International Law in Marine Biodiversity Conservation

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Abstract: For the sake of the Marine ecological environment, especially Marine biodiversity, the United Nations has made early efforts to initiate or adopt many relevant conventions. In addition, some international organizations also assume corresponding protection responsibilities. However, after discussing these specific provisions and functions, it is concluded that the final effect is not ideal, Marine biodiversity is still under significant threat, and we are calling for more effective measures.

Keywords: Marine biodiversity, Marine environment, Protection under international law, Current status and prospects

1. Introduction

Japanese otter, baiji dolphin, Yangtze River sturgeon... In recent years, there has been a continual extinction of aquatic life. At the same time, the general global warming trend is changing Marine and freshwater ecosystems worldwide. In this regard, how can international law help? What has been achieved? How will they respond in the future? Each of these issues is discussed below.



Figure 1: Japanese otter.

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2. What is Biodiversity?

"Biodiversity" refers to the variability of living organisms such as land, sea and other aquatic ecosystems [1]. The ocean accounts for about 71% of the earth's surface area, in which the biodiversity problem cannot be ignored. Therefore, we talk about biodiversity in the context of the ocean.



Figure 2: the Biodiversity.

3. International Law for Marine Biodiversity Conservation

3.1. International Conventions

1. Convention on Fishing and Conservation of the Living Resources of the High Seas

The Convention was adopted in 1958 and entered into force in 1966. It focuses mainly on the conservation of living resources on the high seas. Article 1 stipulates that every country must take measures to protect living resources [2]. Article 4 shows that in the case of multinational fishing, countries can reach an agreement for conservation through negotiation [2]. As for coastal countries, Article 6 (1) explains that coastal countries should protect the living resources adjacent to their coastal areas [2]. Further, refine the responsibilities. It can be seen that, at the level of high seas, there are both broad provisions related to each country, which are relatively general, and there are also descriptions of close details for some countries.

2. United Nations Convention on the Law of the Sea

It was adopted in 1982 and entered into force in 1994. Part V Exclusive Economic Zone, states that coastal countries should take appropriate conservation to ensure that the maintenance of biological resources in this area is not threatened by over-exploitation [3]. Part XII Protection and Preservation of the Marine Environment, stipulates the measures explicitly to regulate marine environmental pollution [3]. These are two aspects of protection: conservation of existing resources and treatment of pollution. In order to solve the problem from the source, human beings should try their best to reduce pollution emissions. It also emphasizes global or regional cooperation and technical assistance to developing countries to further improve the effectiveness of marine environmental protection [3].

3. Convention on Biological Diversity

It came into effect in 1993. Regarding the protection of biodiversity, the Convention pays more attention to areas within the national jurisdiction, but processes and activities under the jurisdiction

or control of a country may be outside its jurisdiction, regardless of where the impact occurs [4]. It also assists developing countries, providing them with support in education and training programs for biodiversity conservation [4]. Although the Convention focuses more on the ecological environment and biological resources, marine life is naturally protected as a part of the ecosystem.

These three treaties more or less embody the idea of cooperation between countries or international assistance, which is enough to prove that a single country's protection of marine biodiversity can never be done alone. The environment is the shared responsibility of humanity. Therefore, for the sake of future generations, all countries must unite and make joint efforts.

3.2. Global Institutions

3.2.1. United Nations General Assembly

The role of the General Assembly in marine environment and biodiversity cannot be ignored. It convened the conference on the formulation and ratification of the UNCLOS; It also organized the eighth COP to the CBD, with the core purpose of sustainable utilization and protection of marine biodiversity [5]. The Conference of the Parties also emphasized the critical role of the General Assembly in preserving biodiversity in areas beyond national jurisdiction [6].

1. World Wildlife Fund

WWF is one of the largest independent environmental protection organizations, with more than 100 countries. It aims to protect the world's species diversity. WWF attaches great importance to the protection of marine biodiversity. It has taken many measures, such as transforming the marine fish market into a sustainable market and reducing the harmful impact of marine trade activities on the environment, especially in protecting marine life from the impact of oil exploration [6]. The main idea is similar: to protect the existing fish resources, achieve the goal of sustainable development and rectify environmental pollution, especially the impact of human commercial activities.

2. Regional Fishery Organizations

The International North Pacific Fisheries Commission (INPFC), the Northwest Atlantic Fisheries Organization (NAFO) and the International Pacific Halibut Commission (IPHC) are all regional fishery organizations. Their principal mechanisms have been allocating catch quotas among the parties [7]. Although they claim that their goal is to conserve the target population, the reality is that they catch specific species to the maximum extent, not to protect diversity [7].

This is a negative example, which shows that the existing measures are not all perfect and beneficial. Therefore, these regional fisheries organizations need to adjust, balance economic development with marine ecological environment protection, and strive to contribute to biodiversity.

4. Marine Biodiversity is Still Threatened

Ten years ago, the General Assembly proclaimed the United Nations Decade for Biodiversity (2011-2020) and set 20 time-bound goals (called Aichi Goals) to protect the biodiversity that supports global food security, health and clean water. However, Global Biodiversity Outlook 5 points out that at the global level, none of the 20 goals has been fully achieved [8]. The fact is that although people have made many efforts for the sustainable utilization of biodiversity, the protection of biodiversity still faces tremendous pressure and dilemma.

In 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) warned that about 1 million plant and animal species worldwide are at risk of extinction—many within a few decades [9]. It can be seen that biodiversity is still under significant threat.

Every 1.1°C increase in temperature changes the marine, terrestrial and freshwater ecosystems worldwide. A rise of 1.5°C may mean that 70% of the coral reefs in the world disappear. Moreover, each time the temperature rises by 2°C, the collapse of the whole ecosystem may escalate rapidly [9]. Climate change has undoubtedly affected marine biodiversity. Human beings urgently need to make new changes to prevent the situation from worsening.

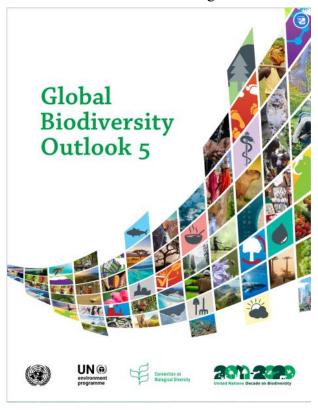


Figure 3: Global Biodiversity Outlooks.

5. New Prospects for Marine Biodiversity Protection

Global Biodiversity Outlook 5 gives a vision of biodiversity by 2050. It put forward "departing from business as usual" and "transitions to living in harmony with nature". It emphasises a new governance and protection mode, overcomes the original drawbacks, and achieves the purpose of living in harmony with nature. In "the sustainable fisheries and oceans transition", there are measures including "promote marine spatial planning", "sustainably manage and rebuild fisheries", and "ensure the sustainability of mariculture production" etc. [10].

Of course, this guiding document is aimed at global biodiversity, and there is still a distance between it and the implementation of specific countries. Nevertheless, countries should be deeply aware of the urgency of protecting biodiversity, fully understand the guiding ideology and externalize it. It is believed that when each individual makes practical contributions in the right direction, coupled with international cooperation and assistance, marine biodiversity will be improved considerably.

6. Conclusion

There are many international conventions and organizations that protect marine biodiversity. However, these protective measures have not achieved the expected results and need further

development and improvement. As a result, the international community is exploring a new road to realize biodiversity's sustainable utilization and development.



Figure 4: Our biodiversity. Our Food. Our health.

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