THE CONCEPT OF THE COMMON HERITAGE OF MANKIND: ITS VIABILITY AS A MANAGEMENT TOOL FOR DEEP-SEA GENETIC RESOURCES

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1. Genetic Resources and the Common Heritage Approach

Many living organisms in the deep sea possess unique genetic dispositions due to their adaptation to a particularly hostile environment in darkness, cold and high pressure.1 Such resources are often labeled ‘genetic resources’ to distinguish them inter alia from other marine living resources which are exploited for consumption. Strictly speaking the term ‘genetic resources’ refers not to the living organism as such but only to genetic material, i.e. to “any material of plant, animal, microbial or other origin containing functional units of heredity”.2 Hence, when it comes to genetic resources the focus of human activity is not the living organism hosting the genetic material but the material itself. The collection of samples of living organisms with potentially useful genetic material is usually sufficient for further research and cannot be compared to the harvesting of living organisms for consumption. This distinction is relevant for a regime on the management of genetic resources and standards for their protection from adverse human influences.

The actual or potential value of genetic resources requires research activities, e.g. the taking of samples of organisms in the deep sea, which are extremely costly, while the value of marine genetic resources for the development of technologies and pharmaceuticals is difficult to assess. Although some believe in the development of e.g. anti-cancer drugs from marine organisms, it cannot be excluded that a legal regime for marine genetic resources in areas outside national jurisdiction will share the fate of the one for mineral resources of the Area.

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2 This is the definition of ‘genetic material’ given by Article 2 of the Convention on Biological Diversity (CBD) of 5 June 1992 ((1992) 31 ILM 818 et seq.).

Genetic resources located in the water column of the sea outside areas of national jurisdiction or on the seabed beyond the continental shelves of coastal States\(^3\) are not addressed specifically by any relevant international agreement. While the Convention on the Law of the Sea (LOS Convention)\(^4\) deals specifically with mineral resources of the Area and establishes an institutional regime based upon the concept of the common heritage of mankind for them, genetic resources are not mentioned. Although the concept itself is still subject to misunderstandings and divergences in interpretation, the LOS Convention seems clear that the concept of the common heritage of mankind only applies to the mineral resources located at, on or under the deep seabed.\(^5\) Article 136 LOS Convention states that “[t]he Area and its resources are the common heritage of mankind”. However, Article 133(a) LOS Convention defines the notion of “resources” in Part XI as “all solid, liquid or gaseous mineral resources”. This limitation has also consequences for a potential institutional set-up for the management of genetic resources of the deep sea as it is relevant for the competences of the International Seabed Authority (ISA) and its structural design.

Neither is the Convention on Biological Diversity (CBD)\(^6\) directly applicable to the resources of the water column of the high seas or the deep seabed.\(^7\) Due to the reliance upon resources under national jurisdiction, the CBD does not mention the common heritage approach. The formulation of the conservation of biological diversity as a “common concern” in the preamble was chosen deliberately to avoid any implications of a general regime of shared resources.\(^8\) The access and benefit-sharing regime envisaged by the Convention relies upon specific bilateral agreements and is subject to further elaborations to overcome difficulties\(^9\) and inequalities in North-South relations.\(^10\) By its very

\(^3\) On the determination whether features with communities of living organisms are located in the Area or in the waters superjacent to the Area see A.G. Oude Elferink “The Regime of the Area: Delineating the Scope of Application of the Common Heritage Principle and Freedom of the High Seas” (2007) 22 International Journal of Marine and Coastal Law 143–176 at 148 et seq.

\(^4\) Adopted on 10 December 1982; 1833 UNTS 296.

\(^5\) A.G. Oude Elferink, note 3 at 174 comes to a different conclusion and affirms that living resources of the Area are included in the common heritage approach.

\(^6\) See note 2.

\(^7\) Beyond the limits of national jurisdiction the Convention only applies to processes and activities under the control of States regardless where their effects occur (Article 4 lit. b) CBD).

\(^8\) Likewise the International Treaty on Plant Genetic Resources of 3 November 2001 (available at ⟨www.planttreaty.org⟩) only mentions the “common concern” and not the concept of a common heritage of mankind.
