Tuna fishing under pressure as global demand increases

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The rising global demand for tuna has placed it under significant threat of overfishing. World Tuna Day, 2 May, was established by the United Nations (UN) to highlight the importance of responsible and sustainable tuna fishing.



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Tuna is one of the most popular fish species consumed worldwide, due to its affordability, availability, and versatility – especially in canned form. This saltwater fish is also one of the most commercially valuable fish globally, with significant economic importance for developing and developed countries.

While there are about 40 species, most of the tuna caught for consumption comes from the Pacific Ocean, followed by the Indian Ocean and the Atlantic, with vessels from more than 85 countries involved in fishing activities.

The global market

Four species comprise most of the global tuna market — skipjack, yellowfin, bigeye, and albacore. Skipjack, while the smallest of the tuna species at 40–80cm, has significant economic value, especially in the canning industry. It is the most

fished, <u>accounting for more than 50%</u> of the tuna caught annually with the US the biggest consumer of skipjack in the world. Despite this, skipjack remains an abundant species.

The consumer demand for tuna continues to rise, putting tuna fisheries under pressure. From January to September 2024, the world trade of tuna, which includes fresh, frozen and canned, 3.07 million tonnes and valued at USD 11.86 billion. This is according to the United Nations Food and Agricultural Organization (FAO), which says the figures represent increases of 20% and 1.28% respectively compared to the same period in 2023.

The threats

The UN explains that common unsustainable practices include overfishing and illegal, unreported, and unregulated (IUU) fishing which depletes tuna stocks, and undermines management and conservation efforts.

The increasing demand coupled with high prices in sushi markets has also driven the refinement of tuna-catching techniques with the result that certain species are disappearing, adds the Worldwide Fund for Nature (WWF).

Tuna has significant ecological value, contributing to healthy oceans. By predating on other fish species, they keep populations balanced. They also move nutrients between the bottom of the sea and the surface, which fertilises the surface and allows plankton to thrive.

Overfishing leads to population decline and disrupts the balance of marine life — the populations of smaller species balloon, impacting marine habitats like coral reefs. Fishermen in coastal communities, who rely on tuna for their livelihood, are also affected. They must go further out at sea looking for more stock, increasing their risk and costs.

Protecting tuna stocks

The global non-profit, the <u>Marine Stewardship Council (MSC)</u> admits that the management of tuna fisheries and protection of tuna stocks is inherently complicated. Sustainability hinges on a multifaceted approach including the effective management of fisheries, tackling illegal fishing, and sustainable fishing practices like pole or line fishing, which reduces bycatch.

Promoting sustainability certification is also important. The MSC, for example, assesses fisheries according to its MSC Fisheries Standard. For a tuna fishery to meet this standard, it must minimise environmental impacts, including those associated with bycatch; ensure the traceability of the product to the shelf; and develop effective monitoring systems to show the health of tuna stocks, the MSC explains.

Globally, there are 23 major commercial tuna stocks, groups of the same species (6 albacore, 4 bigeye, 4 bluefin, 5 skipjack and 4 yellowfin stocks) living and breeding in a specific region. Fisheries management and conservation organisations monitor and assess these stocks to determine if they are hea

lthy, overfished or depleted, and environmental factors that impact them such as predation. Based on these assessments, they set sustainable catch limits and implement conservation measures to ensure the long-term health of populations.

The MSC explains that prohibiting fishing during spawning and setting size limits to protect juveniles are some of the management measures that can be put in place.

"A key aspect of sustainable fishing also involves adopting precautionary measures known as harvest control rules which require catches to be reduced if the stock population declines. This is particularly important when stocks are shared by several different countries and a collective effort is needed to prevent overfishing."

The UN says some other efforts underway include the establishment of marine protected areas, using technology to monitor fishing activities and reduce IUU fishing and educating the public about sustainable fisheries, such as choosing tuna with the MSC blue label.

Is tuna aquaculture a solution? The practice has come under scrutiny for its high environmental impact on wild stocks and low sustainability, among other concerns. The Atlantic bluefin tuna (BFT), the only tuna species farmed in EU waters, is caught in the wild and transferred to floating cages.

A recent study of BFT aquaculture found that: "the limited economic and social contributions of BFT aquaculture do not currently compensate its environmental impacts with an estimate of a 3.4-fold higher long-term social cost than the short-term economic gain."

Celebrating successes and looking ahead

The UN says among the significant achievements in recent years due to global collaboration is that the previously rare Atlantic bluefin tuna can now be found in southern England and Ireland.

"This improvement happened because governments worked together through five tuna management groups, with help from the <u>FAO-led Common Oceans Program</u>. Their success stems from adopting management procedures—rules agreed upon by scientists, managers, and fishers —before fishing begins," says the UN.

The Common Oceans Program is working to transform how tuna and deep-sea fisheries are managed by improving regulatory systems and minimising environmental impact. Its

ambitious target is to ensure that by 2027, all major tuna stocks are being fished sustainably.