

***Marine Genetic Resources of the Deep Seabed:
Considerations for an
Access and Benefit-Sharing Regime***

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As technological innovations continuously improve our ability to reach remote regions of our planet, they also improve our capability to retrieve and utilize novel resources found in these environments. The extreme nature of these remote areas often necessitates the adaptation of certain traits in indigenous organisms not found in terrestrial habitats. In some cases, the genetic basis of these traits has lent itself well to the development of extremely novel commercial products in certain industries. In the deep seabed, genetic resources harvested from organisms located in and around extreme habitats, such as hydrothermal vent systems, seamounts, and cold seeps have seen commercial success in the pharmaceutical and agricultural industries, among others. A large portion of these extreme habitats are located in areas beyond national jurisdiction, which has sparked international debate as to the applicability of existing instruments of international environmental policy to this relatively new industry and the rights of nations lacking the capability to retrieve and develop these resources to the benefits derived from their commercialization.

A number of options and recommendations for a regime to manage these activities have been put forth, with associated implications for access and benefit-sharing (ABS) therein. There are also a number of existing instruments and guidelines relevant to access and benefit-sharing in this respect, such as the Bonn Guidelines of the Convention on Biological Diversity, the TRIPS Agreement of the World Trade Organization, the Budapest Treaty of the World Intellectual Property Organization, and others. These instruments can potentially be utilized in the establishment of an access and benefit-sharing regime that will not only facilitate the fair and equitable use of genetic resources of the deep seabed in areas beyond national jurisdiction and benefits derived from them but one that will also maintain incentives for the exploration of this area and the development of its resources for the benefit of mankind. In my research, I will examine relevant aspects of access and benefit-sharing and the applicability of existing ABS instruments to proposed management regimes for bioprospecting in the deep seabed beyond national jurisdiction as well as the potential for coordination with existing international ocean policy. Based on this examination, I will assess the feasibility of an access and benefit sharing regime for this industry, taking relevant lessons from existing models and case studies, and determine how these could inform potential governance regimes in devising options for access and benefit-sharing for marine genetic resources in the deep seabed beyond areas of national jurisdiction.