



BIODIVERSITY CONSERVATION IN THE EXPLOITATION OF NATURAL RESOURCES IN INTERNATIONAL SEABED AREAS UNDER THE BIODIVERSITY BEYOND NATIONAL JURISDICTION AGREEMENT

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Abstract

This research aims to analyze and understand the conservation of biodiversity in international seabed areas based on BBNJ, and to analyze the urgency of the State of Indonesia to ratify the BBNJ Agreement. The research method used is normative legal research. The results show that conservation in the context of the BBNJ (Biodiversity Beyond National Jurisdiction) Agreement includes protection and conservation of natural resources and management. Protection and conservation are regulated through the establishment of area-based management instruments and the requirement of environmental impact assessments for activities on the high seas and the international seabed. Meanwhile, conservation within management is addressed through equitable benefit sharing, technology transfer and capacity building. Therefore, the ratification of the BBNJ Agreement is very important for Indonesia because Indonesia's geographical situation as an archipelago with a large marine area requires effective protection of marine biodiversity, most of which is beyond national jurisdiction. Ratification of the BBNJ Agreement will strengthen national capacity in marine technology, provide better access to marine genetic resources, and strengthen Indonesia's commitment to sustainable ocean management and contribute positively to global ocean governance.

Keywords: Biodiversity; Conservation; International Seabed Area.

A. INTRODUCTION

Globally, the ocean covers two-thirds of the Earth's surface and provides about 97% of all living space on Earth. The ocean has shaped and supported the existence and life of humanity since the emergence of the first living creatures from the sea. Meanwhile, marine waters are home to a wide variety and myriad of living things or organisms, ranging from the invisible or microscopic such as bacteria, to the largest living things in the world.¹

¹Ria Tri Vinata, *Power of Sharing Sumber Daya Kelautan Republik Indonesia*, Jurnal Ilmiah Hukum Legality 24, no. 2, 2017, p. 213-214.

The sea has proven to have various functions, including as a source of food for mankind, as a trade highway, as a means of conquest, as a place for battles, as a place of fun and recreation, and a means of separating or unifying a nation. With the advancement of science and technology in the twentieth century, the functions of the ocean have increased further with the discovery of valuable resources on the seabed and the possible exploitation of these resources both in the water and on the seabed below.²

This marine exploitation is considered to have economic benefits, but these activities also have impacts that can damage the environment, especially marine ecosystems. exploitation activities at sea can increase the impact of damage either from exploitation tools or anthropogenic impacts on the marine environment.³

The existence of biodiversity both in the oceans, land and other aquatic ecosystems is very important to be protected and preserved because its existence has a huge contribution to the quality of human life. Biodiversity conservation is also regulated in the Biodiversity Beyond National Jurisdiction Treaty or Treaty of the High seas which aims to regulate the protection and utilization of genetic resources in international waters (high seas).⁴ This treaty provides guidelines for countries to sustainably manage biodiversity in areas beyond national jurisdiction.⁵

Indonesia, with its incredible natural wealth, has long been recognized as one of the largest archipelagic countries in the world. From the islands scattered throughout the archipelago to the abundant territorial waters, Indonesia's water area reaches 6,315,222 km², an impressive number that surpasses its land area of only 1,890,739 km². As such, Indonesia's waters cover two-thirds of the country's total area.⁶ Indonesia's marine wealth is also influenced by Indonesia's position flanked by two oceans, the Indian Ocean and the Pacific Ocean. The wealth contained in the two oceans is much more and much remains undiscovered. If properly utilized, this geographical location has a lot of economic and political potential.

Marine life in Indonesia is not only limited to waters within the national territory, but is also physically and biologically connected to the high seas and marine areas of neighboring countries. This implies that if damage occurs in one place, for example due to human activities such as pollution or overfishing, the impact will not be limited to that area. Rather, the impacts may extend to other areas, even across national borders. As previously explained, then this research requires problem identification to assist in the analysis process and help achieve the purposes of research.

B. METHOD

In this study the authors used normative legal research methods. Normative legal research is also known as doctrinal legal research. This research conceptualizes rules or

²Agustina, *Hukum Laut Internasional*, Suluh Media, Yogyakarta, 2018, p 2.

³Luc Cuyvers et al., *Deep seabed mining: a rising environmental challenge*, *Deep seabed mining: a rising environmental challenge*, 2018, p 64.

⁴Ministry of Foreign Affairs of Republic Indonesia, Through BBNJ Agreement, Indonesia Pushes to Accelerate Global Ocean Protection and Utilisation, diakses Oktober 6, 2023, <https://kemlu.go.id/portal/en/read/4872/view/through-bbnj-agreement-indonesia-pushes-to-accelerate-global-ocean-protection-and-utilisation>.

⁵Igor Yoso Kahago Pubian, Antisipasi Indonesia Dalam Pembentukan Kesepakatan Internasional Mengenai Pemanfaatan Keanekaragaman Hayati Di Wilayah Luar Yurisdiksi Nasional, *Jurnal IUS Kajian Hukum dan Keadilan* 9, no. 2 (2021), p 381.

⁶Muhammad Maulana, Awaluddin Moehammad, dan Fauzi Janu, Analisis Pengaruh Perubahan Garis Pantai Terhadap Batas Pengelolaan Wilayah Laut Provinsi Jawa Timur Dan Provinsi Bali Di Selat Bali, *Jurnal Geodesi Undip* 55, no. 4 (2017), p 343.

laws that are used as rules or norms of community behavior towards what is considered correct or appropriate.⁷ In this study, researchers analyzed legal materials by conducting interpretations or legal studies to examine and review the legal materials obtained,⁸ so as to answer the problem formulation in this research. In this case the agreement on the conservation of marine diversity beyond national jurisdiction (BBNJ Agreement). The author also uses the Conceptual Approach method, the International Treaty approach, and the Legislation approach.

C. ANALYSIS AND DISCUSSION

1. Biodiversity Conservation Regulations Implemented in International Seabed Areas Under BBNJ

The location of exploitation of marine resources is not only limited to the jurisdiction of a country but also carried out in areas outside national jurisdiction or what is commonly referred to as the high seas and international seabed (deep seabed area), forms of exploitation activities in the high seas vary, ranging from fisheries, mining, and marine scientific research. Nearly 70 % of the world's marine areas are beyond national jurisdiction, covering 40 percent of the planet's surface and nearly two-thirds of the world's oceans. These areas are home to unique species and ecosystems that have evolved to survive extremes of heat, cold, salinity, pressure and darkness, and can reach depths of more than 10 km and represent 95 % of the total habitat on Earth by volume.⁹

The high seas, governed by the principle of common heritage of mankind, are the main focus of natural resource exploitation. This principle allows all countries to access and utilize the natural resources in these areas without geographical restrictions. Nonetheless, exploitation activities such as seabed mining have the potential to cause significant environmental damage. Therefore, regulations governing the exploitation of the high seas and the conservation of its biodiversity need to be strengthened. These regulations should include the protection of vulnerable marine ecosystems, both within and beyond the country's jurisdiction.

Biodiversity is first regulated in UNCLOS, in chapter XII of UNCLOS on the protection and preservation of the marine environment every state has an obligation to protect and preserve the marine environment within its jurisdiction.¹⁰ States are also obliged to prevent, reduce and control pollution of the marine environment under their control and jurisdiction.¹¹ The protection of the sea in UNCLOS only regulates areas within the jurisdiction of the state, leaving a legal vacuum for areas outside the state's jurisdiction.¹²

The protection of biodiversity is also regulated by the Convention on Biological Diversity (CBD), which is managed under the auspices of the United Nations Environmental Programme (UNEP). The CBD is an international treaty that aims to conserve biodiversity, using an approach based on the sustainable use of resources.

⁷Ika Atikah, *Metode Penelitian Hukum* (Sukabumi: Haura Utama, 2022), p 28.

⁸Amirudin dan Zainal Asikin, *Pengantar Metode Penelitian Hukum* (Jakarta: PT Raja Grafindo Persada, 2021), p 118.

⁹Maria Hammar, Merit Kaal, dan Pernilla Holgersson, *Future Exploitation of Areas Beyond National Jurisdiction Future Exploitation of Areas Beyond National Jurisdiction*, 2020, p 7.

¹⁰Pasal 192 UNCLOS.

¹¹Gulardi Nurbintoro dan Haryo Budi Nugroho, *Biodiversity Beyond National Jurisdiction : Current Debate and Indonesia's Interest*, *Indonesia Law Review* (2016), p 289.

¹²*ibid*

However, it is important to note that the CBD has limitations in its scope. Article 15 of the CBD, for example, outlines that the convention takes into account the limits of state jurisdiction over biological resources in their respective territories.¹³

The adoption by the Intergovernmental Conference of a legally binding international instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction or the BBNJ Treaty is a complement to UNCLOS and CBD related to marine protection beyond national jurisdiction especially biodiversity conservation. This agreement aims to regulate the protection and utilization of genetic resources in international waters (high seas).¹⁴

According to The Harper Collins dictionary of environmental science, conservation: the management, protection and preservation of natural resources and environment conservation has a broad meaning that includes the protection and preservation of natural resources, as well as management. Conservation in the sense of protection and preservation includes various actions to maintain the continuity and balance of ecosystems, and protect natural habitats and the species that live in them. In this sense, conservation is very broad and includes all efforts to maintain biodiversity and ensure sustainable use of natural resources. Biodiversity conservation in the BBNJ Agreement is carried out in two ways: using area-based management tools (ABMT) and environmental impact assessment (EIA).

1) Area Based Management Tools (ABMT)

ABMTs, or Area-based Management Tools, are areas of the ocean where certain human activities are more strictly regulated than surrounding areas. These regulations are put in place to provide a higher level of protection to the marine environment. They can cover a range of human activities, such as fishing, shipping or mining, and can be aimed at different objectives, such as conserving biodiversity, protecting habitats or ensuring sustainable resource use. Overall, ABMTs aim to manage human activities in specific areas of the ocean to achieve specific conservation or management objectives.¹⁵

The UN Technical Report on ABMT's contribution to Sustainable Development Goals and Targets shows that many area-based management tools contribute to multiple SDGs, with significant potential to support SDG 14 (Life Below Water). In particular, all Targets assessed under SDG 14, especially Target 14.2 to sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration to achieve healthy and productive oceans, have been assisted by the area-based management tools studied.¹⁶

The BBNJ Agreement provides for ABNJ in chapter 3 on Measures Such as Area-Based Management Tools, Including Marine Protected Areas. The BBNJ Agreement

¹³Pasal 15 CBD.

¹⁴<https://kemlu.go.id/portal/en/read/4872/view/through-bbnj-agreement-indonesia-pushes-to-accelerate-global-ocean-protection-and-utilisation>, diakses tanggal 6 Oktober 2023.

¹⁵Elizabeth M. De Santo, Implementation challenges of area-based management tools (ABMTs) for biodiversity beyond national jurisdiction (BBNJ), *Marine Policy* 97 (2018), p 1.

¹⁶UN Environment Technical Report, The contribution of Area- based Management Tools to Sustainable Development Goals and Targets, p 14.

sets out the mechanism for establishing ABMTs, including MPAs in ABNJ with the following elements:¹⁷

A) Proposal

Parties are required to submit proposals for the establishment of area-based management tools, such as marine protected areas, to the secretariat, either individually or through collaborative efforts. When developing these proposals, Parties should engage in consultations with a wide range of stakeholders, including other countries, global organizations, civil society, scientists, businesses, Indigenous Peoples, and local communities. These proposals should be informed by the best available scientific knowledge and information, incorporating traditional knowledge from Indigenous Peoples and local communities while adopting a precautionary approach and considering ecosystems holistically.¹⁸

The proposal should include:¹⁹

1. A clear description of the proposed area, using the specific guidelines outlined in Appendix I.
2. Information on the area based on the specific criteria outlined in Annex I, along with any additional criteria that may be added in the future.
3. Details on human activities taking place in the area, including the involvement of Indigenous Peoples and local communities, and how these activities may affect the environment.
4. An overview of the marine environment and the different types of living things found there.
5. Objectives for preserving the area and its possible sustainable use.
6. A plan for managing the area, including the actions to be taken and how progress will be monitored, scrutinized and reviewed to achieve the stated objectives.
7. How long the proposed actions will be implemented for the area.
8. Details on discussions with other countries, nearby coastal states, or international organizations.
9. Information on existing management tools, such as marine protected areas, already in use by treaties or other legal organizations.
10. Important scientific information or traditional knowledge from Indigenous Peoples and local communities that may be helpful.

B) Publicity and initial review of proposals

Once the secretariat receives the written proposal, they will share it with everyone and send it to the Scientific and Technical Board for review. They want to check that the proposal has all the right information, including the things mentioned in Article 19 and Annex I. After checking, they will inform everyone about what they found, and then the person who sent the proposal will send it back to the secretariat, taking into account what the Scientific and Technical Bodies have said. The secretariat will then inform all parties about the proposal and share it with everyone to discuss it further, as described in Article 21.²⁰

¹⁷Area-Based Management Tools, Including Marine Protected Areas, Harvard University, diakses Februari 23, 2024, <https://bbnj-mgr.fas.harvard.edu/abmts>.

¹⁸Pasal 19 ayat (1) – ayat (3) Perjanjian BBNJ

¹⁹Pasal 19 ayat (4) Perjanjian BBNJ

²⁰Pasal 20 Perjanjian BBNJ

C) Proposal Consultation and Assessment

When a party submits a proposal, everyone has a chance to talk about it. This includes countries, organizations, scientists, Indigenous Peoples, and local communities.²¹ After the secretariat publishes all the opinions and information it has gathered, if the proposed plan affects an area surrounded by the waters of a country, the proponents should talk to that country first and consider its feedback for possible changes to the plan.²²

D) Establishment of an Area-Based Management Tool

The Conference of the Parties makes a decision based on the final proposal and draft management plan, taking into account input from consultations and scientific advice. These decisions may include establishing area-based management tools, such as marine protected areas, and related measures. They may also decide on measures that are compatible with other legal instruments and bodies, and cooperate with them. In addition, they may recommend relevant measures to other global, regional, subregional or sectoral bodies.²³

Decisions made by the Conference of the Parties should not undermine measures for areas within national jurisdiction and should take into account the rights and obligations of all states. Where proposed measures may affect areas under the sovereignty of a coastal state, consultations should be conducted appropriately. If an area-based management tool established under this Section falls under the national jurisdiction of the coastal state, that part of the tool ceases to apply immediately. The remaining part in areas beyond national jurisdiction remains in force until the Conference of the Parties decides whether to amend or repeal it. If the competence of a legal instrument or body changes and affects area-based management tools established under this Part, those tools remain in force until the Conference of the Parties decides otherwise, in cooperation with the relevant instrument or body.²⁴

E) Decision Making

Decisions and recommendations made under this Section are generally reached by consensus among the Parties involved. However, if consensus cannot be reached, decisions and recommendations will be made by a three-quarters majority of the Parties present and voting, after a two-thirds majority vote indicating that all attempts to reach consensus have been exhausted. Once a decision is made, it is binding on all Parties and takes effect 120 days after the meeting of the Conference of the Parties at which it was decided.²⁵

F) Emergency Measures

The Conference of the Parties is authorized to make decisions aimed at adopting emergency measures in areas beyond national jurisdiction. These measures are necessary when natural disasters or human activities pose a serious irreversible threat to marine biodiversity in the area. Such decisions are taken only after consultation with relevant legal instruments, global bodies, or regional authorities, and when other provisions of

²¹Pasal 21 ayat (1) Perjanjian BBNJ

²²Pasal 21 ayat (4) Perjanjian BBNJ

²³Pasal 22 ayat (2) Perjanjian BBNJ

²⁴Pasal 22 ayat (5) – ayat (7) Perjanjian BBNJ

²⁵Pasal 23 ayat (1) – ayat (3) Perjanjian BBNJ

the Agreement or existing frameworks are deemed insufficient to address the situation promptly.²⁶

G) Implementation

The Parties are responsible for ensuring that their activities in areas beyond national jurisdiction comply with decisions made under this Section of the Agreement. However, Parties reserve the right to impose more stringent measures regarding nationals, vessels or activities under their jurisdiction in support of the objectives of the Agreement and in accordance with international law. It is important that the application of these measures does not unfairly burden small island developing States or less developed States. Parties should also advocate for the adoption of supportive measures in relevant legal frameworks and bodies to align with decisions and recommendations made by the Conference of the Parties.²⁷

H) Monitoring and Review

Parties shall report to the Conference of the Parties on the implementation of area-based management tools, such as marine protected areas, established under this Section, and related measures. These reports, together with information and reviews conducted by relevant instruments and legal entities, shall be published by the secretariat. In addition, these instruments and legal entities are invited to provide information to the Conference of the Parties on the measures they have adopted to support the objectives of area-based management tools. The Scientific and Technical Bodies will monitor and periodically review the effectiveness of area-based management tools, including marine protected areas, and associated measures. Based on this assessment and the advice provided by the Scientific and Technical Bodies, the Conference of the Parties will decide on any necessary amendments, extensions, or repeals of these tools and measures, taking into account the best available science, relevant traditional knowledge, and the precautionary and ecosystem approach.²⁸

2) Environmental Impact Assessment

In large areas beyond national jurisdiction, no single state has authority. These areas are governed by a complex web of treaties and agreements established under UNCLOS. However, this patchwork of treaties focuses on specific activities such as fishing, navigation and waste disposal, and only applies to countries that have signed them. This creates gaps in regulating and protecting the marine environment beyond national jurisdiction, one of which is the lack of clear rules for conducting environmental impact assessments (EIAs) for projects or activities in these areas. Different sectors and regions may have different EIA requirements, leading to inconsistencies and challenges in effectively assessing the environmental impacts of activities. To address this, a comprehensive EIA framework is needed that is specifically designed for activities outside of national jurisdiction.

UNCLOS provides for environmental impact assessment as follows: Where States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution or significant and harmful changes to the marine environment, States shall, as far as practicable, assess the potential effects of

²⁶Pasal 24 Perjanjian BBNJ

²⁷Pasal 25 ayat (1) – ayat (4) Perjanjian BBNJ

²⁸Pasal 26 Perjanjian BBNJ

such activities on the marine environment and shall communicate a report on the results of such assessment in the manner provided for in Article 205.²⁹ Although UNCLOS has regulated EIA, there is no mechanism or threshold for EIA regulated in UNCLOS.

BBNJ regulates EIA in chapter 4 on Environmental Impact Assessment. The purpose of regulating this environmental impact assessment is:³⁰

1. Implement the Convention's provisions on environmental impact assessment for areas beyond national jurisdiction by establishing processes, thresholds, and other requirements for conducting and reporting assessments by Parties;
2. Ensure that activities covered under this Section undergo assessments to prevent, mitigate and manage significant adverse impacts, aiming to protect and preserve the marine environment;
3. Support consideration of cumulative impacts and impacts within national jurisdictions;
4. Introducing strategic environmental assessment;
5. Establish a cohesive environmental impact assessment framework for activities in areas beyond national jurisdiction;
6. Enhance the capacity of Parties, in particular developing countries, including least developed countries, landlocked developing countries, geographically disadvantaged countries, small island developing States, coastal African countries, island countries, and developing middle-income countries, to prepare, conduct, and evaluate environmental impact assessments and strategic environmental assessments in support of the objectives of this Agreement.

The mechanism for implementing AMDAL in BBNJ is:³¹

1) Screening

Parties must first determine whether an EIA is required for planned activities under their control. If not, they should still make relevant information available to the public. If other parties have concerns about potential impacts, they can register their views, which must be considered. Scientific and Technical Bodies may evaluate these concerns and make recommendations. The decision-making party must take these into account and make them public.

2) Scoping

The parties shall ensure that the main environmental impacts and other relevant impacts, such as economic, social, cultural, and human health impacts, including potential cumulative impacts and impacts in areas within national jurisdiction, as well as alternatives to planned activities, if any, to be included in the environmental impact assessment to be conducted under this Section, are identified. The scope should be determined using the best available science and scientific information and, where available, relevant traditional knowledge of Indigenous Peoples and local communities;

3) Impact Assessment and Evaluation

Parties shall assess and evaluate the impacts of planned activities, including cumulative impacts and impacts within national jurisdiction, using the best available science and traditional knowledge.

4) Prevention, Mitigation and Management

Parties should identify measures to prevent, mitigate and manage potential adverse impacts of planned activities, incorporating them into environmental management

²⁹Article 206 UNCLOS

³⁰Article 27 BBNJ Agreement

³¹Environmental impact assessment, Harvard University, accessed February 26, 2024, <https://bbnj-mgr.fas.harvard.edu/eias>.

plans where necessary. The parties shall ensure public notification and consultation throughout the process. The parties shall prepare and publish an environmental impact assessment report.

According to The Harper Collins dictionary of environmental science, conservation: the management, protection and preservation of natural resources and the environment not only includes protection and preservation, but also involves the sustainable management of natural resources.³² As such, successful conservation is often closely linked to efforts to ensure equitable management of natural resources to support the protection and preservation of biodiversity.

The Biodiversity Beyond National Jurisdiction (BBNJ) Treaty plays a crucial role in regulating conservation efforts in oceanic areas beyond national jurisdiction. It also addresses the management of biological resources in these areas, including technology transfer and equitable benefit sharing. As such, the BBNJ not only regulates conservation efforts in global oceanic regions, but also acts as a framework that governs the transfer of necessary technologies and promotes equitable benefit sharing for all parties involved.

1) Marine Genetic Resources including fair and equitable sharing benefit

BBNJ explains that marine genetic resources means any plant, animal, microbial or other material of marine origin that contains hereditary functional units that have actual and potential value.³³ Ocean genetic resources have many benefits for humans, such as making medicines, cosmetics, food supplements, and even for research and industry. Some organisms from the deep sea have special abilities that we can learn about, such as how they can protect themselves from certain things or how they conduct light. We can use this knowledge to create new materials or designs. Understanding the genes of marine life is also important to know how they can adapt to environmental changes, especially with climate change, and to ensure that we take good care of marine life.³⁴

Although these genetic resources are important and have many uses for mankind, there are no regulations related to marine genetic resources located outside national jurisdiction either in the CBD or UNCLOS. The CBD only regulates marine genetic resources within the jurisdiction of the state, while for those outside national jurisdiction, the CBD in Article 4 (b) only recommends member states to cooperate, even with Regional Fishery Organizations (RFOs) but there are no specific rules on how to regulate such cooperation. The International Seabed Authority has a function to control and supervise the seabed, but currently there is no authority that can regulate MGRs on the high seas and seabed.³⁵

Marine genetic resources in the BBNJ are regulated in chapter 2, which is about ocean genetic resources and fair and equitable benefit sharing. This Agreement covers activities involving genetic resources and genetic information of the oceans outside national jurisdiction collected after this Agreement enters into force for Member States.

³²Satya Darmayani et al., loc.cit.

³³Article 1 paragraph (8) of BBNJ Agreement

³⁴Alex D. Rogers et al., Marine Genetic Resources in Areas Beyond National Jurisdiction: Promoting Marine Scientific Research and Enabling Equitable Benefit Sharing, *Frontiers in Marine Science* 8, no. May (2021), p. 2.

³⁵Sri Wartini, The Legal Lacunae of UNCLOS and CBD to The Access and Benefit Sharing of Marine Genetic Resources in the Area Beyond National Jurisdiction 18, no. 1 (2022), p. 54.

It does not cover fisheries activities governed by other agreements, unless those fisheries activities are conducted in accordance with the objectives contained in this agreement.³⁶

Prior to initiating activities related to marine genetic resources, states parties must notify the clearing house mechanism of the purpose of collection, scope of study, collection methods, funding sources, opportunities for involvement of scientists, especially those from developing countries, and data management plans.³⁷ The clearing house mechanism is one of the main operational mechanisms of the BBNJ agreement, facilitating international cooperation among member states and serving as the central database for MGR, EIA, ABMT, and capacity building.³⁸

Research in areas beyond national jurisdiction (ABNJ), such as the deep sea, is very difficult to reach because it is far from the coast and very deep. This makes research difficult as it requires a lot of advanced technology and skilled people, which only a few countries have. To conduct research there, luxury research vessels with high-tech tools are needed to take samples. Conducting research on marine genetic resources also requires onshore laboratories with different levels of technology. However, many developing countries do not have the money or resources to gain access to these resources or set up laboratories and ships. Even if they can get access to things like samples or data, it's not much use if they don't have the right facilities or skills to put it to good use.

The BBNJ Agreement explains that benefits arising from activities related to marine genetic resources must be shared fairly and equitably.³⁹ The benefits shared are not only monetary benefits but also non-monetary benefits as stipulated in article 14 paragraph (2) of the BBNJ Agreement, non-monetary benefits include:⁴⁰

- a. access to samples and sample collections.
- b. access to digitized information about genes and DNA.
- c. scientific data that is easy to find, access, understand and reuse. This data must be managed responsibly.
- d. The information contained in the notice is accessible and searchable by the public.
- e. transfer of marine technology in accordance with chapter 5 of this agreement.
- f. Capacity building includes financially supporting research programs and providing partnership opportunities for scientists and researchers working on special projects and initiatives.
- g. Enhanced technical and scientific cooperation, particularly with scientists from and scientific institutions in developing countries;
- h. Other forms of benefits as determined by the Conference of the Parties, taking into account the recommendations of the access and benefit sharing committee.

Developed countries are required to make annual contributions to a special fund as specified in article 52. In addition to the special fund, there is also a voluntary fund established to assist developing member states to participate in the meetings of the bodies established under this agreement.⁴¹ The Conference of the Parties will decide how to share the benefits obtained from the use of genetic resources by considering the advice of the Access and Benefit Sharing Committee.⁴² The access and benefit sharing committee is an institution established under the BBNJ Agreement that serves as a means to establish benefit sharing guidelines, in accordance with article 14, provide

⁴²Article 14 paragraph (7) BBNJ Agreement

transparency and ensure fair and equitable sharing of monetary and non-monetary benefits.⁴³

2) Capacity Building and the Transfer of Marine Technology

The preamble of the BBNJ agreement explains that this agreement is not only concerned with biodiversity but also with justice and equity, which can be achieved by capacity building and technology transfer. There are three reasons why capacity building and technology transfer are so important in BBNJ.

First, the BBNJ Agreement emphasizes equity alongside conservation, aiming to address power imbalances and ensure all countries have the necessary skills and resources for marine conservation. Second, capacity building and ocean technology transfer are critical to implementing the Agreement as all countries have a stake in marine biodiversity, but challenges in UNCLOS implementation and capacity gaps must be addressed. Third, early capacity building is key for countries to ratify the Treaty with confidence, with assessments and preparation plans that aid rapid implementation.⁴⁴

There are several ways to conduct capacity building and technology transfer, among others:⁴⁵

- (a) Share and use relevant data, information, knowledge and research results.
- (b) Disseminate information and raise awareness about the traditional knowledge of Indigenous Peoples and local communities, with their consent.
- (c) Develop and strengthen infrastructure, equipment and personnel capacity.
- (d) Improve institutional capacity and the national regulatory framework.
- (e) Enhance human resource and financial management capabilities and technical expertise through exchange, collaboration, support, education, training and technology transfer.
- (f) Develop and share manuals, guidelines and standards.
- (g) Establish technical, scientific, and research programs.
- (h) Strengthen capacity and technological tools for effective monitoring, control and surveillance of activities covered by the agreement.

However, capacity building and technology transfer are not limited to the above, the Conference of the Parties will regularly review and update the list of capacity building and technology transfer activities based on the recommendations of the responsible committee. This ensures that the list stays abreast of technological developments and meets the changing needs of countries and regions.⁴⁶

This capacity building and technology transfer effort will undergo regular monitoring and review by the capacity building and technology transfer committee under the conference of the parties, this process aims to achieve several objectives namely:⁴⁷

1. assess the needs and priorities of developing member countries, with a particular focus on small island developing States and least developed countries.
2. evaluate the support provided and identify gaps in meeting the needs of these countries.
3. identify and allocate funds from the financial mechanisms established under article 52 for capacity-building and technology transfer activities, including needs assessments.

⁴³Article 15 BBNJ Agreement

⁴⁴Harriet Harden-davies et al., First to finish, what comes next? Putting Capacity Building and the Transfer of Marine Technology under the BBNJ Agreement into practice, NPJ Ocean Sustainability (2024), p. 1.

⁴⁵Article 44 BBNJ Agreement

⁴⁶*ibid*

⁴⁷Article 45 BBNJ Agreement

4. measure performance using agreed indicators and review the effectiveness of capacity-building and technology transfer efforts, highlighting successes and challenges.
5. make recommendations for further activities to enhance capacity building and technology transfer, particularly for developing States Parties, to better implement the Agreement and achieve its objectives.

Parties and regional organizations can also contribute to this monitoring and review process by submitting reports to the capacity building and technology transfer committee.

2. The urgency for Indonesia to ratify BBNJ Agreement

The BBNJ Agreement is intended to safeguard and utilize marine biodiversity in marine areas beyond the jurisdiction of states (high seas) and the seabed and submarine lands beyond the jurisdiction of states (areas).⁴⁸ The BBNJ Agreement commenced on September 20, 2023 and runs until September 20, 2025. Indonesia was one of the first countries to sign it, along with 70 other countries, on September 20, 2023. This is the first step for Indonesia to protect and preserve the marine environment both within its jurisdiction and beyond. Ratification of the BBNJ Agreement is necessary for the agreement to take effect.

The ratification of international treaties in a country is certainly inseparable from the interests of the country itself. The interests of the Indonesian state to ratify the BBNJ agreement are as follows.

1) Geographical Conditions

Indonesia is an archipelago with more sea than land. With a 12-mile sea lane, Indonesia's sea area is five million km². This consists of 1.9 million km² of land, 0.3 million km² of territorial sea, and 2.8 million km² of archipelagic waters. Thus, the total area of Indonesia's seas is 3.1 million km², or about 62 percent of the entire territory of Indonesia. With approximately 81,000 km of coastline, Indonesia has the longest coastline in the world. With these geographical conditions, it can certainly provide abundant potential fishery resources for the State of Indonesia.⁴⁹

As an archipelagic country whose exclusive economic zone is directly adjacent to the open sea, and as a country with very high marine genetic biodiversity. Indonesia has a vested interest in safeguarding its biodiversity from biopiracy and maintaining its right to sustainably manage resources within its sovereignty and jurisdiction.⁵⁰ Similarly, exploration in the Pacific Ocean and South China Sea has revealed rich biodiversity, with many species yet to be discovered. These findings underscore the ecological importance of Indonesia's maritime environment.

Despite the richness of its marine life, much of this ocean lies beyond Indonesia's national jurisdiction. This poses a challenge because ecosystems in these areas are interconnected and transcend maritime boundaries established by international law. As

⁴⁸<https://oceanjusticeinitiative.org/2023/03/16/opini-bbnj-mengapa-penting-bagi-indonesia/>, accessed February 21, 2024

⁴⁹Ade Nur Anugrah and Arindra Alfarizi, Literature Review of the Potential and Management of Marine Fisheries Resources in Indonesia, *Indonesian Journal of Science Edukatika (JSEI)* 3, no. 2 (2021), p. 31.

⁵⁰Ade Irma Junida, Luhut: Indonesia leads BBNJ agreement implementation, *Antara Indonesia News Agency*, last modified 2023, accessed March 1, 2024, <https://www.antaraneews.com/berita/3736416/luhut-indonesia-pimpin-implementasi-perjanjian-bbnj>.

a result, issues arise regarding the management of large migratory species, which may cross Indonesian waters and areas beyond national jurisdiction.⁵¹

To address these challenges, the United Nations Convention on the Law of the Sea (UNCLOS) plays an important role. UNCLOS mandates cooperation among states for the conservation and sustainable management of fisheries resources, particularly those in exclusive economic zones and high seas areas.⁵² However, extending these principles to the conservation of marine biodiversity in areas beyond national jurisdiction presents complexities and debates, particularly regarding the utilization of marine genetic resources.⁵³

In essence, Indonesia's geographic location and the surrounding biodiversity-rich marine environment underscore the importance of effective international cooperation and legal frameworks, such as UNCLOS, in managing shared marine resources. However, as the marine biodiversity beyond national jurisdiction (BBNJ) negotiations progress, reconciling different perspectives and interests among countries will be critical to achieving a sustainable and equitable outcome.⁵⁴

2) Benefit sharing, capacity building, and transfer of marine technology

Indonesia as a developing country currently lacks the technological capacity to directly exploit resources in areas beyond its national jurisdiction, such as deep-sea research or biodiversity. With this limitation, Indonesia emphasizes the importance of technology transfer, access to genetic resources and capacity building, which are critical to Indonesia's development, especially in marine scientific research and biodiversity exploration in marine areas.

In addition, Indonesia also wants to improve its economy, technology and industry. Since joining the G-20 in 2008, a group that represents the world's major economies, Indonesia has sought to elevate its status further. With its sustainable growth trajectory, Indonesia anticipates utilizing various natural resources, including those recently discovered in the oceanic region. By ratifying the BBNJ, Indonesia can strengthen its national capacity in marine technology.⁵⁵

3) Participation in the international arena

The 1945 Constitution provides an important mandate for Indonesia, namely to participate in maintaining world peace. This constitutional obligation is interpreted as a call for Indonesia to not only engage, but also lead actively in the international arena, particularly in the formation of international law. Recognizing the pivotal role of international collaboration in fostering prosperity and maintaining global peace and order, Indonesia has consistently demonstrated its commitment to this cause.

An important chapter in Indonesia's international engagement unfolds in the realm of maritime law. Throughout its history, Indonesia has been a proactive participant in various conferences on the law of the sea, landmark meetings that eventually gave birth to the United Nations Convention on the Law of the Sea (UNCLOS). In particular, at the

⁵¹Gulardi Nurbintoro and Haryo Budi Nugroho, *op.cit.* p. 299.

⁵²Article 63 UNCLOS

⁵³Gulardi Nurbintoro and Haryo Budi Nugroho, *loc.cit.*

⁵⁴*ibid*

⁵⁵<https://www.antaranews.com/berita/3736416/luhut-indonesia-pimpin-implementasi-perjanjian-bbnj>, accessed March 1, 2024.

Third Conference, Indonesia championed the concept of humanity's common heritage in the deep seabed region. This principled stance underscores Indonesia's dedication to fair and equitable governance of global resources.⁵⁶

D. CONCLUSION

Conservation regulations in international seabed area under BBNJ covers a wide range of aspects, from the protection and preservation of natural resources to sustainable management. The BBNJ Agreement considers conservation from a protection and preservation standpoint through two approaches: first, through the establishment of area-based management tools; and second, by requiring environmental impact assessments of activities on the high seas and international seabed. In addition, conservation in the context of management is addressed in the BBNJ Agreement through equitable benefit sharing, technology transfer, and capacity building. Indonesia's ratification of the BBNJ Agreement is particularly important given its unique geography as an archipelago with a large marine area, the surrounding marine biodiversity of which demands effective protection as much of this area lies beyond national jurisdiction. Indonesia also has strategic interests in benefit sharing, capacity building and technology transfer. Ratifying this agreement can strengthen national capacity in marine technology and provide better access to marine genetic resources. ratification of the BBNJ agreement can also strengthen Indonesia's commitment to ocean management. Indonesia affirms its role and commitment in maintaining marine biodiversity and ensuring the sustainable use of marine resources, making a positive contribution to global ocean governance.

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⁵⁶Gulardi Nurbintoro and Haryo Budi Nugroho, *op.cit.* p. 297.

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