



Eliminating harmful fisheries subsidies represents the single greatest collective action governments can take to restore the health of fish populations around the world.

SubsidyExplorer is a first-of-its-kind interactive toolkit that allows users to explore potential biological and economic impacts of fisheries subsidy reform scenarios. This tool supports the negotiations currently underway at the World Trade Organization (WTO).

If WTO members agree to eliminate all harmful subsidies, by 2050, it could result in increases of up to

- + 12.5 % in global fish biomass
- + 3.5 % in global fish catch per year

This would mean 35 million more tonnes of fish in the water, and 3 million more tonnes of fish being caught every year!

[Learn How Subsidy Reform Could Help Fish](#)

[Explore More About Fisheries Subsidies](#)

[Discover How This Tool Was Made](#)

How the WTO Can Save Fish for the Future

Tool shows that an ambitious fisheries subsidies agreement could boost fish populations and global catch

In the midst of negotiations at the World Trade Organization (WTO) over proposals to curb the harmful fisheries subsidies that governments issue to their fishing sectors, The Pew Charitable Trusts and leading scientists developed a modeling tool to analyze the proposals' potential effects.

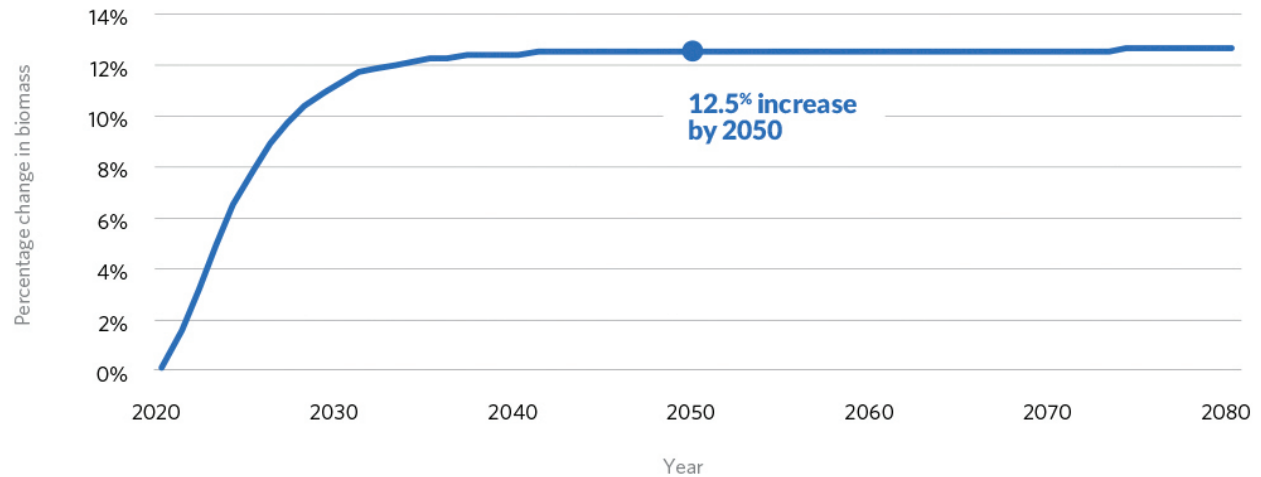
The tool shows that an ambitious WTO deal to eliminate all harmful subsidies worldwide could result in a 12.5 per cent increase in global fish biomass by 2050. This translates to nearly 35 million metric tons of fish—four times North America's fish consumption in 2017.

Harmful fisheries subsidies: A global problem with a short window for action

Every year, governments around the world spend \$22 billion on harmful payments to their fishing sectors. In the short term, these funds may appear to help support fishers and enhance food security, but harmful subsidies—such as those for fuel and vessel construction—encourage increased fishing capacity and effort, allowing fishers to catch more even when fish stocks are under pressure. Then, as fish populations decline, fishers need more subsidies to maintain their catches, leading to further overfishing that jeopardizes ocean ecosystems and the well-being of people who rely on sustainable fisheries and a healthy marine environment.

Fortunately, there is a way to break this cycle. WTO members could agree to eliminate harmful fisheries subsidies and support their fishing communities in ways that do not diminish the sustainability of fish populations and fisheries.

How Fast Could Fish Populations Rebound?



Research shows that the most ambitious policy scenario possible—removing all harmful fisheries subsidies through a WTO agreement—could lead to a 12.5% increase in global fish biomass by 2050, a gain that would steadily increase through 2080 and beyond.

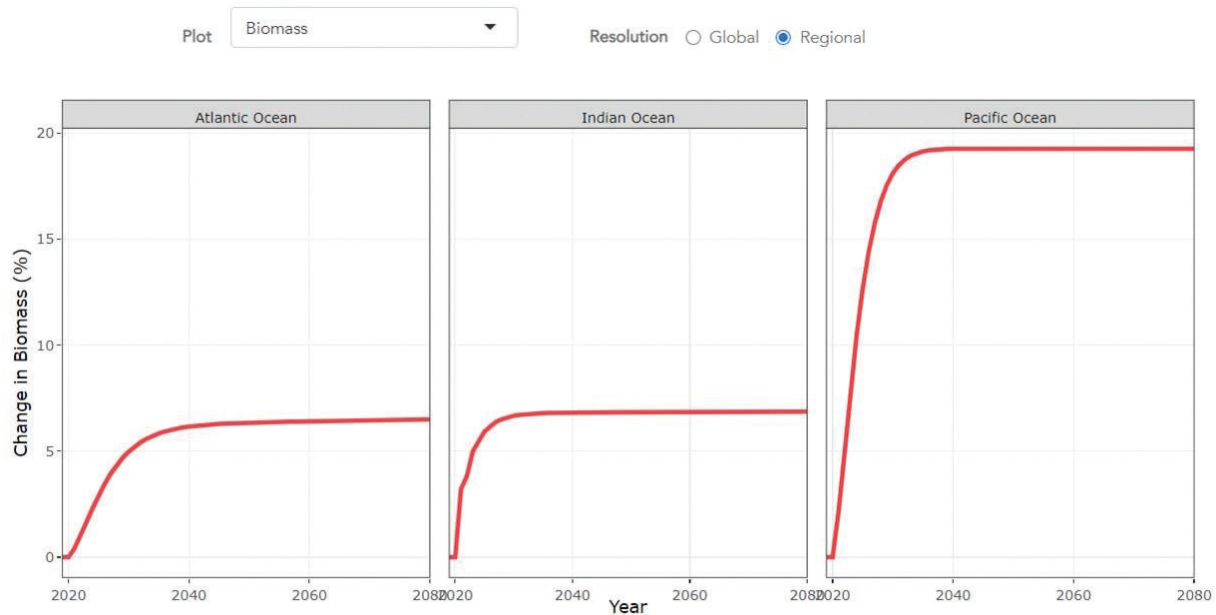
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Introducing SubsidyExplorer

To craft a meaningful agreement to curb destructive fisheries subsidies, WTO members need to fully understand the long-term benefits of the various policy options under consideration. Other stakeholders, such as environmental organizations, also need information to push for the most ambitious outcome at the WTO. To help meet these needs, scientists at the University of California, Santa Barbara, created SubsidyExplorer, a free web-based tool that models the effects that varying levels of subsidy reductions could have on global fisheries. This tool—funded by The Pew Charitable Trusts—was created using publicly accessible biological and economic data from 2018, the most recent year for which complete information was available, and was peer reviewed by independent economists.

How it works

The tool starts with an estimate of subsidies for every fishing nation compiled by Rashid Sumaila and a team of researchers at the University of British Columbia. Using a satellite-based data set created by the nonprofit organization Global Fishing Watch, the tool estimates the payments to each fishing vessel based on that ship's country of registration, size, and time spent fishing. The tool then uses biological and economic modeling to predict how a vessel would change its activity if certain (or all) of its subsidies were removed and how fish populations would respond to changes in fishing pressure. It includes a list of proposed subsidy reduction policies and allows users to select one or more policies to see how different combinations might affect fishing pressure and fish population numbers.



Results to
Show on Plot Most ambitious scenario

Global and regional catch levels can differ due to the effectiveness of a country's fisheries management or the health of fish stocks, among other factors. For example, if WTO members eliminate all harmful subsidies, fish biomass in the Pacific Ocean could rise by 19.3 per cent by 2050—an even greater jump than the global increase.

Key features

- *Long-term forecasting of policy reform scenarios*—Once a policy has been selected, the tool predicts how those changes would affect global and regional fish biomass, catch, revenue, and fishing mortality rates over time.
- *Overview of existing global and country-level subsidies*—The tool, which was recently redesigned in response to feedback from WTO negotiators so that it could play a more useful role in their negotiations, provides a complete picture of existing fisheries subsidies on a global and country-by-country basis and allows for comparisons between countries across a range of criteria.
- *Pre-populated policy menu*—Users can select from a suite of proposals that WTO members are discussing to see how each of those policies would affect global fisheries.
- *“Create your own policy” feature*—Users can design their own reform scenario by selecting from the proposal elements on the table at the WTO.

Main findings

The tool shows that an ambitious agreement to remove all harmful fisheries subsidies worldwide could result in an increase of 12.5 per cent in global fish biomass and a 3.5 per cent increase in global catch per year by 2050.

Through a WTO deal that ends these destructive subsidies, countries have an opportunity to improve ocean health and fishers' livelihoods. After decades of debate, now is the time to finalize a strong fisheries subsidies agreement. These findings confirm that the WTO has an opportunity to improve ocean health and fishers' livelihoods.

For more information

To use the tool, go to www.subsidyexplorer.org.

For more information on why it's critical that WTO members eliminate all damaging subsidies, visit www.pewtrusts.org/EndHarmfulSubsidies.

Research notes

- Because of certain variables, such as the effectiveness of a country's fisheries management or the health of particular fish populations, global and regional catch levels can differ from one another. For example, the tool shows that if WTO members eliminate all harmful subsidies, fish biomass in the Pacific Ocean could rise by 19.3 per cent by 2050—an even greater jump than the global increase.
- The tool's findings are meant to be illustrative and inform policymakers working on subsidy reform; the results from this tool are not intended for use by fisheries managers and other on-the-ground practitioners. Results are conservative because the tool does not include small-scale fishing vessels that cannot be tracked by satellite. Additional benefits may be derived from subsidy reform within those fishing fleets.

For further information, please visit:
pewtrusts.org/fisheriessubsidies

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