

SPECIES PROFILE: ATLANTIC COD



ATLANTIC COD (GADUS MORHUA)



BIOLOGY AND HABITAT

Species description (Read more)

The Atlantic cod belongs to the family of Gadidae.

Geographical distribution and habitat (Read more)

In the Western Atlantic Ocean, the Atlantic cod has a distribution from north of Cape Hatteras, North Carolina to around both coasts of Greenland and the Labrador Sea; in the Eastern Atlantic, it is found from the Bay of Biscay north to the Arctic Ocean, including the Baltic Sea, the North Sea, Sea of the Hebrides, areas around Iceland and the Barents Sea.

The major fishing grounds are in the North-East Atlantic Ocean within the Barents Sea, Icelandic waters and the North Sea.

RESOURCE, EXPLOITATION AND MANAGEMENT

Stock and resource status/conservation measures (Read more)

Minimum conservation size is established at 30 cm of total length in the fishing area Skagerrak and Kattegat, 35 cm in the Bay of Biscay area and 38 cm in the Baltic Sea.

Production methods and fishing gears (Read more)

The Atlantic cod is mainly caught with bottom trawls, longlines, gillnets and hand lines. Cod is also produced in aquaculture in net-cages.

Source: Information system on commercial designations



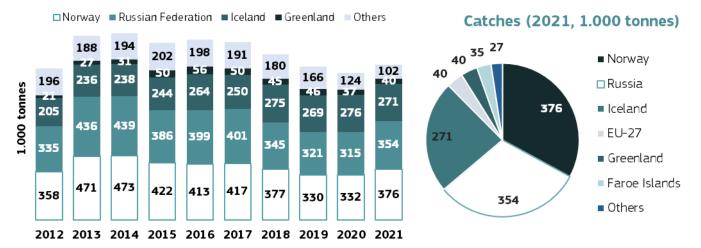
Atlantic cod



CATCHES

- The global catches of Atlantic cod reached around 1.142.591 tonnes in 2021, i.e. 1% of the total global catches. The largest catching countries of Atlantic cod are Norway, Russia and Iceland, accounting for 33%, 31% and 24% of the total global catches, respectively.
- In the last ten years (2012-2021), catches first have increased, to reach a peak in 2014, and then have decreased as a consequence of reduced quotas in the most important commercial Atlantic cod fishery which takes place in the Barents Sea.

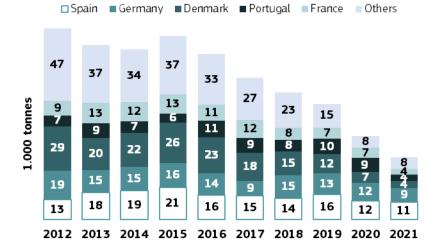
Evolution of world catches



Evolution of EU catches

In 2021, the EU provided **4%** of the global Atlantic cod catches (vs. 11% in 2012). The most important EU producers were Spain and Germany, and to lesser extent Denmark, Portugal and France (i.e. the largest quotas holders). The recent decrease in EU catches is related to the decrease of quotas for EU fleets in both the Barents Sea and the North Sea.

Source: FAO



Source: FAO



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AQUACULTURE PRODUCTION

- During the last decade, the leader of Atlantic cod production (Norway) decreased its production from more than 10.000 tonnes in 2012 to less than 500 tonnes in 2021.
- The EU has no aquaculture production of Atlantic cod (the UK was the only producer, but stopped producing).

Evolution of word aquaculture production, tonnes

Countries	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Norway	10.033	3.770	1.386	5	450	492	495	896	662	350
Iceland	893	482	310	74	59	29	29	4	0	0
Total	10.926	4.252	1.696	79	509	521	524	900	662	350

Source: FAO

Drop of cod production in Norway

In Norway, cod production, which was about 23.000 tonnes in 2010, dropped steadily to 5 tonnes in 2015, before slightly rebounding to 896 tonnes in 2019, 662 tonnes in 2020. The production has decreased again in 2021. The initial optimism for cod farming was based on the trust that the major production challenges were solved and that low quotas and corresponding high prices for wild cod would prevail. But none of these assumptions proved to be true. Because of these issues, the cod farming industry did not have the strength to resist to lower cod prices due to higher quotas for wild cod (source: NOFIMA).



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PROCESSING

- Within the EU, Atlantic cod is mainly used by the Portuguese salted-dried cod industry but is also widely used as raw material in other Member States to produce fish fillets in batter and fish fingers as well as prepared meals, fresh or frozen.
- Even though the Portuguese catches of Atlantic cod are low, Atlantic cod (salted and dried) became the main species in Portuguese seafood consumption. After Norway, Portugal is the wold's second largest producer of dried-salted cod, amounting to 42.270 tonnes in 2016. During the period 2013-2016, production has dropped by 25% in relation to reduced global catches of Atlantic cod.



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TRADE

• Combined nomenclature (Read more)

EU-27 trade of Cod products¹ (tonnes - 2022)

Product	EU exports	EU imports
Fresh or chilled cod "Gadus morhua"	2.024	55.747
Fresh or chilled cod from other species	224	80
Frozen cod "Gadus morhua"	22.202	102.956
Frozen cod from other species	300	15.000
Fresh or chilled fillets of cod from different species, including "Gadus morhua"	1.277	21.908
Frozen fillets of cod from different species, including "Gadus morhua"	13.019	78.181
Frozen meat	4.527	11.313
Fillets, dried, salted or in brine	204	16.197
Dried cod, slated or not (excl. fillets and offal)	3.040	71.966
Prepared-preserved cod, from different species, including "Gadus morhua"	6.782	3.152
Total	53.598	376.499

Source: EUROSTAT-COMEXT



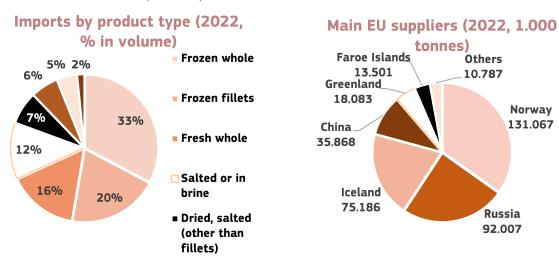
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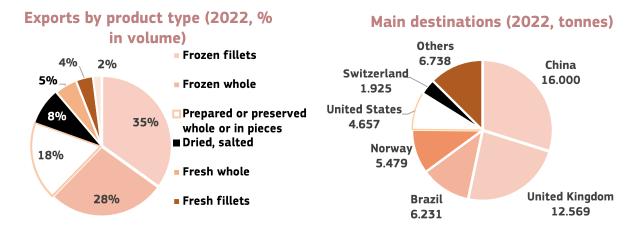
TRADE

EU-27 trade of Cod products (tonnes - 2022)

Extra-EU imports was circa 377.000 tonnes in 2022. Cod was imported to the EU, mainly frozen whole (31% of the EU imports from third countries), frozen fillets (21%) and fresh whole (15%). The main suppliers of the EU market were the largest producers, namely Norway, Russia and Iceland. Together, they supplied almost 80% of the EU imports in volume terms in 2022. The Netherlands were the main importer (34% of the EU imports), followed by Denmark and Sweden (18% and 15% respectively).



Extra-EU exports: EU exports of Atlantic cod were lower than imports (circa 53.600 tonnes in 2022). Cod was mostly exported frozen fillets (42% of EU exports to third countries) and to lesser extent frozen whole (24%). China, the United Kingdom and Brazil were the largest markets of EU exports. Netherlands, Denmark, Portugal and Poland were the main EU exporters. In 2022, together they exported 77% of the EU exports.



Source: EUROSTAT-COMEXT

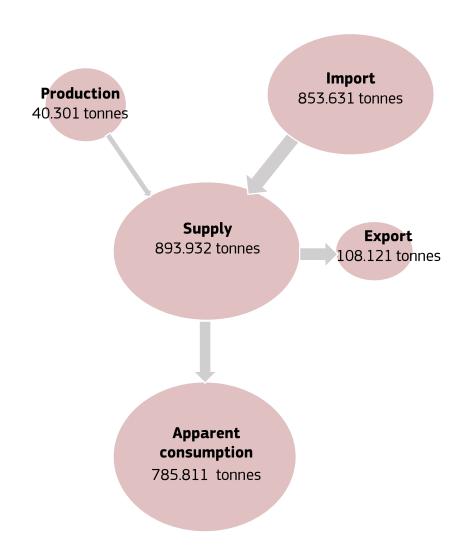


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Supply balance

EU supply balance (2021 1) — Tonnes of live weight equivalent 2



Source: FAO/ EUROSTAT-COMEXT

¹ Supply balance is provided for the year 2021 (trade data for 2021 were taken into account). Detailed trade data provided in the slide 5 concern the year 2022.

² The <u>conversion factors</u> were used to convert net weight of imports and exports of fishery and aquaculture products into live weight equivalents.



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PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

First-sale (fresh whole/gutted)

First-sale prices are provided for main EU producers: Spain, Denmark and France.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Spain	n.a.	2,70	2,89	3,32	3,72	3,71	2,90	3,45	4,21	4,02	EUMOFA
Germany	n.a.	2,25	3,09	2,69	EUMOFA						
Denmark	2,41	2,44	2,74	3,18	3,35	3,74	3,97	4,29	5,12	4,70	EUMOFA

^(*) From January to November 2023

Wholesale

Wholesale prices are reported for Mercamadrid (Madrid, Spain) and Rungis (Paris, France).

Most frequent price	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Spain: Cod filet, fresh	10,2	9,72	9,84	9,27	9,05	10,13	9,61	10,13	10,75	9,67	Mercamadrid
Spain: Cod, whole, fresh	6,26	7,39	7,38	7,02	7,58	8,14	8,90	8,47	9,71	9,66	Mercamadrid
Spain: Cod, salted	9,18	10,34	10,5	10,5	10,73	10,49	9,98	11,28	11,81	11,79	Mercamadrid
Spain: Cod, Head off, 2-3 kg, imported	6,57	6,62	8,12	8,73	8,46	8,34	7,99	8,19	9,22	8,84	Mercamadrid
Cod loins, "Dos de Cabillaud"	11,99	12,43	11,91	12,37	14,25	15,33	14,12	15,09	17,30	17,27	Rungis
Cod, fillets, 200-300 gr, France	8,05	8,13	10,66	10,51	10,36	11,29	11,12	11,89	14,02	14,30	Rungis

^(*) From January to November 2023

Retail/consumption

Retail prices refer to France and Spain.

Most frequent price	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Cod loins, " <i>Dos de</i> <i>Cabillaud</i> "	17,28	18,60	19,01	18,99	19,26	20,57	20,18	20,20	24,62	25,20	Rungis
Spain - fresh cod	7,35	7,52	7,98	8,52	8,50	9,13	9,39	8,40	8,52	n.a.	MAPA
Spain - frozen cod	7,64	8,23	8,25	8,62	8,90	9,60	10,29	10,54	11,71	n.a.	MAPA



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PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

Import (frozen fillets)

Import prices are provided for the Netherlands, Denmark and Sweden, which are the main cod importers in the EU.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023* Source
Netherlands	4,01	4,71	5,02	5,07	5,22	6,06	6,33	5,82	7,20	7,71 EUMOFA
Denmark	4,13	4,93	4,79	4,89	4,74	5,75	6,13	5,72	7,18	6,97 EUMOFA
Sweden	4,29	5,30	5,78	5,73	6,31	7,45	7,02	6,77	8,13	8,75 EUMOFA

^(*) From January to August 2023

Export (frozen fillets)

Export prices refer to Portugal, Poland and Denmark, which are the main cod exporters in the EU.

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Portugal	5,82	7,34	7,16	5,08	3,70	4,22	7,89	7,97	9,85	11,69	EUMOFA
Poland	4,23	4,66	5,13	4,57	4,05	3,41	4,92	3,66	7,92	10,13	EUMOFA
Denmark	5,17	6,67	4,34	3,36	7,56	6,89	4,24	4,48	6,67	7,44	EUMOFA

^(*) From January to August 2023



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MARKETING

- National lists of commercial designations (Read more)
- Information system on commercial designations and scientific names in all EU languages (Read more)
- Applicable marketing standards (Read more)
- In the EU, there is one name protected under **Traditional Specialities Guaranteed** (TSG) for cod: TSG "Bacalhau de Cura Tradicional Portuguesa" in Portugal.

CONSUMPTION

- Third most consumed species in the EU after tuna and salmon (source: <u>The EU Fish Market</u> <u>- 2023 edition</u>, EUMOFA)
- Apparent consumption per capita in 2021:
 1,75 kg live weight equivalent (source: The EU Fish Market 2023 edition, EUMOFA)
- Nutritional value (Cod, nutrition values per serving 100g) (Read more)

Nutritional value	Cod
kilo calories (kcal)	82
Total fat (g)	0,67
Saturates (g)	0,131
Carbohydrates (g)	0
Sugars (g)	0
Protein (g)	17,81
Salt (mg)	135