International Law and the Genetic Resources of the Deep Sea

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Dr Pardo calculated that, if established in 1970, the [International Seabed Authority] would after five years or in 1975 have a gross annual income ‘conservatively’ estimated at USD 6 billion and a net profit of USD 5 billion. (Guenter Weissberg, 1969)

The potential market for industrial uses of hyperhemophilic bacteria has been estimated at [USD] 3 billion per year. (Lyle Glowka [citing William Burke], 1996)

In 2004, the UN General Assembly established an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. Some commentators (including the author of this chapter) view this as the start of a process to negotiate a further protocol to the 1982 United Nations Convention on the Law of the Sea (LOS Convention) to deal with a range of issues surrounding the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. A particular focus of the debate within the context of the mandate of this working group and in other forums has been the status of the genetic resources of the deep sea in areas beyond national jurisdiction. In this chapter I would like to consider a few aspects of this ‘intriguing question’ (as Lyle Glowka has described it).

Firstly I examine what we do and do not know about the level of commercial


3 Ibid., p. 169.
interest in the genetic resources of the deep sea, especially in areas beyond national jurisdiction, arguing that further detailed analysis of this threshold issue in particular is urgently required. The second part of this chapter then goes on to examine the current status of the genetic resources of the deep sea in areas beyond national jurisdiction under international law. This section outlines why the ‘common heritage of mankind’ is irrelevant for understanding the current and future legal status of marine genetic resources in the ocean areas (and in particular in the deep sea) beyond national jurisdiction. The chapter concludes by examining some of the other subsidiary issues relevant to possible future regulation of access to marine genetic resources in areas beyond national jurisdiction.

**DOES COMMERCIAL INTEREST IN DEEP SEA GENETIC RESOURCES JUSTIFY A NEW PROTOCOL TO THE CONVENTION?**

Over more than 500 years the international law of the sea has developed as a consequence of ‘the interplay between two opposing fundamental principles of international law, the principle of sovereignty and the principle of the freedom of the high seas’. As Anand has noted, ‘the history of the law of the sea is to a large extent the story of the development of the “freedom of the seas” doctrine and the vicissitudes through which it has passed over the years’. Throughout this period, coastal states have progressively extended their jurisdictional reach in the oceans. This has culminated most recently in the recognition in the LOS Convention of the sovereign rights and the jurisdiction of the coastal state in the 200-nautical-mile exclusive economic zone (EEZ) and sovereign rights over the continental shelf, for the purpose of exploring it and exploiting its natural resources, up to 350 nautical miles from baselines in certain circumstances.

By the mid-1960s, however, there was growing concern amongst some states (especially the newly independent states emerging from centuries of colonial domination and exploitation) that the enclosure of the oceans would ultimately result in vast areas of ocean space and its resources being controlled by only the wealthy industrialised states. At that time it was assumed

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6 See Art. 56 of the LOS Convention.

7 ‘Natural resources’ in this context is limited by Art. 77(4) of the LOS Convention. On the continental shelf beyond 200 nautical miles, see further Part V in this book.