

Complicating conservation: how marine genetic resources challenge high seas biodiversity negotiations

Complicando la conservación: Cómo los recursos genéticos marinos desafían las negociaciones sobre biodiversidad en alta mar

Complicuer la conservation : comment les ressources génétiques marines remettent en cause les négociations sur la biodiversité en haute mer

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EXTENDED ABSTRACT

This presentation examines the status of negotiations surrounding competing claims to governance of marine genetic resources in high seas biodiversity negotiations. After years of concerns surrounding declining biodiversity of areas beyond national jurisdiction (ABNJ), the parties to the UN Convention on the Law of the Sea (UNCLOS) have begun negotiating an international legally binding instrument to address governance gaps that have historically impeded attempts at conservation. These negotiations, the called the Intergovernmental Conference on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ Negotiations) were formally initiated in 2017, and three formal negotiating sessions were held between April of 2018 and August of 2019. The fourth and purportedly final session, originally scheduled for April of 2020, was delayed due to the COVID-19 pandemic and rescheduled for March 2022. Conference negotiations were divided into four informal working groups: marine genetic resources, area-based management tools, capacity building and technology transfer, and environmental impact assessments.

We watched recordings of the working sessions relating to marine genetic resources and area-based management tools from the first three negotiating sessions, took detailed notes, and coded them in QSR NVivo, applying an iterative approach that combined deductive and inductive coding to identify themes relating to issues of ocean space and resources. For purposes of this presentation, we focus on the sessions relating to marine genetic resources.

The parties to these negotiations continue to dispute how precisely to define which marine genetic resources will fall under the scope of the agreement, but generally these resources include genetic material of marine origin that has actual or potential value. This has the potential to encompass a large range of products, as firms have already filed international patent applications on 12,998 genetic sequences from 862 marine species, ranging from small species like plankton to megafauna like sperm whales (Blasiak et al. 2018). The vast majority of these applications are owned by private entities, primarily those located in Germany, the United States, and Japan, with 47% owned by a single corporation. However, it is unclear to what extent these products will fall within the scope of the proposed instrument, as the location from where this genetic material was sourced is often unclear (Tiller et al. 2020). Moreover, there also may be genetic resources that fall within the scope of the agreement that have not yet been subject to patent applications, have “value” or “potential value” that is not patentable, that have unknown value or potential value, or from species that are, as of now, unknown. This leads the breadth of marine genetic resources that could ultimately be subject to the agreement unclear.

Moreover, the parties to the BBNJ negotiations engaged in ongoing debates regarding whether and to what extent fish will be subject to the instrument. In this regard, the parties are focused on the mandate of the BBNJ Negotiations to “not undermine” existing legal instruments and frameworks, or relevant global, regional, and sectoral bodies. The meaning of “not undermine” is unclear (Scanlon 2018), but it has resulted in hesitancy to include anything within the scope of “marine genetic resources” that would otherwise fall within the jurisdiction of regional fisheries management organizations. This has resulted in a variety of textual proposals that would exclude fish and other biological resources used as a commodity.

The definitional challenges pertaining to marine genetic resources are further complicated by disputes about the geographic scope of which resources are subject to the agreement. For example, the parties dispute how to define the scope of the agreement for mobile species that cross jurisdictional boundaries and move between the water column and the seafloor. This is particularly complicated in areas like the Caribbean, where these resources may come from organisms that cross among a number of countries’ EEZs as well as into ABNJ. The parties also disagree on whether the agreement should cover only marine genetic resources as they exist in situ, or whether access and benefits sharing provisions should apply to ex situ access and access to genetic sequence data, or marine genetic resources in silico.

As a result of these disputes, marine genetic resources were among the most contested issues at the BBNJ Negotiations (see also Tiller et al. 2020). With the scope and potential value of these resources largely unknown, the resolution of these disputes could have important consequences both for biodiversity governance and equity in benefits distribution.

KEYWORDS: Ocean governance, biodiversity, marine genetic resources

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