[Fishermen are losing to fish farms. Aquaculture is outpacing fishing]

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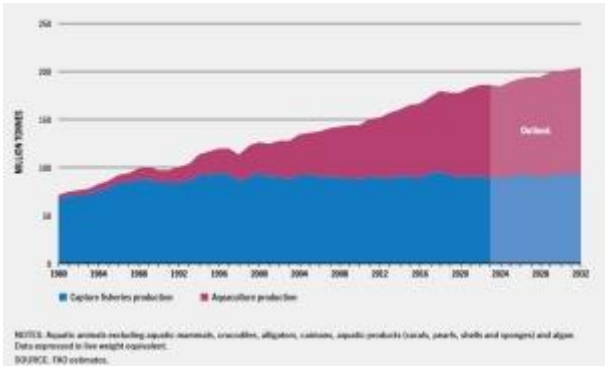
Global fish and aquaculture production has set a new record, with aquaculture production exceeding fish catches for the first time. In 2022, fisheries and aquaculture production reached a record level of 223.2 million tons. The value of production was estimated at USD 472 billion. This represented about 15% of animal protein supplies, reports the FAO in the latest "The State of World Fisheries and Aquaculture 2024".

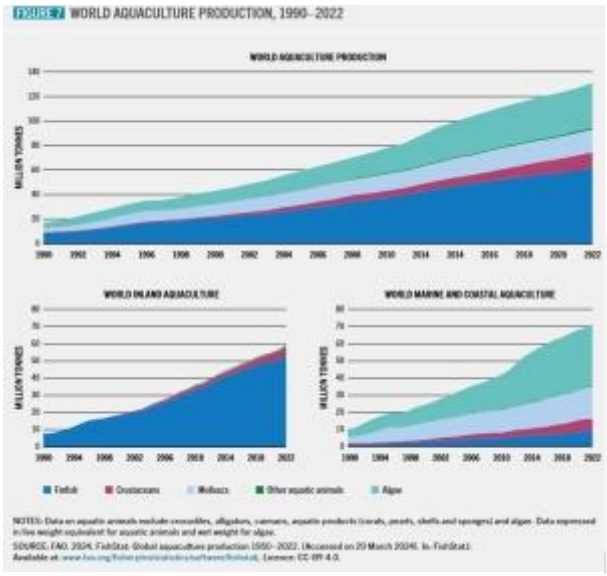
However, it is not only about increasing the production of fish farms but also about the healthy nutrition of fish and other living organisms that will end up on consumer tables. Aquaculture production has reached over 50% of the share of fish production in several Asian and African countries. Changes in the structure of supply have occurred because fisheries catches have remained largely unchanged for decades. Meanwhile, supply from fish and seafood farms and other types of farming increased by 6.6% from 2020. As a result, more than 57% of products produced in water bodies were suitable for direct human consumption, according to a new report published by the Food and Agriculture Organization of the United Nations.

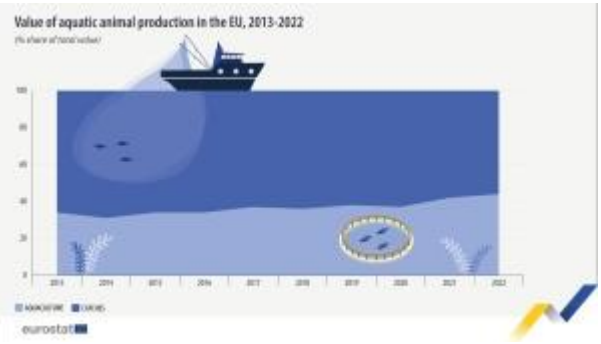


We are releasing more fish and seafood from fish farms

For the first time in the history of food production, we are raising more fish and seafood than we are catching. At the same time, wild fish stocks are being overfished in the seas and oceans. Fish stocks are becoming increasingly rare. This was highlighted in the 2024 edition of the FAO report "The State of World Fisheries and Aquaculture 2024" (SOFIA).

The report notes that in 2022, global production reached a record 223.2 million tonnes, with the share of resources obtained from aquaculture now accounting for 51% of this total. Specifically, 185.4 million tonnes of fish and other live products and 37.8 million tonnes of algae were produced.
The FAO emphasizes the need for further transformational and adaptive actions to increase the efficiency, inclusiveness, resilience and sustainability of food systems in the aquatic environment. – This is crucial to combating food insecurity, reducing poverty and promoting sustainable management, said FAO Director-General QU Dongyu in a statement following the release of the SOFIA report, emphasising: "This is why FAO is advocating what it calls the Blue Transformation, aimed at achieving better production, nutrition, environment and livelihoods for all, leaving no one behind."





Record aquaculture. Is it healthier?
In 2022, aquaculture production exceeded open water catches for the first time. Data from this year show that global aquaculture production reached a record level of 130.9 million tons. Of this amount, 94.4 million tons are fish and other types of aquatic animals. A number of Asian countries dominate aquaculture production. China is in the leading position. Then Indonesia, India, Vietnam, Bangladesh, the Philippines, South Korea. From Europe, Norway operates on the market, from Africa – Egypt, from Latin America – Chile. These countries account for over 89.8% of total production.
FAO supports the Blue Transformation initiative, which aims to increase sustainable aquaculture by 35% by 2030. It is also about improving the sustainable management of fisheries and developing aquatic food value chains. Actions for the production of environmentally friendly fish and seafood are still a difficult postulate to achieve.
The European Food Safety Authority (EFSA) recently assessed the status of intensive fish farming and the safety of commonly consumed species in the European Union and the European Economic Area. This action is due to the fact that there are cases of farmed fish carrying parasites. It is suggested that there are cases of farms from which products can infect humans.

There are still farms where parasites such as Anisakis have been identified, which pose a health risk to the consumer. These parasites are found in fish farmed in open cages at sea or in flow-through ponds. They can occur in European sea bass, bluefin tuna, cod and tench.

The problems associated with fish farming go beyond food safety and include issues related to environmental sustainability.

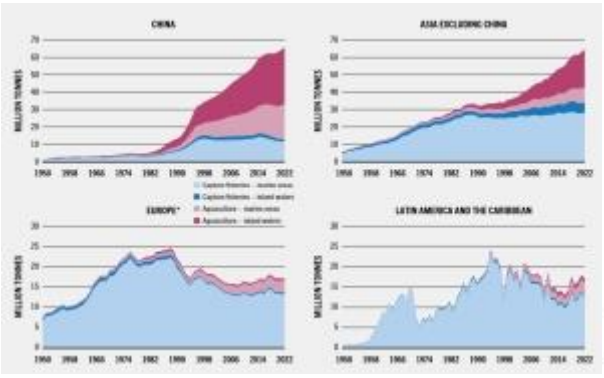
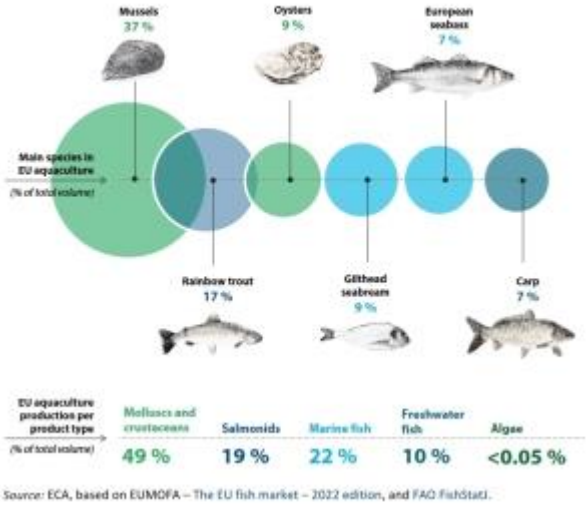


Figure 3 – Main aquaculture species farmed in the EU, 2020



Source: ECA, based on EUMOFA – The EU fish market – 2022 edition, and FAO FishStatJ.

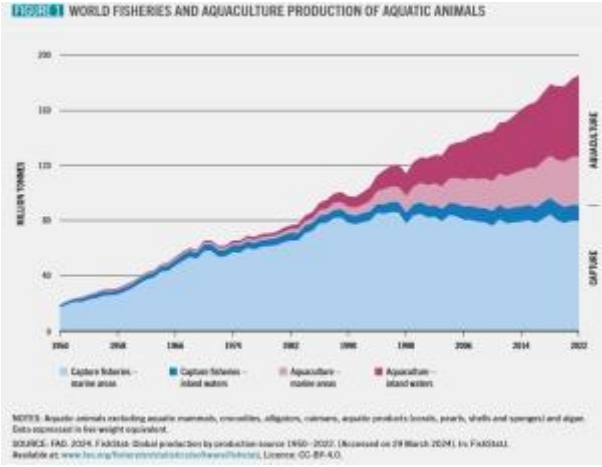
Fish from the Atlantic and Mediterranean Seas in Exhaustion

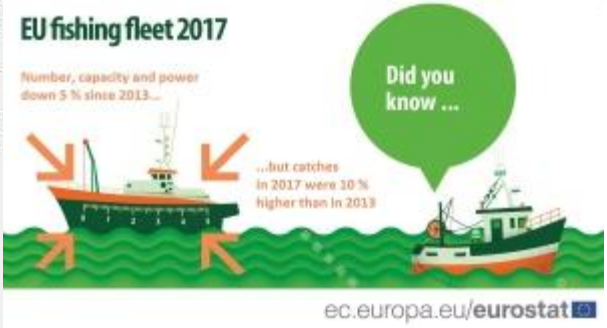
The report states that the Mediterranean Sea (like the Baltic Sea – note by MG) is struggling with serious overfishing. It is estimated that 58% of its fish stocks are overfished. The Mediterranean Sea is considered the second most overfished sea in the world. FAO estimates that globally, we are dealing with 37.7% overfishing of the world's resources. Other disturbances of the marine ecosystem, and above all climate change, are also contributing to the reduction of stocks of living organisms in the oceans.

European demand for seafood is extremely high. The average European consumes around 26 kg of fish per year. The species of fish most affected by overfishing are hake, sardines, purple and pink shrimp, and red mullet. The population situation is worsened by illegal, unreported and unregulated (IUU) fishing, which threatens marine ecosystems and local economies, warns the FAO.

According to the FAO, the climate crisis is also threatening half of the world's fish production, with serious consequences for small fishing communities. Ocean warming is reducing fish populations, and some tropical areas could potentially decline by 40% by 2100, experts warn.

In the Mediterranean, climate change is causing effects such as the tropicalization of the sea, in which native species are being displaced by rising temperatures, creating space for invasive species (almost 1,000 new invasive species, including 126 fish species, have entered the Mediterranean, leading to a reduction of native species by up to 40% in some areas due to competition or predation). Other concerns include jellyfish blooms caused by factors such as marine eutrophication and declining fish stocks, and reduced CO2 storage capacity due to the decline of Posidonia oceanica. The northwestern Atlantic produced an average of 1.7 million tonnes (live-weight equivalent) of fish and other aquatic life per year between 2017 and 2021. Today, catches continue to decline since a peak of 4.6 million tonnes in the late 1960s. The northeastern Atlantic was the fourth most productive area in 2021, with 7.9 million tonnes caught this year. This is down about 0.4 million tonnes from 2019 and 1.4 million tonnes from 2017. By comparison, this area produced a peak of 13 million tonnes in 1976.





Aquaculture 2032 – 111 million tons of seafood

Global fish and aquaculture production is expected to continue to grow. It is forecasted to reach 205 million tons (live weight equivalent) in 2032. This means an increase in supplies to our tables of 19 million tons, or about 10% increase compared to 2022. But this pace will not come close to the period 2012-2022, when the increase was 22%, which translated into an additional 33 million tons of seafood. In the coming years, most of the growth in production will come from aquaculture, which is expected to exceed 100 million tonnes for the first time in 2027, reaching 111 million tonnes in 2032, with an overall increase of 17% or almost 16 million tonnes compared to production in 2022.

Continued growth in aquaculture production is forecast by the FAO for the period 2022-2032. To achieve this result, production must grow at an average annual growth rate of 1.6%. This is significantly less than half the 4% growth rate observed in 2012-2022.

This reduced rate of growth will be the result of several factors. According to the FAO, future increases will depend on the implementation and enforcement of environmental regulations. The critical situation may result from the reduced availability of water resources. It is also about selecting appropriate aquaculture sites. The growing impact of diseases in farms run by overly intensive aquaculture may also pose a threat to the growth of aquaculture production. It is therefore also about the healthy nutrition of fish and other living organisms that end up on the consumer's table.