

# **Monthly Highlights**

No. 10 / 2021

## In this issue

According to data collected by EUMOFA from 13 EU Member States, in August 2021 skipjack tuna and yellowfin tuna together accounted for 14% of first-sales value for the tuna and tuna-like species commodity group.

From September 2018 to August 2021, the weighted average first-sales price of skipjack tuna in Portugal was 1,24 EUR/kg, 7% higher than in Spain (1,15 EUR/kg).

The imports commodity group for the month is "Tuna and tuna-like species", and the featured species are swordfish from Morocco, tuna from the Republic of Korea, and yellowfin tuna from the Seychelles.

Per capita apparent consumption in Spain in 2018 was 89% higher than the EU average with sole being one of the top five most consumed species.

Aquaculture production in Egypt was over 1,6 million tonnes in 2019, accounting for around 80% of the country's total fish production.

*Of the Salmonids species, Atlantic salmon is the most harvested worldwide, accounting for 69,8% of total harvest volume in 2020.* 

Over the past three years (September 2018 – August 2021), total Spanish household consumption of fresh sole was 82.331 tonnes, and Spanish households spent on average 10,17 EUR per month for a kilogram of sole.



EUMOFA

European Market Observatory for Fisheries and Aquaculture Products



## 1. First sales in Europe

During **January–August 2021**, 13 EU Member States (MS), Norway, and the United Kingdom reported first-sales data for 10 commodity groups<sup>1</sup>. First-sales data are based on sales notes and data collected from auction markets. First-sales data analysed in the section *"First sales in Europe"* are extracted from EUMOFA<sup>2</sup> as collected from national administrations.

## 1.1. January-August 2021 compared to the same period in 2020

**Increases in value and volume**: Belgium, Bulgaria, Estonia, France, Latvia, Lithuania, Portugal and the United Kingdom all recorded increases in both first-sales value and volume. Mackerel was responsible for the sharp absolute increases in Norway, while mackerel and anchovy were the main species responsible for increases in Portugal. The highest volume increase in relative terms was in Bulgaria due to sprat and clam.

**Decreases in value and volume**: Denmark, the Netherlands, Sweden, and Norway recorded decreases in first-sales value and volume. Small pelagic species were the main reasons behind decreases in all countries.

### Table 1. JANUARY-AUGUST OVERVIEW OF FIRST SALES FROM THE REPORTING COUNTRIES (volume in tonnes and value in million EUR) \*

	January - / 2019	August )	January - 202	August 20	January - 202	August	Change - January 202	from August 0
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	8.782	38,0	7.800	36,9	7.946	41,2	2%	12%
Bulgaria	3.674	1,7	1.743	0,9	3.182	1,9	83%	101%
Cyprus	922	3,4	726	2,5	700	2,7	-4%	8%
Denmark	690.608	344,6	672.236	322,0	513.814	285,2	-24%	-11%
Estonia	37.183	9,3	36.060	9,9	40.697	11,0	13%	12%
France	119.921	407,9	100.464	338,0	104.787	382,6	4%	13%
Italy	62.880	251,9	56.897	214,4	52.407	221,8	-8%	3%
Latvia	35.181	5,9	27.233	5,4	28.929	6,1	6%	14%
Lithuania	713	0,6	1.120	0,5	1.474	0,8	32%	54%
Netherlands	165.783	252,5	166.071	238,2	129.688	190,2	-22%	-20%
Portugal	80.354	186,3	63.201	153,1	77.151	184,1	22%	20%
Spain	385.540	1123,1	359.052	982,7	328.855	1.012,5	-8%	3%
Sweden	136.234	63,9	86.168	50,8	68.224	36,1	-21%	-29%
Norway	1.934.761	1725,1	2.064.818	1.702,2	2.043.570	1.744,4	-1%	2%
United Kingdom	178.239	385,4	180.033	302,5	188.276	336,5	5%	11%

Possible discrepancies in % changes are due to rounding.

\* Volumes are reported in net weight for EU Member States, and in live weight equivalent (LWE) for Norway. Prices are reported in EUR/kg (without VAT). For Norway, prices are reported in EUR/kg of live weight.

<sup>&</sup>lt;sup>1</sup> Bivalves and other molluscs and aquatic invertebrates, cephalopods, crustaceans, flatfish, groundfish, freshwater fish, Salmonids, small pelagics, tuna and tuna-like species, and other marine fish.

<sup>&</sup>lt;sup>2</sup> First sales data updated on 17.10.2021.

## 1.2. August 2021 compared to August 2020

**Increases in value and volume**: First sales increased in Bulgaria, Cyprus, Estonia, France, Portugal, and Norway. Mackerel was responsible for the sharp absolute increases in Norway, while mackerel and anchovy were the main species responsible for increases in Portugal. The highest volume increase in relative terms was in Estonia due to higher sales of sprat and to a lesser extent of herring.

**Decreases in value and volume**: First sales decreased in Denmark, Italy, Latvia, Lithuania, Spain, and Sweden. Lithuania recorded the sharpest decreases in relative terms due to lower sales of vimba bream and European perch (both species under grouping "other freshwater fish") and European flounder. In Sweden and in Denmark, herring and sprat were the main species behind first-sales decreases.

#### Table 2. AUGUST OVERVIEW OF FIRST SALES FROM THE REPORTING COUNTRIES (volume in tonnes and value in million EUR) \*

	August	2019	August	2020	August	2021	Change fr 20	om August )20
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	1.181	5,0	1.015	4,6	869	5,9	-14%	29%
Bulgaria	306	0,2	223	0,2	434	0,3	95%	37%
Cyprus	246	0,7	128	0,4	180	0,5	41%	29%
Denmark	85.521	56,0	92.335	50,2	49.628	40,6	-46%	-19%
Estonia	867	0,5	212	0,4	921	0,5	334%	19%
France	15.246	54,4	12.860	47,1	13.200	54,0	3%	14%
Italy	7.252	30,1	6.419	27,9	5.224	24,8	-19%	-11%
Latvia	4.072	0,6	3.198	0,6	1.502	0,3	-53%	-55%
Lithuania	6	0,01	11	0,02	0,8	0,002	-93%	-90%
Netherlands	32.378	43,6	24.193	33,6	25.869	33,7	7%	0%
Portugal	16.045	31,5	12.853	25,6	19.316	34,7	50%	36%
Spain	57.461	162,3	50.824	142,1	41.169	137,5	-19%	-3%
Sweden	15.086	11,0	6.645	7,3	4,7	0,1	-100%	-99%
Norway	163.662	143,1	140.953	118,8	253.893	234,1	80%	97%
United Kingdom	30.006	56,6	26.235	43,9	25.177	52,3	-4%	19%

Possible discrepancies in % changes are due to rounding.

\* Volumes are reported in net weight for EU Member States and the UK, and in live weight equivalent (LWE) for Norway. Prices are reported in EUR/kg (without VAT). For Norway, prices are reported in EUR/kg of live weight.

The most recent weekly first-sales data (**up to week 46 of 2021**) are available via the EUMOFA website, and can be accessed **here**.

The most recent monthly first-sales data **for September 2021** are available via the EUMOFA website, and can be accessed **here**.

## 1.3. First sales in selected countries

First sales data analysed in this section are extracted from EUMOFA<sup>3</sup>.

#### FIRST SALES OF THE MAIN COMMERCIAL SPECIES<sup>4</sup> IN BELGIUM Table 3.

Belgium	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Aug 2021 vs Jan-Aug 2020	EUR 41,2 million, +12%	7.946 tonnes, +2%	Common sole, monkfish, ray, Norway lobster, European seabass, other soles* (other than common sole).	The Belgian <b>European seabass</b> production in the North Sea is limited, with total catch representing less than 2% of the total North Sea catches in 2020. Belgium's seabass production
Aug 2021 vs Aug 2020	EUR 5,9 million, +29%	869 tonnes, -14%	Value: common sole, European seabass, ray, monkfish. Volume: European plaice, cuttlefish, ray.	dropped after 2014, from 148 to 40 tonnes in 2015, then oscillated from 18 tonnes and 24 tonnes between 2016 and 2020 <sup>5</sup> . In the context of concerns about the state of the stock <sup>6</sup> , the increase in production is mostly explained by an increase in the Belgian fishing effort, motivated by a strong ex-vessel seabass price (16,45 EUR/kg in August 2021, compared to 10,38 EUR/kg in August 2020).





Percentages show change from the previous year. \*EUMOFA aggregation for species. (Metadata 2, Annex 3: http://eumofa.eu/supply-balance-and-othermethodologies).

#### Table 4. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BULGARIA

Bulgaria	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 1,9 million,	3.182 tonnes,	Clam, sprat, red mullet.
Jan-Aug 2020	+101%	+83%	
Aug 2021 vs	EUR 0,3 million,	434 tonnes,	Sprat, red mullet.
Aug 2020	+37%	+95%	

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

<sup>&</sup>lt;sup>3</sup> First-sales data undate on 1792021

<sup>&</sup>lt;sup>4</sup> Data on fisheries and aquaculture products harmonised in EUMOFA allow comparisons along the different supply chain stages.
<sup>5</sup> ICES Advice 2021 – bss.27.4bc7ad-h – https://doi.org/10.17895/ices.advice.7733

<sup>&</sup>lt;sup>6</sup> COM, 2021. Council Regulation amending Regulations (EU) 2019/1919, (EU) 2021/91 and (EU) 2021/92 as regards certain fishing opportunities for 2021 in Union and non-Union waters



Value (EUR 1.000)

### Figure 2. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BULGARIA, AUGUST 2021

Percentages show change from the previous year. \*EUMOFA aggregation for species.

#### Table 5. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN CYPRUS

Volume (tonnes)

Cyprus	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs Jan-Aug 2020	EUR 2,7 million, +8%	700 tonnes, -4%	<b>Value</b> : swordfish, other marine fish*, other seabream (other than gilthead seabream)*, picarel. <b>Volume</b> : albacore tuna, gilthead seabream, red mullet, hake.
Aug 2021 vs Aug 2020	EUR 0,5 million, +29%	180 tonnes, +41%	Albacore tuna, other horse mackerel*, miscellaneous small pelagics*, other marine fish*.

### Figure 3. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN CYPRUS, AUGUST 2021



#### Table 6. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN DENMARK

Denmark	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 285,2 million,	513.814 tonnes,	Other groundfish*, sprat, mackerel, cod.
Jan-Aug 2020	-11%	-24%	
Aug 2021 vs	EUR 40,6 million,	49.628 tonnes,	Sprat, herring, European plaice, cod.
Aug 2020	-19%	-46%	



#### Figure 4. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN DENMARK, AUGUST 2021

#### Table 7. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ESTONIA

Estonia	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Aug 2021 vs Jan-Aug 2020	EUR 11 million, +12%	40.697 tonnes, +13%	Sprat, herring, other freshwater fish*, eel.	<b>Sprat</b> recorded high increases in first sales in August 2021 compared to the
Aug 2021 vs Aug 2020	EUR 0,5 million, +19%	921 tonnes, +334%	Sprat, herring, pike, salmon.	same month in 2020. Due to high market demand for sprat fishmeal, the processing company started fishmeal production activities in mid- August 2021, whereas in 2020 those activities started in September. To start production at full capacity, sprat landings and sales by foreign fleets were enabled in Estonia. Foreign sprat supply constituted the majority of sales in August 2021.





Percentages show change from the previous year. \*EUMOFA aggregation for species.

France	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 382,6 million,	104.787 tonnes,	Norway lobster, scallop, monkfish, cuttlefish, other sharks*.
Jan-Aug 2020	+13%	+4%	
Aug 2021 vs	EUR 54 million,	13.200 tonnes,	Cuttlefish, monkfish, hake, saithe, bluefin tuna, octopus.
Aug 2020	+14%	+3%	

#### Table 8. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN FRANCE





### Table 9. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ITALY

Italy	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 221,8 million,	52.407 tonnes,	<b>Value</b> : anchovy, miscellaneous shrimps*, red mullet, sardine.
Jan-Aug 2020	+3%	-8%	<b>Volume</b> : clam, hake, anchovy, mussel <i>Mytilus</i> spp., deep-water rose shrimp.
Aug 2021 vs	EUR 24,8 million,	5.224 tonnes,	Clam, anchovy, miscellaneous shrimps*, mussel <i>Mytilus</i> spp.
Aug 2020	-11%	-19%	

#### Figure 7. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ITALY, AUGUST 2021



Percentages show change from the previous year. \*EUMOFA aggregation for species.

Latvia	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 6,1 million,	28.929 tonnes,	Herring, other freshwater fish*, other marine fish*, pike-perch.
Jan-Aug 2020	+14%	+6%	
Aug 2021 vs	EUR 0,3 million,	1.502 tonnes,	Herring, sprat, smelt.
Aug 2020	-55%	-53%	

#### Table 10. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LATVIA





Percentages show change from the previous year. \*EUMOFA aggregation for species.

#### Table 11. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LITHUANIA

Lithuania	First-sales value / trend %	First-sales volume/ trend %	Main contributing species	Notes
Jan-Aug 2021 vs Jan-Aug 2020	EUR 0,8 million, +54%	1.474 tonnes, +32%	Smelt, herring, other groundfish*, turbot.	In August 2021 compared to August 2020, <b>European flounder</b> and <b>other</b>
Aug 2021 vs Aug 2020	EUR 0,002 million -90%	0,8 tonnes, -93%	Other freshwater fish*, European flounder, pike-perch.	<b>freshwater fish</b> * (vimba bream and European perch) recorded significant decreases in first sales. These species were all supplied by small-scale vessels operating in coastal areas of the Baltic Sea. The small-scale fisheries segment is sensitive to any changes in fuel prices which increased by 21% in August 2021 compared to August 2020. Insufficient catches, high fuel prices, and decreased demand for fish all affected fishing activities and led to a drop in supply to the market.







Netherlands	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Aug 2021 vs Jan-Aug 2020 Aug 2021 vs Aug 2020	EUR 190,2 million, -20% EUR 33,7 million, 0%	129.688 tonnes, -22% 25.869 tonnes, +7%	Herring, mackerel, blue whiting, European plaice. <b>Value</b> : herring, shrimp <i>Crangon</i> spp., common sole <b>Volume</b> : Atlantic horse mackerel, shrimp <i>Crangon</i> spp., mackerel.	The production of <b>Atlantic horse</b> <b>mackerel</b> increased from around 230 tonnes in August 2020 to 2.130 tonnes in August 2021, which is half of the production recorded in August 2019 (around 4.500 tonnes). The Dutch production in August is characterised by a strong inter-annual fluctuation and mostly depends on changes in fishing strategies. The bulk of the Dutch horse mackerel production takes place in February to March. As a result, the cumulative Dutch production over the 8-month period of 2021 is rather stable compared to 2020. Also, the global
				Dutch pelagic quota was less utilised in August 2020, as storage capacity was almost fully filled during the first COVID-19 wave.





Portugal	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Aug 2021 vs Jan-Aug 2020	EUR 184,1 million, +20%	77.151 tonnes, +22%	Octopus, Atlantic horse mackerel, anchovy, skipjack tuna, sardine.	<b>Skipjack tuna</b> first-sales recorded a sharp increase in August 2021 compared to August 2020. Catches in 2021 appear to be returning to the normal average,
Aug 2021 vs Aug 2020	EUR 34,7 million +36%	19.316 tonnes, +50%	tuna, sardine. Anchovy, skipjack tuna, octopus, mackerel.	while 2020 was a particularly bad year (catches around 70% lower than the average for 2015-2019). The foreseen increase in operational costs due to the centralisation of catches in one of the islands of the Azores (Ponte Delgada) <sup>7</sup> described in MH issue No.9/2021 report, does not seem to have had an effect yet.

#### Table 13. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN PORTUGAL





#### Table 14. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SPAIN

Spain	First-sales value / trend in %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 1,01 billion,	328.855 tonnes,	<b>Value</b> : yellowfin tuna, anchovy, sardine, albacore tuna.
Jan-Aug 2020	+3%	-8%	<b>Volume</b> : mackerel, Atlantic horse mackerel, other sharks*, hake.
Aug 2021 vs	EUR 137,5 million	41.169 tonnes,	Squid, Atlantic horse mackerel, yellowfin tuna, anchovy, cod.
Aug 2020	-3%	-19%	

<sup>&</sup>lt;sup>7</sup> https://jo.azores.gov.pt/#/ato/8251e49e-de36-45dc-b10a-0a267596e4d5

## Figure 12. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SPAIN, AUGUST 2021



Table 15. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SWEDEN

	Sweden	First-sales value / trend in %	First-sales volume / trend in %	Main contributing species
-	Jan-Aug 2021 vs Jan-Aug 2020	EUR 36,1 million, -29%	68.224 tonnes, -21%	Herring, coldwater shrimp, Norway lobster, other groundfish*.
	Aug 2021 vs Aug 2020	EUR 0,06 million, -99,2%	5 tonnes, -99,9%	Norway lobster, coldwater shrimp, herring, sprat.

#### Figure 13. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SWEDEN, AUGUST 2021



#### Table 16. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN NORWAY

Norway	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs	EUR 1,74 billion,	2.043.570 tonnes,	Value: mackerel, miscellaneous small pelagics, crab.
Jan-Aug 2020	+2%	-1%	Volume: blue whiting, other groundfish*, other marine fish*.
Aug 2021 vs	EUR 234,1 million	253.894 tonnes,	Mackerel, cod, saithe, crab.
Aug 2020	+97%	+80%	





Percentages show change from the previous year. \*EUMOFA aggregation for species.

## Table 17. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE UNITED KINGDOM

United Kingdom	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Aug 2021 vs Jan-Aug 2020	EUR 336,5 million, +11%	188.276 tonnes, +5%	Norway lobster, lobster <i>Homarus</i> spp., scallop, crab, clam, blue whiting, monkfish.
Aug 2021 vs Aug 2020	EUR 52,3 million, +19%	25.177 tonnes, -4%	Value: Norway lobster, lobster <i>Homarus</i> spp., monkfish, scallop. Volume: saithe, haddock, clam, cod.



#### Figure 15. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE UNITED KINGDOM, AUGUST 2021

Percentages show change from the previous year.

## 1.4. Comparison of first-sales prices of selected species in selected countries<sup>8</sup>



#### Figure 16. FIRST-SALES PRICES OF GILTHEAD SEABREAM IN FRANCE, PORTUGAL, AND SPAIN

EU first sales of **gilthead seabream** occur in multiple countries, including **France**, **Portugal**, and **Spain**. In August 2021, the average first-sales prices of gilthead seabream were 18,84 EUR/kg in France (down from the previous month by 1%, and up from the previous year by 10%); 21,25 EUR/kg in Portugal (up from both the previous month and year, by 13% and 28%, respectively); and 16,20 EUR/kg in Spain (up from July 2021 by 8%, and up from August 2020 by 26%). In August 2021, supply increased in both France and Portugal (+8%, and +34%, respectively), and decreased in Spain by 31% relative to the previous year. Volumes sold in the three markets exhibit a clear seasonality: October in France, and November in Portugal and Spain. Over the past 36 months, gilthead seabream prices showed an upward trend in all three markets. At the same time, supply showed a downward trend.



#### Figure 17. FIRST-SALES PRICES OF MEGRIM IN BELGIUM, FRANCE, AND SPAIN

EU first sales of **megrim** occur in many countries, including **Belgium**, **France**, and **Spain**. In August 2021, the average firstsales prices of megrim were: 0,70 EUR/kg in Belgium (down from both the previous month and year, by 6% and 36%, respectively); 2,18 EUR/kg in France (down from both July 2021 and August 2020 by 11% and 10%, respectively); and 2,86 EUR/kg in Spain (down from both the previous month and year, by 22% and 23%, respectively). In August 2021, supply increased in all three markets: +2% in Belgium, +21% in France, and +7% Spain, relative to the previous year. Supply is seasonal with different peaks in all three markets: June–July and November in Belgium, January–March in France, and April in Spain. Over the 36-month period, megrim prices exhibited a downward trend in Belgium and Spain, and they remained stable in France. During the same period, supply showed an increasing trend in Belgium, and the opposite in France and Spain.

<sup>&</sup>lt;sup>8</sup> First sales data updated on 17.10.2021.



#### Figure 18. FIRST-SALES PRICES OF PIKE-PERCH IN DENMARK, ESTONIA, AND THE NETHERLANDS

EU first sales of **pike-perch** occur predominantly in **Estonia**, as well as in **Denmark** and **the Netherlands**. In August 2021, the average first-sales prices of pike-perch were: 7,43 EUR/kg in Denmark (–2% from July 2021, and +5% from August 2020); 3,76 EUR/kg in Estonia (down from both the previous month and year by 4% and 18%, respectively); and 10,17 EUR/kg in the Netherlands (down by 26% from July 2021, and up by 7% from August 2020). In August 2021, supply increased in both Estonia and the Netherlands (+18% and +11% respectively) and decreased in Denmark by 41% relative to the previous year. Volumes sold in the three markets are seasonal with different peaks: September and January in Estonia, October-November in the Netherlands, and June-July in Denmark. Over the past three years, prices remained stable in Estonia, but fluctuated in Denmark and the Netherlands. At the same time, supply went down in Estonia, and had an upward trend in Denmark and the Netherlands.



## **1.5.** Commodity group of the month: Tuna and tuna-like species<sup>9</sup>

The **"Tuna and tuna-like species**" commodity group (CG<sup>11</sup>) recorded the third highest first-sales value and second highest volume out of the 10 CGs recorded in August 2021<sup>12</sup>. In August 2021, of reporting countries covered by the EUMOFA database, first-sales of tuna and tuna-like species reached a value of EUR 53,05 million and a volume of 15.893 tonnes, representing an increase of 5% in value and 7% in volume compared to August 2020. In the past 36 months, the highest first-sales value of tuna and tuna-like species was registered at EUR 78 million (June 2021).

The tuna and tuna-like species commodity group includes 7 main commercial species (MCS): albacore, bigeye, bluefin, skipjack, yellowfin, miscellaneous tuna species<sup>13</sup>, and swordfish. Pelagic shark species, normally regarded as tuna-like species, are not included in the tuna and tuna-like species commodity group.

At Electronic Recording and Reporting System (ERS) level, skipjack tuna (8%) and yellowfin tuna (6%) together accounted for 14% of "tuna and tuna-like species" total first-sales value recorded in August 2021.

<sup>&</sup>lt;sup>9</sup> First sales data updated on 16.10.2021.

<sup>&</sup>lt;sup>10</sup> Norway and the UK excluded from the analyses.

<sup>&</sup>lt;sup>11</sup> Annex 3: http://eumofa.eu/supply-balance-and-other-methodologies

<sup>&</sup>lt;sup>12</sup> More data on commodity groups can be found in Table 1.2 of the Annex.

<sup>&</sup>lt;sup>13</sup> EUMOFA aggregation for species - Metadata 2, Annex 3: http://eumofa.eu/supply-balance-and-other-methodologies

## 1.6. Focus on skipjack tuna



The skipjack tuna (*Katsuwonus pelamis*) is a member of the family Scombridae, which includes "true tuna" such as the yellowfin tuna and other members of the genus *Thunnus*. It is generally similar in appearance to other species of tuna, albeit significantly smaller. The skipjack, which is also known as the arctic bonito, striped tuna, oceanic bonito, and more, has a torpedo-like shape with a streamlined and

muscular body and a cone-shaped head. The skipjack tuna is found throughout the world's oceans in tropical and subtropical waters. They are generally pelagic, inhabiting offshore waters generally near the surface. They are known as a shoaling species, sometimes forming groups of up to 50,000 individuals<sup>14</sup>. Skipjack tuna spawn in batches throughout the year in equatorial waters, and from spring to early autumn in subtropical waters. Maximum fork length is about 108 cm corresponding to a weight of 32.5 to 34.5 kg, with the average adult reaching 80 cm fork length and a weight of 8 to 10 kg. Skipjack tuna is caught at the surface, mostly with purse seines and pole-and-line gear but also incidentally by longlines. Other (artisanal) gear includes gillnets, traps, harpoons, and beach seines<sup>15</sup>. Skipjack tuna is marketed fresh, frozen, and canned. The International Commission for the Conservation of Atlantic Tunas (ICCAT) oversees management to ensure the sustainable exploitation of tuna populations including skipjack tuna<sup>16</sup>.

## **Selected countries**

## Table 18. COMPARISON OF SKIPJACK TUNA FIRST-SALES PRICES, MAIN PLACES OF SALE, AND CONTRIBUTION TO OVERALL SALES OF "TUNA AND TUNA-LIKE SPECIES" IN SELECTED COUNTRIES

Skipjack tuna		Changes in skipjack tuna first sales Jan-Aug 2021 (%) Compared to Jan-Aug 2020 2019		Contribution of skipjack tuna to total "tuna and tuna-like species" first sales in August 2021 (%)	Principal places of sale Jan-Aug 2021 in terms of first-sales value	
Portugal	Value	+314%	+62%	57%	Ilha do Pico, Ribeira Grando, Santa Maria	
	Volume	+319%	+63%	80%	Island.	
Spain	Value	-6%	-35%	4%	Bermeo, A Coruña, Santa Cruz do Toporifo	
	Volume	-13%	-33%	13%	Santa Ciuz de Tenenre.	





<sup>&</sup>lt;sup>14</sup> https://biologydictionary.net/skipjack-tuna/

<sup>&</sup>lt;sup>15</sup> https://www.fao.org/fishery/species/2494/en

<sup>&</sup>lt;sup>16</sup> http://www.internationalwatersgovernance.com/international-commission-for-the-conservation-of-atlantic-tunas-iccat.html

In **Portugal** in the observed period from September 2018 to August 2021, first sales of skipjack tuna occur during the warmer period of year peaking in July-August. The highest sales are recorded in August 2021 when 4.242 tonnes were sold. There are very few or no sales throughout the rest of the year.









Over the past 36 months in **Spain**, the highest first sales of skipjack tuna were in May and August 2019 when 7.806 tonnes and 9.851 tonnes were sold, respectively. First sales fluctuate without clear trend throughout the year, as sales are strongly linked to Total Allowable Catches (TAC) and weather conditions.





## **Price trend**



#### Figure 24. SKIPJACK TUNA: FIRST-SALES PRICES IN PORTUGAL AND SPAIN, SEPTEMBER 2018 - AUGUST 2021

Over the 36-month observation period (September 2018 to August 2021), the weighted average first-sales price of skipjack tuna in **Portugal** was 1,24 EUR/kg, 7% higher than in **Spain** (1,15 EUR/kg).

In **Portugal** in August 2021, the average first-sales price of skipjack tuna (1,21 EUR/kg) decreased by 1% compared with August 2020 and remained stable compared to August 2019. Over the past 36 months, average price ranged from 1,17 EUR/kg for 332 tonnes in June 2019, to 4,64 EUR/kg for 78 kg in February 2021.

In **Spain** in August 2021, the average first-sales price of skipjack tuna (1,24 EUR/kg) increased by 29% compared with August 2020, and decreased by 1%, compared to of the same month in 2019. During the observed period, the lowest average price (0,94 EUR/kg for 4.985 tonnes) was seen in April 2021, while the highest average price was recorded in April 2020 at 1,51 EUR/kg for 952 tonnes. It is evident that the level of price closely follows availability of product – with a higher price when supply is low, and vice versa.

## 1.7. Focus on yellowfin tuna



The yellowfin tuna (*Thunnus albacares*) is a species of tuna which belongs to the Scombridae family and is found in the pelagic waters of tropical and subtropical oceans worldwide. Yellowfin tuna is among the larger tuna species, reaching weights of over 180 kg. Spawning occurs throughout the year in the core areas of distribution, but peaks are always observed in the summer months.

Commercial fisheries catch yellowfin tuna using driftnets gillnets and similar nets, hooks and lines, longlines, pots and traps, purse seines, other seines, surrounding nets and lift nets, and troll lines<sup>17</sup>. It is also targeted in smaller-scale artisanal fisheries using gear such as aggregation devices and handlines<sup>18</sup>. The main world producers are Indonesia, Mexico, and Papua New Guinea, while the main EU producers include Spain, France, and Portugal. Regional Management Fisheries Organisations (RFMOs) oversee fishery management, and TACs are adopted by the International Commission for the Conservation of Atlantic Tunas (ICCAT) for tuna caught in the Atlantic Ocean and the Mediterranean Sea, and by the Indian Ocean Tuna Commission (IOTC for tuna caught in the Indian Ocean). Additionally, this species is subject to Council Regulation (EEC) No. 1536/92 of 9 June 1992 which defines the standard governance for the marketing of preserved tuna and bonito<sup>19</sup>. Most of the commercial catch is canned, but the sashimi marketplace adds significant demand for high-quality fish of this species.

### **Selected countries**

# Table 19. COMPARISON OF YELLOWFIN TUNA FIRST-SALES PRICES, MAIN PLACES OF SALE AND CONTRIBUTION TO OVERALL SALES OF TUNA AND TUNA-LIKE SPECIES IN SELECTED COUNTRIES

Yellowfin tuna		Changes in yello sales Jan-Aug 2	owfin tuna first 021 (%)	Contribution of yellowfin tuna to total	Principal places of sales in Jan-Aug 2021 in terms of first-sales value		
		Compared to Compared to Jan-Aug 2020 Jan-Aug 2019		"tuna and tuna-like species" first sales in August 2021 (%)			
Portugal	Value	-90%	+142%	0,010%.	Viana do Castelo, Funchal Madoira, Santa Maria		
	Volume	-95%	+70%	0,005%.	Island.		
Spain	Value	-11%	-46% 8%		Bermeo, A Coruña, Vigo.		
	Volume	-5%	-41%	14%			



<sup>&</sup>lt;sup>17</sup> https://fish-commercial-names.ec.europa.eu/fish-names/species\_en?sn=36008#ecl-accordion-header-species-descr

<sup>&</sup>lt;sup>18</sup> https://www.fao.org/fishery/species/2497/en

<sup>&</sup>lt;sup>19</sup> https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A31992R1536

In **Portugal** in the observed period from September 2018 to August 2021, first sales of yellowfin tuna occur from July to November 2020, peaking in October when 79 tonnes were sold. In the rest of the observed period there are significantly lower first sales which are mostly below 1 tonne.



In **Spain**, over the past 36 months, fishing activity fluctuated regularly, with the highest first sales registered in May 2019 when 10.757 tonnes were sold for about EUR 26,1 million. During the observed period first sales are in the range of 2.000 to 7.000 tonnes, with a few exceptions when sales were lower such is September 2019 when around 500 tonnes were sold.

## **Price trend**

Figure 27. YELLOWFIN TUNA: FIRST-SALES PRICES IN PORTUGAL AND SPAIN, SEPTEMBER 2018 - AUGUST 2021



Over the 36-month observation period (September 2018–August 2021), the weighted average first-sales price of yellowfin tuna was 1% higher in **Portugal** at 2,13 EUR/kg than that in **Spain** at 2,10 EUR/kg.

In **Portugal** in August 2021, the average first-sales price of yellowfin tuna was 3,60 EUR/kg for 246 kg, 162% higher compared to August 2020, when 27 tonnes at a price of 1,37 EUR/kg were sold, and 84% more than in 2019 when 958 kg at a price of 1,96 EUR/kg were sold. The lowest average price was registered in August 2020 at 1,37 EUR/kg for 27 tonnes, while the highest average price of 9,42 EUR/kg for 44 kg was registered in February 2020.

In **Spain** in August 2021, the average first-sales price of yellowfin tuna was 2,08 EUR/kg for about 3,1 tonnes, representing a 7% decrease compared to August 2020 (2,23 EUR/kg for 5,4 tonnes) and 1% higher than August 2019 (2,06 EUR/kg for 6,2 tonnes). The lowest price in the past 36 months was registered in November 2020 at 1,73 EUR/kg for 4.109 tonnes, while the highest price at 2,56 EUR/kg for 3.680 tonnes was observed in April 2020.

## 2. Extra-EU imports

The weekly extra-EU import prices (weighted average values per week, in EUR per kg) for nine different combinations of product and country of origin are examined every month. The three most important combinations, in terms of value and volume imported, are included every month. These are fresh whole Atlantic salmon from Norway, frozen Alaska pollock fillets from China, and frozen tropical shrimp (*Penaeus* spp.) from Ecuador. The other six combinations change each month; three are chosen from the commodity group of the month, and three are randomly selected. The commodity group for this month is "tuna and tuna-like species", and the featured combinations are fresh or chilled swordfish from Morocco, frozen fillets of tuna from the Republic of Korea, and prepared or preserved yellowfin tuna, whole or in pieces, in vegetable oil (excl. minced) from the Seychelles. The three randomly selected combinations this month are frozen fillets of herring from Norway, caviar substitutes prepared from fish eggs from the United States, and preparations of surimi from Thailand.

Data analysed in the section "Extra-EU imports" are extracted from EUMOFA, as collected from the European Commission<sup>20</sup>.

# Table 20.EVOLUTION OF WEEKLY PRICE AND VOLUME OF THE THREE MOST RELEVANT FISHERIES AND<br/>AQUACULTURE PRODUCTS IMPORTED INTO THE EU

Extra-EU Imports		Week 39/2021	Preceding 4-Week Average	Week 39/2020	Notes
Fresh whole Atlantic salmon imported from Norway (Salmo salar, CN code 03021400)	Price (EUR/kg)	5,29	5,12 (+3%)	4,73 (+12%)	From the beginning of the year, prices have experienced a slight upward trend. This contrasts with the downward trend observed over the past three years. In 2021, 33% of weekly prices were above 6,00 EUR/kg, with remaining prices ranging from 4,62 to 5,98 EUR/kg. After week 30, prices dropped below 6,00 EUR/kg.
	Volume (tonnes)	16.824	17.890 ( <mark>-6%</mark> )	17.318 ( <mark>-3%</mark> )	In 2021, volume ranged from 6.189 (week 13) to 19.071 tonnes (week 37). There has been an upward trend since the beginning of 2021 and over the past three years.
Frozen Alaska pollock fillets imported from China (Theragra chalcogramma, CN code 03047500)	Price (EUR/kg)	2,76	2,72 (+1%)	2,51 (+10%)	In 2021, prices ranged from 2,40 to 2,76 EUR/kg and demonstrated an upward trend, in line with the 3-year trend. On average, in 2021, the price was around 2,50 EUR/kg.
	Volume (tonnes)	1.936	2.221 ( <mark>–13%</mark> )	2.157 ( <b>–10%</b> )	Since week 1 of 2021, volumes fluctuated from 1.359 (week 32) to 3.686 tonnes (week 4). A downward trend has been observed since the beginning of the year, as well as over the past three years.
Frozen tropical shrimp imported from Ecuador (genus Penaeus, CN code 03061792)	Price (EUR/kg)	5,85	6,03 (–3%)	4,58 (+28%)	In 2021, prices fluctuated from 4,58 (week 10) to 6,16 EUR/kg (week 32). There has been an upward trend since week 1 of 2021, in contrast with a downward trend over the past three years.
	Volume (tonnes)	2.195	2.037 (+8%)	3.693 (-41%)	In 2021, weekly volumes fluctuated from 1.059 to 4.176 tonnes. There has been an upward trend since the beginning of the year, in line with the past three years.

<sup>&</sup>lt;sup>20</sup> Last update: 18.10.2021

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context



Figure 28. IMPORT PRICE OF FRESH AND WHOLE ATLANTIC SALMON FROM NORWAY, 2018 - 2021





Figure 30. IMPORT PRICE OF FROZEN TROPICAL SHRIMP FROM ECUADOR, 2018 - 2021



Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context

Table 21.	EVOLUTION OF WEEKLY PRICE AND VOLUME OF THIS MONTH'S THREE FEATURED COMMODITY
	PRODUCTS IMPORTED INTO THE EU

Extra-EU Imports		Week 39/2021	Preceding 4- week average	Week 39/2020	Notes		
Fresh or chilled swordfish imported from Morocco (Xiphias gladius, CN code 03024700)	Price (EUR/kg)	7,83	8,16 (–4%)	5,21 (+50%)	An upward trend has been seen over the past three years. The price has fluctuated from 3,90 (week 49 of 2020) to 12,19 EUR/kg (week 51 of 2018). Price spikes did not correlate with drops in supply.		
	Volume (tonnes)	16	17 (-7%)	31 (-48%)	Over the past three years, an upward trend. has been recorded. Supply has fluctuated from 0,067 tonnes (weeks 18 and 29 of 2020) to 164 tonnes (week 18 of 2021). Most of the weekly volumes were less than 50 tonnes.		
Frozen fillets of tuna "of the genus Thunnus", skipjack or stripe-bellied bonito imported from the Republic of Korea (Euthynnus [Katsuwonus] pelamis, CN code 03048700)	Price (EUR/kg)	18,86	14,61(+29%)	9,87(+91%)	A downward trend has been observed over the past three years. Prices fluctuated from 8,66 (week 32 of 2020) to 18,86 EUR/kg. Most prices ranged between 10,00 and 12,00 EUR/kg.		
	Volume (tonnes)	33	98 (- <mark>66</mark> %)	110 (-70%)	A stable trend has been seen over the past three years. Supply has fluctuated from 6 tonnes (week 5 of 2021) to 250 tonnes (week 10 of 2020). Most of the weekly volumes were less than 100 tonnes.		
Prepared or preserved yellowfin tuna whole or in pieces, in vegetable oil (excl. minced) imported from the Seychelles (Thunnus albacares, CN code 16041431)	Price (EUR/kg)	5,81*	n/a	5,70** (+2%)	From 2018 to 2021 there has been a downward trend, with prices ranging from 4,43 (week 2 of 2019) to 7,65 EUR/kg (week 29 of 2020). Price spikes correlated with a drop in supply in the previous week.		
	Volume (tonnes)	146*	n/a	278** (–48%)	An upward trend was recorded from 2018 to 2021. Supply has fluctuated from1,7 tonnes (week 29 of 2020) to 512 tonnes (week 43 of 2018). Most volumes were over 100 tonnes.		

\*Data refers to week 37 of 2021 (the most recent available); \*\*data refers to week 37 of 2020.





Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context



# Figure 32. IMPORT PRICE OF FROZEN FILLETS OF TUNA, SKIPJACK OR STRIPE-BELLIED BONITO FROM THE

Figure 33. IMPORT PRICE OF PREPARED OR PRESERVED YELLOWFIN TUNA FROM THE SEYCHELLES, 2018 - 2021



Since week 1 of 2021, the price of fresh or chilled swordfish from Morocco showed a stable trend. Supply exhibited a downward trend and ranged from 0,048 to 164 tonnes.

Since the beginning of 2021, both the price and volume of frozen fillets of tuna, skipjack or stripe-bellied bonito from the Republic of Korea showed an increasing trend. Price ranged from 8,87 to 18,86 EUR/kg, and volume from 6 to 242 tonnes.

The price of prepared or preserved yellowfin tuna from the Seychelles showed a downward trend since the beginning of 2021, while volume showed the opposite, increasing since the beginning of 2021. Price ranged from 5,06 to 6,34 EUR/kg, and volume from 7 to 365 tonnes.

# Table 22. EVOLUTION OF WEEKLY PRICE AND VOLUME - EU IMPORTS OF THREE OTHER FISHERIES AND AQUACULTURE PRODUCTS RELEVANT TO THE EU MARKET

Extra-EU Import	5	Week 39/2021	Preceding 4- week average	Week 39/2020	Notes
Frozen fillets of herring imported from Norway (Clupea harengus, Clupea pallasii,	Price (EUR/kg)	1,63	1,68 (–3%)	1,43 (+14%)	The period between 2018 and 2021 saw an upward trend. Prices ranged from 1,31 (week 21 of 2020) to 1,91 EUR/kg (week 36 of 2021). Most prices were less than 1,50 EUR/kg.
CN code 03048600)	Volume (tonnes)	406	575 (– <mark>29%</mark> )	1.761 (-77%)	High fluctuations in supply have been observed, varying between 19 tonnes (week 52 of 2019) and 3.090 tonnes (week 5 of 2021). Overall, there has been an upward trend.
Caviar substitutes prepared from fish eggs imported from the United States (CN code 16043200)	Price (EUR/kg)	13,16	42,18 (- <mark>69%</mark> )	48,46 ( <b>-73%</b> )	A stable trend has been seen over the past three years. Price spikes were related to a significant drop in supply from the week prior. Fluctuations in price have been high, varying from 2,69 (week 28 of 2020) to 102,48 EUR/kg (week 20 of 2019).
	Volume (tonnes)	2,4	1,8 (+34%)	0,12 (+1.900%)	There has been a downward trend over the past three years, with high fluctuations in supply observed, from 0,012 tonnes (weeks 16 and 22 of 2020, and week 24 of 2021) to 73 tonnes (week 47 of 2018).
Preparations of surimi imported from Thailand (CN code 16042005)	Price (EUR/kg)	2,67	3,02 (-11%)	2,60 (+3%)	There has been a stable trend from 2018 to 2021, with prices ranging from 2,19 (week 23 of 2021) to 4,24 EUR/kg (week 12 of 2020). Most price spikes were related to a significant drop in supply from the previous week.
	Volume (tonnes)	101	140 (–28%)	37 (+170%)	From 2018 to 2020, volume ranged between 19 tonnes (week 16 of 2019) and 288 tonnes (week 50 of 2018), with an overall downward trend.

Figure 34. IMPORT PRICE OF FROZEN FILLETS OF HERRING FROM NORWAY, 2018 - 2021



Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context









Since the first week of January 2021, the price of frozen fillets of herring from Norway has exhibited an upward trend, while volume has had shown a downward trend. Prices ranged from 1,39 to 1,91 EUR/kg.

Since the beginning of the year, the price of caviar substitutes prepared from fish eggs from the United States has been a stable trend, while volume has demonstrated a downward trend. Supply ranged from 0,012 to 23 tonnes.

From the beginning of 2021, the price of preparations of surimi from Thailand exhibited a downward trend, while volume increased. Prices ranged from 2,29 to 4,00 EUR/kg and supply from 25 to 220 tonnes.

## 3. Consumption

## **3.1. HOUSEHOLD CONSUMPTION IN THE EU**

Data analysed in the section "Consumption" are extracted from EUMOFA, as collected from Europanel<sup>21</sup>.

In comparison to August 2020, household consumption of fresh fisheries and aquaculture products in August 2021 increased in both volume and value in six of the Member States analysed. In France, the increase was largely due to cod (+14% in volume, +13% in value), gilthead seabream (+61% in volume, +31% in value), and trout (+30% in volume, +34% in value). Salmon and saithe also contributed to the value increase (+10% and +28%, respectively). In Germany, Alaska pollock (+68% in volume, +89% in value) and saithe (+68% in volume, +94% in value) were the main species consumed. Cod (+16% in volume, +15% in value), and mussel *Mytilus* spp (+7% in volume, +14% in value) were the key contributors to the increase in consumption observed in the Netherlands. In Poland, mackerel (+19% in volume, +12% in value) and sardine (+37% in volume, +32% in value),) were consumed the most, with European seabass demonstrating a value increase of +38%. Salmon was the main contributor to decreases in consumption in Ireland (-7% in volume, -8% in value), Spain (-10% in volume, -9% in value), and Sweden (-34% in volume, -32% in value). In Ireland, the decrease was also due to cod (-36% in volume, -30% in value), while in Spain it was partially due to miscellaneous tunas (-9% in volume, -4% in value). In Denmark, the drop in consumption was primarily due to flounder (-33% in volume, -14% in value) and trout (-23% in value), while in Italy it was due to gilthead seabream (-12% in volume, -14% in value) and swordfish (-30% in volume, -35% in value).

Country	Per capita consumption 2018* (live weight equivalent, LWE) kg/capita/year	August 2019		August 2020		July 2021		August 2021		Change from August 2020 to August 2021	
Country		Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	39,83	996	16,04	1.137	18,51	961	17,63	1.048	17,98	8%	3%
France	33,52	16.569	179,76	15.067	168,66	16.911	189,43	16.401	185,61	9%	10%
Germany	14,50	4.920	74,17	4.653	71,88	5.519	83,56	4.734	72,73	2%	1%
Hungary	6,12	270	1,51	314	1,59	237	1,50	346	2,19	10%	38%
Ireland	23,13	939	14,29	998	14,60	1.164	17,98	893	13,77	11%	6%
Italy	31,02	24.069	239,48	23.371	234,99	22.047	238,10	21.962	228,44	6%	3%
Netherlands	20,90	3.244	41,83	3.056	45,34	3.266	47,00	3.134	45,84	3%	1%
Poland	13,02	2.627	17,84	2.635	18,62	2.734	19,33	2.755	19,65	5%	6%
Portugal	60,92	6.613	41,41	5.664	37,20	6.892	46,79	6.243	41,53	10%	12%
Spain	46,01	42.914	333,35	45.828	364,34	46.648	392,20	43.000	352,56	6%	3%
Sweden	26,61	986	14,55	1.211	15,75	795	10,76	887	12,62	27%	20%

#### Table 23. AUGUST OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR)

\*Data on per capita consumption of all fish and seafood products for all EU Member States can be found at: https://www.eumofa.eu/documents/20178/415635/EN\_The+EU+fish+market\_2020.pdf/

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context In the Netherlands and Sweden, the average household consumption of fresh fisheries and aquaculture products for August has been above the annual average for the last three years. In terms of value, the August average household consumption was below the annual average in all countries, except Sweden.

The most recent weekly consumption data (up to **week 45 of 2021**) are available on the EUMOFA website and can be accessed **here**.

## **3.2.** Sole

**Habitat:** Marine flatfish found on sandy and muddy bottoms, from the shore down to 300 m. Usually solitary.<sup>22</sup> **Catch area:** Eastern Atlantic (southward from Trondheim Fjord, also the North Sea and western Baltic), and the Mediterranean (also Sea of Marmara, Bosporus and south-western Black Sea).<sup>23</sup>

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Production method: Caught.
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Main consumers in the EU: Spain.<sup>24</sup>

Presentation: Whole.

Preservation: Fresh, frozen.

## 3.2.1. Overview of household consumption in Spain

Spain is one of the EU Member States where the per capita 'apparent consumption'<sup>25</sup> of fisheries and aquaculture products is above the EU average. In 2018, this was estimated at 46,01 kg, a decrease by 1% from the previous year. Per capita apparent consumption for Spain in 2018 was 89% higher than the EU average (24,36 kg LWE).

See more on per capita apparent consumption in the EU in Table 24.

Sole is one of the top five most consumed species in Spain. Over the past three years (September 2018 – August 2021), total Spanish household consumption of fresh sole was 82.331 tonnes. Spanish consumers spent on average 10,17 EUR per month for a kilogram of fresh sole.

We have covered **sole** in previous *Monthly Highlights*:

First sales: 1/2013; 8-9/2013; 2/2014; 6/2014; 4/2015; 9/2015; 7/2016; 2/2017; 3/2018; 4/2019

Imports: 11/2018; 4/2019; 9/2019; 6/2020; 6/2021

Case study: 6/2018 (Sole in the EU market)

<sup>&</sup>lt;sup>22</sup> https://www.fao.org/fishery/species/3367/en

<sup>23</sup> https://www.fao.org/fishery/species/3367/en

<sup>&</sup>lt;sup>24</sup> Eumofa Monthly Highlights no. 4 / 2018.

<sup>&</sup>lt;sup>25</sup> "Apparent consumption" is calculated by using the supply balance sheet that provides an estimate of the supply of fisheries and aquaculture products available for human consumption at EU level. The calculation of the supply balance sheet is based on the equation: *Apparent consumption* = [(total catches – industrial catches) + aquaculture + imports] – exports. Catches targeted for fishmeal (industrial catches) are excluded. Non-food use products are also excluded from imports and exports. It is worth underlining that the methodologies for estimating apparent consumption at EU and Member State levels are different, the first based on data and estimates as described in the Methodological background, the latter also requiring the adjustment of abnormal trends due to the higher impact of stock changes.









## 3.2.2. Household consumption trends in Spain

Long-term trend (September 2018 to August 2021): Upward trend in both price and volume.
Yearly average price: 9,67 EUR/kg (2018), 10,09 EUR/kg (2019), 10,23 EUR/kg (2020).
Yearly consumption: 27.195 tonnes (2018), 27.678 tonnes (2019), 27.463 tonnes (2020).
Short-term trend (January to August 2021): Decrease in price (13% from January), increase in volume (14% from January).
Average price: 10,28 EUR/kg.
Consumption: 17.004 tonnes.

#### Figure 39. RETAIL PRICE AND VOLUME OF SOLE PURCHASED BY HOUSEHOLDS IN SPAIN, SEPTEMBER 2018 – AUGUST 2021



## 4. Case study – Fisheries and Aquaculture in Egypt

Egypt is located in the northeast corner of the African continent. It borders the Mediterranean Sea, between Libya and the Gaza Strip, and the Red Sea, north of Sudan. Spread over 1.010.408 km<sup>2</sup>, Egypt ranks as Africa's third and the world's fourteenth most populous country with a population of approximately 102 million people as of 2021.<sup>26</sup>

Aquaculture is the primary source of fish production in Egypt. In 2019, aquaculture production was over 1,6 million tonnes, accounting for around 80% of the country's total fish production. In the same year, fisheries production was less than 0,4 million tonnes. Egypt's aquaculture industry ranks eighth worldwide and third in terms of tilapia production.

The majority of the country's fish production is consumed within Egypt. In 2019, only 32.744 tonnes of fisheries products were exported, while imports are increasing. The processing industry is limited to salting, smoking, and filleting. Fish is a traditional and important component of the Egyptian diet. It is also a main source of relatively affordable animal protein for an increasing population.

## 4.1 Fishery and aquaculture production



In 2019, fisheries production accounted for 397.042 tonnes of fisheries products, with 75% of this production from inland fisheries. In the same year, the aquaculture production was circa 1.642.000 tonnes, amounting to over 80% of the Egyptian production. Fisheries production in Egypt has remained stable during the period between 2010 and 2019 while aquaculture production has significantly increased. As part of the Egyptian Sustainable Development Strategy, the national target is to increase fish production to 3 million tonnes by 2030<sup>27</sup>.

# Figure 40. CONTRIBUTION OF AQUACULTURE AND FISHERIES TO TOTAL PRODUCTION (volume in 1.000 tonnes)



Source: FAO

### **Fisheries production**

The Mediterranean and Red Seas, the Nile River, and inland lakes are the main sources for capture fisheries in Egypt, with inland fishing constituting the majority of Egyptian fishery production (75% in 2019). There were 80.600 fishing licenses recorded in Egypt

<sup>27</sup> Egypt's 2021 Voluntary National Review. 2030 vision of Egypt. Ministry of Planning and Economic Development.

//sustainabledevelopment.un.org/content/documents/279512021\_VNR\_Report\_Egypt.pdf

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

7. Macroeconomic context

<sup>&</sup>lt;sup>26</sup> https://www.worldometers.info/world-population/population-by-country/

in 2021<sup>28</sup>. Nile tilapia constitutes the main resource caught in Egypt. This species accounted for 35% of the national fisheries production in 2019, followed by mudfish and mullets, accounting for 10% of national fisheries production each. Relatively small amounts of pelagic fish are also caught, with the main species being sardinellas.

Species	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nile tilapia	130.330	120.220	102.186	102.802	107.956	114.093	107.967	114.863	121.094	140.702
Mudfish	29.156	30.117	35.128	41.495	32.478	30.459	28.860	35.377	34.640	39.507
Mullets nei	26.513	19.008	29.670	39.173	29.537	29.368	27.280	33.769	35.611	38.982
Sardinellas nei	13.672	12.718	15.962	14.390	14.692	15.034	16.035	16.501	18.401	14.526
Grass carp	21.354	32.160	15.094	16.886	15.416	15.371	15.043	13.400	14.040	14.487
Freshwater fishes nei	14.639	14.714	19.729	15.987	12.532	12.121	12.199	14.864	14.176	13.047
Scads nei	6.151	6.011	8.103	7.101	7.829	7.206	9.822	9.626	9.161	10.790
Others	143.395	140.407	128.302	119.024	124.352	120.461	118.408	132.560	126.163	125.001
Total	385.210	375.355	354.174	356.858	344.792	344.113	335.614	370.960	373.286	397.042

#### Table 24. CATCHES BY MAIN SPECIES IN EGYPT (volume in tonnes)

Source: FAO

### Aquaculture production

Aquaculture has been practiced in Egypt for more than 4.000 years. During the last three decades, the country's aquaculture production soared from 60.500 tonnes in 1989 to 1.641.949 tonnes in 2019. As of 2019, aquaculture production in Egypt is the largest in Africa, accounting for 69% of the continent's aquaculture production. In the same year, Egypt ranked eighth among the top global aquaculture producers, and third in Nile tilapia production, after China and Indonesia, accounting for 22% of the global production of this species<sup>29</sup>. It is estimated that about 75.000 people are employed in the aquaculture sector and related activities<sup>30</sup>.

Current aquaculture practices in Egypt include extensive, semi-intensive, and intensive aquaculture systems, integrated aquaculture systems, aquaponics, and rice-field aquaculture, desert aquaculture, and mariculture. The most commonly used aquaculture system in Egypt is semi-intensive production in earthen ponds. This system accounted for 87% of total aquaculture output in 2019<sup>31</sup>. Intensive farming in cages, tanks and ponds, and integrated farming with other crops (mainly rice fields) is also practiced.

According to FAO statistics, 16 species are farmed in Egypt, namely 14 finfish and two species of crustaceans. Aquaculture production in Egypt is dominated by freshwater species. Nile tilapia is the most important, contributing to 66% of total aquaculture production in 2019. Carp species are also widely cultured, mostly in polyculture systems with tilapia.

Aquaculture of marine species represented only 17% of the Egyptian aquaculture production in 2019, with total production reaching almost 303.000 tonnes in 2019 (it was approximately 133.500 tonnes in 2010). Among the marine species, mullets are by far the most important reared species, comprising around 211.000 tonnes in 2019. It remains a key species in Egyptian marine aquaculture because of its low feed intake and its high demand by Egyptian consumers<sup>32</sup>. Other marine species such as gilthead seabream, European seabass, and meagre are expanding at good rates. The production of these species accounted for almost 100.000 tonnes in 2019, while it accounted for less than 50.000 tonnes in 2010.

The rise in aquaculture production is mainly attributed to significant expansion in the application of new technologies such as the use of water recirculation systems and improved farm management practices<sup>33</sup>, and to the contribution of governmental farms (mainly in Kafr El Sheikh, a city to the north of Cairo in the Nile Delta and Suez Canal area) in taking the lead in applying practices before the private sector. Government farms have facilitated the shift from traditional semi-intensive earthen ponds to intensive systems with aeration and use of formulated feeds.<sup>34</sup> In parallel, hundreds of hatcheries for freshwater and marine species have been constructed throughout the country and the feed subsector has received considerable attention, particularly since the introduction of the feed extrusion technology. Currently, the aquafeed sector produces about 1,4 million tonnes annually for all farmed species<sup>35</sup>. The involvement of the private sector and the development of a strong institutional base is another reason for the success of aquaculture in Egypt. Local research institutions and the WorldFish Center, with its regional office in Abbassa, near Cairo, are helping to improve productivity, to increase employment and to intensify farm production<sup>36</sup>. The expansion of aquaculture in Egypt has succeeded in reducing the production cost allowing accessibility to the poorer rural population to healthy and affordable animal protein.

<sup>&</sup>lt;sup>28</sup> Egypt's 2021 Voluntary National Review. 2030 vision of Egypt. Ministry of Planning and Economic Development.

https://sustainabledevelopment.un.org/content/documents/279512021\_VNR\_Report\_Egypt.pdf

<sup>&</sup>lt;sup>29</sup> FAO statistics.

<sup>&</sup>lt;sup>30</sup> Abdel Rahman El Gamal, Fish Consulting Group. Development and outlook of Egyptian aquaculture. 2017.

<sup>&</sup>lt;sup>31</sup> https://www.was.org/articles/The-Success-Story-of-Aquaculture-in-Egypt-The-Real-Motivation-for-Hosting-the-First-Aquaculture-Africa-Conference.aspx#.YXE51RpBxPY <sup>32</sup> The State and Development of Aquaculture in Egypt. 2016.

<sup>&</sup>lt;sup>33</sup> The State and Development of Aquaculture in Egypt. 2016.

<sup>&</sup>lt;sup>34</sup> Olivier. K, Abudou-Fadel B. Overview of aquaculture systems in Egypt and Nigeria, prospects, potentials and constraints. Aquaculture and Fisheries 6 (2021) 535-547. <sup>35</sup> https://www.was.org/articles/The-Success-Story-of-Aquaculture-in-Egypt-The-Real-Motivation-for-Hosting-the-First-Aquaculture-Africa-Conference.aspx#.YXE51RpBxPY

<sup>&</sup>lt;sup>36</sup> Olivier. K, Abudou-Fadel B. Overview of aquaculture systems in Egypt and Nigeria, prospects, potentials and constraints. Aquaculture and Fisheries 6 (2021) 535-547.

The future development of aquaculture will be linked to the development of the aquafeed industry and particularly its ability to decrease the dependence of the sector on the importation of feed inputs and the decrease of their prices.

Species	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nile tilapia	557.049	610.617	768.752	635.843	759.601	875.513	940.309	967.301	1.051.444	1.081.202
Mullets nei	89.029	84.001	99.651	90.151	92.645	115.000	115.000	182.294	210.700	210.900
Common carp	31.721	33.662	23.665	46.447	46.000	30.000	50.000	23.5	79.774	79.774
Cyprinids nei	80.000	85.000	21.700	123.800	52.000	30.000	70.000	64.500	67.000	70.000
Silver, bighead carps nei	80.000	85.000	21.700	123.800	100.829	34.606	80.909	64.685	66.900	66.900
Gilthead seabream	15.015	14.105	14.756	14.487	16.967	16.092	26.663	35.221	29.994	35.880
Mullets nei	27.000	30.000	30.000	26.000	27.000	42.179	38.776	27.919	31.371	33.074
European seabass	16.256	17.664	13.748	12.278	15.167	14.343	24.498	30.720	24.914	30.313
Meagre	12.246	12.092	8.319	4.889	5.884	9.317	16.162	25.013	25.130	25.320
Others	11.269	14.679	15.447	19.849	20.998	7.781	8.343	9.188	7.004	8.586
Total	919.585	986.820	1.017.738	1.097.544	1.137.091	1.174.831	1.370.660	1.406.841	1.594.231	1.641.949

#### Table 25. AQUACULTURE PRODUCTION BY MAIN SPECIES IN EGYPT (volume in tonnes)

Source: FAO

## 4.2 **Processing and marketing**

Egyptian fish is mostly sold fresh. Fish from fisheries is packed in wooden crates with small amounts of ice and supplied through a limited network of wholesalers. It is also common to find individuals selling fish among main roads especially close to lakes. There are two main wholesale markets in Egypt: in Cairo and in Kafr El Sheikh (the main producing region of fisheries and aquaculture products in Egypt). Due to the limited cold chain capacity and cold storage infrastructure, the fish must be sold within hours of harvest. Fish not sold within a day is routinely sold at a heavily discounted price. From these markets, fish is distributed according to demands to other regions. Farmed fish are sold through wholesale markets but generally available for market at supermarket chains, with larger cold chain capabilities.

Fish processing in Egypt is limited to three main types of processing: salting, smoking, and filleting<sup>37</sup>:

- **Salted** fish is traditionally eaten during certain holidays, mainly in locations distant from landing sites where mullets and sardinellas are commonly supplied in salted forms.
- **Smoking** of imported frozen herring like species is also performed. In 2018, 5.800 tonnes of salted and smoked fish were produced<sup>38</sup>. However, it is expected that the quantity of salted fish will decline as internal transport and marketing improves (production of salted fish has decreased by 11% between 2010 and 2018).
- **Filleting** is mainly performed on large-size tilapia and Nile perch from Lake Nasser (vast reservoir in southern Egypt) and a few Red Sea species such as grouper. Frozen and fresh fish fillets aim to meet market demands and achieve efficient transportation to target markets.

## 4.3 Exports and imports

Egypt exports modest quantities of fish, mainly marine fish. As illustrated in the figure below, exports reached a record of 61.000 tonnes in 2017 and were around 31.000 tonnes between 2009 and 2018. Conversely, imports have grown significantly since 2009, reaching a peak of over 633.000 tonnes in 2018. The increase in imports can be explained by the expansion of the number of importers and the retail shift from fresh markets toward supermarket and hypermarket chains that prefer more shelf-stable products<sup>39</sup>. It could be also explained by the population increase of about 2.6 million people per year and, despite the increase in fisheries production, the corresponding increase in consumption is increasing at a higher rate, leading to an increase in Egyptian imports<sup>40</sup>.

The greatest share of imported fish and seafood were whole frozen fish (mainly small pelagic species: mackerel and herring) which represented 47% of imports value in 2018, followed by canned products (mainly tuna) at 14%, frozen shrimps at 12% and frozen fillets at 3%. Small pelagic species are imported in some markets for smoking while shrimps are imported to fill the gap between national production (in relation to the shrimps' production collapse in recent years) and consumption.

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

<sup>&</sup>lt;sup>37</sup> Abdel Rahman El Gamal, Fish Consulting GroupDevelopment and outlook of Egyptian aquaculture. 2017.

<sup>&</sup>lt;sup>38</sup> FAO statistics.

<sup>&</sup>lt;sup>39</sup> Abdel Rahman El Gamal, Fish Consulting GroupDevelopment and outlook of Egyptian aquaculture. 2017.

<sup>4</sup>º Analysis of Fish Production Indicators in Egypt Asmaa M. M. E. Bahlool and Fatma A. M. El-Bateh Faculty of Agriculture – Benha University



# Figure 41. EGYPTIAN IMPORTS AND EXPORTS OF FISHERIES AND AQUACULTURE PRODUCTS IN VOLUME (tonnes of net weight)

Source: EUMOFA elaboration of data from Global Trade Atlas - IHS Markit.

In 2018, of the countries from which Egypt imported fisheries and aquaculture products, the EU<sup>41</sup> was the top supplier with 27% of the Egyptian imports value, followed by Thailand (13%), the United Arab Emirates (11%), Japan (10%) and Brazil (8%) from which Egyptian imports have grown in recent years.

# Figure 42. TOP ORIGINS EXPORTING FISHERIES AND AQUACULTURE PRODUCTS TO EGYPT BETWEEN 2014 AND 2018 IN VALUE TERMS



Source: EUMOFA elaboration of data from Global Trade Atlas - IHS Markit.

### Focus on trade flows with the EU

EU exports of fisheries and aquaculture products to Egypt amounted to EUR 137 million in 2020, largely comprising herring and mackerel species. In 2020, these species constituted 92% of EU exports to Egypt in volume and 88% in value terms. Exports from the Netherlands, Spain, and Ireland constituted almost all the EU exports to Egypt, accounting for 96% of export volume and 93% of export value. Egypt constitutes an important market for these three EU MS. Egypt was the destination for 59% of Spanish extra-EU exports of herring and mackerel species, 32% of Dutch extra-EU exports, and 17% of Irish extra-EU exports in 2020 in value terms.

<sup>&</sup>lt;sup>41</sup> For the EU, data from IHS market are not in line with data from EUROSTAT-COMEXT. Data from EUROSTAT-COMEXT show a lower volume and value of exports to Egypt from the EU. As a result, the figures regarding the share of the EU in Egyptian imports are only provided for indicative purposes and should not represent a relevant indication in value terms.





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## 4.4 Consumption

Fish is an important traditional food source in Egypt. Egyptian per capita consumption has increased steadily to reach around 23,5 kg live weight/person/year in 2017.<sup>42</sup> Fish accounts for 25,3% of the average household's protein intake, and at least 25% of Egyptian households consume fish as their main source of protein.<sup>43</sup> The increase in fish consumption is attributed to expanding domestic supply, as well as some economically incentivized changes in consumer preferences among low-income consumers. Growth in low-cost domestic fish production, improvements in distribution networks, and increased importation of inexpensive canned products have made fish more accessible to lower socioeconomic groups. For higher-income consumers, high-value saltwater species are widely available including imported salmon, shrimp, and mollusk's such as octopus, oysters, and mussels.<sup>44</sup>

According to a study on the consumption of fish, red meat, and poultry in Egypt, households purchased twice as much fish as red meat, mainly in relation to its cheaper price in comparison to other protein sources. The study found that only 16,5% of households in the study reported a preference for fish over other animal proteins.<sup>45</sup> Conversely, in the EU, households spend on average around one-quarter of the amount spent on meat for purchasing fishery and aquaculture products.<sup>46</sup>

Fresh fish is distinctly preferred by consumers over frozen fish, though frozen fish is increasingly being accepted by Egyptian consumers. This explains the increase of imports of frozen products in recent years. Salted fish is traditionally eaten during certain holidays.<sup>47</sup> If consumption continues to increase, investment in cold chains or value-added technology will be necessary. Consumption of fish in terms of species is determined primarily by the availability of fish from market supply. For example, in coastal areas, marine fish and shellfish is more often displayed compared to the delta regions where tilapia and mullet are more common.<sup>48</sup>

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

<sup>&</sup>lt;sup>42</sup> The State and Development of Aquaculture in Egypt. 2016.

<sup>&</sup>lt;sup>43</sup> The State and Development of Aquaculture in Egypt. 2016.

<sup>44</sup> Ibidem.

<sup>&</sup>lt;sup>45</sup> WorldFish. 2017. WorldFish in Egypt. Penang, Malaysia: WorldFish. Factsheet: 2017-20.

<sup>&</sup>lt;sup>46</sup> The EU fish market. EUMOFA. 2020 Edition.

<sup>&</sup>lt;sup>47</sup> https://www.fao.org/fishery/facp/EGY/en

<sup>&</sup>lt;sup>48</sup> Abdel Rahman El Gamal, Fish Consulting GroupDevelopment and outlook of Egyptian aquaculture. 2017.

## 5. Case study – Atlantic salmon

## 5.1. Introduction

Atlantic salmon (*Salmo salar*) is a highly valued fish species from the family Salmonidae. This species is mainly anadromous<sup>49</sup>, relatively short-lived, and occurs naturally in the northern hemisphere exclusively. As juveniles, they usually migrate from the river to the sea for feeding and sexual maturation, and then return to the same river section where they were born to spawn as adults<sup>50</sup>. These long-distance migrations expose this species to multiple threats, including escaped farmed salmon and salmon lice, among others. This may have contributed to the decline in the total abundance of Atlantic salmon, seen over the last three decades<sup>51</sup>. Although this species is available from wild sources, most commercially available Atlantic salmon is farmed<sup>52</sup>.



Source: Shutterstock (photo by: Alexander Raths)

Salmon fish farming started experimentally in the 1960s, becoming an industry in Norway in the 1980s and in Chile in the 1990s. Nowadays, Atlantic salmon farming is dominated by Norway, Chile, Canada, and Scotland, followed by Ireland,

Australia, the Faroe Islands, the USA, Iceland, and New Zealand. The production cycle lasts for about three years, with the first year taking place in freshwater, and the farmed fish then being transported to seawater cages. When the fish reach a harvestable size, they end up in processing plants to be prepared for sale, mostly as fillets or whole fish. In recent years, full-cycle, land-based salmon farming has attracted more investment interest, and there is a potential for more development in the future.

Global trends have supported a rising demand for salmon, including campaigns from various global and national health institutions, calling for increased levels of fish consumption, and the rise of sushi as a cosmopolitan food staple. Salmon has a high content of protein, omega-3 fatty acids, minerals (including iodine and selenium), and vitamins (D and B12)<sup>53</sup>.

## 5.2. Role of Atlantic salmon among the other farmed Salmonids

The Atlantic salmon is one of only a few species in the family Salmonidae. Salmonids are among the most important farmed animals in the world, with the most commonly farmed species being Atlantic salmon, large and small Rainbow trout (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), and chinook (*Oncorhynchus tshawytscha*) salmon. Atlantic salmon is the most harvested Salmonid species worldwide, accounting for 69,8% of total harvest volume in 2020 (see Figure 1)<sup>54</sup>.



#### Figure 44. TOTAL HARVEST QUANTITY OF FARMED SALMONIDS IN 2020 (%)

Source: Salmon World 2021, Kontali

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

<sup>&</sup>lt;sup>49</sup> Species that spend most of their lives in the sea but migrate to fresh water to spawn.

<sup>&</sup>lt;sup>50</sup> OECD (2017), "Atlantic salmon (*Salmo salar*)", in Safety Assessment of Transgenic Organisms in the Environment, Volume 7: OECD Consensus Documents, OECD Publishing, Paris. DOI: https://doi.org/10.1787/9789264279728-7-en

<sup>&</sup>lt;sup>51</sup> ICES Journal of Marine Science, Volume 74, Issue 6, July-August 2017, Pages 1496–1513, https://doi.org/10.1093/icesjms/fsx020

<sup>&</sup>lt;sup>52</sup> Mowi Salmon Industry Handbook 2021, https://corpsite.azureedge.net/corpsite/wp-content/uploads/2021/05/Salmon-Industry-Handbook-2021.pdf

<sup>&</sup>lt;sup>53</sup> Mowi, FAO, WHO, The Norwegian Directorate of Health, Health and Human Services, US Department of Health (2016) Dietary guidelines for Americans 2015-2020 <sup>54</sup> The Salmon World 2021, Kontali

## 5.3. Global catch and aquaculture production

Total catches of wild Atlantic salmon have shown a decreasing trend in the last three decades, remaining below 10.000 tonnes since 1991. In 2019, the global catch of Atlantic salmon was recorded to be 1.807 tonnes, which was a drop of 82%. Globally, total aquaculture production exceeds the wild catch volume of Atlantic salmon and has been increasing since the early 1990s. It has more than doubled in less than two decades, from just over 1,1 million tonnes in 2002, to 2,6 million tonnes in 2019.





Source: Kontali (farmed salmon estimates data); FAO (wild catch data)

Catches dropped from 2.350 tonnes in 2015 to 1.807 tonnes in 2019 - a decrease of 19%<sup>55</sup>. Finland, Sweden, Norway, and the UK are the leading countries in terms of catch volumes of wild Atlantic salmon.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Finland	622	396	408	511	440	620	563	624	592	637	552
Sweden	339	322	372	309	551	562	574	602	423	778	482
Norway	599	644	708	702	479	493	356	349	386	291	309
United Kingdom	227	175	376	284	258	155	199	177	140	96	100
Ireland	68	99	87	88	87	56	59	58	52	69	70
Russia	126	102	73	118	131	180	179	163	266	171	61
Other	394	498	351	323	427	490	420	269	235	236	232
Total	2.375	2.236	2.375	2.335	2.373	2.556	2.350	2.242	2.094	2.278	1.807

### Table 26. GLOBAL CATCH OF WILD ATLANTIC SALMON BY COUNTRIES (in tonnes)

Source: FAO.

The scale of global aquaculture production of Atlantic salmon is 1000 times greater than the capture of wild fish. Since 2013, the total harvest quantity of farmed Atlantic salmon has reached levels of more than 2 million tonnes and has increased every year, with the exception of 2016 when global aquaculture production decreased by  $7\%^{56}$  (Figure 52).

The world's main producers of farmed Atlantic salmon are Norway, Chile, the UK, and Canada, together accounting for more than 91% of global production. In 2020, the total harvest quantity estimated for Atlantic salmon was 2,7 million tonnes, which was an increase of 5% compared to 2019. The key driver behind the growth was Chile, the second-largest Atlantic salmon producing country, whose volume increased by 88.000 tonnes (13%). Additionally, Norway had a growth of 3% in volume.

<sup>&</sup>lt;sup>55</sup> FAO

<sup>56</sup> Kontali estimates

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context





Source: The Salmon World 2010-2021, Kontali

Over the last two decades, there has been significant consolidation of salmon farming companies within a global context. Since 2020 the number of salmon farming companies in the world's largest salmon-producing countries - Norway, Chile, and the UK - has halved. In the same period, several salmon farming companies became listed on different stock exchanges. Currently, 19 salmonid farming companies are listed at the Euronext-owned Oslo stock exchange. This makes it the main stock exchange for salmon farming companies in the world. In addition, several service providers to the salmonid farming industry and other aquaculture companies are also listed on the stock exchange<sup>57</sup>. In 2020, it is estimated that the world's top 10 salmonid farming companies accounted for 54% of total salmonid production and that the top 15 companies accounted for 62%. The highest concentrations of production are recorded in Canada, the USA, and the Faroe Islands. Here, the world's top ten companies account for more than 80% of the production<sup>58</sup>. The EU's share of the global aguaculture production of Atlantic salmon varied between 7,5% and 9,2% between 2015 and 2019. The main EU Member States producing Atlantic salmon in the period were the UK<sup>59</sup>, Ireland, and Denmark. In 2018, the EU accounted for 7,5% of global production, which was a drop of 1,5% from the year prior. In 2019, however, it rose to 7,9%. Between 2010 and 2019, the UK accounted for over 90% of EU production (Table 2). The majority of the remaining share came from Ireland, and less than 1% of production came from other Member States such as Denmark. From 2020, following Brexit, a change in the positioning of the EU on the global map of Atlantic salmon producers is expected. The value of EU aquaculture production has increased from 2015 to 2019, from 1.079 million to 1.498 million EUR. In 2018, however, there was a drop in value of 8,4% compared to the previous year, followed by an increase of 8,3% in 2019.

	2015		2016		2017		2018		2019	
	Volume	Value								
United Kingdom	172	976	163	1.035	190	1.353	166	1.240	191	1.369
Ireland	13	100	16	116	18	151	12	135	11	120
Denmark	0,4	2	1	7	1	4	1	6	1	9
France	0,3	2	0,3	2	0,3	2	0,3	2	0	0
Spain	0,01	0,04	0,01	0,05	0,02	0,2	0	0	0,01	0,1
Sweden	0	0	0,001	0,01	0	0	0	0	0	0
Total	186	1.079	181	1.159	209	1.510	179	1.383	203	1.498

Table 27.	GLOBAL CATCH OF WILD ATLANTIC SALMON BY COUNTRIES (in tonnes)

Source: FAO.

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

<sup>&</sup>lt;sup>57</sup> Source : https://live.euronext.com/nb/markets/oslo/equities/list

<sup>&</sup>lt;sup>58</sup> Source: Salmon World 2020 (Kontali)

<sup>&</sup>lt;sup>59</sup> The UK formally left the EU on 31st January 2020 and entered a transition period that lasted until 31st December 2020. Starting from February 2020, trade data reported by the UK are not available in EUROSTAT. The UK has therefore been excluded when analysing EU trade in 2020.

## 5.4. Trade

### **Extra-EU Import**

Despite a challenging period following COVID-19 lockdowns, salmon farmers, importers, and processors performed well in 2020 and the supply chain has proven robust. A strong increase in retail sales compensated to a large extent for the closure of the Hotel, Restaurant, and Cafe sector (HoReCa). However, the closure of the well-paying HoReCa sector did impact the overall price of salmon in 2020. EU imports of salmon<sup>60</sup> showed an increasing trend from 2017 to 2020, going from 798 thousand tonnes in 2017 to 982 thousand tonnes in 2020 - an increase of 23%. Value was also increasing, but dropped from 2019 to 2020 by 2,6%, from 5,7 billion to 5,6 billion EUR. From January to July 2021, the EU has imported 533 thousand tonnes of salmon, to the value of 3,2 billion EUR.

## Table 28. EXTRA-EU IMPORT OF SALMON BY MAIN ORIGIN COUNTRY (volumes in 1.000 tonnes and values in million EUR)

	201	7	20	18	2	019	202	20	202	21*
	Volume	Value								
Norway	730	4.956	787	5.154	817	5.158	849	4.726	442	2.658
United Kingdom <sup>12</sup>							68	452	50	342
Chile	23	205	21	165	18	134	23	128	9	49
Faroe Islands	37	328	31	248	43	367	22	199	19	148
Iceland	8	54	8	46	17	107	20	110	14	75
Total	798	5.543	847	5.612	895	5.766	982	5.614	533	3.271

\*January-July 2021

Source: EUMOFA elaboration of EUROSTAT-COMEXT data.

The main supply drivers behind an increase in imports to the EU in 2020 were an increase in Europe's production volumes and a greater share of European products being sold to the EU market, due to limited, costly, and unpredictable overseas air freight capacities, drastically limiting imports from remote producing countries. The majority of imports (by volume) came from European countries such as Norway, the Faroe Islands, and Iceland. In 2020, the UK was the second-largest supplier of salmon to the EU, contributing 8% of the total imported value.

On the demand side, good accessibility of salmon in retail stores, including widening of product assortment, led to strong retail sales of salmon in 2020 – in some MS at the expense of other fisheries and aquaculture products.

In 2020, 875.000 tonnes of whole/gutted salmon were imported into the EU, which is 8% more than in 2019 when it was 813.000 tonnes. From January to July 2020, 468.000 tonnes of these products were imported. Fillets are the second most-imported category, with 99.000 tonnes imported in 2020. This is followed by 'other cuts' (4.000 tonnes in 2020), and 'unspecified' (4.000 tonnes in 2020).

#### Table 29. PRODUCTS PRESENTATION OF EU SALMON IMPORTS (volumes in 1.000 tonnes and values in million EUR)

	201	7	201	18	2	019	202	20	202	21*
	Volume	Value								
Whole/Gutted	716	4.667	772	4.874	813	4.963	875	4.656	468	2.696
Fillet	81	864	74	724	80	789	99	881	63	548
Other cuts	0	2	0	4	1	6	4	25	0	5
Unspecified	1	10	1	10	1	9	4	52	1	23
Total	798	5.543	847	5.612	895	5.766	982	5.614	533	3.271

\*January-July 2021

Source: EUMOFA elaboration of EUROSTAT-COMEXT data.

<sup>&</sup>lt;sup>60</sup> In this Case Study, it is assumed that all salmon imports and exports as reported by EU countries to Eurostat consist of Atlantic salmon (Salmo salar).

#### Figure 47. EXTRA-EU IMPORTS OF FRESH WHOLE SALMON



#### Source: EUMOFA elaboration of Eurostat-Comext

EU imports of Atlantic salmon, especially fresh whole salmon, are strongly impacted by the production cycle in Europe. This tie to the production cycle creates a high import season in the 2<sup>nd</sup> half of the year (peaking in the September to November period) and a low import season in the first months of the year. EU imports of fresh whole salmon in August 2021 were at record high prices, significantly higher than in August 2020. In September and October, market prices from European producers have remained at levels higher than in 2020. As a result, a strong increase in EU imports of fresh salmon is expected in the last 4 months of 2021.

#### **Extra-EU Export**

Extra-EU export volumes and values of salmon increased from 2017 to 2020 by 24%. The majority of exports in the last five years have gone to the USA (40% on average). However, in 2020, the majority of exports went to the UK (48%). Most of the salmon exported from the EU is whole or gutted (~50%), or exported as fillets (30%). In terms of preservation, more than 50% of the EU salmon export is either live or fresh, followed by frozen salmon (between 23-32%), and smoked salmon (more than 10%). Poland, Lithuania, Germany, France, and Denmark are the main markets for EU smoked salmon exports.

#### Figure 48. VOLUMES OF SALMON IN VARIOUS PRESERVATION STATES IN EXTRA-EU EXPORTS



#### **Markets and consumption**

Salmon is the 2<sup>nd</sup> most consumed species in the EU and by far the most-consumed farmed species. In 2019, it accounted for more than one third of the total apparent consumption of aquaculture products. If considering total apparent consumption of both wild and farmed salmon, the level reached in 2019 (2,36 kg LWE per capita) was at a 10-year high<sup>61</sup>. Consumption of Atlantic salmon continued to increase in 2020 (by 5%), influenced by the strong increase in imports from non-EU European producers in the 2<sup>nd</sup> half of the year<sup>62</sup>. EU import volume and value in the first 8 months of 2021 indicate that there is a strong demand for salmon – with the prospect of an increase in EU consumption in 2021 as a whole.



#### Figure 49. EU APPARENT CONSUMPTION OF SALMON, PER CAPITA

Source: The EU fish market 2021

#### Trends

Limited possibilities for increasing Atlantic salmon production in Europe, in combination with strong market demand, have led to a strong focus on developing alternative concepts for farming salmon. To date, recirculating aquaculture systems (RAS) have received the most attention, with a number of production facilities being planned. Other options include open ocean farming and farming in closed containment systems. RAS farming has a different licencing scheme to conventional salmon farming, enabling plans for several large RAS projects (with a production capacity of 10.000 tonnes or higher) in Europe, including the EU. If successful, this will allow salmon production in Europe to increase at a faster pace than in the previous years. The revocation of COVID-19 restrictions in the EU has impacted salmon demand positively. Prior to lockdown, a large share of salmon production was sold to the HoReCa sector. The re-opening of a large part of this market sector has contributed to higher prices for producers.

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights |

7. Macroeconomic context

<sup>&</sup>lt;sup>61</sup> EUMOFA supply balance https://www.eumofa.eu/en/supply-balance

<sup>&</sup>lt;sup>62</sup> Source: Kontali monthly salmon report, October 2021

## 6. Global highlights

**EU / EMFF:** The latest implementation report of the European Maritime and Fisheries Fund (EMFF) is now available. The report shows that by the end of 2020, EUR 4,1 billion of EMFF funding was committed, corresponding to 71,6% of the total EMFF funding was directed towards the common fisheries policy objectives of ensuring economically viable and competitive fishing and processing industries (EUR 1,2 billion)<sup>63</sup>.

**EU / Baltic / Fisheries**: On 12 October, the Council of the European Union reached an agreement on the fishing opportunities in the Baltic Sea for 2022, based on the Commission's proposal. Some of the measures adopted include substantially reduced fishing opportunities for several stocks, such as 88% fewer opportunities for western Baltic



cod. It also agreed on additional recovery management measures, such as limiting fishing to unavoidable by-catches for main basin salmon and western herring, as well as extended spawning closure and a ban on recreational fisheries for western Baltic cod<sup>64</sup>.

**COVID-19/ Fisheries / Aquaculture**: A study on "Impacts of the COVID-19 pandemic on EU fisheries and aquaculture" was published by the European Parliament's Policy Department for Structural and Cohesion Policies, at the request of the PECH Committee. The study gives an overview of the main effects experienced at EU level and develops eight case studies (Spain, Denmark, France, Italy, Sweden, Greece, Portugal, and Bulgaria). The research also provides conclusions and policy recommendations to strengthen the sector's resilience to shocks, and to address current vulnerabilities in view of potential similar events in the future<sup>65</sup>.

**Croatia / Traceability / Consumers**: The Directorate of Fisheries of the Ministry of Agriculture has recently realised HR-riba, a web application that enables end-customers to find out information about the fishery products they buy in a simple and fast way. By simply scanning the barcode with the appropriate free mobile application, the customer is automatically redirected to a website where catch data is provided, all the way through the supply chain to the retail facility where they are sold<sup>66</sup>.

**FAO / GLOBEFISH / Market**: GLOBEFISH announced a new product - GLOBEFISH Market Profiles. There are now Market Profiles for 205 countries and territories available on the GLOBEFISH website. Each GLOBEFISH Market Profile provides a snapshot of key data relevant to production and trade in fisheries and aquaculture products. This is supplemented with other relevant information aiming to present a concise overview of a market<sup>67</sup>. The Market Profiles product can be viewed **HERE**.

**NAFO / Fisheries**: On 24 September, the Northwest Atlantic Fisheries Organisation held its 43<sup>rd</sup> annual meeting, this year held virtually due to the COVID-19 pandemic. A number of measures were adopted to enhance protection for Vulnerable Marine Ecosystems (VMEs), in particular to safeguard black coral and sea pens. Some of these measures include a range of closure areas, protection of seamounts at fishable depths within the NAFO Regulatory Area and continued additional conservation measures for cod including maintaining a port inspection effort and limiting bycatches during the first quarter closure of 2022<sup>68</sup>.

**FAO / Seafood / Market**: The Food and Agriculture Organisation has published the European Price Report 2021. The report shows that the summer months of 2021 have been characterised by strong demand, especially from the restaurant sector, and limited supply. The main tourist countries, such as Italy and Spain, reported a demand boom as restaurants reopened, together with a variety of other foodservice businesses. These sales consist primarily of high-end seafood products, including lobster, cephalopods, and shrimp. The improved market situation saw increases in seafood prices, while at the same time, however, retailers have been encountering problems securing sufficient supply. As a result, seafood, particularly wild seafood, is increasingly becoming a product only available to higher-income households<sup>69</sup>.

4. Fisheries and aquaculture in Egypt | 5. Atlantic salmon | 6. Global highlights | 7. Macroeconomic context

<sup>&</sup>lt;sup>65</sup> https://ec.europa.eu/oceans-and-fisheries/news/eu-funding-fisheries-aquaculture-and-processing-sectors-how-was-it-used-2021-09-29\_en

<sup>&</sup>lt;sup>64</sup> https://ec.europa.eu/oceans-and-fisheries/news/baltic-sea-agreement-reached-2022-fishing-opportunities-2021-10-12\_en

<sup>&</sup>lt;sup>65</sup> https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL\_STU(2021)690880

<sup>&</sup>lt;sup>66</sup> https://ribarstvo.hr/hriba/

<sup>&</sup>lt;sup>67</sup> https://www.fao.org/in-action/globefish/news-events/details-news/en/c/1442921/

<sup>&</sup>lt;sup>68</sup> https://www.nafo.int/Portals/0/PDFs/press/pressrelease\_AM2021.pdf

<sup>69</sup> https://www.fao.org/in-action/globefish/publications/details-publication/en/c/1301056/

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption

## 7. Macroeconomic Context

## 7.1. Marine fuel

Average prices for marine fuel in **October 2021** ranged between 0,56 and 0,61 EUR/litre in ports in **France, Italy, Spain,** and the **UK**. Prices increased by an average of around 14,8% compared with the previous month and increased by an average of 92,6% compared with the same month in 2020.

Table 30. AVERAGE PRICE OF MARINE DIESEL IN ITALY, FRANCE, SPAIN, AND THE UK (EUR/litre)

Member State	Oct 2021	Change from Sep 2021	Change from Oct 2020
France (ports of Lorient and Boulogne)	0,56	14%	100%
Italy (ports of Ancona and Livorno)	0,58	18%	100%
Spain (ports of A Coruña and Vigo)	0,61	13%	74%
The UK (ports of Grimsby and Aberdeen)	0,58	14%	100%

Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.





Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; MABUX.

## 7.2. Consumer prices

The EU annual inflation rate was at 3,4% in September 2021, up from 3,0% in August 2021. A year earlier, the rate was -0,3%.



MACROECONOMIC CONTEXT

	Sep 2019	Sep 2020	Aug 2021	Sep 2021	Chang Aug	je from 2021	Chang Aug	e from 2020
Food and non- alcoholic beverages	106,73	108,66	111,22	111,17	-	0,0%	+	2,3%
Fish and seafood	111,07	112,61	115,38	114,09	ŧ	0,3%	1	2,1%

Table 31. HARMONISED INDEX OF CONSUMER PRICES IN THE EU (2015 = 100)

Source: Eurostat.

## 7.3. Exchange rates

#### Table 32. EURO EXCHANGE RATES FOR SELECTED CURRENCIES

Currency	Oct 2019	Oct 2020	Sep 2021	Oct 2021						
NOK	10,252	11,094	10.165	9,7495						
JPY	120,73	122,36	129.67	132,62						
USD	1,12	1,1698	1.1579	1,1645						
Source: Europear	Source: European Central Bank.									

In October 2021, the euro depreciated against the Norwegian krone (4,1%) and appreciated against the Japanese yen (2,3%) and the US dollar (0,1%), relative to the previous month. For the past six months, the euro has fluctuated around 1,18 against the US dollar. Compared with September 2020, the euro has appreciated 8,4% against the Japanese yen and depreciated 12,1% against the Norwegian krone and 0,5% against the US dollar.

### Figure 51. TREND OF EURO EXCHANGE RATES



Source: European Central Bank.

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Luxembourg: Publications Office of the European Union, 2021

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PDF ISSN 2314–9671 KL-AK-21-010-EN-N

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This report has been compiled using EUMOFA data and the following sources: **First sales:** EUR-Lex, DG Mare – European Commission, Official Journal of the Autonomous Region of the Azores – JORAA, ICES, FAO, identifyfish.blogspot.com, Cambridge University Press.

Consumption: EUROPANEL, FAO.

**Case studies:** Worldmeters.info, Ministry of Planning and Economic Development of Egypt, FAO, Abdel Rahman El Gamal – Fish Consulting Group, was.org, Faculty of Agriculture – Benha University, WorldFish, OECD, ICES, Mowi Salmon Industry Handbook 2021, The Salmon World 2021, Dietary guidelines for Americans 2015-2020, euronext.com,

Global highlights: DG Mare - European Commission, FAO.

Macroeconomic context: EUROSTAT, DPMA MABUX, European Central Bank.

The underlying first-sales data is in an annex available on the EUMOFA website. Analyses are made at aggregated (main commercial species) level and according to the EU Electronic recording and reporting system (ERS).

In the context of this Monthly Highlight, analyses are led in current prices and expressed in nominal values.

The European Market Observatory for Fisheries and Aquaculture Products (EUMOFA) was developed by the European Commission, representing one of the tools of the new Market Policy in the framework of the reform of the Common Fisheries Policy. [Regulation (EU) No 1379/2013 art. 42].

As a **market intelligence tool**, EUMOFA provides regular weekly prices, monthly market trends, and annual structural data along the supply chain.

The database is based on data provided and validated by Member States and European institutions. It is available in 24 languages.

The EUMOFA website is publicly available at the following address: <u>www.eumofa.eu</u>.

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