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BBNJ Agreement: High Seas Biodiversity as a Common Heritage (of Mankind)?

Acordo BBNJ: Biodiversidade em Alto Mar como Patrimônio Comum (da Humanidade)?

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Abstract

The UNCLOS does not expressly address genetic resources. In 2017, the United Nations convened a conference to negotiate an Agreement on conservation and sustainable use of BBNJ. Based on UNCLOS provisions, which prohibit the modification of the principle of freedom on high seas, it is not possible for marine genetic resources on high seas to be ruled as *res communis humanitatis*, but as *res communis*.

Resumo

A CNUDM não se refere expressamente aos recursos genéticos. Em 2017, as Nações Unidas convocaram uma conferência para negociar um Acordo sobre a conservação e o uso sustentável de BBNJ. Com base nas disposições da CNDUM, que proibem a motificação do princípio da liberdade em alto mar, não é possível que os recursos genéticos marinhos em alto mar sejam regulamentados como *res communis humanitatis*, mas como *res communis*.

Keywords: BBNJ; high seas; genetic resources; conservation; sustainable use.

Palavras-chave: BBNJ; alto mar; recursos genéticos; conservação; uso sustentável.

Introduction

Relying on sparse rules of customary and conventional nature in force on management and conservation of the sea, the United Nations decided to convene a conference for the codification and the creation of marine legal regimes[1]. The ultimate purpose of this conference, which took place in Geneva in 1958, was to adapt the

1 The four United Nations Conventions on the Law of the Sea, concluded in Geneva in 1958, in addition to codifying the customs then in force, established new marine legal regimes, namely the contiguous zone regime and the continental shelf regime (Yanai, 2012).

Law of the Sea to the new challenges faced by the international community. In fact, at the end of Geneva's conference, a binding legal instrument dedicated to the conservation of biological resources on high seas was signed.

15 years later, after the failure of the conference held in 1960, the United Nations convened a third conference for the unification of the Law of the Sea. After years of complex negotiations (Levy, 1980), the Convention on the Law of the Sea (hereinafter "UNCLOS") was adopted in 1982 in Montego Bay, Jamaica. It has been in force since 1994. Among the various legal regimes included in UNCLOS, there are provisions on the sustainable use of marine biological resources, as the negotiations of this treaty were influenced by the Stockholm Declaration on the Human Environment (Adede, 1995) a year before.

About the subject dedicated to the sustainable use of marine biodiversity, two major normative axes can be identified. First, the right to fish and, second, the right to "other legitimate uses"[2] of marine biological resources. Among these other legitimate uses, those linked to biotechnological analysis based on genetic engineering knowledge stand out. Given the vigorous development of the biotechnological sector, access to and conservation of marine genetic resources have become a strategic issue for the States, as well as part of the agenda of some international conferences (Leary *et al.*, 2009, p. 183).

More recently, the Unites Nations General Assembly, on 24 December 2017, adopted the Resolution 72/249, which called upon its members to negotiate a new legally binding international treaty, under the aegis of UNCLOS, on conservation and sustainable use of marine biological diversity beyond national jurisdiction (hereinafter "BBNJ").

Based on this Resolution, it is clear that a future BBNJ Agreement can only be adopted in accordance with UNCLOS. After holding three sessions of the conference on BBNJ in 2018 and 2019 and after writing the draft text of the BBNJ Agreement[3], we point out the impossibility of creation a single legal regime for the genetic resources on high seas and the Area. In view of the finding, we indicate a systemically more appropriate suggestion of an international legal regime for the sustainable use of BBNJ on high seas.

To this end, it will be analyzed the UNCLOS provisions limiting the ongoing negotiations on the BBNJ Agreement as compared to the provisions of the 1995 United Nations Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks and the provisions of the International Antarctic Law.

2 Article 1(1)(4) of UNCLOS.

3 Revised draft text of an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, written by the United Nations on 27 November 2019. Available from: https://www.un.org/bbnj/sites/www.un.org.bbnj/files/revised_draft_text_a.conf_.232.2020.11_advance_unedited_version.pdf.

UNCLOS as a basis for BBNJ Agreement

The right of freedom of States to negotiate an international treaty is conditioned by respect for the limits existing in the international legal order itself. Therefore, even before negotiations begin at a conference dedicated to BBNJ Agreement, States, which are members of the United States, do not have absolute freedom to innovate, since the marine legal system as a whole must be coherent.

Regarding to the negotiations on BBNJ Agreement, United Nations General Assembly Resolution 72/249 establish that such an instrument should be adopted under the aegis of the UNCLOS[4]. Therefore, the BBNJ Agreement, once adopted, must necessarily be in line with the international legal system codified in Montego Bay, in 1982.

In order to understand the possibilities for negotiations on BBNJ, we must read the UNCLOS provisions that deal with the right of amending, suspending and revoking its text. First of all, it is worth mentioning Article 311(3) of UNCLOS, which states that:

"Two or more States Parties may conclude agreements modifying or suspending the operation of provisions of this Convention, applicable solely to the relations between them, provided that such agreements do not relate to a provision derogation from which is incompatible with the effective execution of the object and purpose of this Convention, and provided further that such agreements shall not affect the application of the basic principles embodied herein, and that the provisions of such agreements do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention".

Therefore, the BBNJ Agreement can neither entail derogation incompatible with the purpose and objective of UNCLOS, nor affect the application of the basic principles set out therein. Regarding the BBNJ issue, which basic principles should be viewed as limits to the Agreement's validity?

The 1992 Convention on Biological Diversity (hereinafter "CBD") defines, on Article 2, biodiversity as the variability among living organisms from all sources including marine ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. UNCLOS provides the meaning of biodiversity when it refers to "living resources"[5] "marine life"[6], "living organisms"[7] and "species"[8]. Therefore, it is possible to identify, in UNCLOS, the existence of standards concerned to marine biological diversity, "including fishing and other legitimate uses of the sea"[9] which includes scientific research and the exploration and exploitation of marine genetic resources.

4 It was not the first time this has happened. In 1994 and 1995, two agreements were adopted for the implementation of UNCLOS, respectively, the Agreement Relating to the Implementation of Part XI of UNCLOS and the Agreement for the Implementation of the Provisions of UNCLOS Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, whose conventional provisions are found in Part V dedicated to the exclusive economic zone. Thus, the BBNJ Agreement will be the third experience of the United Nations in adopting a UNCLOS implementation treaty.

5 Preamble and Articles 1(1)(4), 21(1)(d), 56(1)(a), 61, 62, 69, 70, 71, 73(1), 117, 118, 119, 123(a), 246(5)(a), 277(a), 297(3)(a), 297(3)(b)(i), 297(3)(b)(ii) of UNCLOS.

6 Articles 1(1)(4), 194(5) of UNCLOS.

7 Article 77(4) of UNCLOS.

8 Articles 61-64, 67, 68, 77(4), 119, 194(5), 196, Annex I of UNCLOS.

9 Article 1(1)(4) of UNCLOS.

At a first and immediate look, when dealing with marine biological diversity, fishery resources and genetic resources comprise this set. Although fishing activity is expressly previewed in some Articles of UNCLOS, there is no definition of fishery resource. This does not prevent, however, that various definitions can be found in other International Law instruments dedicated to the cooperation on fisheries, which have been concluded in accordance with UNCLOS. In any case, despite the terminological challenges, it can be identified the differentiation between fish as commodity (fishery resource) and fish valued for their genetic properties (genetic resource) (Leary, 2019).

Due to this terminological difference between fishery resources and marine genetic resources, and recognizing the importance of the International Fisheries Law, the negotiations on the future BBNJ Agreement have expressly moved away from the fisheries issue, restricting themselves only to the sustainable use of marine genetic resources[10]. Therefore, despite being the conference on BBNJ Agreement a conference on biological diversity, its object tends to concentrate on its genetic dimension. So, it will not be an Agreement about the fisheries on high seas, but the bioprospection on high seas.

According to UNCLOS, the only two areas beyond national jurisdiction are those that lie outside continental shelf and exclusive economic zone, which are, respectively, the Area and the high seas. The future BBNJ Agreement should therefore be restricted to the sustainable use of the genetic resources naturally occurring in these two internationalized marine spaces.

Marine genetic resources on high seas: *res nullius*

Regarding the high seas, Article 86 of UNCLOS states that they are "all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State." Thus, the BBNJ Agreement is intended to regulate the sustainable use of genetic resources naturally found in the water column beyond national waters of the coastal State, i.e., its economic exclusive zone.

The internationalization of the high seas is established in Article 89 of UNCLOS, which defines the invalidity of claims of sovereignty over the high seas, stating that "No State may validly purport to subject any part of the high seas to its sovereignty." This conventional disposition, which deals with the illegality of the exercise of sovereignty or sovereign rights by States in that area, guarantees its internationalization and allows the conclusion that the high seas are a kind of marine area beyond national jurisdiction.

The principle of freedom of all States on high seas is consolidated in the International Law since the 19th century (Churchill; Lowe, 1999). Consequently, it should be treated as a basic principle of UNCLOS, under the terms of its Article 311(3). The freedom on high seas means not only the impossibility of territorial appropriation by States, but also the freedom of their vessels to practice

10 Article 8, 2, (a) of Revised draft text of an agreement under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

all legitimate activities (Tanaka, 2015), which is directly related to the sustainable use of marine genetic resources.

Regarding the appropriation of biological resources on high seas, Article 87 of UNCLOS expressly provides for the freedom of use. It comprises, among others, the following freedoms guaranteed to coastal and landlocked States: the freedom of navigation, overflight, laying of submarine cables and pipelines, construction of artificial islands and other installations, fishing, and scientific research. Specifically on marine biodiversity, two kinds of freedoms stand out: the freedom to fish and the freedom of scientific research. Thus, all States may exercise these freedom rights without having counterpart obligations with the international community.

In the UNCLOS, there is no compensation provision for the exploration, exploitation and research with biological resources of the high seas. There is free and open appropriation of the marine biodiversity found there naturally by national States. Once the biological resource of the high seas is captured, collected or accessed, the corresponding State owes nothing to the international community, which allows us to conclude that these biological resources are internationally *res nullius* (Toledo, 2019), i.e., fishing or genetic resources (Beurier, 2014) are appropriable by whoever first reaches them (Le Hardy, 2002, p. 40).

The high seas are open to all States, including those whose territory is landlocked. The freedom on high seas must be exercised in accordance with the provisions of UNCLOS and "other rules of international law"[11]. By opening the possibility for other international treaties to provide for the sustainable use of biological resources on high seas, it follows that the parties to UNCLOS may agree on different legal conditions for the conduct of fishing, scientific research or the bioprospection of marine genetic resources, provided that this does not correspond to the unfeasibility of the principle of freedom on high seas.

This interpretation is justified by the meaning of Article 87(1) of UNCLOS, which guarantees the principle of freedom on high seas – as it recognizes that there are some kinds of freedom, examples of which "inter alia"[12] are indicated in its subitems – allows the identification of the free, open and sustainable use of genetic resources on high seas. The expression *inter alia* in this conventional disposition indicates that the principle of freedom on high seas can be applied in contexts other than those expressed in the paragraphs. It means that UNCLOS does not have exhausted the possibilities of free, open and sustainable use of the biological resources on high seas.

Some examples of freedom are listed there, applying the same legal regime analogously to all other legitimated uses of the high seas. In this case, access to genetic resources would equate to the harvesting of fishery resources. By analogy, the right of freedom of sustainable use of biological resources on high seas by all States would be guaranteed not only with respect to fishery resources, but also with respect to genetic resources. Thus, the entire marine biodiversity naturally found on high seas would be internationally treated as *res nullius*. Therefore, all States would have the right

11 Article 87(1), final part, of UNCLOS.

12 Article 87(1) of UNCLOS.

to have their vessels conducting freely, on high seas, of fishing activity, scientific research, and exploration and exploitation of their genetic resources, without any obligation to share benefits with other States or with mankind.

We are conscious that the adoption of analogy here could cause insecurity as the limits of action on high seas are not very clear. Regarding the sustainable use of marine biological diversity, this interpretation favors the developed States as holders of biotechnology, since they become more competitive when prospecting genetic resources. Since these resources found on high seas are considered as *res nullius*, the States that dominate greater biotechnological capacity can appropriate them more easily, concentrating all the benefits obtained from their use. Such concentration of benefits tends to make international inequalities even more significant as "the potential economic gains of biotechnology have transformed scientific research from a primally academic exercise into an industrial and entrepreneurial one" (Guneratne, 2013, p. 28).

Because of this, the ongoing negotiations on BBNJ Agreement are a unique opportunity for developing States to establish a legal regime aimed at building an international environment for more intense cooperation in order to universalize socioeconomic development between all States. An international context of more equality requires sharing with all States the benefits obtained by few ones when the exploration and exploitation of marine genetic resources on high seas.

Marine genetic resources on high seas: *res communis*

To what extent may the States establish a legal regime on sustainable use of the genetic resources on high seas differently than they have done with fishery resources? To answer this question, we must return to the expression *inter alia* of Article 87(1) of UNCLOS, as it is necessary to recognize that, despite being a basic principle of UNCLOS, the freedom on high seas is not absolute (Tanaka, 2015). Quite the opposite, under the terms of Article 87(2) of UNCLOS, such freedom can only be exercised individually by a State while respecting the interests and rights of all other States. Therefore, there is the concern of the States Parties to UNCLOS not to make the high seas a monopolistic area, due to the material disparities among countries. Thus, by means of the future BBNJ Agreement, it is possible for the States that, guaranteeing the freedom of the high seas, they provide for a legal regime based on a stronger competitive equilibrium. From this perspective, the expression *inter alia* turns to be understood as an opening for States to create, by means of BBNJ Agreement, different obligations in view of equal and universal use of biological resources on high seas. Consequently, it would fulfill the "principle of equal use" (Mello, 2001, p. 40, our translation) on high seas.

As the sustainable use of genetic resources on high seas is not expressly identified as freedom of fishing, any possibility of analogy is ruled out, being necessary the establishment of a specific legal regime for the sustainable use of BBNJ in accord with the basic principles of UNCLOS. Would it then be possible to respect the principle of freedom on high seas, if the genetic resources are not considered expressly as *res nullius*?

As Article 89 of UNCLOS provides that the high seas are *per se* not subject to claims of sovereignty by States, this conventional disposition makes the high seas something that, at this point, is not to be confused with their natural resources. In fact, according to Article 89 of UNCLOS, the high seas as a space are a common good or *res communis*. As it is not possible for a State to appropriate territorially the high seas, it follows that the high seas as such is *res communis*. Thus, the internationalization of the high seas is guaranteed and, consequently, the right of free navigation is consolidated.

Since the existence of *res communis* of the high seas *per se* is a legal reality as a means of vessel navigation (Zanella, 2017), the genetic resources naturally found on high seas – unlike the fishing resources, whose free, open and sustainable use is guaranteed to all States in UNCLOS – may also be legally treated as *res communis*. For that, it is enough that the future BBNJ Agreement to stipulate that not only the high seas, but also their genetic resources are not subject to appropriation by States. This conventional solution would be modelled on UNCLOS Article 137(1), which, dealing with another internationalized marine area, states that "No State shall claim or exercise sovereignty or sovereign rights over any part of the Area or its resources, nor shall any State or natural or juridical person appropriate any part thereof".

Following the solution adopted for the Area in UNCLOS, the BBNJ Agreement should expressly provide that no State shall claim or exercise sovereignty or sovereign rights over the genetic resources naturally found on high seas, nor shall any State or natural or juridical person appropriate any part thereof. Eventually, if there was an intention of States to treat the marine genetic resources on high seas as *res nullius*, it would suffice to provide expressly in BBNJ Agreement the right to freedom of their appropriation with no obligation of counterpart[13].

Once the future BBNJ Agreement expressly establishes the legal impossibility of appropriation of genetic resources on high seas by States, natural or juridical person, and consolidates their character of *res communis*, the basic principle of freedom on high seas would remain applicable. This principle is absolutely reconcilable with the existence of *res communis*, as view in Article 89 of UNCLOS, which prohibits States from sovereign appropriation of any part of the high seas.

Thus, being the genetic resources on high seas a common heritage by provision of the future BBNJ Agreement and keeping the basic principle of freedom on high seas applicable, it would be possible to foresee benefit sharing obligations for the sustainable use of these genetic resources by States. As *res communis*, such biological resources would be open to use, but no longer free to use. In the opposite way, bioprospecting States would be obliged to compensate other States for the use of a common heritage, giving perspectives of material development to other States, especially the developing States. In fact, with reference to Article 137(2) of UNCLOS, the BBNJ Agreement should determine that States, which use genetic resources on high seas, would be obliged to share the benefits with other States, in particular by transfer of biotechnology. Thus, all rights in the genetic resources of the high seas must be vested in international community as a whole.

13 This is precisely what is foreseen in UNCLOS with regard to the utilization of fishery resources on high seas.

Although the BBNJ Agreement, regarding the sustainable use of genetic resources on high seas, should be inspired by the content of Article 137 of UNCLOS, which specifically refers to the legal regime of the Area, it cannot abrogate the basic principle of freedom on high seas, due to the aforementioned Article 311(3) of UNCLOS. For this reason, it is forbidden for States Parties of UNCLOS to adopt for the sustainable use of genetic resources on high seas, through BBNJ Agreement, the principle of common heritage of mankind or *res communis humanitatis,* because, in the Law of the Sea, such a regime presumes the control and management centralized in a quasi-sovereign entity, which exercises a right of "supervenience" (Beirão, 2018), as is the case of the International Seabed Authority (hereinafter "ISA") in relation to the resources of the Area.

In view of Article 311(3) of UNCLOS, as it is not possible to transform the genetic resources of the high seas into common heritage of mankind through BBNJ Agreement under penalty of making unfeasible a basic principle of UNCLOS, we propose to the future BBNJ Agreement the adoption of a legal regime similar to the one adopted in Antarctica.

The Antarctic International Law is an excellent parameter for the legal regime to sustainable use of genetic resources on high seas to be established in BBNJ Agreement since, with regard to scientific research, there is the internationalization of Antarctica as a whole[14], and the freedom of scientific research[15] is guaranteed through international cooperation[16]. In this legal Antarctic regime, the role of the Commission for the Conservation of Antarctic Marine Living Resources[17] (hereinafter "CCAMLR") stands out and benefit sharing obligations are established[18].

Indeed, the Antarctic International Law is based on cooperation (Ferreira, 2009) of all members of the international community as a whole, through the CCAMLR, which does not have quasi-sovereign powers for the management and conservation of Antarctic biological resources, but it is a body for coordinating the individual action of its Member States, which keep the sovereign rights to control their vessels and their nationals to ensure compliance with international legal obligations of sustainable use.

Furthermore, according to this legal regime, the Antarctic International Law establishes the right to each State of free access to biological resources, but sets environmental and scientific obligations for the benefit of the international community (Franco; Toledo, 2018). The sharing of benefits from the exploration and exploitation of Antarctic biological resources is an important objective of this legal regime, which can occur especially through the transfer of technology (Puig-Marcó, 2014).

The fact that the future BBNJ Agreement can provide for genetic resources on high seas to be freely accessible, it does not mean necessarily that these resources will be treated as *res nullius*, because of the obligation to benefit sharing[19]. This counterpart to the free use of genetic resources

14 Article IV(2) of the Antarctic Treaty.

15 Article II of the Antarctic Treaty.

16 Article 6 of the Madrid Protocol to the Antarctic Treaty.

17 Article IX of the Convention on the Conservation of Antarctic Marine Living Resources.

18 Article III(1)(c) of the Antarctic Treaty.

19 Article 7 of the Revised draft text of an agreement under the UNCLOS about conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

on high seas means that they should be treated as *res communis*. For that, it is necessary to strength the international cooperation arrangements, a good example of which is provided by the CCAMLR. As these biological resources are freely available but not free of charge, the BBNJ Agreement must necessarily reinforce the obligation of international cooperation.

Cooperation on high seas: conservation, benefit sharing and combating biopiracy

Regarding international cooperation for the conservation and management of the living resources on high seas, Article 118 of UNCLOS states that:

"States shall cooperate with each other in the conservation and management of living resources in the areas of the high seas. States whose nationals exploit identical living resources, or different living resources in the same area, shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. They shall, as appropriate, cooperate to establish subregional or regional fisheries organizations to this end."

It being defined that genetic resources of the high seas must be part of *res communis*, according to the future BBNJ Agreement, which would imply to States individually the benefit sharing obligations in favor of the international community as a whole, the cooperation obligation, foreseen in Article 118 of UNCLOS, becomes a *sine qua non* condition for internationally licit access to those biological resources. Based on this provision, which deals with living resources in general, States, that have free access to marine genetic resources on high seas, must act together to ensure their conservation.

This can be done either directly or by setting up organizations or arrangements of international cooperation, as a good example is the role played by the CCAMLR to the sustainable use of Antarctic biological resources. The participation in international commissions on access to biological resources on high seas is one way to fulfill the obligation of cooperation for conservation, which must always be fulfilled in good faith (CIJ, 2010, § 145), despite the lack of guidelines in UNCLOS for verification of compliance (Tanaka, 2015).

Given the lack of guidelines, it is important to analyze the 1995 United Nations Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (hereinafter "Fish Stocks Agreement").

The Fish Stocks Agreement is an important reference for verifying compliance with the obligation to cooperate on high seas. Since it is an international treaty that implemented the provisions of UNCLOS, as the future BBNJ Agreement is intended to be, its provisions fall within the scope of validity imposed by the marine legal system consolidated in Montego Bay.

Referring directly to the content of Article 118 of UNCLOS mentioned above, Article 8(1) of Fish Stocks Agreement states that the coastal States and States fishing on the high seas shall pursue cooperation in relation to straddling and highly migratory fish stocks either directly or through appropriate fisheries management organizations or arrangements to ensure effective conservation and management of such stocks. Once this organization has been constituted or a management

arrangement has been established, thereby fixing the access and benefit sharing regime, the States using the genetic resources of the high seas must fulfill the duty of cooperation by becoming a member of that organization or participant of its institutional arrangement[20].

To ensure the effectiveness of international cooperation, the BBNJ Agreement, based on Article 8(4) of Fish Stocks Agreement should establish that only those States which are members of such an organization or participants in such an arrangement, or which agree to apply the conservation and management measures established by such organization or arrangement, shall have access to the genetic resources on high seas to which those measures apply (Hazin, 2018). Among such management measures would be those dedicated to notification of use and benefit sharing.

To the extent that genetic resources on high seas are treated as *res communis*, from the adoption of BBNJ Agreement, international or decentralized management of their use and conservation is imposed, as is the case with Antarctic biological resources. Such a solution is diametrically opposed to that adopted for the resources in the Area, which is a common heritage of humanity, according to Article 136 of UNCLOS.

Therefore, it becomes urgent that each flag State, in exercising its duties to control its vessels and nationals on high seas[21], comply with generally accepted international regulations, procedures and practices, including the management and conservation measures established by the respective cooperating organization or arrangement.

Moreover, like it is foreseen in Fisk Stock Agreement, the obligation of cooperation to be inserted in BBNJ Agreement aims at the reconciliation of the sovereign rights of coastal States over the genetic resources naturally found in their exclusive economic zone and the rights of freedom of sustainable use of genetic resources on high seas through the adoption of an integral approach (Molenaar, 2011).

Since the same marine genetic resource can be found naturally both in the exclusive economic zone and in a sector of the high seas, coastal States and bioprospecting must cooperate directly, or through international organizations, or even arrangements, to take compatible measures to ensure the conservation and management of genetic resources both in national waters and in areas beyond national jurisdiction.

Cooperation is essential because the genetic resources of the high seas may be physically close to the exclusive economic zone of a coastal State, where it has sovereign rights to explore, exploit, conserve, and manage the natural resources, including genetic resources[22]. The cooperation between coastal States and bioprospecting States should create an arrangement of cooperation that presupposes respect for the rights of all.

According to Articles 21 and 22 of Fish Stocks Agreement, through this arrangement of cooperation, procedures for control of vessels on high seas by States other than the flag State are instituted (Molenaar, 2011). It means that costal State may act on high seas to combat biopiracy[23],

20 Article 8(3) of Fish Stocks Agreement.

21 Article 94(5) of UNCLOS.

22 Article 56(1)(a) of UNCLOS.

23 Biopiracy is the transboundary transfer of biological resources with no consent of the State holding the sovereign right of exploration, exploitation, management, and conservation (Toledo, 2019).

which is an international illicit fact related to unauthorized access to genetic resources found naturally in its exclusive economic zone.

The freedom to use genetic resources on high seas cannot put coastal States at risk of significant damage. These States have sovereign rights over the genetic resources under their national jurisdiction. At the same time, all States are free to use the genetic resources on high seas in a sustainable manner.

Therefore, to reconcile the sovereign rights of coastal States and the right of freedom of bioprospecting States, it is condition *sine qua non* the establishment of both an international organization or arrangement for the sustainable use of genetic resources naturally found in exclusive economic zone and in adjacent sectors of the high seas, and providing for extensive control on the high seas of vessels by Member States of international organization or States Parties of international arrangement in order to more effectively address the practice of biopiracy.

In this context, it is urgent that the future BBNJ Agreement also provide for an obligation on all States Parties to adopt, at the domestic level, the requirement to present a certificate of origin for genetic resources used by individuals or legal entities, in order to prevent that the biopiracy product, which is illegal at the international level, can be regularly used at the national level.

The coastal State has the sovereign right to authorize, by agreement, bioprospecting carried out in its national waters. Therefore, the agreements with developed States on access of national genetic resources are strategic instruments by which coastal States rich in marine biological diversity could achieve a level of development through benefit sharing.

Thus, States of destination of any collected marine genetic resource should require the presentation of the certificate of its origin. The purpose of this measure is to require an express declaration by the interested of the exact place of access of the marine genetic resources[24] in order to facilitate the identification of the State holding the sovereign right of exploitation, which is entitled to part of the benefits from the use of such genetic resources.

Conclusion

The United Nations General Assembly convened a conference for the conclusion of an agreement to implement UNCLOS with regard to the conservation and sustainable use of BBNJ, which includes the genetic resources on high seas. Based on the draft Agreement prepared in 2019, after three negotiating sessions; having as a parameter the provisions of Fish Stock Agreement and Antarctic International Law; and in order to contribute to the doctrinal debate on the BBNJ Agreement to be adopted soon; we conclude what follows.

The expression *biodiversity* included in the scope of the BBNJ Agreement refers to marine genetic resources, excluding any provision on fishing, in view of the importance of various instruments of International Fisheries Law, such as the Fisk Stock Agreement. For this reason, fish captured as a commodity is not biological diversity.

24 Article 10(2)(a) of the Revised draft text of an agreement under the UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

Under the aegis of UNCLOS, areas beyond national jurisdiction are only the high seas and the Area[25]. Despite being both internationalized areas[26], they have distinct legal regimes. Thus, in the Area, the basic principle of common heritage of mankind prevails. On the other hand, on the high seas, the basic principle of freedom prevails.

According to Article 311(3) combined with Article 311(6) of UNCLOS, the future BBNJ Agreement cannot affect the basic principles stated therein. Regarding internationalized marine area, the principle of freedom on the high seas and the principle of common heritage of mankind in the Area are basic principles.

According to Article 87 and Article 89 of UNCLOS, no State may claim any part of the high seas to its sovereignty. For this reason, the high seas as such are not *res nullius* but *res communis*. However, with regard to biological resources found in the high seas, given the freedom to fish without obligations to share benefits with other States, we conclude that, at first glance, the biological resources on high seas, including genetic resources, would be treated as *res nullius*, i.e., resources of free and gratuitous appropriation by nationals of the flag States. However, the expression *inter alia*, inserted in Article 87(1) of UNCLOS, recognizes other freedoms on the high seas to be expressly determined by a subsequent treaty, which also means other legitimate uses of the sea.

An example of this, it is the sustainable use of genetic resources, which may be treated differently from the provisions of that Article. Due to this openness and having the Antarctic International Law as a parameter, the BBNJ Agreement should establish that no State, individual or legal person could appropriate genetic resources on high seas without guaran- teeing the sharing of benefits with the international community, therefore making these resources a kind of *res communis*, but not *res communis humanitatis*.

As a condition for the legal existence of the common heritage of humanity, the existence of a quasi-sovereign management and conservation body, as is the case with the ISA in relation to the Area, bearing in mind that the principle of freedom on the high seas is based on the decentralized prevalence of flag States in the control of their vessels, the genetic resources on the high seas, under the aegis of UNCLOS, cannot be a common heritage of mankind or *res communis humanitatis*.

Thus, like it happens in Antarctica, the decentralization of control on access to genetic resources on the high seas is guaranteed, in harmony with the basic principle of freedom, but counterparts are imposed on flag States for the benefit of the international community, especially the developing States.

Because of Article 118 of UNCLOS on international cooperation to management and conservation of biological resources on high seas – including genetic resources – and in line with the irrevocable principle of the freedom, States should create international organizations or arrangements to regulate access to genetic resources on high seas by their nationals. Based on Article 8(4) of Fish Stocks

25 Article 137(1) of UNCLOS.

26 Although the high seas are a kind of *res communis*, whose implications in favor of the international community are evident, we cannot consider them as *res communis humanitatis*, in view of the specific character of this international legal regime in the context of the Law of the Sea. The identification of the high seas as a kind of common heritage of mankind is part of the PhD thesis entitled *Les grands enjeux contemporains du droit international des espaces maritimes et fluviaux et du droit de l'environnement: de la conservation de la nature à la lutte contre la biopiraterie*, written by us, but it is not found in our more recent works.

Agreement, the BBNJ Agreement should provide that only State Parties or those committed to comply with international regulations would have right to access to genetic resources on high seas, thus ensuring benefit sharing with other States.

In the framework of such international cooperation on management and conservation of genetic resources on high seas, the BBNJ Agreement should establish the obligation for all States to domestically certify the origin of marine genetic resources used by their nationals as a condition for their exploitation. This control by the State of destination of the genetic resources enables greater efficiency in combating biopiracy by ensuring benefit sharing with the States of origin of the genetic resources, when related to their economic exclusive zone, or with the international community as a whole, when related to high seas.

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