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E U M O F A

European Market Observatory for Fisheries and Aquaculture Products

MONTHLY HIGHLIGHTS

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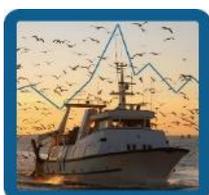
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In this issue

In January–February 2017, first-sales value and volume increased in Denmark, France, and Lithuania over January–February 2016. First sales of cod experienced lower values and volumes among most of the countries surveyed: Belgium, France, Norway, and Sweden. They increased significantly in Latvia and Lithuania, and to a lesser extent in the UK. In February 2017, cuttlefish price increased considerably over February 2016, especially in Belgium and the UK (both +51%).

In January–February 2017, the red mullet average unit prices increased in Portugal and France (+17% and +48%, respectively) and decreased in Italy (-7%) and Greece (-13%), from January–February 2016. Sprat first-sales value decreased significantly in Sweden (-61%) and Estonia (-38%). In the same period, first-sales prices fell in all countries surveyed, especially in Latvia (-12%).

The European Commission, eight Member States, and five non-EU countries signed the Malta MedFish4Ever declaration, which sets out a detailed work programme for the next ten years, with the aim of saving Mediterranean fish stocks and protecting the region's ecological and economic wealth.

The second largest producer of salmonids in the world, Chile, exported seafood products worth EUR 4,7 billion (2016). Chilean exports of fisheries and aquaculture products to the EU market reached EUR 504 million, 9% over 2015. Spain was the main EU destination, accounting for 33% of the export value with hake and mussel as main species.

Organic aquaculture production developed significantly in recent years to exceed 50.000 tonnes in 2015 and represents 4% of overall aquaculture production. However, the economic performance varies between species and Member States, and some important constraints still limit its development. Main species organically farmed are mussel and salmon.

In January 2017, retail prices of fresh saithe for household consumption in France were 11,15 EUR/kg and experienced a slight decreasing trend (-2%), from January 2016.

1. First sales in Europe

In **January–February 2017**, eleven EU Member States and Norway reported first-sales data for 11 commodity groups¹. First-sales value increased over January–February 2016 for Denmark, France, Lithuania, Norway, and Portugal.

In **Belgium** in **January–February 2017**, first sales increased 3% in volume and decreased slightly in value (–1%) compared with January–February 2016. Cod (–45%), plaice (–10%), and sole (–11%) were the species most responsible for the decrease in value. Volume increased mainly as a result of higher first sales of gurnard (+56%), the second largest species landed in Belgium, at 542 tonnes. In **February 2017**, first-sales value experienced the same slight decrease (–1%) from February 2016, caused by sole (–7%), plaice (–15%), and cuttlefish (–19%). Volume also decreased, caused mainly by scallop (–26%). Most of the major species experienced lower average prices, except cuttlefish (+51%), gurnard (+50%), and ray (+13%).

In **Denmark** in **January–February 2017**, first sales increased significantly in both value and volume over January–February 2016. First sales of herring (+75%) and plaice (+39%) were the main contributors to the increase in value. Herring (+85%) and cockle (1.804 tonnes, which accounts for 95% of the volume of “other molluscs and aquatic invertebrates”) caused the greatest increase in volume. In **February 2017**, first-sales value (+5%) and volume (+19%) experienced a similar trend compared with February 2016. Herring (+37% in value, +43% in volume) and plaice (+37% in value, +74% in volume) were the main contributors to the overall increase. Among the main species, average prices increased remarkably for cod (+35%) and Northern prawn (+33%) and decreased for monk (–10%), Norway lobster (–15%), plaice (–21%), and saithe (–11%).

In **January–February 2017**, **Estonia** saw substantial decreases in both first-sales value and volume from the same period a year before. Herring and sprat, which accounted for 85% of first-sales value and 99% of first-sales volume, caused the decreases. In **February 2017**, the decreasing trend continued, compared with February 2016, also because of herring (–16% in value, –13% in volume) and sprat (–38% in value, –37% in volume). The price of European perch (which accounts for 92% of the value of “other freshwater fish”) decreased 11%, as well as the price of herring (–3%), pike-perch (–2%), and sprat (–1%).

In **France** in **January–February 2017**, both first-sales value and volume registered a 3% increase over January–February 2016. Monk (+13%), scallop (+12%), and squid (+89%) had the greatest increase in value. Squid also experienced the greatest increase in volume (+140%). Other species contributing to the overall increase in volume were monk (+24%), sardine (+36%), and scallop (+13%). By contrast, in **February 2017**, both first-sales value and volume decreased from February 2016. The decrease in value was mostly linked to hake and European seabass (both –21%), while the decrease in volume was attributable to herring (–89%), anchovy (–93%), and pollack (–28%). Among the top species landed, prices increased for cuttlefish (+41%), European seabass (+5%), pollack (+8%), ray (+12%), and scallop

(+2%). Prices decreased for hake (–18%), monk (–7%), Norway lobster (–4%), sole (–7%), and squid (–16%).

In **January–February 2017**, **Greece** experienced decreases in both first-sales value and volume from the same period a year before. Mainly anchovy (–23%), hake (–16%), and picarel (–37%), which accounted for 34% of first-sales value, caused the decrease. Hake (–26%) and picarel (–44%) were also responsible for the decrease in volume. In **February 2017**, most species experienced decreases in both value and volume, compared with February 2016. The most significant were anchovy (–30% in value, –7% in volume), hake (–24% in value, –31% in volume), and picarel (–40% in value, –46% in volume). The price of anchovy dropped sharply (–25%), as well as those of red mullet (–11%) and sardine (–16%). At the same time, the price of hake and picarel increased (both +10%).

In **Italy** in **January–February 2017**, first sales decreased in both value and volume from the same period in 2016. Anchovy (–28%) and clam (–39%) were the main species contributing to the decrease in value. Other species responsible for the decrease were sole (–17%), sardine (–20%), and squillid (–30%). Anchovy (–11%), clam (–49%), sardine (–23%), and squillid (–34%) were also responsible for the decrease in volume. In **February 2017**, both first-sales value and volume experienced decreases from February 2016. Clam (–69%), squillid (–37%), and anchovy (–14%) were the species with the largest decreases in value. Prices decreased significantly for anchovy (–14%), and sole (–26%). They increased for clam (+91%), sardine (+6%), and squillid (+22%).

Latvia experienced decreases in both first-sales value and volume (–7% and –2%, respectively) in **January–February 2017** from January–February 2016. Sprat, which accounted for 51% of the value and 58% of the volume of total first sales, was responsible for the decrease. First-sales value of herring (–11%) also contributed to the overall decrease. By contrast first-sales value and volume of cod (the third largest species in value) increased considerably (+126% and +94%, respectively). In **February 2017**, both first-sales value and volume experienced increases over February 2016. The increase in value was attributable to cod, which offset significant decreases in herring and sprat first-sales value. Volume increased because of herring and smelt. Price of cod increased 37%, and herring and sprat decreased 15% and 11%, respectively.

In **Lithuania** in **January–February 2017**, first sales increased significantly in value as well as in volume resulting from cod (+179% and +141%, respectively). Decreases in herring (–62%) and smelt (–16%) did not offset the overall increase in value. In **February 2017**, first-sales value increased and volume decreased, compared with February 2016. The increase in value was caused by cod, while the decrease in volume was attributable to herring and smelt. Prices increased for all main species: 15% for cod, 97% for herring, and 39% for smelt.

In **Norway** in **January–February 2017**, first-sales value increased because of mackerel (+31%), herring (+8%), and haddock (+21%). In **February 2017**, both first-sales value and volume decreased from February 2016, mainly because of blue whiting (–80% in value, –45% in

volume) and crab (-48% in value, -84% in volume). Cod (-17%) also contributed to the decrease in volume. Prices increased for cod (+21%), haddock (+16%), and mackerel (+4%), and experienced an opposite trend for blue whiting (-64%), herring (-23%), and saithe (-33%).

In **Portugal** in **January–February 2017**, first sales increased in value (+28%) and decreased slightly in volume (-1%), compared with January–February 2016. Value increased mostly because of anchovy, which reached EUR 3,7 million, as well as octopus at EUR 7,2 million (+29%). European seabass (+13%), cuttlefish (+15%), and clam (+17%) also experienced increases in value. In **February 2017**, the record increase in anchovy first-sales value (EUR 1,36 million) was attributable to higher volume landed (368.211 tonnes), and a higher selling price (+168%), compared with February 2016. Prices also increased for other top species: clam, cuttlefish, European seabass, octopus, sole, and swordfish.

In **January–February 2017** in **Spain** (28 ports), landings of fresh fish (26.847 tonnes) increased 3% over January–February 2016 and decreased slightly (-1%) from the same period two years ago². This trend was confirmed in **February 2017**, when Spain landed 13.223 tonnes of fresh fish, 9% and 25% less than in February 2016 and February 2015, respectively. Of these, 4.888 tonnes were landed in the port of Vigo (-8% from February 2016 and +9% over February 2015).

In **Sweden**, the significant decrease in both value and volume in **January–February 2017**, from January–February 2016, was caused by herring and sprat (which account for 47% and 92%, respectively, of the total first-

sales value and volume). In addition, volume also decreased because of cod (-33%) and Northern prawn (-22%). This trend continued in **February 2017**, also because of herring and sprat, as well as Norway lobster and Northern prawn. First-sales prices increased for most species: cod and herring (both +13%) and northern prawn (+35%). They decreased for Norway lobster (-23%) and sprat (-10%).

In the **UK** in **January–February 2017**, lower first sales (both value and volume) of Norway lobster (-21% in value, -5% in volume), crab (-31% in value, -41% in volume), scallop (-12% in value, -18% in volume), monk (-11% in value, -4% in volume) and whiting (-28% in value, -34% in volume), caused the first sales to decrease from the same period of the previous year. In **February 2017**, the same trend was confirmed, also because of mackerel, Norway lobster, scallop, monk, and crab. Average prices increased significantly for cuttlefish (+51%), as well as for crab (+18%), haddock (+3%), mackerel (+7%), scallop (+4%), and whiting (+8%). They decreased for Norway lobster (-14%), monk (-6%), hake (-4%), sole (-2%), and saithe (-17%).

The most recent first-sales data for **March 2017** available on EUMOFA can be accessed [here](#).

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

Country	January–February 2015		January–February 2016		January–February 2017		Change from January–February 2016	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	3.350	11,21	3.284	11,01	3.380	10,87	3%	-1%
Denmark	39.441	40,79	29.224	44,41	42.323	53,52	45%	21%
Estonia	14.736	3,12	15.793	3,30	11.274	2,43	-29%	-27%
France	30.290	102,98	30.367	104,01	31.274	107,49	3%	3%
Greece	1.235	4,22	1.563	5,03	1.540	4,57	-2%	-9%
Italy*	11.529	44,38	11.089	42,48	9.580	36,87	-14%	-13%
Latvia	12.040	2,99	13.106	2,84	12.886	2,63	-2%	-7%
Lithuania	244	0,24	316	0,29	321	0,43	2%	48%
Norway	522.847	380,23	520.464	462,71	517.664	465,22	-1%	1%
Portugal	9.137	21,61	8.792	22,58	8.687	28,89	-1%	28%
Sweden	35.496	15,17	31.518	15,01	14.832	9,74	-53%	-35%
United Kingdom	83.165	122,41	91.804	138,72	83.729	133,17	-9%	-4%

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

Country	February 2015		February 2016		February 2017		Change from February 2016	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Belgium	1.635	5,42	1.489	5,29	1.463	5,24	-2%	-1%
Denmark	18.619	20,08	15.572	21,76	18.593	22,89	19%	5%
Estonia	7.462	1,56	8.165	1,65	6.121	1,25	-25%	-24%
France	15.684	50,86	16.339	54,23	15.602	52,08	-5%	-4%
Greece	558	1,87	857	2,68	765	2,21	-11%	-17%
Italy*	5.189	23,59	5.391	21,59	4.797	19,71	-11%	-9%
Latvia	7.285	1,84	6.122	1,30	6.568	1,32	7%	1%
Lithuania	206	0,18	161	0,17	140	0,19	-13%	13%
Norway	343.994	232,05	298.241	264,34	285.934	258,66	-4%	-2%
Portugal	3.985	10,41	4.390	10,98	4.309	13,49	-2%	23%
Sweden	18.127	7,65	16.501	8,06	7.854	4,94	-52%	-39%
United Kingdom	39.399	61,32	45.715	70,94	23.187	45,52	-49%	-36%

Source: EUMOFA (updated 12.04.2017); volume data is reported in net weight.

*Partial data. First-sales data for Italy covers 229 ports (approximately 50% of the total landings).

1.1. FOCUS ON RED MULLET AND SPRAT IN SELECTED COUNTRIES

1.1.1. RED MULLET



Red mullet (*Mullus barbatus*) is a species that lives on muddy as well as gravel and sandy bottoms of the continental shelf, at depths of between 5 and 300 m. It feeds on crustaceans, worms, and molluscs. The species reproduces from April/May to July/August at depths of between 10 and 55 m on sandy or muddy bottoms.

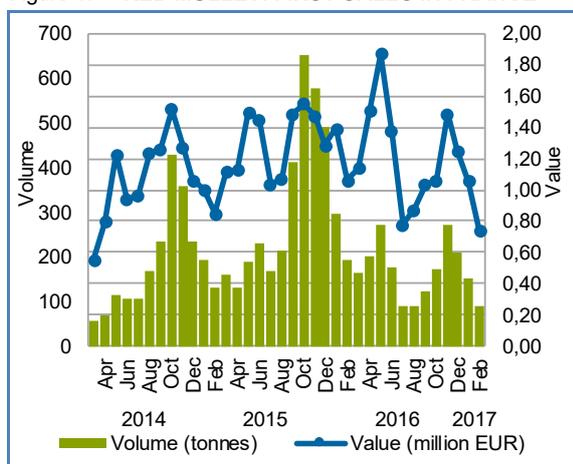
Red mullet is distributed in the eastern Atlantic along the European and African coasts: from western Norway and the English Channel to the Canary Islands, Dakar, and Senegal, including the Mediterranean and the Black seas³.

Red mullet is fished mainly with gillnets, trammel nets, and bottom trawls. Catches are taken year-round, with peaks in March–May and October–December. The species is not subject to fishing quotas. The minimum landing size is 15 cm for the species originating in the Atlantic and 11 cm in the Mediterranean⁴.

Red mullet has a high market value in southern Europe. It is found on the market typically fresh (whole) and frozen (fillets).

In January–February 2017, the French first sales of red mullet decreased substantially from January–February 2016: –27% in value (EUR 1,79 million) and –51% in volume (243 tonnes). Compared with January–February 2015, the first-sales value and volume decreased 3% and 26%, respectively.

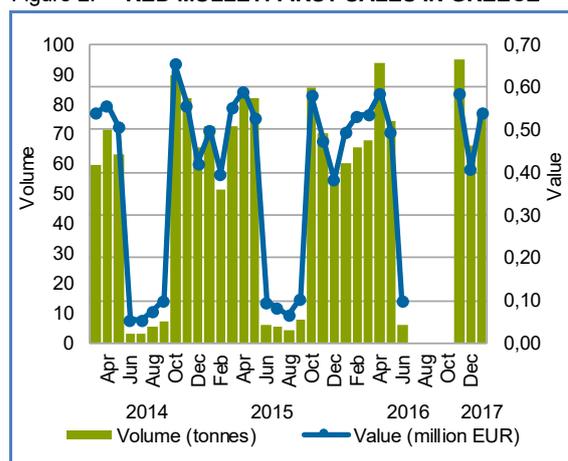
Figure 1. RED MULLET: FIRST SALES IN FRANCE



Source: EUMOFA (updated 12.04.2017).

In Greece in January–February 2017, the first sales ended at EUR 1,04 million and 145 tonnes. They increased in both value and volume (+1% and +15%, respectively) over January–February 2016. Compared with January–February 2015, first sales experienced a similar trend in both value and volume (+16% and +17%, respectively).

Figure 2. RED MULLET: FIRST SALES IN GREECE

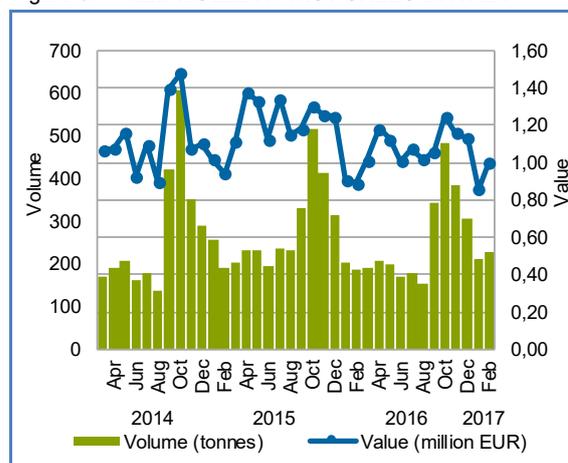


Source: EUMOFA (updated 12.04.2017).

*Data for Jul–Oct 2016 not available.

In Italy in January–February 2017, the first sales reached EUR 1,86 million and 437 tonnes. They increased in both value and volume (+4% and +12%, respectively) over January–February 2016. Compared with January–February 2015, they registered an opposite trend, decreasing in both value and volume (–5% and –2%, respectively).

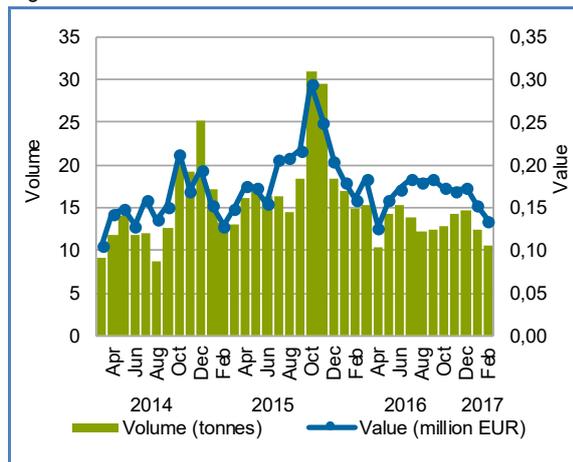
Figure 3. RED MULLET: FIRST SALES IN ITALY



Source: EUMOFA (updated 12.04.2017).

In January–February 2017, the Portuguese first sales of red mullet reached EUR 0,29 million and 23 tonnes. They decreased in both value and volume (–16% and –28%, respectively) from January–February 2016. Compared with January–February 2015, first-sales value increased 2%, and volume maintained the trend (–24%).

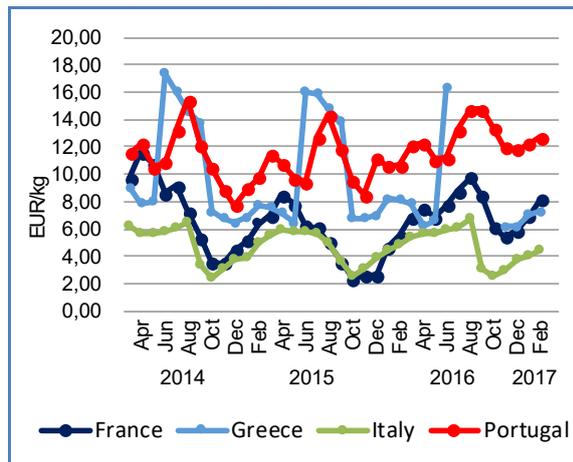
Figure 4. RED MULLET: FIRST SALES IN PORTUGAL



Source: EUMOFA (updated 12.04.2017).

In the past three years, first-sales prices of red mullet ranged from around 4,00 EUR/kg in Italy to more than 16,00 EUR/kg in Greece. Average prices followed a similar trend in the countries surveyed, i.e. sinking to the lowest values in autumn–winter (October–December) when, typically, the species is more abundant. Prices peaked in April (France), June (Greece and Italy), and August–September (Portugal). Overall, except for Portugal, prices demonstrated a decreasing trend. In January–February 2017, the average unit prices increased in Portugal and France (+17% and +48%, respectively) and decreased in Italy (–7%) and Greece (–13%) from January–February 2016. Compared with January–February 2015, the same trends occurred.

Figure 5. RED MULLET: FIRST-SALES PRICE IN SELECTED COUNTRIES



Source: EUMOFA (updated 12.04.2017).

We have covered **red mullet** in previous *Monthly Highlights*:

First sales: Greece (3/2016, 7/2015, 3/2014, Jan 2013)

1.1.2. SPRAT



The European sprat (*Sprattus sprattus*) is a marine pelagic species found in inshore schools. It is a short-lived species with a tolerance to low-salinity waters. It feeds on planktonic crustaceans. Sprat migrates to spawning grounds in spring and summer and moves to the water surface at night. Some spawning may take place throughout the year, however, near the coast or up to 100 km from the shore. Sprat is an important prey for such predators as cod, as well as for seabirds and marine mammals⁵.

Sprat is distributed in the Northeast Atlantic (from the North Sea and Baltic Sea, south to Morocco); it is also found in the Mediterranean and Black seas.

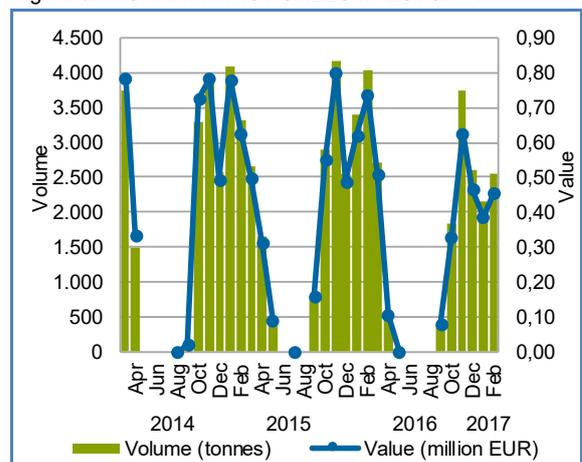
The species is important in the North Sea and Baltic Sea fisheries. Catches are done with pelagic trawlers using small-meshed nets. The sprat stock in the Baltic Sea is longer-lived than the North Sea stock.

Sprat is subject to total allowable catches (TACs), which are shared among 12 Member States (in the North and Baltic seas). For 2017, the EU TACs for sprat in the North and Baltic seas are set at 332.223 tonnes (45% lower than in 2016). Of these, 260.993 tonnes are for the Baltic Sea (+29% over 2016). In the Baltic Sea, Poland has the highest fishing quota (76.627 tonnes), followed by Sweden (49.770 tonnes), Latvia (36.107 tonnes), and Estonia (29.896 tonnes)⁶.

Sprat accounts for most of the raw materials used by the processing sector. On the market, it is found mainly canned and smoked, as well as prepared-preserved, and to a lesser extent fresh (whole). In Denmark and Sweden, it is used mainly for production of fishmeal and fish oil.

In Estonia in January–February 2017, the first sales of sprat decreased substantially from January–February 2016: –38% in value (EUR 0,85 million) and –37% in volume (4.700 tonnes). Compared with January–February 2015, the first-sales value and volume had a similar trend, decreasing 40% and 37%, respectively.

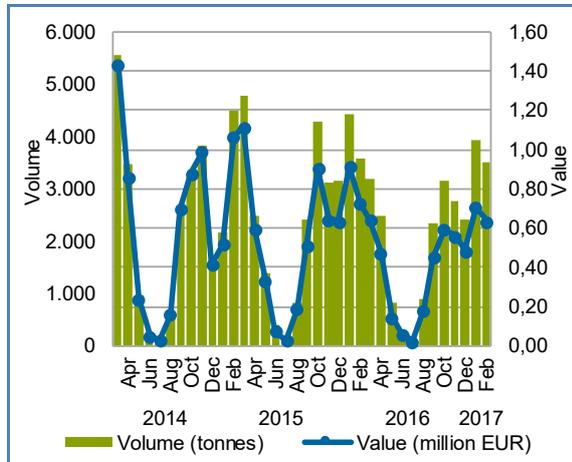
Figure 6. SPRAT: FIRST SALES IN ESTONIA



Source: EUMOFA (updated 12.04.2017).

In January–February 2017, the Latvian first sales of sprat reached EUR 1,34 million and 7.434 tonnes. They decreased in both value and volume (–18% and –7%, respectively) from January–February 2016. Compared with January–February 2015, first-sales volume increased 11%, and value maintained the trend (–15%).

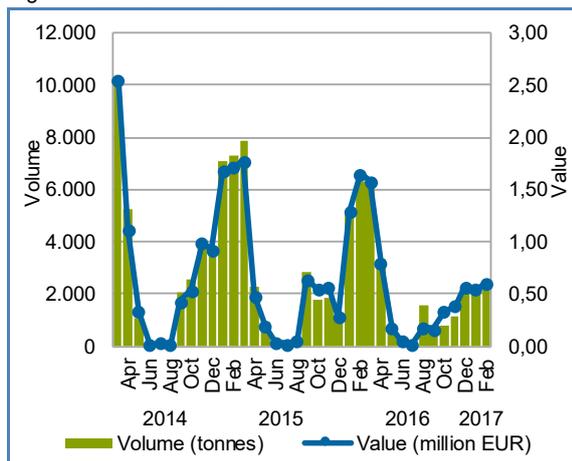
Figure 7. **SPRAT: FIRST SALES IN LATVIA**



Source: EUMOFA (updated 12.04.2017).

In Sweden in January–February 2017, the first sales of sprat decreased substantially from January–February 2016: –61% in value (EUR 1,16 million) and –57% in volume (4,881 tonnes). Compared with January–February 2015, first-sales value and volume were both 66% lower.

Figure 8. **SPRAT: FIRST SALES IN SWEDEN**



Source: EUMOFA (updated 12.04.2017).

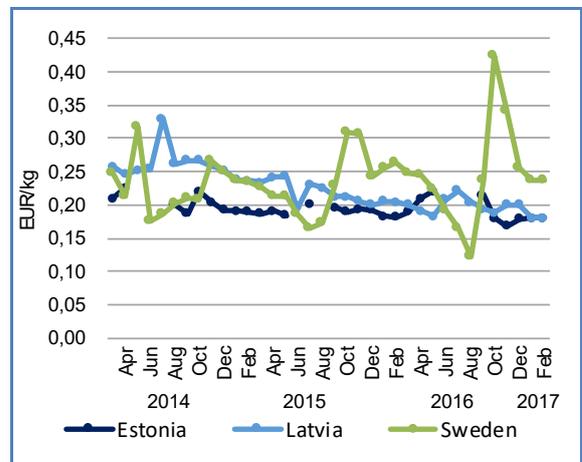
Overall, average prices of sprat varied with species availability (lowest prices with highest volumes), and they ranged from 0,17 EUR/kg (Estonia) to 0,25 EUR/kg (Sweden). Except for Sweden, price showed a decreasing trend.

Typically, in Estonia there is no sprat fishing in June–August. In January–February 2017, the average unit price was 0,18 EUR/kg, showing a slight decrease (–1%) from January–February 2017. Compared with January–February 2015 price was 5% lower.

In Latvia, the highest price was reached in July 2014 (0,33 EUR/kg), when the lowest volume (82 tonnes) was registered. In January–February 2017, the average unit price was 0,18 EUR/kg, –12% and –24% from January–February 2016 and January–February 2015, respectively.

Sweden experienced the highest price in October 2016 (0,42 EUR/kg) corresponding to 796 tonnes. In January–February 2017, the average unit price was 0,24 EUR/kg, 9% lower than previous year and showing a slight increase (+1%) compared with January–February 2015.

Figure 9. **SPRAT: FIRST-SALES PRICE IN SELECTED COUNTRIES**



Source: EUMOFA (updated 12.04.2017).

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

First sales: Latvia (5/2016, 5/2015, 5/2014); Sweden (3/2015, Feb 2013)

2. Global Supply

Resources / EU / CFP: The European Scientific, Technical and Economic Committee for Fisheries (STECF) report on the performance of the Common Fisheries Policy (CFP) reveals improvements in the situation of the fish stocks and exploitation levels. The percentage of overexploited stocks decreased from more than 70% to nearly 40% over the past ten years. In addition, the percentage of the assessed stocks outside safe biological limits also fell, from 65% in 2003 to 38% in 2015. Approximately half of the stocks assessed have reached sustainable levels in line with the objectives set in the CFP, well before the 2020 deadline⁷.

Resources / EU / Mediterranean Sea: The European Commission, eight Member States, and five non-EU countries signed the Malta MedFish4Ever declaration, which sets out a detailed work programme for the next 10 years, with the aim of saving Mediterranean fish stocks and protecting the region's ecological and economic wealth. The declaration will involve coastal communities, civil society, and industrial, small-scale, artisanal, and recreational fisheries, as well as the UN Food and Agriculture Organisation (FAO) and the General Fisheries Commission for the Mediterranean (GFCM)⁸.

Resources / Venezuela: In 2016 fisheries and aquaculture production reached 285.000 tonnes. Of this, fisheries contributed 259.000 tonnes, 78% from small-scale fisheries and 22% from the industrial fleet. The main species concerned were round sardinella, yellowfin tuna, ark clams, prochilods, sharks, skipjack tuna and blue crab. Aquaculture production amounted to 26.000 tonnes, mostly shrimp (21.500 tonnes), but also cachama, trout and tilapia⁹.

Fisheries / Iceland: The total catch for Icelandic vessels was 201.231 tonnes in March 2017, 53% more than in March 2016. The increase is mostly due to capelin, which ended at 131.523 tonnes (+67% over March 2016). On a year-to-year basis (April 2016–March 2017), the total catch decreased 3% from the same period a year before¹⁰.

Fisheries / Germany: In 2016, German fishing vessels caught 238.400 tonnes (+0,2% over 2015) valued at EUR 250 million (+8,5%). The main species were herring (67.100 tonnes), mackerel (28.300 tonnes), blue whiting (24.100 tonnes), sardine (17.900 tonnes), and sprat (14.000 tonnes). In value, the top five species were common shrimp (EUR 40 million), cod (EUR 27 million), herring (EUR 27 million), mackerel (EUR 25 million), and Greenland halibut (EUR 18 million). Fresh catches represent 35% of the total and frozen 65%. More than two-thirds of the fresh fish is landed in German ports, while the rest is landed in Denmark and the Netherlands. Landings of frozen fish occur mostly in foreign ports, mainly in the Netherlands¹¹.

Fisheries / Spain: The Spanish Ministry of Agriculture and Fisheries, Food and Environment has reached an agreement with France about the exchange of fishing opportunities for 2017: 1.000 tonnes of hake and 1.200 tonnes of monk have been granted to the Spanish vessels. The agreement is part of the exchanges that

Spain makes annually with other Member States. It is the most important trade owing to the volume of exchanged quotas. It also includes "mini-quotas" of species such as haddock and saithe, for which Spain has no quotas¹².

Fisheries / Algeria: The EU is supporting the sustainable development of fisheries and aquaculture in Algeria, with the launch of a two-year programme (2017-2018) that contributes to the diversification of the economy. This new EUR 15 million DIVECO 2 programme will encourage local initiatives in three pilot areas (Ain Temouchent, Sétif and Skikda) by supporting the implementation of Algeria's AQUAPECHE 2020 plan, which aims to double fisheries and aquaculture production in the period 2015-2019. EU assistance will be provided through training, studies, and technical support, including support for the consolidation of statistical systems for fisheries and aquaculture, as well as improving health and safety and the marketing of fisheries and aquaculture products¹³.

Certification / Sandeel / Norway pout / Sprat / North Sea fisheries: Two Danish producers' associations have achieved Marine Stewardship Council (MSC) certification for sandeel, Norway pout, and sprat. The total MSC-certified catch is approximately 580.000 tonnes, taken from 20 different stocks. The species are almost exclusively used for the production of fishmeal and fish oil¹⁴.

Certification / Trout / Spain: A Spanish fish farm has achieved Aquaculture Stewardship Council (ASC) certification for rainbow trout. The company exports trout to European markets including Belgium, Denmark, and Germany¹⁵.

Certification / Mussel / Spain: The production of fresh Protected Designation of Origin (PDO) *Mexillón de Galicia* (Galician mussel) reached 6.194 tonnes in 2016, 112% more than the previous year. In recent years, the average mussel yield has seen an important improvement, which is attributable to the amount of food available in the estuaries and improvements in production practices. In 2016, *Mexillón de Galicia* products were marketed by 57 companies¹⁶.

Trade / European seabass / EU: In 2016, the EU trade of European seabass reached EUR 431 million, and 73.200 tonnes, +15% and +13%, respectively, over the previous year. Of this 17.000 tonnes (EUR 89 million) were imported from non-EU countries, mostly Turkey. Italy, the Netherlands, and Germany are the EU largest importers of European seabass. In January 2017, EU imports of European seabass from third countries (1.443 tonnes) were 14% higher than January 2015¹⁷.

Trade / Norway: In March 2017, Norway exported pelagic fish with a value of EUR 62,2 million (NOK 571 million). This represents a slight decrease (-1%) from March 2016. Of these, 60% are herring exports intended for filleting, a 5% increase over the previous year. The main destination markets are the EU and Belarus¹⁸.

3. Case studies

3.1. FISHERIES AND AQUACULTURE IN CHILE



Source: *The World Factbook*

Chile is a large player globally in both marine fisheries and aquaculture. Marine fisheries supply mainly small pelagic species. Aquaculture produces mainly salmonids in addition to various molluscs. However, catches of small pelagics have declined recently, mainly as a result of reduced quotas forced by various natural conditions. Also, disease and natural phenomena have created challenges in the Chilean aquaculture sector. Still, Chile is a major player in the seafood business; it is the second largest producer of salmonids in the world, exporting seafood products worth EUR 4,7 billion in 2016. According to the FAO, Chile ranked 11th on the list of world's largest marine capture producers (2014) and was second in Latin America.

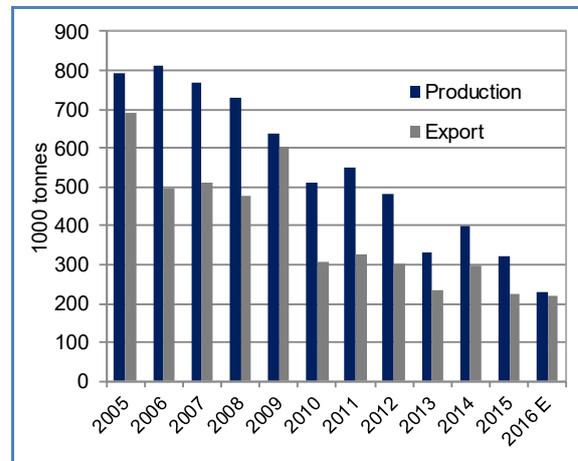
3.1.1. PRODUCTION

MARINE FISHERIES AND FISHMEAL AND FISH OIL PRODUCTION

Most landings in Chile are small pelagic species, with anchovy as the main species. In 2016, the volume of anchovy decreased 38% from 2015 and accounted for 22% of the total landed volume at 333.500 tonnes. In past years, the biomass has decreased as a result of frequent El Niño events, causing a closure in the anchovy and sardine fisheries.

During the past ten years, Chilean fishmeal and fish oil production has declined from approximately 800.000 tonnes in 2006 to approximately 230.000 tonnes estimated for 2016. The raw materials for the fishmeal and fish oil industries are mainly anchovy and sardine, and in the past years, horse mackerel, which is used for non-food purposes and human consumption. The decline in horse mackerel was attributable to reduced availability of raw material through reduced quotas after a period of overfishing by both Chilean and foreign vessels in national and international waters. In addition to the reduced availability of horse mackerel, the modest landings of anchovy and sardines in Chile in past years have contributed to the reduced production volume of fishmeal and fish oil. Fishmeal is used for finfish aquaculture, and a significant share is exported.

Figure 10. CHILEAN PRODUCTION AND EXPORT OF FISHMEAL



Source: *IFFO; Portal Comex CCS.*

The largest Chilean fishmeal exporter in 2016 was Corpesca, accounting for 20% of the volume, followed by Pesquera Pacific Star S.A. (14%), and Camanchaca Pesca Sur S.A. (9%)¹⁹.

Most of the fishmeal that is not exported is used as fish feed for the salmon-farming industry. Chile is also an importer of fishmeal. From 2010 to 2016, imports averaged 44.000 tonnes annually.

AQUACULTURE

Chile is the largest producer globally of large trout and coho (silver salmon) and the second largest producer globally of salmonids (Atlantic salmon, large trout, and coho) behind Norway. Currently, approximately 25 companies produce salmonids. The 14 largest companies are responsible for approximately 80% of total production. Among the top 15 salmonid farming companies globally, six are Chilean: Aqua Chile (6th), Salmones Multiexport (8th), Pesquera los Fjordos (9th), Australis seafood (10th), Pesquera Camanchaca (14th), and Salmones Blumar (15th). In addition, multinational companies such as Marine Harvest, Mitsubishi/Cermaq, and Cooke Aquaculture operate in Chile.

The main areas for freshwater production (smolt) are Regions VIII, IX, XI, XII, and XIV. The sites use flow-through systems close to rivers or recirculating aquaculture system (RAS) technology. Historically, lakes were used for smolt production as well. Because most seawater sites are south of the main smolt production areas, transport by truck is the main means of transport before the final transfer to the seawater sites in well boats. The main areas for the seawater production are in the southern part of Chile (Regions X, XI, and XII)²⁰.

Chile experienced a substantial growth in production over the past 20 years, although biological (disease) and environmental challenges have resulted in some set backs. In 2008 and 2009, the Chilean aquaculture industry struggled with infectious salmon anaemia (ISA), resulting in a substantial drop in harvest volume in 2009 and 2010. Today, the industry is struggling with salmon Rickettsial Syndrome (SRS), in addition to various natural phenomenon such as earthquakes, volcano eruptions, and the effects of El Niño, all of which cause loss and reduced harvest volume. For instance, the February 2016 algae bloom resulted in the loss of more than 25 million individual salmonids, mainly Atlantic salmon.

With a new regulatory regime implemented, industry growth will depend on a different set of sustainable

indicators and sanitary plans, especially in Regions X and XI, where disease and parasites are most frequent. This could limit the exponential growth experienced recently. In the southernmost regions, where fewer biological challenges exist, growth is likely to be greater.

The regulations and biological challenges have resulted in a reduction of large trout production. Coho production will remain stable or grow, and production of Atlantic salmon is estimated to increase its share compared with other Chilean salmonids. In 2016, Atlantic salmon, the leading species farmed in Chile, accounted for 52% of the total aquaculture production volume.

There are 22 processing plants in Chile. Most Atlantic salmon and large trout (60%) is processed (fillets/VAP); only a small share of coho is processed before being exported (7%). More than 50% of exported Atlantic salmon is frozen, and approximately 30% is chilled fresh²¹.

In addition to salmonids, Chile is a large producer of mussels, only surpassed by China and Spain in volume. The Chilean mussel (*Mytilus chilensis*) is also an important export product. Most exported mussel is frozen or canned. In 2016, the produced volume of mussel accounted for 28% of the total aquaculture production.

Table 3. **CHILEAN CATCHES AND AQUACULTURE PRODUCTION BY MAIN SPECIES, EXCLUDING ALGAE** (volume in 1000 tonnes)

Product	2012	2013	2014	2015	2016*
MARINE FISHERIES					
Anchovy	904	803	818	540	334
Sardine	848	237	543	436	280
Atlantic horse mackerel	227	231	272	289	320
Cuttlefish	145	106	177	144	181
Other species	882	912	779	722	428
Total marine fisheries	2.559	1 758	2.159	1.773	1.543
AQUACULTURE					
Atlantic salmon	400	493	644	622	502
Coho	163	146	159	154	102
Rainbow trout	263	146	152	107	71
Chilean mussels	258	254	238	289	277
Other species	21	25	21	20	19
Total aquaculture	1.105	1.064	1.214	1.192	971
TOTAL PRODUCTION	3.664	2.822	3.373	2.965	2.514

Source: www.sernapesca.cl

*Preliminary data.

3.1.2. TRADE

EXPORT

From 2012 to 2016, the value of exported Chilean seafood products increased from approximately EUR 3,5 billion to approximately EUR 4,7 billion (+36%). This is mainly the result of the increased production of Atlantic salmon, Chile's leading seafood export commodity.

Chile and Norway are by far the largest producers of farmed Atlantic salmon, with 23% and 54%, respectively, of the world's production in 2016. The USA is Chile's main market, and the EU is the main market for Norwegian salmon. However, the two countries also compete on their main markets. Over the past two years, exports of Atlantic salmon products from Chile to the EU averaged 33.000 tonnes, mainly frozen processed products.

In 2016, Chilean salmon exports accounted for 61% and 38% of the total export value and volume, respectively. A large share of exported Chilean salmon (26%) and other seafood products ends up in the USA. On a round weight basis, both countries sell/export 50.000–60.000 tonnes to their competitor's main market. Norway targets the US market with airfreight fresh whole salmon on the east coast market and fresh salmon fillets on the west coast market. The latter is in strong competition with Chile. Chile supplies the EU market with frozen salmon fillets.

They have a strong position in the catering sector. According to Norwegian producers, it is difficult to compete with Chile because their prices are normally approximately 1 EUR/kg lower.

In 2016, the US market accounted for 30% and 16% of the export value and volume, followed by Japan, which accounted for 18% of the export value and 14% of the volume.

The EU accounted for 11% of Chilean exports in 2016, an increase of 9% over 2015, to EUR 504 million. In 2016, the main market for Chilean seafood products was Spain, accounting for 33% of the export value to the EU. Hake and mussels are the main exports to Spain. They consist of both precooked, frozen vacuum-packed mussels in shells and frozen mussel meat. The latter is used mainly as raw material for canning. As for mussels, Chile is both a competitor and a supplier to the Spanish mussel industry. Exports of mussels from Chile to the EU fall in the prepared/preserved category. Within this category, most of the mussels are exported as cooked/vacuum packed/frozen. Although Chile mainly targets segments other than the canning industry (owing to the price), some Chilean mussels are canned in Spain. Although Chile can be considered both a supplier and competitor, depending on the market segment, Spain has the opportunity to supply the market with fresh mussels, and Chile does not.

Table 4. **CHILEAN EXPORT OF SEAFOOD PRODUCTS RANKED BY VALUE** (value in million EUR and volume in 1000 tonnes)

Product	Unit of measure	2012	2013	2014	2015	2016
Salmon	Value	1.389	1.895	2.528	2.549	2.886
	Volume	322	392	465	498	441
Rainbow trout	Value	684	569	523	386	361
	Volume	140	110	75	66	49
Fishmeal	Value	344	315	321	323	295
	Volume	309	240	258	194	192
Toothfish	Value	55	53	47	54	80
	Volume	3	4	3	2	3
Fish oil	Value	85	82	99	98	78
	Volume	71	67	85	80	69
Other	Value	927	920	995	1.030	1.042
	Volume	407	428	446	389	418
Total	Value	3.483	3.834	4.514	4.439	4.742
	Volume	1.252	1.240	1.332	1.228	1.171

Source: EUMOFA, based on Global Trade Atlas.

Table 5. **MAIN EXPORT MARKETS OF CHILEAN SEAFOOD PRODUCTS RANKED BY VALUE** (value in million EUR and volume in 1000 tonnes)

Market	Unit of measure	2012	2013	2014	2015	2016
USA	Value	750	980	1.174	1.227	1.405
	Volume	145	162	188	196	188
Japan	Value	1.022	765	925	878	831
	Volume	262	203	193	203	166
EU	Value	399	428	501	463	504
	Volume	184	159	198	152	160
Brazil	Value	257	380	430	450	492
	Volume	75	88	95	102	89
China	Value	266	299	294	266	351
	Volume	215	203	178	144	153
Other	Value	1.097	1.179	1.380	1.334	1.347
	Volume	522	523	601	513	514
Total	Value	3.483	3.834	4.514	4.439	4.742
	Volume	1.252	1.240	1.332	1.228	1.171

Source: EUMOFA, based on Global Trade Atlas.

IMPORT

Although Chile is mostly an exporter of seafood products, it also imports products such as fish oil and various species of tuna and shrimp. In 2016, the total import value was approximately EUR 307 million, a 23% decrease from 2015. The volume in the same year was approximately 144.000 tonnes (-27%). The main suppliers to Chile in 2016 were China and Peru, accounting for 35% and 16% of the total export value, respectively. The main products imported from China are fish oil and various types of shrimp. Peru supplies mainly fishmeal and fish oil. Tuna originates mainly in Thailand and Ecuador.

3.1.3. CONSUMPTION

Chile's mussel culture is based on the production of three main species: the Chilean mussel (*Mytilus chilensis*), which is known locally as "chorito" and is the best known

internationally; the cholga mussel (*Aulacomya ater*); and the giant or choro mussel (*Choromytilus chorus*). While most Chilean mussels are exported, all the cholga and giant mussels are consumed locally. Domestic mussel consumption is estimated by comparing production with exports and then indicating a percentage.

In 2016, the per capita consumption of fish and seafood in Chile was 10 kg. To increase the consumption, the National Fisheries Society (*Sonapesca*) and the Federation of Fishing Industries of Southern Chile (FIPES) organised a campaign known as *Come pescado y súmate al kilo de salud por año*. The campaign's main objective is to increase seafood consumption by a kilo per capita per year until 2022. The Chilean government emphasized that Chilean consumers should be able to consume seafood up to three times a week²².

3.2. ORGANIC AQUACULTURE IN THE EU



This article summarises the study “EU organic aquaculture: economic performance and market perspectives” conducted by the EUMOFA team.

Since 2010, organic fish and seafood production has been increasing in EU Member States. The conversion to organic standards was meant as a way to promote sustainable aquaculture and higher quality products, and as protection against competitive production by third countries. In 2015, EU organic aquaculture production reached 52.000 tonnes, but economic performance varied between species and Member States, and some important constraints still limited its development.

3.2.1. SCOPE AND METHODOLOGY

The study investigated the economic performance of organic aquaculture, focusing on price premiums and differences in production costs caused by organic certification, and it identified the beneficiaries of added value in the supply chain.

The information was collected in two phases:

- A literature review of EU organic aquaculture production and the EU organic fish market. A main source of information was the OrAqua project reports.
- Interviews with a selection of certified organic aquaculture producers, ensuring that the main species and production areas were covered. In addition, a few large-scale retailers and wholesalers were interviewed about their purchasing strategy for organic fish products.

The two phases led to the collation of updated organic aquaculture production data in the EU according to Member State and species; to a comparison of economic

performance between organic and conventional aquaculture; and to an analysis of the characteristics of the EU organic fish market and drivers in the supply chain.

3.2.2. EU ORGANIC AQUACULTURE PRODUCTION

Overall in the EU, organic products currently account for almost 4% of total aquaculture production and reached about 52.000 tonnes in 2015. The main producer of organic farmed products is by far Ireland, accounting for 42% of the EU total organic production, followed by Italy (16%), France (8%), and Hungary and the UK (both 7%).

Based on a literature review and interviews, we estimate the main species produced using organic standards in 2015 were:

- Salmon: more than 16.000 tonnes (9% of total EU salmon production); Ireland and the UK are the main producers.
- Mussel: almost 20.000 tonnes (4% of EU total mussel production); Ireland, Italy, and Denmark are the main producers.
- Carp: approximately 6.000 tonnes (8% of EU total carp production); Hungary, Romania, and Lithuania are the main producers.
- Rainbow trout: almost 6.000 tonnes (3% of EU total trout production); France and Denmark are the main producers.
- Seabass and seabream: approximately 3.500 tonnes (2% of EU total seabass and seabream production); Italy, France, and Greece are the main producers.

A few other species are farmed using organic standards but currently in small volumes (meagre, oyster, sturgeon, perch, prawn, algae, etc.).

EU organic aquaculture experienced a strong increase in recent years, at least for the major species. Between 2012 and 2015, organic production increased 24% for salmon, doubled for rainbow trout, and tripled for seabass/seabream. Positive developments were observed for shellfish (mussel, oyster).

Table 6. OVERVIEW OF EU ORGANIC AQUACULTURE PRODUCTION (volume in tonnes)

Member State	Total production*	Volume of organic production**	% of organic production in national production	Breakdown of organic production***
Ireland	39.650	22.000	55,5%	13.000 tonnes of Atlantic salmon; 9.000 tonnes of mussel.
Italy	148.763	8.500	5,7%	More than 5.000 tonnes of mussel (EUROSTAT). In addition: 1.526 tonnes of seabream, 898 tonnes of rainbow trout, 797 tonnes of mullet, 100 tonnes of sea trout, 81 tonnes of seabass, 50 tonnes of prawn, and 12 tonnes of eel (National sources, 2015).
France	206.800	4.200	2,0%	About 2.300 tonnes of organic salmonids (6,5%), mostly rainbow trout, approximately 900 tonnes of organic seabass/seabream (15–20%), and approximately 1.000 tonnes of mussel and oyster.
Hungary	17.337	3.498	20,2%	Mostly carp.
United Kingdom	206.834	3.382	1,6%	2.382 tonnes of organic salmon in Scotland, 800 tonnes in Northern Ireland and 200 tonnes of organic trout in England (2015). Recent trend: organic production in decline.
Denmark	35.867	2.864	8,0%	1.634 tonnes of organic trout, 1.229 tonnes of organic mussel, 0,5 tonnes of organic seaweed.
Romania	11.042	2.042	18,5%	2.042 tonnes of common carp (2014).
Spain	289.821	1.353	0,5%	409 tonnes of rainbow trout, 233 tonnes of seabream, 550 tonnes of mussel, 157 tonnes of seabass, 4 tonnes of sturgeon.
Portugal	9.322	1.300	13,9%	Mussel.
Lithuania	4.450	1.117	25,1%	409 tonnes of rainbow trout, 233 tonnes of seabream, 550 tonnes of mussel, 157 tonnes of seabass, 4 tonnes of sturgeon.
Germany	29.909	621	2,1%	Carp and trout. No breakdown available (mostly trout).
Greece	106.118	400	0,4%	400 tonnes of seabass and seabream (2016).
Croatia	15.572	300	1,9%	Mostly seabass (approximately 300 tonnes) and mussel production using organic standards.
Others	180.000	260	0,1%	Carp, trout and perch (Austria, Latvia and Poland); Mussel (Bulgaria and Slovenia).
Total	1.301.484	51.837	4,0%	

Sources: EUMOFA, based on a literature review, interviews, EUROSTAT, and FAO.

*FAO (2015 data); **EUMOFA - survey (2015 and 2016); *** EUMOFA survey and EUROSTAT.

3.2.3. ECONOMIC PERFORMANCE

Despite increased production and positive market perspectives for organic fish and seafood, the economic performance of EU organic aquaculture products varies substantially, depending on the Member State and species grown:

- Organic salmon provides good sales price premiums, which on average cover the extra costs generated by organic farming, in a context of positively developing international demand.
- Organic farming of seabass and seabream also allows producers to reach price premiums, which

however are often lower than the additional costs incurred in the context of limited market expansion.

- Organic trout farming leads to substantial price premiums and extra margins, compared with conventional aquaculture; the demand is strong, particularly from the smoking industry.
- Organic mussel farming, which developed more recently, is benefitting from strong demand, and can reach 20% price premiums.
- Organic carp, on the other hand, cannot cover its extra costs with equivalent sales price premiums and would suffer heavy losses without EFF subsidies.

Part of downstream margins (processing, trade, and retail) is much larger in the organic supply chain than in the conventional one. Lower volumes (which mean extra costs per unit) and lower turnover rates (which mean greater losses and greater risks) can explain the situation.

A major economic issue for the development of organic fish farming is the small scale of production. Economies of scale are the most obvious way to reduce costs, not only at production level but also at the logistics and distribution levels.

However, economies of scale are often hard to achieve because of the difficulty of accessing new farming sites and the limited expansion capacity of the market for some species.

Extending the range of organically farmed species is a key issue and is technically possible, but it faces a lack of knowledge and market timidity (e.g. meagre).

Table 7. **ECONOMIC PERFORMANCE OF EU ORGANIC AQUACULTURE BY MAIN SPECIES**

Species produced using organic standards	Organic production cost premium compared with conventional production	Main cost involved in cost premium	Price-premium compared with conventional production	Other inputs/comments
Salmon	23% in the UK 32% in IE	–Feed (+30% in IE but only +13% in the UK) –Juveniles (+54% in IE but only +13% in the UK)	+30–35%	–Profitable activity –Margin larger than for conventional in the UK, but not in Ireland and Norway
Trout	From 15–16% in DK and FR to 18% in IT	–Feed (+30%) –Labour (+15%)	+30%	Extra margin for organic trout seems to be positive in all Member States
Carp	From 15–20% in DE and HU to 43% in RO and PL	–Feed (more than double) –Juveniles (especially in RO where older juveniles are bought)	+30% in DE and PL but almost no price premium in RO, LT and HU	–Cost premium not fully covered by price premium –Margin lower than for conventional carp –Unprofitable without subsidies
Seabass/seabream	30–45%	–Feed (+65% in IT, FR and ES and +50% in EL) –Juveniles (+85–90% in IT, FR and ES and +60% in EL)	+30–35%	–Apparent extra margin negative in all Member States except EL
Mussel	Not enough information	Not enough information	From +13% in ES to +20–25% in DK, FR and BE	–Development of sales in trays (fresh or pre-cooked) in large-scale retailers

Source: EUMOFA.

3.2.4. OVERVIEW OF DEMAND AND MARKET TRENDS

Despite an increasing demand for organic aquaculture products in several Member States, substantial constraints continue to limit market development, especially at the retail level:

- Organic concerns have not yet emerged as a major issue for several large-scale EU retailers, who are more concerned about finding a regular supply of aquaculture products in general than about offering organic fish.
- Organic fish is not necessarily a key priority for both large-scale retailers and specialised organic retailers, who may prefer sourcing wild fish from “responsible fisheries” or aquaculture fish “farmed responsibly,” both with recognised labels (MSC, ASC, etc.), rather than organically certified aquaculture products.
- Some large-scale retailers buying organic fish do not source it in the EU because availability is not guaranteed; they prefer to buy a limited number of products from extra-EU suppliers who are more likely to provide a regular supply (in both quantity and price; for example, organic salmon in Norway or shrimp in South America).
- Retailer reluctance towards organic fish is also based on the observation that, in the mind of the consumer, organic is not clearly differentiated from environmentally friendly. And the large number of eco-labels and organic logos can be confusing to the consumer.

Market perspectives are positive with the sharp increase in organic fish and seafood production in recent years; this increase may continue but more slowly.

Price, however, is the factor most likely to limit the purchase of organic products in countries or regions where organic fish is known and already accepted. But in many markets new to fresh fish, the demand for organic products is non-existent or extremely limited, because marine fish is still a new product (especially salmon). To develop substantially, organic fish must be perceived not as a high-end product (because quality and taste are not distinguishable to average customers) but as a new product. As a result, it must be offered at competitive prices to raise volumes and consequently decrease risks and margins. The interviews highlight that, even if the trend for organic fish continues to increase, stakeholders worry that the premium price will restrict organic products to a niche market.

Moreover, because the term organic overlaps with several existing concepts such as sustainable, biological, ecological, fair trade, and environmentally friendly, skepticism about the relevance of organic fish is an important issue for the future.

For example, in some major carp-producing countries (in central-eastern Europe), producers are skeptical about consumer interest in organic carp farming because they consider their conventional carp an ecological product. They worry that their product could suffer from the development of certified organic carp. They see a risk of depreciation of their conventional product, which is considered ecological, based on the farming methods used, and of subsequent confusion in the consumer's mind.

In some cases, other factors may significantly affect the penetration of an organic product into a market (other logos, product origin, etc.). For example, the success in France of organic seabream and seabass supplied by the Greek company Galaxidi ("dorade royale bio du Golfe de Corinthe") seems more linked to the reference to its origin (Gulf of Corinth), which is perceived positively by the consumer, than to the organic state of the product.

The national reputation of organic labels must also be considered, because some of them are still seen as indispensable (BIOSUISSE on the Swiss market) or

important (AB on the French market, NATURLAND on the German market, etc.) to penetrate a market. Operators would do well to present other characteristics, such as origin, and not rely exclusively on the organic label to market their product.

3.2.5. RECOMMENDATIONS

These observations and conclusions led to the following recommendations:

- Foster a significant increase in the production of organically farmed fish (which is the only way to achieve economies of scale and reduce production and distribution costs) and focus on a few major species, likely to meet the demands of large-scale retailers for regularity of supply and price stability;
- Strengthen the credibility and readability of organic labels relative to eco-labels; do not base the promotion of organic aquaculture on negative terms such as absence and refusal (absence of chemicals, refusal of certain technologies) but describe it as a positive and dynamic move towards compliance with high-level principles of sustainability and animal welfare (in addition to food-quality objectives); clarify and disseminate the specificity of organic labels;
- Ensure that organic fish farmers and regulatory authorities in Member States have optimal access to information on EU regulations and funding opportunities;
- Inform fish farmers of the real costs of organic production, especially certification costs, which are perceived as being higher than they actually are;
- Increase retailer and consumer knowledge of new aquaculture species with high potential (e.g. meagre);
- Strengthen the collection, processing, and dissemination of statistics on organic aquaculture production; extend and deepen the knowledge of the sector (through species profiles, Member State-wide, supply-chain analyses, etc.);
- Develop cooperation between aquaculture stakeholder associations and organic bodies, and promote the exchange of information.

4. Consumption

HOUSEHOLD CONSUMPTION IN THE EU

In January 2017, the volume of fresh fisheries and aquaculture products consumed decreased in ten Member States, increased in Italy (+8%), and remained stable in Germany relative to January 2016. Value increased in Italy (+10%), remained stable in Ireland and the Netherlands, and decreased in the rest of the Member States.

The largest drop in volume was observed in Hungary (-45%), followed by Sweden (-21%).

In January 2017, the greatest decrease in consumption value was observed in Hungary (-23%) and Denmark (-12%).

Table 8. **JANUARY OVERVIEW OF THE REPORTING COUNTRIES** (volume in tonnes and value in million EUR)

Country	Per capita consumption 2014* (live weight equivalent) Kg/capita/year	January 2015		January 2016		December 2016		January 2017		Change from January 2016 to January 2017	
		Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Denmark	22,1	893	13,50	881	12,81	652	11,60	736	11,25	16%	12%
Germany	13,3	5.452	70,31	6.119	83,46	7.850	103,60	6.123	78,39	0%	6%
France	34,4	17.263	187,70	16.866	186,73	29.650	335,27	15.747	184,43	7%	1%
Hungary	4,6	247	1,08	280	1,20	2.361	10,99	153	0,92	45%	23%
Ireland	23,0	994	12,96	1.186	15,66	1.367	22,03	1.119	15,72	6%	0%
Italy	28,9	25.452	238,47	26.846	240,80	39.394	355,85	28.955	265,02	8%	10%
Netherlands	22,6	1.816	24,10	1.798	24,07	2.596	44,15	1.724	24,00	4%	0%
Poland	13,0	4.169	22,16	4.435	22,57	15.084	63,12	3.795	20,42	14%	10%
Portugal	55,3	5.519	34,74	4.678	28,87	5.287	37,74	4.005	27,54	14%	5%
Spain	46,2	58.237	436,16	52.906	402,78	62.401	526,53	50.810	397,16	4%	1%
Sweden	33,2	886	11,26	773	10,13	791	11,39	609	9,31	21%	8%
UK	24,9	25.086	268,94	26.619	292,12	28.315	333,16	25.884	262,51	3%	10%

Source: EUMOFA, based on Europanel (updated 12.04.2017).

* Data on per capita consumption of all fish and seafood products for all EU Member States can be found at: <http://www.eumofa.eu/documents/20178/77960/The+EU+fish+market+-+2016+Edition.pdf>

Generally, in January in the past three years, consumption increased in volume and value in seven Member States: Denmark, Hungary, the Netherlands, Poland, Portugal, Spain, and Sweden; it decreased in France, Germany, Ireland, and Italy. In the UK, consumption increased in volume; however, value decreased.

In January, the household consumption volume of fresh fish products was below the yearly average for the past three years in most Member States analysed, except for Germany, Ireland, and Italy, where volumes were above average. In Germany, it was 15% above the yearly average of 5.326 tonnes; in Ireland, 18% above average (950 tonnes); and in Italy -6% above average (27.411 tonnes). In Denmark, volumes remained at the yearly average level.

In January, the household consumption in value has been above the yearly average since 2014 in Denmark, Germany, Ireland, and Italy, among which the highest above-average values were registered in Ireland (22%) and Italy (18%). In Spain, it was at the yearly average level. In the rest of the Member States analysed, values were below average. On a three-year basis, value in Hungary was 57% below average, the lowest registered for the period.

The most recent consumption data available on EUMOFA for **February 2017** can be accessed [here](#).

4.1. SAITHE



Habitat: A demersal species occurring in inshore and offshore waters to approximately 200 m depth²³.

Catch area: Atlantic Ocean from Barents Sea to Bay of Biscay, around Iceland and Greenland²⁴.

Main producing countries in Europe: Germany, Denmark, Sweden, the United Kingdom, France²⁵.

Production method: Caught.

Main consumers in the EU: Belgium, Denmark, France, Germany, the UK.

Presentation: Whole, fillets.

Preservation: Fresh, frozen, dried-salted, smoked, canned²⁶.

Ways of preparation: Steamed, fried, baked, boiled²⁷.

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

First sales: Denmark (2/2016, 3/2015, June 2013), Sweden (6/2016, 7/2015), Norway (5/2014), the United Kingdom (1/2014)

GENERAL OVERVIEW OF HOUSEHOLD CONSUMPTION IN FRANCE

Overall, per capita consumption in France is among the highest in the EU. France reached 34,4 kg per capita consumption of fish and seafood products in 2014 and remained stable compared with 2013. Compared with the EU average per capita consumption (25,5 kg), it was

35% higher. Compared with the highest per capita consumption in the EU, 55,3 kg, which was registered in Portugal, it was 38% lower. See more on per capita consumption in the EU in Table 8.

CONSUMPTION TREND IN FRANCE

Long-term trend, January 2013–December 2016: increased in price and volume.

Average price: 9,57 EUR/kg (2013), 9,88 EUR/kg (2014), 10,32 EUR/kg (2015), 10,49 EUR/kg (2016).

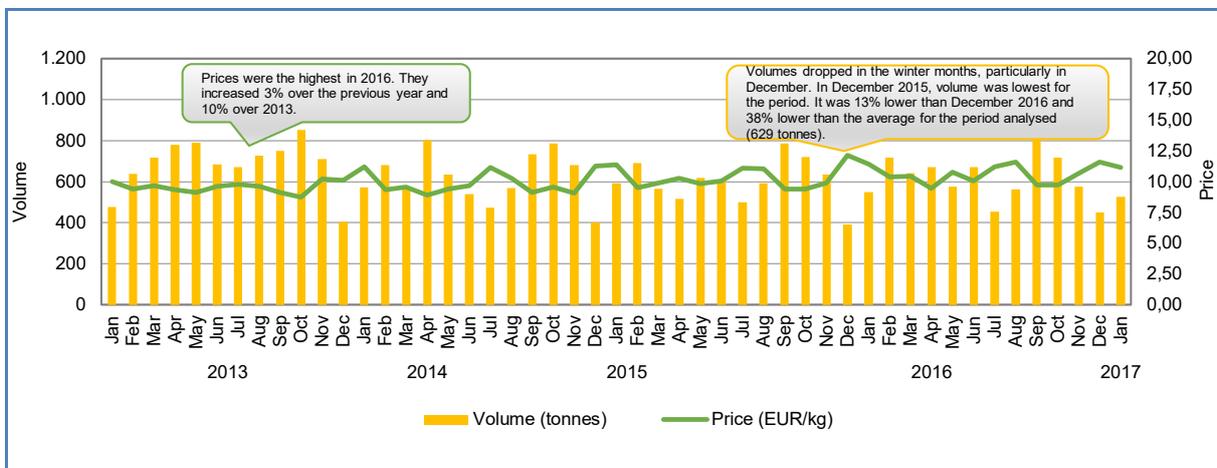
Total consumed volume: 8.202 tonnes (2013), 7.449 tonnes (2014), 7.212 tonnes (2015), 7.448 (2016).

Short-term trend, January 2017: decreased in value and increased in volume, compared with December 2016.

Average price: 11,15 EUR/kg.

Total consumed volume: 525 tonnes.

Figure 11. RETAIL PRICE AND VOLUME OF SAITHE SOLD IN FRANCE

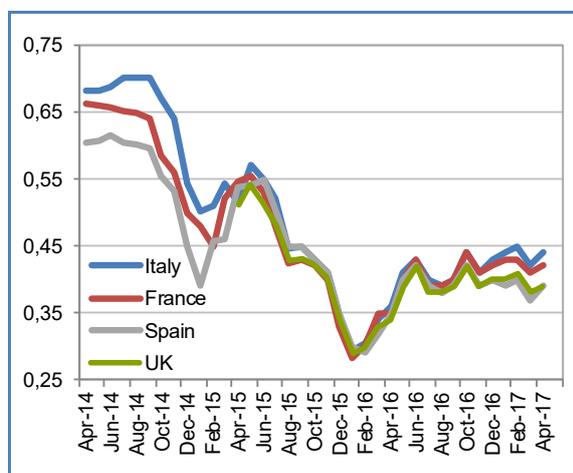


Source: EUMOFA (updated 12.04.2017).

5. Macroeconomic context

5.1. MARINE FUEL

Figure 12. **AVERAGE PRICE OF MARINE DIESEL IN ITALY, FRANCE, SPAIN, AND THE UK (EUR/LITRE)**



Source: Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; Spain; ARVI (January 2013–March 2015); MABUX (June 2015–April 2017).

In April 2017, the fuel price in the French ports of Lorient and Boulogne was 0,42 EUR/litre and increased 2% over March 2017. It increased 20% over April 2016.

In the Italian ports of Ancona and Livorno, the average price of marine fuel in the fourth month of 2017 was 0,44 EUR/litre. It increased 5% over the previous month and 22% over April 2016.

The price of marine fuel in the ports of A Coruña and Vigo, Spain, in April 2017, increased 5% to 0,39 EUR/litre. It increased 11% over April 2016.

The fuel price observed in the UK ports of Grimsby and Aberdeen was 0,39 EUR/litre in April 2017 and increased 3% over the previous month. Compared with the same month a year ago, the fuel price increased 15%.

5.2. FOOD AND FISH PRICES

In March 2017, annual EU inflation was 1,6%, down from 2,0% in February 2017. A year earlier, the rate was 0,0%. In March 2017, the lowest annual rates were recorded in Romania (+0,4%), Ireland and the Netherlands (both +0,6%), while the highest annual rates were registered in Latvia (+3,3%), Lithuania (+3,2%), and Estonia (+3,0%).

Compared with February 2017, annual inflation fell in 17 Member States, remained stable in 6, and rose in 5 (Bulgaria, Ireland, Greece, Cyprus and Latvia).

In March 2017, prices of food and non-alcoholic beverages decreased 0,5%, while fish and seafood decreased 0,4%, compared with February 2017.

Compared with the same month a year ago, both food and fish prices increased 1,9% and 4,1%, respectively. Compared with March 2015, fish and seafood prices increased 6,0%, while food and non-alcoholic beverages increased 1,9%.

Table 9. **HARMONISED INDEX OF CONSUMER PRICES IN THE EU (2015 = 100)**

HICP	Mar 2015	Mar 2016	Feb 2017	Mar 2017
Food and non-alcoholic beverages	100,20	100,21	102,63	102,08
Fish and seafood	99,62	101,42	105,96	105,55

Source: Eurostat.

5.3. EXCHANGE RATES

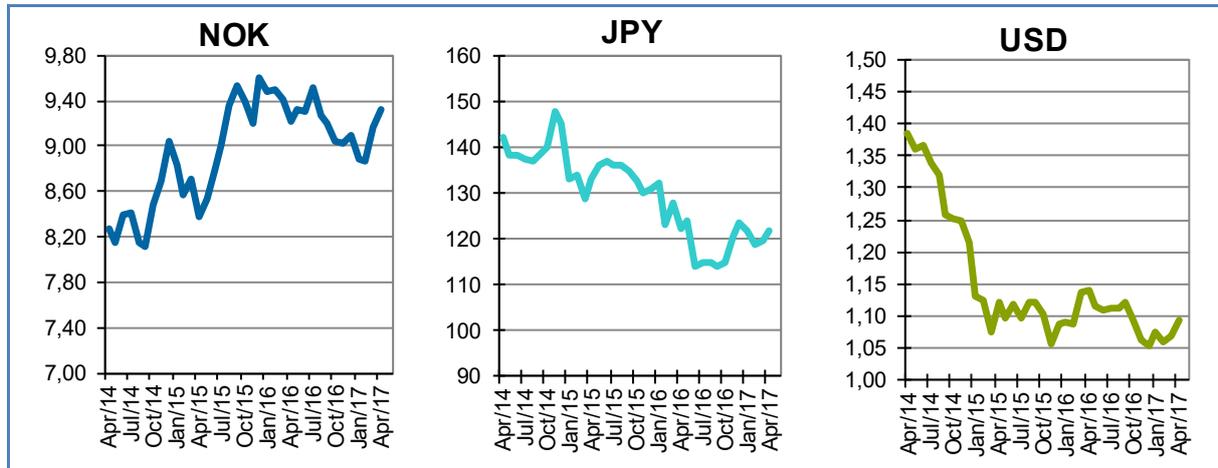
In April 2017, the euro appreciated against the Norwegian krone (+1,7%), the Japanese yen (+1,8%), and the US dollar (+2,2%), compared with March 2017. For the past six months, the euro has fluctuated around 1,07 against the US dollar. Compared with April 2016, the euro has appreciated 1,2% against the Norwegian krone, and depreciated 0,5% against the Japanese yen, and 4,1% against the US dollar.

Table 10. **THE EURO EXCHANGE RATES AGAINST THREE SELECTED CURRENCIES**

Currency	Apr 2015	Apr 2016	Mar 2017	Apr 2017
NOK	8,3845	9,2150	9,1683	9,3243
JPY	133,26	122,34	119,55	121,76
USD	1,1215	1,1403	1,0691	1,0930

Source: European Central Bank.

Figure 13. TREND OF EURO EXCHANGE RATES



Source: European Central Bank.

5.4. EUROPEAN UNION ECONOMIC OVERVIEW

In the fourth quarter of 2016, the GDP rate was 0,5% and grew 0,1% over the previous quarter (0,4%). The annual GDP growth remained stable at 1,9%, the same as the third quarter of 2016.

In Q4 2016, Germany reported a quarterly GDP growth rate of 0,4%, an increase of 0,3% over the previous quarter, when the GDP was 0,1%. The annual GDP growth was 1,8% in Q4, up from 1,7% in Q3. In Spain, the quarterly GDP growth rate was 0,7%, unchanged from the third quarter. Since Q4 2014, the quarterly GDP growth rate has been equal or over 0,7%. The annual GDP growth rate decreased (-0,2%) to 3,0% from 3,2%

in Q3. The United Kingdom declared a GDP growth rate of 0,7%, accelerating from 0,6% in the previous quarter. The annual GDP growth rate remained stable at 2,0% in Q4 compared with Q3.

France reported a quarterly GDP growth rate of 0,4% and registered an increase of 0,2% from the third quarter. The annual GDP growth rate increased to 1,1% in Q4 from 0,9% in Q3.

Among the five largest EU Member States, Italy was the only Member State where the quarterly GDP growth rate decelerated in Q4. It decreased to 0,2% after 0,3% in Q3. However, the annual GDP growth rate remained unchanged at 1,0% in the fourth quarter compared with the third quarter²⁸.

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THIS REPORT HAS BEEN COMPILED USING EUMOFA DATA AND THE FOLLOWING SOURCES:

First sales: EUMOFA; Puertos del estado. Data analysed refers to February 2017.

Global supply: EUMOFA; European Commission; Statistics Iceland; EUROPECHE; MundoAgropecuario; German Federal Office of Agriculture and Food; Spanish Ministry of Agriculture and Fisheries, Food and Environment; EU NEIGHBOURS; Marine Stewardship Council; Aquaculture Stewardship Council; <http://www.mexillondegalicia.org>; Norwegian Seafood Council.

Case studies: EUMOFA; Chilean National Fisheries and Aquaculture Service; <http://www.salmonchile.cl>; <http://www.industriaspesqueras.com/>; FAO; EUROSTAT.

Consumption: EUMOFA; EUROPANEL; FAO Fishstat; <http://fishbase.org/>.

Macroeconomic context: EUROSTAT; ECB; Chamber of Commerce of Forlì-Cesena, Italy; DPMA, France; ARVI, Spain; MABUX.

The underlying first-sales data is available in a separate Annex on the EUMOFA website. Analyses are made at aggregated (main commercial species) level.

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.

EUMOFA website is publicly available at the following address: www.eumofa.eu.

6. Endnotes

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

² Data refer to 28 government-owned ports. http://www.puertos.es/en-us/estadisticas/Pages/estadistica_mensual.aspx

³ <http://www.fao.org/fishery/species/3208/en> ;

http://www.seafish.org/media/Publications/SeafishSpeciesGuide_Redmullet_201401.pdf

⁴ <http://pdm-seafoodmag.com/guide/poissons/details/product/Rouget-barbet.html>

⁵ <http://www.fao.org/fishery/species/2102/en>

⁶ COUNCIL REGULATION (EU) 2017/127 of 20 January 2017 fixing for 2017 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters.

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0127&from=EN>

COUNCIL REGULATION (EU) 2016/1903 of 28 October 2016 fixing for 2017 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulation (EU) 2016/72.

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1903&from=EN>

COUNCIL REGULATION (EU) 2016/1252 of 28 July 2016 amending Regulations (EU) 2016/72 and (EU) 2015/2072 as regards certain fishing opportunities. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1252&from=EN>

COUNCIL REGULATION (EU) 2016/72 of 22 January 2016 fixing for 2016 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters, and amending Regulation (EU) 2015/104. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0072&from=EN>

COUNCIL REGULATION (EU) 2015/2072 of 17 November 2015 fixing for 2016 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Baltic Sea and amending Regulations (EU) No 1221/2014 and (EU) 2015/104.

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2072&from=EN>

⁷ <http://europeche.chil.me/post/success-story-for-european-fisheries-and-policies-137153>

⁸ http://europa.eu/rapid/press-release_IP-17-770_en.htm

⁹ <http://www.mundoagropecuario.com/produccion-pesquera-acuicola-alcanzo-284-mil-toneladas-2016-venezuela/>

¹⁰ <http://www.staticis.com/publications/news-archive/fisheries/total-catch-in-march-was-201-thousand-tonnes/>

¹¹

http://www.ble.de/SharedDocs/Downloads/DE/Fischerei/Fischwirtschaft/Monatsbericht2016/Monatsbericht16_12.pdf?__blob=publicationFile&v=2

¹² <http://www.mapama.gob.es/es/prensa/noticias/el-ministerio-de-agricultura-y-pesca-alimentaci%C3%B3n-y-medio-ambiente-cierra-un-acuerdo-de-intercambio-de-posibilidades-de-pesca-con-francia/tcm7-454704-16#>

¹³ <http://www.euneighbours.eu/en/south/stay-informed/news/eu-support-development-fisheries-algeria>

¹⁴ <https://www.msc.org/newsroom/news/danish-sandeel-norway-pout-and-sprat-fishery-achieve-msc-certification?fromsearch=1&isnewssearch=1>

¹⁵ http://www.asc-aqua.org/index.cfm?act=update_detail&uid=441&lng=1

¹⁶ <http://www.mexillondegalicia.org/?p=1706>

¹⁷ EUMOFA.

¹⁸ <https://en.seafood.no/news-and-media/news-archive/total-pelagic-exports-reach-nok-2.1-billion-in-q1-2017/>

¹⁹ Portal Comex CSS. <https://www.portalcomexccs.cl/>

²⁰ <http://www.sernapesca.cl>

²¹ <http://www.salmonchile.cl/en/exportaciones.php>

²²

http://www.industriaspesqueras.com/noticias/ultima_hora/53826/chile_apuesta_por_aumentar_el_consumo_de_pescado_en_1_kqper_capita_anual.html

²³ <http://www.fao.org/fishery/species/3016/en>

²⁴ <http://www.fao.org/fishery/species/3016/en>

²⁵ FAO Fishstat.

²⁶ <http://fishbase.org/Summary/SpeciesSummary.php?ID=1343&AT=saithe>

²⁷ <http://fishbase.org/Summary/SpeciesSummary.php?ID=1343&AT=saithe>

²⁸ <http://ec.europa.eu/eurostat/documents/3217494/7975592/KS-BJ-17-004-EN-N.pdf>