

Committee: Ecology & Environment

Topic: The Question Measures to Ensure Sustainable Fishing Practises and Protect Oceans from Overexploitation

Chair: Patrick Doyle

School: Haileybury and Imperial Service College

Summary

Why is sustainable fishing important?

The oceans provide global food security and play a critical role in supplying a growing global population with sustainable protein. However, today the ocean supplies just 2% of the world's calorie needs. Furthermore, despite seafood's potential and its low environmental footprint, most food policy discussions focus on land-based agriculture or discuss production on land and sea separately. The oceans therefore are a great solution to problems regarding food security around the globe, but they cannot be over exploited or environmental damage will cause more problems. The oceans must therefore bear witness to sustainable fishing.

The future of fisheries, food security and ocean ecosystems themselves is also undermined by illegal, undocumented and unreported (IUU) fishing, overfished stocks, and unsustainable practices. These will reduce the availability of fish in the sea thus preventing the ability for future generations to use the oceans as a food source, increasing poverty on a global scale. Moreover, seaweed offers enormous potential as a source of feed, fuel and fertiliser and should be leveraged within the aquaculture industry to support food security and combat climate change highlighting the great potential for the oceans to be used to support global economies but they must be harvested sustainably to ensure future use.

The global appetite for fish and fish products shows no signs of slowing down. Global consumption, per capita, has reached 20.5 kilograms per year, which is forecast to rise by one kilo per person, by 2030. Although sustainability trends for tuna and other major fish stocks are improving, nearly 35 per cent of all catches are being sourced at what FAO called "biologically unsustainable levels". The UN agency warned that failure to apply effective fisheries management measures threatens both food security and livelihoods in the future, thus it is vital that sustainable fishing methods are used and the oceans not overly exploited.

What is the value of our oceans?

Commercial ventures like seaweed farming can create new economic opportunities, particularly for women in rural communities, enhanced by the interconnectedness of the global economy. They can also be more environmentally friendly than other aquaculture activities. Part of the reason is that seaweed and other species of algae do not need fertilisers to grow—just sunlight, carbon dioxide and water. All these factors begin to show how economic prosperity, trade and the preservation of the environment can, in fact, reinforce each other.

With regards to the Paris Agreement, oceans-based economic diversification can enhance the nationally determined contributions of small island developing states, supporting the implementation of the agreement. This shows that trade can be an enabling factor in adaptation and in mainstreaming oceans-based economic activities, where domestic markets remain small and remoteness is an intractable hindering factor.

In other areas of the oceans economy, adapting trade policies can play a decisive role in making economic activities more sustainable. One example relates to fisheries subsidies, government support schemes for the fisheries sectors. “Despite the clear trend of declining fish populations, a majority of these subsidies further promote overfishing. Instead, support should be provided to improve the sustainability of the sector, or promote new sustainable economic activities.”

Definition of Key Terms

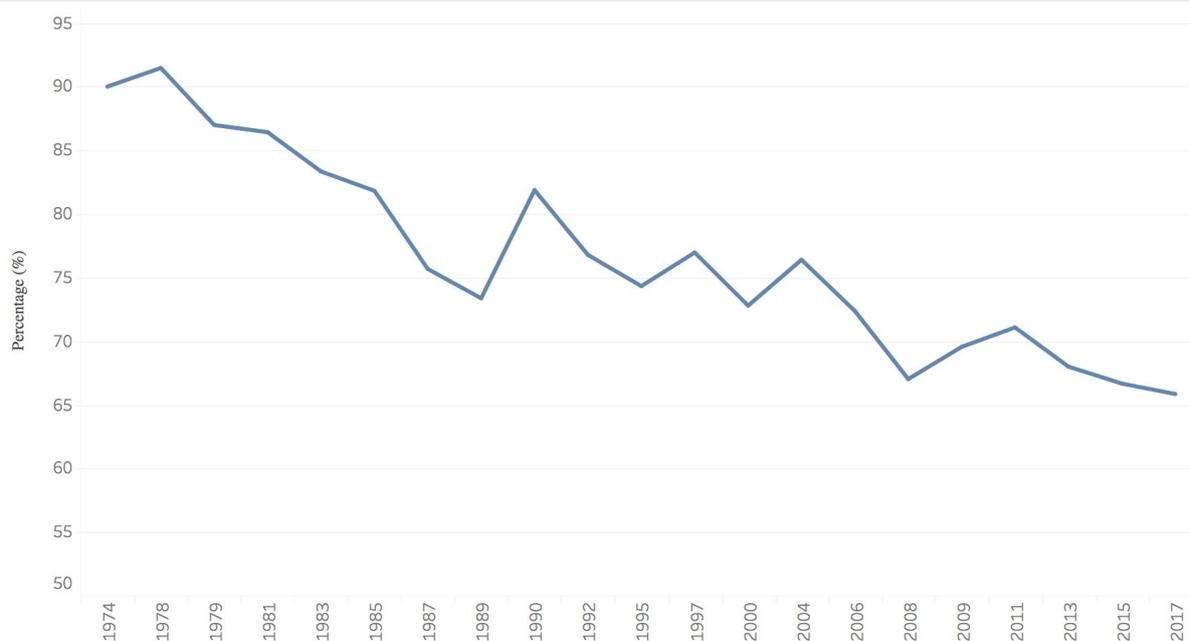
Sustainable - meeting the needs of the present without compromising the ability of future generations to meet their own needs

Illegal, unreported and unregulated (IUU) fishing - a broad term that captures a wide variety of fishing activity. IUU fishing is found in all types and dimensions of fisheries; it occurs both on the high seas and in areas within national jurisdiction.

Overexploitation - harvesting a renewable resource to the point of diminishing returns

Background information

Global proportion of fish stocks within biologically sustainable levels (1974-2017)



The sustainability of global fishery resources continues to decline, having dropped from 90 percent in 1974 to 65.8 percent in 2017. Fish stocks within biologically sustainable levels contributed 78.7 percent of the global marine fish landings in 2017, which have remained relatively stable at around 80 million tonnes since 1995. Despite the continuous deterioration, the rate of decline has slowed down in the most recent period.

Illegal, unreported and unregulated fishing

According to the UN Food and Agriculture Organisation (FAO) illegal, unreported and unregulated fishing activities are responsible for the loss of 11–26 million tonnes of fish each year, which is estimated to have an economic value of US\$10–23 billion. To curtail this impact, Target 4 of Goal 14 of the Sustainable Development Agenda adopted in 2015 by the UN General Assembly, specifically urges the international community to “effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practises” by 2020. Illegal fishing practises are undermining cross-border security by making resources that are already limited due to the climate and nature crises even more scarce.

Major Countries and Organisations involved

UNCTAD - The United Nations Conference on Trade and Development was established in 1964 as an intergovernmental organisation intended to promote the interests of developing states in world trade. UNCTAD is the part of the United Nations Secretariat dealing with trade, investment, and development issues.

FAO - The Food and Agriculture Organisation of the United Nations is a specialised agency of the United Nations that leads international efforts to defeat hunger and improve nutrition and food security.

WTO - The World Trade Organisation (WTO) is the only global international organisation dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business.

Timeline of Events

1974

The proportion of world marine fish stocks within biologically sustainable levels is at 90%

1982

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 set out principles for the conservation and management of those fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information. The Agreement elaborated on the fundamental principle, established in the Convention, that States should cooperate to ensure conservation and promote the objective of the optimum utilisation of fisheries resources both within and beyond the exclusive economic zone.

1990s

The proportion of exploited stocks classed as over-fished remaining around 30 percent

1995, 1996, 2001

The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea was adopted on 4 August 1995 by the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks and opened for signature on 4 December 1995. It remained open for signature until 4 December 1996 and was signed by 59 States and entities. The requirements for the entry into force of the Agreement were met on 11 November 2001, when the Minister for Foreign Affairs of Malta deposited an instrument of accession to the Agreement with the Secretary-General. The instrument was the thirtieth instrument of ratification or accession deposited. The Agreement entered into force on 11 December 2001

1995

To promote long-term conservation and sustainable use of fisheries resources the 1995 FAO Conference adopted the FAO Code of Conduct for Responsible Fisheries. The Code is

voluntary and sets out principles and international standards of behaviour for responsible practises with a view to ensuring the effective conservation, management and development of living aquatic resources, with due respect for the ecosystem and biodiversity.

2009

In 2009 the FAO Conference adopted the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. The Agreement is binding and stipulates minimum port State measures to prevent, deter and eliminate illegal, unreported and unregulated fishing. It entered into force on 5 June 2016.

2010

Projections were made of how much more fish would be required by 2050 to keep up with human population growth and bring the hungry or malnourished up to minimum World Health Organisation standards, taking into account regional variations in the proportion of fish in local diets. It was estimated that an additional 70-80 million metric tons would be needed, a 50 per cent increase in the current total production of capture fisheries and aquaculture.

2016

2010 estimates were revisited and combined with projections of production from large-and small-scale agriculture to consider how climate change may affect future food security. It was concluded that, taking into consideration the impacts of climate change on crops and livestock, fisheries and aquaculture would have to produce an additional 100 to 120 million metric tons of fish-an increase of two thirds from present production.⁵ This will only be possible by fishing more, not less, and by greatly increasing aquaculture yields. Thus, the real challenge to keeping fisheries sustainable is not how to address the 30 percent of stocks that continue to be overfished despite decades of efforts aimed at improved sustainability, but rather how to greatly increase the provision of fish to a needy human population without returning to the trend seen in the 1970s and 1980s, when the number of unsustainable fisheries increased annually.

2017

Global aquaculture has far lower emission intensity compared to terrestrial livestock, accounting for approximately 0.49% of anthropogenic GHG emissions

The proportion of world marine fish stocks that are within biologically sustainable levels declined from 90 percent in 1974 to 65.8 percent in 2017.

2018

Global fish production reached an all-time high of 179 million tonnes, supplying vital proteins and micronutrients to billions of people.

Seaweed represented over 50% of the global aquaculture volume, however 99.5% of this was happening in Asia

2020

The deadline for The Ocean's Forum to deliver on several trade-related Sustainable Development Goal targets on healthy oceans. To support countries to deliver on these targets, UNCTAD, FAO, and UN Environment have come together to develop a draft Inter-agency Plan of Action (the so-called 'IPoA'), on sustainable oceans and trade

2021

One third of the world's fish stocks are overfished, up from 10 per cent in the mid-1970s. Another 60% of fish stocks have been exploited at their maximum sustainable limit.

2030

A major growth in production is expected from aquaculture, which is projected to reach 109 million tonnes

The UN hopes that all seafood traded internationally is required by law to be accompanied by standardised traceability data that consumers can trust.

Relevant UN Treaties and Events

The Paris Agreement - The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

The Oceans Forum - The Oceans Forum is a unique global platform to take stock, exchange experiences and present options for the implementation of trade-related targets of Sustainable Development Goal 14 - Life below water - through the involvement of leading United Nations agencies, regional bodies, government institutions and civil society organisations.

United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks

The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea

Previous / Ongoing Attempts to Solve the Issue

The UN Sustainable Seafood Action Plan goals are:

Working towards increasing the recognition of seafood in the climate and food agendas in the run-up to the UN Food Systems Summit

Initiating a global seaweed platform to scale-up the industry by supporting specific safety standards and knowledge sharing amongst stakeholders

Contributing to standardise traceability data and promote interoperability of traceability platforms through the seafood value chain

Identifying financial mechanisms and levers to incentivize sustainable seafood

Possible Solutions

Bridging food production with dietary and environmental needs: Shift the balance from land-based protein to harnessing sustainable ocean calories, including through seaweed, which offers enormous potential for food, feed and fuel.

Developing supportive financial mechanisms: Blue bonds, as well as mainstream finance, can help fund action. Both the seaweed and aquaculture Practical Guidances offer ESG reference points for investors.

Ensuring fully traceable seafood: The UN currently aims for all seafood traded internationally in 2030 should be required by law to be accompanied by standardised traceability data that consumers can trust.

Contributing to the development of a regenerative aquaculture: By recreating ocean ecosystems through multi-trophic aquaculture, we can generate numerous positive global externalities.

Promoting strategies that exploit less of the oceans such as classifying 30 percent of the ocean as marine protected areas where no extractive resource uses would be permitted. This would reduce fishing pressure across the board and would allow the remaining overfished stocks to recover and sustainable fisheries to have greater resilience to pressures such as climate change, ocean pollution and other factors.

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