



Managing fish stocks sustainably

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- ▶ Around two-thirds of assessed fish stocks reported in the OECD Review of Fisheries 2022 are in good health, but nearly one in five do not meet sustainability standards and many could produce more food or more value for fishers if they were even more abundant.
- ▶ Rebuilding overfished stocks and harvesting all stocks at optimal levels will increase the profitability of the sector, improve environmental sustainability (including by reducing emissions) and enhance outcomes for fishing communities.
- ▶ Producing accurate and timely data on the health of fish stocks and how they are managed is fundamental if stock health and harvest levels are to be maintained in the face of climate change.

What's the issue?

The health of fish stocks is one of the main determinants of fisheries performance, meaning the sustainable management of fish stocks is fundamental to achieving the socio-economic objectives governments and stakeholders have for fisheries. Good fisheries management is also essential for their long-term environmental sustainability, as well as for protecting biodiversity and ensuring the provision of ocean ecosystem services such as climate regulation, food provision and nutrient cycling.

Understanding the status of fish stocks and how to manage them effectively is also important as climate change increasingly affects marine ecosystems. To remain effective, fisheries management must adapt to the impacts of climate change on species diversity, abundance and distribution, which may require changes to the way fisheries operate and the institutions that manage them.

The *OECD Review of Fisheries 2022* finds that in the 32 OECD countries and emerging economies covered, 64% of assessed stocks are in good health. However, 18% of assessed stocks fall below sustainability standards and the health of the remaining 18% could not be determined. Just under half of the stocks assessed to be in good health—30% of all assessed stocks—are also harvested in a way that optimises productivity (i.e. they are abundant enough to maximise the volume or value of catch). Thus, there is scope to produce more fish, generate more value for fishers, and increase environmental sustainability at the same time by better managing fish stocks.

These figures mask significant variations at the country level, both in the number of stocks assessed and in their health status. The granular information presented in the review can help target management efforts where they are most needed.

How are fisheries managed?

Management regimes are generally a collection of tools that aim to limit either the way fish are caught (input controls) or the level and type of catch (output controls). Input controls regulate fleet and gear characteristics (e.g. vessel size and power, gear type and configuration), along with how they can be applied (spatial or temporal restrictions). Output controls usually take the form of quotas, typically total allowable catch (TAC) limits which cap the total quantity of an individual stock that can be harvested. Individual or community quotas are sometimes used to augment TACs and they define the conditions under which catch shares can be sold or exchanged (or not). Output controls also include regulations on minimum fish sizes.

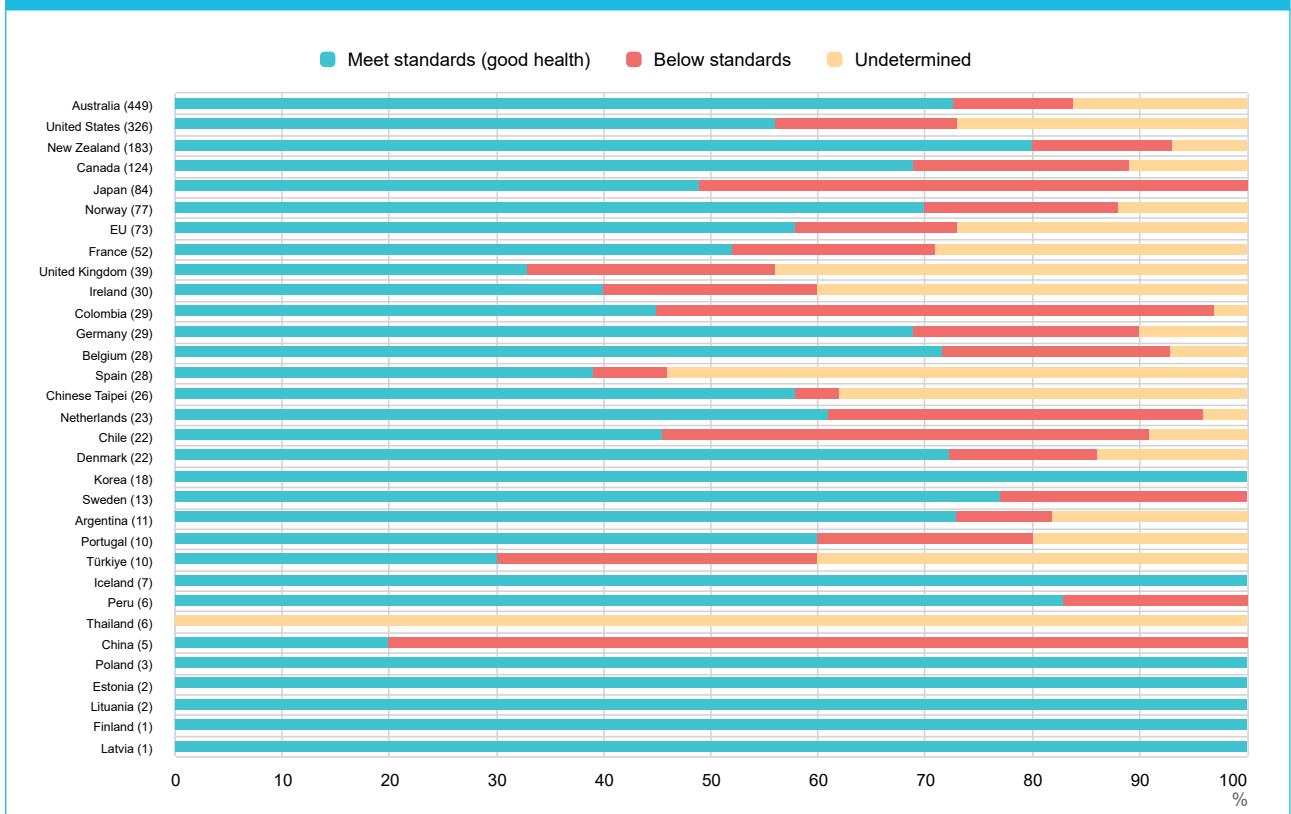
TACs are believed to be one of the most important tools for ensuring the health of fish stocks. The *OECD Review of Fisheries 2022* finds that in 2021, the most frequently used management tools were gear restrictions (used for 87% of stocks), while TACs were the second-most commonly applied tool (76% of stocks). In 2020, species covered entirely by TACs accounted for USD 9 billion in landings, or 59% of the value of landing for all the species in the data set. This equates to 12.6 million tonnes of fish, or 80% of all these landings by volume.





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What is known about fish stock health at the country level?



What can governments do?

The good news is that fisheries management generally works. Increasing management intensity is correlated with increasing biomass and reduced fishing pressure, suggesting that management action can help maintain stock health effectively. There is no perfect management system, and the way fisheries respond to management action can be complex and unpredictable. Therefore, fisheries management needs to be able to adapt to changing circumstances to ensure the sustainability of resources over time. Accurate and timely data on the status of resources and the management actions in place are fundamental to adaptive fisheries management. The *OECD Review of Fisheries 2022* outlines a range of actions that can be taken by governments to improve the socio-economic and environmental performance of their fisheries through better management:

- Rebuild the 18% of stocks that fall below sustainability standards to ensure their long-term health and improve their productivity and economic returns.
- Review current management action to ensure that stocks already in good health are fished optimally to maximise value or harvest volume.
- Invest in stock assessments for those stocks not yet assessed, and those for which assessments are inconclusive, particularly for species of significant commercial importance.

- Develop methods to assess stocks even where data are scarce and capacity limited. This will become increasingly important to inform adaptive management as climate change impacts fish abundance and the location of stocks, making it necessary to assess stock health more frequently.
- Link information on stock management and stock health to help understand where management is effective, and how to optimise fisheries management plans. To facilitate this, governments should consider adopting an internationally agreed naming convention for reporting stock information, including ASFIS (Aquatic Sciences and Fisheries Information System) species codes where possible.



Further reading

- [OECD \(2022\), OECD Review of Fisheries 2022, OECD Publishing, Paris.](#)
- [OECD Policy Brief: Supporting sustainable fisheries](#)
- [OECD Policy Brief: Eliminating government support to illegal, unreported and unregulated fishing](#)

