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Common Heritage of Mankind and the Deep Seabed Area beyond National Jurisdiction: Past, Current, and Future Prospects

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Abstract

The Common Heritage of Mankind (CHM) is of a relatively recent origin. This study examines Arvid Pardo's speech to the United Nations General Assembly in 1967, in which he urged the UN General Assembly to designate the seabed beyond national control as CHM. The paper next looks at Part XI of the United Nations Convention on the Law of the Sea (UNCLOS) 82, as amended by the 1994 Agreement, which incorporates the CHM as a core principle governing mineral mining in the deep bottom Area beyond national jurisdiction. Finally, it discusses CHM's future prospects in relation to the draft International Seabed Authority (ISA) Exploitation Regulations, the Enterprise, an ISA organ that has yet to be operationalized, and ongoing discussions about an international legally binding instrument on the conservation and sustainable use of marine biological diversity under the UN Convention on the Law of the Sea. The purpose of this study is to highlight the complexity surrounding the CHM, which is a key principle governing deep seabed activities.

Key words: common heritage of mankind, deep seabed area, mining, mineral resources.

1. Introduction

The Common Heritage of Mankind (CHM), sometimes also called the common heritage of humankind or humanity, compared with the age-old principles applicable to the law of the sea of sovereignty and *res communis*, is of relatively recent origin. It has been said that CHM was 'a radical challenge for traditional international law, in particular the centrality of state sovereignty, the cornerstone of international law, and the prioritization of national self-interests.' (Taylor, 2019: 143) Although the exact origin of the concept of CHM is debated, there is no doubt that it gained prominence following the inspiring speech of Arvid Pardo, the then Maltese ambassador to the United Nations, delivered at the United Nations General Assembly in November 1967, calling for the deep seabed beyond national jurisdiction and the resources contained therein to be declared as CHM. This speech, which provided the most comprehensive and properly articulated proposal on the concept, was motivated by reports of

rich resources in this part of the sea, as well as the possibility that the rich states with the technology to do so would unilaterally exploit the resources to the exclusion of poorer states. It resulted in the convening of the Third United Nations Conference on the Law of the Sea (UNCLOS III), which culminated in the adoption of the United Nations Convention on the Law of the Sea (UNCLOS)82, including Part IX, which deals with the status of the deep seabed area beyond national jurisdiction (the Area) and the resources contained therein as CHM. The UNCLOS 82 finally entered into force in 1994, following the 1994 Implementation, which significantly modified the original Part XI of the UN Convention on the Law of the Sea provisions and was negotiated and adopted to encourage certain major developed States to ratify the UNCLOS 82(ISA, 2002; Nelson, 1995). This article seeks explore the principle of the CHM in relation to the Area. After the introduction, it examines this CHM as elaborated in the past by Arvid Pardo. Following that, it delves into the principle of CHM as contained in Part XI of UNCLOS 82, as modified by the 1994 Agreement and the ISA Exploration Regulations as reflective of the present situation. The article then looks at the CHM's future prospects in relation to the draft ISA Exploitation Regulations, the Enterprise, and ongoing discussions about an international legally binding instrument under the UN Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. Finally, certain conclusions would be drawn.

2. Past: CHM and Arvid Pardo

As previously stated, Arvid Pardo's 1967 UN General Assembly speech on the CHM and the seabed beyond national jurisdiction brought the CHM into international prominence, despite the fact that the CHM had been previously explored by others and the idea of applying this principle to the seabed beyond national jurisdiction had been discussed prior to his speech(Wolfrum, 1983; Egede, 2014; Ranganathan, 2016:706-708). After a thorough examination of apparent economic, political, and military rationalisations, Pardo urged the

United Nations General Assembly to pass a resolution declaring that ‘the seabed and ocean floor [beyond national jurisdiction] are a common heritage of mankind and should be used and exploited for peaceful purposes and for the exclusive benefit of mankind as a whole.’ (Para.13 of UNGA A/C.1/PV.1515) He underlined that seabed and ocean resources are huge beyond national control but, based upon his judgement on the technological advances that would permit access to these resources, he overestimated the imminence of probable exploitation (Paras. 26-32 and 40-45 of UNGA A/C.1/PV.1515; Pardo, 1968-1969). He also warned of the dangers of a ‘scramble’ for ocean floors outside national jurisdiction, because of the ambiguous provisions of the Geneva CS Convention of 1958 that seemed to allow coastal states to stretch their CS to the deep sea bed and essentially to divide up that portion of the seabed if they had the technology to do so (Paras.60-70 of UNGA A/C.1/PV.1515, Art.1 of the 1958 Geneva Continental Shelf Convention).

Rather than the UN General Assembly, Pardo advocated for the establishment of a ‘special agency’ to act as a ‘trustee’ on behalf of states over the seabed and ocean floor beyond national jurisdiction. He believed that because of the UN General Assembly’s decision-making framework, which allowed small states to have the same voting power as large states, the latter would not be acceptable to technologically developed states as the appropriate body to oversee this part of the sea (Paras.26 – 32 and 36-38 of UNGA A/C.1/PV.1515).

While Pardo's 1967 speech focused on the exploitation of polymetallic nodules, he expands on this to include polymetallic phosphorite, calcareous oozes for cement production, and siliceous oozes for insulation brick production, as well as pelagic clays, vein deposits, and hydrocarbons. He went on to say that the CHM principle could be applied to commercial ocean farming and fish husbandry, claiming that ‘[c]ommercial ocean farming and fish husbandry, which I have

mentioned in passing, lie in the future. National appropriation and commercial exploitation of the ocean floor's mineral resources, on the other hand, are imminent.' (Para. 34 of UNGA A/C.1/PV.1515)

Although, the CHM is usually discussed as if it is an individual principle, Baslar(1998:3) points out that in reality '[CHM] is not an individual rule, a principle or a theory, but rather a bundle of rules, principles and theories, such as the stewardship doctrine and the theory of inter-(and intra-) generational justice, and the principle of sustainable development.' This 'bundle of principles' appears to be represented in Pardo's statement on several parts of the CHM, which he referred to as 'among other principles' that he said should be integrated into a future treaty(Para. 10 of UNGA A/C.1/PV.1516). This included non-appropriation, reservation exclusively for peaceful purposes, marine scientific research for peaceful purposes, with the results made available to all; exploitation of the resources therein in the interests of mankind, including future generations, with a particular focus on the needs of 'poor countries,' as well as exploration and exploitation of this part of the sea in accordance with the UN's principles and objectives, and in a way that does not obstruct the high seas or seriously harm the marine environment (Para. 10 of UNGA A/C.1/PV.1516). He added '[t]here are other important principles, which we could mention, but here again I am aware that time presses', implying that the components of CHM mentioned in the speech are not exhaustive(Para. 11 of UNGA A/C.1/PV.1516). Due to its non-exhaustive nature, the CHM is difficult to define precisely. In addition, while some features are agreed, the contents of the agreed aspects diverge. For example, in terms of environmental protection (should there be environmentally sustainable development of the Area or a complete moratorium on exploitation due to the precautionary approach?)(Hallgren and Hannsson, 2021:5261, Levin, Amon and Hannah, 2020); peaceful use (should there be limited military uses as long as this is permitted by the UN Charter or no

military use at all?)(Egede, 2020:193-197, Kraska and Pedroso, 2013:304-309) Is CHM a principle of common management or common ownership?(Joyner, 1986:191-193, Egede, 2011: 60-69) It has been said '[d]ue to the rather nebulous nature of the concept of CHM, it is open to diverse interpretation as to its exact scope.' (Egede, 2011: 60)

After Pardo's 1967 speech an ad hoc committee was established by the UN General Assembly, which was subsequently reconstituted into a standing committee, the committee on the peaceful uses of the seabed beyond the limits of national jurisdiction. (UNGA 2340(XXII) of 18 December 1967 and UN General Assembly Resolution 2467 A (XXIII) of 21 December 1968) This led to UNCLOS III culminating in UNCLOS 82, which was subsequently modified by the 1994 Agreement. The 1994 Agreement modified the provisions of UNCLOS 82 on Enterprise, Transfer of Technology, Economic Assistance, Institutional Decision Making, Production Policy, Financial Terms of Contracts, and Contract Review. It also changed the institutional framework under Part XI of UNCLOS 82 by merging some institutions and establishing the new organ of the Finance Committee. (Sections 2 to 9 of the Annex to the 1994 Agreement; Brown, 1995)

3. Present: CHM and Part XI of UNCLOS 82 and 1994 Agreement

The CHM principle was legally integrated into UNCLOS 82 Part XI, which regulates the deep seabed beyond national jurisdiction (the Area), which is defined as 'the seabed, ocean floor, and subsoil thereof, beyond the limits of national jurisdiction.' (Articles 1(1) and 76 of UNCLOS 82) The use of the term 'mankind' in the CHM principle shows a desire to humanize the Area's use. Inclusion of the CHM principle in a treaty indicates that 'mankind' is considered a subject of International Law (Cancado Trindade, 2010: 281-285). This new subject, however, is intended to coexist with States, as demonstrated by the Part XI regime Cancado Trindade,

2010: 275). Part XI, for example, states that activities in the Area should be carried out for the benefit of humanity as a whole, and it goes on to state that special consideration must be given to the interests and needs of developing States, reflecting this coexistence. (Article 140(1) of UNCLOS 82) Furthermore, the term 'mankind' has been described as follows: 'a trans-spatial and trans-temporal concept. It is trans-spatial because "mankind" includes all people on the planet. It is trans-temporal because "mankind" includes both present and future generations.' (Tanaka, 2011: 339-340) It has also been argued that implicit in the term 'heritage,' the CHM requires consideration of inter-generational equity, such that any benefits of deep seabed resources are shared, and the resources in their natural environment are, at least in part, preserved for future generations.(Jaeckel, Gjerde and Ardron, 2017: 151)

The Area and the resources therein has been declared as the CHM.(Article 136 of UNCLOS 82) This principle is a core principle and the UNCLOS 82 asserts: 'States Parties agree that there shall be no amendments to the basic principle relating to the common heritage of mankind set forth in article 136 and that they shall be party to any agreement in derogation thereof.'(Article 311(6) of UNCLOS 82) Despite the fact that the 1994 Agreement modified Part XI, the CHM principle is nevertheless upheld by the Agreement, which states in its preamble that the Area and its resources are the CHM (Preamble 2). However, the practical effect of the modifications by the 1994 Agreement is that this core principle has been watered down. (Anand, 1997)

All rights to the Area's resources belong to humankind as a whole(Article 137(2) of UNCLOS 82). It is worth noting that the Area's CHM resources are defined as 'solid, liquid, or gaseous mineral resources in situ in the Area at or beneath the seabed, including polymetallic nodules,' with the resources extracted from the Area referred to as 'minerals.'(Article 133 of UNCLOS 82) Current resources of interest in the Area are polymetallic nodules, polymetallic sulphides,

cobalt-rich ferromanganese crusts, for which the ISA has developed Exploration Regulations, all of which specify in their preamble that the Area and its resources are CHM (ISBA/19/C/17 of 22 July 2013 and ISBA/19/A/9 of 25 July 2013; ISBA/16/A/12/Rev.1 of 15 November 2010; ISBA/18/A/11 of 22 October 2012). The narrow definition of resources that are CHM has been criticised since it excludes other resources, including marine genetic resources (MGRs). (Pardo, 1983:103-104 and Egede, 2011: 129-132) Recently the United Nations has convened a Conference to develop 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, to deal, amongst other things, with MGRs. (A/RES/72/249 of 19 January 2018). This will be examined in further detail in section 4 below of this paper.

Part XI of UNCLOS 82 provides an institutional apparatus in the shape of the ISA, an autonomous international organisation that acts on behalf of mankind, to organise and control activities in the Area in line with CHM, with a special focus on the Area's resources administration. (Articles 137(2) and 157(1) of UNCLOS 82) It has been said that '[a]t its core, the ISA may be regarded as the institutional element of the common heritage of mankind.' (Jaeckal, 2017: 88) Additionally, the ISA has been described as 'custodian of the common heritage of mankind.' (ISBA/24/A/10 of 27 July 2018. Para.8 of the Annex) Under the UNCLOS 82 there is a sponsorship system whereby States Parties are able to sponsor an entity to obtain a contract with the ISA to mine the Area. As of the time of writing, the ISA has awarded 31 contracts to 22 contractors sponsored by different States Parties. (ISA website) According to the 2011 Advisory Opinion of the International Tribunal for the Law of the Sea (ITLOS) Seabed Disputes Chambers:

The role of the sponsoring State, as set out in the Convention, contributes to the realization of the common interest of all States in the proper application of the

principle of the common heritage of mankind which requires faithful compliance with the obligations set out in Part XI. The common interest role of the sponsoring State is further confirmed by its obligation, set out in article 153, paragraph 4, of the Convention, to “assist” the Authority, which, as stated in article 137, paragraph 2, of the Convention, acts on behalf of mankind. (Para.76)

Also, the ISA is responsible for taking steps to ensure the marine environment in the Area is protected from effects of deep seabed mining activities.(Article 145 of UNCLOS 82) Some contend, however, that the ISA's role in environmental protection does not negate the fact that the CHM principle's current formulation emphasises redistribution rather than conservation. (Guruswamy, 1995:48; Feichtner, 2019:603-614)

The ISA has three principal organs - the Assembly, the Council and the Secretariat – with two specialised organs, the Legal and Technical Commission, which for now is also carrying out the functions of the Economic Planning Commission, and the Finance Committee.(Section 4 of Part XI of UNCLOS 82, as modified by section 1 paras 1-4 of the Annex of the 1994 Agreement) There is also the Enterprise, an organ of the ISA conceived as ‘an international mining corporation’(Lowe, 1981:206; Churchill and Lowe, 1999: 229 and 244), which would eventually engage in commercial deep seabed mining activities in the Area that is yet to be operationalized. Presently its rather limited administrative role is being carried out under the 1994 Agreement by the ISA Secretariat(Section 2 para.1 of the Annex of the 1994 Agreement; Egede, Pal and Charles, 2019: Paras.10-45). The Enterprise and the CHM Principle are discussed more in section 4 below.

The idea of CHM would imply that a variety of stakeholders beyond the States, such as civil society, industry, academic, scientific community, coastal communities etc should be involved in the decision-making processes of the ISA. However, in real terms the decision-making would appear to be limited to the members of the ISA(i.e. States and the European Union).

(Articles 156(2), 159(6), 161(7), 163(2) of UNCLOS 82 and Section 3 of the annex of the 1994 Agreement)⁷ However, like many other Intergovernmental Organizations, the ISA includes an observer status process that permits NGOs interested in the ISA's activities to participate in discussions but not vote.(Article 82 of ISBA/A/6 of 7 July 1994 and ISBA/25/A/16 of 26 July 2019) In addition, the ISA has sought to include a diverse range of actors in stakeholder consultations in the past, such as the consultations on the development of the draft Exploitation Regulations, the 2015 development and implementation of a payment mechanism for exploitation activities in the Area, and the 2021 stakeholder consultations on the draft standards and guidelines to support the implementation of the draft Regulations for Exploitation of mineral resources in the Area. (ISBA/25/C/WP.1 of 22 March 2019; Feichtner, 2019:622-624)

Apart from the institutional framework, the provisions of Part XI of UNCLOS 82, as modified by the 1994 Agreement, reveal the following characteristics of the CHM: the prohibition of national appropriation of the Area and the resources therein(Article 137); use of the Area for peaceful purposes(Article 141); marine scientific research to be carried out exclusively for peaceful purposes and for the benefit of mankind as a whole(Article 143); necessary measures to ensure the protection of the environment(Article 145); necessary measures to ensure with respect to activities in the Area that there is effective protection of human life(Article 146) and activities to be carried out for the benefit of mankind as a whole, particular consideration for interests and needs of developing States in these activities and the sharing of benefits derived from such activities(Art.140, 148, 152 and 160(2)(f)(i)).

In CHM, equity plays a significant role and is recognised to be as a general principle of international law (Akehurst, 1976; Bourrel,Torsten and Currie, 2018:313-314). It has been said that: 'Equity in international law encompasses notions of corrective justice and distributive justice—

that the strict application of the law should be tempered by considerations of equity or fairness to achieve a just result, and that international law should promote a more even distribution of resources among states.’ (World Bank, 2005: 207) Thus a critical part of equity is that those who are not equals should be treated differently. In its preamble, the UNCLOS 82 emphasises that the achievement ‘will 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 landlocked.’(Preamble 5). Furthermore, it is stated in Part XI that activities in the Area, as well as the sharing of benefits derived from such activities, must be carried out for the benefit of humanity as a whole, with special consideration, in the interest of equity, given to the interests and needs of developing States. (Art.140, 148, 152 and 160(2)(f)(i) of UNCLOS 82). Equity is not only limited to intra-generational equity, (including developed-developing States equity and investor-beneficiary equity etc), but also inter-generational equity, which seeks to achieve equity between present and future generations. This inevitably leads to discussions about what needs to be done to safeguard the interests of future generations, such as taking immediate steps to ensure that the environment is not harmed by activities in the Area, and possibly considering the possibility of a sovereign wealth investment for such future generations. (Lodge, Segerson and Squires, 2017: 438-442 and 457)

Another important aspect of CHM is benefit sharing. Under the UNCLOS 82 activities in the Area must be for the ‘benefit of mankind as a whole’ regardless of a state's geographic location, whether coastal or landlocked, and also taking into particular account the interests and requirements of developing States as well as peoples that have not yet achieved complete independence or other forms of self-government.(Art140(1) of UNCLOS 82). It further provides that the ISA shall provide for the equitable sharing of ‘financial and other economic

benefits' derived from activities in the Area through an appropriate non-discriminatory mechanism.(Art.140(2) of UNCLOS 82). The UNCLOS 82, as modified by the 1994 Agreement, does not specify the particular details of the equitable distribution or the mechanism to be used for benefit sharing. It leaves it to the Assembly '...to decide upon the equitable sharing of financial and other economic benefits derived from activities in the Area, consistent with this Convention and the rules, regulations and procedures of the Authority.' (Art.160(2)(g) of UNCLOS 82). The ISA Finance Committee's recommendations shall be taken into account by both the Council and the Assembly in carrying out their responsibilities on this topic((Section 9(7)(f) of the Annex to the 1994 Implementation Agreement). The ISA is actively debating the precise mechanism for a fair distribution of benefits, especially now that the Exploitation Regulations are being developed. At this point, it is important to note that benefit-sharing under UNCLOS 82 applies to both 'financial and other economic benefits,' emphasising that, in addition to the obvious potential for monetary benefits, there are other non-monetary benefits such as sharing of marine scientific research (MSR), capacity building through trainings, and knowledge exchange. (Jaeckel, Ardron and Gjerde, 2016:201-202) According to UNCLOS 82, MSR must be carried out solely for peaceful purposes and for the benefit of humanity as a whole. The ISA and States Parties may carry out MSR in the Area. It should be noted, however, that the former can conduct MSR on both the Area and its resources, whereas the latter can only do so on the Area and not the resources. States Parties shall promote international cooperation in MSR in the Area by encouraging MSR in the Area by various States and the ISA, as well as developing programmes for developing and technologically less developed countries, either through the ISA or other international organisations. (Article 143 of UNCLOS 82). There are also capacity-development, trainings and technical assistance provided by various contractors with the ISA and by the ISA to build the capacity of personnel from developing States.(Articles 144, 273, 274, Annex III, article 15 of UNCLOS 82;

ISBA/19/LTC/14 of 12 July 2013; ISBA/24/A/10 of 27 July 2018). The African group of the ISA while acknowledging that ‘training is envisioned as a key non-monetary benefit resulting from the implementation of [UNCLOS 82] part XI’ took the following view on the current approach of the ISA:

...opportunities may be missed to maximize for developing countries the reach and sustainability of the training courses currently delivered under the auspices of the Authority. A new approach may be required for the Authority to comply with the provisions of the [UNCLOS 82] and meet the goals of its own strategic plan with regard to the provision of training to developing country nationals that specifically meets the needs of developing countries and is designed with the participation of developing countries. (Paras 1 and 14 of ISBA/25/A/8 of 10 June 2019)

Further, full implementation, although significantly downgraded under the provisions of the 1994 agreement, of the provisions of UNCLOS 82 on the development and transfer of marine technology may be considered as a non-monetary benefit enabling developing States to participate in Area activities as set out in the application of the CHM principle. (Articles 148, 266, 274, 276 and 277 of UNCLOS 82 and Section 5 of the Annex of the 1994 Agreement).

Traditionally, the CHM in the Area focuses on mineral resources as the ‘shared assets’, which should be exploited to derive monetary benefits, however, it has been noted that there ‘[t]he resources on the deep seabed are of two types: mineral resources and environmental resources.’ (Lodge, Segerson and Squires, 2017:428) The latter resource may generate a variety of ecosystem services, and recognition of this would justify the importance of the ISA, in accordance with Article 145 of the UNCLOS 82, taking stringent measures to ensure that any exploitation of mineral resources in the Area does not obstruct or impair humankind's ability to benefit from ecosystem services derived from the environment.(Lodge, Segerson and Squires, 2017:430; Jaeckel, Ardron and Gjerde, 2016:202) Also, as we live in the knowledge-based age, where information may be commodified, one cannot ignore the knowledge based assets (i.e. scientific research findings and scientific information etc) as part of the CHM.

4. Future prospects – CHM: Draft Exploitation Regulations, Enterprise and MGR in ABNJ

With the possibility of commercial exploitation of the Area looming on the horizon, this section examines the CHM's future prospects in relation to the draft Exploitation Regulations, the Enterprise, and ongoing negotiations on the conservation and sustainable use of marine biological diversity beyond national jurisdiction (BBNJ).

I. Draft Exploitation Regulations

At the moment, whilst the ISA has Regulations on Exploration of polymetallic nodules, polymetallic sulphides and cobalt-rich crusts in the Area, it has not yet approved Exploitation Regulations. The ISA has been working on draft Regulations relating to the exploitation of mineral resources in the Area since 2011 when Fiji asked the ISA Council to begin considering the operating regulation (ISBA/17/C/22 of 22 July 2011), in accordance with UNCLOS and the 1994 Agreement. This process, which started with preliminary work in the context of expert workshops and included a series of expert studies and discussion papers, culminated in the draft Regulations being drawn up by the ISA. Open consultations were held with stakeholders during the process. The 2019 version of the Draft Exploitation Regulations is the most recent version at the time of writing this article. (ISBA/25/C/WP.1 of 22 March 2019). Despite the fact that it only specifically mentioned the CHM three times, it would appear that the intention is to highlight the importance of the principle in Exploitation of resources in the Area, in accordance with Part XI of UNCLOS 82, as modified by the 1994 Agreement. First, the CHM was specifically mentioned in the preamble, which reaffirmed the “fundamental importance of the principle that the Area and its Resources are the common heritage of mankind.” (Preamble 1) Moreover, it was explicitly referenced in part of the Regulations titled ‘fundamental policies and principles’ that ‘[t]he development of the common heritage [is] for the benefit of mankind as a whole’ (Draft Regulation 2, para. b.ix) and ensuring the effective

management and regulation of the Area and its Resources is done in a way that ‘promotes the development of the common heritage for the benefit of mankind as a whole.’ (Draft Regulation 2, para.h). In the current version of the draft Regulations, a further mention of the CHM in the annex of the earlier August 2017 version has been omitted. In annex X of the latter version dealing with standard clauses for exploitation contract under the title ‘undertakings’, states that contractors shall, amongst other things, ‘[m]anage the resources in a way that promotes further investment and contributes to the long term development of the common heritage of mankind.’(Annex X, section 3(3)(k) of the August 2017 version). It is unclear why this was left out, especially given that stakeholders had emphasised the importance of recognising the CHM throughout the regulations, as well as the need for clearer operationalization in the regulatory provisions. (ISBA/25/C/2 of 4 December 2018, para.10). Further, the Council had requested that the LTC consider ways to reinforce the CHM principle in the operative provisions of the regulations, including assessment during the application process. (ISBA/24/C/20 of 10 July 2018, para.6).

There are a number of outstanding matters relevant to the CHM principle in the draft Regulations, but this section will touch on the following issues, which are crucial to the operationalization of the CHM principle, namely: financial terms of exploitation contracts; mechanism for the equitable sharing of benefits; compensation for developing States whose economies are dependent on terrestrial mining and would suffer adverse consequences due to activities in the Area and the recent invocation of the two-year deadline under the 1994 Agreement by Nauru.

Resolving the financial terms of the exploitation contracts is critical to the effective application of the CHM because this is a significant source of income that would be shared in the form of

monetary benefits. The latest version of the draft Exploitation states: ‘A Contractor, from the date of commencement of Commercial Production, shall pay a royalty in respect of the mineral-bearing ore sold or removed without sale from the Contract Area as determined in appendix IV to these regulations.’(Regulation 64). However, the specifics(for e.g. the rate of the royalty, the length of the different periods of commercial production etc) of this payment regime has not been provided. The challenge is determining a payment regime that would, on the one hand, encourage contractors to proceed with exploitation as investors in the capital-intensive and high-risk DSM sector, while also generating enough returns to make exploitation of the Area's CHM resources worthwhile for humanity. (Kirchain, Roth, Field, III, Muñoz-Royo, and Peacock, 2020: Paras.31-32) According to Joyner ‘[u]nder a CHM regime, agencies engaged in commercial profit or private gain would be deemed inappropriate, unless they operated to enhance the common benefit of all mankind.’(1986:192) Presentations to an ISA working group by the Massachusetts Institute of Technology (MIT) in 2019 appeared to suggest an ad-valorem royalty of 2% for the first five years of commercial production and 6% for the remaining years of commercial production. (African Group Submission on the ISA Payment Regime for Deep-Sea Mining in the Area, 5 July 2019, paras 4 and 6) In response, the African group of the ISA believes that this is rather low, and that exploitation of the Area should take place only if it is ‘demonstrably beneficial to mankind’ and ‘mankind is fairly compensated for this loss of resources to common ownership from the commencement of commercial mining.’ (African Group Submission, Ibid: para.1) There are also other proposals, such as a hybrid ad-valorem royalty and fixed-fee payment regime.(Van Nijen, Van Passel, Brown, Lodge, Segersone and Squires, 2019: 589-596) So far there has been no agreement on the precise model for the payment regime.(Thiele, Damian and Singh, 2021: 4-5)

Another issue that will be critical to the operationalization of the CHM once resource exploitation in the Area begins is the development of an equitable distribution of benefits mechanism. The ISA FC is currently working on ideas for an equitable sharing of financial and other economic benefits. It asked the ISA Secretariat to submit an analysis of the conceptual underpinning of fair sharing that establishes different approaches to the formulation of benefits-sharing based on equity principles. The Secretariat submitted the report to the FC in 2019 and an additional report in 2020. (ISA Secretary-General's Annual Report, 2020:44) The implementation of the equitable distribution of benefits raises difficult questions such: what precisely is equitable sharing? How would the distribution formula be worked out? How would the 'interests and needs' of developing States be determined considering there are a wide range of developing States with some more developed than others? What about 'peoples who have not attained full independence or other self-governing status'? How would the monetary benefits be made? Would they be paid directly to States Parties acting on behalf of humankind within their territory? How would such equitable sharing be applied to non-monetary benefits? How would the distribution of such benefits with consideration being given to future generations? (Lodge, Segerson and Squires, 2017:431-442) Furthermore, it has been argued that the distribution of monetary benefits would result in each beneficiary merely receiving a nominal amount. It has been suggested that a preferred option may be the setting up a natural resource wealth fund, where these monetary benefits would be paid, to make investments in projects that would benefit present and future generations. (Lodge, Segerson and Squires, 2017:438 and 440-442 and Van Nijen, Van Passel, Brown, Lodge, Segerson and Squires, 2019: 580-581) The ISA FC is also considering the possibility of the establishment of such global fund as an alternative or supplemental approach to equitable sharing of benefits:

... that could be used to support global public goods, investment in human and physical capital or deep-sea research and conservation. Such a fund could support and enhance knowledge about the deep sea, which is a global public good. Such knowledge includes, for example, scientific knowledge about the marine

environment of the Area, capacity-building for the sustainable development of deep seabed mining (such as enlarging the number of nationals with seabed technical competence), and research and development of new technology that minimizes the environmental impact of deep seabed mining. A suggestion was also made that the fund could also support the establishment of regional marine science and technology centres. (ISBA/26/FC/8 of 25 March 2021, Para.2)

Additionally, the issue of the development of an appropriate mechanism to compensate developing States whose economies are dependent on terrestrial mining and would suffer adverse consequences due to activities in the Area is a key matter that would need to be resolved before the Exploitation Regulations. This is especially true given that developing States are supposed to be the primary beneficiaries of the CHM principle. To seek to operationalize the CHM without resolving the possible adverse impact of deep seabed mining may have on developing States would amount to giving with one hand and taking with the other. The 1994 Agreement requires the ISA to establish an Economic Assistance Fund to assist affected developing land-based producers.(Section 7 of the Annex to the 1994 Agreement). The current version of the draft Exploitation Regulation briefly covers the issue of these land-based producers. It provides that contractors shall use their best efforts to provide or facilitate access to such information as is reasonably required by the ISA Secretary-General to prepare studies of the potential impact of Exploitation in the Area on the economies of, in order to assist the ISA in carrying out its policy and duties under section 7 of the annex to the Agreement.(Regulation 3(g)). It further specifies that the ISA Council ensures that contractors are not subsidised in the form of incentives in order to obtain an unfair competitive advantage over land-based miners.(Regulation 63). The latter is in line with section 8(1)(b) of the Annex of the 1994 Agreement. The ISA has also commissioned in 2020 a Study on the developed land-based producers that are likely to be adversely affected due to exploitation in the Area. (Anna, Alexandra, Marina, Tatiana, Farida and Anastasiya, 2020) Aside from that, there is still much work to be done to ensure that the interests of such developing land-based producers are protected.

The progress on the development of the draft Exploitation Regulation has been hindered by the Covid-19 pandemic. At the end of June 2021, Nauru, a sponsoring State of a contractor with an exploration contract with the ISA, triggered off the ‘two-year’ rule under Section 1(15)(b) and (c) of the 1994 Agreement. This procedure allows a State Party to UNCLOS 82 and member of the ISA who intends to apply for an exploitation contract to request that the ISA Council adopt rules and regulations for the exploitation of seabed minerals of the Area within two years of such notification. If the Council does not complete the elaboration of the rules, regulations, and procedures relating to exploitation within the prescribed time and an application for approval of a plan of work for exploitation is pending, the Council shall consider and tentatively approve such plan of work based on the provisions of the UNCLOS 82 and any rules, regulations, and procedures that the Council may provisionally establish or ‘on the basis of the norms contained in the Convention and the terms and principles contained in [Annex to 1994 Agreement] as well as the principle of non-discrimination among contractors.’ (Section 1 para. 15(c) of the 1994 Agreement; Willaert, 2021) The African group, which was the only regional group to respond to Nauru's request, raised reservations about the ISA's ability to resolve lingering issues on the proposed Exploitation Regulations within two years. (ISBA/26/C/40 of 13 July 2021, para.9)

II. Enterprise

A 1971 working paper from thirteen members of the Group of Latin American and Caribbean Countries (GRULAC) had introduced the idea of the Enterprise and enunciated the rationale for the creation of the new entity in these terms:

In keeping with the principle of common heritage, the co-sponsors of the working paper envisage the establishment of a system in which mankind, in the capacity of owner, would participate directly in the administration and management of the

Area and the exploitation of its resources. Although in its initial stages it may not be possible under the system for mankind by itself to undertake activities in the Area, it may none the less enter into arrangements with third parties for the attainment of its objectives. Such arrangements, however, must in no way derogate from the basic and fundamental principle of the common heritage with its element of non-appropriation which is integral to it. To give effect to this, a body[Authority] should be created which would itself, as the agent of mankind, undertake direct scientific investigation and the exploration of the Area and exploitation of its resources on behalf of all mankind. It would be therefore more in consonance with the principle of the common heritage for such a body in the early stages to enter into joint ventures, production-sharing and profit-sharing arrangements with other entities, public or private, national or international rather than to grant or issue licences to such entities.(ISA, 2002:5-6)

The paper then proposed that the Authority should have a number of principal organs, including ‘the International Seabed Enterprise (ISBE) hereinafter referred to as the Enterprise’ to carry out this mandate. (ISA, 2002:5-6) The UNCLOS 82 eventually adopted the Enterprise as an organ of the ISA that shall carry out activities in the Area directly, as well as the transporting, processing and marketing of minerals recovered from the Area.(Article 170 of UNCLOS 82) It also pointed out the Enterprise would, within the framework of the international legal personality of the Authority, have the legal capacity as provided for in the Statute of the Enterprise.(Article 170 and Annex IV of UNCLOS 82) The provisions on the Enterprise were modified by the 1994 Implementation Agreement and it was downgraded from being an autonomous organ to becoming a part of the Secretariat of the ISA, with an interim Director-General to be appointed by the Secretary-General from within the staff of the ISA(Section 2 para 1 of the Annex of the 1994 Agreement). As an appendage of the Secretariat, it is tasked with merely administrative type functions, including monitoring and reviewing trends and developments relating to deep seabed mining activities, including an analysis of metal market conditions, prices, trends and prospects; assessing the results of marine scientific research in the Area, as well as deep seabed mining technological developments and approaches to joint venture operations.(Ibid) According to the 1994 Agreement, the Enterprise's independence could be triggered either by the approval of a plan of work for exploitation for another entity

other than the Enterprise or by the Council's receipt of an application for a joint venture operation with the Enterprise. If such joint-venture operation with the Enterprise are consistent with sound commercial principles, the Council shall adopt a directive under Article 170, paragraph 2, of the Convention allowing for such independent operation.(Ibid) Recently, there have been calls for the operationalization of the Enterprise, notably by the African group of the ISA. The African group indicates that the vast majority of developing countries can only participate in Area activities through the Enterprise mechanism. (Para.11, Statement by Algeria on behalf of the African Group: Request for consideration by the Council of the African's Group's operationalization of the "Enterprise," 6 July, 2008) It pointed out that “[m]eaningful steps towards the launch of the Enterprise taken now, would go some way to safeguard the ‘common heritage’ and ‘benefit to humankind’ principles espoused by Part XI of the Convention.”(Ibid, para.12) In the statement the African group alluded that without the operationalization of the Enterprise, there was a risk of an undermined exploitation regime of the Area that would leave developing States, including those from Africa, with little or no benefit from the CHM resources.(Ibid, paras 9 and 10) As steps taken towards the operationalization of the Enterprise a study was commissioned by the ISA(Egede, Pal and Charles, 2019; Willaert, 2021), a Special Representative of the ISA Secretary-General for the Enterprise has been appointed on an interim basis (ISBA/25/C/36 of 22 July 2019) and the issue of the operationalization of the Enterprise has been included in the ISA Strategic Plans for 2019-2023 (ISBA/25/A/15 of 3 July 2019).

III. Conservation and Sustainable Use of Marine Biological Diversity Beyond Areas of National Jurisdiction(BBNJ)

The current negotiations for the conclusion of an international legally binding agreement under the Convention on the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (BBNJ), also brings to attention the application of the principle of CHM. The negotiations for what would be the third implementing Agreement under the Convention addresses topics agreed to in a package deal of 2011, which includes, ‘questions of the sharing of benefits’ (UNGA resolution 72/249 of 19 January 2018, para. 2) on the conservation and sustainable use of BBNJ. Consequently, the issue of the sharing of benefits must be addressed in the BBNJ Agreement to be adopted. Article 5 of the draft agreement list the principle of CHM as one the principles that States Parties shall be guided by in achieving the objectives of the agreement.(A/CONF.232/2020/3 of 18 November 2019: 43-51 and 114 and 402-403) There has been no agreement in the negotiations so far on the inclusion of the principle of CHM in the draft BBNJ Agreement.(Leary, 2019: 23-25) It should be noted, however, that the question of benefit sharing should not be separated from the legal status of the resources themselves. The further issue which arises is whether the legal status of the resources under the BBNJ Agreement should be governed by the principles set out in Part XI of the Convention, especially as the instrument is being negotiated under the Convention.(Mcdorman, 2021) It is advanced that the principle of the CHM should apply to the equitable sharing of benefits of marine genetic resources under the said Agreement, as marine genetic resources are shared resources. Additionally, consistent with the application of CHM, the legal status of the resources should be governed by the principles under Article 137 of the UNCLOS 82.

5. Conclusion

This article has explored the development of the innovative, though rather nebulous CHM principle(or rather a bundle principles) in respect of the Area. There has been a somewhat expansive application to the principle in the past, particularly the famed address by Arvid Pardo

to the UN General Assembly in 1967. It contemplated that the CHM would apply not just to a range of non-living resources, but also to life resources at deep sea beds beyond national authority. The current incorporation of the CHM principle in Part XI of UNCLOS 82, as modified by the 1994 Agreement, has limited this to applying to the Area and its resources, with resources defined as mineral resources. The article then looks at the CHM's future prospects in the draft Exploitation Regulations, the Enterprise's operationalization, and ongoing discussions about developing an international agreement on the conservation and sustainable use of marine biological diversity in areas outside of national jurisdiction, including whether MGRs should be considered CHM.

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