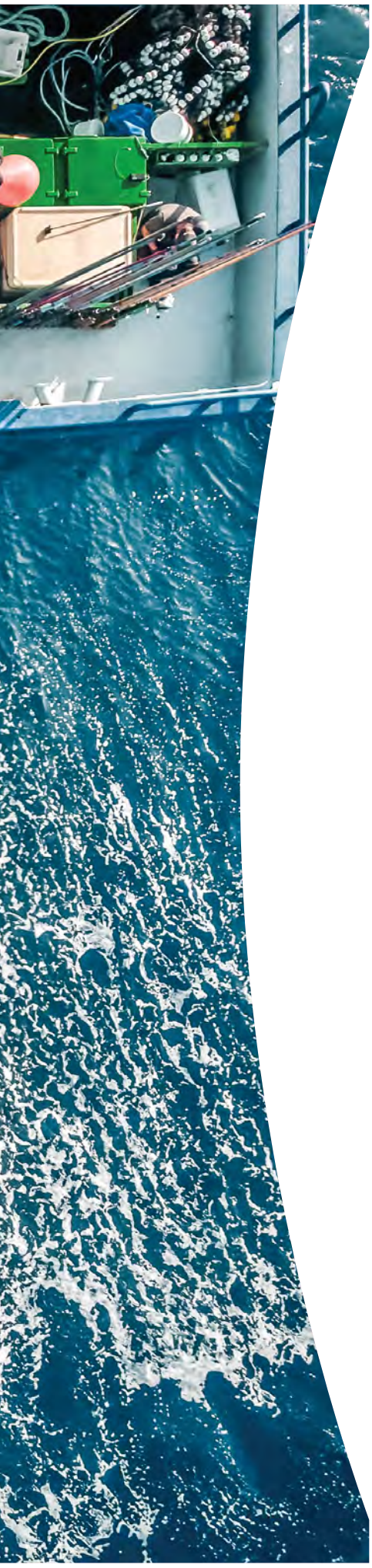
FISHING FOR THE FUTURE

How sustainable fishing helps secure stocks and build long-term resilience

Marine Stewardship Council



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FOREWORD
BY MANUEL BARANGE

Assistant Director-General of the UN Food and Agriculture Organisation (FAO)

Despite plenty of progress, pressures on the ocean persist, making it more important than ever that we work together to manage fish stocks sustainably.

Since the 1970s, when the Food and Agriculture Organisation (FAO) began monitoring the sustainability of global fish stocks, one reality has become increasingly evident: the ocean is vast but not limitless. The fishery resources on which millions depend for food and livelihoods are productive, yet finite, and ensuring they are used sustainably is essential, not just for ecological reasons, but also for global food security, nutrition and economic resilience. Over time, this recognition has influenced the way governments approach fisheries management, balancing environmental sustainability with economic and social considerations in the search for long-lasting solutions.

Fisheries differ widely across regions and management systems must reflect this reality. Highly migratory tuna stocks that cross national jurisdictions, for example, need coordinated international management, coastal shellfish fisheries may depend on local stewardship, seasonal closures and co-management arrangements. What determines success is not uniformity of approach, but commitment to core principles. The good news is that governments are not without guidance. The 1995 FAO Code of Conduct for Responsible Fisheries sets out negotiated principles and standards for responsible management, providing governments with a comprehensive framework for achieving sustainable fisheries.

"The FAO Code of Conduct remains the global reference framework to guide responsible fisheries management."

SCALE MATTERS

Principles and frameworks are essential. The question, however, is whether their implementation delivers results. Evidence shows that success is patchy. According to the latest FAO data, approximately 35.5% of global fishery resources are overfished, a proportion that has increased over time. When we say a stock is overfished, we mean that fishing pressure exceeds its capacity to regenerate: we are, to use a financial analogy, drawing down capital rather than living off its interest.

However, this figure treats all fish stocks equally, regardless of their size or contribution to global production. When weighed by production, the picture is more nuanced: an estimated 77% of global landings come from biologically sustainable stocks. Larger, high-producing stocks tend, on average, to be better monitored, better assessed and more effectively managed. Tuna fisheries are a clear example: as highlighted in this report, and based on FAO data, 99% of global tuna landings today come from stocks that are sustainable.

Nevertheless, many challenges remain. Extending this level of performance to smaller fisheries, where management costs can be proportionally higher and economic returns much lower, requires innovative and less costly approaches, including co-management solutions.

REGIONAL COOPERATION

While most fisheries are managed nationally, they do so under multiple global and regional frameworks. This global legal framework – starting with the UN Convention on the Law of the Sea, its related instruments and the Code of Conduct for Responsible Fisheries – establishes the foundation for sustainable management that applies to all.

As part of this architecture, Regional Fisheries Management Organisations (RFMOs) emerged as critical for fisheries management. They bring countries together to manage shared stocks, promote cooperation and science-based decision making and support compliance. In doing so they are demonstrating that international cooperation is indispensable for the long-term health of shared resources. Today, about 22 RFMOs are in place, with a combined membership of over 150 nations, delivering effective management, conservation, and regulation of shared high-seas fish stocks.

MANAGING UNCERTAINTY

Fisheries management faces an additional test. Climate change is already having an impact on marine ecosystems, shifting species distributions and introducing uncertainties in stock dynamics. Most management systems are based on the principle that setting fishing levels based on a stock's capacity to replenish can reach an equilibrium over time. As environmental conditions change, that equilibrium becomes more dynamic and less predictable, potentially jeopardising conservation and sustainable use arrangements and even leading to tensions between nations sharing resources.

Under climate change, the need for adaptive management is clear, even if the shape of these adaptations is the subject of much debate. What must be preserved in this context are the principles of international cooperation that have formed the bedrock of modern fisheries management.

BUILDING ON STRENGTH

Maintaining healthy fish stocks is an ongoing collaborative effort. The examples presented in this report show how such progress can be achieved across different scales and contexts when science, political commitment and coordination work hand in hand. The priority now is to consolidate and extend this progress, ensuring that fishery resources continue to sustain ecosystems, economies and future generations.

INTRODUCTION

SUSTAINABLE FISHING HOLDS KEY TO HEALTHY STOCKS

It takes a team effort to manage fish sustainably and maintain stocks in optimal condition. The rewards, such as long-term food security and a resilient, biodiverse ocean, are critical to our future.

The ocean sustains life on this planet, yet it's under constant strain. Overfishing in some regions and fisheries continues to pose a serious risk to the ocean environment and threatens food security and livelihoods of millions of people living in coastal communities worldwide. At the same time, ecosystems are being disrupted by climate change, which is altering the distribution of fish populations and impacting the growth and survival of many marine species.

Thankfully, as the growing number of fisheries engaged in the MSC certification program demonstrates, there are solutions for combating overfishing. And with today's access to shared knowledge, advanced technologies and scientific insight, more progress is being made. Sustainable fisheries management has the capacity to protect fish stocks and the wider ocean environment while providing a source of low-carbon protein to feed a growing global population.

SOLVING A COMPLEX PROBLEM

In principle, sustainable fishing is straightforward: fish are a precious resource; to keep stocks healthy and able to feed our population, there must be enough fish left in the sea to reproduce and replenish those taken.

In practice, achieving this is complex. Fishing activities differ in scale and gear type, as well as the species they target and the environments in which they operate – and their management must be tailored accordingly. For example, highly migratory tuna stocks which shift between different national jurisdictions and the high seas will require a different approach to hand-harvested coastal clams.

Sustainable management also relies on having good data, including catch volumes and stock population. This can be challenging and expensive to gather and analyse, which can be prohibitive in many countries with developing economies. Harmful subsidies and illegal, unreported and unregulated fishing generate yet more obstacles on the path to sustainable stock management.

"When fisheries management regulations are based on sound science and properly enforced, fish populations are usually fished within sustainable limits, or if they do become depleted, usually rebuild if fishing pressure is relaxed."

Dr Michael Melnychuk,
Principal Scientist at the
Marine Stewardship Council.

BLUEPRINT FOR SUSTAINABLE STOCK MANAGEMENT

Despite their diversity, many well-managed fisheries share common foundations. Effective governance and monitoring, underpinned by robust science, is central to maintaining healthy stocks. Data on stock size, structure, reproduction and fishing impacts feeds into stock assessments that inform catch limits and other management measures.

Management measures vary by fishery but often include catch quotas set using harvest control rules, seasonal or area closures, and gear modifications to prevent bycatch of juveniles and other species. Vessel monitoring systems and at-sea observers help fishers and scientists assess stock health, and reporting systems are used to verify the catch. Flexibility in management approaches is also becoming increasingly important as climate change alters the marine ecosystem.

IT TAKES A TEAM

Managing fish stocks effectively relies on collaboration. Policy makers, the fishing industry, scientists and NGOs all have a role to play, united by a common aim: maintaining healthy, productive stocks over the long term. It also requires a broad knowledge of the environmental influences acting upon stocks and the dynamics of the ecosystem in which they are embedded.

National governments play a particularly key role; they are responsible for setting and enforcing fishing regulations, implementing management plans, and working with other countries to manage shared stocks. Governments can also influence the collection of data, mandate specific requirements such as area closures, and provide funding to support research and improvements.

INTERNATIONAL COLLABORATION

International collaboration is also crucial, particularly when stocks are highly migratory and move between national and international waters. Tuna stocks are often shared by multiple countries which all need to agree on how the resource should be managed to prevent overfishing. Together, they must decide how catch limits should be set, how quotas should be allocated, and measures to take if data reveals the stock is declining.

The management of such stocks is led by Regional Fisheries Management Organisations (RFMOs) – international bodies formed of countries with a fishing interest in a specific region. RFMOs establish binding measures for sustainable stock management and environmental conservation based on scientific evidence, including catch limits, harvest control rules and area closures.

MAJOR MILESTONE FOR SUSTAINABLE MANAGEMENT

In 2023, a rigorous harvest strategy was implemented in the Western Central Pacific Ocean – the world's largest source of tuna – to ensure the long-term health of skipjack tuna stocks[1]. Following years of negotiations, this vital management measure established a pre-agreed plan for adjusting catch based on estimates of stock status.

The tuna stocks are shared by multiple countries and are managed by the Western Central Pacific Fisheries Commission, an RFMO comprised of 26 member states; almost half of the states are Pacific Islands for whom tuna is key to their economies and livelihoods.

HARVEST STRATEGIES

Vital management measures set by fishery managers, or RFMOs if the stock is shared by multiple nations, to ensure the long-term sustainability of a stock.

To be effective, they should be based on scientific advice and include a combination of stock assessments, monitoring, harvest control rules, and other management actions that help bring about the sustainable management of the fishery[2].

"These achievements mark a significant step forward in global fisheries management, setting a benchmark for other fisheries to follow and ensuring that the world's most important tuna stocks are managed sustainably." Bill Holden, Senior Tuna Fisheries Outreach Manager at the MSC.

The successes in the Western Central Pacific – and other RFMO-managed tuna fisheries – demonstrate what can be achieved when nations work together for the long-term benefit of the stocks and offer hope for progress in other regions.

In the Northeast Atlantic, for example, repeated failure among coastal states to agree on shared quotas has threatened the future health of key small pelagic stocks, including mackerel and Atlanto-Scandian herring. These stocks have been consistently fished at levels well above scientific advice in the absence of collective action to break the political deadlock.

"RFMOs play a vital role in managing shared stocks, but progress cannot be made without political will. The tools for sustainable management exist and the science is clear – governments must put the long-term sustainability of fish stocks ahead of short-term goals, and work together to agree science-based quota allocations as a fundamental component of good fisheries management and governance."

Erin Priddle,
Regional Director for North Europe at the MSC.

1. https://www.msc.org/media-centre/news-opinion/news/2024/10/23/landmark-achievements-in-tuna-fisheries-wcpo-skipjack-and-north-pacific-albacore-implement-world-leading-harvest-strategies
2. https://www.msc.org/what-we-are-doing/maintaining-fish-stocks

© MSC/ Hannah Maule-Ffinch

TURNING THE TIDE

Effective fishery management is demanding, but efforts are paying off. This is particularly apparent for large, commercially valuable stocks: according to the UN FAO, 99% of total tuna landings and 85% of Alaska pollock landings are from stocks that are not overfished[3].

However, challenges remain, especially in developing economies with limited resources, and in heavily fished areas like the Mediterranean and Black Sea where over half (52%) of assessed stocks are overfished[4].

The MSC's growing global program for sustainable fisheries certification shows what can be achieved when fisheries, governments, scientists, NGOs and supply chain businesses work together to protect fish stocks and the ocean.

In our nine case studies, we highlight the commitment fisheries need when faced with rebuilding stocks and delivering ongoing efforts to maintain healthy and productive levels in MSC certified fisheries. Together, they offer excellent proof that fisheries are making significant progress.

These examples underline a central reality: there is no single pathway to ensuring sustainable fish stocks. Progress depends on a fishery's adaptability, being responsive to changes in stocks and environment, stakeholder dedication, and committing to continual improvement.

Where these elements come together, sustainable stock management is not only possible but enables fisheries to move towards long-term resilience.

"Through coordinated science, responsible management, and collective determination, we can turn the tide on overfishing, ensuring that our fish stocks not only recover but thrive – sustaining ecosystems, communities and future generations."

Bill Holden, Senior Tuna Fisheries Outreach Manager at the MSC.

3,4. UN FAO Review of the state of world marine fishery resources (2025)

SUSTAINABLE FISHING IN NUMBERS

213 improvements made by MSC certified fisheries benefitting stock status and harvest strategies

738 fisheries engaged in the MSC program[5]

20.6% of all wild marine catch is engaged with the MSC[6]

5. 'Engaged' is defined as catch from fisheries that are MSC certified, in assessment, suspended and in the MSC Improvement Program.
6. Marine catch and fishery data as of 31 March 2025, compared with figures taken from © FAO. 2025.

JOINING FORCES TO SECURE SARDINE STOCKS

© MSC/ Alexandra Silva

IBERIAN SARDINE PURSE SEINE FISHERY

Certified July 2025
Portugal, Spain

Four-fold increase in biomass of Iberian sardine stocks following collaborative rebuilding plan led by Portuguese and Spanish fishers.

When the Portuguese sardine fishery had its MSC certification suspended after only four years in 2014 prospects looked bleak for the popular local fish. The health of the stock was in decline following years of poor recruitment (the number of young fish surviving to reproductive age) and an inability to resolve conditions of certification set by the MSC to rebuild stocks and ensure they were being fished sustainably.

By 2017, the stock was in critical condition, and the International Council for the Exploration of the Sea (ICES) even recommended complete closure of the fishery. From fishers to cannery workers, it was a desperately hard time for the hundreds of people whose livelihoods had long depended on healthy stocks.

Over the next few years, the fishery entered what Humberto Jorge, President of ANOPCERCO, the National Association of Purse Seine Producers' Organisation, called the "years of survival". He adds proudly that during this challenging period, defined by stringent fishing and catch limitations, they "never lost focus on the sustainability of the resource".

Both the Portuguese and Spanish fisheries were united in their determination to turn things around. Together, the two countries developed and agreed on a science-based management plan. This included seasonal closures, annual catch limits based on the best available data, and precautionary harvest control rules (measures to adjust catch in response to stock changes).

The improved management of the fishery – which ensures better protection of the stock throughout the Iberian Peninsula – was accompanied by several years of strong recruitment. The combination of these factors has allowed the sardine population to be rebuilt, with the 2025 biomass now estimated to be almost four times greater than in 2015[7].

The two countries' joint effort to rebuild the stock was rewarded in 2025, when the Iberian Sardine purse seine fishery achieved MSC certification. The certificate covers 317 vessels operating from the Bay of Biscay to the Strait of Gibraltar.

Along this coast, the sardine is so much more than just a dietary staple. It is a prized cultural symbol that offers a vital barometer of the region's socio-economic health. Thanks to the co-operation and foresight of Portuguese and Spanish fleets and their governments the celebrated Iberian sardine faces a much more certain future.

"For the seafood sector, this proves that MSC certification is more than the label; it's the result of long-term collaboration, transparency, and scientific commitment."

Alberto Martin,
MSC Program Director for Spain and Portugal

7. ICES Advice (2025) on Sardine in divisions 8.c and 9.a

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THE RETURN OF BLUEFIN TUNA

© MSC/ Jonathan Serrano

A comprehensive rebuilding plan brought East Atlantic Bluefin tuna stocks back from the brink, with spawning stock biomass at the highest level since the 1960s[8].

Bluefin tuna has made a remarkable comeback. Towards the end of the 20th century, the Eastern Atlantic and Mediterranean bluefin tuna stock reeled on the brink of collapse. However, in recent years, the introduction of strict new management rules for all states targeting the iconic species has allowed the stock to recover.

8. https://oap.ospar.org/en/ospar-assessments/committee-assessments/biodiversity-committee/status-assesments/atlantic-bluefin-tuna/

Surging demand for bluefin tuna, which is prized for its taste and quality, led to overfishing in the 1980s and '90s and poor adherence to catch limits. During this period, catches in the Eastern Atlantic and Mediterranean peaked at an estimated 50,000-61,000 tonnes annually[9], far exceeding sustainable levels and bringing the stock close to collapse. Measures to address the overexploitation, including setting a total allowable catch (TAC), were introduced in 1998 but were poorly enforced, allowing overfishing to continue unchecked.

Bluefin tuna is a highly migratory stock, so effective management and cooperation between many different states is required to ensure the stock is fished sustainably. In 2007 the International Commission for the Conservation of Atlantic Tunas (ICCAT) introduced a 15-year recovery plan.

Recovery plan measures included:

- Reduced catch limits and quotas, aligning catch more closely with sustainable yield estimates.
- Fishing season restrictions based on gear and vessel size to reduce excessive pressure.
- Increased minimum catch size, raised from 10kg to 30kg to protect juveniles and support spawning success.
- Improved monitoring, control, and surveillance, with observer coverage mandatory on vessels over 15m.
- Bans on the use of aircraft to locate tuna schools, transfer of quotas, and transshipment without oversight.

9. ICCAT Report (2017) | https://www.iccat.int/Documents/Meetings/Docs/2017_SCRS_REP_ENG.pdf

© MSC/ Jonathan Serrano

The plan also strengthened data reporting requirements and incentivised better compliance across all member states targeting bluefin tuna.

These measures delivered faster results than anticipated. In 2014, ICCAT scientists noted stock improvements were well ahead of schedule, and just three years later assessments showed that overfishing was not taking place on the Eastern Atlantic stock. By 2019 – three years earlier than forecast – the long-term recovery plan was switched to multi-year management following agreement from scientists that the Eastern Atlantic stocks had recovered. International cooperation, aligned with strict enforcement of these science-based measures – astutely adapted along the way – had enabled the recovery plan to yield positive results.

This ultimately opened the door for three fisheries to achieve MSC certification, with the requirement to make further improvements to ensure stocks remain healthy. In addition to the Japanese Usufuku Honten Northeast Atlantic longline bluefin tuna fishery, awarded certification in July 2020, the SATHOAN French Mediterranean bluefin tuna artisanal longline and handline fishery (October 2020) and JC Mackintosh Greenstick, handline and fishing rod bluefin tuna fishery (September 2022) were also certified.

Additional bluefin tuna fisheries are currently engaging with the MSC program with the aim of achieving certification. This not only celebrates this recovery but reinforces the importance of ongoing stewardship to ensure bluefin tuna stocks thrive for generations to come.

Having been under threat for so many years, the International Union for the Conservation of Nature (IUCN) was able to reclassify Atlantic bluefin tuna from “endangered” to “least concern” in 2021[10].

The following year, ICCAT established a new Management Procedure which required the eastern and western stocks to be managed under a single harvest strategy[11]. The non-governmental organisation Pew Charitable Trusts called it a “seminal moment” in the management of fish stocks. This was an important step towards safeguarding the long-term health of the stock throughout the Atlantic, providing a “safety net” to ensure catch is reduced and the stock allowed to recover if the population falls below sustainable levels.

10. https://iucn.org/news/species/202109/tuna-species-recovering-despite-growing-pressures-marine-life-iucn-red-list
11. https://www.msc.org/media-centre/news-opinion/news/2022/11/22/seminal-moment-atlantic-bluefin-tuna-harvest-control-rules

“We have seen that when stocks need to be rebuilt, countries have come together in the best interest of the stock. Eastern Atlantic bluefin is an example of an overfished stock that has been rebuilt when fishing pressure was reduced. Now management of stocks through Management Procedures is ensuring the stocks remain healthy while allowing catches to increase.”

Bill Holden,
Senior Tuna Fisheries Outreach Manager,
MSC

EARLY WARNING SYSTEM TO PROTECT SARDINES FROM OVERFISHING

© MSC

SMALL PELAGICS FISHERY IN SONORA, GULF OF CALIFORNIA

Certified in July 2011
Sonora, Mexico

A preventative approach to management has helped rebuild small pelagic stocks, with the available biomass of Pacific sardines approximately doubling between 2013 and 2021[12].

The long sliver of water enclosed by the Mexican mainland and the Baja California peninsula is one of the world's richest ecosystems.

These pristine waters yielded rich pickings for many years until overfishing in the 1980s triggered a collapse of the Pacific sardine stock in the early 1990s. The ripple effect of the collapse impacted the regional marine ecosystem and had severe economic consequences for communities relying on the fishery for their food security and livelihoods.

12. Public Certification Report (2023) | https://fisheries.msc.org/en/fisheries/small-pelagics-fishery-in-sonora-gulf-of-california/@@assessments/

© MSC

"The fishery monitoring system puts shared responsibility into practice. A sustainable fishery supports community wellbeing, strengthens the value chain, and safeguards national food sovereignty, with respect for the ocean."

Regino Ángulo Rodríguez, President of the Sonora Chapter, National Chamber of the Fishing and Aquaculture Industries

In the following two decades stocks fluctuated unpredictably, often due to climate related changes alongside fishing pressure. Catch even reached historic lows below 5,000 tonnes in the immediate years after the Sonora small pelagics fishery achieved MSC certification in 2011.

The small pelagics purse seine fishery – Mexico's largest by volume – faced a challenge: how to rebuild and stabilise a stock that is highly sensitive to environmental changes. Factors such as sea surface temperature and ocean currents directly impact the distribution and abundance of these stocks, and influence how many juvenile fish mature into adulthood. For example, historical El Niño Southern Oscillations (ENSO) have warmed waters and driven dramatic declines in Pacific sardine numbers.

Past fishery collapses left a clear lesson: the small pelagic fishery management had to be agile and resilient, able to adapt to natural stock fluctuations, rather than unintentionally amplifying them.

The Sonora small pelagics fishery has chosen a preventive approach, even though managing a multi-species fishery presents significant challenges. The strategy relies on conducting annual stock assessments for each target species and setting a precautionary quota for each one. Exceeding the quota for any single species can trigger the closure of the fishing season for all species.

To prevent quotas being exceeded, Sonora's fishers took action and developed a type of early warning system that requires all vessels to record catch data, which is analysed and issues real-time alerts if a quota is being approached. The system relies on collaboration and cooperation between different stakeholders, including the skippers of 50 vessels. Their shared ownership has clearly paid off as since the system's introduction and refining, quotas have not been exceeded.

Ensuring the Pacific sardine stock and the rest of the small pelagics targeted by this fishery are healthy and not overfished is of additional importance as these forage fish are a key source of food for other animals such as larger fish, seabirds and marine mammals. Significant research has been carried out to understand the role of sardines within the ecosystem, and to develop models to estimate catch limits that will ensure the ecosystem can continue to function.

The majority of the catch is reduced into fishmeal and fish oil, primarily used to feed livestock and farmed fish. Aquaculture has been the fastest-growing food production sector of the last 50 years with the demand for farmed fish putting pressure on wild-capture of small pelagics such as sardines and herring.

In light of these pressures, the fishery is working to further improve stock management as a condition of certification. This includes providing evidence that the tools used to comply with harvest control rules are effective (For chub mackerel, thread herring, Pacific sardine), and that well-defined harvest control rules are in place (For Pacific anchoveta and California Anchovy).

MODIFIED NETS HELP HAKE TO THRIVE

© MSC/ Oliver Berry

CORNISH HAKE GILL NET

Certified in June 2015 Cornwall, United Kingdom

Adopting sustainable management measures and the use of larger meshes in gillnets has enabled the Cornish hake stock to be rebuilt and maintained at a healthy level.

Cornish hake had been a popular species for many years in UK and European markets before overexploitation led to a pronounced decline in stock levels in the late 1990s. By the turn of the century, the spawning stock biomass (the number of females in the stock capable of reproduction) had reached a historical low, and existing management measures were not robust enough to prevent overfishing.

© MSC / Nigel Millard

“Cornish fishermen and the seafood supply chain proved to be very entrepreneurial and forward thinking in approaching this, introducing various management and gear selectivity measures, including an increase in mesh size, followed by domestic marketing campaigns. We are now at a point where the stock is at a sustainable and productive level, and we have an ever-growing demand from UK consumers.”

Chris Ranford,
CEO of the Cornish Fish Producers Organisation

To recover the stocks to levels within safe biological limits, a stock rebuilding plan was needed. Thanks to changes brought in by local fishermen and a new collaborative management plan set up in 2004, the biomass of hake has significantly recovered.

The formal recovery plan was implemented by the European Union and included measures such as a minimum landing size, capped catches and a reduction in fishing effort in biologically sensitive parts of the Celtic Sea, such as “the hake box”, a major nursery ground for juvenile hake that lies off the south coast of Ireland.

The Cornish fishery consists of a fleet of about a dozen boats and is managed by the Cornish Fish Producers Organisation Ltd, a non-profit cooperative. Critical to their success was an incremental but significant change to the fishermen’s gillnets. The fishery has worked to reduce bycatch of small and juvenile hake by using gillnets with a mesh size of 124 to 130mm, which is larger than the legal requirement (120mm minimum). In a science-led field like fishing a matter of a millimetres can make a big impact.

Gillnets are like curtains of netting that hang in the water with minimal seabed interaction. The increased mesh size allows smaller adults and juveniles to swim free from the nets, leaving more time for both small fish to grow and young fish to reach maturity and reproduce.

By around the mid-2010s, biomass had increased significantly, supporting a revived domestic market. This paved the way for the Cornish hake fishery to become the first hake fishery in the UK to meet the Marine Stewardship Council’s internationally recognised standard for sustainable fishing in 2015. While the improved management of the fishery has enabled the spawning stock biomass to increase by over 300% since 1998[13].


© MSC/ Oliver Berry

OVER 300%

Spawning stock biomass increased by over 300% between 1998 and 2025, from 29,079 to 116,970 tonnes.

13. ICES Advice (2025) Hake in subareas 4, 6, and 7, and in divisions 3.a, 8.a–b, and 8.d, Northern stock (Greater North Sea, Celtic Seas, and the northern Bay of Biscay)

© MSC / Tiare Buoys

ENDING THE "RACE TO FISH" IN THE PACIFIC NORTHWEST

CANADA (BRITISH COLUMBIA) PACIFIC HOOK AND LINE HALIBUT FISHERY AND SABLEFISH CAUGHT BY LICENSED COMMERCIAL HALIBUT VESSELS

Certified in September 2009 British Columbia, Canada

A novel quota system that integrates seven commercial groundfish fisheries has enabled harvesters to fish smarter, not faster, and helped secure the future of MSC-certified halibut in British Columbia.

In the 1980s, fishing seasons for groundfish such as halibut, lingcod and sablefish in the Pacific Northwest were extremely short and dangerous. Driven by a "race to fish" dynamic, hundreds of vessels charged to catch fish during brief openings creating intense fishing pressure, excessive waste and serious management challenges.

This crisis had inadvertently arisen when Canada's Department of Fisheries and Oceans (DFO) attempted to control fishing effort and harvest by using season length reductions. In the 1980s, the DFO set a total allowable catch (TAC) for multiple groundfish species mandating that the fishery would close once that total was reached.

Unfortunately, as is the case in many fisheries around the world, the measure backfired. Rather than improving management, it led to "derby style" competition where individual vessels would rush to gain as large a share of the catch as possible. Under such frenzied conditions, the TAC was frequently exceeded between 1980-90[14], putting the long-term health of the stocks at risk.

Concerned about the long-term sustainability and economic viability, halibut vessel owners approached the DFO to develop new and more effective management measures. This led to the implementation of an Individual Vessel Quota (IVQ) program in 1991, which was then adopted across the other groundfish fisheries in British Columbia. The IVQ system provides each vessel with a share of the total allowable catch, which can be taken at any time during a much longer season, eliminating the destructive "race to fish".

A further management change was introduced in 2006, which requires halibut vessels to be accountable for not just their target catch but all other groundfish catch. This applies regardless of whether the non-target species are retained or discarded. For example, any lingcod or sablefish caught by the halibut fishery would count towards those fisheries' quotas and vice versa.

Because the quotas are transferable, fishers can temporarily or permanently reallocate their quota between vessels or different fisheries, allowing them to plan their operations over an extended season. Flexibility is built-in: halibut harvesters, for example, can carry over up to 10% of unused quota, while any excess catch is deducted from the vessel's quota in the following year.

14. Impacts of harvesting rights in Canadian Pacific fisheries (2009) | https://publications.gc.ca/site/eng/363708/publication.html

© MSC / Tiare Buoys

"Today, the fishery has 100% at-sea monitoring of all the catch and 100% dockside monitoring of all fish landed; catch limits for halibut and non-target species are never exceeded, and, as a result, Canada's Pacific halibut fishery has been certified as sustainable by the Marine Stewardship Council, the global gold standard in wild fisheries eco-certification."

Chris Sporer, Executive Manager, Pacific Halibut Management Association of BC.

HANDS-ON COMMUNITY ACTION PROTECTING THE FUTURE OF CLAMS

© MSC / Saigon Laca

VIETNAM BẾN TRE CLAM HAND GATHERED FISHERY

Certified since November 2009 Bến Tre, Vietnam

A cooperative management system transformed a clam fishery, securing the future of the stock and local livelihoods.

There was a time when illegal fishing was common on the mudflats of the Bến Tre clam fishery in Southern Vietnam. Regulations were largely absent, and the government's fishery management initiatives failed to incentivise local fishers to harvest clams sustainably.

Under increasing pressure to boost production, immature clams were collected before they reached a productive size, limiting their capacity to reproduce successfully. The region had also experienced historic loss of mangrove forests, which provide clams with key nutrients and help prevent erosion of the mudflats.

Things began to change when a cooperative-based management system was established in the early 2000s. Working together has enabled management of the fishery to ensure regulations are in place to safeguard the future of the stock and empower the local community to protect their livelihoods in the Mekong Delta.

Supported by the Department of Agriculture and Environment, the formation of eight fishers' cooperatives and two groups comprising over 9,000 community members has allowed villagers to be actively involved in ownership of their marine resources. Members collaborate with one another as equal shareholders.

The cooperative regulates the size and quantity of clams that can be harvested, as well as the area in which clams can be collected. It also implements a rotation system between different regions and unfished areas, allowing for ongoing stock replenishment.

Surveys are carried out at each plot before harvesting to calculate the biomass. Harvesters are required to leave 15% to 20% of clams on the beds to maintain the population and serve as broodstock (mature shellfish kept for breeding). They also need to ensure the clams are at an appropriate density – surveys are often carried out post-harvest to confirm this.

The hand-harvesting method is also key to ensuring that the Asiatic hard clams are not overexploited. The traditional technique – picking from the sand-flat shoreline with the aid of a rake – does not disturb other species, the area's biodiversity, or the delicate ecosystem.

A locally elected "clam committee" takes part in evaluating the clam stock and habitat, and consults with the local government to agree fishery management strategies each year. Newfound motivation has also seen fishers attend training workshops on environmental management. This has led to community involvement in a government-led conservation project for the province's 4,800 hectares of mangroves. Replanting mangrove trees – which filter water, act as a buffer to waves and wind, and support nutrient cycling – has helped to stabilise the clam habitats.

Once a serious problem, illegal harvesting has also been virtually eliminated, through a combination of community-led initiatives such as the introduction of a fisher ID card system, and the use of security guards and viewing platforms to monitor activity.

It's a far cry from the free-for-all of the past and demonstrates how the efforts of local people to protect stocks and their livelihoods are paying off.

"In order to become MSC certified, fishers had to begin measuring the clams they harvested and returning any undersized individuals to the mud to grow bigger."

Mrs Nga, former Bến Tre fisheries director.

"As a result of this, and the temporary closure of different areas of the fishing ground to allow clams to grow, we have noticed big increases in the abundance of clams."

© MSC / Saigon Laca

REVIVING HAKE STOCKS IN NAMIBIA

© MSC / Joshua Ihlenfeldt

NAMIBIA HAKE TRAWL AND LONGLINE FISHERY

Certified in November 2020 Namibia

Carefully rebuilding fish stocks post-Namibian independence has benefitted both the marine environment and the local economy

Historically, the hake fishery in Namibia was largely unregulated. There were few management measures and uncontrolled fishing by international fleets led to overexploitation of the stock. The population were not fishers, there was little local fishing industry, hardly any scientific knowledge and no real management structure beyond the nearshore.

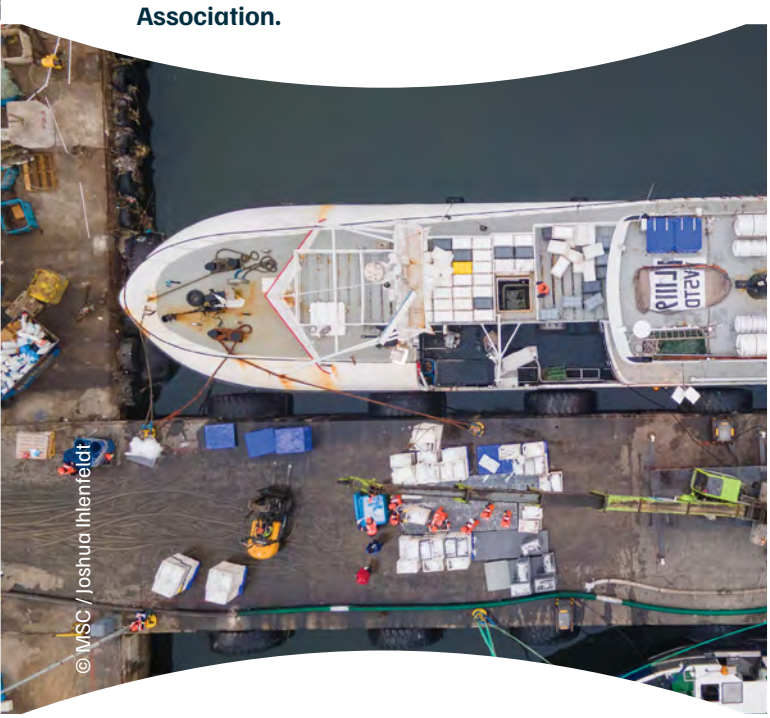
X2 **The biomass estimate in 2019 was approximately twice the level of 1990[15].**

15. Public Certification Report (2020) | https://fisheries.msc.org/en/fisheries/namibia-hake-trawl-and-longline-fishery/@@assessments

© MSC / Joshua Ihlenfeldt

"Since [the country's] independence, the government, scientists and industry have worked hand-in-hand to rebuild the hake resource and create a profitable fishing industry that gives back to people and the environment. Achieving MSC certification, first in 2020 and now (2026), has been a team effort and provides assurance to the world that we are committed to the sustainability of Namibian hake."

Matti Amukwa, Chair of Namibian Hake Association.



© MSC / Joshua Ihlenfeldt

This all changed in 1990, when Namibian independence from South Africa heralded a new age for the fishery. The government and industry's shared goal was to create a profitable fishing industry that gave back to both people and the ocean. The adoption of the Marine Resources Act in 2000 established fishing rights allocations and ensured that control of the fishery and any economic benefits favoured Namibian companies and citizens.

Over 30 years on, and following extensive collaboration between government and industry, the fishery is thriving. Now the Namibian Hake Association members use both longline and deep-sea trawl fishing gear. They target deep-water and shallow-water hake species with a catch of around 140,000 tonnes – about one sixth of the overfished peak.

Perhaps the most important thing that the government has done is to set targets in line with scientific advice, allowing stocks to rebuild. While the government may still be under pressure to maximise the short-term economic benefit to Namibia, the longer-term perspective has been pivotal in improving the fish stocks.

The fishery has also implemented a clear harvest strategy – a combination of monitoring, stock assessments, control rules and management measures to ensure stocks are healthy – and works closely with the MSC certified South African hake trawl fishery to ensure information from both stock assessments is considered.

The fishery also benefits from high levels of at-sea observer coverage[16]. Having a dedicated observer overseeing and monitoring fisheries activities is essential for verifying catch data and recording independent data on interactions with threatened species.

The Namibian hake trawl and longline fishery was awarded its second MSC certification in January 2026, having become the first fishery in Namibia and the second in Africa to meet the globally recognised standard for sustainable fishing in 2020. This has helped the fishery to meet growing demand from northern European markets for sustainable hake, filling the gap left by overfished cod stocks.

"Having MSC certification means we can get top dollar for a high-quality product, and that benefit is kept locally."

Ron Wolters, Executive Secretary of the Namibian Hake Association and representative of the certified fishery members.

16 Public Certification Report (2026)
https://fisheries.msc.org/en/fisheries/namibia-hake-trawl-and-longline-fishery/@@assessments

SAFEGUARDING SCALLOPS THROUGH ANNUAL SURVEYS

BAIE DE SEINE SCALLOP DREDGE

Certified in November 2025 France

Science-based decision making in France's Baie de Seine allows scallop fishery to thrive, with "fallow" zones and strict gear controls helping the exploitable biomass reach its highest levels in 30 years.

In the nutrient-rich waters of the Baie de Seine in the Eastern Channel, Great Atlantic scallops can reach the harvestable size of 110mm in just two to three years. Scallops are short-lived species and the population of a stock can vary significantly year on year. This can make typical stock assessment models less effective and can even mean that management advice is based on "out-of-date" data, which is no longer representative of stock status.

To counter this, the Baie de Seine scallop dredge has partnered with Ifremer, the French Research Institute for Exploitation of the Sea, since 1976 to inform decisions on how to manage the stock.

Each year, Ifremer deploys research vessels to directly assess the scallop stock. Data is gathered on the weight of the stock (biomass), age and size of the scallops, and distribution. These surveys take place in July when one-year-old scallops have grown enough to be captured by the scientific dredges used for sampling and to allow sufficient time for the results to be processed before the commercial season opens in October. The findings are used to set exact opening dates and quotas to manage the resource sustainably over time. Good participation by fishers in the decision-making process helps to make it transparent and effective.

Robust regulations are also in place to ensure the stocks are fished sustainably. Restricting the fishing season from October to May allows the scallops to reproduce during the summer months. While a rotational fallow system, introduced in 2016, allows the stock to regenerate without being disturbed by fishing. The areas for closure are identified through the annual survey and include regions with high densities of juvenile scallops. This helps to improve the survival of juveniles into adulthood.

There is also a minimum size restriction of 110mm in place, which ensures scallops can only be retained if they are well above the size of maturity. The fishery uses dredge gear to catch scallops and must ensure that the rings of the dredge net meet a minimum size (97mm) to reduce unwanted catch of undersized scallops. This ensures that juvenile scallops remain on the seabed for future seasons. To double-check, fishers also measure each shell with a hand-held gauge to ensure only those that meet the minimum size are retained and smaller scallops are returned to the sea.

Years of rigorous management put in place by fishers and informed by annual Ifremer surveys enabled the fishery to achieve MSC certification in November 2025. While the biomass reached record levels in 2024, the certification ensures that the fishery operates under a framework that can adapt to fluctuations, such as the lower juvenile recruitment (low numbers of juveniles maturing into the adult population) observed in the July 2025 survey.

The fishery has gone to great lengths to collect good data on catches and is now making sure that these efforts are incorporated into key decisions, for an even more robust management system.

"This label [MSC] is a symbol of pride and a turning point. It rewards 30 years of collective work and exemplary management: fallow land, leftover policy, stock monitoring... The hardest part was getting everyone on board, but today we are proving that quality and sustainability go hand in hand."

Dimitri Rogoff, President of the Comité Régional des Pêches de Normandie (Normandy Regional Fisheries Committee)

© MSC / NFM

102,729 TONNES

The estimated exploitable biomass (no. mature adults in the stock) in a 2024 survey - a record high since standardised surveys began in 1992[17]

17. Public Certification Report (2025) | https://fisheries.msc.org/en/fisheries/baie-de-seine-scallop-dredge/@@view

FORWARD-THINKING MANAGEMENT

© MSC

NEW ZEALAND HAKE, HOKI, LING AND SOUTHERN BLUE WHITING

Certified since 2001

New Zealand

For more than two decades, the New Zealand hoki fishery has been at the forefront of sustainable fisheries management. Its agile implementation of comprehensive management measures has ensured hoki stocks – a vital part of the country's economy – have remained healthy over the years.

New Zealand was the first country to introduce a quota management system (QMS) in 1986. Based on scientific assessments, the QMS established total annual catch limits for commercial hoki fishers at less than 10% of the adult fish population. Building on these responsible fishery practices, the New Zealand hoki fishery became the first whitefish fishery in the world to achieve MSC certification back in 2001. Since then, it has been recertified four times.

It's not all been plain sailing out on the cold waters off New Zealand's west coast where the majority of hoki is harvested between June and September each year. Hoki stock biomass has fluctuated over the past 30 years, driven by multiple years of low-level recruitment (juveniles maturing and joining the stock). Strong and adaptive management measures have ensured the catch limits were responsive to the changing biomass, preventing the stock from becoming overfished.

The New Zealand hoki fishery has gone a step further to ensure stocks remain sustainable. When crew started to notice fewer hoki than they would expect in the West Coast fishery in 2018, they volunteered to reduce their catch limit below the government's recommended level. The reasons for a decline in biomass were unclear and contradicted what was seen in the government's stock assessment and modelling at the time. However, the industry came together and agreed to reduce their catch that year by 20,000 tonnes.

This proactive approach was first introduced in 2018-19, and has been adopted every year since 2020, with the fishery reducing the catch limits across the eastern and western stocks based on stock status.

Area closures have also been implemented in regions where juveniles are abundant. Vessels are advised to move away from an area if juveniles encompass more than 20% of the catch. This has helped to reduce fishing pressure on juvenile and spawning hoki, which can travel over 1,200km to spawn.

The fishery has also taken action to improve understanding of the stock structure, which has distinct east and west populations. Scientists have been engaged to undertake genetic analyses of hoki which could prove invaluable for enabling more targeted management decisions. Genomic data allows fisheries to identify distinct populations, monitor genetic diversity and health, and detect overfishing impacts. Naturally, this enables more precise management practices by tailoring strategies to each specific stock, and makes sure the New Zealand hoki fishery stays at the forefront of global sustainable fishing.

60,000 TONNES

Voluntary reduction in catch limit since 2018[18]

"Twenty-five years on [from initial certification], our commitment to science-based, ecosystem-focused fisheries management remains as strong as ever."

Aaron Irving,
General Manager Deepwater,
Seafood New Zealand

18. MSC Public Certification Report (2026): Assessments New Zealand hake, hoki, ling and Southern blue whiting - MSC Fisheries

Marine Stewardship Council

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THE DATA IN THIS REPORT IS CORRECT AS OF 31 MARCH 2026, UNLESS OTHERWISE STATED.