

Monthly Highlights

EUMOFA European Market Observatory for

No. 3 / 2021

EUMOFA's monitoring report on the impacts of the COVID-19 crisis (week 12/2021) is available <u>here</u>. Updated analyses will be published every two weeks.

In this issue

According to data collected by EUMOFA from 13 EU Member States, in December 2020 blackbellied angler and gilthead seabream together accounted for 16% of the total first-sales value of the commodity group "Other marine fish".

Looking at imports, price of frozen monkfish from Namibia fluctuated from 4,60 to 10,23 EUR/kg over the past three years. Price exhibited an overall downward trend while volume went up slightly.

In 2020, total household consumption of fresh pollack in Germany experienced an increase in the average price reaching 12,79 EUR/kg.

In 2020, total export from Indonesia was 1,13 million tonnes for a value of EUR 4 billion. The largest share of species exported was miscellaneous shrimp which consists of whiteleg shrimp, giant tiger prawns, and other shrimps.

In 2019, total extra-EU imports of rock lobster products reached 3.511 tonnes worth almost EUR 90 million.

In February 2021, the European Union and Gabon established a new Protocol to their Fisheries Agreement.



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1. First sales in Europe

During **January–December 2020**, 13 EU Member States (MS) and Norway reported first-sales data for 10 commodity groups¹. 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 EUMOFA².

1.1. January-December 2020 compared to the same period in 2019

Increases in value and volume: Estonia and Lithuania were the only countries that recorded an increase in both firstsales value and volume. In Lithuania, the increase was sharp due to a higher supply of herring. In Estonia value increased because of pike-perch, while volume was up thanks to herring.

Decreases in value and volume: Belgium, Bulgaria, Denmark, France, Italy, the Netherlands, Poland, Portugal, and Sweden recorded decreases in first-sales value and volume. Bulgaria stood out with the most significant decline, which was due to a lower supply of sprat, while decreases in Poland were due to cod (value) and sprat (volume).

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

	January - De 2018	ecember }	Janua Decembe	ıry - er 2019	January - [202	December 20	Change Janua Decembe	from ry - r 2019
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	14.289	60,27	13.717	59,05	12.439	54,72	-9%	-7%
Bulgaria	3.083	2,20	4.949	2,81	2.600	1,79	-47%	-36%
Denmark	269.742	365,50	250.510	344,20	243.161	281,24	-3%	-18%
Estonia	48.393	11,95	60.686	13,26	65.964	16,54	9%	25%
France	188.906	639,58	178.595	614,65	161.515	538,81	-10%	-12%
Italy	95.406	350,04	94.594	367,22	82.072	312,92	-13%	-15%
Latvia	48.519	8,68	51.777	8,79	48.518	9,94	-6%	13%
Lithuania	1.694	1,25	966	0,74	2.409	0,99	149%	33%
Netherlands	351.530	543,73	248.158	387,34	244.336	358,15	-2%	-8%
Norway	2.984.359	2.527,19	2.758.768	2.561,19	2.910.007	2.463,30	5%	-4%
Poland	109.575	34,80	95.389	27,32	76.229	19,13	-20%	-30%
Portugal	116.588	253,03	127.760	263,11	100.778	227,76	-21%	-13%
Spain	488.243	1383,74	476.789	1406,19	487.629	1370,76	2%	-3%
Sweden	214.369	100,23	175.380	90,91	130.979	76,15	-25%	-16%

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.

¹ Bivalves and other molluscs and aquatic invertebrates, cephalopods, crustaceans, flatfish, freshwater fish, groundfish, salmonids, small pelagics, tuna and tuna-like species, and other marine fish.

1.2. December 2020 compared to December 2019

Increases in value and volume: First sales increased in Denmark, Estonia, Latvia, Lithuania, Norway and Sweden. The species Norway pout was behind the sharp increases in Denmark, while herring and sprat were the main causes of the strong upward trend in Lithuania and Sweden.

Decreases in value and volume: First sales decreased in Belgium, Bulgaria, Italy, Poland, Portugal, and Spain. Poland recorded one of the sharpest decreases due to lower sales of herring.

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

	Decembe	er 2018	Decembe	r 2019	Decembe	er 2020	Change Decembe	e from er 2019
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	1.277	5,16	1.293	5,97	1.123	4,18	-13%	-30%
Bulgaria	88	0,13	164	0,21	86	0,14	-47%	-32%
Denmark	11.825	19,96	9.432	19,24	46.020	25,17	388%	31%
Estonia	4.797	0,89	4.837	0,96	7.852	1,57	62%	63%
France	13.256	56,98	13.408	57,84	13.696	55,16	2%	-5%
Italy	7.670	31,14	6.810	29,11	5.320	24,01	-22%	-18%
Latvia	3.985	0,65	3.513	0,65	4.259	0,86	21%	34%
Lithuania	90	0,08	112	0,10	241	0,13	116%	27%
Netherlands	22.361	36,25	22.187	33,38	30.610	32,92	38%	-1%
Norway	109.059	125,59	57.120	81,15	98.727	100,92	73%	24%
Poland	6.710	2,15	5.416	1,45	2.379	0,58	-56%	-60%
Portugal	4.524	16,16	5.314	13,86	3.511	13,03	-34%	-6%
Spain	26.997	118,37	28.417	124,26	27.645	121,63	-3%	-2%
Sweden	11.926	5,17	4.668	4,13	14.143	6,68	203%	62%

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 11 of 2021)** are available via the EUMOFA website, and can be accessed **here**.

The most recent monthly first-sales data **for January 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 EUMOFA³.

Table 3. FIRST SALES OF THE MAIN COMMERCIAL SPECIES⁴ IN BELGIUM

Belgium	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 54,7 million,	12.439 tonnes,	European plaice, turbot, other sole* (i.e. other than common sole), shrimp <i>Crangon</i> spp., cod.
Jan-Dec 2019	-7%	-9%	
Dec 2020 vs	EUR 4,2 million,	1.123 tonnes,	Common sole, squid, scallop, ray.
Dec 2019	-30%	-13%	





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-Dec 2020 vs	EUR 1,8 million,	2.600 tonnes,	Molluscs and aquatic invertebrates (other)*, sprat, red mullet, clam.
Jan-Dec 2019	-36%	-47%	
Dec 2020 vs	EUR 0,1 million,	86 tonnes,	Red mullet, clam, molluscs and aquatic invertebrates (other)*.
Dec 2019	-32%	-47%	

³ First-sales data updated on 16.2.2020.

⁴ Data on fisheries and aquaculture products harmonised in EUMOFA allow comparisons along the different supply chain stages in EUMOFA.



Figure 2. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN BULGARIA, DECEMBER 2020



Denmark	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Dec 2020 vs Jan-Dec 2019	EUR 281,2 million, -18%	243.161 tonnes, -3%	Norway lobster, cod, mackerel, saithe, clam, mussels <i>Mytilus</i> spp. Herring, other	High first sales of herring in December 2020 seems significant in relative terms, but it should be noted that the total production of herring for the whole of 2020 (around 112.500 tonnes) is rather similar to that of 2019 (around 111.100 tonnes;
Dec 2020 vs Dec 2019	EUR 25,2 million, +31%	46.020 tonnes, +388%	Herring, other marine fish*, sprat, blue whiting,	1,2% difference). Traditionally, the Danish quota for herring is fished during the first months of the year. However, the market and price for the large Atlanto- Scandian herring fell in early 2020. Its price reached that of the smaller North Sea herring which is less expensive. Therefore, fishermen decided to target the North Sea stock, although it was not its peak season in terms of abundance, and to postpone the production of Atlanto-Scandian herring to November and December when the season resumes. Norway pout is the main species responsible for the sharp first-sales increase in "other marine fish" . Above- average recruitment in 2018 and 2019 can explain the increase in catches. As regards to sprat , its quota has been reduced in 2019, while in 2020 allocated quota reached back the amount set between 2017 and 2018 (partially explaining the data recorded for 2020.





Percentages show change from the previous year.

Estonia	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 16,6 million,	65.964 tonnes,	Pike-perch, other freshwater fish*, herring, smelt.
Jan-Dec 2019	+25%	+9%	
Dec 2020 vs	EUR 1,6 million,	7.852 tonnes,	Herring, sprat, pike-perch, other freshwater fish*.
Dec 2019	+63%	+62%	

FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ESTONIA Table 6.





FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN FRANCE Table 7.

France	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 538,8 million,	161.515 tonnes,	Monk, hake, squid, cuttlefish, anchovy.
Jan-Dec 2019	-12%	-10%	
Dec 2020 vs	EUR 55,2 million,	13.696 tonnes,	Value: squid, monk, common sole.
Dec 2019	-5%	+2%	Volume: scallop, hake.

Figure 5. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN FRANCE, DECEMBER 2020



Percentages show change from the previous year.

Italy	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 312,9 million,	82.072 tonnes,	Miscellaneous shrimps*, clam, anchovy, cuttlefish, red mullet, sardine, albacore tuna.
Jan-Dec 2019	-15%	-13%	
Dec 2020 vs	EUR 24,0 million,	5.320 tonnes,	Clam, warmwater shrimp, deep-water rose shrimp, hake.
Dec 2019	-18%	-22%	

Table 8. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN ITALY





Table 9. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LATVIA

Latvia	First-sales value / trend %	First-sales volume / trend %	Main contributing species	Notes
Jan-Dec 2020 vs Jan-Dec 2019	EUR 9,9 million, +13%	48.518 tonnes, -6%	Value : herring, other freshwater fish*. Volume : sprat, smelt, European flounder.	One of the reasons for the first-sales increase of herring is the market demand for low-priced fresh fish in Latvia, caused by restrictions on fisheries laid down in
Dec 2020 vs Dec 2019	EUR 0,9 million, +34%	4.259 tonnes, +21%	Herring, smelt, sprat.	Council Regulation (EU) 2019/1838 ⁵ . Moreover, suppliers partly shifted their activities from the first part of the year to the last quarter of 2020. Herring export from Latvia was extended and suppliers focused on satisfying foreign market demand. It should be considered that winter months are a good season for herring supply, as the quality of fish is quite high. The reasonable weather conditions in December 2020, the existing resources in fishing capacity and the total allowable catches satisfied market demand.

⁵ Council Regulation (EU) 2019/1838 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R1838-20200101



Figure 7. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LATVIA, DECEMBER 2020

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

Table 10. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN LITHUANIA

Lithuania	First-sales value / trend %	First-sales volume/ trend %	Main contributing species	Notes
Jan-Dec 2020 vs Jan-Dec 2019	EUR 1,0 million, +33%	2.409 tonnes, +149%	Herring, sprat, European flounder, other groundfish*.	The main reason behind significant first- sales increases of herring was the expansion of Latvian and Estonian fish
Dec 2020 vs Dec 2019	EUR 0,1 million, +27%	241 tonnes, +116%	Herring, sprat, smelt.	processing companies. The companies invested in fish suppliers and in the purchase of a subsidiary fish company in Lithuania since the best area to fish herring is in the Lithuanian Economic zone water of the Baltic Sea. As such, Latvian and Estonian companies changed their transport procedure (now the company can fish in Lithuania) and transport the product in one trip only causing the sharp increase in landings and first sales in Lithuania. However, most of such product will be used to satisfy the Estonian and Latvian market rather than the Lithuanian one.





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

The Netherlands	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 358,1 million,	244.336 tonnes,	Common sole, blue whiting, Atlantic horse mackerel, European plaice.
Jan-Dec 2019	-8%	-2%	
Dec 2020 vs	EUR 32,9 million,	30.610 tonnes,	Value : Atlantic horse mackerel, blue whiting, sardine, common sole.
Dec 2019	-1%	+38%	Volume : herring, sprat, mackerel

Table 11. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN THE NETHERLANDS





Table 12. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN NORWAY

Norway	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 2.463,3 million,	2.910.007 tonnes,	Value: cod, haddock, coldwater shrimp.
Jan-Dec 2019	-4%	+5%	Volume: other groundfish*, mackerel, other crustaceans*.
Dec 2020 vs	EUR 100,9 million	98.727 tonnes,	Herring, cod, crab, saithe.
Dec 2019	+24%	+73%	

Figure 10. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN NORWAY, DECEMBER 2020



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

Poland	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 19,1 million,	76.229 tonnes,	Cod, herring, European flounder, sprat.
Jan-Dec 2019	-30%	-20%	
Dec 2020 vs	EUR 0,6 million	2.379 tonnes,	Herring, European flounder, sprat, European plaice.
Dec 2019	-60%	-56%	

Table 13. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN POLAND





Percentages show change from the previous year.

Table 14. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN PORTUGAL

Portugal	First-sales value / trend %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 227,8 million,	100.778 tonnes,	Mackerel, anchovy, squid, Atlantic horse mackerel.
Jan-Dec 2019	-13%	-21%	
Dec 2020 vs	EUR 13,0 million	3.511 tonnes,	Mackerel, squid, blue whiting, clam.
Dec 2019	-6%	-34%	

Figure 12. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN PORTUGAL, DECEMBER 2020



Percentages show change from the previous year.

Spain	First-sales value / trend in %	First-sales volume / trend %	Main contributing species
Jan-Dec 2020 vs	EUR 1.370,8 million,	487.629 tonnes,	Value: hake, clam, octopus.
Jan-Dec 2019	-3%	+2%	Volume: squid, sardine, mackerel.
Dec 2020 vs	EUR 121,6 million	27.645 tonnes,	Clam, swordfish, skipjack tuna, Atlantic horse mackerel.
Dec 2019	-2%	-3%	

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





Table 16. FIRST SALES OF THE MAIN COMMERCIAL SPECIES IN SWEDEN

Sweden	First-sales value / trend in %	First-sales volume / trend in %	Main contributing species	Notes
Jan-Dec 2020 vs Jan-Dec 2019	EUR 76,1 million, -16%	130.979 tonnes, -25%	Herring, sprat, cod, Norway lobster, mackerel.	Increased national market demands stimulated sprat suppliers to intensify fishing of sprat . In
Dec 2020 vs Dec 2019	EUR 6,7 million, +62%	14.143 tonnes, +203%	Sprat, herring, lobster <i>Homarus</i> spp., coldwater shrimp.	December 2020, national fleet catches increased significantly compared to December 2019. In 2020 compared to 2019, suppliers' activities partly shifted from the first half of the year to the second half.





Percentages show change from the previous year.

1.4. Comparison of first-sales prices of selected species in selected countries⁶



Figure 15. FIRST-SALES PRICES OF RED MULLET IN GREECE, ITALY, AND SPAIN

Italy, Spain and **Greece** are among the most important EU countries in terms of first sales for **red mullet**. Average prices in December 2020 (the most recent available data) were 6,71 EUR/kg in Greece (up from both the previous month and year by 10% and 21%, respectively), and 3,75 EUR/kg in Italy (up by 23% from November 2020 and down by 5% from December 2019). In Spain, the average price was 6,14 EUR/kg (higher than both November 2020, and December 2019, by 21% and 29%, respectively). In December 2020, first-sales volume decreased in all three countries: 3% in Greece, 18% in Italy, and 25% in Spain, relative to the previous year. Red mullet fisheries are seasonal, with similar peaks (October – November) for each of the three countries. The prices fluctuate around a relatively stable level, although with a slightly increasing trend in Greece and a decreasing trend in Spain and Italy.



Figure 16. FIRST-SALES PRICES OF EUROPEAN SEABASS IN ITALY, THE NETHERLANDS, AND SPAIN

EU first sales of **European seabass** occur in multiple countries, including **Italy, the Netherlands**, and **Portugal**. In December 2020, the average first-sales prices of seabass were: 13,79 EUR/kg in Italy (up 16% from the previous month and down 23% from the previous year); 10,48 EUR/kg in the Netherlands (5% higher than November 2020, and 15% lower than December 2019); and 12,55 EUR/kg in Portugal (up from both the previous month and year, by 12% and 2%, respectively). In December 2020, supply increased in Italy (+47%) and the Netherlands (+64%) and decreased in Portugal (-16%) relative to December 2019. First-sales volume is seasonal, with different peaks in all three countries. In Italy, supply peaks in November and December, in the Netherlands in October, and in Portugal in February. Over the past 36 months, European seabass prices

⁶ First sales data updated on 16.2.2021.

fluctuated, but in long-term they remained stable in the Netherlands, and decreased in Italy and Portugal. Over the same period, supply increased in Italy and the Netherlands and remained stable in Portugal.



Figure 17. FIRST-SALES PRICES OF SMELT IN ESTONIA, LATVIA, AND LITHUANIA

EU first sales of **smelt** occur in many markets, including **Estonia**, **Latvia**, and **Lithuania**. In December 2020, the average first-sales prices of smelt were: 0,47 EUR/kg in Estonia (up by 73% from the previous month and down by 69% from the previous year); 0,13 EUR/kg in Latvia (13% higher than November 2020, and unchanged from December 2019) and 4,72 EUR/kg in Lithuania (up from both the previous month and year by 18% and 46%, respectively). In December 2020, supply increased remarkably in Estonia (over threefold), and decreased in Latvia (–9%), and Lithuania< (–36%), compared to December 2019. First-sales volume fluctuates highly in Estonia and Lithuania and is more stable in Latvia. Supply has different peaks across the three countries. In Estonia it peaks in April, in Latvia in August, and in Lithuania in January – February. Over the past 36-month period, long-term price trend remained stable in Estonia and Latvia, while it increased in Lithuania. Over the past three years, supply increased in Estonia and Latvia, and decreased in Lithuania.



1.5. Commodity group of the month: Other marine fish⁷

The "**other marine fish**" commodity group (CG⁹) recorded the third-highest first-sales value and the second-highest volume out of the 10 CGs recorded in December 2020¹⁰. Of reporting countries covered by EUMOFA database, first sales of "other marine fish" reached a value of EUR 46,8 million and a volume of 23.647 tonnes, representing a value decrease of 3% and a volume increase of 115% compared to December 2019. In the past 36 months, the highest first-sales value of other marine fish was registered at EUR 51,8 million (May 2019).

The "other marine fish" commodity group includes the following main commercial species (MCS): cusk-eel, dogfish, gurnard, John Dory, monk, picarel, ray, red mullet, scabbardfish, European seabass and other seabass, gilthead seabream and other seabreams, smelt, weever, other marine fish, and other sharks.

At Electronic Recording and Reporting System (ERS) level, blackbellied angler (13%) and gilthead seabream (3%) together accounted for 16% of "other marine fish" total first-sales value recorded in December 2020.

⁷ First sales data updated on 16.2.2021.

⁸ Norway excluded from the analyses.

⁹ Annex 3: http://eumofa.eu/supply-balance-and-other-methodologies

¹⁰ More data on commodity groups can be found in Table 1.2 of the Annex.

1.6. Focus on blackbellied angler



Blackbellied angler (*Lophius budegassa*) is a demersal species of anglerfish in the family Lophiidae. The species is distributed in the eastern Atlantic (from England and the North Sea to Senegal) and throughout the Mediterranean. It lives on soft bottoms but does not prefer any specific type of sediment. The depth range of *L. budegassa* is between 13 and $650m^{11}$. This species spawns at the end of spring and beginning of summer in the Adriatic¹², while off the Portuguese and Spanish coast it occurs between November and February¹³. Like other species of anglerfish, blackbellied angler is

essentially an 'opportunistic feeder' that consumes mainly fishes, crustaceans and molluscs¹⁴. It can grow up to 8kg in weight and 100 cm in length.

Blackbellied angler is caught with trawl and fixed nets - mostly gillnets and trammel-nets. The species presents an important fishery resource in Iberian waters where it is caught by Spanish and Portuguese bottom trawlers and gillnet fisheries. It is an important target species for the artisanal fleet, while it is a bycatch species for the trawl fleet targeting hake or crustaceans. Although there is no minimal landing size for anglerfish in the EU, an EU Council Regulation (2406/96) laying down common marketing standards for certain fishery products fixes a minimum size for anglerfish, which is 30cm in length (the Mediterranean) and 0,5 kg in weight¹⁵. In Spain, this minimum weight was put into effect in 2000¹⁶. *Lophius piscatorius* (commonly known as angler) and *L. budegassa* are reported together because of their similarity. Since they are caught together in mixed fisheries, they are subject to a common Total Allowed Catch (TAC) set by the EU¹⁷.

Selected countries

Table 17. COMPARISON OF BLACKBELLIED ANGLER FIRST-SALES PRICES, MAIN PLACES OF SALE, AND CONTRIBUTION TO OVERALL SALES OF "OTHER MARINE FISH" IN SELECTED COUNTRIES

Blackbellied angler		Changes in bla angler first sal Jan-Dec 2020 Compared to Jan-Dec 2019	ckbellied les (%) Compared to Jan-Dec 2018	Contribution of blackbellied angler to total "other marine fish" first sales in December 2020 (%)	Principal places of sale Jan-Dec 2020 in terms of first-sales value		
Italy	Value	+28%	+140%	2%	Rimini, Manfredonia, Pesaro		
	Volume	+32%	+98%	1%			
Portugal	Value	+370%	+428%	2%	Sesimbra, Sines, Olhão.		
	Volume	+512%	+484%	2%			
Spain	Value	-13%	-25%	28%	Vigo, Ondárroa, A Coruña		
	Volume -1%		-10%	18%			

¹¹ https://www.fishbase.se/summary/5094

¹² https://www.faoadriamed.org/html/Species/LophiusBudegassa.html

¹³https://www.researchgate.net/publication/229421894_Reproduction_of_anglerfish_Lophius_budegassa_Spinola_and_Lophius_piscatorius_Linnaeus_from_the _Atlantic_Iberian_coast

¹⁴ https://onlinelibrary.wiley.com/doi/abs/10.1111/jai.12148

¹⁵ Council Regulation(EC) No 2406/96 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A01996R2406-20050602

¹⁶ ICES WGBIE REPORT 2017 Anglerfish in Divisions 8c and 9a

¹⁷ Council Regulation (EU) 2021/92 https://eur-lex.europa.eu/eli/reg/2021/92/oj



Figure 19. BLACKBELLIED ANGLER: FIRST SALES IN ITALY, JANUARY 2018 - DECEMBER 2020

Over the past 36 months, the highest first-sales value of blackbellied angler in Italy occurred in March 2019. Typically, first sales were higher in the first half of the year, when fishing activities are more intensive.





Figure 21. BLACKBELLIED ANGLER: FIRST SALES IN PORTUGAL, JANUARY 2018 - DECEMBER 2020



Over the past 36 months in Portugal, the highest first sales of common blackbellied angler were from July to December 2020, peaking in November 2020 when 26 tonnes were sold.









Over the past 36 months in **Spain**, first sales fluctuated throughout each year depending on various factors including fisheries seasonality and weather conditions. The highest first-sales volume of common blackbellied angler occurred in July 2019 when 1.109 tonnes were sold. However, the lowest first-sales volume was recorded in the following month, August 2019.





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Price trend



Figure 25. BLACKBELLIED ANGLER: FIRST-SALES PRICES IN SELECTED COUNTRIES, JANUARY 2018 -DECEMBER 2020

Over the 36-month observation period (January 2018 to December 2020), the average first-sales price of blackbellied angler in **Italy** was 7,59 EUR/kg, 10% higher than in **Portugal** (6,89 EUR/kg), and 31% greater than that of **Spain** (5,80 EUR/kg).

In **Italy** in December 2020, the average first-sales price of blackbellied angler (8,69 EUR/kg) decreased by 8% compared with December 2019, and 3% compared with December 2018. Over the past 36 months, average price ranged from 5,98 EUR/kg for 2,8 tonnes in January 2018, to 9,49 EUR/kg for 1,6 tonnes in December 2019. The high price in December is closely linked with the Christmas holidays, when seafood is in high demand.

In **Portugal** in December 2020, the average first-sales price of blackbellied angler (4,99 EUR/kg) decreased by 30% compared to of the same month in both 2019 and 2018. During the observed period, the lowest average price (4,29 EUR/kg for 3,6 tonnes) was seen in November 2018, while the highest average price was recorded in January 2019 at 11,59 EUR/kg, for 0,3 tonnes. Supply is usually low in January.

In **Spain** in December 2020, the average first-sales price of blackbellied angler (6,70 EUR/kg) decreased by 4% compared to December 2019 and by 14% relative to December 2018. During the observed period, the lowest average price of 3,67 EUR/kg for 892 tonnes was seen in May 2020, while the highest average price was recorded in December 2018, at 7,77 EUR/kg for 1.031 tonnes.

1.7. Focus on gilthead seabream



Gilthead seabream (Sparus aurata) is a fish species of the bream family Sparidae, commonly found in the Mediterranean and also along the Eastern Atlantic coasts, from the United Kingdom to the Canary Islands. It can live in marine waters as well as in the brackish waters of coastal lagoons. Commonly seen in rocky or sandy bottoms, it can also be found in seagrass beds. During

the spawning period (October to March with a peak in December¹⁸), adults move into deeper waters. The young fry migrates to coastal or estuarine waters in early spring. This species is hermaphrodite, maturing as a male throughout the first or second year of its life and then as a female throughout the second or third year. It feeds on molluscs, crustaceans, and small fish¹⁹.

Gilthead seabream can reach a weight of up to 17 kg and an age of 11 years²⁰. In the European Union, most gilthead seabream supply comes from aquaculture, while catches from fisheries are proportionally lower. Wild catches of gilthead seabream are dominated by France and Spain. Minimum conservation reference size for the species is 20 cm²¹. The main markets are Italy and Spain, but this fish is increasingly prized in northern Europe²².

Selected countries

Table 18. COMPARISON OF GILTHEAD SEABREAM FIRST-SALES PRICES, MAIN PLACES OF SALE AND CONTRIBUTION TO OVERALL SALES OF OTHER MARINE FISH IN SELECTED COUNTRIES

Gilthead seabream		Changes in gilth first sales Jan-I	iead seabream Dec 2020 (%)	Contribution of gilthead seabream to	Principal places of sales in Jan-Dec 2020 in		
		Compared to Compared to Jan-Dec 2019 Jan-Dec 2018		total "other marine fish" first sales in December 2020 (%)	terms of first-sales value		
France	Value	-3%	-3%	4%	Sète, Le Grau-du-Roi, Lorient		
	Volume	+7%	-5%	2%			
Portugal	Value	+8%	+10%	8%	Olhão, Peniche, Sesimbra.		
	Volume	+16%	+14%	4%			
Spain	Value	+54%	+46%	3%	San Pedro del Pinatar, San		
	Volume	+109%	+68%	1%	Pola.		





¹⁸ http://fishethobase.net/db/49/

¹⁹ https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/sea-bream_en.pdf

²⁰ https://www.fishbase.se/summary/1164

²¹ REGULATION (EU) 2019/1241 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R1241-20210101

²² https://ec.europa.eu/fisheries/marine_species/farmed_fish_and_shellfish/seabream_en

In **France**, over the observed 36-month period, the highest first sales of gilthead seabream occurred in October 2020, 2019, and 2018. During the rest of each year, first sales fluctuated between 19 and 100 tonnes.



Figure 27. FIRST SALES: COMPOSITION OF "OTHER MARINE FISH" (ERS LEVEL) IN FRANCE IN VALUE AND VOLUME, DECEMBER 2020





In **Portugal**, first sales of gilthead seabream are the lowest among the surveyed countries. Over the past 36 months, fishing activity fluctuated regularly, with the highest first sales registered in November 2020. Fishing activity peaks from September to December every year when the sea gets colder.



Figure 29. GILTHEAD SEABREAM: FIRST SALES IN SPAIN, JANUARY 2018 - DECEMBER 2020

In **Spain**, over the past 36 months, the highest first sales of gilthead seabream were registered in November 2018, when 281 tonnes were sold. The main fishing season occurs in winter and spring.

Price trend





Over the 36-month observation period (January 2018–December 2020), the average first-sales price of gilthead seabream in **France** was 12,00 EUR/kg, nearly equal to that of **Portugal** (12,01 EUR/kg), and 28% greater than that of **Spain** (9,35 EUR/kg). As gilthead seabream is a highly popular fish in the hotel, restaurant and catering sector (HoReCa) sector, the average price is usually at its peak during the summer, the tourist season for all surveyed countries. This was also true in summer 2020 despite Covid-19 outbreak, as restaurants in were indeed gradually reopening in France, Portugal, and Spain.

In **France**, in December 2020, the average first-sales price of gilthead seabream (12,74 EUR/kg) increased by 16% compared to December 2019 and by 10% compared to December 2018. The lowest average price was registered in November 2018 at 7,08 EUR/kg for 87 tonnes, while the highest average price of 17,22 EUR/kg for 57 tonnes was registered in August 2019, in the middle of the summer season.

In **Portugal**, in December 2020, the average first-sales price of gilthead seabream was 12,65 EUR/kg, 5% and 16% higher than in December 2019 and 2018, respectively. The lowest price in the past 36 months was registered in November 2020, at 8,21 EUR/kg for 60 tonnes. The highest price (17,21 EUR/kg for 10 tonnes) was observed in August 2019.

In **Spain**, in December 2020, the average first-sales price of gilthead seabream (10,04 EUR/kg) increased by 4% compared to December 2019 and by 27% compared to December 2018. The lowest average price was registered in February 2020 at 3,60 EUR/kg for 214 tonnes. The highest average price of 15,10 EUR/kg for 35 tonnes was registered in July 2019.

2. Extra-EU imports

The weekly extra-EU import prices (average values per week, in EUR per kg) for nine different species are examined every month. The three most relevant species in terms of value and volume remain consistent: fresh whole Atlantic salmon from Norway, frozen Alaska pollock fillets from China, and frozen tropical shrimp (*Penaeus* spp.) from Ecuador. The other six species change each month; three are chosen from the commodity group of the month, and three are randomly selected. The commodity group this month is "Other marine fish", and the featured species are fresh or chilled European seabass from Turkey, fresh or chilled monkfish from Norway, and frozen monkfish from Namibia. The three randomly selected species this month are frozen fillets of hake from the United States, cod fillets from Iceland - dried, salted, or in brine but not smoked - and live, fresh or chilled squid from Morocco.

Table 19. EVOLUTION OF WEEKLY PRICE AND VOLUME OF THE THREE MOST RELEVANT FISHERIES AND AQUACULTURE PRODUCTS IMPORTED INTO THE EU

Extra-EU Imports	;	Week 05/2021	Preceding 4- week average	Week 05/2020	Notes		
Fresh whole Atlantic salmon imported from Norway (Salmo salar, CN code 03021440)	Price (EUR/kg)	4,96	4,71 (+5%)	6,93 (<mark>-29%</mark>)	Lower average price in January 2021 than the same month in previous years. Upward trend since the beginning of the year.		
	Volume (tonnes)	12.627	13.842 (<mark>-9%</mark>)	11.326 (+11%)	Higher average volume in January 2021 than the same month in previous years. Downward trend since the beginning of the year.		
Frozen Alaska pollock fillets imported from China (Theragra chalcogramma, CN code 03047500)	Price (EUR/kg)	2,39*	2,45** (-3%)	2,98*** (<mark>-20%</mark>)	January 2021 average price was lower than the same month in previous years. Downward trend since the beginning of the year.		
	Volume (tonnes)	3.413*	2.901** (+18%)	3.309*** (+3%)	Fluctuations in supply. Higher average volume in January 2021 than the same month in previous years. Upward trend since the beginning of the year.		
Frozen tropical shrimp imported from Ecuador (genus <i>Penaeus</i> , CN code 03061792)	Price (EUR/kg)	4,64*	5,08** (–9%)	6,13*** (–24%)	Downward trend since week 1 of 2021. Average price in January 2021 distinctively lower than January 2019 and 2020.		
	Volume (tonnes)	1.402*	1.582** (-11%)	2.036*** (- <mark>31%</mark>)	Fluctuations in supply. Downward trend since week 1 of 2021. Average volume in January 2021 higher compared with January 2019, but lower compared with January 2020.		

Source: European Commission (updated 22.02.2021).

* Data refers to week 4 of 2021 (the most recent available); **average of weeks 53 of 2020, and 1, 2, and 3 of 2021; ***data refers to week 4 of 2020.







Figure 33. IMPORT PRICE OF FROZEN TROPICAL SHRIMP FROM ECUADOR, 2018 - 2021



Source: European Commission (updated 22.02.2021).

Table 20. EVOLUTION OF WEEKLY PRICE AND VOLUME OF THIS MONTH'S THREE FEATURED COMMODITY PRODUCTS IMPORTED INTO THE EU

Extra-EU Imports		Week 05/2021	Preceding 4- week average	Week 05/2020	Notes	
Fresh or chilled European seabass from Turkey	Price (EUR/kg)	4,19	4,19 (0%)	3,78 (+11%)	Average price is around 4,00 EUR/kg without major fluctuations. Slight upward trend over the past three years.	
(<i>Dicentrarchus labrax</i> , CN code 03028410)	Volume (tonnes)	404	398 (+2%)	490 (–17%)	Supply is consistent, most of the volume ranges from 230 to 640 tonnes. Downward trend from week 6 of 2018 to week 5 of 2020.	
Fresh or chilled monkfish from Norway (Lophius spp	Price (EUR/kg)	4,76	5,97 (<mark>–20%</mark>)	5,90 (–1 <mark>9</mark> %)	Slight downward trend from 2018 to 2021. Price spikes correlate in most cases with drop in supply.	
CN code 03028950)	Volume (tonnes)	21,4	18,4 (+16%)	21,0 (+2%)	High fluctuations in supply, from 0,8 to 63,5 tonnes. Downward trend from 2018 to 2021.	
Frozen monkfish from Namibia (<i>Lophius</i> spp., CN code 03038965)	Price (EUR/kg)	6,54*	7,02** (– <mark>7%</mark>)	7,97*** (–18%)	Slight downward trend over the past 52 weeks. Price spikes do not always correlate with drop of supply.	
	Volume (tonnes)	133*	62,6** (+113%)	22,8*** (+483%)	Fluctuations in supply, from 0,2 to 232,2 tonnes. Stable trend over the past 52 weeks.	

Source: European Commission (updated 22.02.2021). *Data refers to week 3 of 2021 (the most recent available); **average of weeks 52 and 53 of 2020, and 1 and 2 of 2021; ***data refers to week 3 of 2020.





Source: European Commission (updated 22.02.2021).



Figure 35. IMPORT PRICE OF FRESH OR CHILLED MONKFISH FROM NORWAY, 2018 - 2021





Source: European Commission (updated 22.02.2021).

In January 2021, the price of fresh or chilled seabass from Turkey increased slightly, while volume exhibited a downward trend.

The price of fresh or chilled monkfish from Norway showed a downward trend in January 2021, while volume went up. Over the past three years, price fluctuated between 2,67 and 9,75 EUR/kg.

Between 2018 and 2021, the price of frozen monkfish from Namibia fluctuated from 4,60 to 10,23 EUR/kg. Price exhibited a downward trend, while volume increased slightly.

Table 21. EVOLUTION OF WEEKLY PRICE AND VOLUME OF EU IMPORTS OF THREE OTHER FISHERIES AND AQUACULTURE PRODUCTS RELEVANT TO THE EU MARKET

Extra-EU Impo	rts	Week 05/2021	Preceding 4- week average	Week 05/2020	Notes
Frozen fillets of hake from the US (<i>Merluccius</i> spp., CN code 03047419)	Price (EUR/kg)	2,88*	2,68** (+8%)	2,90*** (–1%)	Upward trend from 2018 to 2021. Most prices range from 2,00 to 3,00 EUR/kg. Price spikes do not always correlate with drop of supply.
	Volume (tonnes)	410*	846** (<mark>-52%</mark>)	739*** (–45%)	High fluctuations in supply, from 18 to 1.677 tonnes. Slight upward trend from 2018 to 2021.
Dried, salted or in brine, cod fillets from Iceland	Price (EUR/kg)	7,01*	7,43** (<mark>–6%</mark>)	6,82*** (+3%)	Upward trend from 2018 to 2021. Price spikes do not always correlate with drop in supply.
(Gadus morhua, Gadus ogac, CN code 03053219)	Volume (tonnes)	190*	89,0** (+113%)	172*** (+10%)	Downward trend from 2018 to 2021. High fluctuations in supply, from 16 to 417 tonnes.
Live, fresh or chilled squid from	Price (EUR/kg)	10,96	9,19 (+19%)	7,63 (+44%)	Downward trend from 2018 to 2021. Prices range from 4,97 to 17,77 EUR/kg.
Morocco (<i>Loligo</i> spp., CN code 03074220)	Volume (tonnes)	24	39,2 (<mark>–39%</mark>)	5,3 (+350%)	Volume exhibited a strong upward trend from 2018 to 2020. From 2018 to week 22 in 2020, volume fluctuated between 0,005 and 24,2 tones, while as of week 23 in 2020 it fluctuated from 0,005 to 135 tonnes.

Source: European Commission (updated 22.02.2021).





Figure 37. IMPORT PRICE OF FROZEN FILLETS OF HAKE FROM THE UNITED STATES, 2018 - 2021

Source: European Commission (updated 22.02.2021).



Figure 38. IMPORT PRICES OF DRIED, SALTED, OR IN BRINE COD FILLETS FROM ICELAND, 2018 - 2021





Source: European Commission (updated 22.02.2021).

In the past 52 weeks, price of frozen fillets of hake from the US have exhibited a downward trend, while volume went up.

During the same period, both the price and volume of dried, salted or in brine cod fillets from Iceland exhibited a downward trend. Over the past three years, the price fluctuated between 4,65 EUR/kg and 9,37 EUR/kg.

Both the price and volume of live, fresh or chilled squid from Morocco exhibited an upward trend in the past year.

3. Consumption

3.1. HOUSEHOLD CONSUMPTION IN THE EU

In December 2020, household consumption of fresh fisheries and aquaculture products increased in both volume and value in seven of the Member States analysed, relative to December 2019. Sweden saw the highest increase due to salmon consumption. Three of the Member States experienced declines in both volume and value, most notably Ireland (-16% and -21%, respectively), mainly due to a reduced consumption of miscellaneous shrimp, salmon, and mackerel.

In Portugal, miscellaneous shrimp and gilthead seabream were the main species responsible for increased consumption (+63% and +92%, respectively). The consumption increase in France was mainly due to a rise in consumption of salmon (+22%) and monkfish (+36%). In Spain, salmon (+31%), European seabass (+36%), and cod (+47%) were the main contributors to the increase in household consumption. Salmon (+31%) was the most consumed species also in Germany.

Table 22. DECEMBER OVERVIEW OF THE REPORTING COUNTRIES (volume in tonnes and value in million EUR)

Country	Per capita consumption 2018* (live weight	December 2018		December 2019		November 2020		December 2020		Change from December 2019 to December 2020	
	equivalent, LWE) kg/capita/year	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	39,83	1.133	19,44	1.227	21,43	1.041	16,80	1.176	20,95	4%	2%
France	33,52	26.369	306,03	24.937	295,07	20.911	229,63	28.207	333,51	13%	13%
Germany	14,50	6.521	85,54	6.299	91,67	6.625	90,90	8.532	124,00	35%	35%
Hungary	6,12	2.163	11,90	2.421	12,80	417	2,54	2.388	11,97	1%	7%
Ireland	23,13	1.289	20,90	1.214	19,32	997	14,85	1.014	15,32	16%	21%
Italy	31,02	41.248	460,54	39.640	438,13	24.224	251,61	40.676	438,25	3%	0%
Netherlands	20,90	3.407	56,74	3.449	60,12	3.070	44,18	3.923	71,32	14%	19%
Poland	13,02	13.057	64,66	11.725	61,36	4.152	26,55	12.102	65,94	3%	7%
Portugal	60,92	5.547	44,07	5.287	39,49	6.796	47,37	7.552	57,61	43%	46%
Spain	46,01	56.862	502,54	52.686	479,80	57.453	458,51	63.681	591,89	21%	23%
Sweden	26,61	827	11,16	821	11,12	923	11,07	1.220	15,48	49%	39%

Source: EUMOFA, based on Europanel (updated 16.02.2021).

*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/

The most recent weekly consumption data (up to 8 of 2021) are available on the EUMOFA website and can be accessed **here**.

3.2. Fresh pollack

Habitat: A finfish living on hard bottoms, close to the shore, up to 200 m depth²³.
Catch area: Celtic Sea, North Sea, the English Channel, Denmark strait, Bay of Biscay, Norwegian Sea²⁴.
Catching countries in the EU: France, Spain, Denmark, Ireland.
Production method: Caught.
Main consumers in the EU: France, Germany.
Presentation: Whole, fillets.
Preservation: Fresh, chilled, frozen.

In **Germany**, pollack refers also to *Pollachius virens* (saithe or pollock in English, Seelachs or Seelachs Köhler in German)" *Theragra chalcogramma* (Alaska pollock or Pacific pollock in English, Seelachs Alaska in German). The name "Seelachs" (literally 'sea salmon') was invented in Germany in the first half of the 20th century as both types (Seelachs / Seelachs Köhler and Seelachs Alaska) were used as replacements for real salmon and still today both types are sold under this name.

Since the Alaska pollock is mostly marketed frozen, we can assume that the German consumption of fresh pollack refers mainly to saithe/pollock.

3.2.1. Overview of household consumption in Germany

Germany has low per capita apparent consumption²⁵ of fisheries and aquaculture products compared with other EU Member States. Per capita apparent consumption increased by 3% from 2017 to 2018 in Germany, reaching 14,50 kg in LWE. This was still 40% less than the EU average (24,36 kg LWE) and 83% less than that of Malta²⁶, the Member State with the highest per capita apparent consumption (85,95 kg LWE) in 2018.

See more on per capita apparent consumption in the EU in Table 22.

Pollack is not among the top 10 most consumed products in the EU; however, it is one of the main consumed fresh species in Germany, along with salmon, mussels *Mytilus* spp., carp, shrimps, and herring.

The average price of fresh pollack increased in 2020, reaching 12,79 EUR/kg, while the volume consumed decreased to 4.672 tonnes, 7% lower than 2019 and 15% lower than 2018.

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

First Sales: Denmark 3/2017; France 3/2017, 3/2014; the UK 3/2017.

Consumption: Germany 11/2016; the UK 11/2016.

Extra-EU Imports: the USA 8/2020, 10/2019.

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²³ http://www.fao.org/fishery/species/2232/en

²⁴ Ibidem.

²⁵ "Apparent consumption" is calculated by using the supply balance sheet, which 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; at EU level it is based on data and estimates as described in the Methodological background, while at Member State level it also requires the adjustment of abnormal trends, due to the higher impact of stock changes.

²⁶ The high per capita apparent consumption in Malta could be due to higher consumption of fisheries and aquaculture products during the tourist season.

3.2.2. Household consumption trends in Germany

Long-term trend (January 2018 to December 2020): Upward trend both in price and volume. Yearly average price: 11,22 EUR/kg (2018), 12,29 EUR/kg (2019), 12,79 EUR/kg (2020). Yearly consumption: 6.212 tonnes (2018), 5.037 tonnes (2019), 4.672 tonnes (2020).

Figure 40. RETAIL PRICE AND VOLUME OF FRESH POLLACK PURCHASED BY HOUSEHOLDS IN GERMANY, JANUARY 2018 – DECEMBER 2020



Source: EUMOFA, based on Europanel (updated 16.02.2021).

4. Case study – Fisheries and aquaculture in Indonesia

4.1 Introduction

The Republic of Indonesia is located in Southeast Asia and consists of more than 17.000 islands^{27,28}. The Indonesian islands border the Indian Ocean to the west and the Pacific Ocean to the east. Surrounding seas include the South China Sea to the north, the Celebes Sea, the Java Sea, the Banda Sea, the Timor Sea and the Arafura Sea. Indonesia has a total land area of 1.811.569 square kilometres and a coastline of 54.716 kilometres²⁹. Indonesia has an estimated population of 275.122.131 people³⁰, and a large domestic market for fisheries and aquaculture products. Indonesia is the second-largest producer of



fishery and aquaculture products in the world after China³¹, with production totalling 22.032.744 tonnes in 2018. Indonesia has the largest and most productive tuna fisheries in the world³² and is also among the top three shrimp producers in the world³³. In 2019, capture fisheries and aquaculture made up 2,65% of Indonesia's Gross Domestic Product³⁴.

4.2 Fisheries

In 2018, the FAO reported wild catches of 7.261 thousand tonnes for Indonesia, consisting of 11 species of crustaceans, 136 species of fish, 12 species of molluscs, three species of other aquatic invertebrates, one species of other aquatic plants and animals, and four ungrouped species³⁵. Marine fisheries can be divided into small-scale and large-scale fisheries and consist of both artisanal and industrial fisheries. A variety of fishing gears are used on motorized vessels ranging from traditional tools to trawls, purse seines and longlines. The fishery sector withstood the effects of the 1998 financial crisis quite well and recovered faster than most other sectors, thus significantly contributing to Indonesia's food security³⁶. However, there is evidence that the majority of targeted fish stocks are fully or partially over-exploited due to habitat destruction, excess fishing, and ineffective management approaches³⁷.

The Indonesian government is currently implementing a number of programs to improve the sustainability of the sector³⁸. Indonesia has the highest tuna catch in the world. In 2018, total tuna catches amounted 917.896 tonnes, 15% of global production. Of this, 40% was skipjack tuna, 26% yellowfin tuna, 13% frigate tuna, 8% longtail tuna, and the remaining 13% consisted of bullet tuna, bigeye tuna, dogtooth tuna and southern bluefin tuna. Traditional pole-and-line or handline fishing are the techniques used for most tuna catches, making Indonesia a global leader in one-by-one tuna fishing³⁹. Indonesian pole-and-line and handline fisheries achieved an MSC certification in 2021 for a certified quantity of almost 12.000 tonnes⁴⁰.

gdp/#:~:text=In%202019%2C%20the%20fisheries%20and,largest%20and%20most%20productive%20worldwide

³⁵ Pearl oyster shellls nei, Marine turtles nei, River and lake turtles nei, and frogs.

³⁶ http://www.fao.org/fishery/facp/IDN/

³⁸ https://seafood-tip.com/sourcing-intelligence/countries/indonesia/

³⁹ https://indonesiantuna.com/#:~:text=Indonesia's%20tuna%20catch%20is%20the,%2Dby%2Done%20tuna%20fishing

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²⁷ https://www.cia.gov/the-world-factbook/countries/indonesia/

²⁸ Image downloaded from Shutterstock with credit to Rainer Lesniewski

²⁹ https://www.cia.gov/the-world-factbook/countries/indonesia/

³⁰ Ibidem

³¹ FAO, 2018

³² https://seafood-tip.com/sourcing-intelligence/countries/inde

³³ Ibidem

³⁴ https://www.statista.com/statistics/1083946/indonesia-fisheries-contribution-to-

³⁷ Tran, Nhuong & Rodriguez, U.-Primo & Chan, Chin Yee & Phillips, Michael & Mohan, Chadag & Henriksson, Patrik & Koeshendrajana, Sonny & Suri, Sharon & Hall, Stephen. (2017). Indonesian aquaculture futures: An analysis of fish supply and demand in Indonesia to 2030 and role of aquaculture using the AsiaFish model. Marine Policy. 79. 25-32. 10.1016/j.marpol.2017.02.002.

⁴⁰ https://fisheries.msc.org/en/fisheries/indonesia-pole-and-line-and-handline-skipjack-and-yellowfin-tuna-of-western-and-central-pacific-archipelagicwaters/



Figure 41. TOTAL CATCHES BY THE INDONESIAN FLEET (LEFT) AND CATCHES IN 2018 BY FAO COMMODITY GROUP (RIGHT)

Table 23. MAIN SPECIES IN INDONESIA'S FISHERIES (volume in 1.000 tonnes)

FAO species	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Marine fishes nei	416	541	569	605	579	673	1.123	1.031	453	936
Scads nei	331	351	406	428	368	376	37	55	326	510
Skipjack tuna	359	354	354	368	454	409	348	417	381	370
Snappers nei	116	124	119	119	123	130	126	127	346	303
Short mackerel	261	276	292	266	239	269	326	283	444	291
Yellowfin tuna	120	103	148	176	180	161	172	183	180	238
Other	3.526	3.652	3.890	3.922	4.214	4.532	4.629	4.499	4.663	4.622
Total*	5.128	5.402	5.776	5.884	6.158	6.551	6.761	6.595	6.790	7.270

*Totals may not correspond with the sum of the separate figures due to rounding. Source: FAO.

4.3 Aquaculture

In 2018, the FAO reported 14.8 million tonnes of aquaculture production for Indonesia, consisting of 7 species of crustaceans, 24 species of fish, 2 species of molluscs, 1 species of other aquatic invertebrates, 2 species of other aquatic plants and animals, and 2 ungrouped species⁴¹. In 2018, 62% of aquaculture production in terms of volume comprised *Eucheuma* seaweed, although they only covered 10% of total production value. Whiteleg shrimp represented 5% of production volume, but 24% of production value. Apart from seaweeds and shrimps, freshwater species dominate Indonesia's aquaculture production.

The growth in output volume in aquaculture can be attributed Eucheuma seaweeds in particular, whose production since 2000 has increased by more than forty times. Indonesia is the largest producer in the world of the red seaweeds *Kappaphycus* and *Eucheuma*, which are mainly used as raw material for industrial purposes⁴². However, producers are currently facing challenges such as disease outbreaks, epiphyte infestations and a loss in seedling quality⁴³. The seaweed industry directly supports approximately 1 million farms and, indirectly, their households, who often are excluded from workforce statistics⁴⁴.

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⁴¹ Frogs and Penguin wing oyster

⁴² EU DESK at BKPM, Indonesia Investment Coordinating Board: Investing in Indonesia's FISHERIES SECTOR

⁴³ Kambey, C.S.B., Campbell, I., Sondak, C.F.A. *et al.* An analysis of the current status and future of biosecurity frameworks for the Indonesian seaweed industry. *J Appl Phycol* 32, 2147–2160 (2020). https://doi.org/10.1007/s10811-019-02020-3

⁴⁴ Ibidem

In 2018, 63% of Indonesia's aquaculture production took place in marine water, 24% in fresh water and 13% in brackish water. The aquaculture sector is set to continue its growth with the Indonesian government stating that an additional 26 million hectares of land is suitable for aquaculture expansion⁴⁵.

Figure 42. AQUACULTURE PRODUCTION IN INDONESIA (LEFT, volume in million tonnes) AND AQUACULTURE **PRODUCTION IN 2018 BY FAO COMMODITY GROUP (right)**



Table 24. MAIN SPEICES IN INDONESIA'S AQUACULTURE PRODUCTION (volume in 1.000 tonnes, value in million EUR)

FAO	2013		2014		201	2015		16	20	17	2018	
species	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
<i>Eucheuma</i> seaweeds nei	8.323	1.591	8.971	1.512	10.112	755	9.692	1.049	9.489	993	9.205	1.376
Nile tilapia	914	1.709	1.000	1.685	1.084	1.620	1.114	1.824	1.280	2.085	1.172	2.022
Torpedo- shaped catfishes nei	544	728	678	1.143	720	1.075	765	1.016	1.126	1.682	1.027	1.464
Milkfish	576	825	578	730	672	771	747	915	701	937	876	1.268
Whiteleg shrimp	376	1.798	442	1.864	410	1.534	498	2.390	758	3.630	709	3.267
Common carp	413	789	434	915	461	861	497	949	321	609	534	1.040
Other	2.156	3.243	2.272	2.712	2.190	2.146	2.689	2.876	2.444	3.500	1.250	2.958
Total*	13.301	10.683	14.375	10.561	15.649	8.761	16.002	11.019	16.118	13.437	14.772	13.395

*Totals may not correspond with the sum of the separate figures due to rounding. Source: FAO.

4.4 Processing

It is estimated that there are more than 60.000 fish processing units throughout Indonesia. Roughly 43% of these can be found on Java, 23% on Sumatra, 14% on Kalimantan, and the remainder on other islands⁴⁶. There are 104 processing facilities approved by the Indonesian Ministry of Marine Affairs and Fishery for processing shrimp. These facilities are concentrated on East Java (23), Jakarta (13), East Kalimantan (12) and South Sulawesi (12). However, only 58 of these facilities have an EU approval number. Of the 104 facilities, 17 indicate they process cooked frozen shrimp while the others

⁴⁵ Tran, Nhuong & Rodriguez, U.-Primo & Chan, Chin Yee & Phillips, Michael & Mohan, Chadag & Henriksson, Patrik & Koeshendrajana, Sonny & Suri, Sharon & Hall, Stephen. (2017). Indonesian aquaculture futures: An analysis of fish supply and demand in Indonesia to 2030 and role of aquaculture using the AsiaFish model. Marine Policy. 79. 25-32. 10.1016/j.marpol.2017.02.002.

⁴⁵ EU DESK at BKPM, Indonesia Investment Coordinating Board: Investing in Indonesia's FISHERIES SECTOR

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produce raw frozen shrimp⁴⁷. Indonesia is an important player in the fish canning industry, with an estimated domestic production capacity of around 750.000 tonnes per year⁴⁸. Indonesia produces around 300 million cans of sardines and mackerel, 90% of which are intended for the domestic market. On the other hand, 99% of canned tuna production is destined for the export market. Indonesia is among the largest exporters of canned tuna products, after countries like Thailand, Ecuador, and the Philippines⁴⁹, with canned tuna exports reaching a volume of 95.602 tonnes in 2019.

4.5 Trade

TOTAL EXPORTS FROM INDONESIA

Indonesia has been a member of the WTO since 1995⁵⁰. In 2020, Indonesia exported 1,13 million tonnes of fisheries and aquaculture products for a value of EUR 4 billion. The largest species category exported was miscellaneous shrimp which consists of whiteleg shrimp (54%), giant tiger prawns (9%), and other shrimps (37%). Miscellaneous shrimp covered 19% of total export volume and 40% of export value in 2020. Seaweed and other algae cover 13% of export volume and 4% of export value. Miscellaneous tuna (skipjack tuna and bonito) and other cephalopods (cuttlefish and squid) each cover 10% of export volume and account for 12% and 8% of export value, respectively. In terms of preservation, 59% of exports are frozen, 17% unspecified, 16% prepared or preserved and 7% live or fresh. When preservation state is unspecified, seaweed and other algae are the usual species in question. Indonesia is the principal foreign supplier of frozen tuna loins to the USA and of frozen skipjack tuna to Japan.

Table 25. EXPORTS FROM INDONESIA BY MAIN COMMERCIAL SPECIES (volume in 1.000 tonnes, value in million EUR)

Main Commercial	20	16	20	17	20	18	20	19	202	20*
Species	Volume	Value								
Shrimp, miscellaneous	182	1.479	177	1.520	195	1.461	206	1.532	217	1.631
Seaweed and other algae	101	63	147	118	176	162	182	190	152	143
Tuna, miscellaneous	91	372	96	412	110	509	124	568	110	472
Other cephalopods	108	258	102	275	126	348	123	399	109	339
Tuna, skipjack	27	36	79	113	41	53	45	53	47	52
Crab	29	291	27	364	28	400	26	351	25	294
Other	490	1.113	423	1.050	417	1.039	445	1.139	468	1.109
Total*	1.029	3.613	1.051	3.852	1.094	3.972	1.151	4.233	1.127	4.040

*Totals may not correspond with the sum of the separate figures due to rounding.

Source: EUMOFA elaboration of IHS Markit data (Global Trade Atlas

Exports to China covered 34% of total volume and 16% of total value, while exports to the United States covered 41% of total value but only 19% of total volume. This difference can be explained by the fact that exports to the United States are high-value products such as miscellaneous shrimp (70%), crab (13%) and miscellaneous tuna (10%, mainly skipjack tuna).

⁴⁷ https://seafood-tip.com/sourcing-intelligence/countries/indonesia/shrimp/processing/

⁴⁸ INDONESIA INVESTMENT COORDINATING BOARD, 2015

⁴⁹ https://seafood-tip.com/sourcing-intelligence/countries/indonesia/canned-fish/

⁵⁰ https://ec.europa.eu/trade/policy/countries-and-regions/countries/indonesia/

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Table 26. EXPORTS FROM INDONESIA BY DESTINATION COUNTRY (volume in 1.000 tonnes, value in million EUR)

Partner	20	16	20	17	20	18	20	19	20	20
Country	Volume	Value								
China	267	347	277	376	355	539	394	688	381	630
United States	179	1.445	185	1.598	196	1.580	210	1.625	216	1.669
Thailand	56	109	73	141	58	123	54	118	94	165
Japan	102	548	117	581	104	557	117	576	90	472
Malaysia	59	103	52	89	57	94	63	120	61	103
Vietnam	99	186	86	161	51	122	44	140	37	134
Other	269	875	261	906	273	956	269	965	249	867
Total**	1.029	3.613	1.051	3.852	1.094	3.972	1.151	4.233	1.127	4.040

*Data not yet available for December 2020 **Totals may not correspond with the sum of the separate figures due to rounding. Source: EUMOFA elaboration of IHS Markit data (Global Trade Atlas)

TOTAL IMPORTS TO INDONESIA

In 2020, Indonesia imported a total of 228.000 tonnes seafood. Fishmeal represented 48% of import volume and 29% of import value. As Indonesia, particularly the island of Java, has a high aquaculture production, there is a need for fishmeal for feed. Half of the fishmeal imported was from the Netherlands⁵¹, however it should be noted that since the Netherlands is a hub for re-export, the fishmeal most likely originated ind other countries. The import of tuna is likely to benefit the canning industry, as the government has allowed several companies to import fish for canning to be re-exported or sold on the domestic market to overcome shortages of raw materials⁵². Small pelagic species are imported as bait in the tuna longline fisheries, in addition to consumption⁵³.

Table 27. INDONESIAN IMPORTS BY MAIN COMMERCIAL SPECIES (volume in 1.000 tonnes, value in million EUR)

Main Commorcial	20	16	20	17	20	18	20	19	202	20*
Species	Volume	Value								
Fishmeal	65	68	81	58	99	57	105	49	110	66
Tuna, skipjack	10	13	3	4	7	9	18	23	24	29
Mackerel	57	45	98	76	73	58	49	48	21	24
Miscellaneous small pelagics	19	12	46	27	30	15	8	4	20	11
Tuna, yellowfin	3	6	1	2	6	11	7	12	10	15
Other marine fish	20	31	23	31	17	26	14	26	9	18
Other	29	155	34	159	38	173	45	211	34	151
Total**	204	329	286	357	269	349	245	372	228	314

*Data not yet available for December 2020 **Totals may not correspond with the sum of the separate figures due to rounding. Source: EUMOFA elaboration of IHS Markit data (Global Trade Atlas)

⁵¹ EUMOFA elaboration of IHS Markit data (Global Trade Atlas)

⁵² https://seafood-tip.com/sourcing-intelligence/countries/indonesia/canned-

fish/#:~:text=Imports%20of%20mackerel%20and%20sardine,around%2050%2C000%20tonnes%20in%202017

⁵³ http://www.fao.org/fishery/facp/IDN/en

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EU IMPORTS FROM INDONESIA

From January to November 2020⁵⁴, the EU imported 50.151 tonnes of marine and aquaculture products from Indonesia. In 2019, the total reached 61.247 tonnes. Negotiations for an EU-Indonesian Free Trade Agreement was launched in July 2016, but the process has not yet been concluded⁵⁵. As a member of the WTO, Indonesia benefits from trade preferences granted by the EU's Generalised Scheme of Preferences (GSP) under which around 30% of total imports from Indonesia have lower duties⁵⁶. A regulation concerning certification of imported fish from Indonesia to the EU was enforced in January 2010 to ensure that the fish had not been caught through IUU fishing⁵⁷. Indonesia has fully cooperated with this regulation⁵⁸.

In total, imports of tuna species covered 40% of import volume and 37% of import value. The grouping "other non-food use" is comprised of seaweeds and other algae fresh, chilled, frozen or dried, which are not intended for human consumption. Italy imported 34% of the total volume, followed by Spain (17%), France (15%), and the Netherlands (13%).

Main	20	16	20	17	20	18	20	19	202	20*
Species	Volume	Value								
Tuna, yellowfin	5	21	4	15	4	17	5	29	8	37
Tuna, skipjack	15	54	12	44	14	62	11	49	7	35
Other non-food use	7	14	4	12	8	18	9	20	7	13
Octopus	7	32	7	36	12	67	8	44	6	27
Tuna, miscellaneous ⁵⁹	3	14	4	17	4	16	5	17	4	14
Shrimp, warmwater	5	28	6	28	5	26	5	27	4	18
Other	31	212	25	171	22	149	19	128	15	98
Total**	73	374	62	324	68	353	61	315	50	241

Table 28. EU IMPORTS FROM INDONESIA BY MCS (volume in 1.000 tonnes, value in million EUR)

*Data not yet available for December 2020 **Totals may not correspond with the sum of the separate figures due to rounding. Source: EUMOFA elaboration of EUROSTAT.

Table 29. EU IMPORTS FROM INDONESIA BY MEMBER STATE (volume in 1.000 tonnes, value in million EUR)

Import	20	16	20	17	20	2018		2019		2020*	
country	Volume	Value									
Italy	18	84	15	79	18	97	17	96	17	87	
Spain	10	26	9	27	9	28	7	22	8	23	
France	8	33	7	33	10	42	9	41	8	31	
Netherlands	8	56	7	46	7	52	7	42	7	46	
Portugal	5	19	2	12	3	16	3	11	2	9	
Greece	1	5	1	6	2	14	1	9	2	7	
Other	24	150	20	121	19	104	17	94	6	37	
Total**	73	374	62	324	68	353	61	315	50	241	

*Data not yet available for December 2020 **Totals may not correspond with the sum of the separate figures due to rounding. Source: EUMOFA elaboration of EUROSTAT

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⁵⁴ Data for December 2020 not yet available

⁵⁵ https://ec.europa.eu/trade/policy/countries-and-regions/countries/indonesia/

⁵⁶ Ibidm

⁵⁷ FAO 58 Ibidem

⁵⁹ Skipjack or other fish of the genus *Euthynnus* and tuna of the genus *Thunnus*, or stripe bellied bonito

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4.6 Consumption

Consumption of fish in Indonesia was estimated to average at 47,34 kg per capita in 2017⁶⁰. Around 55% of fish is consumed fresh in Indonesia. Due to limited availability of refrigerated storage and transport facilities, fish is processed and consumed as dried, salted, smoked, or fermented⁶¹. According to the Indonesian Cold Storage Association, the Indonesian seafood industry alone required around 14 million tonnes of cold storage facility capacity per year, though in 2016 the capacity was only 7,5 million tonnes.

In general in Indonesia, fish is considered a cheap animal protein with some exceptions, such as southern bluefin tuna which sells for a high price⁶². People with low incomes can afford dried salted products such as pony fish and anchovy⁶³.

⁶¹ http://www.fao.org/fishery/facp/IDN/en ⁶² http://www.fao.org/fishery/facp/IDN/en

⁶⁰ EU DESK at BKPM, Indonesia Investment Coordinating Board: Investing in Indonesia's FISHERIES SECTOR

⁶³ Ibidem

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5. Case study - Rock lobster in the EU

Rock lobsters, also known as spiny lobsters, are among the most valuable crustaceans in the global seafood market. Most of the EU supply is imported, predominantly from Caribbean countries. In 2019, total extra-EU imports of rock lobster products reached 3.511 tonnes for almost EUR 90 million. The EU fleet catches low volumes of rock lobster species, especially the common spiny lobster, in the Northeast Atlantic and in the Mediterranean (around 400 tonnes rock lobster species caught on a yearly basis), supplying mostly high-end, niche markets. First--sales prices of common spiny lobster are usually around 40,00 EUR/kg but can reach up to 80,00 EUR/kg in France in the Christmas season.

5.1. Biology resource and exploitation

BIOLOGY



Rock lobsters or spiny lobsters are a family (Palinuridae) of about 60 species of achelate crustaceans. Spiny lobsters are also called crayfish, sea crayfish, or crawfish, especially in Australia, New Zealand, Ireland, South Africa, and the Bahamas, terms which elsewhere are reserved for freshwater crayfish. Unlike a lobster (*Homarus* species), they are an orange golden colour and are covered in spines. Instead of large claws they have spikey multi-purpose front legs and long antennae.

The main species caught in European waters (both in the Atlantic, from Norway to Portugal, and in the Mediterranean) is the common spiny lobster (*Palinurus elephas*). This benthic species is generally found in open coastal areas and offshore seabed. Inshore, they prefer rocky or mixed seabeds, often living in groups in rock crevices or under boulders for protection. They usually live between depths of 15 m and 200 m and move offshore during their periodic migrations to deeper water⁶⁴. The common spiny lobster is mature when its carapace is

about 10 cm long. The maximum length is 50 cm. It is omnivorous and preys on hard-shelled bottom-dwelling organisms, namely molluscs, echinoderms, and crustaceans⁶⁵.

RESOURCE, EXPLOITATION, AND MANAGEMENT IN THE EU

Rock lobsters are caught using lobster pots and trammel nets, and to a lesser extent by bottom trawlers and divers. Populations of rock lobsters have been heavily fished over the last 100 years, especially from the 1970s when a new technique for catching them - the trammel net – replaced lobster pots. This has resulted in significant declines in populations and landings both in the Mediterranean (*Palinurus elephas*) and in Mauritania (*Palinurus mauritanicus*) where the French fleet used to operate from the 1950s⁶⁶. Fishing by European vessels in Mauritanian waters is now governed by a detailed agreement between Mauritania and the EU, which does not allow EU vessels to target rock lobster⁶⁷.

In European waters, after strong declines in the last century, populations of common spiny lobster seem to be slowly recovering thanks to strong regional management measures implemented after close cooperation between fishermen and scientists, including the establishment of Marine Protected Areas (MPA)⁶⁸. Minimum conservation size is 95 mm (carapace length) in the Northeast Atlantic and 90 mm in the Mediterranean⁶⁹. However, this minimum length can be higher when local management measures are implemented.

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⁶⁴ https://www.nature.scot/plants-animals-and-fungi/invertebrates/marine-invertebrates/european-spiny-lobsterp

⁶⁵ https://www.sealifebase.ca/summary/Palinurus-elephas.html

⁶⁶ https://www.thefishsociety.co.uk/fishopedia/rock-lobster

 ⁶⁷ https://ec.europa.eu/fisheries/cfp/international/agreements/mauritania
 ⁶⁸ https://www.pdm-seafoodmag.com/guide/crustaces/details/product/Langouste_rouge.html

⁶⁹ https://mare.istc.cnr.it/fisheriesv2/species_en?sn=26560#commdes

5.2. Production

CATCHES

Global production of rock lobster species amounted to 83.087 tonnes in 2018. The main species caught were Caribbean spiny lobster (43% of total catch volume), tropical spiny lobsters nei (30%) and the Australian spiny lobster (10%). The common spiny lobster, the species most often caught by the EU fleet, accounted for only 0,4% of total world catch.



Rock lobster species are caught in many regions around the world. The leading producers in 2018 were Australia (14%), Brazil (9%), Indonesia (8%) and Honduras, Bahamas and Nigeria (7% each). EU catches of rock lobster species accounted for only 0,5% of world catch, with 409 tonnes caught. It should be noted that the French fleet based in La Réunion also catches approximately 350 tonnes of rock lobster on a yearly basis in French Southern territories (.

Over the last decade (2009-2018), global catches of rock lobster species have experienced a 19% increase. However, total catch has been moderately stable since 2010. Among major producing countries, Australia and Brazil have reported very stable catch volumes over the last decade, although many major producing countries reported increases, especially Mexico (+96%), Honduras (+88%), Nigeria (+77%), and the USA (+42%). Among major producing countries, only the Bahamas reported a significant decreasing trend (-18%). Over the same period, EU catches decreased by 33%.

Table 30. TOTAL WORLD CATCHES OF ROCK LOBSTER SPECIES (volume in tonnes)

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Australia	11.696	11.462	10.740	9.756	10.871	11.065	10.746	10.425	10.950	11.471
Brazil	7.268	6.866	6.776	7.451	6.726	6.787	6.900	7.000	7.300	7.300
Indonesia	5.892	7.651	10.541	13.549	16.482	10.086	5.014	8.634	7.524	6.934
Honduras	3.252	4.119	4.314	5.323	4.973	4.503	6.157	6.101	6.101	6.101
Bahamas	7.138	9.692	8.505	9.761	6.088	6.569	6.526	8.482	7.709	5.824
Nigeria	3.147	4.398	3.697	4.289	4.586	5.001	5.216	4.773	5.467	5.570
Cuba	4.124	4.458	5.010	4.467	4.621	4.371	4.035	4.634	4.147	4.540
Nicaragua	3.643	3.800	4.102	4.427	4.494	4.845	6.540	5.618	5.140	4.498
Mexico	2.285	3.260	3.228	3.041	3.535	4.459	4.529	3.997	5.027	4.477
New Zealand	3.094	3.731	3.458	3.406	3.535	3.577	3.649	3.962	3.873	3.756
USA	2.256	2.944	2.984	2.187	3.111	2.969	3.038	2.762	2.063	3.208
Others	15.876	18.545	19.080	20.160	20.257	19.473	18.694	18.256	19.708	19.408
Total	69.671	80.926	82.435	87.817	89.279	83.705	81.044	84.644	85.009	83.087

Source: FAO.

LANDINGS IN THE EU

In 2018, landings of rock lobster species⁷⁰ in the EU amounted to 428 tonnes for a total value of EUR 17 million. Italy was the most important landing country, accounting for 38% of landing volume and 44% of value. Other major landing countries were Greece (19% of landing volume), Spain (17%), and France (15%).

Over the 2009-2018 period, rock lobster landings experienced a 54% decrease in volume, affecting Italy (-51%), Greece (-81%), and France (-39%) in particular, while Spain (+16%) and Portugal (+81%) reported an increase in volume. In value, the total EU decrease in real terms from 2009 was 44%. The drop of volumes was partly compensated, caused by an average landing price increase of 22% in real terms⁷¹.

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Italy	330	250	213	165	144	164	202	180	258	162
Greece	410	544	310	125	106	116	72	98	73	80
Spain	61	70	62	47	43	52	70	72	73	71
France	106	67	23	20	26	31	41	57	40	65
Portugal	11	12	9	7	10	14	27	29	34	19
United Kingdom	13	15	14	23	23	17	15	15	15	13
Ireland	n/a	n/a	n/a	1	n/a	n/a	26	6	3	9
Croatia	n/a	n/a	n/a	n/a	13	9	9	8	7	7
Others	2	2	1	3	1	4	1	1	1	2
Totals	932	960	632	390	366	408	464	465	503	428

Table 31. LAN	NDINGS OF ROCK	LOBSTER IN	THE EU	(volume in	tonnes) ⁷²
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Source: EUROSTAT.

MARKETING AND CONSUMPTION

Rock lobster is a very valuable crustacean in the EU market whether sold live (when landed in the EU) or imported as frozen (whole and raw, cooked or raw tail or half tail, cooked half lobster sold chilled after defrosting). In Europe, rock lobster is mostly sold in higher-level supermarkets (about 70%) and in specialised fish & seafood restaurants (around 30%). Depending on availability and seasonality (affected by periods of high demand such as Christmas and the summer tourist season), rock lobster may also be sold by lower-level supermarkets, fishmongers, and street markets, as well as other less expensive restaurants⁷³.

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⁷⁰ Including common spiny lobster, Palinurid spiny lobsters nei, Pink spiny lobster, Royal spiny lobster and spiny lobsters nei.

⁷¹ Values are deflated by using the GDP deflator (base=2015).

⁷² Totals do not correspond exactly to actual sums because of roundings.

⁷³ https://www.cbi.eu/market-information/fish-seafood/rock-lobster/market-entry

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5.3. International trade

EU TRADE FLOWS AND SUPPLY

In the CN nomenclature used for registering EU import-export data, rock lobster is specifically reported as live/fresh whole, frozen tails, frozen whole, and cooked and preserved⁷⁴.

In 2019, the EU had a trade deficit for rock lobster products, amounting to EUR 60 million. In 2019, extra-EU imports reached 3.511 tonnes for almost EUR 90 million, dominated by frozen tails (49% of total import value) and frozen whole lobsters (27%). Nicaragua and the Bahamas were the main countries of origin, accounting together for 43% of the import value of rock lobster products. Extra-EU exports of rock lobster products were lower (EUR 30 million for 2.540 tonnes in 2019), dominated by live/fresh whole lobsters (68% in value terms) and almost exclusively destined for China (43%) and Hong Kong (29%).

In 2019, intra-EU exports reached EUR 89 million for 4.230 tonnes of rock lobster products. Of the total value, 52% was covered by frozen tails, 23% by frozen whole lobsters and 13% by live/fresh whole rock lobsters. Belgium, Spain, and, to a lesser extent, France were the main rock lobster suppliers to other EU countries, while France was the main destination. Belgium is an important logistical hub for extra-EU imports of frozen rock lobster products.



Figure 44. THE ROCK LOBSTER EU-TRADE MARKET IN 2019, IN VALUE

Source: EUMOFA elaboration of EUROSTAT-COMEXT data.

COVID-19 IMPACTS ON THE ROCK LOBSTER MARKET

The pandemic has impacted trade and sales channels for rock lobster due to the partial lockdown of the HoReCa segment in the EU, and the slowing and reduction of trade flows to China, one of the main rock lobster importing countries in the world. This has led to market disruption since the beginning of 2020. For instance, Australian rock lobster, usually mostly exported to China, has experienced a strong decrease in demand and a price drop. Australian fishermen have had to find new outlets in the domestic market⁷⁵. In the EU, extra-EU exports of rock lobster products have experienced a sharp drop in 2020 (-51% in volume compared to 2019) for both main products: whole and live lobster (-81%) and frozen tails (-33%). Despite the lifting of restrictions in most countries in summer 2020, extra-EU exports did not recover and stayed at very low levels compared to 2018 and 2019. However, in 2020 extra-EU imports decreased by "only" 15% in volume terms compared to 2019, mostly attributable to frozen whole lobsters.

⁷⁴ 03061110 Frozen crawfish tails "Palinurus spp., Panulirus spp., Jasus spp.", even smoked, whether in shell or not, incl. crawfish tails in their shell, cooked by steaming or by boiling in water; 03061190 Frozen rock lobster and other sea crawfish "Palinurus spp., Panulirus spp., and Jasus spp.", even smoked, whether in shell or not, incl. ones in shell, cooked by steaming or by boiling in water; 03061190 Frozen rock lobster and other sea crawfish "Palinurus spp., Panulirus spp., and Jasus spp.", even smoked, whether in shell or not, incl. ones in shell, cooked by steaming or by boiling in water (excl. crawfish tails); 03063100 Rock lobster and other sea crawfish "Palinurus spp., Panulirus spp. and Jasus spp.", whether in shell or not, live, fresh or chilled; 03069100 Rock lobster and other sea crawfish "Palinurus spp., and Jasus spp.", whether in shell or not, dried, salted, smoked or in brine, incl. in shell, cooked by steaming or by boiling in water.
⁷⁵ https://www.abc.net.au/news/2020-12-11/westem-rock-lobster-in-supermarkets-due-to-china-trade-woes/12972960



Figure 45. ROCK LOBSTER MONTHLY EXTRA-EU EXPORTS IN VOLUME: 3 YEAR COMPARISON (2018-2020)

Source: EUMOFA elaboration of EUROSTAT-COMEXT data.

5.4. Common spiny lobster: first sales in the EU

Monthly first-sales data cover only a share of rock lobster landings in the EU. However, they provide an interesting source of data for analysing the seasonality of volumes and prices. Indeed, the monthly data for first sales in major producing EU countries show a clear seasonality of the common spiny lobster fishery, with increasing sales in spring, highest volumes in summer, and almost no sales in winter. France is the only country to see another peak for first-sales volume (and prices), in December coinciding with the Christmas season.

Throughout the year, monthly first-sales volumes in Spain fluctuate between 0,6 and 21 tonnes, whereas they are lower in France (between 0,02 and 4 tonnes) and in Italy (between 0,04 and 7 tonnes). In 2019, the main place of first sales for common spiny lobster in Spain was Palma de Mallorca, accounting for 14% of total first-sale volume in Spain. Other important ports were Ciudadela and Fornells (8% each). In France, the main places of sale were by far Audierne and Brest, accounting for 41% and 29% of total first-sales volume, respectively. In Italy, the main places of sale for common spiny lobster were Castelsardo (16% of total volume), Santa Teresa di Gallura (10%), and, to a lesser extent, Marsala (8%) and Livorno (7%).

Variation in first-sales prices does not seem to be correlated with volume. In Italy, prices stay relatively high and stable at around 40,00 EUR/kg, despite variations in volume. In Spain, prices seem more volatile, ranging between 30,00 and 45,00 EUR/kg: this seems to relate not to the volumes sold but rather to demand, with higher prices in summer and in December. In France, prices also fluctuate around 40,00 EUR/kg except in December, when they double to reach 80,00 EUR/kg for the Christmas season.



Figure 46. FIRST SALES: COMMON SPINY LOBSTER IN SPAIN, ITALY, AND FRANCE

Overview | 1. First sales in Europe | 2. Extra-EU imports | 3. Consumption | 4. Fisheries and aquaculture in Indonesia | 5. Rock lobster in the EU | 6. Global highlights | 7. Macroeconomic context

6. Global highlights

EU / Cameroon / IUU: The European Commission has issued a warning (a so-called "yellow card") to Cameroon, that it should step up its actions against illegal, unreported and unregulated (IUU) fishing. The Commission's decision is based on shortcomings identified in Cameroon's ability to comply with agreed standards under international Law of the Sea as flag, port and market state. In particular, the country should develop a robust registration policy for fishing vessels entitled to operate under its flag, and should ensure efficient and adequate



control over fishing activities carried out by vessels in its fleet⁷⁶.

EU / Gabon / Sustainability: On 10 February 2021, the European Union and Gabon established a new Protocol to their Fisheries Agreement. The Agreement allows European Union vessels to access Gabonese waters for a period of 5 years, and contributes to the development of the Gabonese fisheries sector. This new Protocol creates a framework for cooperation and governance with Gabon in the field of fisheries and guarantees respect for the fundamental values of the EU's Common Fisheries Policy, based on sustainable resource management, improved fisheries governance and transparency⁷⁷.

EU / Mediterranean / Sustainability: On 2 February 2021, ministers from the 42 Union for the Mediterranean (UfM) countries agreed to intensify their efforts towards a sustainable blue economy in the Mediterranean. Doing so, they want to promote the recovery of the region's economies from the COVID-19 crisis, and address environmental and climate challenges. Ministers adopted a new declaration, firmly committing to cooperate closely and address joint challenges in key blue economy sectors. The countries agreed to promote sustainable fisheries and aquaculture, transformative policies and tools such as maritime clusters or maritime spatial planning, and support the overall shift towards low-emission technologies and a circular blue economy⁷⁸.

EU / ICRI / Conservation: The EU has become the latest member of the International Coral Reef Initiative (ICRI), a global partnership for the conservation of the world's coral reefs. In the context of the EU's ambitious International Ocean Governance agenda, the ICRI membership is an opportunity to work together with almost 90 organisations and countries – members of the ICRI – which are acting to protect vulnerable marine ecosystems, by sustainably managing coral reefs and associated ecosystems, building capacity and raising awareness⁷⁹.

EU / FAO / Covid-19: The impacts of the Covid-19 pandemic on the seafood sector dominated the 34th Session of the FAO Committee on Fisheries (COFI), from 1-5 February 2021. As the world's largest donor of official development assistance and the principal donor to FAO, the EU reaffirmed its commitment to supporting and promoting the contribution of fisheries and aquaculture to sustainable development. The EU contributed directly to the decision to develop, for adoption in 2022, FAO Guidelines on Transshipment Operations that currently remain largely unregulated and insufficiently monitored and controlled. Finally, the EU also contributed to an agreement to progress on developing FAO Sustainable Aquaculture Guidelines in 2021⁸⁰.

EU / Seafood / Consumption: The European Commission launched 'Taste the Ocean', a brand new social media campaign in which top chefs promote the consumption of sustainably caught or produced fish and seafood. The Commission wants to create awareness among consumers about the importance of local, seasonal and sustainable consumption. Over the coming three months, top chefs from nine EU countries will share their recipes, made with various species of delicious fish or shellfish from fisheries and aquaculture. During the campaign, the Commission will explore the challenges and complexities faced by the sector⁸¹.

4. Fisheries and aquaculture in South Africa 5. Horse mackerel in the EU 6. Global highlights

⁷⁶ https://ec.europa.eu/commission/presscorner/detail/en/ip_21_621

⁷⁷ https://ec.europa.eu/fisheries/press/european-union-and-gabon-building-new-partnership-sustainable-fisheries_en

⁷⁸ https://ufmsecretariat.org/news-ministerial-meeting-blue-economy-2021

⁷⁹ https://ec.europa.eu/fisheries/press/ocean-governance-eu-joins-international-coral-reef-initiative-protect-marine-ecosystems_en

⁸⁰ https://ec.europa.eu/fisheries/press/recovery-must-be-based-sustainability-says-eu-fao-committee-fisheries_en

⁸¹ https://ec.europa.eu/fisheries/press/european-commission-and-top-chefs-promote-sustainable-fish-and-seafood-consumption_en

7. Macroeconomic Context

7.1. Marine fuel

Average prices for marine fuel in **February 2021** ranged between 0,39 and 0,45 EUR/litre in ports in **France, Italy, Spain,** and the **UK**. Prices increased by about 10,1% compared with the previous month, although they decreased by 7,9% compared with the same month in 2020.

Member State	Feb 2021	Change from Jan 2021	Change from Feb 2020
France (ports of Lorient and Boulogne)	0,40	11%	-7%
Italy (ports of Ancona and Livorno)	0,39	8%	-15%
Spain (ports of A Coruña and Vigo)	0,45	10%	-2%
The UK (ports of Grimsby and Aberdeen)	0,40	11%	-7%

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 1,2% in January 2021, up from 0,3% in December 2020. A year earlier, the rate was 1,7%.



	Jan 2019	Jan 2020	Dec 2020	Jan 2021	Chang Jan	je from 2020	Change Dec 2	from 020
Food and non- alcoholic beverages	105,75	108,52	108,67	109,70	ŧ	0,4%	1	0,1%
Fish and seafood	111,00	113,89	113,03	114,49	1	1,3%	1	0,5%

Table 33. HARMONISED INDEX OF CONSUMER PRICES IN THE EU (2015 = 100)

Source: Eurostat.

7.3. Exchange rates

Table 34. EURO EXCHANGE RATES FOR SELECTED CURRENCIES

Currency	Feb 2019	Feb 2020	Jan 2021	Feb 2021
NOK	9,7268	10,3888	10,3661	10,4012
JPY	126,44	119,36	126,31	128,83
USD	1,1416	1,0977	1,2171	1,2121

In February 2021, the euro appreciated against the Norwegian krone (0,3%), the Japanese yen (2,0%), and US dollar (0,1%) relative to the previous month. For the past six months, the euro has fluctuated around 1,20 against the US dollar. Compared with February 2020, the euro has appreciated 7,9% against the Japanese yen, 0,1% against the Norwegian krone, and 10,4% against the US dollar.

Source: European Central Bank.

Figure 48. TREND OF EURO EXCHANGE RATES



Source: European Central Bank.

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PDF ISSN 2314–9671 KL-AK-21-003-EN-N

FOR MORE INFORMATION AND COMMENTS:

Directorate-General for Maritime Affairs and Fisheries B-1049 Brussels Tel: +32 229-50101 E-mail: contact-us@eumofa.eu

This report has been compiled using EUMOFA data and the following sources: **First sales:** EUR-Lex, DG Mare – European Commission, FAO, ICES, Fishbase.se. researchgate.net.

Consumption: EUROPANEL, FAO.

Case studies: CIA.gov, FAO, Statista.com, Indonesian aquaculture futures: An analysis of fish supply and demand in Indonesia to 2030 and role of aquaculture using the AsiaFish model, Seafood-tip.com, Indonesiantuna.com, MSC.org, EU DESK at BKPM, INDONESIA INVESTMENT COORDINATING BOARD, nature.scot, sealifebase.ca, thefishsociety.co.uk, pdm-seafoodmag.com, mare.istc.cnr.it, msc.org, cbi.eu, abc.net.au.

Global highlights: DG Mare - European Commission.

Macroeconomic context: EUROSTAT, Chamber of Commerce of Forlì-Ces ena, Italy: DPMA, France: ARVI, Spain: 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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