

Submission of the Government of Jamaica on Access and Benefit Sharing Regime for Marine Genetic Resources in Areas Beyond National Jurisdiction

Four existing models of access and benefit-sharing (ABS) that may be considered to develop an ABS regime for marine genetic resources (MGR) in areas beyond national jurisdiction are: (1) the provisions in the United Nations Convention on the Law of the Sea (UNCLOS) relating to marine scientific research; (2) the Convention on Biological Diversity (CBD) and Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the CBD (Nagoya Protocol); (3) the International Treaty on Plant Genetic Resources for Food and Agriculture (Plant Treaty); and (4) the Antarctic Treaty System.

Although none of these instruments on their own can be transplanted to completely govern ABS in areas beyond national jurisdiction, they nevertheless provide useful guidance on elements to be addressed in an access and benefit-sharing regime for such resources. This non-paper will (i) give an outline of each instrument; (ii) identify provisions in the instrument which provide specific guidance in framing an ABS regime for MGR in areas beyond national jurisdiction; and (iii) summarize the key elements that should be included in an ABS regime for MGR in ABNJ.

I. CONVENTION ON BIOLOGICAL DIVERSITY AND NAGOYA PROTOCOL

Overview of ABS under the CBD and Nagoya Protocol

The main objectives of the CBD are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising from the utilisation of genetic resources.¹ This objective, along with the universal ratification of the CBD and the detailed provisions of the Nagoya Protocol which implement the ABS provisions of the CBD, confirms that these instruments represent a comprehensive legal regime on the management of biological resources generally, and ABS of genetic resources.

The CBD defines “genetic resources” to mean genetic material of actual or potential value, and makes provision for the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.² Article 4 states that the provisions of the Convention apply, in relation to each Party:

“(a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction; and

¹ CBD, Article 1.

² CBD, Articles 1, 2 and 15.

(b) In the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction."

Therefore, the provisions of the CBD are directly relevant to the question of ABS in ABNJ, as activities undertaken in the high seas or the Area, including marine scientific research, bioprospecting, exploration and exploitation, fall within the scope of the CBD when these activities are under the control or jurisdiction of a CBD Party.

The Nagoya Protocol to the CBD is limited to access and benefit-sharing (ABS) transactions in a bilateral setting between a 'provider' (i.e. the State that possesses the genetic resource within its jurisdiction) and a 'user' (i.e. the individual or entity requesting access to the resource). Access to the resources rests on prior informed consent (PIC) and will be subject to mutually agreed terms (MAT) between the provider and user. If the elements of PIC and MAT are to be applied to ABS in ABNJ, questions of the relevant stakeholders for the purposes of PIC and the designated entity with responsibility for settling MAT would have to be determined.

Guidance on ABS in ABNJ from the CBD and Nagoya Protocol

Despite the circumscribed nature of the Nagoya Protocol which implements one of the three core objectives of the CBD, both these instruments provide a basic framework that highlights key elements to be included in an ABS regime for MGR located in areas beyond national jurisdiction.

Cooperation

Article 5 of the CBD provides that each Party *"shall, as far as possible and as appropriate, cooperate with other Contracting Parties, directly, or where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biological diversity."* The CBD does not specify the nature of the cooperation that is expected of Parties. However, the combined effect of the responsibility to cooperate in Article 5 and the applicability of the CBD in ABNJ as provided in Article 4(b) serves to affirm the position that resources in areas beyond national jurisdiction should be utilized through cooperative arrangements that effectively address the mutual interest of States.

Access and Benefit-Sharing

The Nagoya Protocol seeks to promote legal certainty, clarity and transparency in relations, and requires Parties to take the necessary legislative, administrative or policy measures to

ensure that domestic ABS legislation or regulatory requirements meet this aim, and access is based on fair and non-arbitrary rules and procedures. In its considering the duties of States that engage in deep seabed mining activities, the International Tribunal on the Law of the Sea has observed that a State has a duty to enact and enforce laws and regulations to ensure that the contractor that the State is sponsoring to explore or exploit the seabed in ABNJ does so in compliance with the Regulations of the International Seabed Authority.³ An agreed on international framework must therefore be supported by the necessary regional and domestic mechanisms through which MGR will be accessed and should be clear, transparent, certain, and fair.

The Annex to the Nagoya Protocol provides specific examples of monetary and non-monetary benefits that are to be shared by the State or entity accessing the MGR. Under the Nagoya Protocol, benefits arise from the utilization of genetic resources, and from subsequent applications and commercialization.⁴

The Nagoya Protocol anticipates monetary and non-monetary benefits in various forms. Part 1 of the Annex to the Nagoya Protocol outlines a non-exhaustive list of monetary benefits, which includes:

- (a) Access fees/fee per sample collected or otherwise acquired;
- (b) Up-front payments;
- (c) Milestone payments;
- (d) Payment of royalties;
- (e) Licence fees in case of commercialization;
- (f) Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity;
- (g) Salaries and preferential terms where mutually agreed;
- (h) Research funding;
- (i) Joint ventures; and
- (j) Joint ownership of relevant intellectual property rights.

The monetary benefits listed in the Nagoya Protocol act as a reference, and not all the benefits listed will be applicable or appropriate to MGR in ABNJ. Transposing the regime for monetary benefits into a framework agreement on the biodiversity beyond national jurisdiction would pose obvious challenges, and issues relating to the basis for and aims of monetary benefits will have to be resolved. For example, since the 'provider' of the genetic resources from ABNJ is the international community as a whole, questions such as whether there should be access fees, which entity would be responsible for receiving payments, and

³ *Responsibilities and obligations of States with respect to activities in the Area*, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p. 10, para 117-120, 218-222, 241.

⁴ Nagoya Protocol, Article 5.1.

what types of activities could be supported by the payments collected must be addressed. However, these challenges should not foreclose constructive debate.

Part 2 of the Annex states that non-monetary benefits may include:

- (a) Sharing of research and development results;
- (b) Collaboration, cooperation and contribution in scientific research and development programmes, particularly biotechnological research activities, where possible in the Party providing genetic resources;
- (c) Participation in product development;
- (d) Collaboration, cooperation and contribution in education and training;
- (e) Admittance to ex situ facilities of genetic resources and to databases;
- (f) Transfer to the provider of the genetic resources of knowledge and technology under fair and most favourable terms, including on concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity;
- (g) Strengthening capacities for technology transfer;
- (h) Institutional capacity-building;
- (i) Human and material resources to strengthen the capacities for the administration and enforcement of access regulations;
- (j) Training related to genetic resources with the full participation of countries providing genetic resources, and where possible, in such countries;
- (k) Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies;
- (l) Contributions to the local economy;
- (m) Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in the Party providing genetic resources;
- (n) Institutional and professional relationships that can arise from an access and benefit-sharing agreement and subsequent collaborative activities;
- (o) Food and livelihood security benefits;
- (p) Social recognition;
- (q) Joint ownership of relevant intellectual property rights.

Additionally, pursuant to Article 10 of the Nagoya Protocol, Parties should “consider the need for and modalities of a global multilateral benefit sharing mechanism to address the fair and equitable sharing of benefits derived from the utilization of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary

situations or for which it is not possible to grant or obtain prior informed consent.⁵ The benefits shared by users of genetic resources and traditional knowledge associated with genetic resources through this mechanism shall be used to support the conservation of biological diversity and the sustainable use of its components globally.” This provision echoes key elements of the common heritage of mankind principle as applicable to MGR in ABNJ.

II. UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

Overview of ABS under UNCLOS

The UNCLOS makes a distinction between marine scientific research conducted in the Area and the water column. UNCLOS Article 256 provides that all States and competent international organizations have the right to conduct marine scientific research in the Area in conformity with the provisions in Part XI. Article 257 addresses marine scientific research on the high seas, and provides that all States and competent international organizations have the right, in conformity with the Convention, to conduct such research “in the water column beyond the limits of the exclusive economic zone.”

UNCLOS contains several provisions on ABS in ABNJ as it relates to marine scientific research. These provisions may provide guidance on the types of non-monetary benefit-sharing obligations that States should have in respect of MGR in ABNJ.

Guidance on ABS under UNCLOS

As it relates to marine scientific research in the Area, the main principles and rules relating to access and benefit-sharing are:

- The Area and its resources are the common heritage of mankind: Article 136.
- 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 of the Area. Any claim or exercise of sovereignty or sovereign rights or appropriation will not be recognized: Article 137(1).
- All the rights in the resources are “vested in mankind as a whole” and are not subject to alienation: Article 137(2).
- Activities in the Area shall be carried out for the benefit of mankind as a whole, taking into particular consideration the interests and needs of developing States.

⁵ MGR “for which it is not possible to grant or obtain prior informed consent” could be interpreted to refer to MGR in ABNJ.

The ISA shall provide for equitable sharing of financial and other economic benefits derived from activities in the Area: Article 140.

- Marine scientific research in the Area shall be carried out for the benefit of mankind as a whole: Article 143.1.
- The results of research and analysis should be disseminated through the ISA or other international channels, and the ISA is to coordinate the conduct of MSR in the Area and disseminate the results of such research and analysis when available: Articles 143.2 and 143.3(c).
- MSR programs should be developed through the ISA or other international organizations for the benefit of developing States and technologically less developed States with a view to strengthening their research capabilities: Article 143.3(b).
- The ISA and States Parties should cooperate in promoting the transfer of technology and scientific knowledge relating to activities in the Area, including facilitating the access of developing States to the relevant technology under fair and reasonable terms and conditions: Article 144.2(a).

Although marine scientific research is listed as a freedom of the high seas in UNCLOS Article 87.1(f), it is qualified by the provisions of Parts VI and XIII. In particular:

- MSR activities shall not constitute the legal basis for any claim to any part of the marine environment or its resources: Article 241.
- States and competent international organizations shall cooperate in MSR on the basis of mutual benefit: Article 242.1.
- States and competent international organizations shall cooperate through the conclusion of bilateral and multilateral agreements, to create favourable conditions for the conduct of MSR: Article 243.
- States and competent international organizations shall publish and disseminate information on proposed MSR programs and knowledge resulting from MSR, especially to developing States. Other aims to be pursued are the strengthening of the autonomous MSR capabilities of developing States through education and training of their technical and scientific personnel: Article 244.

III. INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Overview of ABS under the Plant Treaty

The Plant Treaty⁶ was identified as a possible reference point for the discussions on practical measures to address options for benefit sharing from as early as 2008.⁷

⁶ The Plant Treaty was adopted by the Thirty-first session of the Food and Agriculture Organization (FAO)

Jurisdictional Scope

Like the CBD, the Plant Treaty is premised on national sovereignty over plant genetic resources for food and agriculture (PGRFA), and the authority of States to determine access to those resources.⁸ The Plant Treaty therefore excludes PGRFA originating from ABNJ).

Access and Benefit-Sharing

Parties to the Plant Treaty have established a Multilateral System to facilitate access to plant genetic resources and share the benefits arising from utilization of these resources “in a fair and equitable way” and “on a complementary and mutually reinforcing basis.”⁹ Access to the PGRFA listed in Annex 1 is provided through a Standard Material Transfer Agreement (SMTA) adopted by the Governing Body of the Plant Treaty in 2006.¹⁰ Where the Recipient transfers the material supplied under the SMTA to another person or entity, that subsequent recipient is bound by the terms and conditions of the SMTA.¹¹

Unlike the Nagoya Protocol, which facilitates access to genetic resources of any plant, animal, microbial or other origin, the Plant Treaty takes a more restricted approach, as access to PGRFA under the Plant Treaty is primarily limited to an agreed list of food crops and forages in Annex I. The PGRFA listed in Annex I are those deemed to be most vital to world food security, although this list has been criticized as excluding many other vital crops. The Multilateral System includes all PGRFA that are under the management and control of the Contracting Parties and in the public domain, and those found in the ex situ collections of the International Agricultural Research Centres of the Consultative Group on International Agricultural Research (CGIAR).¹² Access under the Plant Treaty is to be provided solely for the purposes of utilization and conservation for research, breeding and training for food and agriculture, provided that such purpose does not include chemical, pharmaceutical and/or other non-food/feed industrial uses.¹³

Recipients of PGRFA under the Plant Treaty are obliged to share benefits arising from the use, including commercial use, of PGRFA under the Multilateral System. This sharing of

Conference on 3 November 2001 and entered into force on 29 June 2004.

⁷ Letter dated 15 May 2008 from the Co-Chairpersons of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction addressed to the President of the General Assembly, UN Doc A/63/79, page 9 para 38.

⁸ Plant Treaty, Article 10.1.

⁹ Plant Treaty, Article 10.2.

¹⁰ Plant Treaty Governing Body, Resolution 1/2006 of 16 June 2006

< <http://ftp.fao.org/ag/agp/planttreaty/agreements/smta/SMTAe.pdf> >

¹¹ SMTA, Article 6.4.

¹² Plant Treaty, Articles 11.2 and 11.5.

¹³ Plant Treaty, Article 12.3(a).

benefits occurs through the exchange of information, access to and transfer of technology, capacity-building, and the sharing of the benefits arising from commercialization.¹⁴

Guidance on ABS from the Plant Treaty

Benefit Sharing

Article 6.9 of the SMTA outlines the broad benefit-sharing obligations imposed on Recipients of PGRFA material. The Recipient: (1) is required to make available to the Multilateral System, all non-confidential information that results from research and development carried out on the material; (2) is encouraged to share through the Multilateral System non-monetary benefits identified in Article 13.2 resulting from such research and development; and (3) is encouraged (once a relevant period of intellectual property protection on a product expires or is abandoned) to place a sample of the product into a collection that is part of the Multilateral System, for research and breeding. If the intellectual property in a product developed from PGRFA material is transferred, the same benefit-sharing obligations are transferred to the subsequent recipient under Article 6.10 of the SMTA.

Benefit Sharing Fund

The Plant Treaty takes a two-tiered approach to stipulating the funds that Recipients are required to pay. Where the Recipient commercializes a product that is a PGRFA and that incorporates material accessed from the Multilateral System, that Recipient is required to pay into the PGRFA Benefit Sharing Fund “an equitable share of the benefits arising from the commercialization of that product, except whenever such a product is available without restriction to others for further research and breeding, in which case the recipient who commercializes shall be encouraged to make such payment.”¹⁵

This requirement is treated with more specificity in the SMTA. Where the commercialized product is *not* available without restrictions to others for further research and breeding, the Recipient is required to pay a fixed percentage to the Fund.¹⁶ On the other hand, where the commercialized product *is* available without restriction to others for further research and breeding, the Recipient is encouraged to make a voluntary payment into the Fund.¹⁷ This approach is useful, as it allows for commercialization with restriction contingent on

¹⁴ Plant Treaty, Article 13.2.

¹⁵ Plant Treaty, Articles 13.2(d)(ii) and 19.3(f).

¹⁶ SMTA, Articles 6.7 and 6.11. This fixed percentage is either 1.1% of the sales of the product, or products less 30% under Article 6.7 and Annex 2, or alternatively, for Recipients that opt for an alternative to payments under Article 6.7, 0.5% of the sales of any products and of the sales of any other products that are PGRFA belonging to the same crop under Article 6.11 and Annex 4.

¹⁷ SMTA, Article 6.8.

payment into the Fund towards ends that benefit all Parties while promoting access without restriction for research and breeding, which again benefits all Parties.

Needs and Capabilities of Developing Countries

Certain provisions of the Plant Treaty also demonstrate sensitivity to the needs and capabilities of developing countries. For example, under Article 13.2(d)(ii), the Governing Body may establish “different levels of payment for various categories of recipients who commercialize” products that are a PGRFA and that incorporates material accessed from the multilateral system, and “it may also decide on the need to exempt from such payments small farmers in developing countries and in countries with economies in transition.” Additionally, under Article 13.3, Parties “agree that benefits arising from the use of plant genetic resources for food and agriculture that are shared under the Multilateral System should flow primarily, directly and indirectly, to farmers in all countries, especially in developing countries, and countries with economies in transition, who conserve and sustainably utilize plant genetic resources for food and agriculture.” This is in line with the priorities for the use of resources identified in the Funding Strategy for the implementation of the Plant Treaty which states that the benefit-sharing Fund should be used to “focus on critical conservation and sustainable activities in developing countries not adequately funded elsewhere.”¹⁸

Intellectual Property

Article 12.3(d) of the Plant Treaty and Article 6.2 of the SMTA stipulate that Recipients “shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts or components, in the form received from the Multilateral System.” It has been noted that there is some ambiguity created by the use of the words “in the form received”, which suggests that rights should not be claimed over the original material accessed, but that the opportunity to patent derivatives remains. There is uncertainty as to the kind of derivatives that could attract intellectual property rights.

IV. THE ANTARCTIC TREATY SYSTEM

Overview of the ATS

The ATS describes all the agreements made by States to regulate and coordinate activities and relations among States in the Antarctic. The instruments that address ABS within the ATS are: the Antarctic Treaty, its Protocol on Environmental Protection (Environmental

¹⁸ Funding Strategy for the Implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture, Annex 1: ftp://ftp.fao.org/ag/agp/planttreaty/publi/funding_strategy_compilation_en.pdf

Protocol) and the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).

The AT is not intended to prejudice the position of any Party as it relates to claims of territorial sovereignty in Antarctica or recognition of such claims. However, Article IV of the AT preserves the *status quo* by providing that no acts or activities taking place while the AT is in force will constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. The legal status of Antarctica may therefore be contrasted with areas beyond national jurisdiction. The provisions of the Treaty are not intended to affect the rights or the exercise of the rights of any State under international law with regard to the high seas within the area covered by the AT: Article VI

Guidance on ABS from the ATS

Three key provisions of the Antarctic Treaty (AT) that are relevant to ABS are: use of Antarctica for peaceful purposes only (Article I); freedom of scientific investigation in Antarctica and cooperation toward that end (Article II); and the exchange of information on scientific programs for Antarctica, scientific personnel, and scientific observations and results from Antarctica (Article III).

The AT contains a compliance mechanism in the form of an inspection system to ensure that the AT regulations are observed. Parties have the right to send observers to the continent who have right of access to any area of the Antarctica, and may also undertake aerial observation: Articles VII.1-4. Under Article VII.5 of the AT, each Party must give the other Parties notice in advance of all expeditions to and within Antarctica.

The Environmental Protocol designates Antarctica as a “natural reserve, devoted to peace and science” (Article 2), and stipulates that activities should be planned and conducted in the AT so as to “accord priority to scientific research and preserve the value of the Antarctic as an area for the conduct of such research” (Article 3.3).

The Environmental Protocol also prohibits any activity relating to mineral resources, other than scientific research (Article 7).

DEVELOPING AN ABS REGIME FOR MGR IN ABNJ

Based on the specific guidance provided in the four legal regimes discussed above, an ABS regime for MGS in ABNJ may be shaped in the following manner:

(i) Scope

It would seem fruitless given the sphere of the unknown that the new instrument employ the approach of listing particular MGR that would be covered by its provisions. As discussed above, this was the approach taken in the Plant Treaty, which listed PGRFA under the Multilateral System in an Annex. This aspect of the Plant Treaty has been criticised for omitting vital PGRFA. In similar vein, a listing approach in the new instrument could overly restrict the MGR subject to ABS, and is not appropriate in light of the fact that the discovery of MGR is still expanding.

(ii) Access

The issue of whether a version of prior informed consent and mutually agreed terms will appear in the new instrument is to be considered in the context of how these elements form the basis of access under the Nagoya Protocol.

At the First Preparatory Committee, the Federated States of Micronesia took the view that special consideration should be afforded to indigenous communities in coastal States who possess special knowledge about living resources of ABNJs.¹⁹ This signals the possibility that certain groups could be viewed as stakeholders and is an issue that may be considered subject to further dialogue during the negotiations.

(iii) Benefit-Sharing

The UNCLOS and Nagoya Protocol provide excellent guidance on the benefit-sharing obligations that States should have in respect of MGR. Some of the non-monetary benefits that are of particular importance are the transfer of technology and dissemination of scientific knowledge and research and development results relating to MGR; strengthening the research capabilities of developing countries through education and training; and collaboration in research and development programs where possible.

The new instrument should address the issue of monetary benefits. For example, under the Plant Treaty where products are developed from PGRFA accessed under the Multilateral System, payment obligations are imposed on the Recipient of the PGRFA. Funds are paid into the PGRFA Benefit Sharing Fund, which is then used for conservation and sustainable

¹⁹ Views of the Government of the Federated States of Micronesia on the elements of a draft text of an international legally binding instrument 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, Submitted: 14 March 2016, FSMUN 015-2016, para 8.

development activities in developing countries. The Nagoya Protocol also provides for fees to be paid into trust funds supporting conservation and sustainable use of biodiversity.

(iv) Appropriation of MGR and Intellectual Property Rights

The new instrument must reflect the status of MGR as the common heritage of mankind. Accordingly, it must embrace the principle of non-appropriation to ensure that no State will claim or exercise sovereignty or sovereign rights over MGR in ABNJ. The instrument should prohibit private appropriation and the exercise of intellectual property rights where this would limit access to MGR for further research and other aims. If intellectual property rights are claimed in respect of products developed from MGR, the approach taken in the Plant Treaty as discussed above provides a possible framework which could be considered.

The discussions on the new instrument should also be informed by the work of the World Intellectual Property Organization (WIPO) Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), which has developed a Consolidated Document Relating to Intellectual Property and Genetic Resources.²⁰ The IGC has developed this Document with the objective of reaching an agreement on an international legal instrument relating to intellectual property that will ensure the balanced and effective protection of genetic resources, traditional knowledge and traditional cultural expressions. Article 3.1(e) of the Document identifies the issue of whether patent disclosure requirements related to genetic resources, their derivatives and traditional knowledge associated with genetic resources should apply to genetic resources from areas beyond national jurisdictions. The Document will form part of the IGC's 2017 work program.

(v) Special Provisions for Developing and Least Developed Countries

Based on the example of the Plant Treaty, in which Recipients in developing countries and countries with economies in transition are exempt from certain payments, consideration should be given to whether similar special exemptions should be extended to developing and least developed countries where there are obligations to pay into a benefit-sharing fund.

²⁰ Thirtieth Session of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, May 30 to June 3, 2016, "Second Revision of the Consolidated Document Relating to Intellectual Property and Genetic Resources", WIPO/GRTKF/IC/30/4 Annex < http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_30/wipo_grtkf_ic_30_decisions.pdf>