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CONSERVATION PARTNERSHIP POLICY IN SUSTAINABLE DEVELOPMENT IN THE FORESTRY SECTOR

1st Djuariah

Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
juju.djuariah@ugj.ac.id

2nd Gusti Yosi Andri

Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
gusti.yosi@ugj.ac.id

3rd Endang Sutrisno

Law Department, Faculty of Law
Universitas Swadaya Gunung Jati
endang.sutrisno@ugj.ac.id

Abstract— The impact of changing the status of the protected forest on Mount Ciremai into a national park is felt to be very detrimental to the surrounding community because they no longer utilize the natural resources in the forest freely. Nature lovers and activists welcome this status change because it will better preserve the ecosystem and habitat in forest areas. Mount Ciremai National Park (MCNP) has received several proposals from local communities to utilize the area around the forest. However, a decision has yet to be made because it considers regulations and policies so it does not conflict with legal provisions. This research analyzes the policy provisions for using forest areas that have changed to national parks, which can no longer be used in the business sector. The research method uses a normative juridical method, considering that the activities revolve around reviewing policies in the form of regulations and laws. The research results show that the conservation partnership model is intended for local communities who depend on natural resources in the MCNP area for their livelihoods. The concept of Adaptive Collaboration Management (ACM) is applied in this conservation partnership so that the community and its facilities can pick up or collect non-timber products (NTPs) and non-timber forest products (NTFPs) both outside and inside the forest area while maintaining the sustainability of the forest ecosystem so that future generations can utilize it.

Keywords— ACM; Conservation Partnership; SDGs; National Park; MCNP

I. INTRODUCTION

Background presents issues related to the research focus. Sustainable development in the forestry sector [1] is an approach that aims to meet current needs without compromising the ability of future generations to meet their own needs. The forestry sector has a vital role in maintaining ecosystem balance [2], supporting biodiversity

[3], and providing various ecosystem services [4] that are vital to human life. One is an effective carbon sink [5], helping mitigate climate change's effects by absorbing and storing carbon dioxide from the atmosphere.

In addition, forests support biodiversity by providing habitat for various species of flora and fauna, many of which depend on forest ecosystems for survival [6]. Forests also provide various ecosystem services vital to human life, including clean water [7] through water absorption and protection against soil erosion [8]. Forests support nutrient cycling, provide critical raw materials for small and medium enterprises (SMEs) [9], and play a role in regulating local and global climate [10]. All these functions make forests essential in maintaining the natural balance [11], biodiversity, and supporting the dependence on human life [12].

Healthy forests serve as effective carbon sinks, helping mitigate climate change's effects by sequestering carbon dioxide and creating important climate stability for economic sectors [13] such as agriculture, fisheries, and tourism. In addition, forests support high biodiversity, which provides economic benefits through natural pollination [14], pest control, and the potential development of pharmaceutical products from medicine plant species [15] found in forests. Forests also provide essential ecosystem services such as the provision of clean water quality [16] and protection against soil erosion [17], which are vital for the agricultural and infrastructure sectors [18].

Forests are also a source of raw materials in the form of timber and non-timber [19], which can provide employment and income for communities around forest areas. Forests have high biodiversity [20], such as plants/flora, animals/fauna, and microorganisms, which become a natural resource that produces goods and services to meet human needs [21]. One of the benefits is that it has an impact on industrialization, which movement the wheels of a country's economy [22], such as the availability of employment and business opportunities [23] for levels of

society so that it can improve the welfare of people's lives [24]. On the other hand, using biodiversity raises problems such as not maintaining terrestrial ecosystems, in this case forests [25], due to conflicts of interest [26]. Damage to forest ecosystems can indeed be caused by natural factors [27] such as climate or natural disasters, but what makes things worse is the human factor, both from the Government with policies to open forests and conversion of functions and actions of business actors who exploit the available biodiversity [28].

For example, pine sap tapping activities that occur in Mount Ciremai National Park by local communities. Environmental activists indicated that parties with solid positions and finances were involved in the pine sap tapping activity. Indeed, pine sap can become a superior product that can improve the economy [29]. This pine sap can be processed or produced into turpentine as a raw material for cosmetics, antiseptics, and other products with high sales value and usability. Apart from that, pine sap can be processed into *gondorukem*, used in the industrial sector as a raw material for making bath soap, and in the pharmaceutical sector, for example, as a raw material for making plaster [30].

Such exploitation occurred in the Mount Ciremai forest area. Environmental activists have reminded the Government and several parties to act wisely in treating the forests around the Mount Ciremai area so that they can be enjoyed together for generations to come [31]. Following up on this, the Government determined that the forest in Mount Ciremai area, with an area of around 15,500 hectares located in Kuningan and Majalengka Regencies, had been changed from its original function as a protected forest area to a national park area [32]. The impact of this function change is felt by the surrounding community, who depend on their livelihoods on the results of exploiting the biodiversity around the Ciremai mountain forest because based on the conditions and natural potential in the Ciremai mountain forest area are limited (*penetapan hutan*). Only the traditional zone of the 1,100-hectare nature conservation area can be utilized by communities dependent on natural resources for generations [33]. This is in accordance with the definition of a national park, which is a forest area with an ecosystem that sustainability is maintained by management based on a zoning system and is only used according to the role of a national park for educational, research, cultivation, tourism and recreational purposes [34].

The Government issued a Minister Regulation of Environment and Forestry Number P.83/MENLHK/SETJEN/KUM.1/10/2016 regarding the community empowerment around forest areas with the concept of community empowerment conservation partnerships or ecosystem restoration. Conservation partnerships carry the concept of society as subjects who are given legal access [35]. This means that the Government's

position is only as a facilitator and motivator in communication forums with local communities in utilizing natural resources for mutual respect, trust, and mutual benefit [36] in carrying out business activities accompanied by efforts to restore the ecosystem. The Government further calls on people who wish to utilize biodiversity to obtain permission first. As long as they do not have permission, it is categorized as an illegal activity like illegal logging [37]. The licensing techniques have been regulated in the Regulation of the Director General of Natural Resources and Ecosystems Conservation Number P.6/KSDAE/SET/Kum.1/2018, which begins with submitting a proposal until the cooperation agreement is signed.

Forest areas are used for biodiversity in the form of plants/flora, not only wood but also non-timber forest products (NTFPs) such as fruit, honey, rattan, latex, bamboo, and others. The potential for NTFPs is quite promising; in 2020, around 558,000 tons were produced and provided input to Non-Tax State Revenue of around 4.2 billion rupiah. The highest production of NTFPs was in the gum group, around 126,000 tons; the grain group, around 114,000 tons; and the leaf/root group, around 63,000 tons. Not to mention NTFP commodities that have the potential to be developed, such as honey, rattan, bamboo, eucalyptus leaves, and others [38].

Hesti L. Tata [39], in an anthology book published by IPB Press Bogor in 2019 entitled *Development of Indonesian Non-Timber Forest Products (NTFPs) in Support of SDGs*, stated that one of the supporting factors for national development in the forestry sector is developing commodities in the form of NTFPs to achieve sustainable development goals (SDGs). The challenges stakeholders face in providing seeds/seedlings and raw materials, using technology in process innovation, and marketing need to be considered. Another research, which was carried out by Abdul Mazid et al., [40] with the title *Food Plant Diversity at Karangsari Research Station Mount Ciremai National Park*, published in the *Forestry and Environment* journal *Wana Raksa*, Volume 16 Number 2, December 2022, stated that 29 types of flora/food plants were found, such as vegetables (Shandong), fruit (avocado), spices (coffee), and others. This shows that the biodiversity in Mount Ciremai National Park for NTFPs has quite good commodity potential. The journal compiled by Desak Gde Dwi Arini et al [41] with the title *Conservation Contract as the Basis for Agreement in Buffer Village for Nature Tourism in West Bali National Park*, published in *Kertha Wicaksana* Volume 17 Number 1 of 2023, stated that Buffer Village, the Village Government and community groups made a joint agreement to obtain permission to use a conservation area which further explains the legal relationship between the three parties which is outlined in the form of a written agreement.

Their agreement is the basis for applying for a conservation partnership permit.

Researching the Conservation Partnership Policy in Sustainable Development in the Forestry Sector in Gunung Ciremai National Park (TNGC) Kuningan, West Java, is very important considering the strategic role of this region in maintaining ecosystem balance, biodiversity conservation and improving the welfare of local communities. Furthermore, this research needs to identify and develop effective and adaptive policies to protect the region from external pressures such as deforestation, land encroachment, and climate change, as well as to ensure the sustainability of natural resources that form the backbone of local communities' lives.

This study explores how conservation partnership policies can be effectively implemented to achieve sustainable development goals, namely the balance between environmental conservation and economic and social improvement of communities. Providing strategic guidance to strengthen conservation partnerships in TNGC and other conservation areas in Indonesia involving various stakeholders (Government, private sector, local communities) will support the achievement of the sustainable development goals more broadly.

II. METHOD

Using a conceptual approach, this type of qualitative research explores and analyzes conservation partnership policies that can improve the effectiveness of forest management in the context of sustainable development in the forestry sector. This research focuses on an in-depth analysis of the legal framework governing conservation partnerships, community empowerment, and the application of collaborative adaptive concepts.

This study is around the Gunung Ciremai National Park (TNGC) area in Kuningan, West Java. This area is one of Indonesia's critical conservation areas, with high biodiversity and complex management challenges. The research will cover areas in and around the park, including villages directly adjacent to conservation areas. The focus is on interactions between governments, local communities, non-governmental organizations (NGOs), and the private sector in implementing conservation partnership policies.

The instruments used in this study include in-depth interviews, participatory observations, and literature studies. In-depth interviews will be conducted with various stakeholders, including government officials, community leaders, NGO representatives, and local businesses, to gain their perspectives on conservation partnership policies and their implementation. Participatory observations will be conducted in the field to observe forest management practices and stakeholders' interactions directly. The literature study will search policy documents, previous

research reports, and relevant academic literature to support the analysis.

The analytical tools used in this study are content analysis and thematic analysis. Content analysis will be applied to document data and interview transcripts to identify patterns, themes, and key concepts related to conservation partnership policies. Thematic analysis will organize and interpret qualitative data, enabling researchers to identify relationships between key concepts and provide insight into how the policy is implemented and impacts sustainable development.

III. RESULTS AND DISCUSSION

Poverty is still a scourge in many countries: rich countries, poor countries, developed countries, and developing countries [42]. The UN states that the world will not be able to end poverty by 2030 [43]. Poverty is not just about money; poverty also includes other variables such as high levels of unemployment, poor health, low education, and even social exclusion [44]. Even though the principles are the same, the poverty experienced by rural communities is three times higher than that experienced by urban communities [45], including access to health services or pension funds that people in rural areas never have.

Likewise, people who live around forest areas where for generations they have depended on forest products for their livelihoods [46]. Poverty can result in inequality and crime, leading to environmental damage, such as taking wood for construction, heating, or cooking. In other words, poverty can impact sustainable ecosystem forested functions [47]. For example, illegal pine sap tapping activities occurred in the Mount Ciremai National Park area, which caused damage to pine plants [48].

The illegal tapping of pine tree sap occurred after the forest in Mount Ciremai area, with an area of around 15,500 hectares located in Kuningan and Majalengka Regencies, had been changed from its original function as a protected forest area to a national park area [32]. The impact of this function change is felt by the surrounding community, who depend on their livelihood on the results of exploiting the biodiversity around the Ciremai mountain forest because access is limited based on the conditions and natural potential in the Ciremai mountain forest area [49]. Only the traditional zone of the 1,100-hectare nature conservation area can be utilized by communities dependent on natural resources for generations [33]. This is in accordance with the definition of a national park as stated in the Regulation of the Director General of Natural Resources and Ecosystem Conservation Number P.6/KSDAE/SET/Kum.1/2018, namely a forest area with an ecosystem whose sustainability is maintained by management based on a zoning system and is only used for educational, research, cultivation, tourism, and recreation purposes.

Apart from that, people who want to utilize natural resources in the zone need permission from the relevant department, which is then written into a cooperation agreement. The technical use of natural resources is regulated in the Regulation of the Director General of Natural Resources and Ecosystem Conservation Number P.6/KSDAE/SET/Kum.1/2018 (NREC regulation), which is referred to as a conservation partnership. The long process in the partnership stages made the local community lose patience because the community's urgency to meet their daily living needs sourced from forest areas was temporarily stopped until the cooperation agreement was issued.

The purpose of the NREC regulation is to protect and maintain the integrity of the ecosystem so that it can be used sustainably for future generations. Therefore, the concept of conservation partnerships places the community as the subject. At the same time, the Government is the facilitator and motivator in directing, maintaining, and sustaining the function of the forest ecosystem and the use of the ecosystem in the future [50]. For example, people use forest areas to grow crops, take or collect NTFPs, or open tourist attractions. After the issuance of the NREC Regulation, all activities are stopped and prohibited from being reviewed through the stages regulated in the NREC Regulation. This means that the Government evaluates the impact of the use of natural resources on ecosystem stability by inviting the public to discuss and exchange views so that they can work together.

Article 3, Letter A of the NREC Regulation states that community empowerment is one of the scopes of conservation partnerships. Empowerment is an activity that is dynamic, sustainable, and synergistic with existing potential and involved in an evolutionary way [51]. Empowerment aims to form individuals who are independent in thinking/potential (empowering) and acting/developing (enabling) [52]. Community empowerment is a way to increase community potential and develop through strengthening societal institutions, especially using NTFPs [53].

The Mount Ciremai National Park (MCNP) Center has received several requests from the public to be allowed to collect NTFPs in the MCNP area. The MCNP Center is concerned about the exploitative extraction or collection of NTFPs, which causes damage to the ecosystem, so it needs to be evaluated in granting permits. The community regrets the existence of such a regulation because people who have depended on it for generations to collect NTFPs cannot possibly destroy their source of life [54]. Therefore, the MCNP Center immediately accelerated the granting of permits or cooperation, considering that the potential for NTFPs is quite promising; in 2020, around 558,000 tons were produced and provided input to Non-Tax State Revenue of around 4.2 billion rupiahs. The highest production of NTFPs was in the gum group, around 126,000

tons; the grain group, around 114,000 tons; and the leaf/root group, around 63,000 tons. Not to mention NTFP commodities that have the potential to be developed, such as honey, rattan, bamboo, eucalyptus leaves, and others [38]. Therefore, the public needs legal certainty immediately because the NTFP market is waiting to be supplied.

Legal certainty is a form of realizing justice as achieving legal objectives. With legal certainty, every legal subject is confident in carrying out a legal act. Gustav Radbruch believes that legal certainty is a legal product that must be obeyed because it regulates the actions or interests of each legal subject [55]. The designation of Mount Ciremai as a national park means that local people who depend on the use of biological resources for their livelihoods are required to obtain permission first, even though it is felt to be unfair because, according to Radbruch the principle of justice is equality before the law [56]. At least the writer thinks that Radbruch's legal certainty provides the legality of a legal act carried out with certainty and direction.

Satjipto Rahardjo stated that legal certainty is different from regulatory certainty. Issuing legal provisions does not mean that legal certainty is born, but rather that regulatory certainty is born [57]. A form of legal certainty is compliance with the law as an institution that aims to make people happy and prosperous [58]. The issuance of the NREC Regulation as law gives rise to regulatory certainty that every community must have permission to extract natural resources in the MCNP area. If these regulations are obeyed, then legal certainty will arise.

The granting of permits for the use of natural resources, as outlined in the form of a cooperation agreement stipulated in the NREC Regulation, must be obeyed by local community members. The text format of the cooperation agreement has been attached to the NREC Regulation so that the parties can use this format. The writer thinks that people who need help understanding an agreement's text will tend to follow what is made or prepared by the MCNP Center. Moreover, the text format states that there is a memorandum of understanding, which has different legal consequences from a cooperation agreement. A memorandum of understanding (MoU) is a pre-contract agreement that only contains the main points that will later be stated in an agreement and does not give legal consequences if the MoU is not implemented [59]. The purpose of community empowerment in the NREC Regulation is that the MCNP Center not only submits or offers a manuscript format as one of the stages that must be passed but instead provides clear and detailed education and information to the community. If other parties outside of them are needed, assistance from both academics and practitioners may be needed. In the NREC regulation itself, it has been stipulated that conservation partners are local communities, both individuals and groups, with the

requirements specified in Article 13 of the NREC Regulation and the local Village Government. Thus, apart from the MCNP Center, the participation of the Village Government is needed to help empower and enable village residents who genuinely depend on natural resources in the MCNP area to comply with the provisions of the NREC regulation.

Collaborative Adaptive Concepts in Conservation Partnerships

The concept called for by Mr. Wiratno, Head of the Director General of NREC, in sustainable governance of conservation partnerships related to community empowerment and ecosystem restoration is Adaptive Collaborative Management (ACM) [60]. Adaptive here is responsive in adapting to changes/new conditions that occur in a structured and repeated manner for making decisions [61]. Collaborative is an activity that is participatory or works with interested parties on an ongoing basis to achieve common goals [62]. Thus, the ACM concept in conservation partnerships can be interpreted as stakeholder cooperation through community empowerment and ecosystem restoration to utilize resources and sustainably preserve ecosystems [63].

Empowering local communities in the ACM concept supports conservation partnerships because residents in forest areas are more familiar with local forest environmental, climate, and weather change conditions [64], [65]. This becomes the basis for decision-making when undesirable situations occur so that they can adapt to new conditions. For example, there is a change in climate from the dry season to the rainy season, which disrupts the use of natural resources. Therefore, participation from other related parties is needed to continue utilization and conservation activities by providing facilitation, as stated in the NREC regulation, which is a catalyst for adjustment to the changes that occur [66].

Three ACM anchors most stakeholders must carry out [67]:

Interaction/Communication

Effective communication is a flow of information between stakeholders. All desires, hopes, constraints, and problems are communicated to determine priorities for actions, policies, and decisions to achieve the main goal, using natural resources and sustainable ecosystem maintenance or sustainable forest management (SFM).

Learning

Learning here is not enough to empower the community as regulated in the NREC regulation, but rather for all stakeholders. Develop skills, knowledge, attitudes, will, capacity, and competence in a learning forum related to SFM by sharing experiences or transmitting knowledge. Learning carried out by stakeholders is the key to ACM's success, as it includes indicators of a shared vision and

mission, unity of perception or understanding, and actions/behavior.

Action

All stakeholders must participate actively in actions, starting from planning, preparing frameworks, implementation processes, monitoring, and decision-making related to subjects and objects in SFM, as well as mechanisms or techniques for handling conflict or negotiating changes in the conditions faced.

People living in the MCNP area only want to continue earning a living by collecting or taking NTFPs reasonably. For this reason, the Village Government accommodates this desire by inviting business actors who need NTFPs for raw materials for production to work together to support the community's economy while still paying attention to ecosystem preservation, as suggested by the MCNP Center. The first concept of ACM is implemented by holding effective interactions between stakeholders. By reaching an agreement in interaction, empowerment, and learning continue. Sharing experience and knowledge transfer are expected to further hone the abilities and skills of stakeholders in taking actions or decisions to realize SFM.

IV. CONCLUSIONS

Conservation partnership policies in sustainable development in the forestry sector, particularly in Gunung Ciremai National Park (TNGC) in Kuningan, West Java, are essential in balancing environmental conservation and improving community welfare. A conservation partnership is an agreement that contains the rights and obligations of each party and establishes procedures for cooperation in the management of conservation areas—empowering communities around forest areas in natural resource management as active partners in maintaining the sustainability of conservation forest areas. Applying the collaborative adaptive concept aims to create synergies between the interests of conservation, economic development, and social welfare, thus creating more effective and sustainable results in maintaining biodiversity and natural ecosystems.

People who live in the MCNP area and depend on their livelihoods by utilizing natural resources in the MCNP area no longer need to worry because the Government has issued regulations for community empowerment through conservation partnerships. Stakeholder involvement as facilitation in conservation partnerships will make it easier for the MCNP Center to submit requests for community permits to the Director General of NREC to make the ACM concept a success. Implementing the conservation partnership pattern can realize SDGs goal number 1, which is ending poverty, especially for communities in the MCNP area.

Several limitations are noteworthy in research on conservation partnerships in sustainable development in the

forestry sector. With limited time, the research location was only chosen in the Gunung Ciremai National Park (TNGC) area in Kuningan, West Java. Researchers are aware of possible differences in characteristics in other National Park areas, which can limit the comprehensive generalization of research findings. Therefore, this study opens the door for further research by choosing a representative research location.

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