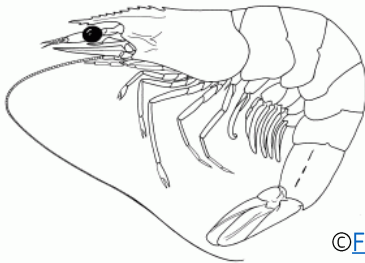
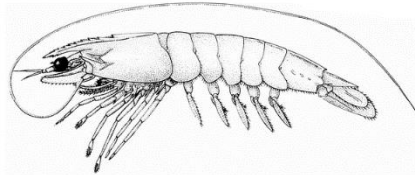




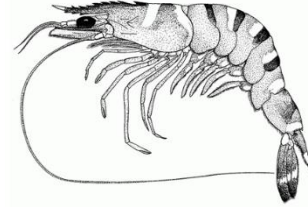
SHRIMP PENAEUS



©FAO

Penaeus vannamei (Whiteleg shrimp)

©FAO

Penaeus brasiliensis (King prawn)

©FAO

Penaeus monodon (Giant tiger prawn)

BIOLOGY AND HABITAT

- **Species description (Read more [\(1\)](#) [\(2\)](#) [\(3\)](#))**

The appellation shrimp covers a wide range of decapod crustaceans. The main commercial species belong to the Penaeidae family. The Penaeidae family includes the most significant farmed crustacean species worldwide.

The main species caught are whiteleg shrimp, giant tiger prawn, akiami paste shrimp, Southern rough shrimp, fleshy prawn, and banana prawn.

- **Geographical distribution and habitat (Read more [\(1\)](#) [\(2\)](#) [\(3\)](#))**

Even if most shrimps are marine, they can also be found in freshwater. Shrimps are widespread, they can be found in all marine areas, from tropics to polar regions.

RESOURCE, EXPLOITATION AND MANAGEMENT

- **Stock and resource status/conservation measures (Read more [\(1\)](#) [\(2\)](#) [\(3\)](#))**

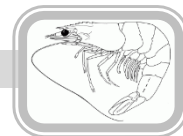
A TAC for *Penaeus* shrimps in French Guiana (Outermost region) waters is established.

- **Production methods and fishing gears (Read more [\(1\)](#) [\(2\)](#) [\(3\)](#))**

Shrimps are either caught in the wild or farmed. The main fishing gears used are otter trawls, bottom pair trawl, gillnets and similar nets, pots and traps and seines. For shrimp farming, there are three growing culture practices: extensive, semi-intensive and intensive, which represent low, medium and high stocking densities, respectively.

Source: Information system on commercial designations for [whiteleg shrimp](#), [king prawn](#) and [giant tiger prawn](#)

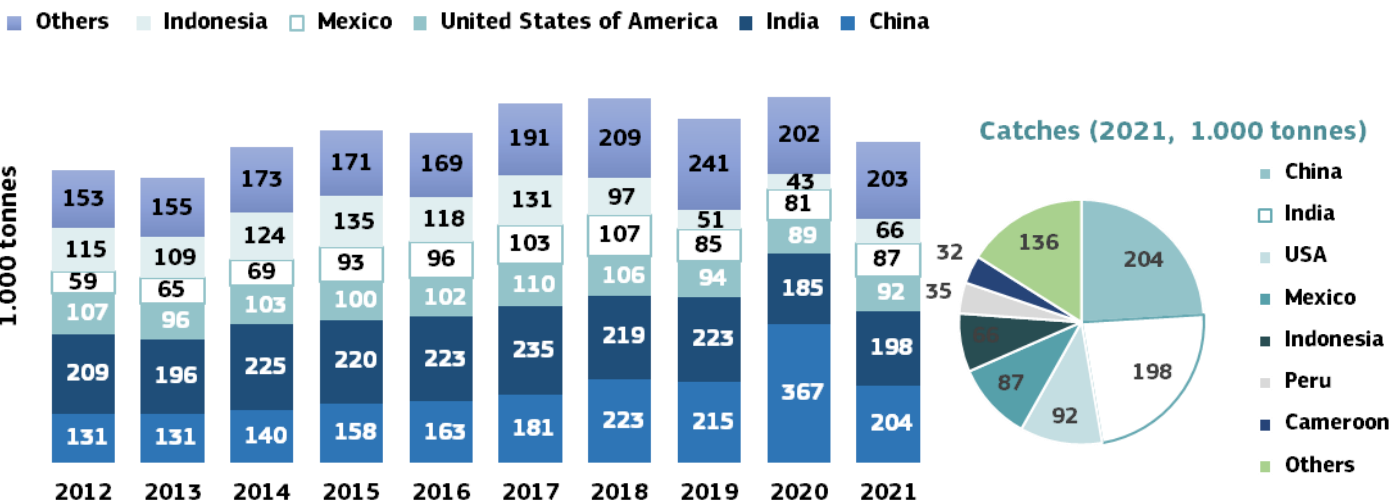
Shrimp *Penaeus*



CATCHES

Evolution of world catches

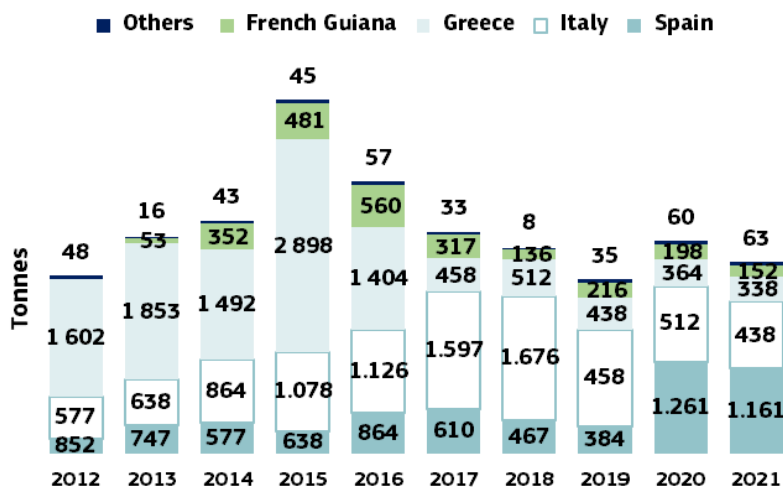
- Global catches of *Penaeus* shrimp (all species), amounted to 849.457 tonnes in 2021. The main species caught were: Fleishy prawn (*Penaeus chinensis*) (25% of the global catches and mostly caught by China), Giant tiger prawn (*Penaeus monodon*) (22% and mostly caught by India), and not identified species reported under the category *Penaeus spp.* (20%).
- Over the period 2012-2021, the global production of *Penaeus* shrimps has increased by 10%, attributable to fleshy prawn (+58%), blue shrimp (+66%), and yellowleg shrimp (+134%).



Source: FAO

Evolution of EU catches

- EU catches of *Penaeus* shrimp species amounted to 2.624 tonnes, i.e. less than 1% of the global catches in 2021. EU catches are composed of 52% of caramote prawn (*Melicertus kerathurus*, mostly caught by Italy, Greece and Spain) and 45% of not specified *Penaeus* shrimp (mostly caught by Spain). Since 2012, EU catches of *Penaeus* shrimp have slightly increased by 8%, with strong fluctuations over the decade. French Guiana, which is a French Outermost Region was the fourth producer at EU level (6%). Catches of the French Guiana have experienced a significant decrease since the mid 2000s.



Source: FAO

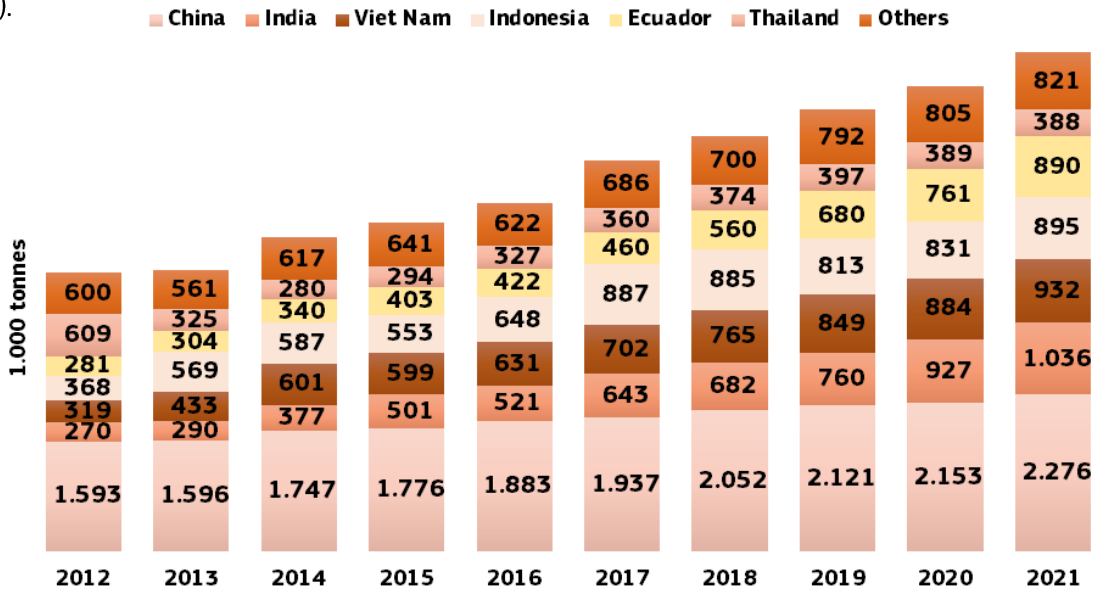
Shrimp *Penaeus*



AQUACULTURE PRODUCTION

Evolution of world production

The world aquaculture of *Penaeus* shrimps amounted to around 7,24 million tonnes in 2021. The main species were whiteleg shrimp (*Penaeus vannamei*) (87% of global production of *Penaeus* shrimps) and giant tiger prawn (*Penaeus monodon*) (10%). Production of whiteleg shrimp has increased globally, over the last decade (2012-2021), by 101%, while catches of giant tiger prawn have been relatively stable (4% over the same period). China is by far the main producer, providing 31% of the global production in 2021, followed by India (14%), Vietnam (13%) and Indonesia (12%). Over the period between 2011 and 2020, the global production has increased by 79%, related to the significant increase of production in Asian countries (India, Vietnam, Indonesia and to lesser extent China).

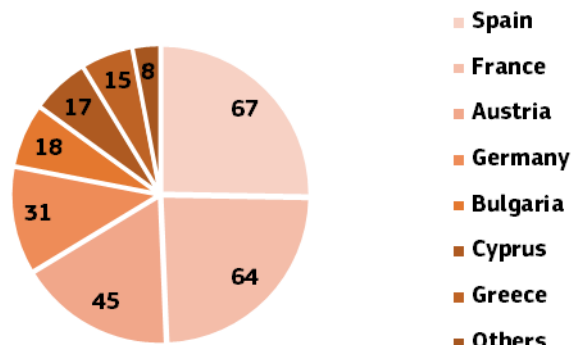


Source: FAO

Evolution of EU production

EU aquaculture production of *Penaeus* shrimps is quite limited, with 265 tonnes in 2021. France, Germany and Cyprus provided almost all the EU production. The main species produced in the EU are: *whiteleg shrimp* (142 tonnes), *kuruma prawn* (69 tonnes), and *giant tiger prawn* (35 tonnes)

Production (2021, Tonnes)



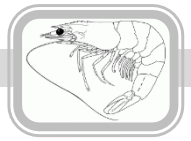
Source: FAO

Shrimp *Penaeus*



PROCESSING

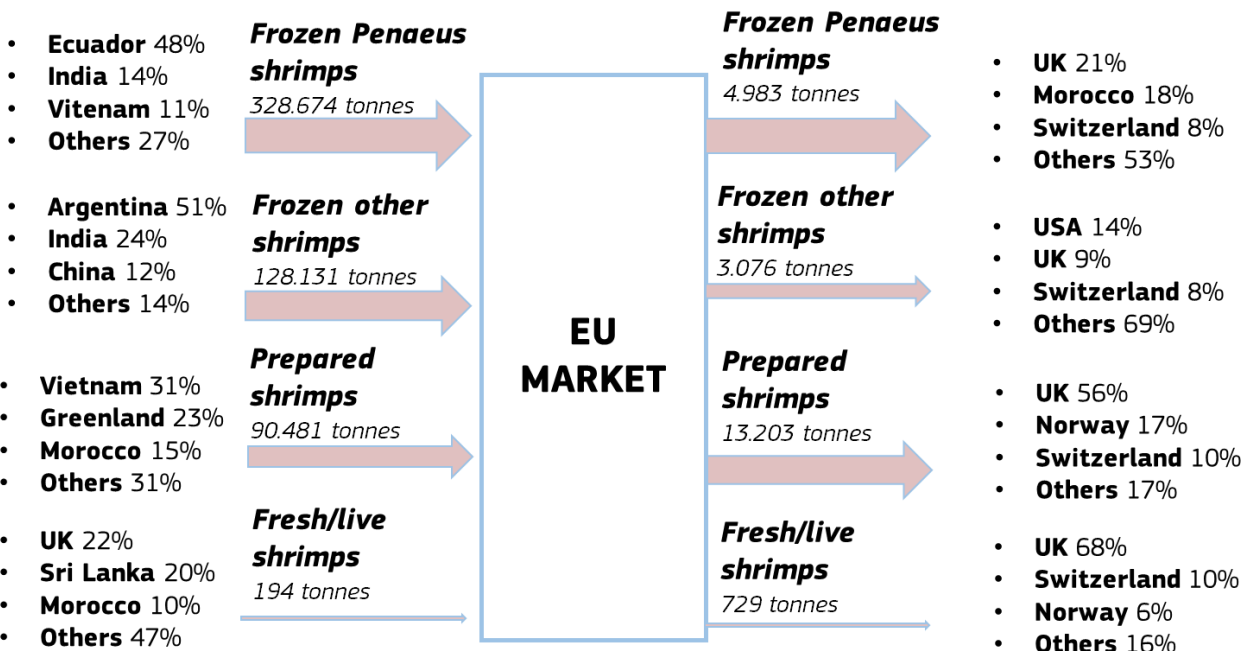
- Warmwater shrimps are mostly imported whole and frozen to be cooked and sold as chilled products (whether head-on or head-off and sometimes peeled). A share of these imports is also sold through the frozen products market. There are different segment types in the shrimp cooking market, based on the shrimp's size, presentation and preservation, and certification.
- There is no statistic on the EU shrimp cooking industry, except some figures on the French market: France cooked 50.000 tonnes of *Penaeus* shrimps in 2015 (source: [Cooked shrimp in France](#), Price structure in the supply chain, 2017, EUMOFA)

Shrimp *Penaeus*

TRADE

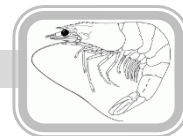
- Combined nomenclature: Read more for [whiteleg shrim](#), [king prawn](#), [giant tiger prawn](#)

EU-27 trade of shrimp products, excluding cold-water shrimps (except for prepared and preserved products where coldwater shrimps are included) (2022, tonnes)



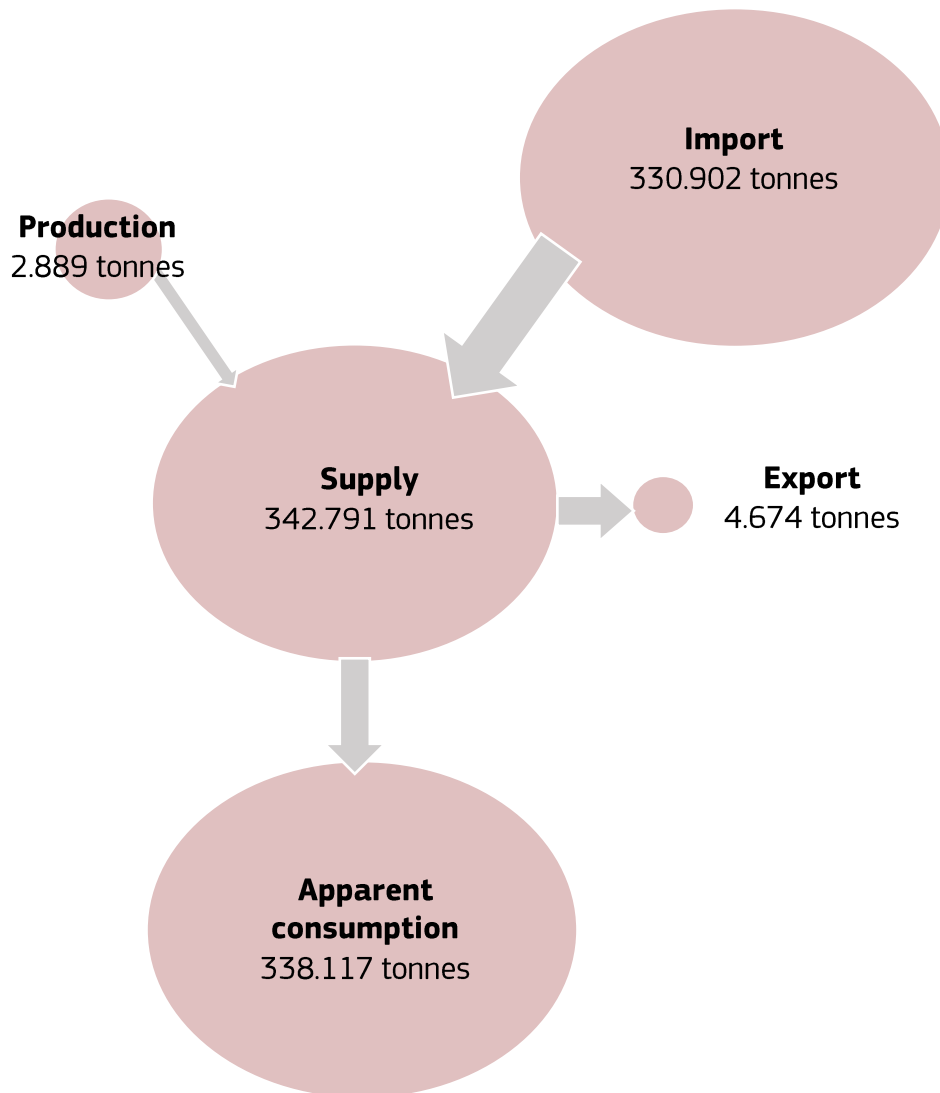
- The EU shrimp market is mostly dependent on imports. Shrimps are mostly imported raw and frozen to be cooked near to consumption areas.
- EU imports of frozen *Penaeus* shrimp are under an Autonomous Tariff Quota (ATQ) to support the EU cooking sector. The annual quota for the period 2021-2023 is 48.000 tonnes.
- In 2022, extra-EU imports reached:
 - 328.674 tonnes of frozen *Penaeus* shrimps**,
 - 128.131 tonnes of other frozen shrimps,
 - 90.481 tonnes of prepared shrimps. Main suppliers include Vietnam, Greenland and Morocco. Imports from Morocco correspond most likely to shrimps caught by the EU fleet, sent to Morocco to be peeled in specialised units and then re-exported to the EU market.
 - 194 tonnes of fresh/chilled shrimps.
- Extra-EU exports remained limited, with **4.983 tonnes of frozen *Penaeus* shrimps**, 3.076 tonnes of frozen other shrimps, 13.203 tonnes of prepared shrimps and 729 tonnes of fresh/chilled shrimps.

Shrimp Penaeus



Supply balance

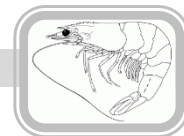
EU supply balance (2021¹) – Tonnes of live weight equivalent² – Shrimps Penaeus



Source: FAO/ EUROSTAT-COMEXT

¹ Supply balance is provided for the year 2020 (trade data for 2020 were taken into account). Detailed trade data provided in the slides 5 and 6 concern the year 2021.

² The [conversion factors](#) were used to convert net weight of imports and exports of fishery and aquaculture products into live weight equivalents.

Shrimp *Penaeus*

PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

First-sale (fresh)

First-sale prices are provided for Italy, for the main shrimp species landed (i.e. caramote prawn).

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Italy, fresh, Caramote prawn	14,85	15,27	14,42	15,27	12,30	11,51	12,91	13,91	16,20	13,64	13,16	EUMOFA

* From January to November 2023

Retail/consumption (cooked, chilled)

Retail prices refer to France, which is among the largest EU markets for chilled cooked shrimps.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	Source
France	12,5	13,5	13,1	13,9	14,6	14,1	13,9	14	13,6	FranceAgriMer

Import (frozen *Penaeus* shrimps)

Import prices are provided for Spain, France and Italy, major importers of frozen shrimps from third countries.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Spain	5,73	6,34	6,28	6,60	6,41	5,67	5,63	4,82	5,24	5,86	5,30	EUMOFA
France	6,43	7,25	6,93	7,22	7,57	6,83	6,57	6,08	6,34	7,54	6,37	EUMOFA
Italy	5,98	6,90	6,49	6,99	7,07	6,11	5,99	5,46	5,98	6,72	5,71	EUMOFA

* From January to August 2023

Export (frozen *Penaeus* shrimps)

Export prices refer to Spain, the Netherlands and Germany major EU exporters outside the EU.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	Source
Spain	5,64	8,70	9,80	6,30	8,75	6,80	6,73	6,87	7,08	7,95	8,50	EUMOFA
Netherlands	7,25	8,56	9,27	7,77	8,69	7,72	8,28	8,67	7,96	8,21	7,30	EUMOFA
Germany	8,83	11,22	10,56	9,49	9,53	9,60	8,47	10,00	8,02	9,67	9,05	EUMOFA

* From January to August 2023

Shrimp *Penaeus*

MARKETING

- National lists of commercial designations ([Read more](#))
- Information system on commercial designations and scientific names in all EU languages (Read more [\(1\)](#) [\(2\)](#) [\(3\)](#))

CONSUMPTION

- Nutritional value (Shrimps, cooked meat, values per 100 g – source : NUTRAQUA/AQUIMER)

Nutritional value	King prawn - <i>Penaeus brasiliensis</i>	Giant tiger prawn - <i>Penaeus monodon</i>	Whiteleg shrimp - <i>Penaeus vannamei</i>
kilo calories (kcal)	113	98	94
Kilojoule (kJ)	480	418	401
Water (g)	71,2	73,5	73,9
Ashes (g)	1,3	2,3	2,9
Proteins (g)	26,6	23,4	22,6
Carbohydrates (g)	0,2	0,4	0,3
Lipids (g)	0,6	0,4	0,3
Cholesterol (mv)	237,1	204,5	181,1
Omega 6 (mg)	76	122	119
Omega 3 (mg)	197	145	177
EPA (mg)	103	50	86
DHA (mg)	68	84	77