BIODIVERSITY

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Summary

The international law on biodiversity is primarily contained in a single instrument, the Convention on Biological Diversity, which was adopted in 1992. The Convention deals with biological diversity in all its forms and at all levels, namely the ecosystem level, the species level, and the genetic level. It seeks not only to enable the conservation of biological diversity, but also attempts to promote the sustainable use of the components of biological diversity and to enable appropriate access to genetic resources and the fair and equitable sharing of the benefits arising out of the utilization of such resources. These measures are supported by an institutional structure and financial mechanism designed to ensure that the objectives of the Convention can be fully realized.

1. Introduction

The term “biological diversity” (often contracted to “biodiversity”) is commonly used to describe the number and variety of living organisms on the planet. In its most obvious form, it comprises the millions of species on Earth, which are the outcome of more than three billion years of evolution. However, such a description comprises just one component of biological diversity, which is more accurately and conveniently described in terms of three levels:

- ecosystem diversity: the variety and frequency of different ecosystems;
- species diversity: the frequency and diversity of different species;

- genetic diversity: the frequency and diversity of different genes and/or genomes.

Thus, biological diversity includes not only the millions of species on Earth (diversity between species) but also diversity within individual species and diversity of the ecosystems in which they exist. In short, it may be considered a synonym for "life on Earth" in all its various forms. Over the past few decades, there has been a growing recognition of the importance of biological and genetic resources to the world's economic and social development and, as a result, a growing recognition of the need to protect biological diversity, as an asset of enormous value to present and future generations. This led, particularly during the 1970s, to the adoption of various international instruments designed to protect particular species or habitats, or other specific elements of biological diversity, usually on a regional basis, but there was no instrument, of global application, which sought to address the protection of biological diversity in its own right.

It was against this background that, in the early 1980s, various governments and international organizations began to consider the idea of a global agreement on biological diversity. This is reflected, in particular, in two nonbinding instruments adopted at this time: the World Charter for Nature, adopted formally in 1982 as a Resolution of the United Nations General Assembly (Resolution 37/7) and providing for, *inter alia*, the maintenance of the "genetic viability" of the Earth and the conservation of unique areas, representative samples of ecosystems and habitats of rare or endangered species; and the Undertaking on Plant Genetic Resources, adopted by the Food and Agriculture Organization (FAO) in 1983, which sought to ensure that plant resources should be explored, preserved, evaluated and made available for plant-breeding and scientific purposes. In 1987, the issue was taken up by the United Nations Environment Program (UNEP), which convened an Ad Hoc Working Group of Experts on Biological Diversity in the following year. Shortly after, in May 1989, it established the Ad Hoc Working Group of Technical and Legal Experts to prepare an international legal instrument for the conservation and sustainable use of biological diversity. Originally, the Working Group concentrated on designing an instrument to address conservation of biological diversity, but during its discussions it soon became apparent that many states were not prepared to consider conservation aspects only, and the scope of the proposed convention was widened to include other aspects, such as sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the use of biological resources, including the need to share costs and benefits between developed and developing countries and means to support innovation by local people. By February 1991, the Ad Hoc Working Group had become formalized as the Intergovernmental Negotiating Committee, in which 70 states participated and which culminated in May 1992 with adoption of an agreed text at an international conference in Nairobi.

The Convention was opened for signature a few days later, on 5 June 1992, at the United Nations Conference on Environment and Development (UNCED or the Rio "Earth Summit"). It remained open for signature until 4 June 1993, by which time it had received 168 signatures, a considerable total for an international agreement. The Convention entered into force on 29 December 1993, which was 90 days after the 30th

ratification. As of 1 June 2001, the Convention had 180 parties, representing the vast majority of the world's countries.

2. General Principles

The basic philosophy of the Convention on Biological Diversity rests not on the need to protect particular species or habitats that might be endangered or threatened, but on the need to protect biological diversity, in all its forms, in its own right. This is an important innovation in the Convention, as it is the first international instrument to recognize the intrinsic value of biological diversity and acknowledge the inherent right of all components of biological diversity to exist independent of their value to humans. Based on this philosophy, the basic objectives of the Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. As indicated above therefore, the Convention is concerned not only with conservation, but also sustainable use and the sharing of benefits. These are objectives that reflect a careful political balance upon which the Convention is founded.

From the beginning it is important to understand the nature of the Convention, which is essentially a framework agreement that seeks to provide a basic structure for action at the national and international levels, but does not, in general, seek to elaborate detailed or specific measures for the protection of particular elements of biological diversity. This is reinforced by the opening Articles of the Convention, which confirm the sovereign rights of states, in accordance with international law, to exploit their own resources. Thus, for areas within the limits of its national jurisdiction, a state can determine rules for the areas in question and the resources found there, such as the components of biological diversity, and can also regulate all processes and activities occurring therein (subject to the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction)—whether by their nationals or by nationals of third states. Beyond national jurisdiction, of course, a state has only the power to regulate the activities of its nationals and conservation and other measures require international cooperation. Thus, the Convention also provides that, for areas beyond national jurisdiction, each party is, as far as possible and as appropriate, cooperate with other parties, either directly or through international organizations on matters of mutual interest, for the conservation and sustainable use of biological diversity.

3. Conservation and Sustainable Use of Biological Diversity

The Convention contains a series of wide-ranging, but rather vaguely expressed, obligations related to the conservation of biological diversity and the sustainable use of its components. Taken together, these measures, many of which are already reflected in existing conservation treaties, do take a broad and comprehensive view of what constitutes conservation and sustainable use, although they are left to individual States to implement "as far as possible and as appropriate." They require action at the national level and the international level, although the emphasis is on the former. Thus, in setting

out general measures for conservation and sustainable use, the Convention requires parties to:

- develop national strategies, plans, or programs for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans, or programs based on the measures in the Convention; and
- integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programs and policies.

The general measures outlined above are supplemented by further general measures designed to ensure that activities undertaken by the parties are based on good science. Thus, parties are to identify and monitor components of biological diversity, paying particular attention to those requiring urgent conservation measures and those which offer the greatest potential for sustainable use. Processes and categories of activities that may have a significant adverse impact on conservation and sustainable use are also to be identified and monitored. For the purposes of identification, parties are to have regard to an indicative list of biological diversity components listed in an Annex to the Convention. These are categorized in terms of species and habitats; species and communities; and described genes and genomes (corresponding to the three levels of biological diversity outlined above). Within these categories, the Annex provides that parties are to have regard to factors such as: distinctiveness, richness, economic, and cultural importance or potential and the extent to which they are threatened.

The Convention also requires parties to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity. To this end, and as was directed by the Convention, the first Conference of the Parties established a clearinghouse mechanism (CHM) to promote and facilitate technical and scientific cooperation. The parties are also to encourage and develop methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, and, subject to mutual agreement, promote the establishment of joint research programs and joint ventures for the development of relevant technologies.

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Biographical Sketch

Christopher Hedley is a trainee barrister, specializing in law of the sea and fisheries law, environmental law, and European Union law. He has previously held appointments as an instructor in public international law and European Union law at Cardiff Law School, as a stagiaire at the European Commission, and has various consultancy experience. He is also the editor of the OceanLaw web resource (www.oceanlaw.net) and *International Fisheries Bulletin* (www.oceanlaw.net/ bulletin).