

Forum: Environment Committee
Issue: Setting up measures against the exploitation of marine life
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Introduction

Marine life accommodates 97 per cent of the Earth's liveable habitat and is home to more than 700,000 species.¹ Nevertheless, it is not only those species and their habitats that marine life and oceans are important to: in fact, oceans are significant sources of oxygen and food. In addition to that, many job opportunities are offered in sectors such as fishing industry and seafood production, as they depend on marine life.

Uncontrolled fishing practices –especially those with industrial purposes – and wastes that are causing marine pollution are critically harming marine habitats and endangering hundreds of thousands species. It is a fact that such disproportional fishing leads the remaining fish to have difficulties in reproducing adequately to maintain its population as well. Therefore, this situation is considered likely to result in a massive plummet of fish population unless immediate action is taken.

Currently, countless species in the ocean community are facing the danger of extinction. The fact that there is a potential irreversible damage on the largest habitat on earth and a possible collapse of one of the most important food sources in the world alarmed the international community. Therefore, RCIMUN 2017 Environment Committee calls for action in order to set up measures against the exploitation of marine life.

Definition of Key Terms

Marine life: Overall of the habitats and organisms that is accommodated in salt water.

Overfishing: “The practice of commercial and non-commercial fishing which depletes a fishery by catching so many adult fish that not enough remain to breed and replenish the population. Overfishing exceeds the carrying capacity of a fishery.”²

Growth overfishing: “When fish are harvested at an average size that is smaller than the size that would produce the maximum yield per recruit. This makes the total yield less than it would be if the fish were allowed to grow to a reasonable size.”³

¹ "Protecting Our Oceans." *Greenpeace USA*. N.p., n.d. Web. 23 Feb. 2017.

² "What Is Overfishing." *Overfishing - A Global Environmental Problem, Threat to Our Oceans and Disaster*. N.p., n.d. Web. 10 Feb. 2017.

Recruitment overfishing: “When the mature adults, or spawning biomass, population is depleted to a level where it no longer has the reproductive capacity to replenish itself. There are not enough adults to produce offspring.”⁴

Trophic cascading: The ecological imbalance triggered by the removal of the top-level predators.

Ghost fishing: Resulted by the discarded nets in the sea or ocean, the unintentional massive trapping of fish.

Coral reefs: Diverse underwater ecosystems made up of calcium carbonate structures and concealed by corals.

General Overview

a. Overfishing

The rapidly expanding human population growth observed in the last decades has led to the exploitation of marine resources in order to provide for the growing demand for food. This has been the major factor that has led to the issue of exploitation. Nowadays, fishing fleets are two to three times larger than they were in the past, which also contributes to the issue of overfishing. Additionally, the use of modern techniques to practice harvesting, to facilitate transport and to provide storage has only accelerated this process.

At the point when the recruitment of target species is dramatically high, not only the average but also the below the average sized fish are affected, which would be displaying the signs of growth overfishing. As a reminder, growth overfishing refers to harvesting fish that were not allowed to grow to a reasonable size before being harvested. This situation would not only affect the efficiency of harvesting negatively, but also would not even have a considerable income value for the fisheries. In addition to that, when the number and size of the adult population is heavily exploited to a point where there is no reproductive capacity left to replenish the population; recruitment overfishing is observed. Overfishing also has indirect effects on targeted populations, such as the effects of ghost fishing and trophic cascading.

Trophic cascading effects refer to the point when top-level predators are overly harvested. This results in countless indirect effects within the ecosystem. For instance, in Pacific kelp forests, sea urchins that sea otters feed on have been observed to have an increase in their number where sea otters have been hunted to extinction. This change resulted in reduced kelp populations overall.

Ghost fishing is a result of the fishing nets that are left in the ocean. These are barely visible in the dim light and they often end up tangling fish, dolphins, sea turtles, seabirds, and many more, even including

³ "Abbreviations and Definitions." *Overfishing - A Global Environmental Problem, Threat to Our Oceans and Disaster*. N.p., n.d. Web. 11 Feb. 2017.

⁴ "Abbreviations and Definitions." *Overfishing - A Global Environmental Problem, Threat to Our Oceans and Disaster*. N.p., n.d. Web. 11 Feb. 2017.

human divers occasionally. As these nets are designed to restrict movement; they lead to starvation, laceration, and infection which unfortunately results in millions of losses every year.

b. Exploitation of Coral Reefs

Coral reefs accommodate an estimated quarter of all marine fish species, which include over 800 different species of reef building, corals, and hundreds of thousands of such others. In addition to this biological diversity, coral reefs are considerably valuable for fisheries, coastal protection and nature-based tourism. However, it has been estimated that 19% of reefs have previously been destructed and a following 35% appears likely to be lost within ten-to-forty years.⁵ As over-exploitation, uncontrolled fishing practices, coastal development, tourism and marine pollution are the main issues that result in the destruction of marine habitats in general; increases in seawater temperature and acidity due to global climate change are the additional particular factors.

c. Marine Pollution

Marine pollution mainly comes from chemical wastes, oil disposal, plastics, industrial waste, and such manmade solids. Annually, this situation leads to the deaths of one million seabirds, one hundred thousand sea mammals, and three hundred thousand dolphins and porpoises. Currently, 700 different marine species are in danger of extinction, due to the increasing rates of marine pollution.⁶

Major Parties Involved and Their Views

a. World Wildlife Fund (WWF)

WWF aims to counter the issue of exploitation of marine life by helping countries implement policies that would improve fisheries management. Furthermore, the Fund assisted the foundation of Marine Stewardship Council (MSC), which has defined the environmental standards to identify sustainable fisheries. Additionally, the Fund also works to create and expand the marine protected areas to ensure the preservation of marine habitats.⁷

⁵ "Marine Conservation Society." *Coral Reefs* | *Marine Conservation Society*. N.p., n.d. Web. 23 Feb. 2017.

⁶ Rinkesh. "20 Facts About Ocean Pollution." *Conserve Energy Future*. N.p., 07 Jan. 2017. Web. 23 Feb. 2017.

⁷ "Oceans." *WWF*. World Wildlife Fund, n.d. Web. 23 Feb. 2017.

b. Greenpeace

Greenpeace is a non-governmental international campaigning organisation that acts to raise public awareness to have an impact on society's behaviour towards environmental issues, to protect and conserve the environment and to promote peace. It mainly works as to challenge wasteful and destructive fishing, and to create a global network of marine reserves. Additionally, it also aims to raise awareness upon improving management systems, fishing techniques and countering illegal fishing by running campaigns and preparing expensive publications.⁸

c. Asia Pacific Countries

The Asia Pacific countries are world's leading producers of fish, as 48 per cent of total world production is provided within the region.⁹ Recently, alarmed by the fast increasing overfishing rates, Food and Agriculture Organization (FAO) have reported that improved management of these activities is required in order to ensure the sustainability of the sector. Therefore, The Asia-Pacific Fishery Commission (APFIC) has recently been granted the entitlement to act as a regional consultative platform to promote –and if necessary, endorse the sustainable development of fisheries. The commission aims to provide better management for fisheries and ensure the ecological wellbeing of the ecosystem.¹⁰

UN Involvement

United Nations Sustainable Development Goal 14 reads as: “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”. Targets also include expanding MPAs and strengthening the international law as reflected in United Nations Convention on the Law of Sea (UNCLOS), which is the legal framework for ensuring the conservation and sustainable use of marine life and resources. The goal has 10 targets that would serve for these purposes and been actively working since its establishment in 2015.

In addition to that, relevant UN Bodies such as United Nations Environment Program (UNEP) and United Nations Development Program (UNDP) are elaborating on the issue of exploitation of marine life. In the following section, you will find the UN Documents by which these organizations are showing efforts to contribute to the process.

⁸ "About Greenpeace." *Greenpeace International*. N.p., n.d. Web. 23 Feb. 2017.

⁹ "Overfishing on the Increase in Asia-Pacific Seas." *FAO Site*. N.p., n.d. Web. 23 Feb. 2017.

¹⁰ "Overfishing on the Increase in Asia-Pacific Seas." *FAO Site*. N.p., n.d. Web. 23 Feb. 2017.

Relevant UN Documents

United Nations Convention on the Law of the Sea (10 December 1982)

Large-scale pelagic drift-net fishing and its impact on the living marine resources of the world's oceans and seas (20 December 1991, A/RES/46/215)

Sustainable fisheries, including through the 1995 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, and related instruments (11 December 2012, A/RES/67/79)

United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (22 December 2015, A/RES/70/226)

Modalities for the United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development (9 September 2016, A/RES/70/303)

Unauthorized fishing in zones of national jurisdiction and its impact on the living marine resources of the world's oceans and seas (22 February 1995, A/RES/49/116)

Fisheries by-catch and discards and their impact on the sustainable use of the world's living marine resources (2 February 1995, A/RES/49/118)

Treaties and Events

Conservation issues in international waters have been quite difficult to resolve in the past due to the different approaches to the exploitation of marine resources that would vary from country to country. In other words, the high seas do not have borders, which mean that issues such as overfishing would not have borders as well. Having said that, **Convention on Fishing and Conservation of Living Resources of the High Seas** established a framework that would ensure that international conservation laws are enforced within the high seas.

Secondly, the responsibilities and rights of the nations that use the oceans are defined in the **United Nations Convention on the Law of the Sea**. The Convention aims to protect the health and resources of the marine life by not allowing overuse, announces the international water boundaries, and all of the exclusive economic zones.

Evaluation of Previous Attempts to Resolve the Issue

Currently, 1.6% of the world's oceans are proclaimed as marine protected areas (MPAs) (World Wildlife Fund). MPAs are critical for reconstructing the affected marine life since they aim to preserve habitats from destructive fishing practices. In addition to that “No-take zones” allow the remaining fish populations to recover and ensure the wellbeing of endangered species such as marine turtles. However, lack of such protected areas has been one of the main causes of the problem of exploitation of marine life. Therefore, MPAs are expected to be expanded to 30% globally by the year 2050. Such an expansion is expected to result in US\$920 billion net benefit and over 180,000 jobs.¹¹

Previous attempts to resolve the issue also include drawing the attention of the international communities. Following such attempts, for instance one the Sustainable Development Goal 14 was set as: “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”. It aims to significantly reduce marine pollution, sustainably manage and protect marine ecosystems, minimize the impact of climate change and ocean acidification, effectively regulate overfishing and such by the year 2030.

Additionally, encouraged by the UN, regional consultative platforms have been established in some regions such as the Asia Pacific.

Possible Solutions

First of all, for those harmed habitats and the remaining fish in such to recover, “No-take zones” should be strongly encouraged. Furthermore, for those unharmed habitats and recovered areas to remain stable, MPAs must be expanded. For this expansion, scientific reports would be more than critical since the allocations should be in accordance with the scientific data. Therefore, supporting further research as to serve for this purpose could also be considerable. The importance of ensuring collaboration within the member states and the international organisations should also be recognized.

Following that, the lack of management, government regulations, and monitoring on the fishing activities both in national and international levels are also critical problems in the fishing industry, which lead to uncontrolled fishing. In addition to those, most of the fishery management bodies are not capable of adequately incorporating scientific advice on fish quotas, and customs agencies are not capable of always ensuring that the fish entering their territory is harvested legally in a sustainable way. Many organisations such as the WWF have been providing assistance to countries during the process of preparing adequate and effective management protocols, which remain inadequate. Expanding such assistance with special emphasis on the developing countries would also be a significant step.

¹¹ Dang, Vu Hai. "International Legal Framework for Marine Protected Areas and Networks of Marine Protected Areas." *Marine Protected Areas Network in the South China Sea* (n.d.): 55-118. Web.

Notes from the Chair

Dear delegates, please be reminded that you will be representing your country in the Environment Committee, in which economic interests are definitely no superior to the environmental concerns. Please read the report carefully, and make sure to have a general opinion about the possible approaches to the issue.

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