ALEX HOFFORD

HSA BRIEFING

Equity, Food Security and Capacity-building

The world's marine areas beyond national jurisdiction (ABNJ), which belong *equally* to every nation, whether in the north, south, east or west, landlocked or coastal, are not being managed in a sustainable and equitable manner. The world's ocean provides not only one-half of the oxygen we breathe, but also food, jobs and income for billions of people. Its fish provide 18 percent of the global average per capita intake of animal protein.[1]

But in the areas beyond national jurisdiction, where there is no comprehensive governance regime, the global ocean, its food resources and biological treasures are being abused by a small number of States with the technological capacity to exploit resources in a manner and on a scale inconceivable to the framers of the United Nations Convention on the Law of the Sea (UNCLOS) when it was implemented more than 30 years ago. According to the UN's Food and Agriculture Organization (FAO) in 2012, about 87 percent of global fisheries is either fully exploited, overexploited, depleted or recovering from depletion. Overfishing is stimulated not only by demand but by ever-increasing and subsidized industrial fishing fleets spanning the globe. And this exploitation is costing everyone, whereas sustainability could benefit everyone: economists have estimated that improving the sustainability of global fisheries could increase economic returns from negative US$26 billion to positive US$45 billion a year.[2]

The "freedom of the seas" is not an absolute right; rather it is balanced by a corresponding obligation to protect and preserve the marine environment, and to cooperate to this end. Historically, most developing nations and local fishing communities have not been part of the problem of overfishing, climate change and other threats, however, they are the ones who are paying the highest price.

What we know is that the status quo of global ocean governance is not working to protect and maintain this life-supporting system and the billions of people on Earth who depend on it. What we also know is that the present system is not sustainable. Due to a combination of anthropogenic pressures, including pollution, climate change and the effects of ocean acidification, important fish stocks are being depleted at alarming rates, habitat is being harmed by destructive fishing practices, and there is increasing biodiversity loss. Climate change will change the ocean's productivity and ability to sequester carbon, while ocean acidification will affect the growth and viability of a range of marine organisms, including corals, bivalves, crustaceans and plankton.

What we need is the adoption of an implementing agreement to UNCLOS for the conservation of marine biodiversity in ABNJ, which will conserve and properly manage marine biodiversity in ABNJs and protect the rights of all to the essential benefits and bounty emanating from the ocean; hence, operationalizing the implementation of the Convention's general provisions.

STEPHEN MCGOWAN/MARINE PHOTOBANK

Equity

The principle of equity, incorporated throughout UNCLOS, comprises elements of inter-generational (rights of future generations) and intra-generational equity. Elements of inter-generational equity can be found in the UNCLOS obligation to protect and preserve the marine environment in many different forms. Elements of intra-generational equity can be found in the idea of a "just and equitable international economic order which takes into account the interests and needs of mankind as a whole and, in particular, the special interests and needs of developing countries, whether coastal or land-locked" (UNCLOS preamble).

The concepts of equity and equitable use have evolved since UNCLOS, especially in instruments such as the Brundtland Report[3], Agenda 21[4], The Convention on Biological Diversity, and, most recently, in the Rio+20 outcome document *The Future We Want*.[5] Equity also entails the application of the precautionary principle in the face of uncertainty to avoid risks for both present and future generations, and the concept of the responsibility of States to prevent harm in ABNJ.

1. FAO. *The State of World Fisheries and Aquaculture* 2012. Rome, FAO. (2012) p.84
2. UNEP, Towards a Green Economy: Pathway to Sustainable Development & Poverty, p. 85 (2011).
3. *Our Common Future: Report of the Commission on Environment & Development* (1987)
4. United Nations Conference on Environment and Development, Agenda 21, Rio Declaration (1992)
5. http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/10/PDF/N1147610.pdf?OpenElement

Despite general provisions under UNCLOS and subsequent instruments, the application of the principle of equity in ABNJ continues to be a challenge, and disparities tend to be accentuated with the increasing rates of biodiversity loss – and consequently resource and genetic material loss – as well as damage to other ecosystem goods and services. Despite UNCLOS' strong reference to equity and cooperation, mechanisms and further means of implementation need to be defined, especially with respect to the conservation and sustainable use of marine biodiversity, including genetic resources.

Under UNCLOS there are no provisions for access to, and sharing of, benefits of marine genetic resources in ABNJ outside of "the Area". Recent scientific research has found that valuable biological components can be extracted from marine biological resources, which include essential components used in the research and development of drugs to fight cancer, AIDS and malaria, and it is highly likely that more such components will be found. A new agreement would enhance the conservation of marine biodiversity and could also ensure greater equity in the sharing of any benefits arising from future exploration of marine genetic resources in ABNJ.

Food Security

Worldwide, fish represent a significant source of animal protein in the diet of billions of people, especially in developing and coastal States. Fisheries and food security are linked together and are essential elements to be considered in national agendas. In this context:

- The high seas include highly productive areas, which are important feeding grounds, spawning areas and migratory corridors for endangered and vulnerable species and for economically and environmentally important fish stocks, providing valuable goods and services to all coastal and land-locked States.

- The connectivity between coastal ecosystems and the high seas is critical for numerous species. Therefore, the recognition of these ecological linkages is fundamental for the sustainable use of marine resources, which contribute to food security by increasing available food supply and generating income for the purchase of food.

- Healthy and resilient ecosystems are essential to achieving food security. Consequently, governments entrusted with the stewardship of marine resources must improve management and conservation actions to ensure the availability of these resources for present and future generations.

- The depletion of fish stocks that depend on the high seas in different lifecycle stages has a direct impact on coastal populations and undermines food security.

- The ocean's productive capacity cannot keep up with stresses such as an ever-increasing demand for fish, habitat destruction and pollution, which are all aggravated by the effects of climate change, including ocean acidification. Improving food security requires conservation of biological diversity through the establishment of marine protected areas (MPAs) and marine reserves and the use of environmental impact assessments (EIAs) and strategic environmental assessments (SEAs). Resilience can be enhanced by the combination of biodiversity and abundance, as well as the reduction of stressors, which can be improved by the use of these management tools. It is critically important to enhance the protection and proper management of areas of high conservation value located on the high seas and on the seabed, so as to restore and maintain the productivity capacity of these areas and ensure a healthy ocean.

Capacity-building and Technology Transfer

An equitable process demands that developed countries invest more in science and technological research and solutions so as to limit the burdens of overfishing, destructive fishing practices, pollution and climate change on developing countries. Presently, only a few developed countries have the capacity to conduct complex and expensive research in ABNJ. During the Rio+20 negotiations, States recommended that any new implementing agreement to UNCLOS would need to include capacity-building and technology transfer so as to level the playing field. Such an agreement can enhance and encourage improvements such as:

- Establishing or strengthening programmes for scientific and technical education and training in conservation and sustainable use of marine biodiversity, particularly through development, support, and the supervision of scientists in developing countries.

- Designing and conducting scientific joint ventures and scientific research where possible with developing country partners and institutions, and enhancing and encouraging capacity for such research, as well as establishing technological and research centers in developing countries.

- Establishing the means for the effective implementation of Part XIV of UNCLOS on development and transfer of marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology. This could include a clearing-house mechanism for the transfer of marine technology, providing Member States with efficient access to relevant sources of information, practical experience of and scientific and technical expertise in the transfer of marine technology, and also facilitate effective scientific, technical and financial cooperation.