

## Aquaculture in the EU

Aquaculture means the rearing of aquatic animals and the cultivation of aquatic plants and algae. While, at global level, this industry has undergone significant growth for several decades, in the EU, aquaculture production, focused on the farming of fish and shellfish for human consumption, is rather stagnating. Subject to diverse EU policies, such as environmental protection or animal and consumer health, the development of aquaculture largely depends on measures taken by national authorities. The EU common fisheries policy requests Member States to put in place a strategic plan for sustainable aquaculture, which can be fostered with the European Maritime and Fisheries Fund.

### Aquaculture: what is it about?

Aquaculture is to water what agriculture is to land: the farming of aquatic living organisms, whether animals or plants, using techniques to increase their production beyond the productivity of the natural environment. It also implies ownership of the farmed aquatic organisms throughout the rearing and culture stage, up to harvesting. Although aquaculture, notably algae cultivation, may also provide raw material for different industrial purposes (such as cosmetics or biofuels), aquatic farming activities are mainly aimed at producing food for human consumption. A very fast growing sector at [global level](#), aquaculture nowadays contributes half of the annual average [consumption of fish per capita in the world](#), and it is poised to continue this growth and overtake capture fisheries as a supplier of fish for food.

### Main features of EU aquaculture

EU aquaculture is mainly about rearing fish and shellfish, with production having levelled out at between 1.2 and 1.3 million tonnes annually since the first half of the 2000s. Today, this represents only about 1.7 % of the global tonnage of aquaculture in the world. Three quarters of EU aquaculture products, in both volume and tonnage, emanate from five Member States (Spain, Greece, France, Italy, and the United Kingdom), in which aquaculture covers a range of diverse farming activities of fish [species](#) in freshwater (notably trout, carp and sturgeon) or in sea water (such as salmon, sea bass, sea bream and turbot), and of shellfish (mainly mussels, oysters and clams). Farming practices also vary significantly, from rearing low to high densities of fish, which can originate from hatcheries after artificial reproduction of genetically selected breeders, as well as from collection of specimens in the wild. Rearing takes place in a variety of [systems](#), such as earthen ponds open to nature, floating cages or indoor tanks with recirculated and fully controlled water. Aquatic animals are grown on natural food or on complex compound feed, specifically designed depending on the species, the fish age or the intended market.

### An activity subject to diverse policies

Aquaculture is covered by numerous EU policies, some applicable to any industry (e.g. competition and trade), others for more specific aspects.

The farming of aquatic animals requires access to water of good, if not excellent, quality, but it also implies the need to comply with the EU's high levels of environmental protection, notably with Member States' measures to implement the water protection requirements established in the [Water Framework Directive](#) and the [Marine Strategy Framework Directive](#). Aquaculture activities must also comply in particular with environmental [impact assessment](#) requirements and [nature protection](#) needs, notably under the Birds and Habitats Directives, as well as with specific EU [rules on alien species](#), if they entail the rearing of a species that is not naturally present in the EU, in order to contribute to biodiversity protection.

As a food producing and animal rearing business, fish and shellfish farming also has to comply with the high levels of [animal health](#) and welfare standards and with [food safety](#) requirements, such as rules governing the



prevention and control of transmissible [diseases in aquatic animals](#), measures applicable to [animal feed](#) and its components, and other veterinary issues (e.g. control and [inspections](#), and use of veterinary [medicines](#) including fish vaccines). Similar to agriculture when considering its production processes, aquaculture is also covered by the EU rules on [organic](#) production, as well as other types of voluntary labels under the EU agricultural [quality product policy](#) (e.g. protected geographical indication and protected designation of origin). However, in producing fish and shellfish, aquaculture is, from a market perspective, part of the fish value-chain. As such, the scope of the EU common fisheries policy (CFP) covers aquaculture (and the processing and marketing of aquaculture products) 'in relation to [measures on markets](#) and financial measures in support of the implementation of the CFP'. In this latter regard, the European Maritime and Fisheries Fund ([EMFF](#)) allows the fostering of aquaculture through possible financing of numerous measures (for innovation, productive investments, new aquaculture farmers, environmental services, organic aquaculture, training, networking...)

Most responsibilities framing the development of aquaculture activities around the EU lie with public authorities at national level. However, the [CFP Basic Regulation](#) requires Member States to establish a [multiannual national plan](#) for the sustainable development of aquaculture on their territory, including as part of the prerequisites for Member States to receive [EU financial support](#) under the EMFF. Furthermore, it establishes a new consultative body at EU level, the aquaculture advisory council ([AAC](#)), to be set up by interested parties from the sector and other groups of interests. The CFP also envisages exchanges of information and best practices among Member States through an [open method of coordination](#), a voluntary process to be [facilitated by the European Commission](#). The EU is also a major source of funding for [research and innovation](#) in aquaculture (notably under Horizon 2020).

### Challenges and perspectives for EU aquaculture

To develop, EU aquaculture may take advantage of numerous opportunities such as the prospects for global development in this industry, the increasing demand for fish products, the high level of environmental sustainability and the quality of EU products, and the know-how and continuous search for innovation of European aquaculture enterprises. However, notwithstanding external pressures (e.g. climate change, diseases) as well as market and economic challenges (e.g. competition with imports, difficulties for access to finance), the EU aquaculture industry also faces difficulties in terms of [regulatory](#) management and governance (e.g. licensing requirements and possibilities for access to space and water), possibly complicated by societal challenges (lack of information on aquaculture activities, 'not in my backyard' opposition at local level, demand for further improvement in terms of environmental footprint or animal welfare).

The aquaculture growth expectations envisaged in the [first EU strategy](#) for sustainable development of aquaculture launched in 2002 did not materialise, although trends and [economic performance](#) vary depending on the sector concerned. The EU financial support provided to promote aquaculture under the previous European fisheries funds in 2007-2013 was also criticised by the [European Court of Auditors](#).

Started in 2014, the new CFP aims, among other things, to give new impetus to aquaculture in the EU. The Commission projection for EU farmed fish and shellfish production in 2020, based on its [summary of national strategic plans](#) for aquaculture, would represent an increase in volume of about 25 % by then – up to 1.5 million tonnes a year. Promotion of sustainable aquaculture activities would also benefit from some €1.2 billion of support under the EMFF by the end of the financing period. However, the programming process and the start of effective use of available EMFF support has suffered from delays. The establishment of the aquaculture advisory council also took over two years before it could start working, and it has not yet been in a position to make recommendations on issues of concern for aquaculture. The issuing of new Commission [guidance documents](#) on some environmental directives in relation to aquaculture was also finalised two years later than announced in the [2013 communication](#) on strategic guidelines for EU aquaculture. The results of the open method of coordination among Member States, notably regarding licensing requirements and allocation of space to aquaculture, have not yet been assessed, but Member States have been [invited to report](#) before the end of 2017, on a voluntary basis, on progress made with regard to their national strategic plans for aquaculture.

The European Parliament took a position on aquaculture in [2010](#), and subsequently in 2013-2014 when reforming the CFP. The Committee on Fisheries has now decided to review the [situation of aquaculture](#) and is preparing an own-initiative report 'Towards a sustainable and competitive European Aquaculture sector: current status and future challenges' ([2017/2118\(INI\)](#); rapporteur Carlos Iturgaiz, EPP, Spain).