Legal Recognition of Coastal Communities in Marine Protected Areas: An Imperative for Indonesia

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Abstract. Marine Protect Areas (MPA) is one of the practical tools to conserve and protect the marine environment, which has been promoted globally. Besides being able to conserve biodiversity, MPAs can also protect a few human values related to the ocean. Ecologically, MPAS has been proven to be effective in protecting or stopping habitat and ecosystem degradation and improving marine resources and biodiversity. However, not all MPAs implementations are managed effectively due to weak governance and law enforcement. Accordingly, maintaining the excellent quality of the sea environment could not just depend on the MPAs. Furthermore, each marine environment has its uniqueness; thus, the management and protection system could not be executed by one template. Hence, it is essential to explore the potential of coastal communities' laws, customs, and values in maintaining marine diversity in Indonesia. Therefore, this research will conduct qualitative legal research through a literature study. This study concludes that Indonesian law recognizes the essential participation of coastal communities in managing MPAs.

Keywords: MPAs, Community, Participation

1 Introduction

Most of the planet's surface, around 71%, consists of marine areas. All parts of the ocean are integral. Furthermore, the ocean is home to the world's biodiversity and plays a significant role in climate change, which is globally known. The ocean is a crucial natural resource for people worldwide. Marine sustainability depends on the quality of international cooperation and compliance with international law.[1] A number of international cooperation and international laws are formed to protect and restore marine biodiversity through universal or regional cooperation and general or specific treaties.

Marine Protect Areas (MPAs) are effective tools to conserve and protect the marine environment, which has been promoted globally.[2] Besides being able to conserve biodiversity, MPAs can also protect a few human values related to the ocean. Ecologically, MPAs have been proven effective in protecting or stopping habitat and ecosystem degradation and improving marine resources and biodiversity.[3] Therefore, Indonesia has 196 MPAs with a total area of 23.4 million hectares until December 2019.[4] Furthermore, MPAs also have been established in the six countries of the Coral Triangle region (Indonesia, Malaysia, Papua New Guinea,

Philippines, Salomon Island, and Timor-Leste) in response to the loss of a number of valuable marine ecosystems.[5]

According to Article 63 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS), Coastal States are required to collaborate with international organizations, both regional and global, to safeguard and maintain marine biodiversity. Coastal communities also play a crucial role in protecting the environment through cooperation. There are a few strong reasons why indigenous rights and biodiversity conservation have a robust connection. Marine spatial management in the traditional form is implemented by following the culture that lived in the society, and local ecosystems are ubiquitous in indigenous cultures that rely on marine resources. For example, common habits in Melanesia and Polynesia, extractive activities are limited except for special occasions (village feasts and funerals).[6] Conserving the coastal marine environment can be successful if coastal communities are seen as allies rather than being excluded from their own territory. It is important to provide them with a better understanding of positive conservation behavior and emphasize that the participation of coastal communities is essential for maintaining marine biodiversity.[7]

According to Article 29 of the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), indigenous peoples have the right to conserve and protect the environment, as well as the productive capacity of their lands, territories and resources, and States are required to establish and implement programs to assist indigenous peoples to conserve and protect these resources without discrimination. Indigenous peoples regulate and manage territories and areas, including coastal communities with significant biodiversity. This management is based on their history, life, sustainable use, and cultural values. In Australia, these areas are known as Indigenous Protected Areas, while in Costa Rica, they are known as Indigenous Reserves.[8] In general, there is a harmony between indigenous peoples and coastal communities and nature. Not only do they use and care for the natural resources as a source of livelihood, but they also hold many socio-cultural values that support the diversity of the earth.[9]

This article discusses the legal recognition of coastal communities under international and national law, with a focus on Indonesia's diverse range of communities that depend on marine resources for their livelihoods and well-being, often in poverty-stricken contexts. To ensure equitable and inclusive governance of marine protected areas (MPAs), particularly since the majority of MPAs are located in nearshore areas, the Indonesian government aims to establish approximately 10 million hectares of new MPAs. Communities can be involved throughout the design and implementation stages of the MPA.[4]

Various studies regarding MPAs have been conducted from multiple disciplinary points of view, including marine, fisheries, economics, and law. First, using a legal framework, Sri Wartini conducted a study regarding the implementation and establishment of MPAs in Raja Ampat based on the international law perspective. It was established that the MPAs in Raja Ampat had been per the international law regulations, especially the United Nations Convention on the Law of the Seas. Therefore, it can be used as best practice in forming MPAS in other regions to achieve sustainable fisheries.[10] Subsequently, Adrian Nugraha examined the supervision and progress of MPAs from a national and international legal perspective.[2]

Besides the legal perspective, MPAs studies have also been conducted in economic disciplines. For example, Mariska and Bush examined the role of private parties as initiators of marine conservation programs in Indonesia. They argued that the private sector has the potential to initiate the formation and management of MPAs. Therefore, the concept of Entrepreneurial Marine Protected Areas (EMPAs) is a term introduced in this study to explain the potential of private parties to develop street vendors. Furthermore, this study postulates that cooperation among various stakeholders, including the government and local and private communities, should be promoted to maximize the potential of MPAs.[11]

2 Method

I propose to conduct qualitative legal research by way of a literature study. The literature study will scrutinize the primary and secondary sources of law related to MPAs, indigenous peoples, and coastal communities' rights. The comparative approach is utilized in this study. In addition, the comparative approach is necessary to look at other states' practices on how they have tried to accommodate coastal communities' interest in ocean resources in the middle of the expansion MPAs trend.

3 Result and Discussion

3.1. Marine Protected Areas in Legal Instruments: International and Indonesian Perspective

Marine Protected Areas (MPAs) are recognized as an essential tool for the conservation of the diversity and productivity of the biological resources of the oceans, including the ecological life-supporting systems. MPAs have the potential to contribute significantly to developing and managing modern fisheries, recognizing the need to protect biological diversity to maintain the structure, functions and processes that support fisheries and all marine life.[12] MPAs are typically established by coastal states to protect specific areas within their waters.[13] The establishment of protected areas in ocean is a key action under Article 8(a) of the Convention on Biological Diversity (CBD). The Aichi Target 11, adopted under the CBD, commits states to conserving 10% of coastal and marine areas by 2020 through the establishment of effective, equitable, and well-connected systems of protected areas and other area-based conservation measures that are ecologically representative.[14]

The most commonly cited definition of MPAs can be found in the 1988 Resolution of the 17th General Assembly of the International Union for the Conservation of Nature (IUCN), which is a follows:[15]

"Any area of intertidal or subtidal terrain, together with its overwhelming waters and associated flora, fauna, historical and cultural features, which has been reserved by legislation to protect part or all of the enclosed environment."

On a regional scale, Convention of OSPAR has established MPAs as:[14]

"An area within the maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have been instituted to protect and conserve species, habitats, ecosystems or ecological processes of the marine environment."

From these definitions, three core elements of an MPA are derived: a geographically defined area with a conservation purpose or objective, protective conservation purpose or objective, protective measures to regulate human activities, and adoption of such measures within the area.

The United Nations Convention on the Law of the Sea (UNCLOS) does not explicitly mention MPAs, but they can be inferred. This gives them authority to designate MPAs for environmental purposes, including mitigation and adaptation (Article 2 UNCLOS). Coastal states have the right to establish and manage Marine Protected Areas (MPAs) within their jurisdictional waters to safeguard coastal and marine habitats from damage and degradation. This can be achieved by imposing restrictions on activities such as trawling and aquaculture to ensure that these habitats continue to serve as carbon sinks.[14] Additionally, MPAs can be established in Exclusive Economic Zones (EEZs) to conserve and manage living resources or protect the marine environment based on the sovereign rights and jurisdiction of coastal states as outlined in Article 56 of UNCLOS. Coastal states have the authority to regulate and limit human activities within these MPAs to minimize the risk of harm and enhance the resilience of the ecosystem or habitat.

- 1. MPAs are known by various names, such as "specially protected areas", "marine reserves, preserves", "sanctuaries", "wilderness areas", "specially managed areas", and "parks". These names have a range of goals, from strict protection to allowing multiple human uses. The International Union for Conservation of Nature (IUCN) has established a category system to distinguish the levels of management which may apply to the site, namely:[14]
- 2. Category IA, also known as 'Strict Nature Reserve' or 'Wilderness Area', refers to protected areas (PAs) managed for science and research;
- 3. Category IB areas is protected areas managed for wilderness protection purposes, also known as 'Strict Nature Reserve' or 'Wilderness Area';
- 4. Category II, a protected area managed for ecosystem protection and recreation, is known as a 'national park';
- 5. Category III refers to 'Natural Monument', which is protected areas managed for the preservation of specific natural features;
- 6. Category IV refers to 'Habitat/Species Management Area', which is protected areas managed for the conservation of species, habitats, and ecosystems through management intervention;
- 7. Category V refers to 'a Protected Landscape/Seascape', which is managed for the purpose of the protection of landscapes and seascapes as well as for recreational purposes; and
- 8. Category VI refers to 'Managed ResourceArea', which is protected areas managed for the sustainable use of natural ecosystems.

Marine Protected Areas (MPAs) can be established in various ways. For instance, they can be defined based on a protected water column and can be either vertical or horizontal.[16] To conserve diverse life, an approach must occur in program management effective ecosystem covers ecosystem the sea and the areas that affect it, for example, land areas including the islands.[16] Protection can be achieved through various means, typically through legislation, but not necessarily. In the Pacific, MPAs have been created on the basis of traditional uses.[12]

Research by the US National Research Council and other institutions shows that, if managed effectively, MPAs can contribute to the conservation and sustainable use of biological diversity in coastal zones, among others as following:[12]

- 1. it is crucial to preserve sustainable populations of endangered or threatened species;
- 2. this means preserving both species and genetic diversity;

- 3. preserving seagrass beds, mangroves and coral reefs is essential for breeding, nursery and foraging habitats;
- 4. sufficient in size to ensure their long-term viability and to include representative examples of marine life and ecosystems;
- 5. the item is considered unique, rare, or possesses other exceptional qualities;
- 6. it is crucial for benthic habitats, such as seagrass beds, coral reefs and sponge beds, are spatially complex and slow to recover;
- 7. spawning sites are areas where species, such as groupers, congregate in large numbers to reproduce. These sites are often subject to commercial fishing pressure;
- 8. offshore nursery areas, migratory corridors, and other population bottlenecks are vulnerable; and
- 9. reference sites for long-term research and monitoring.

MPAs can be a critical tool for restoring degraded seascapes and promoting the recovery of overfished fish stocks. Fisheries management agencies worldwide have implemented MPAs to rebuild lost biodiversity.

Indonesia uses the term Kawasan Konservasi Perairan (KKP) instead of MPAs. KKP is defined as "water areas that are protected and managed with a zoning system to achieve sustainable management of fish resources and their environment", as stated in Article 8(1) of Government Regulation No. 60 Year 2007 on Conservation of Fish Resources. Furthermore, Article 8 paragraph (2) of the Government Regulation specifies that the MPA comprises a National Marine Park, Marine Tourism Park, Marine Nature Reserve, and Fishery Sanctuary. Additionally, MPAs are already regulated in Law No. 31 of 2004, and amendments to Law No. 45 Year 2009 on Fisheries through art. 13 of the Law Number 31 Year 2004 define that "the management of fish resources is implemented to conserve ecosystems, preserve fish species, and preserve fish genetics."

According to Article 6, paragraphs (1) and (2) of Government Regulation No. 60 Year 2007, ecosystem conservation aims to protect, preserve, and utilize ecosystem functions as a habitat for supporting aquatic life in the present and future. Fisheries conservation means the conservation, preservation and use of fish resources for the benefit of present and future generations. The conservation of fish genetics aims at the protection, conservation and utilization of fish resources to ensure their existence, availability and sustainability for the present and future generations. Management of marine conservation areas is carried out by the government and local authorities according to their respective jurisdictions. The management organizational unit manages the area according to the water conservation area management plan created by the organizational management unit. Each management plan must include zoning information for the conservation area, as outlined in Article 8, paragraphs (2) and (3) of Government Regulation No. 60 Year 2007. Management of marine conservation areas can form a network of areas at the local, national, regional, and global levels. However, the regulations still indicate that the management of marine environmental protection is primarily the responsibility of the government. Meanwhile, the IUCN divides several MPA's type governance, including[4]:

- 1. MPA governance by Government, namely Government full responsible on MPAs management.
- 2. MPA shared governance, namely KKP managed by together by various stakeholders.

- 3. MPAS is sovereign by private individuals and organizations, namely KKP, managed by the private sector (actors of marine business tourism).
- 4. Indigenous peoples and/or local communities govern the MPA, specifically managing MPA using traditional knowledge and local roles.

Article 7 paragraph (1) of Law Number 45Year 2009 defines MPAs in the same way as Article 8 paragraph (1) of Government Regulation Number 60 Year 2007. These regulations prohibit catching or cultivating fish using destructive methods such as "chemicals, biological substances, explosives, or other means that endanger" the sustainability of fish resources and the environment in Fisheries Management Areas. These laws prohibit pollution, breeding genetically modified fish, and using drugs that endanger fish resources, the environment and human health.[2]

Currently, Indonesia has 23.4 million ha MPAs, and the Government commits to expand the MPAs to 32.5 million hectares by 2030. MPAs in Indonesia is regulated by the Ministry of Marine Affairs and Fisheries and the Ministry of Environment Life and Forestry.[4] This impact on the management of two different permits by the entrepreneur, namely permission management based on Law no. 1 of 2014 and permission concession based on PP No. 36 of 2010.[2] Indonesian MPAs contribute significantly to the management and protection of the marine environment as well as conserving the structure ecosystem sea.[12] MPAs can have different goals, such as destination research and science knowledge, maintaining the benefit of the environment, protecting and preserving marine species and diversity, tourism, education, and sustainable use of natural resources.[10] On the other hand, the MPAs aim for the interest of living and mineral marine resource conservation by forbidding exploitation activity, such as fishing or known as "no-access" and "no-take" zones.[17]

MPAs are regulated by Law Number 27 Year 2007 and amendments to Law Number 01 of 2014 on the Management of Coastal Areas and Small Islands. According to Article 1 paragraph (20), MPAs are designated areas in coastal areas and small islands with specific characteristics, which are protected in order to achieve sustainable management of coastal areas and small islands. Article 28, paragraph (4), states that a ministerial decree shall define the protected areas in the coastal zone and in the small islands. One year later, the Minister of Marine Affairs and Fisheries issued the Ministerial Decree Number 17 Year 2008, which defines the protected areas in the coastal zone and in the small islands. According to Article 4 paragraph (1) of this Ministerial De, the Category of Coastal Conservation Areas and Small Islands includes:

- 1. 'Coastal and Small Islands Conservation Areas';
- 2. 'Maritime Conservation Areas';
- 3. 'Marine Protected Areas'; and
- 4. 'Coastal Buffer Zone'.

3.2 The participation of coastal communities in the management of MAPs: learning from Indonesian regulations

According to Kusnadi, a coastal community is a fisherman, a person who is actively working in catching animals or aquatic plants with some or all of the results for sale and consumption.[18] Coastal communities are communities or communities that live and grow on the coast and are bound by local wisdom. Indonesia, an archipelagic state, covers 70 percent of the archipelago's total area. Such vast sea conditions with abundant marine resources should be able to bring coastal communities to live prosperous and prosperous, but on the other hand, coastal

communities are underdeveloped and continue to be in a marginal conditions.[19] However, as time goes by, the development of coastal areas began to be noticed. Starting from forming regulations in favor of the coastal area development program. Through Article 1 paragraph (32) of Law Number 1 Year 2014 regarding Amendments to Law Number 27 Year 2007 on the Management of Coastal Areas and Small Islands means that "communities are communities consisting of Customary Law Communities, Local Communities, and Traditional Communities living in coastal areas and islands small." Paragraphs (33), (34) and (35) of Article 1 explain that customary communities are groups of people who have traditionally lived in certain geographical areas in Indonesia due to ancestral ties, strong relationships with land, territory and natural resources, and who have customary government institutions and legal systems in their respective areas in accordance with laws and regulations. Local communities are groups that are not totally dependent on specific coastal and small island resources, but who conduct their daily lives based on customs that are generally accepted as values. Meanwhile, traditional communities are fishing communities whose traditional rights to engage in fishing or other lawful activities in certain areas within archipelagic waters are still recognized in accordance with the rules of the international law of the sea.

This regulation provides opportunities for coastal communities to participate in developing and protecting the marine environment. Article 63 of Law Number 1 Year 2014, which amends Law Number 27 Year 2007 regarding the Management of Coastal Areas and Small Islands, confirms that the government and local governments are to empower the community in improving their welfare, including decision-making and management implementation. Article 63 paragraph (4) stipulates that a Ministerial Regulation will provide guidelines for Community Empowerment. In compliance with this article, the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia established Regulation Number 40/PERMEN-KP/2014, which outlines the participation and empowerment of communities in the management of coastal areas and small islands. The Ministerial Regulation aims to promote the participation and empowerment of coastal communities in the management of coastal zones and small islands (Article 2). Article 4 of the regulation ensures equal opportunities for coastal communities to participate in the planning, implementation, and control of coastal zone and small island management. Community empowerment is defined as the provision of facilities, encouragement, or assistance to the community and traditional fishermen to enable them to make informed decisions about the sustainable utilization of coastal and small island resources.

Coastal communities have a crucial role to play in the development of the coastal zone. To achieve sustainable development, it is essential to empower these communities through community-based development, which involves planning and implementing development projects that meet the community's needs while making the most of existing natural resources and local access. Community-based development should be based on the needs of the community, rather than being formulated by outsiders or community elites who believe they have the best knowledge of what is best for the community.[20] The importance of coastal communities in protecting and managing the marine environment is evident in Law Number. 1 Year 2014, which amends Law Number 27 year 2007 regarding the Management of Coastal Areas and Small Islands.

Coastal communities have been involved in various practices that are implemented in the coastal areas of Indonesia. The local government of Batam City has established seven protection zones as Marine Management Areas (MMA) through Mayor Decree No. 114/Kpts/HK/VI/2007. Additionally, they have established Local Regulation Number 07 Year 2009 concerning Coral

Reef Management and Batam Mayor Regulation Number 27 of 2011 concerning the Strategic Plan for Batam City Coral Reef Management 2011-2016. The regulation aims to direct the sustainable management of fish resources and the environment in coastal areas, with the goal of maintaining the ecosystem of Batam City's coastal area. Additionally, community institutions will be developed to manage coral reefs. There are two groups involved in the protection of coral reefs: the Community Monitoring Group (*Kelompok Pengawas Masyarakat/Pokwasmas*) which monitors the destruction of coral reefs, and the Coral Reef Resource Management Agency (*Lembaga Pengelola Sumberdaya Terumbu Karang/LPSTK*) which facilitates community activities that promote alternative livelihoods to reduce activities that lead to coral reef destruction. These alternative livelihoods can gradually change people's mindsets. If the previous livelihood pattern was harmful to the environment, it has now shifted towards cultivating and processing eco-friendly fishery products. Furthermore, there has been a shift from individual fishing to group work. Currently, many fishermen are aware of the advantages of coral reefs and mangroves for fish breeding. Therefore, they are highly motivated to participate in activities related to the management and conservation of these ecosystems.[21]

In Indonesia, the awig-awig tradition has been implemented as an example of co-management to revitalize community participation in marine resource management in East Lombok. This program is part of "the Coral Reef Rehabilitation and Management Program (COREMAP II)". The awig-awig tradition, a relic of the ancestors of the people of East Lombok, considers it one of the most successful practices.[22] Furthermore, the implementation of Sarano Wali customary law by the Kaombo community in Southeast Sulawesi has contributed to the strengthening of MPAs. Kaombo is one of the customary law communities that follows Sarano Wali's rules for managing an area, and it is implemented by all Cia-Cia communities. Kaombo is an area where individuals are prohibited from taking something that is not rightfully theirs, and where traditional and social sanctions are in place for any violations. The participation of the Cia-Cia communities is based on several laws approved by stakeholders. On October 24, 2015, the Guardian and Kaombo Customary Territories were reinforced through an agreement between the customary law communities of Sarano Wali, the Wakatobi National Park Office (Balai Taman Nasional Wakatobi/BTNW), the Wali Village Chief, the Village Forest Counseling Center (Sentra Penyuluhan Kehutanan Pedesaan/SPKP), community leaders, representatives of local government, Yayasan WWF Indonesia, and local NGOs. The text describes three key developments: firstly, the establishment of Regent Regulation Number 29 Year 2019 on 2 September 2019, which focuses on the protection and management of coastal and marine resources based on the customary law communities of Sarano Guardian in Binongko Island, Wakatobi District. The Cooperation Agreement (Perjanjian Kerjasama/PKS) was signed between the Head of BTNW and the Sarano Wali Customary Institution (No. 1146/T.21/TU/KSA/08/2019). According to data from the 2017 Kaombo ecological condition monitoring and repeat monitoring, Kaombo has been proven to have positive outcomes in terms of biodiversity, social, and economic factors. The biodiversity outcomes comprise an increase in the number of small fish.[4]

Although several efforts to protect the marine environment involving coastal communities have shown positive results, there are still coastal areas protection that has not maximally involved coastal communities. For example, the establishment of Regional Water Conservation Areas (*Kawasan Konservasi Daerah*/ KKPD) does not integrate the concept of KKPD with local wisdom (Laot Adat Law), which has been carried out for generations in Aceh. In addition, the establishment of the KKPD in Aceh did not fully involve the Laot Customary Law Community/MHAL from the initiation process to the determination. In contrast, the Laot

Customary Law Community has unwritten laws, such as the method of catching fish at sea (*meupang*), a ban on fishing on certain days (*Uroe Pantang Laot*), and procedures for resolving disputes that occur between fishermen.[23]

Indonesian Law Number 27 the Year 2007 *junto* Law Number 1 Year 2014 on Management of Coastal and Small Islands provides recognition and support for coastal communities' participation in managing and protecting marine resources. However, all stakeholders still need to build trust in each other and a fair division of roles. Thus, the management of marine conservation areas in Indonesia can become a conservation area that is fair, democratic, and based on the people and based on the preservation of ecosystems. Marine conservation areas have an important role and meaning in life because they have infinite fundamental and intrinsic ecological, economic, and social values. Therefore, good management is needed, including emphasizing decentralization and community participation.

In several countries, including Turkey and Japan, the involvement of coastal communities in marine conservation efforts has been recognized as having a positive impact on marine ecosystems. Since 2012, local communities have been actively involved in conserving the Gökova Bay Special Environmental Protection Area, Turkey's first and only actively managed marine protected area. The "Six No-Fishing Zones (NFZs)" in Gökova Bay cover almost 150 kilometers of marine and coastal areas. The impact of these marine conservation zones and patrolling activities in Gökova Bay has improved the overall health of the ecosystem, increased the fishing stock, and boosted the income of local fishing communities and cooperatives. This initiative also introduced a model for marine patrols to be carried out by the local community in close cooperation with the Coast Guard, Fisheries, and Aquaculture Departments.[24]

Japan also has traditional knowledge that has a good impact on improving the marine environment health, namely "*satoumi*". *Satoumi* is a traditional method of human interaction that can enhance ecosystem productivity and biodiversity. Japanese fishermen modify existing environments to make them hospitable to specific species by setting up nets to deter new predators, and restore or expand environments by transplanting, propagating, or cultivating various species that change the habitat.[25] *Satoumi* integrates local traditional and scientific knowledge into coastal management, with cooperation and support between scientists, government agencies, and fishermen to ensure that knowledge is shared.[26]

Although the participation of coastal communities has been accommodated in the implementation of MPAs in several countries through national laws and policies, no international law regulates the coastal people's participation in the implementation of marine environmental protection specifically. UNCLOS highlights the responsibility of member states to safeguard the marine environment. Article 145 of UNCLOS requires each Authority to take such measures as may be necessary to ensure adequate protection of the marine environment from any harmful activities in the Area covered by the Convention. According to Article 145 of the 1982 UNCLOS Convention, the authority must establish rules, regulations, and procedures to protect and conserve the resources and assets of the area and prevent damage to flora and fauna. Furthermore, Article 192 of the 1982 Convention stresses that each State is under a duty to protect and conserve its marine environment. The above provisions suggest that the involvement of coastal communities in the implementation of marine protected areas is a viable effort for the protection of the marine environment.

While not specifically addressing marine biodiversity conservation, several international legal instruments recognize the critical role of indigenous peoples and local communities in

conservation efforts. Article 8 paragraph (j) of the 'Convention on Biological Diversity' (CBD) requires CBD parties to respect, preserve, and maintain traditional knowledge that is relevant to the conservation and sustainable use of biological diversity, and to promote its more comprehensive application. The '10th Conference of Parties' (COP10) made additional decisions to broaden the scope of conservation efforts for indigenous and local communities. These decisions include protected areas, sustainable use of biodiversity, biodiversity and climate change, and marine and coastal biodiversity.[8] Furthermore, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) acknowledges that indigenous knowledge, cultures and practices can contribute to sustainable and equitable development and sound environmental management.[27] The Declaration also sets out other rights for indigenous peoples and local communities. These include the right to self-determination, the right to participate in decision-making, the right to maintain control over their cultural heritage, and freedom from discrimination.[8]

The role of coastal communities in implementing MPAs has been recognized in several countries, either through regulations or policies, especially in Indonesia. International Law has also regulated the rights of indigenous peoples and local communities to play a role in nature conservation efforts, although MPAs are not explicitly stated. However, the international legal instrument is sufficient to become a reference for countries to expand the involvement of coastal communities in implementing and establishing MPAs, especially in Indonesia. To meet its commitment to expand MPAs to 32.5 million ha by 2030, Indonesia should increase the involvement of coastal communities in establishing and managing MPAs.[4] Thefore, the Government of Indonesia is advised to involve all stakeholders in managing MPAs, including coastal communities, rather than working individually. Moreover, challenges to the sea will be more complex in the future, such as sea-rise levels, ocean acidification, and other adverse impacts of climate change, as well as illegal, unregulated, and unreported fishing (IUU fishing). Therefore, it is necessary to review the readiness of regulations, coastal communities, and there needs to be a review of the preparedness of legislation, coastal communities, and marine protected areas (MPA) to mitigate the adverse effects of climate change.

Pancasila and the Constitution of the Republic of Indonesia emphasize the importance of managing and protecting the marine environment with the principle of *gotong-royong*. This principle is based on giving respect to each individual as a creature of God who has dignity in unity. The fourth precept is the basic principle behind the application of *gotong-royong* in decision-making processes that involve all potential citizens. Dialogue can be used to practice and appreciate the values of *Pancasila* in daily life. It recognizes and values diversity through personal and group experiences, local traditions, languages, races, tribes, beliefs, and symbolic expressions that span the Indonesian archipelago. The Constitution requires policies for the benefit of the state to be implemented with the principle of full sovereignty in the hands of the people. Pancasila as a way of life emphasizes that Pancasila is the basic norm of the state (*staatsfundamentalnorm*) and also the ideals of law (*rechtsidee*).

4 Conclusion

International Law has accommodated the participation of indigenous peoples and local communities in managing Protected Areas (PAs). Although there is no international instrument regulating the role of coastal communities in the management of Marine Protected Areas (MPAs), several policies and decisions of international forums have called for the

implementation of marine environmental protection to involve coastal communities and traditional knowledge. Meanwhile, Indonesia has recognized and regulated the involvement of coastal people in protecting the marine environment, including MPAs. Nevertheless, to enhance the management of MPAs in Indonesia, it is crucial to involve coastal communities. This is especially important as threats to the marine environment are becoming increasingly complex.

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