

Rules and Consequences: How to Improve International Fisheries

Pew is working to strengthen the governance of global fisheries and bolster the health and resiliency of the world's ocean

Overview

Overfishing is one of the greatest threats facing the ocean, with the United Nations Food and Agriculture Organization (FAO) reporting in 2020 that one-third of all fish stocks are overfished and that another nearly 60 percent cannot sustain any increases in fishing. At the same time, the U.N. reports that biodiversity is declining, with 33 percent of marine mammals, sharks, and other related species threatened with extinction.

Insufficient and ineffective management of industrial fishing has played a large role in this decline. At least 130 fish stocks—worth billions of dollars annually—are managed internationally, but there are few cohesive rules in place to ensure their sustainability. Even where science-based measures exist to help stocks recover and reduce the impact of fishing practices on other marine species, there are few consequences for those who skirt the rules. Further exacerbating the situation is widespread illegal, unreported, and unregulated (IUU) fishing. In some developing nations, IUU accounts for more than 30 percent of fish taken from their waters and is often a sign of weak governance that affects the food and economic security of coastal communities that rely on fishing.

In recent years, however, there have been promising developments in the management of international fisheries. These include new ways to improve the long-term health of fisheries and the ecosystem they are a part of; evolving technology and cooperation among coastal, flag, market, and port States to track and prevent illegal fishing; efforts to improve compliance with existing rules; and international treaties aimed at building a stronger governance system. With the right scientifically based framework and increased understanding and collaboration from key stakeholders in place, we can look forward to healthier fish stocks and a sustainable future.

Rules to ensure sustainable and legal catches

Many commercially important fish species migrate through the ocean in search of food. Their paths cross multiple national jurisdictions and into the high seas with implications for the management of the fish stocks as well as for the fleets that target them. Rules on how much of these fish can be caught, by whom, how, and when are set by a combination of national laws and regulations and by regional fisheries management organizations (RFMOs). RFMOs are international bodies made up of governments that share a practical and/or financial interest in managing and conserving fish stocks in a particular region and agree to coordinate management of these stocks.

Unfortunately, RFMOs have failed to stem the tide of overfishing, with nearly 50 percent of all stocks managed by these organizations either overfished or experiencing overfishing. With RFMOs covering more than 95 percent of the ocean, more needs to be done to implement effective management measures that bring fish populations back to healthy levels and keep them there.

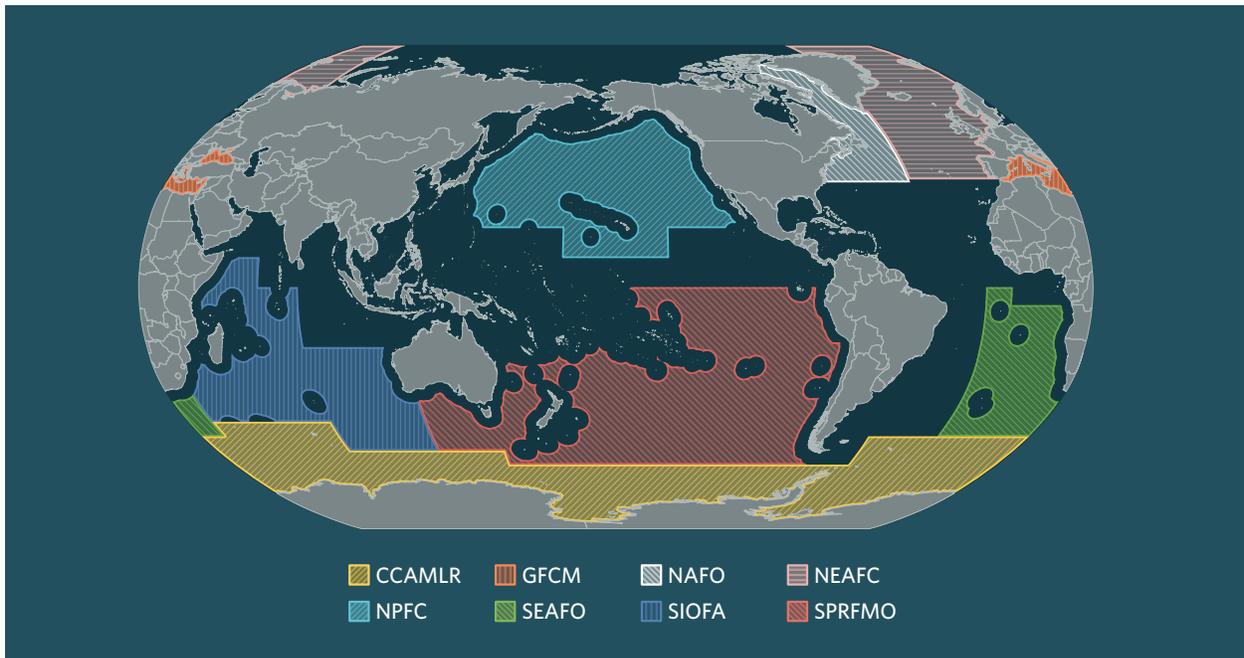
Modernize management through harvest strategies

Traditional fisheries management typically involves a regular assessment of a commercially fished stock, followed by scientists preparing advice for managers based on the assessment results, and then managers negotiating on what measures to adopt. These stock assessments can be imprecise because fishery data can be incomplete and there are inherent challenges in using statistical models to determine the amount of fish in a population. This means that scientific advice can be ambiguous or include a wide range of management options. Even when managers have committed to following scientific advice and a precautionary approach to reduce risk in decision-making, the lack of a clear framework for making management decisions means that negotiations often become contentious, time-consuming, and expensive.

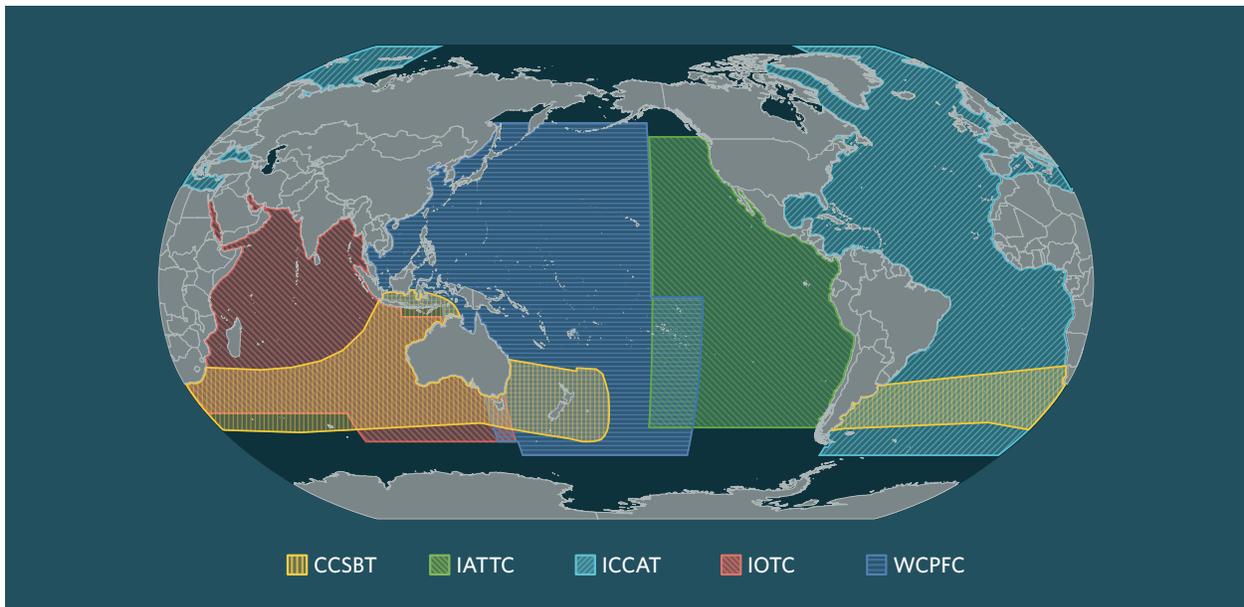
As a more effective and efficient alternative to annual quota negotiations, some RFMOs are beginning to adopt a new approach known as harvest strategies, which are also called management procedures. This approach requires governments to agree to long-term management objectives for each fishery and to a system that will automatically set catch levels based on scientific analysis that ensures that these objectives will be met. By locking in management actions that will be taken at various stock levels, harvest strategies make outcomes for fish stocks much more transparent and predictable, and increase market stability. By scientifically modeling how different management approaches could work and selecting those that best meet long-term objectives, harvest strategies also increase the likelihood of healthy fish stocks and fisheries into the future.

Global Fisheries Management Overview

Non-tuna RFMOs



Tuna RFMOs



Note: The CCSBT sets no geographic limits of competence; it extends over all national waters and the high seas where southern bluefin tuna are found.

Sources: Food and Agriculture Organization of the United Nations Geonetwork, <http://www.fao.org/geonetwork/srv/en/main.home?uuid=cc7dbf20-1b8b-11dd-8bbb-0017f293bd28>; Natural Earth

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Protection of vulnerable marine species

Addressing the harmful effects of fishing operations on the rest of the marine ecosystem is paramount in securing healthy, resilient fisheries. Species such as sharks, marine turtles, and whales play important roles in the ocean, and are particularly vulnerable to the impacts of international fisheries, even when they themselves are not the targets of fishing vessels. Bycatch—the nontarget species caught incidentally by fishing gear—can lead to overfishing of sharks and the decline of other rare or sensitive species. Reducing the impact of fishing operations on vulnerable populations and species, such as tuna and sharks, is a key goal, which should be accompanied by measurable improvements for the ecosystem-based management of fisheries at the international level. These improvements would reduce bycatch and would protect valuable habitat through the establishment of protections for nursery and spawning areas.

Improve oversight of longline and transshipment activities

Longline vessels are primarily used to catch high-value tunas, such as bluefin, bigeye, yellowfin, and albacore. These ships deploy thousands of hooks on lines up to 80 miles long, and their bycatch frequently includes sharks, turtles, seabirds and other marine wildlife. The vessels often transfer their catch at sea to larger carrier ships, which take fish to port—a practice known as transshipment that, although legal, often includes IUU fishing and other illicit activity. Longline fishing and transshipment are among the least-regulated fishing activities, with minimal oversight of catches on the fishing vessel or the carrier vessel. The lack of effective monitoring allows unscrupulous operators to underreport data on their fishing practices to their financial advantage or to avoid reporting activities altogether. In the western and central Pacific Ocean alone, an estimated \$142 million worth of fish products are transshipped illegally each year.¹

Fortunately, new technologies and information sharing can overcome these challenges. Electronic reporting and electronic monitoring on longline vessels can increase official observation of fishing activities, creating more transparency. These systems have increased the accuracy of reporting on vessels, and better hold fishers accountable for their catch.² Oversight of transshipment can also be improved through stronger reporting, monitoring, and data sharing. The FAO Committee on Fisheries has begun creating international transshipment guidelines that can help governments and RFMOs to create a more transparent, safe, and legal system.

State responsibilities

Although there are large gaps in governance and oversight of fisheries, many building blocks are already in place for governments—acting as a flag, coastal, port or market State—to strengthen controls and raise the global standards regulating fishing operations. International agreements and treaties, combined with individual actions by flag States, can make a big impact on the water, and to fisheries health.

Flag State responsibilities

A flag State, the country in which a vessel is registered, has exclusive legislative and enforcement authority over its ships on the high seas. The flag State also has exclusive control over the vessel, from its registration and labor standards to safety requirements, in all waters. Flag State obligations are established through a series of international treaties, laws, and protocols. But new benchmarks are needed to evaluate how States comply with these international requirements on illegal fishing and to ensure that countries begin to close the gaps where comparatively lax regulations and poor enforcement of international laws are observed.

Port State Measures Agreement

The 2009 Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (PSMA) entered into force in 2016. This treaty, the first of its kind, codifies and standardizes international rules for how a port State should verify catches that are landed in its ports from vessels flagged to a different State. The treaty also removes the incentive to fish illegally by making it nearly impossible to land illegal catch. Currently backed by over 60 parties (including the European Union), the agreement is only as good as its implementation, which relies on countries cooperating and sharing information in a timely way, particularly before a vessel enters port. There are steps that can be taken now to reduce the risk of illicit catch being landed. They include States working cooperatively and sharing information, publicly identifying the landing ports designated by PSMA parties for tightening of regulations, and ensuring that fisheries officers are properly trained—and have enough capacity to enforce PSMA provisions.

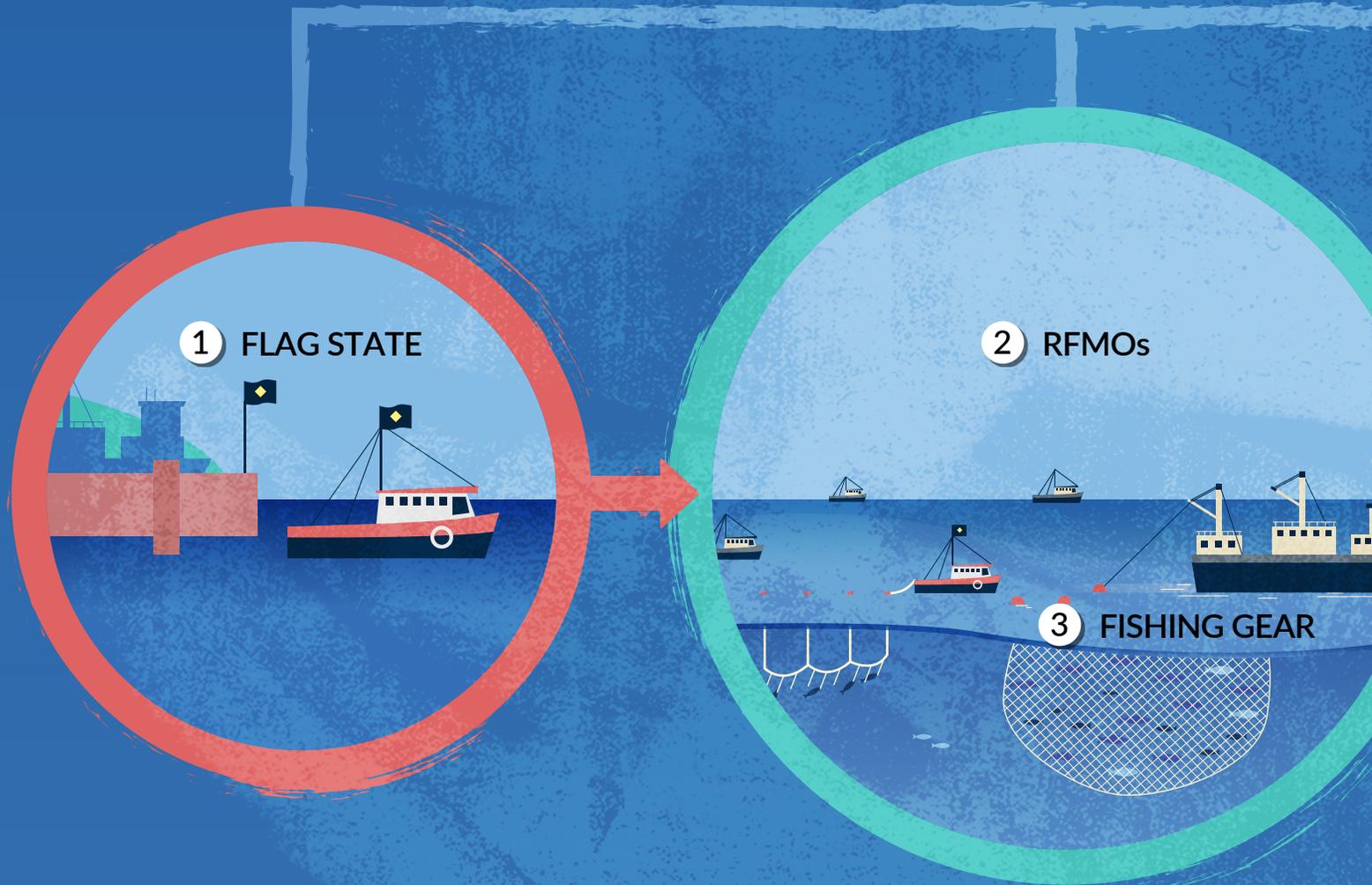
Cape Town Agreement

Fishing is a dangerous occupation—yet vessels, crews, and onboard observers are excluded from nearly all international maritime regulations.³ But the Cape Town Agreement, a multinational agreement adopted by the U.N. International Maritime Organization in 2012 but not yet ratified, can change that. It outlines the design, construction, and equipment standards for fishing vessels 24 meters in length or longer; calls for coordinated efforts to bring about harmonized fisheries, labor, and safety inspections; and encourages countries to provide authority to coastal and flag State officials to inspect national and foreign-flagged fishing vessels, covering every aspect of their activities, from crew safety to fishing practices. A total of 22 States, with an aggregate of 3,600 eligible vessels, are needed to ratify this agreement. Once in force, the Cape Town Agreement would not only raise the global safety standard for one of the most dangerous professions in the world, it would give States a powerful tool to help ensure that fishing vessels flying their flags or operating in their waters are held accountable for crew safety and that catch landings are conducted safely and legally.

Figure 1

A Complementary System of Rules and Consequences Could Transform International Fisheries Management

Strong governance and clear requirements—from the time a vessel departs for sea through landing of catch at port—are key to changing the global seafood trade



- ① **Flag State:** A fishing vessel must be registered to a State and fly its flag when it goes to sea. The vessel can operate far from shore and its national borders, but the flag State has exclusive jurisdiction over the ship's administrative operations and must ensure the vessel is abiding by all relevant measures and laws wherever it goes.
- ② **RFMOs:** When on the high seas, vessels often operate in waters governed by regional fisheries management organizations. RFMOs determine the rules for how much fish can be caught and how fishing gear may be used.
- ③ **Fishing gear:** Vessels employ many types of fishing gear, depending on the fish being targeted, including those that trail longlines and others that use giant nets known as purse seines. These types of gear frequently catch many nontarget species—such as turtles, rays, and seabirds—as bycatch.

6 COOPERATIVE ENFORCEMENT AND MARITIME SECURITY

4 TRANSSHIPMENT



5 PORT STATES



- ④ **Transshipment:** Catch is often transferred from a smaller fishing vessel to a large carrier vessel that then takes the fish to port. This process often occurs outside the view and reach of authorities.
- ⑤ **Port States:** Catch is brought to port for processing. Before port States authorize the offloading of catch, they must verify the vessel has met its international and regional fishing obligations. Only then should fish be allowed to make their way to market.
- ⑥ **Cooperative enforcement and maritime security:** Successful fisheries management requires that all levels of government—State, regional, and international—and enforcement authorities work together to maintain maritime security and ensure that the fish that reach the market are legal and verifiable.

Consequences for noncompliance with fisheries rules

Effective global governance requires meaningful consequences when rules are ignored or broken. Yet even when countries are assigned quotas for fish stocks, or have signed agreements to address illegal fishing practices, significant actions are rarely taken against governments or operators that break the rules.

Effective compliance at RFMOs

Catch limits, harvest strategies, and efforts to fight illegal fishing at the RFMO level must be tracked by effective regimes to ensure compliance and appropriate penalties for infractions. Some RFMOs have compliance processes, while others have insufficient mechanisms or none at all.

At a minimum, RFMOs should assess member State fishing activities—at ports and at sea—for compliance with existing management measures, obligate parties to take action against fleets flying their flag that are noncompliant, institute consequences for significant or persistent noncompliance, and allow review of these assessments by stakeholders, including nongovernmental organizations, to allow transparency and accountability.

Regional cooperation and multistate action

Although bolstering treaties and calling on governments to follow existing rules for fisheries are vital first steps, enforcing the rules is just as important. There is a critical need to improve enforcement, especially in developing coastal nations contending with illegal fishing and other illicit maritime activity. Authorities in these nations often lack adequate ways to collect information on illegal practices, as well as the capability to take action when such practices are detected. To address this problem, Pew is working with maritime authorities from around the world to integrate fisheries enforcement into their military curricula and training exercises. Because illegal fishing is often associated with other crimes and has broader national security implications, it is imperative that authorities stop looking at fish solely as an environmental or management issue.

Internationally there is a well-established precedent of navies sharing information about vessel location and movements across large swaths of the ocean. By integrating fishing vessel surveillance and IUU fishing inspections into their work, navies and coast guards can take a more holistic approach to maritime security and help nations, including those with less surveillance capacity, establish governance of their waters.

For example, FISH-i Africa, an alliance among eight east African coastal nations, has helped bring actions and charges against more than 40 suspected illegal operators. As successful as that African experience has been, more collaboration is needed around the globe—from Central and South America to the Pacific—to ensure that stakeholders from government, industry, and civil society develop effective multistate solutions.

Market engagement

Consumers increasingly want assurances that their seafood is sustainably and legally sourced and that people have not been harmed or treated unfairly at any point in the catching or processing of seafood. The seafood industry can be a vital player in achieving this goal by ensuring that the fish sold comes only from vessels and governments complying with flag and port State requirements from individual governments and RFMOs. Stakeholders throughout the seafood industry can advocate for effective fishery laws that bring a clear result for those who do not follow the rules: unpurchased fish and lost profits.

Conclusion

The ocean and the marine life in it face growing challenges to their long-term sustainability, and the lack of cohesive rules harms more than just fish. Fishers, the seafood industry, and countries around the world are dependent on the health of fish stocks for long-term economic stability. Strengthening conservation efforts and ensuring that fish are caught legally and sustainably will lead to greater food security and thriving communities.

The tools are available—and new ones are coming—that can improve fisheries management. Strong global fisheries governance is possible if governments, RFMOs, international agencies, and industry come together to eliminate one of the greatest pressures on the ocean today: overfishing. The opportunity is there, and the time to act is now.

Endnotes

- 1 D. Souter et al., "Towards the Quantification of Illegal, Unreported and Unregulated (IUU) Fishing in the Pacific Islands Region" (MRAG Asia Pacific, 2016), <http://www.ffa.int/files/FFA%20Quantifying%20IUU%20Report%20-%20Final.pdf>.
- 2 T. Emery et al., "Changes in Logbook Reporting by Commercial Fishers Following the Implementation of Electronic Monitoring in Australian Commonwealth Fisheries," *Marine Policy* 104 (2019): 135-45, <https://www.sciencedirect.com/science/article/pii/S0308597X18307218>.
- 3 G. Petursdottir, O. Hannibalsson, and J. Turner, "Safety at Sea as an Integral Part of Fisheries Management" (U.N. Food and Agriculture Organization, 2001), <https://agris.fao.org/agris-search/search.do?recordID=XF2001400245>.

The Pew Charitable Trusts' international fisheries project is working to ensure that these new approaches are adopted and implemented by governments and regional fisheries management bodies globally. By working toward effective rules and consequences, Pew seeks to increase cooperation and improve international fisheries governance and management.

For further information, please visit:
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