

## **Recognition of Indigenous Peoples Values in Indonesia for Policy Addressing Climate Change**

**Ilham Dwi Rafiqi**  

Faculty of Law, Universitas Hang Tuah, Surabaya, Indonesia

✉ corresponding email: [ilham.rafiqi@hangtuah.ac.id](mailto:ilham.rafiqi@hangtuah.ac.id)

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### **Abstract**

Climate change has a significant impact on vulnerable communities; one of which is indigenous people. The dependence and closeness of indigenous people to the environment and natural resources have indicated that they must be the first to experience the negative impacts of climate change. This abstract focuses on the need of policy reform and strategies to deal with climate change in Indonesia through recognition of the environmental values amidst indigenous people. The current management of climate change in Indonesia shows that there are gaps and weaknesses in the participation of indigenous people for policy making and moves for climate change mitigation and adaptation. The article begins by explaining the guarantee of legal protection and identified the rights of people who are disturbed by the impacts of climate change, including examining whether existing climate change policies in Indonesia are in favor of indigenous people. Apart from that, the exportation of environmental values depicted by indigenous people in Indonesia is also a basis for proposing recognition about climate change handling policy strategies. To answer legal questions, legal and literature studies were chosen. The proposed recognition of environmental values would aim to protect and maintain the existence of indigenous people amidst the threat of climate change. Research findings would become suggestions to the government,

starting with reforming problematic policies to taking further steps in recognition of prescribed environmental values. At the end, this article is strongly expected to contribute significantly to the midst of 'climate legislation' and the on-going formulation to generate strategies policy for handling climate change in Indonesia. For existing conditions, this article serves to be a consideration for the need of legal reform in handling climate change policy related to indigenous people.

## Keywords

*Climate Change, Indonesia's Indigenous People, Environmental Values*

## Introduction

Climate change is crucial problem and must be addressed immediately. Since 1850s, industrial activities and development of human transportation have been releasing greenhouse gas emissions into the atmosphere, causing an increase in the earth's temperature of around 1.1°C. It exceeds the natural increase rate of normal temperature that should occur. If we refer to the pattern of climate change that has happened over thousands of years, the earth should have been undergoing the cooling phase, not warming.<sup>1</sup>

Climate change is a change in the average climate conditions and climate variability from one specific period to another as a result of human activities.<sup>2</sup> The term climate change is often used interchangeably with 'global warming' even though the global warming phenomenon is only a part of climate change. It is due to the fact that climate parameters are not only based upon temperature, but also other

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<sup>1</sup> Over the last 1 million years the earth has experienced natural cycles of climate change, alternating between ice ages and warm periods. This gradual change in temperature has averaged an increase of about 0.5 degrees Celsius over the last 10,000 years. Currently, the earth should be experiencing a natural cooling phase that began around 5,000 years ago, and is heading towards an ice age in the next 1,500 years. Alan C. Mix Shaun A. Marcott, Jeremy D. Shakun, and Peter U. Clark, "A Reconstruction of Regional and Global Temperature for the Past 11,300 Years," *Science* 339, no. 6124 (2013): 1198–1201.

<sup>2</sup> Noam Angrist, Kevin Winseck, Harry Anthony Patrinos, Joshua Graff Zivin, "Human Capital and Climate Change," *The Review of Economics and Statistics* March 18 (2024): 1–28.

related ones, such as precipitation, cloud conditions, wind, and solar radiation.<sup>3</sup>

Climate change brings about impacts to all aspects of human life, and is felt throughout the world. Climate change threatens ecosystem stability and diversity of biodiversity. Damages that occur at the earth's physical and ecological systems can also be proven by deflation of ozone layers that span over the stratosphere, a decrease of diversity of living creatures, land degradation, and changes of water system or cycle. Climate change can also influence human health, such as causing illness or death related to extreme temperatures and their effects.<sup>4</sup>

Not only environmental and health impacts, climate change will also cause impacts to human social and economic aspects. The impacts of climate change more and less influence economic development. It is estimated that global Gross Domestic Product (GDP) in 2050 will decrease by 4-18%, while ASEAN is expected to lose 4-37% of its GDP.<sup>5</sup> The economic problems that occur worsen people in maintaining their livelihoods, which thus can exacerbate social problems including poverty and hunger.<sup>6</sup>

Indonesia is one of the countries most vulnerable to the impacts of climate change. According to a 2021 World Bank report, Indonesia is ranked the top three countries most vulnerable to climate change risks, with high exposure to all types of risks, including floods and extreme heat.<sup>7</sup> It is the fact as the Indonesian Meteorology, Climatology and Geophysics Agency (BMKG) states that the Indonesian sea level is estimated to rise by 0.8-1.2 centimeters (cm) per year due to climate change. Further, climate change has caused the rise of average

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<sup>3</sup> Danielle Goldwert, Kimberly C. Doell, Jay J. Van Bavel, and Madalina Vlasceanu, "Climate Change Terminology Does Not Influence Willingness to Take Climate Action," *PsyArXiv* February 5 (2024): 1–12.

<sup>4</sup> K. R. Shivanna, "Climate Change and Its Impact on Biodiversity and Human Welfare," *Proc. Indian Natl. Sci. Acad* 88, no. 2 (2022): 160–171.

<sup>5</sup> Marshall Burke, "The Global Economic Costs from Climate Change May Be Worse Than Expected," Brookings, 2015.

<sup>6</sup> Matthias Ruth Rebecca Gasper, and aAndrew Blohm, "Social and Economic Impacts of Climate Change on the Urban Environment," *Current Opinion in Environmental Sustainability* 3, no. 3 (2011): 150–57.

<sup>7</sup> World Bank Climate Change Knowledge Portal, "Indonesia - Climate Change Overview," 2021.

temperature in Indonesia by 0.45 to 0.75 Celsius degree.<sup>8</sup> This condition certainly affects the existence and condition of small islands and coastal areas in Indonesia. Even in terms of economic consequences, a study by the Ministry of National Development Planning/National Development Planning Agency has indicated Indonesia to suffer from economic loss of up to IDR 544 trillion during 2020-2024 because of climate change.<sup>9</sup>

The Indonesian government has taken out some strategies to deal with climate change, either by means of climate change adaptation or mitigation, which starts from policy-making to action-taking to increase climate awareness. In addition, Indonesia has ratified international legal instruments, among others, which are a form of the Indonesian State's commitment to supporting the legal efforts of developed countries in reducing carbon emissions.<sup>10</sup>

Indonesia has also set a target to reduce its emissions by 2030, with 31.89% accomplished after its own strategies (unconditional) and 43.20% due to international support (conditional). This result is higher than Indonesia's previous Nationally Determined Contribution (NDC) policy, with 29% on its own strategies and 41% on international support. Despite the fact, there are still many efforts being made, such as use of renewable energy, carbon taxes, carbon trading, formation of the National Council for Climate Change, arrangement of a National Registry System for Climate Change Handling (SRN-PPI), Climate Village program, and so forth.

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<sup>8</sup> Delivered by Donaldl Permana (BMKG Central Climatology Research and Development Coordinator) in a virtual seminar forum related to sustainable climate, Denpasar, Bali, Thursday 18 April 2024. Donaldl Permana, "Indonesia's Sea Level Continues to Rise, Small Islands Disappear," *AsiaToday.Id*, 2024.

<sup>9</sup> Komunikasi LCDI, "Bappenas Prediksi Kerugian Akibat Perubahan Iklim Rp 544 T, Begini Rinciannya," 2022.

<sup>10</sup> Indonesia has ratified international agreements related to climate change, including: (1) Paris Agreement on the United Nations Framework Convention on Climate Change at Law no. 16 of 2016 concerning Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change; (2) United Nations Framework Convention on Climate Change 1992 (UNFCCC) at Law no. 6 of 1994 concerning Ratification of the United Nations Framework Convention on Climate Change; (3) Kyoto Protocol at Law no. 17 of 2004 concerning Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change; and (4) Presidential Regulation No. 33 of 2005 concerning Ratification of the Beijing Amendment to the Montreal Protocol on Substances that Deplet the Ozone Layer.

One of problems that still exists today regarding climate change planning and policy-making in Indonesia is the lack of participation and involvement of indigenous people. As a result, policies, programs, and actions carried out by the government in the handling of climate change bring about damages to traditional people. Indigenous people, to be specific, are so vulnerable that they become the first to face the direct impacts of climate change following their need of and closeness to the environment and natural resources.

Indonesia is a country with lots of indigenous people. The Alliance of Indigenous People of the Archipelago (AMAN) have noted that in 2023, there would be around 4.57 million indigenous people living in Indonesia. This number seems to be less than the real number of indigenous people in Indonesia today.<sup>11</sup> In terms of territoriality, according to data from the Customary Territory Registration Agency in March 2024, there were 1,425 Customary Territories covering an area of 28.2 million hectares in Indonesia. However, the total area of customary territories whose recognition had been determined by regional governments only reaches 240 customary territories with an area of 3.9 million hectares, which means that only 13.8% of the total customary territories are registered with the Customary Area Registration Agency.<sup>12</sup> Moreover, Indigenous people in Indonesia are located in various regions, forests, mountains, and sea coasts. With the current climate change, the existence of indigenous people in Indonesia has become vulnerable and threatened.

This research will present a new perspective by explaining the roles of indigenous people in Indonesia, which actually can contribute to climate change anticipation, such as adaptation and mitigation actions. To arrive at the research goals, the research exports values, especially depicted at indigenous people in Indonesia. Prior to it, all-inclusive identification and analysis will be carried out on policies and strategies for climate change handling in Indonesia, whether they support and guarantee the rights of indigenous people or not. Moreover, in the 2025 Climate Change Performance Index (CCPI) Indonesia

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<sup>11</sup> Aliansi Masyarakat Adat Nusantara (AMAN), “Catatan Tahun 2023 Aliansi Masyarakat Adat Nusantara (Masyarakat Adat Di Tahun Politik: Ditengah Hukum Refresif Dan Cengkeraman Oligarki)” (Jakarta, 2023).

<sup>12</sup> Badan Registrasi Wilayah Adat, “Status Pengakuan Wilayah Adat Di Indonesia Pada Hari Kebangkitan Masyarakat Adat Nusantara 2024” (Jakarta, 2024).

scored 50.84 and was ranked 42nd. Indonesia dropped from its previous position of 36. The government's priorities and actions in creating climate change policies are still unclear.<sup>13</sup> It is at this moment that the idea in this study is presented to improve climate change policies in Indonesia in the future which focus on recognizing the values of local wisdom of indigenous peoples in responding to climate change.

This research will definitely not examine all indigenous people in Indonesia, but rather purposively pick up a number of indigenous people in Indonesia with remarkable environmental values depicted at their daily activities. The environmental values found in indigenous people are, moreover, elaborated to be recognized as a material for legal and policy reform in the handling of climate change in Indonesia. It is strongly expected that the research can yield a scientific and practical contribution to dealing with climate change consequences in Indonesia.

## Method

Method used in this research was legal studies, also known as normative legal research, as it was focused on studying legal rules or norms in positive law in relationship with climate change adaptation and mitigation policies in Indonesia. Justification about these legal rules was mainly concerned to the extent to which climate change policies involved or accommodated the environmental values of indigenous communities. Statutory and conceptual approaches were applied, with the former serving as a review object for all regulations related to climate change adaptation and mitigation in Indonesia. The conceptual approach was considered most widely used in this paper in order to explore, analyze, and elaborate issues of climate change and environmental values of indigenous communities in Indonesia.

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<sup>13</sup> Greenwatch, New Climate Institute, CAN International, " Climate Change Performance Index (CCPI) Ranking 2025" (Germany, 2025), <https://ccpi.org/download/climate-change-performance-index-2025/>.

## How the Law Should Work to Protect Indonesia's Indigenous Peoples from Climate Change

The first part of this paper will begin with an explanation of the theoretical framework. Many theories can be used to analyze the conditions of Indigenous legal communities. Still, in the context of this research, the most relevant theory to discuss indigenous communities facing climate change is the theory of legal protection. Legal protection functions to ensure that the basic rights of indigenous communities are recognized and protected by the state. Legal protection is also related to the recognition of existing customary legal systems, which are often more adaptive and sustainable in managing natural resources.

The existence of indigenous communities is guaranteed and protected by the Indonesian constitution, the 1945 Constitution of the Republic of Indonesia (Indonesian Constitution 1945). In Article 18B paragraph (2) of the Indonesian Constitution 1945 as a result of the second amendment, it is stated that the state recognizes and respects customary law community units and their traditional rights as long as they are still alive and by the development of society and the principles of the Unitary State of the Republic of Indonesia, as regulated in law.<sup>14</sup> The provisions of Article 18B paragraph (2) of the Indonesian Constitution 1945 are reemphasized by Article 28I paragraph (3) of the Indonesian Constitution 1945, stating that cultural identities and traditional communities are respected in line with developments over time and civilization. Apart from the Indonesian Constitution 1945, several sectoral laws also guarantee the rights of indigenous people.<sup>15</sup>

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<sup>14</sup> I Nyoman Prabu Buana Rumiarta, Ni Luh Gede Astariyani, and Anak Agung Sagung Ngurah Indradewi, "Human Rights of Indigenous People in Indonesia: A Constitutional Approach," *J. East Asia & Int'l L* 15, no. 2 (2022): 395–402.

<sup>15</sup> These laws include: 1) Law no. 39 of 1999 concerning Human Rights 2) Law no. 41 of 1999 concerning forestry 3) Law no. 22 of 2001 concerning Oil and Natural Gas 4) Law no. 20 of 2003 concerning the National Education System 5) Law no. 24 of 2003 concerning the Constitutional Court 6) Law no. 27 of 2003 concerning Geothermal Energy 7) Law no. 7 of 2004 concerning Water Resources 8) Law no. 18 of 2004 concerning Plantations 9) Law no. 31 of 2004 concerning Fisheries 10) Law no. 26 of 2007 concerning Spatial Planning 11) Law no. 27 of 2007 concerning Management of Coastal Areas and Small Islands 12) Law no. 30 of 2009 concerning Electricity 13) Law no. 32 of 2009 concerning Environmental Protection and Management 14) Law no. 18 of 2013 concerning Prevention and

The existence of indigenous communities is currently also strengthened in decisions of the Constitutional Court, such as Constitutional Court decisions No. 3/PUU-VIII/2010 and Number 31/PUU-V/2007 that emphasize the position of customary law communities, in line with the Decision No. 35/PUU-X /2012 as the reemphasis of defining customary forest status.<sup>16</sup>

The rights of indigenous people have been guaranteed by the constitution and sectoral laws and regulations as a form of legal protection guarantee. Some of these sectoral laws include Law Number 39 of 1999 concerning Human Rights, Law Number 32 of 2009 concerning Environmental Protection and Management, Law Number 39 of 2014 concerning Plantations, Law Number 27 of 2007 concerning Management of Coastal Areas and Small Islands, and many others.

In the Indonesian Constitution 1945, these rights are termed 'traditional rights of Indigenous people', but the constitution does not explain what rights the state must fulfill for Indigenous people are. In simple terms, traditional rights can be referred to as special rights inherent and owned by a community of Indigenous people based on their common origins (genealogy), common territory and other customary objects, rights to customary land, as well as natural resources contained therein.<sup>17</sup>

The traditional rights of indigenous people can be divided into 3 (three) categories. First is the right to regulate and manage themselves in matters of customary governance. Indigenous communities have their customary laws, which allows them to possess traditional institutional structures, economic and inheritance systems, and ways of conflict resolutions by means of customary courts. Second is customary rights to land and natural resources contained therein. Rights, by this category, are simply included as collective rights for the realization of economic

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Eradication of Forest Destruction 15) Law no. 1 of 2014 concerning Amendments to Law no. 27 of 2007 concerning Management of Coastal Areas and Small Islands  
16) Law no. 6 of 2014 concerning Villages.

<sup>16</sup> Rudy, Ryzal Perdana, and Rudi Wijaya, "The Recognition of Customary Rights by Indonesian Constitutional Court," *Academic Journal of Interdisciplinary Studies* 10, no. 3 (2021): 308–18.

<sup>17</sup> Chairul Fahmi, Azka Amalia Jihad, Akihisa Matsuno, Faisal Fauzan, and Peter-Tobias Stoll, "Defining Indigenous in Indonesia and Its Applicability to the International Legal Framework on Indigenous People's Rights," *Journal of Indonesian Legal Studies* 8, no. 2 (2023): 1019–1064.



sovereignty of customary law communities over their land and natural resources. In order to have customary right and be recognized, some elements must be fulfilled as long as the customary law community still exists, by the national and state interests, and does not conflict with higher laws and regulations.<sup>18</sup> Third is the individual rights of members of customary law communities to land. Indigenous people also have individual or individual rights, especially in terms of land ownership.<sup>19</sup>

Even though recognition and protection for indigenous people have been guaranteed by the constitution and statutory regulations, to date indigenous people are still often threatened and oppressed, which generally involves agrarian conflicts, discrimination, marginalization, and even criminalization.<sup>20</sup> The position of indigenous people as a minority group has been vulnerable and weak in various aspects of life, such as economics, law, socio-culture, and human rights (including climate change). Indigenous people will probably be the first group to undergo all of these impacts due to climate change because they are dependent on and close to the environment and natural resources.

In connection with climate change, the form of legal protection that the state must provide to indigenous people is to fulfill their rights. In the context of climate change, some types of rights of indigenous people must be at least protected and fulfilled, such as the rights to good and healthy living environment, adequate housing, water and sanitation, customary land rights, and management and utilization of natural resources. These rights are the rights of indigenous people which can be 'directly' ruined due to the impacts of climate change and changes of physical conditions around the indigenous community's environment, such as drought, floods, landslides, and coastal erosion.

The next rights of indigenous people that must be protected and fulfilled are the rights 'indirectly' affected due to climate change, generally related to social and economic rights. These violations of rights

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<sup>18</sup> Sartika Intaning Pradhani, "Traditional Rights of Indigenous People in Indonesia: Legal Recognition and Court Interpretation," *Jambe Law Journal* 1, no. 2 (2018): 177–205.

<sup>19</sup> I Gede Yusa, "Identification And Analysis Of The Rights Of Indigenous Peoples In The Study Of Constitutional Law," *Constitutional Review* 2, no. 1 (2016): 1–28.

<sup>20</sup> M.Y. Aiyub Kadir and Alexander Murray, "Resource Nationalism in the Law and Policies of Indonesia: A Contest of State, Foreign Investors, and Indigenous Peoples," *Asian Journal of International Law* 9, no. 2 (2019): 298–333.

occur as a result of failure to fulfill previous substantive rights related to the availability of the environment and natural resources. These rights include the rights to food, work and decent living, participation in climate change planning and handling, freedom from discriminatory treatment, and maintaining and development of one's customs, culture, traditions, and arts. Protection of the rights of indigenous people is referred to as climate protection, which in essence, is also a strategy to protect, respect, and fulfill the human rights of indigenous people.

## Case Study on Indonesia's Indigenous Peoples and Climate Change

The case studies in this section are intended to illustrate the various problems faced by indigenous peoples in the phenomenon of climate change. This section will begin with an analysis of the impact of climate change on the typology of ecosystems inhabited by indigenous peoples. Then after that, an analysis of government policy practices that have an impact on climate change and indigenous peoples will be carried out.

The Department of Economic and Social Affairs Indigenous People of the United Nations (UN) claims that indigenous people will face consequences due to climate change, including political and economic marginalization, loss of land and natural resources, violations over human rights, discrimination, and unemployment.<sup>21</sup> These impacts are measured globally so as to make it ascertained whether all of these impacts also occur in indigenous communities in Indonesia.

To scrutinize impacts of climate change on indigenous people in Indonesia, it will be easier to divide them based on the ecosystem of the area occupied by indigenous people. Based on geographical and climatic conditions of Indonesia, areas where indigenous people live can be classified into at least 4 (four) ecosystems: **First**, Forest ecosystems with tropical and sub-tropical forests and boreal and temperate forests. This ecosystem is an area most inhabited by indigenous people in Indonesia.<sup>22</sup>

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<sup>21</sup> United Nations, "Climate Change (The Effects of Climate Change on Indigenous Peoples)," Department of Economic and Social Affairs Indigenous Peoples, 2023.

<sup>22</sup> According to data from the Indigenous Peoples Alliance of the Archipelago (AMAN), it is estimated that there are more than 20 million hectares of customary forests in Indonesia managed by more than 8,000 indigenous communities.

Climate change can lead to significant changes in forest growth, altering forest function, soil fertility, and composition. Increasing number of forest fires due to climate change causing loss of forest coverage violates the rights of indigenous people to land and land ownership systems on traditional livelihood practices and rituals. Ecosystems have the richest habitats. Thus, apart from climate change, indigenous people also oftentimes deal with land conflicts with the government or corporations.

**Second,** Dry and slightly humid ecosystems consisting of deserts and savannas, arid and semi-arid areas, grasslands, and Mediterranean landscapes. Indigenous people in Indonesia who live in this ecosystem are Aru tribe. They are living in Aru archipelago in Southeast Maluku. Climate change brings about impacts on the savanna ecosystem (including the biodiversity therein) where Aru people habitually hunt (*tordauk*). In this ecosystem, indigenous people will experience the impacts of climate change, such as traditional agricultural cycles being disrupted by late and erratic rains, threatening famine, and giving rise to the potential pests and disease. Drought of water sources affects access to indigenous people's rights to water.

**Third,** Ecosystems of coastal and lowland areas and small islands. Rising sea levels due to melting glaciers and sea ice, with the expansion of water due to increasing temperatures, is mainly the impact undergone by most of people living in this ecosystem. This condition is experienced by the Bajo Tribe along the coast of Southeast Sulawesi, the Laut Tribe in the Riau Islands, and other indigenous communities. Rising sea levels contributes to land sinking, coastal erosion, salt intrusion, and threats to livelihoods of coastal indigenous communities. Indonesia as an archipelago country has the potential to lose more lands due to climate change. Indonesia has lost 29,000 ha of land due to rising of the sea levels. National Research and Innovation Agency even estimates that Indonesia will lose 115 of its islands in the next few decades<sup>23</sup>. Other research even

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However, throughout 2023, AMAN noted, that at least 2,578,073 hectares of customary territories will be confiscated by the state and corporations. Most of the control of customary territories is accompanied by violence and criminalization. Look inside Sarjan Lahay, "Masyarakat Adat Minim Perlindungan, Penetapan Hutan Adat Pun Lamban," Mongabay Indonesia, 2024.

<sup>23</sup> Widya Rainnisa Karlina and Abilio Silvino Viana, "Pengaruh Naiknya Permukaan Air Laut Terhadap Perubahan Garis Pangkal Pantai Akibat Perubahan Iklim," *Jurnal Komunikasi Hukum* 6, no. 2 (2020): 575–86.

shows that by 2050, as many as 2,000 small islands will be submerged, more than 70% of which are in Maluku archipelago.<sup>24</sup>

**Fourth,** Ecosystems of highland and high mountains Climate change has caused faster and higher temperature increase in highland ecosystems. Increasing temperatures in the mountains and changes in rainfall will cause glacier shrinkage, land degradation, crop decline and failure, and disruption of tourism activities. Indonesian indigenous communities who experienced this impact were Kaili Tribe, Saluan Tribe, Toli-Toli Tribe in Central Sulawesi, Arfak Tribe in West Papua, Tengger Tribe in East Java, and others.

From this phenomenon, it can be seen that the impacts of climate change are faced by almost all indigenous communities in Indonesia in various types of regional ecosystems. The differences of impacts depend on regional ecosystem typologies, which can be in the form of drought or land sinking in coastal marine ecosystems. However, all of those impacts are the result of this natural phenomenon, following the lack of good and healthy living environment, difficulty to acquire clean water, and economic and socio-cultural vulnerability.

In terms of policy practice, Indonesia often produces contradictory policies in efforts to address climate change. The policies made give rise to conflicts that disrupt indigenous communities. There are two (2) typologies of conflict actors due to the impact of government policies, the first is the conflict between indigenous communities versus corporations originating from permits granted by the Government. Some examples of cases include the granting of land permits for oil palm plantations covering an area of 36,094.4 Ha to corporations that have an impact on the customary forests of the Awyu Tribe Indigenous community and the granting of permits for zinc mining activities in North Sulawesi that are detrimental to the Dairi Indigenous community.

The second is the conflict between Indigenous peoples versus the government, this conflict currently generally occurs due to development policies in the National Strategic Project (PSN), for example, the construction of the Bamboo Biomass Power Plant (PLTBm) in the Mentawai Islands which displaces the Mentawai Indigenous people, the

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<sup>24</sup> Winda Herman and Ikhwan Wahyudi, "Yayasan Madina Berkelanjutan Ajak Warga Maluku Turut Serta Tangani Perubahan Iklim," ANTARA News Ambon, 2023.

geothermal power plant project in East Nusa Tenggara which was rejected by the Wae Sano indigenous people, the construction of the Rempang eco-city which caused conflict with Rampang residents. According to the Report of the Indonesian National Human Rights Commission, the PSN policy is not friendly to human rights and proves that PSN is a source of human rights violations. There are at least 114 cases of alleged human rights violations in the development of PSN in various regions.<sup>25</sup>

Throughout 2024, AMAN recorded at least 121 cases that had seized 2,824,118.36 hectares of customary territory in 140 indigenous communities.<sup>26</sup> This condition indicates that the existing policy practices are still problematic. The main factor is the low participation of indigenous peoples in policy-making. Development and licensing are often carried out without adequate consultation with indigenous peoples, and even without their consent (free, prior, and informed consent – FPIC). In addition to the low participation of indigenous peoples, the policies made also have minimal consideration of climate change conditions. This will be further proven in the policy analysis below.

## **Considering Climate Change Policies in Indonesia: Are They Favoring Indigenous People?**

Law has an important role in controlling climate change.<sup>27</sup> Indonesia has used legal instruments by ratifying several international agreements

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<sup>25</sup> Komisi Nasional Hak Asasi Manusia RI, “Dampak Proyek Strategis Nasional Terhadap Hak Asasi Manusia”, (2024), <https://www.komnasham.go.id/index.php/publikasi/2024/12/04/167/dampak-proyek-strategis-nasional-terhadap-hak-asasi-manusia.html>.

<sup>26</sup> Aliansi Masyarakat Adat Nusantara (AMAN), “Catatan Akhir Tahun 2024 Aliansi Masyarakat Adat Nusantara: Transisi Kekuasaan & Masa Depan Masyarakat Adat” (Jakarta, 2024), <https://aman.or.id/files/publication-documentation/35819CATAHU%202024%20-%20final.pdf>.

<sup>27</sup> Law plays an important role in regulating and promoting action to address climate change, including implementing environmental protection policies, regulating greenhouse gas emissions, and enforcing legal responsibility for environmental damage resulting from human activities. Leonie Reins and Jonathan Verschuuren, “Climate Change Mitigation and the Role of Law,” in *Research Handbook on Climate*

related to climate change. Several international agreements that have been ratified by Indonesia include (1) Law No. 16 of 2016 concerning Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change; (2) Law No. 6 of 1994 concerning Ratification of the United Nations Framework Convention on Climate Change; and (3) Law No. 17 of 2004 concerning Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change; and (4) Presidential Regulation No. 33 of 2005 concerning Ratification of the Beijing Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer. This step is taken by the Indonesian government to declare the Indonesia's commitment to controlling global climate change.<sup>28</sup>

Two laws in Indonesia contain climate change substances. First is Law No. 31 of 2009 concerning Meteorology, Climatology and Geophysics. Second is Law No. 32 of 2009 concerning Environmental Protection and Management (amended and partially revoked by Law No. 6 of 2023 concerning the Determination of Government Regulations in lieu of Law No. 2 of 2022 concerning Job Creation into Law). However, climate change control regulations in these two laws are still very general and have not reached the point of relationship between aspects of climate change and indigenous communities.

In Indonesia, there are currently no laws that specifically regulate indigenous people or climate change. However, these two issues are currently in the legislative process with the stage status the Draft Law on Indigenous People is in the harmonization stage, while the Draft Law on Climate Change Management is currently in registered status in the National Legislation Program. There are similar reasons why the two draft laws were formed, the most important of which is because both the regulation of indigenous communities and climate change are widely spread across numerous partial sectoral laws and regulations, giving rise to many overlapping regulations.

The absence of legal instruments at the statutory level indicates that efforts to control and deal with climate change have not run optimally,

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*Change Mitigation Law*, ed. Leonie Reins and Jonathan Verschuuren (Edward Elgar Publisher, 2022): 2–16.

<sup>28</sup> Daniel C. Esty and Dena P. Adler, “Changing International Law for a Changing Climate,” *AJIL Unbound* 112 (2018): 279–284.

let alone providing real protection for indigenous people. The absence of core regulations regarding climate change and indigenous people in Indonesia has indicated how weak the guarantee of legal protection for indigenous people is. Considering regulations regarding climate change in Indonesia is currently at the policy or technical regulation level in which every policy related to climate change adaptation and mitigation will be analyzed based on aspects of protection or role of indigenous people in dealing with climate change, as explained in the following table:

**TABLE 1.** Assessment of Indigenous People' Aspects of Climate Change Policy

Policy	Aspects Indigenous People		Explanation
	Present	Absen t	
Indonesia Nationally Determined Contribution (2022)	√		The Indonesian NDC has explicitly mentioned customary law communities and acknowledged their role in climate resilience in Indonesia. However, the term customary law community is meant only by 'customary communities', not including 'Indigenous People'. The government should consistently and firmly recognize indigenous people as Indigenous People. This is because the term 'Indigenous People' is an international identity as stated in The UN Declaration concerning Rights of Indigenous People/UNDRIP, with Indonesia as one of UN member countries that supports and adopts it, also reemphasized by Constitutional Court Decision No. 35/2012. By explicitly mentioning indigenous people as Indigenous People, Indonesia will get maximum benefits from the contributions of indigenous people.
Presidential Regulation no. 18 of 2020 concerning the National		√	In the National Medium Term Development Plan (RPJMN) 2020-2024, one of the mainstays of disaster management and climate change adaptation is carried out through

Medium Term Development Plan for 2020- 2024		community adaptation to climate change in disaster-prone areas based on local community wisdom. However, the local wisdom of the community in question is not identical with the one of indigenous communities. Indigenous communities are not positioned firmly and specifically in the RPJMN either as victims or agents in controlling climate change.
Presidential Regulation no. 53 of 2021 concerning the National Human Rights Action Plan for 2021 - 2025	√	In this regulation, it has been ruled and recognized that indigenous people are one out of four marginalized community groups being targeted. However, protection of indigenous people as a strategic target group is still general in nature, not specifically placed in the context of climate change and the protection of indigenous people
Presidential Regulation no. 98 of 2021 concerning Implementati on of Carbon Economic Value to Achieve Nationally Determined Contribution Targets and Control of Greenhouse Gas Emissions in National Development	√	There is no regulation of the position and rights of indigenous communities as administrators of Carbon Economic Value (NEK). Indigenous people are legal subjects who contribute directly to increasing carbon stocks through forest management and utilization. Thus, they should be included for NEK organizers. If it is not changed, the carbon trading mechanism in this regulation will only become a tool to further marginalize the existence of indigenous people from their traditional territories due to absence of pledge for legal protection for the rights of indigenous people over their customary territories and does not resolve the mechanism for resolving tenurial conflicts in forest areas.
Regulation of the Minister of Environment and Forestry of Indonesia no. 7 of 2023 concerning Procedures for	√	The status of customary forests and the existence of indigenous communities are sufficiently recognized in this regulation. Indigenous communities become one of the business organizers and/or GHG Emission Offset activities in carbon trading in customary forest locations (Article 7 paragraph (7)), provided with help (Article



Carbon Trading in the Forestry Sector		8 letter c) and receiving increased knowledge and skills in implementing Carbon Trading sector Forestry supported by the government (Article 24 paragraph (1)).
Regulation of the Minister of Environment and Forestry of Indonesia no. 21 of 2022 concerning Procedures for Implementing the Economic Value of Carbon	√	This regulation contains the same provisions as in Presidential Decree 98/2021, stating that it regulates no positions and rights of indigenous communities as NEK administrators. A similar recommendation is that the government should include indigenous communities, including NEK organizers.
Indonesian Minister of Environment and Forestry Regulation No. P.7/Menlhk/Setjen/Kum.1/2/2018 concerning Guidelines for Assessment of Vulnerability, Risks and Impacts of Climate Change	√	There is a guarantee of participation and involvement in assessing the social and cultural conditions of society by considering natural resources, local wisdom and customs (Article 10 paragraph (3)). However, the position of indigenous people in this regulation is as the same as the general public due to no differences in legal subjects. What is guaranteed is more of the 'value' manifested in local wisdom and customs.
Indonesian Minister of Environment and Forestry Regulation No. P.33/Menlhk/Setjen/Kum.1/3/2016 Concerning	√	There is a guarantee that participation in preparing climate change actions must also involve representatives of local communities (Article 13 paragraph (1) letter c). The term in this regulation uses 'local community'. Use of the term is not common in discussions on Indigenous People. In Indonesia, some regularly used terms include Indigenous People, Customary Law Communities (Article 18B

Guidelines for Preparing Climate Change Adaptation Actions	paragraph 2), Traditional Communities (Article 28I paragraph 3), and Local Communities. The government, indeed, must ensure that the terms used are and have been consistent and in line with existing laws and regulations.
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From Table 1, it can be seen that climate change policies still minimally regulate aspects of indigenous people. Even though it exists, it is too general and does not specifically regulate the role of and protection for indigenous people in handling and controlling climate change. Based on the analysis in Table 1, some issues need to be considered for improving future climate change policies. *Firstly*, there is a lack of uniformity in the use of the term ‘indigenous people’. In several policies, it is known that various terms ‘*masyarakat adat*’ are widely used, such as customary law communities, traditional communities, and local communities. Thus, the Government should consistently use the term Indigenous People or ‘*masyarakat adat*’, considering the term ‘Indigenous People’ as an identity used globally and in the constitution of Indonesia. *Secondly*, referring to national climate change action policies such as Indonesia’s NDC, National Medium Term Development Plan (RPJMN) and National Human Rights Action Plan in the future, it is of necessity to emphasize the position of indigenous people in climate change apart from their being most vulnerable groups who are prone to impacts so that their role can be guaranteed in contribution to handling and controlling climate change. *Thirdly*, indigenous communities must be guaranteed to be included in the implementation of NEK.

Coming to a question, ‘Has climate policy in Indonesia taken sides with indigenous people?’, the answer is obviously a ‘No’ with reference to the aforementioned fact. Both in terms of law and policy, the existence of indigenous people has not been sufficiently considered in climate policy in Indonesia. This certainly contradicts the existence and characteristics of indigenous people who, in the context of climate change, are vulnerable groups and the first to face the impacts of climate change. Therefore, on the other hand, indigenous people can also play a role in handling and controlling climate change with all their knowledge,

habits, and local wisdom about nature and the surrounding environment.

In the context of comparison, Indonesia can learn from Canada in ‘The Canadian Pact for A Green New Deal’ as a policy product that involves the active participation of indigenous peoples. One part of the Green New Deal is to link the energy transition to achieve reconciliation with indigenous peoples. The Canadian Green New Deal tries to integrate Indigenous knowledge in natural resource management and supports the recognition and protection of Indigenous peoples’ rights in the transition to a green and sustainable economy. This kind of commitment does not yet exist in Indonesia, so it needs to be developed and used as a reference.

## Exploring Environmental Values in Indonesian Indigenous People

Indigenous People have been part of Indonesian society for a long time. Even before the archipelago of Indonesia as the Unitary State of the Republic of Indonesia was established, customary law communities had been existent and growing up. By the independence of the state, indigenous people had lived side by side with the Dutch East Indies when the Dutch Indies government recognized and regulated customary law communities in its autonomous or ‘*madebewind*’ government.<sup>29</sup>

In post-independence, customary law communities were even recognized by the insertion of related terms in the 1945 Constitution (before amendments) stating that: “In the territory of the Indonesian State there are approximately 250 *zelfbesturende landschappen* and *volkgemeenschappen*, such as villages in Java and Bali, *nagari* in Minangkabau, hamlets and clans in Palembang and so on”. These areas have an original structure and therefore can be considered as special areas.<sup>30</sup> After the amendment to the Indonesia Constitution 1945,

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<sup>29</sup> Ikhdia Fitria, “Recognizing Adat Law: Problems and Challenges in Modern Law System in Indonesia,” *The Indonesian Journal of International Clinical Legal Education* 2, no. 4 (2020): 503–516.

<sup>30</sup> Sukri Tamma and Timo Duile, “Indigeneity and the State in Indonesia: The Local Turn in the Dialectic of Recognition,” *Journal of Current Southeast Asian Affairs* 39, no. 2 (2020): 270–289.

customary law communities were accommodated in Article 18B paragraph (2) of the Indonesia Constitution 1945. The inclusion of customary law communities in the Indonesia Constitution 1945 is an index of the state's recognition to the existence of customary law communities.<sup>31</sup>

The role of indigenous people is linked to being the preserver or guardian of the values of life of the State of Indonesia. Their noble values have been legacy inherited from generation to generation, to their children and grandchildren, so they will not fade and will be maintained within the framework of the Unitary State of the Republic of Indonesia. Indigenous people consider themselves the most important part of the environment and an inseparable part of the Unitary State of the Republic of Indonesia.

Indigenous communities are affiliated with local wisdom values and customs. Indigenous people have religious values that exist in various sectors of life, such as in the government of traditional institutions, economic systems, inheritance, or ways of conflict resolution through customary justice.<sup>32</sup> This section will of course not discuss all of these things but will focus on values related to climate change, like environmental values of indigenous people in Indonesia. Therefore, as Indonesia's territory is quite large and the number of indigenous people is too, the search for environmental values of indigenous people will be carried out purposively and divided based on regional divisions (archipelagos) in Indonesia, consisting of the islands of Java, Sumatra, Kalimantan, Nusa Tenggara, Sulawesi, Maluku, and Papua.

*First* is the Java Islands. The majority of Java is inhabited by Javanese tribe, which is divided into several tribes or sub-tribes. Apart from the Javanese, the tribes that inhabit this area are *Samin*, *Tengger*, *Osing*, and *Bawean*. Other tribes in the western part of Java include the Sundanese, Badui, Betawi, Cirebon, and Banten tribes. In Java, there is an environmental value that is quite well known, called "*Memayu*

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<sup>31</sup> Aisyah Risyat, Riska Muliani, and Muhammad Erfa Redhani, "Constitutional Jurisdiction Review of the Existence of Indigenous Law Communities in Indonesia," *Constitutional Law Society* 1, no. 1 (2022): 25–40.

<sup>32</sup> Azlan Abas, Azmi Aziz, and Azahan Awang "A Systematic Review on the Local Wisdom of Indigenous People in Nature Conservation," *Sustainability* 14, no. 6 (2022): 3415.

*Hayuning Bawana*" which means beautifying and make in the world at peace. This philosophy is closely related to ecology, and is often translated as that humans are the servant of the earth; instead of destroying it, they are to care for and preserve it.<sup>33</sup> Some environmental values can also be found in subtribes and subcultures in Java, such as in the Samin Tribe, the teachings of *Saminism* hold the principle of "*panca sesanti samin sikep*" which consists of *Seduluran*, *Ora seneng memusuhan*, *Ora seneng memusuhan*, *Ora rewang kang dudu sak mestine*, *Ora Ngelenah Liyan*, and *Eling Sing kuoso*. Nature and the environment are positioned as a family bond, like parents and children. Apart from the principles, environmental values are also manifested in their traditions and customs. In addition, *Tengger* people perform *kasada*, *entas-entas*, *Selamatetan Banyu* (water salvation) accompanied by making offerings for the queen of water sources. Biocentric and eco-centric nobility (*tengering*) are manifested in various cultural behaviors of the Tengger Tribe.<sup>34</sup> Nature conservation in *Osing* tribe tradition is manifested in the activity of protecting springs with the performance of source *slametan*, *rebo wekasan*, *kebon slametan*, as well as prohibitions, myths and values that are still superstitiously believed in. Meanwhile, in Bawean tribe, there is *Rasol* tradition that is a traditional ceremony carried out to clean up cattle in the sea.

Moving to western Java, in Sundanese tribe, one of Sundanese *Tri Tangtu* philosophies is "*Alam ruwateun Jeung Rumateun*" which means the command to care for nature. More fully, it mentions *gunung talingakeun*, *leuweung kanyahokeun*, *kebon garaaceun*, *gawir awieun*, *lebak balongan*, *sampalan sawahan*, *walungan rempekan* (Mountains must be guarded, forests must be studied/observed, gardens must be cultivated, cliffs must be planted with bamboo, valley basins must be made into ponds, plains must be used as rice fields, and rivers must be

<sup>33</sup> Sumarmi, Alfyananda Kurnia Putra, Tuti Mutia, Heni Masruroh, Syah Rizal, Tasya Khairunisa, Dicky Arinta, Mohamad Arif, and Alice Sabrina Ismail, "Local Wisdom for Global Challenges: Memayu Hayuning Bawono as a Model for Sustainable Environmental Practices," *International Journal of Sustainable Development and Planning* 19, no. 2 (2024): 527–538.

<sup>34</sup> Febriana Kinanthi Putri, Helena Joan Novén, Marhcelina Nurcahyati, Irfan A.N., Anisa Septiasari, Jati Batoro, and Ahmad Dwi Setyawan, "Review: Local Wisdom of the Tengger Tribe, East Java, Indonesian Environmental Conservation," *Asian Journal of Ethnobiology* 5, no. 1 (2022): 20–34.

planted with trees on the banks).<sup>35</sup> In line with that, *Badui* tribe has a guideline of life "*gunung ulah dilebur, lebak ulah dirusak*" which means mountains should not be destroyed and valleys as water reservoirs should not be destroyed.<sup>36</sup> Indigenous people in *Kasepuhan Cibedug* also have a view of nature as "*penyangga kahirupan supaya hurip*" (supporting life to live). In Cirebon tribe, there is a piece of advice (*petatah-petitih*) "*Aja ilok gawe kaniaya ing mahluk*", which means "never cause violence to other creatures, including nature and the environment". The majority of indigenous communities in West Java also have forest areas (*leuweung*), divided into prohibited forests (*leuweung kolot*), sacred forests (*leuweung titipan*), reserve forests (*leuweung reserve*), and production forests (*leuweung garapan*).<sup>37</sup>

*Second* is Sumatra Island. In Sumatra, there is Malay tribe residing and raising wisdom in protecting and preserving nature which can be seen in advice, teachings, poetry and myths. For example, there is quite widely-known verse "belonging to customs, knowledge to guard the seas and straits, knowledge to guard traditional lands, knowledge to guard ants and caterpillars, and knowledge to guard sticks and splints". Apart from the Malay tribe in Sumatra, there are also other tribes or indigenous communities, like *Anak Dalam* tribe that has a sacred tradition, to plant one tree every time a child is born.

*Kenagarian Guguk Malalo* indigenous community, further, has a tradition of "*mambuka Kapalo Bando*", which is a combination of Islamic values and Minangkabau customs. The Minangkabau tribe has a saying "*alam takambang jadi guru*", meaning that nature grows as a teacher. These values are manifested in a forest ban (*larangan rimba/hutan*). Minangkabau tribe also has reverence for Sumatran tigers,

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<sup>35</sup> Dimas Aldi Pangestu, "Urgensi Nilai-Nilai Karakter Peduli Lingkungan Dalam Kearifan Lokal Tri Tangtu," in *Konferensi Nasional Kewarganegaraan IV "Penguatan Pancasila Dan Pendidikan Kewarganegaraan Dalam Memperkokuh Jati Diri Bangsa Di Era Disrupsi"* (Yogyakarta: UNY Press, 2019), pp. 26–36.

<sup>36</sup> Mega Halmahera, Anggi Septiya Purnama, Fuad Hasyim, and Andi Irwan Benardi, "Local Wisdom Pikukuh Sapuluh Suku Baduy Dalam Konservasi Lingkungan Budaya Desa Kanekes," *Geo-Image* 8, no. 1 (2019): 80–88.

<sup>37</sup> Kazuhiro Harada, "Policy of Protected Areas and Local Use of Forest Resources in Indonesia: A Case Study of a National Park in West Java," in *People and Forest — Policy and Local Reality in Southeast Asia, the Russian Far East, and Japan*, ed. M. Inoue and H. Isozaki (Institute for Global Environmental Strategies, vol 3. Springer, Dordrecht, 2003): 231–247.

as a symbol of culture and life commonly called '*Inyiak Balang*', '*Ampang limo*' or '*Datuak*'.<sup>38</sup> In addition, Batangtoru indigenous community, in North Sumatra, has its own traditional tradition of maintaining water conservation, known as *Mantari Bondar*. Similarly, Batak tribe has preserved local wisdom called '*lubuk larangan*', which is a tradition and rule for maintaining land fisheries ecosystem. Further, in agricultural system, Karo tribe has a tradition of '*gambur-ngamburi*', which is a form of hopeful request for success in plantation. In terms of forest management, *Jurukalang* traditional community has rules for dividing areas, such as '*taneak tanai*' (communal land that is cultivated together) and *Utan* or *Imbo Piadan* (sacred customary forest).

*Third* is Kalimantan Island. In Kalimantan, indigenous people generally live in forest areas so environmental values are closely related to forest management and conservation. For example, among the various Dayak tribes in Kalimantan, Dayak Ngaju people believe that all living creatures on earth have their own roles and work together in synergy to maintain order, goodness and balance in nature called "*pukung palawan*". There are six principles for forest resource management, namely *handel* (continuity), *himba* (diversity), *sub arep* (resistance), *mihing* (organic), *badat* (ritual rules), and *jipen* (customary law). Dayak tribe in Parahangan Village also has a principle of "*Nantan pukung pabewan, nantan bukit panjang, nantan sungai saka, danau baru, nantan tana kaya, babu lanyau*", which means purification for animals, hills, small rivers, lakes, forests, fields and ex-field sites.<sup>39</sup>

Moreover, farming activities (*bebuma*) by Meratus Dayak Tribe are through a system-shifted process to aim at ecological sustainability. Harvest party or *Aruh Bawanang*, in addition, is a form of human respect to nature. Dayak Iban tribe holds a principle "*babas adalah apai kami, tanah adalah inai kami, dan ae adalah darah kami*", meaning that forests symbolize a position of a father, land as a mother, and water as blood that flows throughout the body. For Bugis tribe in the coastal areas of Kalimantan in Pagatan-Tanah Bumbu (South Kalimantan) and

<sup>38</sup> Khairil Anwar, "Disaster Mitigation Local Wisdom in the Tradition of the Minangkabau Community," *E3S Web of Conferences* 331, no. 04013 (2021): 1–5.

<sup>39</sup> Marhaeni Ria Siombo, "Local Wisdom as Basic Material for Drafting Local Government Regulations: A Case Study of Dayak Forest Fires in Kalimantan, Indonesia," *LingCure: Linguistics and Culture Review* 5, no. S3 (2021): 1067–1075.

Kuala Samboja Kutai (East Kalimantan), a tradition of *mappanretasi* (feeding the sea) is held to express a sense of gratitude to the earth for its abundant marine products.

*Fourth* is Nusa Tenggara Islands. Balinese people in the western part of Nusa Tenggara Islands have spiritual values and aspects, namely *tri hita karana*. This value is often associated with the implementation of nature conservation activities that must always pay attention to the harmonious relationship between humans (*pawongan*), the universe (*palahan*) and God (*parhyangan*).<sup>40</sup> In Nusa Tenggara Islands, there are customary rules (*awig-awig*), for example in the Bayan indigenous community and the Sasak tribe in Lombok, and the Mandala indigenous community in West Nusa Tenggara. *Awig-awig* contains rules and sanctions in accordance with tribal traditions or indigenous people's culture. Mandala indigenous communities formulate customary rules in the '*pawang mandala*' which contain prohibitions and restrictions on the use of forest resources. In the Sasak tribe, what is known as '*kemalik*' is a prohibition on entering the Mount Kiyangan traditional forest carelessly. Once people violate, disaster or harassment and sanctions will come next. Indigenous communities in East Nusa Tenggara also have various local wisdoms related to nature and the environment. Pubabu Indigenous Community, for example, has the concept of the life triangle "*mansinan-muit-nasi, na bua*" with humans, livestock and forests as inseparable unit. They are mutually dependent.<sup>41</sup>

Environmental values are pronounced in the management of forest areas, such as Aelipo Village Community in Ende reserving *pire gara* (pepali place) tradition, Wotawara Indigenous Community maintaining forest sustainability and managing springs by *baololong* ritual, *gletek glouk Lewotana* (cleansing Lawotana), *Nitung Lolong* and *Puduk* ceremonies (cleansing forest springs), Boti Tribe Indigenous People respecting nature with the term '*talas*' through the rituals of *Nasi fain*

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<sup>40</sup> I Wayan Kartika Jaya Utama, Made Warka, Sri Setyajie, and Budiarsih, "The Philosophy Of Tri Hita Karana In Land Procurement," *NVEO – Natural Volatiles & Essential Oils Journal* 8, no. 6 (2021): 1428–37, <https://www.nveo.org/index.php/journal/article/view/3795>.

<sup>41</sup> Liwa Irrubai, Idrus Affandi, Nana Supriatna, and Dede Rohaniawati Mohamad, "Education Values in Local Wisdom Awik-Awik to Enviromental Conservation in Lombok Indonesia," in *Proceedings of the International Conference on Islamic Education (ICIE 2018)* (Atlantis Press, 2018), pp. 223–227.



*Metan* (not destroying forests), *Kae* (protecting plants), *Tonat Oematan* (guarding springs), and *Tjen Hau* (protecting springs). Manggarai indigenous people perform '*barong wae*' ritual as a form of respect for the spirit that guards the spring.<sup>42</sup>

*Fifth* is Sulawesi Island. Kajang Ammatoa Indigenous Community in South Sulawesi has a set of customary rules and obligations called *Pasang ri Kajang* (message in Kajang), *Pasang* (message, mandate, command) aims to ensure the community's life is in harmony with nature.<sup>43</sup> For example, customary rules regarding the division of forest management areas consist of *Borong Karamaka* (Sacred Forest), *Borong Batasayya* (Border Forest), *Borong Luara* (Community Forest). Similar to Kajang Traditional Community, Karampuang community also has a rule of *paseng ri ade'*, which serves as guidelines for managing and utilizing forests using traditional practices. Then, Siotapina indigenous people have a tradition of preserving forests, starting with *posamburea* (cleansing), *Sangka* (ritual equipment) and *popaua* (umbrella for shelter). To traditional communities of coastal areas in North Sulawesi, Kakorotan Indigenous People have mane'e tradition, a fishing tradition agreed upon simultaneously by all members of the community that contains rules for catching marine products at predetermined locations and times.<sup>44</sup>

*Sixth* is Maluku Island. A well-known tradition or customary system on the island of Maluku is '*sasi*', which is a prohibition on harvesting or taking from the nature (at sea or on land), with certain natural resources for a certain time with the aim of preserving their validity and acquiring multiple results in the future. The law in *sasi* recognizes time restrictions

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<sup>42</sup> G. Lewoleba, B. Widianarko, and Y. T. N. Dewi, "Environmental Conservation Based on Mamar System as Local Wisdom of West Timor, East Nusa Tenggara," *Man and Environment. Issues of Neocology*, no. 40 (2023): 94–102.

<sup>43</sup> Khairun Nisa, and Kaharuddin, Suardi, "Peranan Ammatoa Dalam Pemberian Sanksi Tindak Pidana Pelaku Pengrusakan Hutan Di Suku Adat Kajang Ammatoa," *LAWYER: Jurnal Hukum* 2, no. 1 (2024): 12–16, <https://asianpublisher.id/journal/index.php/lawyer/article/view/545>.

<sup>44</sup> Zoni Henki Singal Maryam Lamadirisi, Ferdinand Kerebunu, Theodorus Pangalila, and Wadjidi Marlian, "Mane'e Culture in Kakarotan Village Talaud Island," in *Proceedings of the 1st International Conference on Social Sciences (ICSS 2018)*, 2018, 753–755.

based on the type of natural resource it regulates, for example sea *sasi*, river *sasi*, forest *sasi*, to *lompa sasi* (rules for catching Lompa fish).<sup>45</sup>

In Maluku, there are also sub-tribes or indigenous communities. Indigenous people in Kalaodi Village, Tidore City, North Maluku. Having a '*paca goya*' ceremony as a ceremony to protect nature, hills or mountains are believed to have the greenest or sacred luck so they must not be damaged. At certain times, residents stop activities for three days, preventing themselves from gardening, trading or work. During this time, residents cleanse their sacred areas. The traditional institution in Kalaodi also has a rule called '*bobeto*', the sound of bobeto in Tidore language called "*nage dabe so jira alam, ge domaha alam yang golaha so jira se ngon*", which means in short "Those who destroy nature will be destroyed by the nature." In addition, Tobelo indigenous community (*o hongana/tugutil*) sees environment and humans as a unit (house unit, settlement unit, and forest unit). Meanwhile, *O'Hongana Manyawa* tradition has a value system for preserving forests, like *liringiri* (tradition for gathering and hunting), *boku* (prohibition to destroy or harvest plants carelessly), and *mang ngadodo gamu pahiyara* (restrictions on maintenance).

*Seventh* is Papua Island. In some areas of Papua, such as West Papua, '*sasi*' tradition is also known as on Maluku, but in different names. For example, Koiwai tribe in Kaimana Regency has *sasi* tradition called '*gama*'. *Gama* is applied on land and at sea. On land, *gama* is used to protect coconut, nutmeg and other plantation commodities. While in the sea, *gama* is applied to protect *lola*, sea cucumbers and batulaga. Almost the same, Moi tribe in Sorong Regency also has '*egek*' culture, which is a traditional culture about protecting nature by taking as enough as possible from nature and preferring to use traditional boats called '*kama*' to avoid using boat engines that are not environmentally-friendly.<sup>46</sup>

<sup>45</sup> T G R Hallatu, I D Palittin, Supriyadi, U Yampap, R Purwanti, A Ilyas, "The Role of Religious Sasi in Environmental Conservations," in *IOP Conference Series: Earth and Environmental Science* (IOP Publishing Ltd, 2019), 012082, <https://iopscience.iop.org/article/10.1088/1755-1315/473/1/012082/meta>.

<sup>46</sup> David Reeve George Mentansan, Monica Nauw, Rina Awom, Musa Ayorbaba, and Johnli Lumi, "Sasi Local Wisdom as a Cultural Capital for Sustainable Tourism Development in Raja Ampat Regency, West Papua," *International Journal of Green Tourism Research and Applications* 5, no. 1 (2023): 52–59.

Moving on to forest areas in Papua, Arfak indigenous people, especially the Hatam tribe, have rules regarding the division of forest areas, *Susti* (as an area for living or gardening), *Nimahamti* (timber forest), while *Bahamti* is mossy forest and Tumti is the top of the mountain. They consider forests as living kitchen or mother who provides food (*ayamphos*). Further, Meyah tribe community has customary rules for managing forests, which are referred to as '*Ig ya ser*'. The meaning of '*Ig ya*' is standing and ser guarding. Overall, *Ig ya ser* can be interpreted as standing to protect an area, including the environment. The belief of indigenous people in Papua in the position of nature is quite strong. Indigenous people of Amungme, Tembagapura, hold the principle of "*Te Aro Naweak Lako*", which means '*adalah is me*'. Papuan indigenous people view the land as a mother who is described as a mother who feeds, nurtures, educates and raises from babies to elderlies until death.<sup>47</sup>

At this point we can see that environmental values are something that are generally shared by indigenous people in Indonesia. There is even a tendency for similarities in knowledge (local genius) and behavior (local wisdom) towards nature and the environment by indigenous people. Nature and the environment are seen as something sacred and an inseparable cosmological unity with humans. Due to this, indigenous people create local traditions and rules with various names and methods aimed at utilizing and preserving the environment.

Indigenous peoples in Indonesia have long developed sustainable knowledge and practices to manage their nature and resources. Many of these values and practices align with modern climate change management strategies. The philosophy or outlook of the people in Indonesia that embraces harmony with nature as explained earlier is the main basis for making policies to address climate change. Harmonious management of natural resources will increase community resilience to the threat of climate change.

In addition to the philosophical aspect, indigenous peoples' practices align with current climate change strategies. In the forestry sector, there are similarities between Indigenous peoples' practices and

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<sup>47</sup> Eric Krisna Sandi, "The Role of Indigenous Peoples in Local Wisdom-Based Forest Management in Papua: Case Studies and Development Strategies," *Journal of Horizon* 1, no. 1 (2024): 23–29.

existing policies such as the Social Forestry policy, Customary Forest Determination, and REDD+ (Reducing Emissions from Deforestation and Forest Degradation) Policy. Indigenous peoples in Indonesia, such as the Dayak tribe in Kalimantan the Anak Dalam tribe in Sumatra, the Hatam tribe in Papua, and the Aelipo Village Community in East Nusa Tenggara have long managed forests. They have customary rules that regulate when and how trees can be cut down, as well as how to protect certain forest areas that are considered sacred or have important ecological functions. In addition, local knowledge about the planting season calendar (*keneunong*) such as in Aceh is also an important part of forest management. This kind of forest management practice is in line with that it can be adopted in the strategy to reduce greenhouse gas emissions by optimizing the function of forests as carbon sinks.

Then the practice of natural resource conservation. In some Indigenous communities, such as in Sulawesi, Maluku, and Papua, there is a community-based conservation areas management system, such as customary forests or customary land that is prohibited from being exploited without customary permission. This practice can be developed in line with natural resource conservation programs carried out by the government, such as ecotourism, national parks, conservation funding, and so on.

In the maritime sector, there are similarities between local wisdom-based water resource management practices and current policies. Many indigenous communities in Indonesia, such as the Baduy tribe in Banten and the Toraja tribe in South Sulawesi, have water management systems based on local wisdom. For example, the Baduy community maintains the sustainability of river flows by creating customary rules, the Batangtoru indigenous community in North Sumatra carries out water conservation traditions, and the Maluku indigenous community has the *sasi* tradition which protects marine and river ecosystems. In the context of coastal areas, water conservation can protect coral reefs, mangrove forests, and seagrass beds. These ecosystems can support carbon absorption and can also increase fishery resources.

In the plantation sector, there are elements of similarity between the agroforestry system (Intercropping Farming/*Perladangan Tumpang Sari*) and the Food Estate program. In various regions of Indonesia, such as Bali, Papua, and Nusa Tenggara, indigenous peoples implement

intercropping and agroforestry farming systems. In this system, various types of plants (such as trees, food crops, and medicinal plants) are planted together to create a balanced and mutually supportive ecosystem. This practice can increase carbon sequestration, reduce soil erosion, and increase soil resilience to climate change.

Traditional knowledge based on local wisdom values is one of the important things in adaptation efforts by indigenous legal communities to deal with climate change. The local wisdom values held by indigenous communities in Indonesia can be adopted or recognized in making policies to handle climate change. The following section will explain recommendations or ways in which indigenous knowledge and practices can be part of handling climate change.

## **Recognition of Indigenous Community Environmental Values for Policy Addressing Climate Change in Indonesia**

Throughout their lives, indigenous people have observed the impacts of climate change directly for decades. They observed changes in temperature, the amount and quality of rain and seas, and changes in seasons.<sup>48</sup> The observations of indigenous people and the knowledge and practices they developed to cope with and adapt to these changes cannot be underestimated because it enabled them to survive as distinct societies for thousands of years.

Indigenous communities in Indonesia can be part of the solution to climate change adaptation and mitigation actions because indigenous communities view that humans are part of nature who must protect and nurture each other.<sup>49</sup> Indigenous people have knowledge (local genius) how to maintain and utilize natural resources in their habitat, indigenous

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<sup>48</sup> Naomi Johnstone, "Indonesia in the 'REDD': Climate Change, Indigenous Peoples and Global Legal Pluralism," *Asian-Pacific Law & Policy Journal* 12, no. 1 (2010): 93–122.

<sup>49</sup> Linda Etchart, "The Role of Indigenous Peoples in Combating Climate Change," *Palgrave Commun* 3, no. 17085 (2017): 1–4.

communities also have customary laws, customs, traditional institutions as part of local wisdom.<sup>50</sup>

Recognition is an effort to acknowledge, respect and give proper value to the identity, existence, rights, and interests of certain groups or individuals. In the context of customary law communities in Indonesia or elsewhere, recognition relates to the form of recognition and protection of indigenous communities provided by the state.

Recognition of the values and rights of indigenous people in Indonesia has become an important part of efforts to achieve social justice, environmental preservation, and build a culturally inclusive society. However, until now its implementation often faces challenges due to ongoing conflicts between indigenous communities and industry and state political interests. Therefore, it is important to continue to develop and strengthen policies and practices based on recognition of indigenous people's values. Here are some strategic steps to recognize indigenous peoples' values in climate change management policies:

1. Identification of Local Wisdom Values of Indigenous Communities that are in Alignment with Climate Change Management Strategies

The first step to recognizing the environmental values of indigenous communities in dealing with climate change is to identify values that are universal. From the value exploration that has been carried out previously, it is known that traditional knowledge of indigenous people regarding nature and the environment is 'eco-centric' because they view and position themselves as humans in cosmic reality, humans and the universe are a single ecosystem that depends on and influences each other. In law, ecocentrism can be found in the principle of sustainability, the precautionary principle, the principle of ecological justice, the principle of intergenerational justice. These principles are a reflection of the local wisdom of indigenous people in preserving nature and the environment which has been accommodated and spread in various legal regulations. In addition, the identification of traditional practices also needs to be carried out as lessons that can be taken from indigenous communities such as forest area management arrangements, planting season

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<sup>50</sup> Nicole Redvers, Paula Aubrey, Yuria Celidwen, and Kyle Hill, "Indigenous Peoples: Traditional Knowledges, Climate Change, and Health," *PLOS Glob Public Health* 3, no. 10 (2023): e0002474.

calendars, natural resource utilization management, and various other traditional practices that are in line with efforts to address climate change.

## 2. Adopting the Local Wisdom Values of Indigenous Communities in Climate Change Management Policies

Local knowledge and practices of indigenous peoples in Indonesia, such as sustainable farming, hunting, or forest management methods, have often proven to be more adaptive in responding to the challenges of climate change. Climate change management policies can adopt traditional methods or practices that have been tested to manage natural resources and maintain ecosystem balance. For example, in forest management, there are many indigenous values in Indonesia that practice environmentally friendly agroforestry or agricultural rotation systems.

The challenge in this step is in determining the form of policy choices because Indonesia has a variety of policy products. Initial recognition can be done through existing climate change management policies, for example strengthening the role of Indigenous peoples through several policies as in Table 1. In addition, recognition can also be done through the creation of policies that specifically regulate Indigenous peoples and climate change from the aspects of adaptation, mitigation, protection, participation, funding, and so on.

## 3. Indigenous Peoples' Participation in Policy Making for Addressing Climate Change

The problem about why until now indigenous people have to bear the heavier impacts of climate change is because they have minimal participation and involvement in formulation of policies and actions to handle the climate change. Therefore, the next important step to take is to ensure that there is participation of indigenous communities in the formulation and making of climate change policies. The dependence of indigenous people and their close relationship with nature and the environment makes indigenous people a vulnerable group and the first to face the impacts of climate change. As a matter of the fact, indigenous communities become a

subjective requirement for fulfilling 'meaningful participation' in the formulation and making of climate change policies.<sup>51</sup>

The participation of indigenous communities in the formulation and making of climate change policies is also a form of dialogue process and internalization of indigenous environmental values. Because only in this agenda can the environmental values of indigenous communities be captured optimally so that cognitive justice can be realized in the initial process of handling climate change.

'Crowd Legislation Mechanism' can be one of the mechanisms for indigenous/local community participation in conveying ideas in the process of drafting and publishing a legal product or policy. This mechanism is carried out in 2 (two) ways, namely offline and online mechanisms. Offline mechanisms explore meetings to reach limited areas/regions with internet networks. Online mechanisms are carried out to collect and contrast ideas into a website that is published nationally so that it can be seen by the wider public.

The importance of the participation of Indigenous People in the formulation and decision-making of climate change policies and actions has been basically recognized by the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), such as at COP16 in Cancun in 2010 (Cancun Agreement), it was decided to create a UN Platform on Indigenous People and an Ad Hoc Committee to develop Guidelines for Increasing the Engagement of Indigenous People in climate change. In the Preamble to the Paris Agreement, it is also acknowledged that in taking action to address climate change it is mandatory to respect, protect and fulfill (among other things) the rights of indigenous people.

Most recently, the UN Climate Change Conference held in Baku in November 2024, the 29th Conference of the Parties (COP29), has become a major turning point in giving voice to Indigenous Peoples and

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<sup>51</sup> One of the subjective requirements for meaningful participation is regulated in Article 96 paragraph (3) of Law Number 13 of 2022 concerning the Second Amendment to Law Number 12 of 2011 concerning the Formation of Legislative Regulations, that "The public who have the right to provide input are individuals or groups of people who are directly affected and/or have an interest in the content of the Draft Legislative Regulations."



local communities in global climate action. At this conference, a major step was taken to strengthen their role in addressing the increasingly detrimental impacts of climate change. Namely by renewing the mandate of the Facilitative Working Group (FWG) of the Local Communities and Indigenous Peoples Platform (LCIPP).

Apart from these steps, what to do is to implement climate education among indigenous communities. Empowering indigenous communities is a crucial step to increase knowledge and skills in dealing with climate change. Climate education can be carried out through training, outreach and technology transfer which is of course relevant and does not conflict with the culture and local wisdom of certain indigenous communities. Because in fact every indigenous community already has traditional knowledge and local wisdom in preserving nature and the environment, the government is only to strengthen and develop the traditions of indigenous communities so that they become an integral part of national climate change and adaptation actions.

Then, multi-party collaboration is needed. Multi-stakeholder collaboration is important and necessary approach to addressing the complex challenges of climate change. Collaboration of indigenous communities with the government, non-governmental organizations (NGOs), private sectors and international institutions is important to create comprehensive and holistic solutions, considering that climate change is a global challenge and problem.

Climate funding for indigenous communities in dealing with climate change is the key to recognizing the environmental values of indigenous communities so that they can run well. So far, climate funding for indigenous people has not run optimally, only 7% of which is allocated in the COP process have been provided even though indigenous people protect almost 80% of global biodiversity. Further, Indonesian government has established 2 climate fund management institutions, namely the Environmental Fund Management Agency (BPD LH) and the Indonesia Climate Change Trust Fund (ICCTF). There is also private climate funding from 'Nusantara Fund'.<sup>52</sup>

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<sup>52</sup> This is a new initiative by 3 organizations, the Indonesian Forum for the Environment (WALHI), the Alliance of Indigenous People of the Archipelago (AMAN) and the Agrarian Reform Consortium (KPA) which aims to build strong support for initiatives by indigenous people and local communities to protect and

Several forms of climate change funding for indigenous communities can be in the form of: (1) Funding for Forest Conservation and Emission Reduction: The REDD+ (Reducing Emissions from Deforestation and Forest Degradation); (2) Adaptation and Resilience: Indigenous communities are to the impacts of climate change such as droughts, floods and changes in seasonal patterns. Funding can be used to build their resilience to natural disasters; (3) Facilities and infrastructure: Assistance with driving equipment facilities for agricultural cultivation, farming, fishing for coastal indigenous communities is provided with materials and products from renewable energy; and (4) Empowerment and Training: Funding can be used to empower indigenous communities with the knowledge and skills necessary to adapt to climate change and take advantage of environmentally friendly economic opportunities, such as ecotourism or sustainable forest management. The challenge of climate change funding for society so far is process accountability, such as distribution, management and supervision. This occurred as a result of policy uncertainty and weak political commitment from the Indonesian government.

By recognizing and strengthening the role and environmental values of indigenous people in climate change, we can build more effective solutions to face all the challenges of climate change. The steps described previously are ways and stages of recognizing the environmental values of indigenous communities that can be accommodated in policy and realized in action to deal with climate change in Indonesia.

Recognition of indigenous values in climate change management policies is an important step in achieving Indonesia's climate commitments under the Paris Agreement. In addition, this idea was proposed as an effort to support the objectives of the Sustainable Development Goals (SDGs) point 13, namely Climate Change Management (climate action) and points 14 and 15 on the protection of marine ecosystems (life below water) and land ecosystems (life on land).

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manage land, territories and their resources to increase their contribution to reducing emissions related to deforestation and forest degradation, increasing carbon stocks and improving people's quality of life.

## Conclusion

In conclusion, negative impacts of climate change are undergone by almost all indigenous communities in Indonesia who live in various types of regional ecosystems. This happens apart from weak protection of the rights of indigenous people, it is also caused by Indonesia's climate policy regulations which are not yet in favor of indigenous people. In the future, the position of indigenous communities also needs to be emphasized in their role and contribution in handling and controlling climate change, rather than being eliminated as happened in the policy of implementing the Economic Value of Carbon (NEK) in Indonesia.

Indigenous communities in Indonesia tend to have similarities in traditional knowledge (local genius) and local wisdom (local wisdom) in managing and preserving nature and the environment. Recognition of the environmental values of indigenous communities in dealing with climate change is built by this spirit. The eco-centric principle of environmental values of indigenous communities must be internalized in every regulation and policy addressing climate change. Steps to recognize the values of Indigenous peoples in climate change management policies include identifying the values of Indigenous peoples' local wisdom that are in line with climate change management strategies, adopting Indigenous peoples' local wisdom values in policies, and ensuring Indigenous peoples' participation in policy making. Several ways can support recognition of environmental values by providing climate education, multi-stakeholder collaboration, and climate funding for indigenous communities. From all these things, it is hoped that climate justice can be fully realized in Indonesia.

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## **Acknowledgment**

The author would like to thank the Universitas Hang Tuah, which has helped in many ways, both morally and financially. The author would also like to express his thanks to the entire “The 5<sup>th</sup> International Conference on Law Reform (INCLAR) 2024” Faculty of Law Universitas Muhammadiyah Malang committee as a means for the author to convey the ideas for this article. Also, the author does not forget to express his deepest gratitude to Ridwan Arifin, journal expert form Faculty of Law Universitas Negeri Semarang, who has always succeeded in creating high-quality journal with an international reputation.

## **Funding Information**

No funding support.

## **Conflicting Interest Statement**

There is no conflict of interest in the publication of this article.

## **Publishing Ethical and Originality Statement**

All authors declared that this work is original and has never been published in any form and in any media, nor is it under consideration for publication in any journal, and all sources cited in this work refer to the basic standards of scientific citation.

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