



Michael Crispino

# Recommendations for the Sustainable Fisheries Resolution

69th Session of the United Nations General Assembly

The Pew Charitable Trusts urges Member States of the United Nations to take action on this year's General Assembly resolution on sustainable fisheries to implement effective conservation and management measures worldwide. In addition to addressing overexploitation of fish stocks, States must move fisheries management beyond the management of single species to fully embrace tools such as ecosystem-based management, marine protected areas (MPAs), and decision-making based on the precautionary principle. In particular, this year's resolution on sustainable fisheries should include text that:

- Calls for a detailed, time-bound evaluation of how well regional fisheries management organizations (RFMOs) are meeting their responsibilities to ensure that fishing is sustainable.
- Calls on States and RFMOs to prohibit the taking of sharks unless precautionary, science-based management plans are in place.
- Urges States and RFMOs to limit the deployment of fish aggregating devices (FADs) under their jurisdiction and to increase observer coverage on longline fishing vessels.
- Calls on States and RFMOs to increase efforts to eliminate illegal, unreported and unregulated (IUU) fishing.
- Encourages efforts to establish large, fully protected marine reserves and MPAs, including for use as a fisheries management tool, with a goal of protecting at least 10 per cent of the world's oceans by 2020.
- Reaffirms the global commitment to reduce the harm caused by deep-sea bottom fisheries and initiates preparations for the review of implementation of these commitments in 2015.

## Accountability of regional fisheries management

The world's fish stocks continue to deteriorate because of ineffective fisheries management. Successive reports by the United Nations Food and Agriculture Organization (FAO) on *The State of World Fisheries and Aquaculture* show that there has been no meaningful reduction in the percentage of overexploited stocks worldwide while the percentage of fully exploited stocks has increased, including straddling and highly migratory stocks for which many RFMOs bear responsibility.<sup>1</sup> The 2012 United Nations Conference on Sustainable Development in Rio de Janeiro (Rio+20) recognized "the need for transparency and accountability in fisheries management by RFMOs." The FAO's reports reflect that the ambition shown at Rio+20 has not had the impact needed.

In 2016, the Parties to the Fish Stocks Agreement<sup>2</sup> will convene 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 upholding their mandate. But for the evaluation to be effective, countries first must develop a robust, transparent picture of the agreement's current state of implementation. A 2015 report by the United Nations Secretary-General will be a critical first step. This report must synthesize the most pertinent information about RFMOs, including whether they are meeting their obligations to ensure the long-term conservation of fish stocks. It should include information from States as well as non-State actors.

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 driftnet fishing and destructive bottom fishing. In those cases, General Assembly intervention prompted a flurry of additional actions by States and RFMOs to show progress. If the resumed Review Conference and a preceding Secretary-General's report reflect a commitment to real progress, they can have a similar effect.

The General Assembly should:

- Call for a report in 2015 by the Secretary-General that specifically requests information regarding RFMO implementation of science-based total allowable catch (TAC) limits, including target and limit reference points; the ecosystem approach and precautionary principle; and the recommendations of the 2006 and 2010 resumed Review Conferences.
- Call on the United Nations Fish Stocks Agreement Resumed Review Conference to transparently review the performance of States and RFMOs in meeting their obligations to manage fisheries sustainably by implementing the precautionary principle and ecosystem approach, and recommend urgent action should the review indicate these obligations are not being met.

## Conserving sharks

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 shark and shark-like species face an elevated extinction risk: at least one-quarter are threatened, and well over one-quarter are near threatened.<sup>3</sup> Approximately 100 million sharks are killed globally each year in commercial fisheries, which is an unsustainable number.<sup>4</sup>

Shark fishing occurs around the globe and is largely unregulated, both within nations' exclusive economic zones (EEZs) and on the high seas. While 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. But because sharks are taken in large numbers as bycatch in non-directed fisheries, and because some shark species are unable to withstand even the existing fishing effort, additional actions are needed. The fate of sharks has broad implications: There is increasing evidence that their loss may have negative effects on the overall health of marine ecosystems.

Many States have acted to help ensure healthy shark populations. The General Assembly has welcomed, and should continue to welcome, the establishment of shark sanctuaries in the EEZs of a number of developing countries. Commercial exploitation of sharks is prohibited within these waters.

The General Assembly should:

- Welcome the establishment of shark sanctuaries in the waters of Palau, the Maldives, Honduras, The Bahamas, Tokelau, the Marshall Islands, French Polynesia, the Cook Islands, New Caledonia, and the British Virgin Islands. It should encourage States to protect and conserve sharks by establishing shark sanctuaries throughout their EEZs.
- Call on States and RFMOs to prohibit the take of shark species, unless a precautionary, science-based management plan that ensures sustainability is in place.

## Ensuring sustainable tuna fisheries

Tuna are some of the most commercially valuable fish in the ocean. Millions of people depend on them for protein, and thousands of vessels ply remote 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.<sup>5</sup> Mismanagement of tuna fisheries is a problem worldwide. Species are being fished unsustainably and with increasing reliance on destructive fishing practices.



The severe depletion of Pacific bluefin tuna, a species on the brink of collapse, exemplifies the need for more sustainable management. This population has been reduced to just 4 per cent of its original size, and more than 90 per cent of these fish are caught before they can reproduce.<sup>6</sup> Only urgent action will reverse this situation and allow this economically and ecologically critical species to rebuild and recover. In fact, a coordinated, ocean-wide rebuilding plan incorporating precautionary, science-based catch limits and a minimum catch size could substantially increase the numbers of Pacific bluefin within just a few years. To avoid further population crashes from overfishing, the General Assembly should reinforce the need to apply the precautionary approach and to set science-based catch limits for all species. It should call for robust, globally implemented rebuilding plans for overfished species, such as Pacific bluefin.

The General Assembly also should call for steps that will improve sustainability in tuna fishing methods. Purse seine vessels catch the majority of tuna today using fish aggregating devices, or FADs. An estimated 100,000 drifting FADs are deployed in the oceans each year, often built with synthetic ropes and plastic webbing that descend as far as 100 meters below the surface.<sup>7</sup> Tens of thousands of these FADs go unrecovered, adding to a deadly web of drifting litter that entangles marine life. For instance, an estimated 480,000 to 960,000 threatened silky sharks are killed each year in the Indian Ocean by FADs.<sup>8</sup> Uncontrolled FAD fishing also has led to record catches of juveniles of the overfished bigeye tuna.<sup>9</sup> 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 overfished, vulnerable and threatened marine species. Specifically, it should call on States, individually and through regional fishery management organizations 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.

In addition to the use of FADs by purse seine vessels, about 14 per cent of the world's tuna are caught on longlines—lines with thousands of baited hooks that can be up to 100 kilometers in length. Surface longlines are responsible for significant bycatch and the mortality of sea turtles, sharks, marine mammals, and seabirds. Sharks make up a quarter of the total catch in some pelagic longline tuna fisheries, effectively constituting an unmanaged and largely unreported fishery. High levels of observer coverage are needed for effective longline fishery management. Although many tuna RFMOs require at least 5 per cent of their longline vessels to carry observers, a level many consider too low, these provisions are not regularly implemented. That leads to large gaps in data and increased IUU fishing. The General Assembly should call on States and RFMOs to increase observer coverage on longline fishing vessels to prevent IUU fishing and, at a minimum, call for enforcement of existing observer requirements.

The General Assembly should:

- Call on States fishing for Pacific bluefin tuna to create a coordinated, ocean-wide, precautionary, science-based rebuilding plan 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.
- Call on RFMOs to limit the deployment of FADs to prevent overfishing and to create management systems to reduce, track, and record their contribution to marine debris.
- Call on States and RFMOs to increase observer coverage on longline fishing vessels and to implement and enforce, at a minimum, existing observer requirements.



## Ending illegal fishing

Countries at Rio+20 recommitted to eliminating IUU fishing, which 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 with related crimes, such as money laundering, fraud, human trafficking, drug trafficking, and corruption. States can reduce and eliminate IUU fishing through common-sense measures and effective coordination.

For example, States should commit to ratifying and bringing into force the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing (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 port States before entering their ports. When faced with evidence that the vessels engaged in IUU fishing, these States must deny them port access. Nearly five years after its adoption, the PSMA has been ratified by just 10 States and the European Union. Twenty-five must ratify it for the agreement to enter into force. That means the pace of ratifications must accelerate.



Kashi Halford

In addition, fishing vessels should be required to have unique, permanent, globally verifiable identification numbers that provide an independent and continually updated audit trail. Only an International Maritime Organization (IMO) number satisfies all of these criteria. Without it, owners can undermine transparency, and illegal fishermen can escape liability by changing their vessels' names and flags whenever needed to escape scrutiny. In 2013, the IMO General Assembly extended application of the voluntary IMO Ship Identification Number Scheme to fishing vessels. Concurrent measures adopted by four tuna RFMOs—the Inter-American Tropical Tuna Commission (IATTC), the International Commission for the Conservation of

Atlantic Tunas (ICCAT), the Western and Central Pacific Fisheries Commission (WCPFC), and the Indian Ocean Tuna Commission (IOTC)—will require IMO numbers for larger vessels operating in those regions by January 2016. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the South Pacific Regional Fisheries Management Organization (SPRFMO), and the Northwest Atlantic Fisheries Organization (NAFO) are implementing comparable requirements. CCAMLR's include all vessels regardless of size. Standardizing this requirement for all fishing vessels will help enforcement officials track vessels, share information, and take appropriate action when confronting those engaged in IUU fishing.

Properly implemented and maintained vessel monitoring systems (VMS) can further strengthen management by tracking fishing activity at all times. These systems 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 mandated VMS coverage for large-scale vessels in 2008 and should be expanded to cover all vessels fishing outside the EEZ of their flag State.

IUU fishing often amounts to criminal activity or is linked to it. In February 2013, Interpol launched Project Scale, a global coordination effort to detect, suppress, and combat fisheries crime. The following September, Project Scale published its first Purple Notice, a request to Interpol member countries for cooperation and information concerning specific IUU fishing activities. It has since issued five other IUU-related notices. Interpol's ad hoc Fisheries Crime Working Group provides a framework for Member States to provide guidance to Project Scale.

Transnational organized crime at sea is a global problem that threatens security, stability, and the rule of law. It undermines economic prosperity and sustainable development and has a significant impact on the environment. The Commission on Crime Prevention and Criminal Justice (CCPCJ), at its 22nd session in Vienna on 22-26 April 2013, adopted Resolution 22/6, which promoted international cooperation and capacity building to combat this problem. Among other actions, the resolution mandates the United Nations Office on Drugs and Crime (UNODC) to reconvene a meeting of the expert group to survey the challenges caused by organized criminal activities at sea. The Commission invited Member States and other donors to provide additional resources for implementation of the resolution, but few contributions have been made.

IUU operators commonly use transshipment at sea to avoid proper catch reporting, launder illegal catch, and provide fuel and logistical support to illegal vessels. Transshipment also provides a platform for other crimes at sea, such as human or drug trafficking. States and RFMOs should ban all forms of transshipment at sea until they can ensure that such operations will not contribute to fisheries-related crime. This would require a robust monitoring system that guarantees full transparency.

The General Assembly should:

- Call on States to accelerate the ratification processes and become parties to the PSMA by 1 January 2016, or as soon as possible.
- Welcome the ratification of the PSMA by Mozambique and New Zealand.
- Call on States and RFMOs that have not yet done so to adopt port State measures consistent with the agreement by 1 January 2016.
- Call on flag States to mandate the use of IMO numbers for fishing vessels flying their flag as of 1 January 2016. This should also apply to vessels greater than 100 gross tons authorized to fish within their EEZs.
- Welcome requirements by IATTC, ICCAT, WCPFC, IOTC, CCAMLR, and SPRFMO that vessels authorized to fish in their convention areas obtain IMO numbers.

- Call on RFMOs that have not yet done so to mandate the use of IMO numbers for all vessels greater than 100 gross tons that are authorized to fish in their regulatory areas as of 1 January 2016.
- Call on States and RFMOs to expand the required use of VMS to all vessels that engage in fishing on the high seas or in another country's EEZ and to mandate that VMS information be readily shared among interested States.
- Welcome Interpol's efforts to improve national law enforcement capacities to combat fisheries crime and call on States to cooperate with and support Interpol in this effort.
- Welcome progress by the CCPCJ in its assessment of transnational organized crime in the fishing industry and request that States provide additional resources to help implement this resolution. That includes reconvening the expert group for the United Nations Office on Drugs and Crime to survey the challenges arising from organized criminal activities at sea.
- Call on States and RFMOs to ban transshipment at sea until a robust and transparent monitoring system is in place.

## **Large-scale marine reserves and marine protected areas**

Large, fully protected marine reserves and MPAs are widely acknowledged to be essential tools to protect biodiversity, restock marine areas, and build resilience to change. The Rio+20 outcome document reaffirmed the importance of these strategies.<sup>10</sup> That document also noted the agreed-upon target in the Convention on Biological Diversity<sup>11</sup> to establish a network of protected areas and other area-based conservation measures to cover 10 per cent of the world's oceans by 2020.

To date, only about 1 per cent is fully protected. Most of these areas are small and inshore. Though they provide important conservation benefits in regions already heavily fished, these areas offer relatively limited protection for many wide-ranging predator species that migrate through the broader seascape. Large reserves, where ecological processes and functions can operate without human interference, are virtually nonexistent.

Market demand has grown, while fish stocks are dwindling and ever more inaccessible, including those in polar regions. Even isolated and remote locations soon will face depletion unless there is transformative improvement in the management and governance of marine ecosystems.

A worldwide system of very large, fully protected reserves in the high seas, as well as national initiatives to protect marine life in States' exclusive economic zones, is an essential and long-overdue contribution to the stewardship of the global marine environment and fisheries management. These reserves would protect highly migratory top predators, such as sharks, swordfish, tuna, toothfish, and marine mammals, as well as forage fish, seabirds, and other marine fauna. Coastal fish populations would benefit from the spillover effect of fully protected reserves.

Large marine reserves should be used to help protect healthy fish populations, rebuild populations that are depleted, provide spillover benefits in areas where fishing is permitted, and improve resilience to climate change. Efforts to designate additional large marine reserves are underway for the waters of a number of countries around the world. These should be expedited. In addition, efforts by CCAMLR members to establish protected areas in the Ross Sea and East Antarctica, as well as 13 other areas of high conservation value, should be strongly encouraged.

The General Assembly should:

- Call on States to accelerate efforts to establish large, fully protected marine reserves and MPAs, especially in ecologically or biologically significant areas.
- Welcome the expansion of the U.S. Pacific Remote Islands Marine National Monument and similar very large, fully protected marine reserve designations by Palau and Kiribati.
- 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 Convention on Biological Diversity of protecting at least 10 per cent of the world's oceans by 2020.
- Encourage CCAMLR Parties to proceed with their agreed-upon process to establish a network of protected areas in Antarctica's Southern Ocean.

## Managing deep-sea fisheries

The largest and least explored environment on the planet is the deep sea. Deep-sea fish and ecosystems have evolved a unique set of biological characteristics to survive in this otherwise inhospitable environment. Those characteristics are of great interest to science and the biotechnology industry.

But these deep-sea species are highly vulnerable to fishing. They tend to grow slowly, live long lives, and reproduce late in life. Deep-sea corals, sponges, and other habitat-forming species are particularly vulnerable to damage from bottom trawling. Deep-sea fish species often aggregate around the peaks of seamounts. That makes them easy targets for sophisticated fishing operations. In the worst case, deep-sea bottom trawlers scour the sea floor with giant nets, grinding away important bottom habitats while indiscriminately catching everything in their path.

To respond to the problems of deep-sea bottom fisheries in areas beyond national jurisdiction, the General Assembly adopted Resolutions 59/25, 61/105, 64/72, and 66/68. These reaffirm obligations under the United Nations Convention on the Law of the Sea and related instruments that require environmental impact assessments be conducted before potentially destructive activities are authorized. Under these resolutions, bottom fishing may not commence until an impact assessment has been carried out and precautionary management measures are put in place to prevent significant adverse effects.

The General Assembly resolutions also have endorsed and incorporated a set of International Guidelines for the Management of Deep-Sea Fisheries in the High Seas that were negotiated under the auspices of the FAO. The guidelines describe how prior impact assessments should be conducted and how to implement effective conservation and management measures.

At previous sessions, the General Assembly has reaffirmed its commitment to implementing Resolutions 59/25, 61/105, 64/72, and 66/88 and the guidelines. A review of implementation of these resolutions will take place in 2015.

The General Assembly should:

- Urge States and RFMOs to adopt regulations and other measures to fully implement Resolutions 59/25, 61/105, 64/72, and 66/88.
- Begin preparatory work for the review of the resolutions' implementation.



## Endnotes

- 1 Food and Agriculture Organization of the United Nations, *The State of World Fisheries and Aquaculture* (2012), <http://www.fao.org/docrep/016/i2727e/i2727e00.htm>; *The State of World Fisheries and Aquaculture* (2014), <http://www.fao.org/3/a-i3720e/index.html>.
- 2 *The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, 34 ILM 1542 (1995), <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N95/274/67/PDF/N9527467.pdf?OpenElement>.
- 3 Nicholas K. Dulvy et al., "Extinction Risk and Conservation of the World's Sharks and Rays," *eLife* 3 (2014): e00590, <http://elifesciences.org/content/3/e00590>.
- 4 Boris Worm et al., "Global Catches, Exploitation Rates, and Rebuilding Options for Sharks," *Marine Policy* 40 (2013): 194–204, <http://wormlab.biology.dal.ca/publication/view/worm-et-al-2013-global-catches-exploitation-rates-and-rebuilding-options-for-sharks>.
- 5 L. Campling, E. Havice, and M. McCoy, *FFA Trade and Industry News*, 7: 3 (May/June 2014), <http://www.ffa.int/node/842>.
- 6 International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean, *Stock Assessment of Bluefin Tuna in the Pacific Ocean in 2014: Report of the Pacific Bluefin Tuna Working Group*, 10, 16, [http://isc.ac.afric.go.jp/pdf/2014\\_Intercessional/Annex4\\_Pacific%20Bluefin%20Assmt%20Report%202014-%20June1-Final-Posting.pdf](http://isc.ac.afric.go.jp/pdf/2014_Intercessional/Annex4_Pacific%20Bluefin%20Assmt%20Report%202014-%20June1-Final-Posting.pdf).
- 7 G. Scott and J. Lopez, *The Use of FADs in Tuna Fisheries*, *European Parliament* (2014), 20, [http://www.europarl.europa.eu/RegData/etudes/note/join/2014/514002/IPOL-PECH\\_NT\(2014\)514002\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/note/join/2014/514002/IPOL-PECH_NT(2014)514002_EN.pdf).
- 8 J. D. Filmlalter et al., "Looking Behind the Curtain: Quantifying Massive Shark Mortality in Fish Aggregating Devices," *Frontiers in Ecology and Environment*, 11:6 (2013), 291–296. <http://www.esajournals.org/doi/abs/10.1890/130045>.
- 9 P. Williams and P. Terawasi, Western and Central Pacific Fisheries Commission (2014), ii, <http://www.wcpfc.int/system/files/GN-WP-01-overview-tuna-fisheries-WCPO-inc-economics.pdf>.
- 10 United Nations Conference on Sustainable Development, Rio+20, *The Future We Want*, 131 (paragraph 177), <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf>.
- 11 10th Conference of the Parties to the Convention on Biological Diversity, Aichi Biodiversity, Target 11, March 12–14, 2012, <http://www.cbd.int/sp/targets/rationale/target-11/>.

---

## For further information, please visit:

[pewtrusts.org/ip](http://pewtrusts.org/ip)

---

**Contact:** Joan Yang, senior officer    **Email:** [JYang@pewtrusts.org](mailto:JYang@pewtrusts.org)    **Phone:** 202-540-6526    **Project website:** [pewtrusts.org/ip](http://pewtrusts.org/ip)

---

**The Pew Charitable Trusts** is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.