Tullio Scovazzi

THE CONSERVATION AND SUSTAINABLE USE OF MARINE BIODIVERSITY, INCLUDING GENETIC RESOURCES, IN AREAS BEYOND NATIONAL JURISDICTION: A LEGAL PERSPECTIVE

Abstract

The relevant aspects of the present UNCLOS regime

New challenges are facing States as regards the subject of conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. This report will focus on the legal aspects of the subject. It will elaborate on how the present regime, as embodied in the United Nations Convention on the Law of the Sea (UNCLOS), could evolve to address some of the new challenges, such as a regime for genetic resources and the establishment of a network of marine protected areas.

The basic aspect of the high seas regime is freedom. Today the freedom of the high seas is not absolute, but subject to a number of conditions, as specified by the relevant rules of international law, including UNCLOS. Today it cannot be sustained that a State has the right to engage in specific marine activities simply because it enjoys freedom of the sea, without it being bound to consider the opposite positions, if any, of the other interested States. Also the concept of freedom of the sea is to be understood in the context of the present range of marine activities and in relation to the other potentially conflicting uses and to interests having a general character, such as the sustainable use of living resources and the protection of the environment.

The most innovating aspect of UNCLOS is the concept of common heritage of mankind. It presupposes a regime completely different from both the traditional concepts of sovereignty, which applies in the territorial sea, and of freedom, which applies on the high seas. The basic elements of the regime of common heritage of mankind, applying to the seabed beyond the limits of national jurisdiction (the Area), are the prohibition of national appropriation, the destination of the Area for peaceful purposes, the use of the Area and its resources for the benefit of mankind as a whole with particular consideration for the interests and needs of developing countries, as well as the establishment of an international organization entitled to act on behalf of mankind in the exercise of rights over the resources. However, the prospects in the field of mineral resources in the Area remain today uncertain. A number of factors, including the cost of seabed mining activities, have inhibited progress towards commercial exploitation of mineral deposits.

Genetic Resources

The exploitation of commercially valuable genetic resources may in the near future become a promising activity taking place beyond the limits of national jurisdiction. But what is the international regime applying to genetic resources in areas beyond national jurisdiction? Neither the UNCLOS nor the Convention on Biological Diversity provide any specific legal framework in this regard. Some States take the position that the UNCLOS principle of common heritage of mankind and the mandate of the International Seabed Authority should be extended to cover also genetic resources. Other States rely on the UNCLOS principle of freedom of the high seas, which would imply the freedom of access to, and the unrestricted exploitation of, genetic resources. In fact, both the divergent positions move from the same starting point, namely that the UNCLOS is the legal framework for all activities in the oceans and seas, including in respect of genetic resources beyond areas of national jurisdiction.

There is no doubt that the UNCLOS is a cornerstone in the field of codification of international law. Nevertheless, the UNCLOS, as any legal text, is linked to the period when it was negotiated and adopted (from 1973 to 1982). Being itself a product of time, the UNCLOS cannot stop the passing of time. While it provides a solid basis for the regulation of many subjects, it would be illusory to think that the UNCLOS is the end of legal regulation. International law of the sea is subject to a process of natural evolution and progressive development which is linked to new needs and involves also the UNCLOS. In particular, the UNCLOS cannot be supposed to regulate those activities that its drafters did not intend to regulate for the simple reason that they were not foreseeable in the period when this treaty was being negotiated. At this time, very little was known about the genetic qualities of deep seabed organisms. The words "genetic resources" or "bioprospecting" do not appear anywhere in the UNCLOS. When dealing with the special regime of the Area and its resources, the

The UNCLOS defines the "resources" of the Area as limited to "all solid, liquid or gaseous mineral resources *in-situ* in the Area at or beneath the sea-bed, including polymetallic nodules". This means that the UNCLOS regime of common heritage of mankind cannot be automatically extended to the non-mineral resources of the Area. But, for logical and chronological reasons, the regime of freedom of the high seas cannot apply to genetic resources either. While establishing specific regimes for living and mineral resources in areas beyond national jurisdiction, the UNCLOS does not provide any third regime for the exploitation of marine genetic resources. A legal gap exists in this regard. Sooner or later it should be filled (better sooner than later) through a regime which, to be consistent, should encompass under the same legal framework the genetic resources of both the deep seabed and the superjacent waters.

UNCLOS drafters had only mineral resources in mind.

However, some general principles of the UNCLOS should be taken into consideration when envisaging a future regime for marine genetic resources beyond national jurisdiction. They include the paramount objective to "contribute to the realization 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). Also in the field of genetic resources, the application of the principle of freedom of the sea under a "first-come-first-served" approach leads to inequitable and hardly acceptable consequences. New cooperative schemes, based on a regime for access and the benefit of all States, should be envisaged in a future agreement on genetic resources beyond the limits of national jurisdiction. This is also in full conformity with the principle of fair and equitable sharing of the benefits arising out of the utilization of genetic resources set forth by the Convention on Biological Diversity.

The scope of the UNCLOS regime of the Area is already broader than it may be believed at first sight. The legal condition of the Area has an influence also on the regulation of matters and activities that, although different from minerals and mining activities, are also located in that space and are more or less directly related to mining activities, such as marine scientific research, the preservation of the marine environment and the protection of underwater cultural heritage. As far as the first two matters are concerned, it is difficult to draw a clercut distinction between what takes place on the seabed and what in the superjacent waters. Bioprospecting, that is what is currently understood as the search for commercially valuable genetic resources of the deep seabed, can already be considered as falling under the UNCLOS regime of marine scientific research. Also bioprospecting is consequently covered by Art. 143, para. 1, of the UNCLOS, which sets forth the principle that "marine scientific research in the Area shall be carried out exclusively for peaceful purposes and for the benefit of the mankind as a whole".

Marine Protected Areas

The UNCLOS puts a great emphasis on the issue of preservation and protection of the marine environment, at both the world and the regional level and according to the different sources of pollution. All States are under an obligation, arising from customary international law and restated in Art. 192 UNCLOS, "to protect and preserve the marine environment". This obligation applies everywhere in the sea, including the high seas and the seabed, and can be complied by resorting to different means. One of the main means are area-based management tools, including marine protected areas, which are implied in Art. 194, para. 5, UNCLOS. It provides that the measures taken to protect and preserve the marine environment "shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life".

A marine protected area (MPA) can generally be understood as an area of marine waters or seabed that is delimited within precise boundaries (including, if appropriate, buffer zones) and that is granted a special protection regime because of its significance for a number of reasons (ecological, biological, scientific, cultural, educational, recreational, etc.). MPAs are a rather flexible instrument that can be limited to those protection measures which are necessary to ensure the prescribed objectives, without unnecessarily burdening maritime activities that can be carried out in an environmentally sustainable way. The establishment of MPAs, as a key element of marine environmental protection, is linked to the most advanced concepts of environmental policy, such as sustainable development, precautionary approach, integrated coastal zone management, marine spatial planning, ecosystem approach and transboundary cooperation.

A number of policy instruments call for action towards the establishment of MPAs, including Agenda 21, the action programme adopted in Rio de Janeiro by the 1992 United Nations Conference on Environment and Development, and the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg, 2002) that confirms the need to "maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction". To achieve this aim, the Plan puts forward the objective of a representative network of MPAs and the deadline of 2012 for its achievement. The United Nations General Assembly, by its 2010 Resolution on "Oceans and the Law of the Sea", reaffirmed the need for States to continue and intensify their efforts, directly or through competent international organizations, to develop and facilitate the use of diverse approaches and tools for conserving and managing vulnerable marine ecosystems, including the establishment of marine protected areas, consistent with international law, as reflected in UNCLOS, and based on the best scientific information available, and the development of representative networks of any such marine protected areas by 2012.

Area based management tools and the establishment of MPAs beyond the limits of national jurisdiction are encouraged by general rules of customary international law on the protection of the environment and by a number of treaties that, besides the UNCLOS, are today in force for many States, at both the world and regional level. The instances of the International Convention for the Prevention of Pollution from Ships (called MARPOL), the Convention on Biological Diversity, the 1995 Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean, and the Convention for the Protection of the Marine Environment of the North East Atlantic (called OSPAR Convention) are considered in detail in the report. However, there is a lack of an instrument having a world scope of application that could specifically provide for the establishment of a network of MPAs in areas beyond national jurisdiction.

Possible Future Developments

New prospects for overcoming a conflict based on the use of the two radically opposed principles of common heritage of mankind or freedom of high seas have emerged at the 2011 meeting of the Working Group. States participating to the meeting recommended that "a process by initiated by the General Assembly, with a view to ensure that the legal framework for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction effectively addresses those issues by identifying gaps and ways forward, including through the implementation of existing instruments and the possible development of a multilateral agreement under UNCLOS". The possibility of a third UNCLOS implementing agreement is implicitly envisaged as a way to fill the present gaps. What is needed for the time being, in order to bridge the gap between distant positions, is a general understanding on a number of "communalities" that could become the key elements for a future regime.

Issues relating to genetic resources, including access and benefit sharing, and to marine protected areas already need to be addressed with priority. Other key elements for a future global "package" on conservation and sustainable use of marine biodiversity could be environmental impact assessment, capacity-building and the transfer of marine technology, as recalled in the above mentioned 2011 recommendation of the Working Group.