

Biodiversity Conventions and Marine Biodiversity

Pratibha Singh* and Dr. Ram Jee Srivastava

U.P. State Biodiversity Board, Lucknow *Email : poly.singh@gmail.com

International Conventions, treaties and agreements form an important and significant pressure for issues regarding the conservation of marine biodiversity. The overall list below includes International Conventions, treaties and agreements that address the issues of marine biodiversity at a global level. Those relating to the more general issue of pollution and its avoidance are also included as avoidance of pollution in a marine environment has a significant impact on marine biodiversity. The conventions are ordered by year.

The most important conventions in relation to biodiversity (marine life included) are the "big six":

- 1. The Convention on International Trade in Endangered species of Wild Flora and Fauna, 1975 (CITES)
- 2. The Ramsar Convention, 1971
- 3. The World Heritage Convention, 1972
- 4. Convention on Migratory Species, 1979 (Bonn Convention)
- 5. The United Nations Convention on the Sea (UNCLOS),1982
- 6. Convention on Biological Diversity, 1992 (CBD)

1. The Convention on International Trade in Endangered Species of Wild Flora and Fauna, 1975 (CITES)

Opened for signature: 3 March 1973 Entry into force: 1 July 1975 Number of Parties : 175

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments whose aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation. CITES was conceived in the spirit of such cooperation. Today, it accords varying degrees of protection to more than 30,000 species of animals and plants. Species are listed in the three of the CITES Appendices.

Appendix I lists species that are the most endangered. They are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial, for instance for scientific research.



Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. It also includes socalled "look-alike species", i.e. species of which the specimens in trade look like those of species listed for conservation reasons. International trade in specimens of Appendix-II species may be authorized by the granting of an export permit or re-export certificate. No import permit is necessary for these species under CITES

Appendix III is a list of species included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation. International trade in specimens of species listed in this Appendix is allowed only on presentation of the appropriate permits or certificates

The whole group of Cetaceans (whales, dolphins and porpoises), sea turtles, corals are included in CITES lists.

2. The Ramsar Convention, 1971

Opened for signature: 3 March 1973 Entry into force: 1975 Number of Parties : 160

The official name of the treaty, The Convention on Wetlands of International Importance especially as Waterfowl Habitat, reflects the original emphasis upon the conservation and wise use of wetlands primarily as habitat for waterbirds. Over the years, however, the Convention has broadened its scope of implementation to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation and for the well-being of human communities. Presently, this List has more than 1,850 wetlands for special protection as "Ramsar sites", covering about 180 million hectares (1.8 million square kilometres). The Convention uses a broad definition of the types of wetlands covered in its mission, including lakes and rivers, swamps and marshes, wet grasslands and peatlands, oases, estuaries, deltas and tidal flats, near-shore marine areas, mangroves and coral reefs, and human-made sites such as fish ponds, rice paddies, reservoirs, and salt pans.

The Ramsar Convention's definition of "wetlands" is intentionally broad, including amongst many other types all "areas of marine water the depth of which at low tide does not exceed six metres", but also explicitly allowing the inclusion of "coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands". Thus, according to the Ramsar Classification System for Wetland Types, coral reefs figure prominently as Number 3 amongst the categories of marine and coastal wetlands. There are 47 Ramsar Sites in which coral reefs dominate or are significantly present

3. The World Heritage Convention, 1972

Opened for signature: 23 November 1972 Number of parties: 188

The Convention aims at the identification. protection, conservation, presentation and transmission to future generations of cultural and natural heritage of outstanding universal value. For the purposes of this convention the following shall be considered as "natural heritage":

- natural features consisting of physical and i. biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
- geological and physiographical formations and ii precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation:
- iii. natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

The Convention is unique in that it combines the protection of cultural and natural heritage in one instrument. Since 1972, the World Heritage List has grown to include 936 sites inscribed for their outstanding universal value in 153 countries around the world. About 725 sites are cultural, 183 are natural and 28 are mixed.



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4. Convention on Migratory Species (CMS), 1979 (Bonn Convention)

Opened for signature: 23 June 1979 Entry into force: 1983 Number of Parties: 116

The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or Bonn Convention) aims to conserve terrestrial, aquatic and avian migratory species throughout their range. It is an **intergovernmental treaty**, concluded under the aegis of the United Nations Environment Programme, concerned with the conservation of wildlife and habitats on a global scale. It is the only global convention specializing in the conservation of migratory species, their habitats and migration routes.

Migratory species threatened with extinction are listed on *Appendix I* of the Convention. CMS Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.

Migratory species that need or would significantly benefit from international co-operation are listed in *Appendix II* of the Convention.

Several Agreements have been concluded to conserve marine Biodiversity:

- Cetaceans of the Mediterranean Sea, Black Sea and Contiguous Atlantic Area
- Small Cetaceans of the Baltic, North-East Atlantic, Irish and North Seas
- Seals in the Wadden Sea
- African-Eurasian Migratory Waterbirds
- Albatrosses and Petrels

In addition several Memoranda of Understanding (MoU) have been concluded to date under the auspicies of CMS. They aim to conserve:

- Slender-billed Curlew
- Marine Turtles of the Atlantic Coast of Africa
- Marine Turtles and their Habitats of the Indian Ocean and South-East Asia

- Aquatic Warbler
- Cetaceans and their Habitats of the Pacific Island Region
- Dugongs and their Habitats
- Eastern Atlantic Populations of the Mediterranean Monk Seal
- Ruddy-headed Goose (Argentina and Chile)
- Small Cetaceans and Manatees of West Africa
- Sharks

5. Convention on Biological Diversity, 1992 (CBD)

Opened for signature: 4 June 1993 Entry into force: 29 December 1993 Parties: 193 parties

The CBD was one of the major outcomes of the 1992 United Nations Conference on Environment and Development - termed the "Earth Summit" - in Rio de Janeiro. The Convention has 193 Parties, with the notable exception of the United States. The three main goals of the Convention on Biological Diversity (CBD) are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from utilization of genetic resources.

In view of common concern regarding marine and coastal biodiversity, and recognizing the significant differences between marine and terrestrial biodiversity, at the second meeting of the Conference of the Parties (COP 2, November 1995, Jakarta, Indonesia) the Parties to the CBD agreed on a programme of action for implementing the Convention with respect to marine and coastal biodiversity. The "Jakarta Mandate on Marine and Coastal Biodiversity focuses on five thematic areas:

- i. Integrated marine and coastal area management;
- ii. Marine and coastal protected areas;
- iii. Sustainable use of marine and coastal living resources;
- iv. Mariculture; and
- v. Alien species





The Aichi Biodiversity Targets were adopted at the 10th COP at Nagoya. There are 5 strategic Goals and 20 targets out of which the following relate directly to marine Biodiversity:

"Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use Target 6- By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 10- By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11- By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

6. The United Nations Convention on the Sea (UNCLOS), 1982

Opened for signature: 10 December 1982 Entry into force: 16 November 1994

The UNCLOS is an overarching international agreement regulating the various uses of the world's oceans and seas. It is often referred to as "Constitution for the Oceans" and covers the utilization of resources, shipping, marine research, the exploitation of the exclusive economic zone and continental shelf, and the prevention and avoidance of marine pollution. The Convention divides the sea into the following zones:

- i. The area of ocean immediately adjacent to the coastline and extending to upto 12 miles out to the sea is known as the Territorial Sea over which the coastal state retains full sovereignty over this area of the sea.
- ii. An area contiguous to the territorial sea, called Contiguous Zone, which extends to a maximum of 24 nautical miles from the coast. In this area, the coastal state can prevent and punish 'infringement of its customs, fiscal, immigration or sanitary laws and regulations' which occurs within its territory or territorial sea.
- iii. The Exclusive Economic Zone (EEZ), which extends from the end of the territorial sea and out to a maximum distance of 200 miles from the coast, provides the coastal state with sovereign rights of exploration, exploitation and management of natural resources in both the waters themselves and the seabed below. States have rights with regard to the protection and preservation of the marine environment in their EEZ, as well as the construction, operation and use of installations and structures at sea.
- UNCLOS also conveys sovereign rights upon iv coastal States with regard to the Continental Shelf. This area covers the seabed and subsoil of the submarine areas that extend beyond the coastal state's territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the coast if the continental margin does not extend up to that distance. Although its breadth can vary from state to state, the continental shelf is limited to either 350 nautical miles from the coast or 100 nautical miles from a line connecting the depth of 2,500 metres. A state is entitled to explore and exploit the natural resources of the seabed and subsoil of the continental shelf, which include 'mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species'. States are entitled under UNCLOS to lay pipelines on the continental shelf, in order to reasonably explore or exploit their natural resources

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v. Beyond the EEZ or the Continental Shelf, the Convention establishes the regime of the High Seas, which is an area where all states enjoy freedom of fishing, subject to certain conditions and prerogatives accorded to the coastal state, and are required to conserve living resources. UNCLOS also regulates the exploitation of the seabed and ocean floor beyond national jurisdiction in a zone called 'the Area'. No state can exercise sovereignty or sovereign rights over the Area and its natural resources as they are 'common heritage of mankind'. The Convention also establishes an International Seabed Authority to regulate activities in this communal zone.

India has gained in two significant areas:-

- (a) India's EEZ became the twelfth largest in the world. The extension of the EEZ to 350 miles or 100 miles beyond the 2500-metre isobath added 2 million square kilometers to India's jurisdiction.
- (b) Pursuant to the `pioneer investor' status, the International Seabed Authority allotted to India a 150,000 square kilometer mine site in the central Indian Ocean for the seabed mining of polymetalic nodules. The richest area at this site has a density of 21 kilograms of nodules per square metre.

Some other treaties/ conventions/ protocols on the marine environment include:

S. No	Name of treaty/ Protocol/ Convention
1	International Convention for the Regulation of Whaling, Washington, 1946
2	Convention on the International Maritime Organization, Geneva, 1948
	Protocol to the International Convention for the Regulation of Whaling, Washington, 1956
3	International Convention relating to the Limitation of the Liability of Owners of Sea- going Ships, Brussels, 1957
4	Antarctic Treaty, Washington, 1959
5	Agreed Measures for the Conservation of

	Antarctic Fauna and Flora, Brussels, 1964
6	International Convention on Civil liability for Oil Pollution Damage, Brussels, 1969
7	Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass destruction on the Sea-bed and the Ocean Floor and in the Subsoil, thereof, Washington, (1971)
8	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention)
9	Protocol to the International Convention on Civil Liability for Oil Pollution Damage, Brussels, 1976
10	Protocol to the International Convention on the establishment of an International Fund of Compensation for Oil Pollution Damage, London, 1976
11	International Convention for Preservation of Pollution from Ships as modified by the Proto- col, London, 1978
12	Protocol relating to the International Convention for Safety of Life at Sea (SOLAS) , London, 1978
13	Convention on the Conservation of Antarctic Marine Living Resources, Canberra, 1980
14	United Nations Convention on the Law of the Sea , Montego Bay, 1982
15	International Convention on Salvage, London, 1989
16	International Convention on Oil Pollution Preparedness Response and Co-operation, London, 1990
17	Protocol to the Antarctic Treaty on Environment Protection, Madrid, 1991
18	Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1996 (London Protocol)