

Legal Framework For Conservation of Marine Biological Diversity

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Abstract

Biological diversity is essential for human life. However, there are serious concerns that biodiversity in the oceans is rapidly declining. Thus there is a strong need to establish legal frameworks for the conservation of marine biological diversity. This article will explore how the LOSC does not have enough power to conserve marine biodiversity, and how the Convention on Biological Diversity is important to marine conservation.

Key words: Biological, Human Right, Climate change, Conservation, Environment.

Introduction

Marine biodiversity is of vital importance to mankind. Nearly 71% of the earth's surface is covered by the ocean, which contains 97% of the water on the earth. The ocean has important functions, such as regulating the global climate, regulating the local temperature, and removing carbon dioxide (The main greenhouse gases) come from the atmosphere and provide humans with the main source of protein. "In some countries, more than half of the animal protein that people eat comes from the ocean." Ocean photosynthesis generates one-third to one-half of the world's oxygen supply. In addition, marine biodiversity is an invaluable resource with important scientific significance. "The main fauna (phyla) of the ocean is much richer than that of the land; nearly half of the animal phyla appear only in the sea." Scientific researchers often turn to the sea to find treatments and unique compounds. The loss of marine biodiversity threatens these important functions and values¹.

Despite its vital importance, biological diversity, as a whole, is now rapidly declining in the world, and marine biological diversity is no exception. According to the Millennium Ecosystem Assessment Report, 20 percent of the world's coral reefs have been lost and another 20 percent degraded in the last few decades of the twentieth century. Marine biodiversity is severely damaged by the following human activities: Overfishing of biodiversity. Impact of extraction methods such as bottom trawling. Sediments resulting from activity on adjacent lands; physical changes in the marine environment, such as estuary reclamation. Water pollution; Impact of tourists and divers; Climate change; Invasion of alien species; Coastal fragmentation and development. Habitat fragmentation².

Certain people are concerned about how climate change will impact on the diversity of wild species, plant life, etc. The ocean produces oxygen, absorbs carbon dioxide from the atmosphere, and plays an important role in controlling climate and temperature. In this regard, there are growing concerns that climate change can affect marine ecosystems in many ways, modifying ecosystem structure and function. For instance, it is suggested that coral reefs would be seriously damaged if the sea surface temperatures were to increase by more than 1°C above the seasonal maximum temperature. The impacts of ocean acidification on marine biological diversity, and the lack of ability to artificially reproduce biological diversity, are also a matter of concern. Therefore, marine biological diversity deserves serious consideration in the law of the sea³.

Aim of the Study

The main purpose of the research paper has to analyzed legal regimes of conservation of marine biological diversity and limits of legal framework of protection of marine biological diversity.

Principal Approaches To Conservation of Marine Biological Diversity

The 1972 Stockholm Declaration marked a milestone towards the development of treaties focusing on the conservation of biological diversity[1]. Principle 2 of the Declaration made the following important statement: "The natural resources of the earth including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate".

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Principle 4 further stated that: “Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat which are now gravely imperiled by a combination of adverse factors”.

3.1 The UN Convention on the Law of the Sea, 1982

Global Legal Frameworks for the Conservation of Marine Biological Diversity

The LOSC contains only two general provisions relating directly to this issue

1. First, Article 194 (5) provided that “A general obligation to protect rare or fragile ecosystems: the measures taken under this Part XII include those necessary to protect and maintain rare or fragile ecosystems, the habitat of depleted, threatened or endangered species and other forms of marine life”.

2. Second article 196 (1) provided that “To prevent, reduce, and control pollution of the marine environment due to the use of technology under its jurisdiction or control, or the intentional or accidental introduction of technology. It imposes an obligation on the state to take all necessary measures. An exotic or new species for a particular part of the marine environment”. This can cause significant and detrimental changes. The LOSC made little reference to the conservation of marine biological diversity. Under the traditional conservation approach, marine biodiversity is managed in zones.

The LOSC does not provide an explicit obligation to conserve marine biological diversity in marine spaces under territorial sovereignty, namely internal waters, the territorial sea and archipelagic waters. It follows that the coastal state is subject only to the general obligations in Articles 192, 194(5) and 196 of the LOSC. Similarly, there are no clear provisions for the conservation of marine biodiversity in the EEZ.

3.2 The Convention on Biological Diversity, 1992

The 1992 Rio Convention provides a global legal framework for the conservation of biological diversity. Article 1 of the Convention states that it seeks three objectives:

1. the conservation of biological diversity,
2. the sustainable use of its components, and
3. the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

In this regard, it is relevant to note that provisions of the Rio Convention apply both to terrestrial and marine biological diversity[1]. The principal rules of the Rio Convention can be divided into six categories.

1. Article 3 confirms that states have the sovereign right to exploit their own resources pursuant to their own environmental policies. The power to decide on access to genetic resources rests with national governments and is subject to national law. However, sovereign rights are offset by a general duty to ensure that activities within their sovereignty or control do not harm the environment of other states or areas outside the boundaries of national jurisdiction.
2. Biodiversity Conservation: The Rio Convention provides in-situ and ex-situ conservation. While many types of conservation efforts may be global, it is the focus of in situ conservation to maintain and recover viable populations of species in their natural settings.
3. Procedural rules aimed at minimizing adverse effects on biodiversity: Article 14 (1) (a) provides to each Contracting Party the environmental impact of the proposed project, which is likely to be important. We require that procedures that require evaluation be introduced as appropriately as possible. Adverse effects on biodiversity for the purpose of avoiding or minimizing such effects.
4. Fair and equitable sharing of benefits: in this regard, a key provision is Article 15: Article 15(2) requires each Contracting Party to endeavor to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties. Under Article 15(3), the genetic resources being provided by a Contracting Party are only those that are provided by Contracting Parties that are countries of origin of such resources or by Parties that have acquired the genetic resources in accordance with the Rio Convention. Access to genetic resources must be on mutually agreed terms and be subject to the prior informed consent of the Contracting Party providing such resources (Article 15(4) and (5)). Article 15(7) further obliges each Contracting Party to take legislative, administrative or policy measures with a view to sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. These obligations are amplified by the Nagoya Protocol on Access to Genetic

Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity adopted on 29 October 2010.

5. Assistance to developing countries: Article 20(4) of the Rio Convention clearly recognizes the fact that economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties. In this sense, conservation of biological diversity can be characterized by a North–South axis[1]. Article 20(2) places an explicit obligation upon the developed country to provide w and additional financial resources to enable developing country Parties to meet the agreed full incremental costs to them of implementing measures. Furthermore, Article 16(1) calls for each Contracting Party to provide and/ or facilitate access for and transfer to other Contracting Parties of technologies that are relevant to the conservation and sustainable use of biological diversity.
6. Compliance and dispute settlement: the Rio Convention does not contain a non-compliance procedure comparable to the one created by Article 8 of the 1987 Montreal Protocol to the Ozone Convention, but provides for a reporting system. In this regard, Article 26 places an obligation upon each Contracting Party to present to the Conference of the Parties reports on measures which it has taken for the implementation of the provisions of the Rio Convention and their effectiveness in meeting the objectives of the Convention.

Marine Protected Areas

Marine protected areas (MPAs) seek to protect marine ecosystems of a certain area, or an entire marine ecosystem, as a whole. Although there is no universally established definition in international law, the Biodiversity Committee of the OSPAR Convention defines MPA as:-the purpose of protecting and preserving species, habitats, ecosystems or ecological processes in the marine environment"[1]

Concept of MPA In International Law

MPA related concepts can be divided into two principal categories. The first category involves MPA intended to protect the marine environment .There are five MPA-related concepts that must be noted:

1. 'Clearly defined area' in Article 2 11(6) of the LOSC,
2. 'Ice-covered areas' in Article 234 of the LOSC,
3. 'Special areas' under MARPOL 73/78,
4. 'Particularly sensitive sea areas' (PSSA) in IMO Guidelines, and
5. 'Specially protected areas' in the 1985 Montreal Guidelines.

The last item relates to the protection of marine spaces from land-based marine pollution. Other MPA-related concepts in this category are meant to protect the marine environment from vessel source pollution. Although these MPA related concepts do not directly involve conservation of marine biological diversity, they will indirectly contribute to preserve diversity by protecting the marine environment.

The second category pertains to MPAs relating directly to conservation of marine biological diversity .These MPAs can be divided into two sub-categories.

1. The first sub-category concerns a species-specific MPA. This type of MPA seeks to protect specific marine life, such as marine mammals, in a particular region. MPAs in this sub-category are basically in line with the traditional species-specific approach.
2. A second sub-category involves MPAs which seek to protect rare or fragile ecosystems and the habitat of depleted or endangered species and other marine life in a particular region.

Limits of MPA

Whilst MPAs are increasingly incorporated into treaties respecting the conservation of marine biological diversity, the effectiveness of MPAs is not free from controversy. From a legal viewpoint, there are three hurdles can be clearly identified-

1. The first obstacle is the lack of any link between marine protected areas that protect marine biodiversity and the control of marine pollution. Protecting the environment from pollution is a prerequisite for protecting marine biodiversity. However, the establishment of marine reserves aimed at protecting marine biodiversity cannot protect marine biodiversity from marine pollution. Marine protected areas for the protection of marine biodiversity must be combined with marine pollution control. In some cases, marine pollution is beyond the scope of marine protected areas.
2. The second difficulty concerns the adverse impact of climate change on marine biological diversity. The marine environment is sensitive to climate and atmospheric changes. Nonetheless, MPAs cannot, in themselves, prevent

adverse impacts upon marine biological diversity by climate change. Accordingly, The prevention of climate change is also needed in order to halt the degradation of marine biological diversity.

3. Third, there is doubt that fishing activities are one of the major threats to marine biological diversity. With few exceptions, however, the regulation of fisheries falls outside the scope of treaties relating to the conservation of marine biological diversity; conversely, fisheries treaties do not focus on the conservation of marine biological diversity. As a consequence, there is a disjunction between the two legal fields. Positive coordination between MPAs and the regulation of fisheries will be increasingly important in order to effectively conserve marine biological diversity[1].

Conclusion

There are other ways to degrade the ocean, but they need to change the way we think and act. It turns out that it's not enough to focus on species in the ocean, just like on land. Ecosystem protection and management is an important supplement to species protection and management. The goal should be to ensure that living things are not threatened in order to maintain the integrity of life. Saving our planet is not a luxury that can be left to others. It is imperative that we are required to make fundamental changes to our curriculum by incorporating protection into the decision-making process.

The establishment of MPAs is increasingly being incorporated into treaties relating to the conservation of biological diversity. There appears to be general agreement that MPAs have a valuable role to play in conservation of marine biological diversity. However, in view of enhancing the efficacy of MPAs, there will be a need to enhance the inter-linkage between MPAs on the one hand and the protection of the marine environment, prevention of climate change and the regulation of fisheries on the other hand.

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