td>65.77</td>
<td>51.82</td>
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<td>Netherlands</td>
<td>57.61</td>
<td>44.09</td>
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<td>Other countries</td>
<td>173.47</td>
<td>130.79</td>
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<tr>
<td><strong>Total exports</strong></td>
<td>373.54</td>
<td>314.60</td>
<td>347.64</td>
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Source: Trade Data Monitor.

### World imports and exports of oysters January–December, 2019–2021 (1 000 tonnes)

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<td><strong>Imports</strong></td>
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<td>United States of America</td>
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<tr>
<td>Italy</td>
<td>6.29</td>
<td>5.97</td>
<td>9.01</td>
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<tr>
<td>Other countries</td>
<td>40.70</td>
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<tr>
<td><strong>Total imports</strong></td>
<td>65.30</td>
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<td><strong>Exports</strong></td>
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<tr>
<td>France</td>
<td>15.17</td>
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<td>Republic of Korea</td>
<td>11.02</td>
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<td>China</td>
<td>8.82</td>
<td>10.50</td>
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<tr>
<td>Other countries</td>
<td>38.17</td>
<td>29.90</td>
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<tr>
<td><strong>Total exports</strong></td>
<td>73.17</td>
<td>61.16</td>
<td>76.13</td>
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Source: Trade Data Monitor.

### World imports and exports of clams January–December, 2019–2021 (1 000 tonnes)

<table>
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<th>2020</th>
<th>2021</th>
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<tr>
<td><strong>Imports</strong></td>
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<tr>
<td>Japan</td>
<td>71.53</td>
<td>65.98</td>
<td>62.68</td>
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<tr>
<td>Republic of Korea</td>
<td>57.76</td>
<td>51.30</td>
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<td>Spain</td>
<td>39.74</td>
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<tr>
<td>Other countries</td>
<td>123.98</td>
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<tr>
<td><strong>Total imports</strong></td>
<td>293.01</td>
<td>267.07</td>
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<tr>
<td><strong>Exports</strong></td>
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<tr>
<td>China</td>
<td>151.66</td>
<td>129.94</td>
<td>141.17</td>
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<tr>
<td>Republic of Korea</td>
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<td>Canada</td>
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<td>12.64</td>
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<tr>
<td>Other countries</td>
<td>86.83</td>
<td>86.80</td>
<td>86.53</td>
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<tr>
<td><strong>Total exports</strong></td>
<td>268.39</td>
<td>242.51</td>
<td>253.41</td>
</tr>
</tbody>
</table>

Source: Trade Data Monitor.
### Global Fish Economy

#### Bivalves

**European Union | Imports | Mussels**

**Top three origins**

Unit: 1,000 tonnes, January-December

- **Spain**
- **Chile**
- **Netherlands**
- **Other countries**

<table>
<thead>
<tr>
<th>Year</th>
<th>Spain</th>
<th>Chile</th>
<th>Netherlands</th>
<th>Other countries</th>
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<td>80</td>
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</tbody>
</table>

Source: Eurostat

**European Union | Imports | Scallops**

**Top three origins**

Unit: 1,000 tonnes, January-December

- **France**
- **The United Kingdom**
- **Argentina**
- **Other countries**

<table>
<thead>
<tr>
<th>Year</th>
<th>France</th>
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<td>10</td>
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</table>

Source: Eurostat

**France | Imports | Mussels**

**Top three origins**

Unit: 1,000 tonnes, January-December

- **Spain**
- **Chile**
- **Netherlands**
- **Other countries**

<table>
<thead>
<tr>
<th>Year</th>
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<td>25</td>
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<td>10</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Eurostat

**Chile | Exports | Mussels**

**Top three destinations**

Unit: 1,000 tonnes, January-December

- **Russian federation**
- **United States of America**
- **Spain**
- **Other countries**

<table>
<thead>
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<th>Year</th>
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<th>United States of America</th>
<th>Spain</th>
<th>Other countries</th>
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<tr>
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<td>20</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>65</td>
</tr>
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</table>

Source: Chile National Customs Office
Spain | Imports | Mussels
Top three origins
Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th>Year</th>
<th>Chile</th>
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<td>15</td>
<td>10</td>
<td>7</td>
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</tr>
</tbody>
</table>

Source: Agencia Tributaria

Prices
Mussels: France
EUR/kg

Monthly average consumer prices in metropolitan France
Source: European Price Report
Varied supply situation, higher prices

Supplies of octopus may become tighter, and squid landings in Argentina were very slow in the beginning of the year. Demand is expected to return as COVID-19 restrictions are lifted in many countries. The restaurant sector is particularly important, and is now largely back in business. The summer holidays in Europe tend to see stronger demand for cephalopods through the restaurant trade.

Octopus

In Japan, octopuses are an important ingredient in the national cuisine. Because of technological development, it is now believed by some that it is only a matter of time before fully farmed octopus will be available.

Consumption of octopus in Japan dropped in 2021 compared to 2020. Average per capita consumption fell from 219 grammes in 2020 to 178 grammes in 2021 (-18.7 percent). In value terms, consumption dropped from JPY 502 per person in 2020 to JPY 422 in 2021 (-15.9 percent).

Trade

EU imports of frozen octopus increased in 2021 to 95 722 tonnes, compared to 84 643 tonnes in 2020 (+13.1 percent). Prices went up considerably, from EUR 6.35 per kg to EUR 9.15 per kg.

Japan saw a significant reduction in imports of octopus in 2021, from 44 873 tonnes in 2020 to 33 740 tonnes in 2021 (-24.8 percent), and there were some major shifts among suppliers. China increased its market share by shipping 20.5 percent more in 2021, with total octopus exports to Japan amounting to 10 067 tonnes. Meanwhile, Mauritania saw a 46 percent drop in shipments to Japan, to just 7 597 tonnes.

Imports of octopus into the Republic of Korea remained much the same in 2021, increasing by a modest 1.2 percent from 2020 to 73 158 tonnes. The only country that registered a significant increase in trade with the Republic of Korea was Viet Nam, which exported 6 percent more octopus there than in 2020.

Korean imports of small octopus (so-called “baby octopus”) increased by 4 percent to 29 066 tonnes, up from 27 940 tonnes in 2020. The main supplier by far was Viet Nam, which accounted for no less than 82 percent of the total. Thailand supplied 13 percent, while Indonesia accounted for 2.3 percent. The average price for small octopus in the Republic of Korea increased by 3 percent year on year, to USD 6.69 per kg.

Squid

The Argentine squid season had a slow start in January and February 2022, partly due to bad weather that forced the fleet to stay in port for several weeks. The fleet landed 45 300 tonnes of squid during the first two months of the year, a 12 percent decline compared to the same period in 2021.
The market has also been rather sluggish. About 70 percent of squid exports from Argentina go to China, but this year Chinese buyers have so far been reluctant to stock up. The main markets for Argentine squid are the Republic of Korea, Thailand, Viet Nam and several European countries. Demand from the European market has been rather weak this year.

The fishery for jumbo flying squid (*Dosidicus gigas*) in the South Pacific appears to be out of control. At a January meeting of the South Pacific Regional Fisheries Management Organization (SPRFMO), no decision was taken on conservation issues. The Committee for the Sustainable Management of the Jumbo Flying Squid (CALAMASUR) claims that the lack of action by SPRFMO will damage the fishery, in particular for Peru, Ecuador and Chile.

Many nations are fishing for jumbo flying squid, and the most active may well be China, which has a fleet of 641 vessels fishing jumbo flying squid in the South Pacific. It has also been claimed that as many as 450 foreign vessels are fishing within Argentine waters.

According to CALAMASUR, urgent action is needed to adopt conservation measures necessary for the sustainable utilization of the jumbo flying squid stocks.

China has taken steps to limit its squid fishing fleet in international waters. As of 1 April 2022, restrictions were introduced. The vessel limit will be effective from 1 April 2022 through 31 March 2023, and the limits were set as follows: North Pacific 350 vessels; East-Central Pacific 420 vessels; Southeast Pacific 400 vessels; Southwest Pacific 300 vessels; and Indian Ocean 250 vessels. The reasons for these restrictions are said to include China’s concern for the long-term sustainability of squid populations and to ensure the economic sustainability of China’s squid fishery.

**Trade**

There was a dramatic increase in Chinese imports of squid and cuttlefish in 2021 compared to 2020. Imports went up by almost 60 percent, to 489 900 tonnes. The largest supplier was Peru, which represented 23.8 percent of total imports, followed by Indonesia (18.4 percent) and Taiwan Province of China (14.9 percent).

Chinese exports of squid and cuttlefish also increased, but not by as much as imports. Exports grew by 22.2 percent to 542 647 tonnes in 2021 compared to 2020. Japan and Thailand, the largest markets, registered modest growth rates of 5.7 percent and 4.1 percent respectively. Shipments to the third largest market, the Philippines, increased by 94.9 percent, from 29 194 tonnes in 2020 to 56 897 tonnes in 2021.

Imports of squid and cuttlefish into the Republic of Korea in 2021 dropped by 13 percent compared to 2020, from 175 471 tonnes to 152 663 tonnes. All the main suppliers registered declines, ranging from -6 percent (Peru) to -21 percent (Chile).

Japanese imports of squid and cuttlefish were just slightly higher in 2021 compared to 2020. The largest suppliers were China (59.3 percent of the total), Peru (13.9 percent of total), and the Russian Federation (4.8 percent of total).
Spain imported 67,608 tonnes squid and cuttlefish in 2021, almost 20 percent more than in 2020. The main suppliers were the Falkland Islands (Malvinas), Peru and Morocco.

The United States of America increased its imports of squid and cuttlefish by an impressive 57 percent in 2021. However, the country had a significant decline in imports in 2020, so the 2021 imports were just 20.5 percent above the 2019 level. The largest suppliers were China (35 percent of total), Argentina (11.5 percent of total) and India (9.6 percent of total).

**Outlook**

Demand for octopus and squid should increase significantly in the Mediterranean region during the summer, as travel and tourism return to normal levels in Europe and octopus and squid are popular items on tourist menus. In Asia demand is less dependent on tourism, and is building again after the COVID-19 pandemic.

However, supplies are likely to be restricted, especially for octopus. For squid, the outlook is brighter. But price increases may be expected, mainly as a result of higher operating costs because of much higher fuel costs globally. The war in Ukraine is not helping this situation, either. In addition to higher operating costs, the tight supply situation for octopus will continue to push octopus prices even higher than they already are.
**CEPHALOPODS**

**United States of America | Imports | Squid and cuttlefish | Top three origins**  
Unit: 1,000 tonnes, January-December  
- **Peru**  
- **Indonesia**  
- **Taiwan Province of China**  
- **Other countries**

**China | Imports | Squid and cuttlefish | Top three origins**  
Unit: 1,000 tonnes, January-December  
- **Peru**  
- **Indonesia**  
- **Taiwan Province of China**  
- **Other countries**

**Republic of Korea | Imports | Octopus | Top three origins**  
Unit: 1,000 tonnes, January-December  
- **China**  
- **Viet Nam**  
- **Thailand**  
- **Other countries**

**Spain | Imports | Squid and cuttlefish | Top three origins**  
Unit: 1,000 tonnes, January-December  
- **Falkland Islands (Malvinas)**  
- **Peru**  
- **Morocco**  
- **Other countries**

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*Source: NMFS*  
*Source: China Customs*  
*Source: Korea Trade Statistics Promotion Institute*  
*Source: Agencia Tributaria*
China | Exports | Squid and cuttlefish
Top three destinations
Unit: 1,000 tonnes, January-December

Source: China Customs

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

Source: Japan Customs

Prices
Squid: Italy

EUR/kg

Whole, FAS, middle size, origin: South Africa
Source: European Price Report
Lower supplies, shifting trade patterns and high prices

The war in Ukraine is having a major impact on the crab industry. The Russian Federation is the largest supplier of king crab and a major supplier of snow crab, and is now cut off from important markets. Trade has been diverted to countries that have not imposed trade sanctions on the Russian Federation. A result of all this turbulence is skyrocketing prices.

The Russian Federation exported USD 2.4 billion of crab in 2021, and secured 94 percent of the global red king crab quota for 2022.

With Russian seafood now facing import bans in a number of countries, Russian crab is expected to be diverted to, and through, China and the Republic of Korea, neither of which have imposed sanctions.

Supplies

In early April the Department of Fisheries and Oceans Canada announced that the quotas for the 2022 snow crab fishery would be increased. The quotas and the increases vary from area to area, but all told the total Canadian snow crab TAC for 2022 will amount to 50 470 tonnes, up by 32 percent compared to 2021. The fishery opened on 4 April.

The main competitor for the Canadian snow crab fishery in the US market is the Alaska snow crab fishery, which has seen a dramatic cut in quotas, down by 88 percent for the 2022 fishery. Russian imports have in the past been another major competitor; these will likely be restricted as the United States of America has announced a ban on Russian imports of fish and fish products, set to come into force on 23 June.

A dispute over Dungeness crabbing rights on Canada’s west coast, south of Vancouver Island, has developed. A new federal ruling re-allocated 50 percent of the inshore trap and 25 percent of the offshore trap to First Nation fishers. The decision was received with disappointment by both commercial fishers and First Nation tribes. Both parties claim they were not properly consulted prior to the decision, with commercial crabbers maintaining that they will not be able to make a living with the sharp reduction in quota allocations.

Oregon Dungeness crab harvesters set a new record in January with landings of 14.7 million pounds (6 668 tonnes) just eight weeks into the season, with an ex-vessel value of USD 74.5 million. While it is still early days, it is expected that the record landings of 23.05 million pounds (10 455 tonnes) in 2017 will be surpassed. Ex-vessel prices averaged USD 5.48 per pound, which is considered to be high for the time of year.
Washington state has issued an emergency order in an effort to eradicate the European green crab (*Carcinus maenas*) in their waters. The European green crab is a small shore crab, with a natural range in the Northeast Atlantic Ocean along coasts from northern Africa to Norway and Iceland, and in the Baltic Sea. The crab is an effective predator, adept at opening bivalve shells. It preys on numerous organisms, and has been blamed for harming the softshell clam industry on the east coast of the United States of America, having decimated the industry in the Gulf of Maine.

California announced that all commercial Dungeness crab harvesting would cease along three quarters of the California coast for the months of April and May, in an effort prevent the entanglement of humpback whales with fishing equipment.

**International trade**

Global trade in crab picked up slightly in 2021 after a modest decline in 2020. Total imports grew by 12.8 percent to 418 470 tonnes. The main importers were the United States of America with 137 249 tonnes, up by 17 percent compared to 2021, and China with 85 165 tonnes, up by 25.7 percent.

The largest supplier to the United States of America was Canada, which accounted for 40 percent of the volume of imports, followed by the Russian Federation (23 percent of total) and Indonesia (10.6 percent of total).

While the market for live Russian crab has shrunk somewhat due to trade restrictions, observers perceive this change to be limited by the relatively small size of the European market for live king crab and snow crab. Even so, Russian exporters have had to re-direct shipments to other markets.

Europe is a major market for Russian frozen snow crab and king crab. In 2021 57 percent (USD 929 million) of frozen Russian snow and king crab went to the Netherlands for consumption in Europe or re-export to other markets. This trade is now in jeopardy as European countries have imposed sanctions on trade with the Russian Federation. The situation may open an opportunity for Norwegian crab exports, although the country is currently a relatively minor player in the global snow and king crab industry.
The value of US imports of blue swimming crab (*Portunus pelagicus*) increased dramatically in 2021 as unit prices for imports shot up. During 2021, US imports of both blue and red swimming crab amounted to 30 231 tonnes, of which 47 percent came from Indonesia. The value of these imports has increased dramatically, from USD 448.5 million in 2020 to USD 845.4 million during the first eleven months of 2021.

The turbulence in the market has had a marked impact on crab prices. The majority of prices have skyrocketed, as the Russian Federation, the largest global supplier, is no longer able to export to western markets. In Canada, industry spokespersons are saying that prices need to be reduced in order to keep trade flowing. Canada is the second largest supplier of king crab and snow crab to the US market, after the Russian Federation. Imports from the Russian Federation account for 30 percent of all the snow crab and 90 percent of all the king crab imported through the major port of Seattle.

Russian exporters have diverted shipments of crab that would normally be destined for China and western markets because of the ban on Russian imports in many western countries and the closure of some important Chinese ports. These have been largely redirected to the Republic of Korea. Prices for both snow crab and king crab in the Republic of Korea have plummeted. While most Korean consumers previously found these delicacies unaffordable, they are now buying king crab and other crab products from the Russian Federation in great volumes. Thus, a market in the Republic of Korea is developing for these products; it remains to be seen if the market will be able to sustain itself if prices were to return to previous levels.

**Outlook**

It appears that the global market for crab will remain turbulent for some time to come. The supply situation for king crab and snow crab will remain difficult as Russian supplies are cut off from western markets and the Alaskan quota has been drastically reduced. For the time being Russian crab is being diverted to countries that have not yet imposed trade restrictions on Russian exports, such as China and the Republic of Korea.

There is sustained and growing demand for crab in the global market. Prices have shot up in most markets and will probably remain high unless something happens to dampen demand.
**United States of America | Imports | Crab | Top three origins**
Unit: 1,000 tonnes, January-December

- Canada
- Russian Federation
- Indonesia
- Other countries
- Total imports

Source: US Census Bureau

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

- Republic of Korea
- Netherlands
- China
- Other countries
- Total exports

Source: Federal Customs Service of Russia

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**China | Imports | Crab | Top three origins**
Unit: 1,000 tonnes, January-December

- Russian Federation
- Myanmar
- Indonesia
- Other countries
- Total imports

Source: China Customs, estimates

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**Prices**
Crab: United States of America, Japan

USD/lb

- 9-12 oz/pc
- 14-17 oz/pc

Claw and sections, red, EXW New York
Source: INFOFISH Trade News
High prices and uncertain supply

Global fishmeal trade reached 3.67 million tonnes in 2021, an increase of 384 000 tonnes (+12 percent) on 2020. The booming aquaculture industry in China is fuelling massive growth in imports of feed raw material, with Chinese imports of fishmeal reaching 1.84 million tonnes in 2021, an increase of 29 percent over 2020. China now accounts for half of global imports of fishmeal.

Fish oil saw more modest gains, with annual volume traded rising from 972 000 tonnes in 2020 to 983 000 in 2021.

On the production side, bad weather and temporary closures of fishing areas in Peruvian waters may pose challenges for supply. Fishmeal production is currently below last year’s level, and there is the possibility that the quota for Peru’s first anchoveta season of 2022 may not be filled.

Production

Peru, the largest producer of both fishmeal and fish oil, has set high quotas for the first anchoveta season of 2022, with total allowable catches of 3.28 million. This is a 9 percent increase on last year’s quota. However, fishing activities in early 2022 have been hampered by bad weather and high presence of juveniles. The former means that fishers are behind schedule to harvest before the season ends, having filled just 26 percent of the quota in the all important North centre region by mid-May. Last year the season closed in mid-July. This time last year they had harvested over 30 percent of the quota. The high catches of juveniles have prompted Peruvian authorities to impose a number of temporary, dynamic closed fishing areas. The high rates of juvenile catches have been linked to annual variance in water temperatures, but raise concerns for ensuring stable biomass and maintaining stocks. Catches of juveniles currently stand at approximately 100 000 tonnes in Peru’s North-centre region; if they reach 300 000 tonnes then the fishery will be closed until the second season of 2022 starts in November, even if the quota has not been filled. The high catches of juveniles have resulted in lower fish oil yields, as they have a lower proportion of body fat that can be rendered down. Fish oil yields are currently 2 percent of total catches; they would usually be expected to be around 3 percent.

Chile is an important secondary producer of fish meal and oil. Following a successful 2021, Chilean production in 2022 has been kept low by fishing bans in a number of areas. Production of fishmeal is down by 17 percent year on year for the 4 months of the year, while fish oil production was reduced by 12 percent.

For other suppliers, an easing of US and EU quotas for capelin and menhaden could mean moderate increases in supply from both. China has imposed a fishing moratorium, in place from 1 May until September 2022, that will inhibit domestic reduction fisheries.
Global fishmeal production (1 000 tonnes)

<table>
<thead>
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<th></th>
<th>2016</th>
<th>2017</th>
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<td>China</td>
<td>460</td>
<td>400</td>
<td>570</td>
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<td>Chile</td>
<td>234</td>
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<td>377</td>
<td>350</td>
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<tr>
<td>Vietnam</td>
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<td>United States of America</td>
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<td>Others</td>
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<td>4,878</td>
<td>5,763</td>
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</table>

Source: IFFO

Global fishoil production (1 000 tonnes)

<table>
<thead>
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<td>Chile</td>
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<td>227</td>
<td>126</td>
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<td>United States of America</td>
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<td>Japan</td>
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<tr>
<td>Others</td>
<td>527</td>
<td>564</td>
<td>449</td>
<td>525</td>
</tr>
<tr>
<td>Total</td>
<td>1,055</td>
<td>1,122</td>
<td>1,303</td>
<td>1,172</td>
</tr>
</tbody>
</table>

Source: IFFO

Exports

Good catches in Peru translated into a high volume of trade in 2021. Exports of fishmeal rose from 856 000 tonnes in 2020 to 1.22 million tonnes in 2021. Having fallen in 2020, exports of fish oil rebounded, growing from 129 000 tonnes to 225 000. China remained the main market for fishmeal, accounting for 80 percent of volume. There was a massive increase in exports of fish oil to China, which more than tripled in volume from 15 000 tonnes in 2020 to 48 000 tonnes in 2021, making China the main destination market, with twenty percent of fish oil imports, followed by Belgium (18 percent) and Denmark (12 percent).

Chile, the second largest supplier of fishmeal, saw exports fall by 18 percent in 2021 to 245 000 tonnes. Exports of fish oil were 122 000 tonnes, down by 5 percent.

Denmark lost its position as the top global exporter of fish oil. Having overtaken Peru in 2020, the two once again swapped standings in 2021. Danish exports of fish oil stood at 128 000 tonnes in 2021, a 15 percent decrease on 2020 levels.

Markets

China saw a massive increase in imports of fishmeal in 2021, with volumes increasing from 1.43 million tonnes to 1.84 million tonnes. The Chinese market now absorbs 50 percent of the volume of global trade in fishmeal, up from 43 percent in both 2019 and 2020. Much of this fishmeal is being funnelled into the domestic aquaculture industry, which continues to grow. Meanwhile, the Chinese pork industry is still inhibited by low pig prices, dampening demand from this important consumer of fishmeal. The Peruvian Sol has strengthened against the Chinese Yuan, decreasing the competitiveness of Peruvian imports as it rose over the last year from a low of 1:1.50 Yuan to now stand at 1:1.80 Yuan.
Norway, the largest importer of fish oil and the second largest importer of fishmeal, saw a sharp rise in imports, especially of fish oil. Norway saw an uptick in aquaculture production in 2021, which has fuelled demand for inputs. Imports increased by 37 000 tonnes for fishmeal and 9 000 tonnes for fish oil (+ 26 percent and +4 percent respectively). Denmark is the main supplier of fishmeal to this market, while Peru accounts for the majority of fish oil. Imports from Peru had fallen in 2020, largely replaced with supply from Denmark, but 2021 saw trade flows return to previous levels, with Peru supplying a third of fish oil.

**Prices**

Prices for both fishmeal and fish oil are rising steadily due to high demand and rising cost of alternatives. Soybeans are commonly used in fish feed, both as a solid and as an oil, but prices are very high, with NASDAQ showing an 80 percent increase on prices two years ago for soybean futures.

Fishmeal prices are the highest that they have been since early 2018, standing at USD 1 800 per tonne, up by USD 200 per tonne on prices this time last year.

Fish oil prices are also the highest that they have been since early 2018, at USD 3 000 per tonne, an increase of USD 700 per tonne on last year.

**Outlook**

The outlook for the industry is uncertain at present. Prices for both fishmeal and fish oil are high, due to strong demand, low current supplies and rising prices for feed alternatives. At the same time, lockdowns in China and a strengthening of the Peruvian Sol are dampening demand in the world’s largest market for fishmeal and fish oil. These opposing trends mean that there is no certain path for the industry, with the conclusion of the first 2022 anchoveta season in Peru set to determine much of what happens in the rest of the year.
**Peru | Exports | Fishmeal**  
Top three destinations  
Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>Germany</th>
<th>Japan</th>
<th>Other countries</th>
<th>Total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Peru Statistics Office - SUNAT

**Peru | Exports | Fishoil**  
Top three destinations  
Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Other countries</th>
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<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
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</table>

Source: Peru Statistics Office - SUNAT

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

<table>
<thead>
<tr>
<th>Year</th>
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<th>Denmark</th>
<th>Mauritania</th>
<th>Other countries</th>
<th>Total imports</th>
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<td></td>
<td></td>
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<tr>
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<tr>
<td>2021</td>
<td></td>
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</table>

Source: Norway Bureau of Statistic

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Norway</th>
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<th>Other countries</th>
<th>Total exports</th>
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<td></td>
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<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Eurostat
**FISHMEAL and FISH OIL**

**China | Imports | Fishmeal**

**Top three origins**
Unit: 1 000 tonnes, January-December

- Peru
- Viet Nam
- Thailand
- Other countries

Source: *China Customs, estimates*

**Prices**

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

Source: *Oil World*

**Prices**

**Fish oil and rapeseed oil: Europe**
USD/tonne

Source: *Oil World*
Slightly lower supplies and major trade disruptions

Quotas for some major groundfish species have been reduced. Cod supplies are expected to be tighter in 2022. Pollock landings from US fisheries may also be lower, and it is uncertain if pollock from the Russian Federation will be available to western markets. The war has already disrupted trade patterns.

Supplies

According to information presented at the National Fisheries Institute’s 2022 Global Seafood Market Conference, global supplies of cod will drop by some 50 000 tonnes, to 1.45 million tonnes. Practically all of this decline is due to a decline in supplies of Atlantic cod, which will go down by 75 000. Pacific cod, on the other hand, is expected to increase by 25 000 tonnes to 390 000 tonnes.

Norwegian fishers will be able to benefit from a carryover of last year’s uncaught quota in the Barents Sea. As much as 20 percent of the 2021 quota was not caught, with 48 762 tonnes of cod to be carried over, bringing the total quota for Norway to 385 265 tonnes in 2022.

For haddock, a 23 percent uncaught Norwegian quota, or 10 935 tonnes, will be carried over to the 2022 quota, which will then be 101 636 tonnes, down from the 2021 quota of 127 377 tonnes.

The adjusted Norwegian saithe quota stands at 197 212 tonnes, practically the same as in 2021 (197 779 tonnes). For saithe, there is practically no carryover, just 756 tonnes.

The northern Norway regions of Lofoten, Vesterålen and Senja have for many years been the central cod fishing areas in Norway. However, climate change may change this soon. Warmer waters are pushing the spawning cod northwards toward Finnmark, - the top of Norway -, and even into the Barents Sea, and some now fear that the lucrative Norwegian cod could end up spawning in Russian waters.
Global supplies of pollock are expected to decline by close to 8 percent in 2022, from 3.49 million tonnes in 2021 to 3.22 million tonnes in 2022, as to a forecast by the Global Seafood Market Conference. The United States of America has set their 2022 TAC of Alaska pollock at 1.24 million tonnes, a reduction of 189 000 tonnes from 2021. However, landings in the Russian Federation started very well, and may in part compensate for the reduction in US landings. It is quite another matter, though, whether the Russian whitefish will now be able to reach many markets, as many countries have imposed sanctions on Russian trade, although not yet on whitefish.

**RECENT NEWS**

The European Union has been in a dispute with Norway over its cod quota in the area around Svalbard. In early 2021, Norway made a unilateral decision to cut EU’s quota in Svalbard and transferred 50 percent of it to the Russian Federation. However, with the outbreak the conflict in Ukraine, the situation is very unclear. European Union representatives suggest that Norway should transfer the quota back to the European Union now that Europe is imposing sanctions on the Russian Federation.

The situation is a very sensitive one for Norway, which for years has had a very close and very successful cooperation with the Russian Federation in the management of shared fish stocks in the Barents Sea. Consequently, both Norwegian authorities and fishermen’s associations are reluctant to impose sanctions on the Russians in this fishery. At present, they are desperately looking for ways to continue fisheries research and management cooperation, while at the same time making it clear that Norway condemns the Russian attack on Ukraine and supports other sanctions against the Russian Federation.

At the beginning of the Ukraine conflict, Norwegian authorities said they had no plans to ban Russian fish landings in Norway. Over the past years, a number of Russian vessels have landed their catch in fishing ports in northern Norway. Norwegian processing plants have come to rely on this for their supplies of raw material. However, the volume is rather modest. During the first two months of 2022, Russian vessels had landed 1 300 tonnes of cod in Norwegian ports.

**Production**

Following a disappointing start to the season, Icelandic cod fishers experienced good weather and exceptional landings in March. These good landings have put downward pressure on prices. While prices are still higher they were this time last year, they are a lot lower than they were at the beginning of the year.

The winter pollock fishery in the Sea of Okhotsk got off to a good start in January, and by the end of the month they were about 4 percent more than at the same time in 2021.
The good fishing continued into February, and landings continued to be above the corresponding landings in 2021. A large proportion of the catch is processed on-board into fillets. By mid-February, total pollock landings from the Russian Far Eastern regions amounted to 298,600 tonnes, and by 1 March, landings of pollock in the Far Eastern Basin stood at 463,000 tonnes, or 16 percent ahead of landings a year ago.

**Market**

In February 2022, it was reported that demand for frozen H&G Atlantic cod was strong and increasing, but supplies were tight. As a consequence, prices have soared and approached USD 5,000 per tonne for fish delivered to China. Haddock prices were also on the rise.

Demand from China is very strong, and it is obvious that Chinese processors are back in action. Prior to Lunar New Year, many processors were stocking up on raw material. It should be noted that a fair share of the imported cod is now being consumed in the Chinese market.

While China has been importing less pollock from the United States of America, consumption of pollock (and other whitefish) is on the rise in the Chinese market. The Genuine Alaska Pollock Producers (GAPP) now expect China to develop into a strong market.

Another country that is expected to hold great promise as a market for pollock is Malaysia. Together with the United Kingdom of Great Britain and Northern Ireland, Spain, and the United States of America, Malaysia is one of the countries identified in a new report commissioned by the GAPP that is considered important future markets for pollock.

In the report, Wild Alaska Pollock 2040: Future Potential for Current and New Markets, these four countries were ranked as “most favourable” future markets for pollock. Countries like France, Germany, Japan, Poland, the Republic of Korea, and the United Arab Emirates were ranked as “favourable” future markets.

**Trade**

Shipping fresh fish over long distances has become very expensive because of the lack of freight space available. Since the outbreak of the COVID-19 pandemic, flights have been cancelled, and therefore freight space has been cut dramatically, while air freight rates have skyrocketed. This is hurting particularly shipments of salmon to Asia, but also some whitefish.

Norway exported almost 65,000 tonnes of frozen cod in 2021, a 12 percent increase compared to 2020. The total value of these exports also rose but only by 2 percent to NOK 2.24 billion (USD 255.5 million). Exports of fresh cod soared by 38 percent to 51,769 tonnes, and the value of fresh cod exports increased by 16 percent to NOK 1.71 billion (USD 192.3 million). Norwegian exports of fresh haddock, on the other hand, declined by about 3 percent to 16,706 tonnes.
The Republic of Korea shipped almost 100,000 tonnes of H&G frozen pollock to China between June and November 2021. Most of this was of Russian origin but had to be re-routed because of China’s restrictions on Russian vessels coming into Chinese ports. During the same period, Russian pollock exports directly to China fell by 104,000 tonnes. In previous years, Korean pollock exports to China were negligible (821 tonnes in 2019).

In 2021, the United States of America exported 312,280 tonnes of Alaska pollock, an increase of 108 percent over 2020. However, prices dropped, and the export value dropped by 4 percent to USD 901.8 million.

Surimi

Production of surimi and minced fish in the Russian Federation increased by 61.4 percent during the first eleven months of 2021, to 41,000 tonnes.

US exports of frozen surimi increased from 151,965 tonnes in 2020 to 167,666 tonnes in 2021. The value of this increased from USD 397.8 million in 2020 to USD 444.2 million in 2021.

Demand for surimi-based products in the United States of America is booming, and sales are up significantly. Plant-based “seafood” products are also gaining in popularity. These trends underline the fact that the urbanised American consumer often prefers products that do not remind them of living animals. According to recent reports, demand for these products will continue to rise in coming years.

Prices

The outbreak of the Ukraine conflict has affected whitefish prices considerably. Prices for Norwegian H&G cod shot up in March, as many traders saw Russian fish as too risky. Shortage of fish is pushing prices up, and if sanctions against the Russian Federation are intensified, supplies will become even more problematic, and prices will be pushed further up. In addition to the effects of the conflict, inventories of a number of products are low at the moment. Normally, prices slip a bit during February and March as landings pick up, but this year that has not happened.

Outlook

Supplies of whitefish will be tighter in the near future. This is primarily because some quotas have been lowered, but more importantly because of the sanctions imposed against the Russian Federation, which will cut off supplies to Western markets. It is a bit difficult to predict how this situation will develop, but it seems clear that there will be a significant change in trade patterns.

Prices have already started to rise, and it is expected that they will rise significantly in the months to come. This is both because of the tighter supply situation, but also because of rising demand in most markets.
**Norway | Exports | Cod | Frozen whole**

**Top three destinations**
Unit: 1 000 tonnes, January-December

![Graph showing top three destinations for Norway exports]

Source: Norway Bureau of Statistics

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**Netherlands | Imports | Cod | Frozen whole**

**Top three origins**
Unit: 1 000 tonnes, January-December

![Graph showing top three origins for Netherlands imports]

Source: Eurostat

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**Germany | Imports | Alaska pollock | Frozen fillets**

**Top three origins**
Unit: 1 000 tonnes, January-March

![Graph showing top three origins for Germany imports]

Source: Germany Statistical Office - Destatis

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**Russian Federation | Exports | Alaska pollock | Frozen whole**

**Top three destinations**
Unit: 1 000 tonnes, January-December

![Graph showing top three destinations for Russian Federation exports]

Source: China Customs, estimates
**GROUNDFISH**

**China | Imports | Cod | Frozen whole**

**Top three origins**
Unit: 1,000 tonnes, January-December

- Russia federation
- United States of America
- Norway
- Other countries

**Source:** China Customs, estimates

---

**China | Exports | Cod | Frozen fillets**

**Top three destinations**
Unit: 1,000 tonnes, January-December

- United States of America
- United Kingdom
- Germany
- Other countries

**Source:** China Customs, estimates

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**China | Exports | Alaska pollock|**

**Frozen fillets**

**Top three destinations**
Unit: 1,000 tonnes, January-December

- Germany
- Republic of Korea
- United States of America
- Other countries

**Source:** China Customs, estimates

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**Export price**
**Cod: Norway**

NOK/kg

Source: Norwegian Seafood Council
Tight supplies, higher prices

After a very good year in 2021, the supply of American lobster (Homarus americanus) is expected to be tighter in 2022. Demand remains very good and is rising along with prices. The global lobster trade is generally back to pre-COVID-19 levels.

Supplies

2021 was a record year for the Maine lobster fishery. The fishery brought lobstermen USD 724.9 million, which was an increase of USD 312.3 million (76 percent) from 2020. The volume landed amounted to 108,048,704 pounds (49,010 tonnes), about 10 percent above landings in 2020. Very strong demand is thought to be a contributing factor for the record landings, which pushed prices up and made lobster harvesting more attractive to the fishers.

Maine is by far the most important US supplier of lobsters, accounting for 82 percent of all US lobster landings. However, the outlook for the lobster industry in Maine is not all bright. The on-going dispute over measures to protect the right whale, especially regarding the new and stringent gear requirements, is still causing concern. The new gear guidelines include the use of “weak links” that would allow right whales entangled in ropes attached to the lobster traps to escape. During the peak season there as many as 80,000 vertical ropes in the water, which would require modification to include a “weak link”. At the same time, it is still difficult to obtain this equipment.

Environmental groups have also entered the discussion. The Seafood Watch programme of the Monterey Bay Aquarium has proposed adding several fisheries to its “Red List”, a catalogue of seafood that Seafood Watch says consumers should avoid. Lobsters from the East Coast of the United States of America are among the species that the group wants consumers to avoid, due to the threat to the North Atlantic right whale.

There is also concern that climate change may influence Maine’s lobster industry. The water in the Gulf of Maine is heating up, and this is pushing lobsters further to the north.

Market and trade

Global lobster trade picked up again and is now more or less back to pre-COVID-19 levels, with global imports up by almost 15 percent in 2021 compared to 2020. Canada registered a 33.6 percent increase in imports and a 16.9 percent increase in exports. The United States of America also saw major increases in its foreign trade, while China imported 11 percent less in 2021 than in 2020.

The COVID-19 pandemic caused some turbulence in the global lobster market. Problems with logistics made shipments difficult and very costly. There were difficulties with cargo availability on flights and freight handling, with labour and materials shortages also affecting the market. As an example, while Maine lobster is in high demand in China, Hong Kong SAR, the aforementioned issues have made it difficult for exporters to serve this market.
Lobster

Lunar New Year is usually a high season for lobster sales in China and Chinese communities in Southeast Asia. The availability of commercial flights has yet to return to pre-pandemic levels, meaning reduced freight availability. This has directly impacted shipment of live lobsters from North America to China. Consequently, the volume shipped was only about 30 percent of what one would expect in a typical year.

2021 was also a record year for Canadian lobster sales. This was partly due to a recovery after the initial disruption of the pandemic, as consumers seem to be keen on treating themselves to luxury seafood like lobster. Canadian exports of American lobster soared to CAD 3.2 billion (USD 2.52 billion), CAD 700 million more than exports in 2020. China imported live lobster worth CAD 454 million from Canada, while the United States of America imported live lobster worth CAD 522 million from Canada.

Exports of frozen and processed lobster from Canada were up by USD 790 million in 2021 compared to 2020. The United States of America was the most important market, with imports of 31 706 tonnes of frozen and processed Canadian lobster during the first eleven months of 2021, followed by the Republic of Korea with 2 211 tonnes and Spain with 1 595 tonnes. China imported just 1 200 tonnes of frozen and processed lobster from Canada in 2021.

The market outlook for Canadian lobster in 2022 is very positive. Sales during the first two months of the year continue to be strong, with prices high.

As the United States of America is sending lobster to the Chinese market in accordance with the Phase One trade agreement with China that was signed in January 2020, less US lobster is apparently available for the EU market, in spite of the tariff-free access for US lobsters on the EU market granted in November 2020. This void has been filled by Irish supplies. In 2021, Irish lobster exports to the European Union increased by 37 percent in value terms to USD 19 million.

Sales of warmwater spiny lobsters in Europe are expected to increase in 2022 as the European Union authorized imports of lobsters from Nicaragua. It is expected that exports of spiny lobsters from Nicaragua will increase by some 27 percent in 2022 compared to 2021, and much of this increase will go to the European Union.

Demand for warmwater spiny lobster is also growing in the US market, albeit slowly. Warmwater lobsters constitute 22 percent of the US lobster market, and in 2021 sales of these species grew by 2 percent. Supplies were somewhat limited by hurricanes and trade interruptions caused by COVID-19.

Prices

The high cost of live lobsters is causing some consumers in the United States of America to switch to lobster tails. While the price for live American lobster is about USD 10 per lb, lobster tails are selling for about USD 7 per lb. The shift from live lobster to lobster tails is beginning to be seen in statistics, too: sales of lobster tails in the United States of America rose by 16 percent in 2021, while sales of live lobsters rose by 14.4 percent.
Prices for American lobsters on the European market continued their upward trend into the end of 2020, although there was a drop from early to mid-2021. Since then, import prices for US lobsters in Europe have been high and stable. Inflation in many European countries is rampant and may dampen sales somewhat.

Prices can be expected to remain high, and lower supplies during the early months of 2022 mean that they could well rise further.

**Outlook**

The outlook for the lobster market is generally bright. Demand is strong and rising significantly in the most important markets, and prices are high and will remain so for some time.

There are still problems in the US-China trade situation, but both countries seem more interested in resolving the disputes now. Trade between the two countries has been picking up after the initial phases of the trade war.

Demand is also good in the European and North American markets. However, high prices and high inflation rates may soften the growth in sales somewhat. Furthermore, there may be some economic effects of the war in Ukraine that may impact demand for luxury food items such as lobster, although it is far too early to say precisely how this will affect the market.

### Canada | Exports | Lobster

**Top three destinations**

Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
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<tbody>
<tr>
<td>United States of America</td>
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<td>China</td>
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<td>90</td>
<td>108</td>
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</table>

Source: *Canada Statistics*

### China | Imports | Lobster

**Top three origins**

Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
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<th>2021</th>
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<tbody>
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<td>20</td>
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<td>Viet Nam</td>
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</table>

Source: *China Customs, estimates*
### World imports and exports of lobsters January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
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<td><strong>Total imports</strong></td>
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<td><strong>Exports</strong></td>
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<td><strong>Total exports</strong></td>
<td>197.98</td>
<td>168.11</td>
<td>186.23</td>
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</table>

Source: Trade Data Monitor.
Record prices and tight supply

Last year saw pangasius trade drop significantly, with supply severely inhibited by a wide-ranging lockdown in Viet Nam. While there has been strong demand for pangasius in most markets, China saw their volume of imports fall by close to 50 percent. Prices are as high as they have ever been, but there is has been only limited stocking throughout the COVID-19 pandemic.

Production

The last couple of years have been difficult and disruptive for pangasius farmers. Bottlenecks further up the supply chain have led to wildly fluctuating demand, with periods of surging demand followed by lockdowns that have often left producers with fish in their ponds. Demand from processors is currently strong, with farmgate prices higher than ever before. However, as farmers have reduced their stocking over the last two years there are currently only limited supplies, and often fish are above the ideal market size. As such, few producers are currently in a position to take advantage of these high prices, but many are now stepping up production. The breeding season typically peaks towards the middle of the year, with additional supply expected to start coming onto the market between July and August, possibly easing pressure on prices and pushing them back down.

Lockdowns in Viet Nam, by far the largest global producer of pangasius, have disrupted supplies. From July 2021 movement between regions was significantly restricted, negatively impacting the availability of labour. Many pangasius processors temporarily closed their factories, with those that stayed open grappling with severely restricted flow of goods and people. COVID-19 cases in the country peaked in mid-March, with authorities lifting some restrictions such as 9 pm closing times for restaurants towards the end of March, followed by a relaxation of restrictions on domestic travel in early May.

The cost of inputs has increased significantly in recent months. Fingerlings are in short supply and have seen rapidly rising prices; in Viet Nam they now stand at VND 50 000 per kg, more than double the VND 23 000 per kg that they were selling for this time last year. Meanwhile, fish feed costs have risen rapidly, 40 per cent higher than at the beginning of 2022.

Trade

The pangasius industry is still feeling the effects of the most recent lockdowns in Viet Nam and increased testing at the Chinese border, with volume traded in 2021 down by 57 000 tonnes (-9.4 percent) from 2020. Much of this reduced volume was due to reduced demand and difficulties accessing the Chinese market, with China’s zero COVID-19 policy causing headaches for exporters. Border testing of packaging for traces of COVID-19 has been intensified, and numerous Vietnamese shipments of pangasius were turned back in late 2021 and early 2022. Despite a year-on-year reduction in imports of close to 50 percent, China remains the main market for pangasius by volume with imports of 126 000 tonnes in 2021. Chinese imports of pangasius have bounced back with renewed vigour in early 2022, with March import volumes up by 63 percent year on year.
The last year has seen the US market overtake China in value terms, with US imports growing by close to 40 percent while Chinese imports shrunk by a similar proportion. The latest figures indicate that the United States of America imported 117 000 tonnes of pangasius with a value of USD 393 million in 2021, up by 24 000 tonnes and USD 108 million on 2020. The United States of America's 17th review of anti-dumping duties on Vietnamese pangasius was issued in March, with the second largest exporter of pangasius to the market became exempt from paying anti-dumping duties.

Reduced trade with China has added to existing pressure on exporters to diversify their target markets. In order of imports by volume, Mexico, Brazil, Colombia, the Russian Federation and the Philippines together accounted for 20 percent of the global volume of imports of pangasius in 2021, with all of these markets seeing significant growth. Between 2020 and 2021, Mexico saw imports increase in volume by 98 percent, Brazil by 27 percent, Colombia by 63 percent and the Russian Federation by 83 percent. The Russian Federation accounted for close to 3 percent of global imports of pangasius in 2021, and the Animal and Plant Health Quarantine Service of the Russian Federation recently approved two of the largest pangasius processors, both Vietnamese, to export to the Russian Federation and other members of the Eurasian Economic Union.

**Prices**

In recent months, the low volumes available on the market have led to rapidly rising farmgate prices, with Vietnamese farmers receiving VND 32 500 per kg (USD 1.42 per kg) in early May. This is a substantial increase on last year when prices were VND 20 000 per kg. While these high prices have been sustained these last few months, past periods of high prices have soon been followed by a glut in the market and prices returning to close to breakeven. Similar prices have not been seen since the last peak between May and November 2018, after which they took a rapid tumble.
Outlook

The ever-present wariness of pangasius’s now familiar boom and bust cycle persists, with the industry hoping that the events of 2018 are not set to repeat themselves. Tight supplies and healthy demand have led to high prices, which are unlikely to be sustained for long after the middle of this year as more product is expected to come on to the market in the coming months. Most producers do not have harvestable fish on hand to take advantage of the current prices, and are facing greatly elevated costs which will make for slim margins if prices fall again. Further up the chain exporters are grappling with reduced freight availability and sustained high freight costs. Strong demand for pangasius in major export markets will likely persist, but it remains to be seen if the industry can avoid the gluts that have plagued it previously.
Farmed Atlantic salmon prices reach 40-year highs

The upheaval associated with the COVID-19 pandemic has now given way to the far-reaching economic and political effects of the conflict in Ukraine. However, the resilient salmon market is booming, and limited supply is sending prices soaring to exceptional heights.

Production

Atlantic salmon

Global farmed Atlantic salmon production in 2021 is estimated to have increased by some 4.4 percent to 2.8 million tonnes, which is somewhat higher than previously forecast. European producers, led by Norway, drove the majority of growth amidst a positive market environment. Emerging producer nations recorded significant increases in harvest volumes, eroding the supply share of the traditionally larger players. In contrast, Chilean output dropped sharply by comparison with last year, partially offsetting gains elsewhere and keeping a tight market balance.

Norwegian production of farmed Atlantic salmon is estimated to have increased by some 10 percent in 2021, boosted by good biological conditions in the pens and high smolt utilization. The figure also reflects farmers’ decisions to delay production from 2020 to 2021 in response to the initial onset of the COVID-19 pandemic and the uncertainty that accompanied it. This has meant that fish have remained in the water longer and has pushed average harvest weights up. As a result, the increase in the number of fish harvested in Norway was relatively small, with 387.6 million fish over the year representing a 3 percent increase relative to 2020. Logistical challenges persisted throughout 2021, with limited transport capacity and high costs affecting all stages of the supply chain and forcing suppliers to pass high costs onto consumers. In early 2021, increased incidence of winter sores is being reported in Norway, meaning a higher proportion of fish must be downgraded in quality.

In Chile, according to analysis by the consulting firm AquaBench, an increase in mortality and lower harvest weight affected the productive results for salmonids in 2021. Total biomass harvested at the industrial level reached 989 000 tonnes, 8 percent less than 2020. Of this, 723 650 tonnes (73 percent) was accounted for by Atlantic salmon (7.4 percent). Figures for Chile output in 2021 vary between sources, however, with some observers putting the drop at closer to 12 percent. This sharp contraction reflects the conservative approach to stocking taken by Chilean farmers in 2020, when the pandemic, a trucker strike and general social unrest all contributed to risk-adverse production planning. However, after a difficult 2020, last year was an improvement for the Chilean industry in terms of operational challenges.
In the United Kingdom of Great Britain and Northern Ireland, Scottish salmon farmers bounced back from a weak year in 2020 to record an estimated 4.5 percent growth in output in 2021. A large proportion of the increase was attributed to the second half of the year, when higher fish weights and a reopening market drove harvesting. Elsewhere, 2021 was also notable for the surge in growth observed in emerging producer nations, which include Iceland, the Russian Federation and Australia. Land-based producers, many based in Norway, have also been growing, posting an estimated 30 percent increase in 2021 to reach some 10 000 tonnes of total output. However, there remain concerns over the long-term profitability of land-based farming, given the significantly higher costs that must be incurred.

Other farmed salmonids

Coho salmon harvests rose around 13 percent year-on-year in Chile in 2021, to a reported 213 635 tonnes. Chile is the top producer of farmed coho, of which the majority is sold to the Japanese market. Meanwhile, Chilean farmed trout production fell sharply by 38 percent, to 51 776 tonnes. Farmed trout harvests were also well down in Norway, with the authorities reporting harvests of 20.7 million fish, down 16 percent in comparison with the prior year. Biomasses in the pens remained significantly lower year-on-year at the end of 2021, contributing to ongoing tight supply.

Wild salmon

Last year was an exceptionally good year for wild Pacific salmon fisheries, both in Alaska and in the Russian Far East. The Alaskan fleet landed some 24 million fish, 20 percent about forecasts and well above the last odd year, while the Russian industry recorded the second largest catch in history of more than half a million tonnes. The new season typically gets underway in June and lasts throughout the summer, although there is some variation by region and by fishing equipment used.

Markets

The COVID-19 pandemic has impacted many industries, including seafood, but salmon has weathered the restrictions well due to the geographical diversity of its markets, the range of products on offer at retail and the impressive progress that has been made in recent years in establishing salmon as a globally accepted, high-status and uniquely positioned seafood item. Even as restaurants shut down across the world and logistical challenges mounted, salmon business revenues generally remained stable or recovered rapidly from the initial hit. As economies have reopened, it has generally been expected that the additional demand and sales opportunities represented by the marketing strategies and delivery methods adopted during the pandemic would persist into 2022, and this is indeed what has been observed so far this year.
At the same time, however, there are reports from major markets that the damage inflicted by the pandemic continues to affect the restaurant sector. For those that have survived and reopened, rampant inflation, labour shortages and logistical issues continue to negatively impact operations. This has seen many restaurants adopt more streamlined business strategies, reducing the number of items on the menu and focusing on the most profitable species in value-added forms so that in-house preparation time is reduced. At the same time, variants of COVID-19 continue to represent an ever-present threat to any business requiring in-person gathering, and the lockdown in Shanghai in early 2022 in response to a new wave serves as a reminder that the threat of the pandemic remains, despite a general loosening of restrictions.

Despite overcoming the worst of the pandemic, there are other world events that are affecting prices, logistics and consumer confidence. The conflict in Ukraine, the resulting international sanctions and the consequent impacts on logistics and the world economy are now central in the minds of analysts and observers of the global salmon sector. The rise in commodity prices and food prices has a direct impact for businesses’ bottom lines, while the political repercussions of the conflict are deep and far-reaching. Large Western retail chains have pulled out of the Russian Federation in response to the conflict, and, although the majority of European salmon production has been subject to a Russian embargo for many years, Chile has expanded its share of the Russian market significantly and now exports some 50 000 tonnes annually to the Russian Federation. For retailers outside of the Russian Federation, the conflict is nevertheless still a primary determinant of business decisions. Many have made commitments to reduce or eliminate products sourced from the Russian Federation, including seafood products. At the same time, the combination of increased costs, tight supply, recovering demand and widespread uncertainty is creating difficulties for many stakeholders, particularly processors and other supply chain intermediaries, despite the substantial increase in revenues resulting from spiking price levels.

Trade

Despite the challenges associated with the repeated resurgences of the COVID-19 virus and the exceptionally high freight costs experienced last year, salmon exporters generally recorded high revenues in 2021. Norway, the world’s largest salmon exporter, set records for both volume and value exported in 2021. According to the Norwegian Seafood Council (NSC), Norwegian salmon exports totalled 1.3 million tonnes worth NOK 11.3 billion (USD 1.15 billion), which represents year-on-year increases of 13 percent and 16 percent, respectively. Good demand from retail in Norway’s core European markets during the pandemic was a key driver of these results, with the NSC singling out France and Italy as top performers last year.

Norwegian trout export figures were also 5 percent higher at NOK 4 billion (USD 410 million), despite a 12 percent drop in volume. Despite the record figures, the NSC has noted that costs have also increased significantly, and higher revenues do not necessarily translate directly into improved profitability.
The salmon industry in the United Kingdom of Great Britain and Northern Ireland also recorded impressive export figures in 2021, with figures released by the government putting the annual total at GBP 614 million (USD 767 million), a 36 percent increase compared with 2020. Salmon was exported to 51 different countries, and 10 of the top 20 markets recorded import growth, according to official figures. In particular, exceptionally strong results were reported by the UK’s top 3 markets, France, the United States of America and China. These results were achieved in spite of a number of different factors impacting trade, including the pandemic, freight costs and the severe logistical delays and higher overheads associated with Brexit.

In Chile, export figures for 2021 confirm the sector’s recovery after a complex 2020 marked by logistical challenges and the paralysis of the main sales channels. Coordinated work between government, the aquaculture sector and the fisheries industry have made it possible to continue operating during the crisis, and to drive the recovery as lockdown restrictions were lifted.

One measure the Chilean industry has taken to mitigate the impact of the pandemic is to diversify away from its three primary export markets, the United States of America, Japan and Brazil. Salmon shipments to the Russian Federation have also been redirected to other markets, mainly in Asia, including China, Taiwan Province of China, and Southeast Asia. In 2021, the Russian Federation ranked fourth among the main markets for Chilean salmon, importing 50 689 tonnes (7 percent of Chile’s salmon export volume), according to Chilean Customs, 17.7 percent down from 2020 levels.

The United States of America absorbed 44 percent of Chile’s salmon production in 2021, more than double the next highest export destination, Japan. The US market has been characterised by stable retail demand throughout the pandemic and the reactivation of the foodservice sector is now contributing to very strong market momentum, despite the continuing difficulties being faced by the restaurant industry. Although the United States of America imports some processed salmon from the Russian Federation these volumes are relatively low, and so the sanctions have had a limited impact.
Prices

The most notable feature of the current market for Atlantic salmon is soaring prices, which in the second quarter of 2022 are reaching levels not seen in some 40 years. According to the NASDAQ salmon index, in week 18 of 2022 Norwegian fresh, head-on-gutted Atlantic salmon were selling for NOK 122.05 (USD 12.58) per kg. Prices for Chilean fillets exported to the US market are also high, at USD 15.70 per kg in week 16. These exceptionally high levels are part of a broader trend of rapid inflation, driven in part by rising costs of inputs and logistics, but also reflecting a general lack of fish and a strong recovery of demand for salmon worldwide.

Outlook

The soaring prices in the market for farmed Atlantic salmon are translating into very high revenues for salmon farmers, and margins are good despite rising costs and inflation. Although some decline from current peak prices is expected, global supply growth this year is unlikely to be sufficient to bring prices back to levels observed in recent years. At Fish Pool, Norwegian forward contracts were closing at levels ranging from the mid-NOK 80s (USD 8.80) to the mid-NOK 70s (USD 7.75) per kg for the remainder of the year, with the lowest prices observed in the traditional post-summer harvesting period. Fundamentally, the forecasted increase of 1-2 percent in Norwegian production and 4-6 percent in Chile in 2022 are far below the levels needed to keep prices at 2021 levels given the present buoyant market conditions. At the same time, the conflict in Ukraine and the resulting political and economic upheaval remains a significant source of uncertainty that could contribute to further cost increases and reshuffling of trade routes and trading relationships.

| Top three global producers of farmed Atlantic salmon (1 000 tonnes) |
|------------------|------------------|------------------|------------------|------------------|------------------|
| Norway           | 1 237            | 1 285            | 1 368            | 1 360            | 1 405            |
| Chile            | 614              | 677              | 746              | 805              | 724              |
| The United Kingdom | 190          | 162              | 194              | 181              | 186              |
| Others           | 320              | 330              | 321              | 367              | 381              |
| Total            | 2 361            | 2 454            | 2 629            | 2 713            | 2 696            |
| Total            | 4 722            | 4 908            | 5 258            | 5 426            | 5 392            |

Source: FAO (until 2019) (*) Estimate
**Salmon**

**United States of America | Imports | Salmon | Fresh fillet**

Top three origins
Unit: 1 000 tonnes, January-December

![Graph showing imports of salmon fresh fillet from top three origins in the United States of America, with data from 2019 to 2021.](source: Eurostat)

**United States of America | Imports | Salmon | Fresh whole**

Top three origins
Unit: 1 000 tonnes, January-December

![Graph showing imports of salmon fresh whole from top three origins in the United States of America, with data from 2019 to 2021.](source: Eurostat)

**Prices**

**Salmon: Norway**

NOK/Kg

![Graph showing prices of salmon in Norway, with data from March 2017 to March 2022.](source: European Price Report, FOB prices)
High prices are tinged by inflation and rising costs

Stagnant growth in seabass production has led to tighter supplies, while seabream saw marginally higher production in 2021. Demand for both species is as strong as it’s ever been, which has pushed up prices and led to an unusual surge in prices over the winter period. Rising costs of inputs and high inflation rates in Europe are putting pressure on producers.

Production

Despite an increase in production of some 5 000 tonnes in 2021 over 2020, seabass output is still 7 percent below the peak seen in 2019. Turkey, the main producer of seabass and seabream, continued to see reduced production in 2021, continuing a trend from 125 000 tonnes in 2019 to 112 000 tonnes in 2020 and 110 000 tonnes in 2021. Spurred by higher prices, secondary producers, notably Greece, Spain and Italy, increased production in 2021, bringing an additional 7 000 tonnes onto the market.

There has been rapid growth in seabream production, with more fish brought to market in 2021 than ever before. Much of this increase came from Greece, Turkey and Spain, who respectively increased their production by 9 000 tonnes (+12 percent year-on-year), 8 000 tonnes (+8 percent) and 4 500 tonnes (+60 percent). Spanish production is decidedly on the road to recovery after storm Gloria in January 2020, with output in 2022 expected to return to the level seen in years prior to 2020.

Rising inflation in Europe, which averaged 5.8 percent annually in February 2022 (+4.6 percent year-on-year) according to Eurostat, will place pressure on producer’s margins. Turkey’s inflation rate is far higher, at 54.4 percent annually according to the Turkish Statistical Institute. Producers will also be squeezed by rising costs, as the cost of feed, packaging and shipping have all increased. For now, they will have to hope for continued high prices in order to recoup their investments.

Trade and markets

As in previous years, harvest volumes of seabass and seabream declined during the winter offseason, resulting in a substantial drop in trade volume in the fourth quarter of 2021. Initial figures indicate that the volume of trade fell by around 12 percent between the third and fourth quarter of 2021, putting further pressure on prices.

Seabass and seabream have enjoyed newfound growth in North America, where imports have risen steadily. US imports rose from 8 095 tonnes in 2020 to 12 100 tonnes in 2021 (+49 percent), with most of the increase being made up of seabass from Greece. Canadian imports have also increased substantially, from 1 880 tonnes in 2020 to 2 530 tonnes (+35 percent) in 2021. Other emerging markets that have seen strong relative growth for seabass and seabream include Croatia, whose imports grew by 160 percent from 281 tonnes in 2020 to 728 tonnes in 2021, and the United Kingdom of Great Britain and Northern Ireland, whose imports rose from 10 430 tonnes to 12 100 tonnes (+16 percent).
Prices

Prices for farmed seabass have risen significantly, with tightening supply and unusually high demand towards the end of the year leading to high prices. In late February Spanish wholesale prices of domestically produced seabass were EUR 8.77 per kg for fish for large fish, EUR 6.50 per kg for medium-sized fish and EUR 6.02 EUR per kg for small fish. These good fortunes have not been shared with their wild-caught counterpart, which saw a sharp decline in price from EUR 27.00 EUR per kg at the beginning of December 2021 to EUR 19.27 EUR per kg in late February 2022.

Having seen little variation for much of 2021, prices for farmed seabream saw a strong appreciation over the Christmas period, largely due to increased demand. Small seabream on the Spanish market (wholesale) were selling for EUR 5.60 per kg in December 2021 (up 14 percent from November), medium fish for EUR 5.47 per kg (up 12 percent from November 2021) and large fish for EUR 6.98 per kg (up 9 percent from November 2021). Prices for wild-caught seabass took a plunge in January 2022, falling to EUR 18.50 per kg from EUR 26.00 per kg in early December 2021. They have since recovered and stood at EUR 25.00 per kg at the end of February 2022.

Outlook

2021 saw the highest levels of demand for seabass and seabream ever, with total supplies of both species standing at 520 000 tonnes, a 5 percent increase over 2020. The reality of limited supplies of seabass is likely to persist for quite some time, as there is little sign of major producers upping production enough to plug the supply deficit. On the other hand, we will likely see plentiful supplies of seabream in 2022, with the effect this will have on prices during the year as yet to be seen.
### SEABASS and SEABREAM

#### Turkey | Exports | Seabass | Fresh

Top three destinations

Unit: 1 000 tonnes, January-December

- **United Kingdom**
- **Italy**
- **United States of America**
- **Other countries**
- **Total exports**

![Graph showing Turkey's Seabass exports destinations from 2019 to 2021](source: Turkey Statistical Institute)

#### Italy | Imports | Seabass | Fresh

Top three origins

Unit: 1 000 tonnes, January-December

- **Greece**
- **Turkey**
- **Croatia**
- **Other countries**
- **Total imports**

![Graph showing Italy's Seabass imports origins from 2019 to 2021](source: ISTAT - National Institute of Statistics)

#### Turkey | Exports | Seabream | Fresh

Top three destinations

Unit: 1 000 tonnes, January-December

- **Italy**
- **Greece**
- **Spain**
- **Other countries**
- **Total exports**

![Graph showing Turkey's Seabream exports destinations from 2019 to 2021](source: Turkey Statistical Institute)

#### Italy | Imports | Seabream | Fresh

Top three origins

Unit: 1 000 tonnes, January-December

- **Greece**
- **Turkey**
- **Croatia**
- **Other countries**
- **Total imports**

![Graph showing Italy's Seabream imports origins from 2019 to 2021](source: ISTAT - National Institute of Statistics)
## SEABASS and SEABREAM

### Top global producers of seabass (1,000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2019</th>
<th>2020*</th>
<th>2021*</th>
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<tr>
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<td>Others</td>
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<td><strong>Total</strong></td>
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<td><strong>221</strong></td>
<td><strong>236</strong></td>
<td><strong>248</strong></td>
<td><strong>222</strong></td>
</tr>
</tbody>
</table>

Refers to European seabass only.
Source: FAO (until 2019) (*) estimate.

### Top global producers of seabream (1,000 tonnes)

<table>
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<tr>
<th></th>
<th>2016</th>
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<th>2019</th>
<th>2020*</th>
<th>2021*</th>
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<tr>
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<td>9</td>
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<tr>
<td>Others</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>230</strong></td>
<td><strong>246</strong></td>
<td><strong>240</strong></td>
<td><strong>243</strong></td>
</tr>
</tbody>
</table>

Refers to Gilthead bream only.
Source: FAO (until 2019) (*) estimate
The United States of America overtook the European Union as the top shrimp importer in 2021

International shrimp trade showed strong recovery in 2021 following reopening of the restaurant and hospitality sector in North America and Europe. Encouraged by this market development, supplies of farmed shrimp increased in Latin America and Asia compared to 2020. Imports in China and Japan, the two largest markets in Asia, increased marginally.

Supply

The year-on-year production cost of farmed shrimp reportedly increased by 10-14 percent in 2021 without much compensation in ex-farm prices. Nonetheless, the sector produced 4.5 million tonnes of shrimp which is 12.5 percent higher than 2020. Ecuador is the top producer, harvesting 1 million tonnes of shrimp in 2021. Production also increased in China, India, Vietnam and Indonesia.

Affected by the falling domestic supplies of farmed shrimp, Thailand imported 32 600 tonnes of shrimp in 2021, which was 87 percent higher than the previous year. In Vietnam, raw shrimp imports also increased by 15-20 percent at 60 000 tonnes, largely supplied by India (41 000 tonnes) and Ecuador (5 700 tonnes).

International Trade

Globally, the shrimp market remained firm in 2021 with improved demand and matching supplies of farmed shrimp. The estimated international trade for shrimp in 2021 is thought to have reached a historical high at 3.35 million tonnes.

The new market dynamics evolved in the retail trade from COVID-19 related restrictions also continued in 2021 in the large markets. The reopening of restaurant trade in 2021 generated additional demand in the market.

Exports

Ecuador, the top exporter, had a 25 percent share in international shrimp trade in 2021. China remained Ecuador's main market but with reduced share in total exports - from 54 percent in 2019 to 46 percent in 2021; Ecuador's export gains were significantly higher in the United States of America (+53 percent), the European Union (+18 percent), the Russian Federation (+55 percent), the Republic of Korea (+33 percent), Thailand (+175 percent) and the United Kingdom of Great Britain and Northern Ireland (+ 54 percent). Increased export processing of retail packs, semi-processed and processed shrimp contributed to higher exports from Ecuador to the developed markets in North America and Europe. Exports from India also increased to most of these markets.
Imports

The global shrimp market bounced back significantly in 2021. The top seven importers were the United States of America, the European Union, China, Japan, the Russian Federation, the Republic of Korea and the United Kingdom of Great Britain and Northern Ireland. The combined imports of these markets were 2.82 million tonnes in 2021, representing an 85 percent share of the international shrimp trade.

United States of America

2021 was another record year for shrimp imports in the United States of America (895 030 tonnes valued at USD 8 011 million). Among the top five supply sources, imports increased from India (+ 25 percent), Ecuador (+ 46 percent), Indonesia (+8.6 percent) and Viet Nam (+33 percent), but declined marginally from Thailand.

Raw frozen peeled shrimp was the most popular product group, having a 46 percent (416 415 tonnes) share in total shrimp imports, followed by raw shell-on shrimp (30 percent at 276 000 tonnes), breaded shrimp (7 percent at 62 182 tonnes) and other value-added shrimp (14 percent at 125 364 tonnes). In general shrimp prices remained stable in the retail and catering trade.

Europe

The resumption of restaurant and catering trade increased overall demand for raw and processed shrimp throughout the continent.

European Union: Annual imports of shrimp in 2021 were 13.3 percent higher at 829 300 tonnes in comparison with 2020. Spain, France, Denmark, the Netherlands and Italy were the top importers.

The share of extra–EU supplies in total EU imports reduced from 73 percent in 2020 to 71 percent in 2021 (590 304 tonnes), including 108 617 tonnes of processed shrimp.

Imports also increased in the United Kingdom of Great Britain and Northern Ireland by 10 percent to 84 657 tonnes; the top suppliers were Viet Nam, India, Ecuador and Denmark.

Imports in the Russian Federation were 52.8 percent higher, at 90 000 tonnes year-on-year. The top suppliers in ranking were Ecuador, Greenland, India, Argentina and Viet Nam.

Similarly, Ukrainian imports increased by 38.6 percent to 16 700 tonnes; supplies were dominated by Canada (38 percent), Ecuador (20 percent) and India (11 percent).

In Norway and Switzerland imports increased in comparison with 2020.
SHRIMP

This year, imports in the Russian Federation are seriously affected because of the conflict in Ukraine. Shipments to the Russian Federation, which was Ecuador’s sixth largest shrimp market in 2021, have been forced to divert to other markets due to logistical complications and payment difficulties.

China:

In general, consumer demand for seafood, including shrimp, improved in 2021. Domestic trade was brisk during the first and fourth quarter of the year in conjunction with Lunar New Year (January-February) and the National Day in October.

Meanwhile, the national “zero COVID-19” policy and the stringent food inspection of imported seafood kept the quarterly imports of shrimp in the range of 146 000 tonnes during the first nine months of 2021. Imports shot-up during the last quarter of 2021, to 211 400 tonnes, contributing to a 7.4 percent rise in annual imports, at 658 117 tonnes. Ecuador, the top supplier, benefited much as its market share increased to 57.6 percent in 2021 compared with 45 percent in 2019 and 52 percent in 2020.

The National Chamber of Aquaculture of Ecuador (CNA) and the Embassy of Ecuador in China launched the “Ecuador Shrimp” Promotion Campaign in 2021 which was targeted towards giving a new brand image to Ecuadorian shrimp showing advantages to Chinese distributors and consumers, not only for flavour and nutritional value, but also for responsible production, processing, guaranteeing high quality and safety. Imports increased by 10 percent from India, 13 percent from Thailand compared to 2020, but remained below 2019 levels. The drop in official imports from Vietnam was large at 35 percent.

The year 2022 began with a 30 percent rise in the quarter-on-quarter imports into China, as domestic stocks of frozen shrimp reduced during the Chinese New Year celebration in January-February.

Unfortunately, the market is overshadowed following the outbreak of COVID-19 in Shanghai since late March where a full lockdown was implemented following China’s “zero-Covid-19” policy. The lockdowns (full or partial) are also extended to Beijing, and some other big cities since April and May where restaurants are closed to dine-in customers but open for take-away and delivery from 1 May 2022.

Japan

Once the top market for shrimp, Japan has lost its prominence in the global shrimp trade with no real boost in consumer demand over the years. On average, the annual imports in the market were stable around 210 000 to 220 000 tonnes during the last decade.
SHRIMP

Total imports in 2021 were 219,334 tonnes (+4.4 percent), of which 28 percent (62,000 tonnes) were processed/value added products. Among the top five suppliers, imports declined from Viet Nam but increased marginally from India, Indonesia, Thailand and Argentina.

Shrimp consumption in Japan generally increases during the Spring festival months of April and May. Nonetheless, quarter-on-quarter imports during January-March 2022 were 3.5 percent lower than 2021 suggesting high stocks in the local supply chain.

Asia and the Pacific

Overall demand for shrimp in the regional markets improved with the reopening of the restaurants for local populations and lifting of stringent restrictions on dining out. However, restrictions on international tourists remained in most of the countries till the second quarter of the year.

The intra-regional trade of fresh shrimp increased in many southeast Asian markets (Malaysia, Singapore). Imports of frozen shrimp also increased from near and far (India and Ecuador) for local consumption to cater to the Lunar New Year festival demand in particular.

Prices

Despite the high shipping cost, prices of internationally traded frozen shrimp in 2021 remained stable. Along the distribution chain in some import markets (the United States of America), shrimp prices faced 10 to 14 percent inflation in 2021 compared to 2019. However, the price rise seemed to be lower than for other seafood such as scallops, lobsters and crab.

In the retail trade in Southeast and East Asia, prices of fresh/chilled shrimp increased by 25 to 30 percent in 2022 compared with the price level in 2021.

In India packers are concerned about the rises in costs for freight, labour and packaging that add about USD 0.30 - 0.40/per lb to export prices.

Outlook

Shrimp industry leaders anticipate a ten percent rise in farmed shrimp production in 2022. However, the market outlook remains uncertain worldwide in view of the current geo-political and financial issues from the conflict in Ukraine, rising cost of fuel, high freight rates and logistic costs.

The export industries in Asia and Latin America are also concerned about possible weakening in demand from China and Europe. With the anticipated rise in supplies in the coming months in Asia, prices will certainly be under pressure. As of March 2022, ex-farm prices of vannamei shrimp in India were 20-30 percent higher than 2021 levels.
Argentine shrimp fishers forecast smaller catches in 2022 compared to 2021. Stakeholders considered catch levels not entirely satisfactory as vessels landed 36 percent less than during the same period in 2020. In addition, shrimp processing activities could be disrupted for some time due to lack of raw material between seasons.

There will be additional supplies available in Ecuador as its exports to the emerging market in the Russian Federation would be on hold until the sanctions are lifted.

The reopening of HORECA trade in 2021 increased sales opportunities in many markets, both traditional and emerging. Nonetheless the new norms that evolved in retail marketing as a result of COVID-19 restrictions continue to thrive, supporting on-line shopping, home cooking and home delivery services.

In the United States of America, shrimp imports increased by 19 percent during the first quarter of 2022, suggesting good supplies in the market. However, shrimp consumption may suffer if consumer disposable incomes are affected by rising inflation.

In Europe, the conflict in Ukraine will continue to impact shrimp sales in 2022.

During the first quarter of 2022, shrimp imports in China also increased by 30 percent quarter-on-quarter. However, the COVID-19 lockdown imposed on millions of the population in Shanghai, Beijing and many more large cities during March-April caused disruption in shipments from all sources to this market.

### China imports and exports of shrimp
**January–December, 2019–2021 (1 000 tonnes)**

<table>
<thead>
<tr>
<th>Imports</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>322.78</td>
<td>318.64</td>
<td>378.89</td>
</tr>
<tr>
<td>India</td>
<td>155.52</td>
<td>105.44</td>
<td>116.48</td>
</tr>
<tr>
<td>Thailand</td>
<td>39.42</td>
<td>21.39</td>
<td>24.18</td>
</tr>
<tr>
<td>Other countries</td>
<td>204.25</td>
<td>174.14</td>
<td>144.88</td>
</tr>
<tr>
<td><strong>Total imports</strong></td>
<td><strong>721.96</strong></td>
<td><strong>619.61</strong></td>
<td><strong>664.43</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Exports</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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</thead>
<tbody>
<tr>
<td>Japan</td>
<td>21.55</td>
<td>31.92</td>
<td>33.71</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>12.42</td>
<td>14.44</td>
<td>19.96</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>13.92</td>
<td>12.58</td>
<td>16.17</td>
</tr>
<tr>
<td>Other countries</td>
<td>117.47</td>
<td>100.54</td>
<td>110.23</td>
</tr>
<tr>
<td><strong>Total exports</strong></td>
<td><strong>165.36</strong></td>
<td><strong>159.48</strong></td>
<td><strong>180.07</strong></td>
</tr>
</tbody>
</table>

Source: China Customs, estimates.

### European Union imports and exports of shrimp
**January–December, 2019–2021 (1 000 tonnes)**

<table>
<thead>
<tr>
<th>Imports</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>102.78</td>
<td>125.97</td>
<td>147.19</td>
</tr>
<tr>
<td>Argentina</td>
<td>76.34</td>
<td>64.71</td>
<td>87.82</td>
</tr>
<tr>
<td>Greenland</td>
<td>58.77</td>
<td>70.79</td>
<td>70.50</td>
</tr>
<tr>
<td>Other countries</td>
<td>493.33</td>
<td>479.89</td>
<td>534.53</td>
</tr>
<tr>
<td><strong>Total imports</strong></td>
<td><strong>731.22</strong></td>
<td><strong>741.36</strong></td>
<td><strong>840.04</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Exports</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>41.56</td>
<td>41.88</td>
<td>47.76</td>
</tr>
<tr>
<td>Italy</td>
<td>25.77</td>
<td>26.31</td>
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<tr>
<td>France</td>
<td>30.61</td>
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<td>32.57</td>
</tr>
<tr>
<td>Other countries</td>
<td>235.91</td>
<td>231.20</td>
<td>257.60</td>
</tr>
<tr>
<td><strong>Total exports</strong></td>
<td><strong>333.85</strong></td>
<td><strong>330.34</strong></td>
<td><strong>371.01</strong></td>
</tr>
</tbody>
</table>

Source: TDM
### India Exports of Shrimp, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>280.86</td>
<td>260.41</td>
<td>346.94</td>
</tr>
<tr>
<td>China</td>
<td>160.24</td>
<td>101.48</td>
<td>122.48</td>
</tr>
<tr>
<td>Japan</td>
<td>39.72</td>
<td>39.74</td>
<td>41.56</td>
</tr>
<tr>
<td>Other countries</td>
<td>191.99</td>
<td>178.13</td>
<td>226.42</td>
</tr>
<tr>
<td><strong>Total exports</strong></td>
<td><strong>672.81</strong></td>
<td><strong>579.75</strong></td>
<td><strong>737.41</strong></td>
</tr>
</tbody>
</table>

**Source:** TDM

### Ecuador Exports | Shrimp | Top three destinations

**Unit:** 1 000 tonnes, January–December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
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<td>Other</td>
<td>191.99</td>
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<td>226.42</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>672.81</strong></td>
<td><strong>579.75</strong></td>
<td><strong>737.41</strong></td>
</tr>
</tbody>
</table>

**Source:** TDM

### Japan | Imports | Shrimp | Top three origins

**Unit:** 1 000 tonnes, January–December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
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<td><strong>579.75</strong></td>
<td><strong>737.41</strong></td>
</tr>
</tbody>
</table>

**Source:** TDM
The war in Ukraine affects the market

The war in Ukraine has disrupted the market for pelagics. The Russian Federation is a major producer as well as a market and trader; Ukraine is an important market, especially for capelin. The Russian Federation, which is a big consumer, has had to rely more on domestic landings since trade was restricted following the 2014 invasion of the Crimea.

There is concern among the coastal nations in Europe about the quotas for small pelagics in 2022. While the relevant countries claim to agree on the scientific limits for 2022, they have not agreed on the country allocations.

Even before talks got under way, some countries set their own quotas for 2022. The United Kingdom of Great Britain and Northern Ireland has set quotas for mackerel (209 217 tonnes), Atlanto-Scandian herring (11 690 tonnes) and blue whiting (58 393 tonnes). The European Union has set quotas for mackerel (108 067 tonnes) and Atlanto-Scandian herring (19 095 tonnes). Norway has set quotas for Atlanto-Scandian herring (454 927 tonnes) and blue whiting (200 230 tonnes).

The North Atlantic Pelagic Advocacy Group (NAPA) is concerned that the lack of an agreed allotment could lead to overfishing of these resources, and in the long run would threaten the sustainability of these stocks.

Mackerel

In 2021 the Norwegian Directorate of Fisheries issued a regulation limiting the mackerel fishery in 2022. The majority of Norwegian vessels will not be allowed to catch or land mackerel this year, although approved vessels may land up to 100 000 tonnes of mackerel from catches in Norwegian waters. Thus, the total supplies of mackerel will be somewhat limited in 2022. The total quota agreed by Norway, the European Union, the Faroe Islands, Greenland, Iceland and the United Kingdom of Great Britain and Northern Ireland amounts to 794 920 tonnes for 2022, down from 852 284 tonnes in 2021. This is in line with the recommendations of the International Council for the Exploration of the Sea (ICES).

Korean imports of frozen mackerel were up by 31 percent in 2022 compared to 2021. Total imports amounted to 55 225 tonnes, up from 42 238 tonnes in 2021. Of this total, 47 192 tonnes, or 85 percent, came from Norway. Other suppliers included China (4 167 tonnes), the Russian Federation (3 100 tonnes) and the Netherlands (246 tonnes).

Norwegian mackerel exports hit a new record in 2022, standing at 389 000 tonnes worth NOK 5.9 billion (USD 663 million). Japan and the Republic of Korea were the largest importers of Norwegian mackerel. Japan imported about 10 percent less in 2021 than in 2020, while the Republic of Korea registered a 40 percent increase in mackerel import from Norway.

Chinese imports of whole frozen mackerel dropped by 14.3 percent in 2021 compared to 2020, from 117 742 tonnes to 100 909 tonnes. Despite this drop in overall trade, imports from Norway increased dramatically, from 36 409 tonnes in 2020 to 59 947 tonnes in 2021 (+65 percent).
First-sale prices for mackerel are not expected to change much in 2022 compared to 2021. If European coastal states are able to agree on quota allocations, that would probably mean a lower quota for Norway, and consequently there would be some pressure on prices.

Herring

There have been optimistic reports from Alaska, which could well see landings break previous records. The herring fishery in Sitka Sound started in late March, with the catch set at 45 164 tonnes (90 million pounds). The fishery in Kodiak started on the first of April, with the quota set at 8 075 tonnes (16 million pounds). The roe herring fishery at Togiak in Bristol Bay starts in May, and the TAC is set at a record 65 107 tonnes (130 million pounds). However, most of this will probably not be harvested because of a lack of buyers. The only significant market is Japan.

Warmer waters are pushing the herring in the North-east Atlantic and along the coast of Norway farther north. Researchers from the Norwegian Institute of Marine Research went on a research cruise in February. They found that the herring had moved farther north than in previous years, and estimated that the population was smaller than in 2021.

Norwegian exports of frozen herring increased by just under 30 percent in 2021, to 165 438 tonnes, up from 127 352 tonnes in 2020. The largest markets were Egypt (38.6 percent of total), and Nigeria (17.9 percent of total).

Russian exports of whole frozen herring declined by 14 percent in 2021 compared to 2020. The Republic of Korea and Nigeria have emerged as the two largest markets, registering increases of 48.7 percent and 53.8 percent respectively.

Capelin

The spring capelin fishery around Iceland and in the Barents Sea came to an end in March. The Icelandic fishery landed a total of 521 475 tonnes out of a quota of 685 148 tonnes. The majority of this went to fishmeal and fish oil production. In contrast, almost all of the capelin caught in the Barents Sea went for human consumption.

Norwegian vessels fishing in Icelandic waters had only caught about 90 000 tonnes of the 145 000 tonne quota by mid-March. The Norwegian fleet then moved to the Barents Sea, where it has a 42 000 tonne quota. Norwegian capelin fishers are trying to delay their fishing in order to catch more of the female roe capelin. There is strong demand for them in in Asia, where they fetch higher prices than in Europe.

Capelin basically has two different markets: male capelin is sold round to markets in Eastern Europe, primarily Ukraine, while female capelin with roe is sold to Asian markets. With the war raging in Ukraine, that market has become inaccessible, weakening the market for whole male capelin.
Anchovies and Sardines

Algeria’s sardine production amounted to almost 30,000 tonnes in 2021. This represented a 60 percent increase on the 18,441 tonnes caught in 2020. The increased landings contributed to pushing prices down.

Peru’s landings for human consumption increased by 44 percent to 178,400 tonnes in early 2022. In January, raw materials allocated to canning and freezing increased by 56.7 percent and 78.5 percent respectively. Conversely, volumes allocated for reduction purposes (fish meal and fish oil) were reduced.

Peru’s fishery exports grew by 39 percent in 2021 to USD 3.5 billion. Fishmeal and fish oil accounted for USD 2.3 billion or 66 percent of the total. Increased anchovy landings were the principal reason for this increase.

Outlook

The market outlook for small pelagics is mixed, in part because of the war in Ukraine.

Mackerel quotas have been set unilaterally, although there is consensus on the total scientific limits. It is difficult to know with certainty what the total supplies will be. Demand is good in Asian markets, with Japan in particular willing to pay relatively high prices.

Herring along the Norwegian coast seems to be moving further north in search of colder waters, and this may affect landings. Some part of the Norwegian herring catch would, in the normal course of events, find its way to the Russian Federation and Ukraine; the war has disrupted this trade for the foreseeable future. Herring resources in Alaska will probably remain largely underexploited, and prices are expected to decline slightly.
Norway exports of frozen whole small pelagics
January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>48.78</td>
<td>59.45</td>
<td>53.39</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>28.36</td>
<td>36.07</td>
<td>50.17</td>
</tr>
<tr>
<td>China</td>
<td>47.32</td>
<td>38.38</td>
<td>50.13</td>
</tr>
<tr>
<td>Other countries</td>
<td>102.80</td>
<td>156.08</td>
<td>221.38</td>
</tr>
<tr>
<td>Total exports</td>
<td>227.26</td>
<td>289.97</td>
<td>375.05</td>
</tr>
<tr>
<td>Exports</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Egypt</td>
<td>42.05</td>
<td>41.35</td>
<td>63.90</td>
</tr>
<tr>
<td>Nigeria</td>
<td>42.19</td>
<td>22.91</td>
<td>29.69</td>
</tr>
<tr>
<td>Lithuania</td>
<td>28.15</td>
<td>15.44</td>
<td>13.72</td>
</tr>
<tr>
<td>Other countries</td>
<td>78.21</td>
<td>47.66</td>
<td>58.13</td>
</tr>
<tr>
<td>Total exports</td>
<td>190.60</td>
<td>127.35</td>
<td>165.44</td>
</tr>
</tbody>
</table>

Source: TDM
SMALL PELAGICS

Export prices
Mackerel: Norway

Source: Norwegian Seafood Council

Export prices
Frozen herring: Norway

Source: Norwegian Seafood Council
Tilapia prices spiking as demand outpaces global supply growth

Tilapia was one product category that weathered the pandemic particularly well, benefitting from its position as a cheaper, retail-sold seafood option widely available in frozen form. Although aquaculture output growth is expected to pick up this year, rapidly strengthening demand has sent prices soaring.

Production

In recent years, global tilapia production growth has slowed relative to the long-term trend, with the Global Aquaculture Alliance (GAA) estimating an average annual increase of 2 percent per year since 2018. In 2021, this rate fell to around 1.2 percent. This has been attributed to the maturation of the industry and a number of constraints on growth in China. These have included pandemic-related challenges affecting labour and logistics, US tariffs, rising input costs and the repurposing of land in aquaculture regions. In 2021, an exceptionally hot summer led to fish die offs and fingerling shortages in the Chinese farming region of Guangdong, contributing to a further reduction in China’s share of global supply. China remains the world’s largest producer, but growth has generally been more rapid in the other significant producers in East and Southeast Asia, including Indonesia, the Philippines, Thailand and Viet Nam. Bangladesh and Egypt also have large tilapia sectors, although focused on supplying the domestic market.

In Latin America, it is the exceptionally fast expansion of the emerging Brazilian tilapia farming industry that has been attracting analysts’ attention. Investments by large, vertically integrated producers and an established infrastructure around food production are supporting strong year-on-year gains in output. More recently, the increase in volumes has been accompanied by technical advancement in Brazilian fish farming practices, together with a weakening currency that has boosted the competitiveness of Brazil’s exports. According to the Brazilian Fish Farming Association (PeixeBR), 534 005 tonnes of tilapia were produced in 2021, an increase of 9.8 percent over the previous year. Tilapia represents 63.5 percent of the national production of farmed fish, and the species is produced in all regions of the country, including the north, which has been a traditional centre for the cultivation of native fish. In Colombia, tilapia production continues to strengthen, with a strong commitment to innovation and a responsible approach to the environment, supported by a new label of origin. Honduras and Mexico also continue to pursue growth via a combination of domestic consumption, restaurant sales to tourists and exports to the US market.

Trade and Markets

Logistical challenges and supply chain issues have led to a lack of availability and higher prices for some seafood species and other animal proteins in the US market, which has favoured the consumption of tilapia and boosted sales. Uptake by consumers continues to grow despite the variety of fish products that are available on the market.
Total US imports of frozen tilapia increased slightly in 2021, rising in volume by 0.58 percent to 156,669 tonnes and in value by 8.7 percent to USD 483.8 million. Growth in 2020, a year conditioned by the pandemic, was due both to the increase in demand for lower-priced, frozen products at retail and to the temporary lifting of tariffs on Chinese imports, reflected in the increase in the supply of Chinese frozen tilapia fillets. In 2021, demand shifted to frozen whole tilapia, which rose 20 percent in volume, while volumes of frozen fillets decreased by 6 percent. Overall, frozen fillets still comprised 70 percent of total US imports of frozen tilapia.

Brazilian tilapia, which arrives mostly frozen, has risen in popularity in the US market, with 64 percent of total Brazilian exports of fish destined for the United States of America. In the longer-term, Brazil is seeking to diversify its tilapia export destinations, and in particular is awaiting the reopening of the EU market. In 2021, boosted by the appreciation of the United States dollar against the Brazilian real, Brazil exported 8,500 tonnes of tilapia worth USD 18.2 million, representing 88 percent of Brazilian farmed fish exports in value terms.

According to the Colombian Federation of Aquaculture (Fedeacua), tilapia exports during 2021 grew by 13 percent compared to the previous year, up to 13,000 tonnes. During the same period the value of tilapia exports from Colombia increased by 12 to reach USD 67.6 million. The US market, which has a free trade agreement with Colombia, is the biggest market for Colombian tilapia, where it is marketed as a high-quality and sustainable option.

Prices
Demand for almost all seafood products has recovered strongly as COVID-19 pandemic restrictions have been lifted, and tilapia has also benefitted from this trend. Combined with tilapia’s relatively good performance during the pandemic itself, this has seen global demand outstrip supply growth by a significant margin over the last 2 years, with prices rising steeply. In week 17 2022, prices for whole, live tilapia in Guangdong, China, reached CNY 8.60 (USD 1.29) per kg, compared with CNY 5.50 (USD 0.83) per kg at the end of 2019. For traded product, the unit value of US imports of frozen tilapia fillets increased 7 percent in 2021, with average prices of USD 3.48 per kg, while prices for frozen whole tilapia increased by 17.5 percent to USD 1.80 per kg.

Outlook
According to the latest projections by the National Fisheries Institute (NFI), global tilapia production is forecasted to increase by 3 percent in 2022. This relatively high growth figure reflects the post-pandemic recovery and the resumption of normal business operations in the majority of producing regions. However, strong demand and high freight and input costs are expected to keep pushing prices up, despite the increased supply. Brazilian growth will likely continue to significantly outpace competing producers both in terms of supply and export share, while China’s share will continue to decline.
### United States of America imports of chilled tilapia fillets, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen tilapia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>6.90</td>
<td>7.79</td>
<td>8.19</td>
</tr>
<tr>
<td>Colombia</td>
<td>5.42</td>
<td>7.53</td>
<td>7.76</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>4.60</td>
<td>2.85</td>
<td>3.31</td>
</tr>
<tr>
<td>Other countries</td>
<td>2.95</td>
<td>3.91</td>
<td>3.53</td>
</tr>
<tr>
<td>Total imports</td>
<td>19.86</td>
<td>22.08</td>
<td>22.79</td>
</tr>
</tbody>
</table>

Source: TDM

### United States of America imports of frozen tilapia fillets, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh or chilled fillets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>92.82</td>
<td>105.01</td>
<td>97.15</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7.60</td>
<td>6.27</td>
<td>6.26</td>
</tr>
<tr>
<td>Honduras</td>
<td>2.15</td>
<td>2.15</td>
<td>2.11</td>
</tr>
<tr>
<td>Other countries</td>
<td>5.29</td>
<td>4.07</td>
<td>4.80</td>
</tr>
<tr>
<td>Total imports</td>
<td>107.86</td>
<td>117.50</td>
<td>110.32</td>
</tr>
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Source: TDM

### United States of America imports of frozen whole tilapia, January–December, 2019–2021 (1 000 tonnes)

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<th>2019</th>
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<tr>
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<tr>
<td>Total imports</td>
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<td>117.50</td>
<td>110.32</td>
</tr>
</tbody>
</table>

Source: TDM

### China exports of frozen whole tilapia, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen tilapia</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>China</td>
<td>92.82</td>
<td>105.01</td>
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Source: TDM
Frozen skipjack prices hit a seven-year high in April 2022

After staying soft for a year, international trade in non-canned tuna made a solid recovery in 2021. Meanwhile, demand for canned tuna weakened in the retail trade worldwide and saw import declines in many markets.

Supply

During the first quarter of 2022, tuna catches in major fishing grounds were slow to moderate while global demand for ready-to-eat tuna products is yet to recover.

Nonetheless, prices of frozen skipjack, yellowfin and cooked tuna loins has been on the rise since November 2021, due to increased operational costs and bunker prices.

In mid-April, the delivery price of frozen skipjack to Thailand from the Western and Central Pacific (WCP) reached a seven-year high level of USD 1 950 per tonne.

Raw material import trends in 2021

Demand for frozen raw material for canning and reprocessing weakened in 2021 at the global level.

In Thailand, frozen tuna imports for reprocessing were 12.5 percent lower than 2020 at 662 954 tonnes; imports of cooked loins also declined by 8 percent year-on-year to 39 200 tonnes.

There were increased imports in the Philippines (+29 percent, at 204 830 tonnes) of which 62 percent was frozen skipjack (126 410 tonnes), procured to process into cooked frozen loins (mostly exported to Europe) and canned tuna. Frozen yellowfin imports also increased by 71 percent to 76 050 tonnes, part of which was processed into higher value non-canned tuna (frozen tuna loins and steaks) for exports.

In Europe, imports of raw frozen tuna in Spain declined by 14 percent to 135 150 tonnes. Imports of cooked frozen loins also declined in Spain by 5.2 percent to 102 047 tonnes, but increased marginally in Italy (+2.2 percent, at 43 960 tonnes), France (+2.8 percent, at 8 796 tonnes) and Portugal (+13.3 percent, at 13 876 tonnes).

FRESH AND FROZEN TUNA MARKET

There was a tangible recovery in the global trade of non-canned tuna in 2021, attributed to the reopening of restaurants and catering trade in traditional and emerging markets.

It is estimated that over 4 000 tonnes of fresh bluefin (air-flown), 10 000 tonnes of fresh/chilled yellowfin and 172 000 tonnes of frozen tuna fillets entered international trade in 2021. The top three markets were Japan, the United States of America and the European Union. Positive demand trends also returned in many emerging markets.
Overall demand for sashimi quality seafood, including tuna, remained soft in Japan throughout 2021 as several restrictive measures were in place to combat the COVID-19 pandemic. Businesses in the restaurant trade, including the popular conveyor belt eateries or fast-casual restaurants that serve affordable sushi, endured slow business in 2021.

With this backdrop, the market imported about 200 000 tonnes of fresh and frozen tuna in 2021; an estimated 80 percent of these supplies entered the sashimi market.

The decade long contraction in demand for fresh and frozen tuna in Japan persisted in 2021; there was a 16 percent decline in fresh tuna imports, while frozen tuna imports fell by 14 percent in comparison with 2020.

However, imports of ultra-frozen tuna loins in 2021 were 23 percent higher at 60 000 tonnes in comparison with 2020.

The non-canned tuna trade in the United States of America revived strongly in 2021 with increased demand for fresh tuna as well as frozen tuna fillet. Total imports of fresh and frozen tuna were 21 percent higher, at 63 685 tonnes, in comparison with 2020. Summer demand for non-canned tuna, including sashimi grade bluefin and bigeye, was strong from the catering trade.

Imports of fresh tuna were 21 410 tonnes in 2021, 30 percent higher than imports in 2020. This volume is also three time more than the Japanese imports of fresh tuna during the corresponding period. There was a 10.5 percent increase in imports of frozen tuna fillets/steaks (36 768 tonnes), which are popular in the retail and catering trade. This product group had a 57.6 percent share in total imports of non-canned tuna in 2021.

In Europe, the reopening of the HORECA sector in 2021 created additional demand for non-canned tuna including fillets.

To cater to the rising demand in the HORECA sector, the European Union imported 45 650 tonnes of frozen tuna fillet (+26.5 percent) in 2021. Imports of high value fresh/chilled bluefin also increased in Spain, Italy, France, Portugal.

Demand for frozen tuna fillet also increased in Canada, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, Ukraine, and Switzerland in 2021.

Imports of fresh and frozen tuna for non-canned uses also increased in China, the Republic of Korea, China, Hong Kong SAR, Singapore and other markets in the region.
Canned tuna trade

Worldwide demand for canned and processed tuna slowed down in 2021, along with increased opportunities for people to dine out and reduced home consumption of canned tuna. The distribution chains in many markets are also holding unsold stocks associated with heavy imports a year ago. Per unit import costs are also on the rise due to the rise in sea freight rates.

EXPORTS

Trading of canned tuna was brisk in 2020 but weakened in 2021, with most markets seeing a drop-off.

Thailand, the top exporter, endured a 19 percent decline in exports with profound short falls in the major markets: the United States of America (-34.7 percent), Australia (-10 percent), Canada (-16.5 percent), Saudi Arabia (-38 percent) and Libya (-42 percent).

However, Ecuador posted a moderate rise (+4.78 percent) in exports of processed and canned tuna associated with increased sales of cooked loins to European canneries and improved exports of end products to the United Kingdom of Great Britain and Northern Ireland (+23.6 percent). Exports also increased to markets in Argentina, Chile, Brazil.

In Spain, the 11 percent decline in exports to the European Union greatly impacted total exports of canned tuna in 2021.

Imports

Demand for canned and prepared tuna weakened in the large western markets (United States of America, Canada, the European Union) in 2021 with increased opportunities to dine out and declines in home consumption of canned tuna. Imports also contracted in the Middle East, North Africa and Southeast Asian markets.

North and South America

In comparison with 2020, home consumption of canned tuna declined in 2021. This was mirrored in the annual import figures of markets in the region.

US imports, the single largest market, were at a 4-year low of 203 216 tonnes in 2021. Compared with 2020 imports fell by 22 percent with reduced supplies from all top producers except Indonesia.

Imports in Canada also eroded by 15.2 percent to 31 015 tonnes in 2021.

In Latin America, annual imports in 2021 were lower in Colombia, Chile and Peru compared to 2020, but increased in Argentina and Mexico with increased exports from Ecuador.
Europe

Retail sales of canned tuna declined throughout Europe, affecting overall imports of processed tuna and tuna products in 2021. However, demand for large packs generally used in the catering trade improved with the reopening of the HORECA sectors.

In the European Union, the year-on-year decline in canned and processed tuna imports was 7.5 percent, at 655 663 tonnes in 2021. Cooked frozen loins had a 25 percent share (165 000 tonnes) in total imports of processed tuna. Among the top suppliers of cooked loin, imports declined from Ecuador (-4.5 percent) and China (-28 percent) but increased from Papua New Guinea and the Philippines by 18 percent and 48 percent, respectively.

Imports in the United Kingdom of Great Britain and Northern Ireland were at a 3-year low of 93 868 tonnes in 2021, representing a 5.5 percent decline against 2020. However, there was a 35 percent rise in supply from Ecuador - the top exporter of canned tuna in this market.

Among the other European markets, imports fell by 12 percent in Switzerland (8 950 tonnes) and by 6 percent in the Russian Federation (6 355 tonnes), but increased in Ukraine by 15 percent (3 660 tonnes).

Asia, Pacific and Others

Canned tuna imports declined significantly in the Middle East and North Africa (MENA) markets, which are generally supplied by Southeast Asian producers.

Imports in Saudi Arabia were 32.6 percent lower at 43 580 tonnes in 2021 compared with 2020. The shortfall was large in Egypt (-43.6 percent at 24 279 tonnes). Export data from Thailand, Indonesia and the Philippines also posted declines in exports to Libya, Jordan, Iraq, Yemen, Qatar, Kuwait and Lebanon. Imports in the United Arab Emirates increased from Thailand but declined from Indonesia and the Philippines.

It is also worth mentioning the 73 percent boost in canned tuna exports from Iran (7 415 tonnes) to neighbouring markets (Syria, Iraq, Afghanistan, Pakistan, Azerbaijan) in 2021.

In Asia, demand for canned tuna weakened in conventional markets, namely Japan, Australia, New Zealand and Singapore, but increased marginally in Malaysia, Hong Kong, China SAR and the Republic of Korea.

Prices

After the stable price trend of the last four years, delivery price of frozen skipjack to Bangkok started to rise from USD 1 540 per tonne in November 2021 to reach USD 1 950 per tonne in mid-April 2022. Slow catches in the major fishing grounds, rising prices of fuel and other operational costs finally pushed up prices at this level, which is 39 percent higher than the price recorded a year ago.
Frozen skipjack and yellowfin prices also increased in West Africa. Export prices of cooked loins to European canners have increased.

In Europe prices of whole frozen skipjack and yellowfin increased sharply as demand increases from the regional canners. In addition, the indicative price for cooked, single cleaned skipjack loins also followed this trend.

**Outlook**

As of April 2022, tuna catches in the Western and Central Pacific (WCP) fluctuated between slow and moderate levels. Considering this disappointing supply situation, packers’ demand for frozen raw material is likely to increase in the coming months, while the FAD fishing closure in the WCP region will be in place from July to September.

In the Atlantic Ocean, increases in tuna catches are forecasted, which will ease raw material shortage at local canneries.

In view of lower imports in 2021, demand for prepared tuna may increase in some markets during the first half of 2022. However, consumers’ reaction to price rises needs to be monitored.

For non-canned tuna, demand was strong during Easter in the United States of America; summer demand is also expected to be positive in the US market and in Canada.

However, in Europe the conflict in Ukraine will obstruct exports of frozen fillets in the emerging markets that these products had found in the Russian Federation and Ukraine, and may impact consumer demand in other markets bordering these two countries.

In Japan, the current surge in demand for sashimi tuna will persist until the end of the Spring festivals in May. The market will then enter a low consumption period from June.

### European Union imports of prepared and preserved tuna, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th>Canned or preserved tuna</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>148.57</td>
<td>135.11</td>
<td>125.35</td>
</tr>
<tr>
<td>Spain</td>
<td>94.07</td>
<td>114.51</td>
<td>102.05</td>
</tr>
<tr>
<td>Netherlands</td>
<td>32.01</td>
<td>49.39</td>
<td>53.69</td>
</tr>
<tr>
<td>Other countries</td>
<td>372.32</td>
<td>409.40</td>
<td>374.58</td>
</tr>
<tr>
<td><strong>Total imports</strong></td>
<td><strong>646.98</strong></td>
<td><strong>708.41</strong></td>
<td><strong>655.66</strong></td>
</tr>
</tbody>
</table>

*Source: TDM*

### Thailand exports of prepared and preserved tuna, January–December, 2019–2021 (1 000 tonnes)

<table>
<thead>
<tr>
<th>Canned or preserved tuna</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>104.93</td>
<td>144.05</td>
<td>94.05</td>
</tr>
<tr>
<td>Egypt</td>
<td>46.28</td>
<td>55.76</td>
<td>71.21</td>
</tr>
<tr>
<td>Japan</td>
<td>35.77</td>
<td>40.13</td>
<td>39.93</td>
</tr>
<tr>
<td>Other countries</td>
<td>345.94</td>
<td>342.75</td>
<td>265.82</td>
</tr>
<tr>
<td><strong>Total exports</strong></td>
<td><strong>532.92</strong></td>
<td><strong>582.69</strong></td>
<td><strong>471.01</strong></td>
</tr>
</tbody>
</table>

*Source: TDM*
**TUNA**

**United States of America | Imports | Tuna | Prepared preserved | Top three origins**

Unit: 1 000 tonnes, January-December

<table>
<thead>
<tr>
<th>Year</th>
<th>Thailand</th>
<th>Ecuador</th>
<th>Viet Nam</th>
<th>Other countries</th>
<th>Total imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>150</td>
<td>60</td>
<td>30</td>
<td>120</td>
<td>300</td>
</tr>
<tr>
<td>2020</td>
<td>300</td>
<td>120</td>
<td>60</td>
<td>180</td>
<td>600</td>
</tr>
<tr>
<td>2021</td>
<td>240</td>
<td>90</td>
<td>30</td>
<td>120</td>
<td>480</td>
</tr>
</tbody>
</table>

**Prices**

**Skipjack: Thailand**

USD/tonne

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

Source: INFOFISH Trade News
MEET the EXPERT

Fisheries Transparency Initiative (FITI)

Welcome to “Meet the Expert” Section.

“Meet the Expert” aims at exploring and analyzing contemporary issues in the area of markets and international trade of fisheries and aquaculture products with leading experts worldwide to bring a comprehensive and holistic perspective of the sector.

"Meet the Expert" is a multi-media section, addressing from markets and trade to the role of FAO in supporting the sector, also exploring the importance and nuances of small-scale fisheries and gender, among other topics. There are no boundaries in the scope and complexity of the themes to be discussed in this section.

In this interview, GLOBFISH “Meet the Expert” had the opportunity to interview Sven Biermann, Executive Director at The Fisheries Transparency Initiative (FiTI). FiTI is a global multi-stakeholder partnership, which seeks to increase transparency and participation for the benefit of a more sustainable management of marine fisheries.

During the interview, Sven Biermann explained what FiTI does, its main objective and mandate, and how FiTI operates in order to provide transparent information about marine fisheries. It was also discussed the definition of transparency from a general perspective and in specific term, as well as the main challenges of global governance, which is transparency. This allows to continue discussing about the FiTI’s role in order to enhance the credibility and quality of national fisheries information and how does FiTI collaborates to reach this goal. In addition, the importance of FiTI to support countries in fostering sustainability with its three pillars (economic, environmental and social), and the benefits of reporting transparent information were explained in the interview.

In the GLOBFISH Highlights, “Meet the Expert” contains some parts of the interview, but the expert's full interview can be watched at the FAO YouTube channel within the GLOBFISH playlist.

GLOBEFISH is always open to receiving by e-mail (globefish@fao.org) suggestions of persons to be interviewed and topics to covered.

Excerpt:

Question: Transparency is critical in global governance, including the fisheries sector. However, implementing and having transparency can also be considered one of the main challenges of global governance. What is the FiTI approach towards transparency? Can transparency be defined in general and specific terms?

Sven Biermann: Transparency always has two sides. On one side, you have the aspect of visibility, supporting governments in making information freely accessible. And I would say this is probably what most of the people associate when they think about transparency, the aspect of making information publicly accessible. But on the other side, it’s also to ensure that information, that eventually will be made publicly accessible, will also be understood and be used.

The full interview may be found here or on the GLOBEFISH website.