Sustainable Fisheries Resolution Recommendations

Key priorities for adoption by the United Nations General Assembly's 71st session

Overview

The Pew Charitable Trusts urges United Nations Member States to take action on this year's General Assembly resolution on sustainable fisheries in order to implement effective conservation and management measures worldwide. The recommendations of this year's resumed United Nations Fish Stocks Agreement review conference have outlined the steps needed to ensure the long-term sustainability and health of fish stocks and other marine species. This includes measures such as ecosystem-based management, decision-making based on the precautionary principle, and marine protected areas (MPAs). In particular, this year's resolution on sustainable fisheries should include text that calls on States and regional fisheries management organizations (RFMOs) to:

- Implement the recommendations agreed upon in the resumed review conference rapidly, to improve the performance of States and RFMOs in meeting their obligations to manage fisheries sustainably.
- Prohibit the taking of sharks unless precautionary, science-based management plans are in place.
- Adopt precautionary catch limits immediately, including target and limit reference points for all tuna species fished in their convention areas, and use management strategy evaluation to develop robust harvest control rules to ensure the long-term sustainability and profitability of fisheries.

- Limit the deployment of fish aggregating devices (FADs) under their jurisdiction and increase observer coverage on longline fishing vessels through human or electronic means.
- Increase efforts to eliminate illegal, unreported, and unregulated (IUU) fishing, particularly by ratifying the Port State Measures Agreement (PSMA), mandating the use of International Maritime Organization (IMO) numbers, positively identifying and tracking vessels, and effectively regulating authorized trans-shipment at sea through specific control mechanisms.
- Establish and increase large, fully protected marine reserves and MPAs, including for use as a fisheries management tool, with a goal of protecting at least 30 per cent of the world's oceans.
- Recommit to implementing the resolutions regarding deep-sea fisheries and improving protections for deep-sea ecosystems.

Accountability of States and RFMOs

Embedded within the 17 ground-breaking sustainable development goals (SDGs) adopted by the General Assembly in 2015 is SDG 14, which calls for States to "conserve and sustainably use the oceans, seas and marine resources."[1] Under Target 14.4, States should, by 2020, "implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics." This ambitious target is critically important in the face of successive *State of World Fisheries and Aquaculture* reports by the United Nations Food and Agriculture Organization (FAO), indicating that many of the world's fish stocks continue to deteriorate because of ineffective fisheries management. Among those affected are straddling and highly migratory stocks for which many RFMOs bear responsibility.[2]

It was in light of this target that the parties to the Fish Stocks Agreement[3] convened in May 2016 for a resumed review conference, as required under the agreement, to assess its ongoing "effectiveness … in securing the conservation and management of straddling fish stocks and highly migratory fish stocks." Since the agreement's adoption in 1996, the conference has been a periodic opportunity to evaluate whether RFMOs are fulfilling their mandate. Although the conference recognized progress in some areas, it was necessary to revisit recommendations from previous meetings of the review conference, including that RFMOs "fully implement conservation and management measures for straddling fish stocks and highly migratory fish stocks, including stocks that are currently unregulated, in accordance with the best available scientific information on the status of such stocks and the provisions of the Agreement with respect to the precautionary approach."[4]

To be effective, these management measures must incorporate science-based total allowable catch limits, including target and limit reference points, to ensure that those catch limits are not exceeded. This recommendation, like many others, was repeated in this year's recommendations but has gone unheeded as RFMOs continue to set catch limits with insufficient precaution and allow fishing of stocks to dangerously low levels. States should therefore commit themselves to concrete objectives and timelines to implement the recommendations of the resumed review conference, so that RFMOs may fulfil their mandate to manage fisheries sustainably and with effective compliance regimes.

The General Assembly should:

- Call for the rapid implementation of the recommendations agreed upon in the resumed review conference to improve the performance of States and RFMOs in meeting their obligations to manage fisheries sustainably.

Conserving sharks and other chondrichthyes

Sharks are particularly vulnerable to overexploitation because they grow slowly, mature late, and produce few young at a time. More than half of all observed sharks, rays, and chimaeras face an elevated extinction risk: At least one-quarter are threatened, and well over one-quarter are near-threatened.[5] Approximately 100 million sharks are killed in commercial fisheries globally each year, a level that is unsustainable.[6] There is mounting evidence that their loss may degrade the overall health of marine ecosystems.

Shark fishing occurs around the globe but is largely unregulated, both within nations' exclusive economic zones (EEZs) and on the high seas. Although a few RFMOs have prohibited retention of some of the most vulnerable shark species, no RFMO has set shark fishing catch limits. Previous General Assembly resolutions have called on States and RFMOs not to increase fishing effort in directed shark fisheries until measures are established to ensure long-term sustainability. However, the resolutions have not called on States and RFMOs to establish the catch limits needed to implement this commitment. Additionally, because sharks are taken in large numbers as bycatch in non-directed fisheries and because some shark species are unable to withstand even a very low level of fishing effort, further actions are needed. If sharks are to be retained in commercial fisheries, these predators must be sustainably managed. Otherwise, they must be fully protected like other uniquely vulnerable marine wildlife, such as turtles and whales. Management measures may include species-specific retention bans that prohibit landings, science-based catch limits, or even sanctuaries to protect all sharks in a country's waters, which an increasing number of States have established to ensure healthy shark populations.

History demonstrates that when the United Nations undertakes high-level oversight of fishery management goals, real progress can be made. Examples include the efforts to end large-scale pelagic drift-net fishing and destructive bottom fishing. In those cases, General Assembly intervention prompted a flurry of constructive actions by RFMOs and States to show progress. The General Assembly must take similar action addressing shark mortality if these predators are to survive.

The General Assembly should:

- Call on States and RFMOs to prohibit the landing of all shark species, unless a precautionary, science-based management plan is in place to secure their sustainable management.

Ensuring sustainable tuna fisheries

Tuna are some of the most commercially valuable fishes in the ocean. Millions of people depend on them for protein, and thousands of vessels ply waters around the globe to satisfy growing demand. The global tuna trade has expanded significantly in recent decades and in 2013 exceeded 5 million metric tons for the first time.[7] Mismanagement of tuna fisheries is a problem worldwide. Species are being fished unsustainably and with increasing reliance on destructive fishing practices.[8]

The severe depletion of Pacific bluefin tuna, a species on the brink of collapse, exemplifies the need for implementation of long-term sustainable management policies. This population has been reduced to just 2.6 per cent of its original size, and more than 90 per cent of the catch is made up of fish that have not had the chance to reproduce.[9] Despite years of clear scientific information showing the dire state of this species, States have failed to take sufficient steps to end overfishing or recover the stock. Only urgent action will reverse this situation and allow this economically and ecologically critical species to rebuild and recover. In the face of continued overfishing and mismanagement, Pew has called for a two-year moratorium on commercial fishing of

this species. The General Assembly should take up this call or, at the very least, reinforce the need to apply the precautionary approach, set science-based catch limits, and adopt long-term management plans for all species. It should call for robust, globally implemented rebuilding plans for overfished stocks, including not only Pacific bluefin tuna but also bigeye tuna in the western and central Pacific Ocean and bigeye in the Atlantic Ocean.

The General Assembly also should call for steps to improve sustainability in tuna fishing methods. Purse seine vessels catch the majority of tuna using FADs. An estimated 121,000 drifting FADs are deployed in the oceans each year,[10] often built with synthetic ropes and plastic webbing that descend as far as 100 metres.[11] Tens of thousands of these FADs go unrecovered, adding to a deadly web of drifting litter that entangles marine life. For instance, 480,000 to 960,000 threatened silky sharks are killed each year in the Indian Ocean through the use of FADs.[12] Uncontrolled, ineffectively managed FAD fishing has also driven further decline of the depleted bigeye tuna in the western and central Pacific and Atlantic, with record catches of juvenile bigeye caught in conjunction with FADs.[13] By calling for the monitored and controlled use of drifting FADs, the General Assembly can stem the increasing flow of derelict gear into the oceans and protect those overfished, vulnerable, and threatened marine species targeted in FAD fisheries and caught incidentally during FAD fishing operations. Specifically, it should call on States, individually and through RFMOs and other arrangements, to introduce limits on FAD sets to reduce the catch of juvenile bigeye. The General Assembly should also call for tracking and monitoring systems for the thousands of FADs deployed each year.

About 14 per cent of the world's tuna are caught on longlines—lines that can be dozens of kilometres long with thousands of baited hooks. Over 8,000 industrial longline tuna-fishing vessels currently roam the world's oceans, catching over US$7.5 billion worth of tuna annually.[14] While longlines mainly target tuna, they are also responsible for the incidental catch of millions of sharks, sea turtles, seabirds, and marine mammals. Sharks make up a quarter of the total catch in some pelagic longline tuna fisheries, and because data reporting requirements for sharks are minimal and there are no prohibitions or catch limits in RFMOs for many shark species, these sharks effectively constitute an unmanaged and largely unreported fishery. Longliners operate with insufficient oversight relative to their significant environmental impact. All tuna RFMOs require that at least 5 per cent of the fishing effort made by longline vessels greater than 20 or 24 metres in length be monitored by an observer, but often less than 5 per cent coverage is achieved in practice.[15] This systemic non-compliance facilitates illegal fishing and the misreporting and non-reporting of catch, making it nearly impossible to collect all of the data needed for accurate scientific stock assessments and informed management actions.

Electronic reporting, with a tablet computer paired with a GPS unit, and electronic monitoring, with video cameras and hydraulic sensors, are proven technologies to enhance the efficiency and accuracy of reporting and monitoring and to effectively supplement low levels of human observer coverage.[16] These technologies are increasingly being implemented, particularly in the western and central Pacific, with positive results.[17]

The General Assembly should:

- Call on States fishing for Pacific bluefin tuna to adopt a two-year moratorium on commercial fishing to prevent the collapse of the species.
- Call on RFMOs to immediately adopt precautionary catch limits, including target and limit reference points, as identified in Annex 2 of the United Nations Fish Stocks Agreement, for all tuna species fished in their convention areas and to use management strategy evaluation to develop robust harvest control rules to ensure the long-term sustainability and profitability of tuna fisheries.

- Call on RFMOs to limit the deployment and use of FADs to prevent overfishing and to create management systems to reduce, track, and record their use to include their contribution to marine debris.
- Call on States and RFMOs to develop mechanisms to ensure compliance with existing observer requirements.
- Call on States to expand observer coverage by either human or electronic means to improve both science and compliance to ensure that longline fisheries operate legally and the data are accurate and verifiable.

Ending illegal fishing

IUU fishing continues to threaten marine biodiversity and fish stock sustainability. It robs coastal and developing States of billions of dollars' worth of fish every year and is linked to such crimes as money laundering, fraud, human and drug trafficking, and corruption.

IUU fishing can be significantly reduced through common-sense measures and effective coordination. This year, some States took a major step forward in combatting IUU fishing with the entry into force of the PSMA. Adopted in 2009 under the auspices of the FAO, the agreement requires foreign fishing and support vessels to transmit information about their operations to States before entering their ports. When faced with evidence that the vessels engaged in IUU fishing, these States must prevent them from landing their catch and take enforcement action. As of 29 July 2016, 36 countries have ratified the agreement, but more must follow to ensure that vessels fishing illegally are denied the opportunity to land their catch and profit from their illegal activity.

In addition, the European Union, nine RFMOs, and two other regional fisheries bodies have adopted requirements that fishing vessels of a certain size should have unique, permanent, globally verifiable identification numbers, assigned by IHS Maritime and Trade on behalf of the IMO. These numbers provide an independent and continually updated audit trail. Without an IMO number, owners can undermine transparency and illegal fishermen can escape liability by changing their vessels' names and flags whenever needed to escape scrutiny. The challenge now is to ensure that these requirements are implemented, as many States continue to authorize vessels to fish in RFMO convention areas without an IMO number. RFMOs must be vigilant in ensuring that their authorized vessel records do not include vessels violating their identification obligations. Furthermore, to ensure that authorized vessel lists are both accurate and up-to-date, RFMOs should keep historical records separate from current fishing vessel authorizations and should urge their Member States to update vessel information in near-real time.

Properly implemented and maintained vessel monitoring systems (VMSs) are also necessary for effective fisheries management because they allow for monitoring of vessel activity and position. These systems can alert authorities to potential illegal activity and deter wrongdoing. They also can provide flag States with vital information about their compliance with international obligations. General Assembly Resolution 63/112[18] mandated VMS coverage for large-scale vessels in 2008 and should be expanded to cover all vessels fishing outside their flag State's EEZ.

Trans-shipment at sea, particularly in the longline industry, can be a conduit of IUU fishing unless adequately regulated and controlled. In the western and central Pacific, tuna worth an estimated $142 million are involved in illegal at-sea trans-shipment each year.[19] This issue remains front and centre in multilateral efforts undertaken at the United Nations. The parties to the Fish Stocks Agreement, at a resumed review conference, recommended that States "continue to encourage and support FAO in studying the current practices of trans-shipment … and produce a set of guidelines for this purpose." Further, in July 2016, the FAO's Committee on Fisheries encouraged

the FAO to work with RFMOs to review current regulations and at-sea trans-shipment practices and consider which, if any, at-sea trans-shipment activities should be authorized.

Some RFMOs have banned at-sea trans-shipment for some fleets, such as purse seiners or small-scale longline vessels, demonstrating that it is not only feasible but economically viable. While a number of States have championed similar provisions for the longline sector or mandated trans-shipment bans, RFMOs in general have been unable to adequately ensure that at-sea trans-shipment is monitored and controlled.

RFMOs should ban all forms of at-sea trans-shipment until there is clear evidence that such operations are legal and verifiable and do not contribute to IUU fishing.

The General Assembly should:

- Welcome the entry into force of the PSMA and call on States to become parties to the PSMA and fully implement the agreement as soon as possible.
- Call on States and RFMOs to enforce IMO number requirements for all mandated vessels and maintain national and regional authorized vessel records with separate current and historical records that are updated in near-real time.
- Call on RFMOs to enforce and fully implement VMS requirements for all vessels authorized to fish in their regulatory areas, and expand existing VMS requirements to all vessels that engage in fishing on the high seas or in another country's EEZ and mandate that VMS information be readily shared among interested States.
- Call on States and RFMOs to ban at-sea trans-shipment until there is clear evidence that such operations are legal and verifiable and do not contribute to IUU fishing.
- Call on the FAO and RFMOs to develop best practices for at-sea trans-shipment to ensure that these activities are transparent, accountable, and verifiable.

Large-scale marine reserves and MPAs

Large, fully protected marine reserves and MPAs are widely acknowledged to be essential tools for protecting biodiversity, restocking marine areas, and building resilience to change.[20] SDG 14 recommitted States to a target initially agreed upon in the Convention on Biological Diversity[21] to "by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information." In 2014, the World Parks Congress issued "The Promise of Sydney," calling for at least 30 per cent of marine and coastal areas to be protected, with no extractive activities permitted. Emerging science shows this target is most effective for conserving biodiversity, supporting fisheries productivity, and ensuring maximum economic, cultural, and life-supporting benefits.[22]

A worldwide system of very large, fully protected reserves, created both within and beyond areas of national jurisdiction, is an essential and long-overdue contribution to the stewardship of the global marine environment and fisheries management.

Large marine reserves should be used to help protect healthy fish populations, rebuild populations that are depleted, provide spillover benefits to areas where fishing is permitted, and improve resilience to climate change.[23] In the past 18 months, more of the ocean has been protected through highly protected marine reserves than ever before. To date, large-scale marine reserves have been created within the national waters of the Australia, Chile, Kiribati, Palau, the United Kingdom, and the United States.

These reserves—and others being considered by governments such as French Polynesia's Austral Islands and New Caledonia—help to protect not only marine life, but also indigenous and island cultural traditions. Many local populations, such as those from Polynesian cultures in the Pacific, still rely on traditional ways of fishing, hunting, and gathering for their livelihoods.

These efforts should be expedited. In addition, efforts by Members of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to establish protected areas in the Ross Sea and East Antarctica, as well as to create a network of protected areas including other areas of high conservation value, should be strongly encouraged. Finally, although areas beyond national jurisdiction (ABNJ) comprise about two-thirds of the global ocean, there is no mechanism for establishing MPAs within them. A preparatory committee (the Prepcom) has met twice this year to begin developing text for a new treaty on ABNJ and will meet twice next year before States must decide whether to launch a formal negotiating conference. This proposed agreement represents the best opportunity to complement the work of RFMOs and other institutions with an institutional framework to create MPAs in ABNJ.

The General Assembly should:

- Call on States to accelerate efforts to establish large, fully protected marine reserves and MPAs.
- Call on States to ensure that marine ecosystems are kept intact and that marine living resources are sustainably managed.
- Call on States to achieve, at a minimum, the target set by the World Parks Congress of protecting at least 30 per cent of the world's oceans.
- Encourage CCAMLR parties to designate MPAs in the Ross Sea and East Antarctica and proceed with their agreed-upon process to establish a network of protected areas in Antarctica's Southern Ocean.
- Encourage all States to participate fully in the Prepcom, particularly the development of a mechanism to establish MPAs in ABNJ.

Managing deep-sea fisheries

Deep-sea species tend to grow slowly, have long lives, and reproduce late in life, leaving them uniquely vulnerable to impacts from human activities. Deep-sea corals, sponges, and other habitat-forming species are particularly vulnerable to damage from bottom trawling. Deep-sea fishes often congregate around the peaks of seamounts, making them easy targets for sophisticated fishing operations. In the worst case, deep-sea bottom trawlers scour the sea floor with giant nets, destroying important habitats while indiscriminately catching everything in their path.

To respond to the problems of deep-sea bottom fisheries in ABNJ, the General Assembly adopted resolutions 59/25, 61/105, 64/72, and 66/68, under which bottom trawling and other potentially destructive fishing activities may not commence until an environmental impact assessment has been carried out and precautionary management measures have been put in place to prevent significant adverse effects. The resolutions also have endorsed and incorporated a set of International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, which were negotiated under the auspices of the FAO. The guidelines establish internationally agreed-upon criteria for identifying vulnerable marine ecosystems (VMEs), conducting environmental impact assessments of bottom fisheries, and determining significant adverse impacts. They also describe how prior impact assessments should be conducted and how to implement effective conservation and management measures.

In August 2016, the General Assembly held a workshop involving States, RFMO secretariats, non-governmental organizations, and industry representatives to review the implementation of the resolutions adopted to date. It was clear that significant improvements have been made in the management of deep-sea fisheries in ABNJ since the early 2000s. More information on the impact of deep-sea fishing is now available in most high seas regions, including information on the known or likely occurrence of VMEs. In addition, new agreements have established RFMOs to manage bottom fisheries on the high seas and several RFMOs—including the North East Atlantic Fisheries Commission, the Northwest Atlantic Fisheries Organization, and the South East Atlantic Fisheries Organization—have closed substantial areas of the high seas at fishable depths to bottom fishing, including a number of areas where VMEs are known to occur.

However, a great deal of work remains to be done to fully implement the resolutions. Many of the impact assessments that have been carried out for bottom fisheries in the high seas have been inadequate, often because of a lack of good baseline information or substantial scientific uncertainties. Cumulative impact assessments as called for in Resolution 66/68 have not been conducted in any region. Many existing and potential VMEs remain open to fishing and historical fishing "footprints" where bottom fishing is permitted are too large. These are just a few of the challenges States must confront to achieve full implementation of the above resolutions.

The General Assembly should:

- Recommit to implement resolutions 59/25, 61/105, 64/72, and 66/68, in particular the call in Paragraph 120 of Resolution 64/72 to not authorize bottom fishing activities until measures to protect vulnerable deep sea ecosystems have been adopted and implemented.
- Call on States to expedite efforts within RFMOs with jurisdiction over deep-sea fishing to develop stock assessments for all managed deep-sea fish species.
- Call on States and RFMOs with jurisdiction over deep-sea fishing to also expedite efforts to identify and protect VMEs within their respective convention areas.
- Call on RFMOs to report specifically on gaps in their implementation of the above-referenced resolutions and efforts to address those gaps.

Endnotes

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For further information, please visit:

pewtrusts.org/ip

Contact: Leah Weiser, senior associate, communications
Email: lweiser@pewtrusts.org
Project website: pewtrusts.org/ip