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# Investigating Community Problems Inside Indonesian National Parks: From Overview to Case Study at Sukamade Geoforest Coastal Area : Menyelidiki Problematika Masyarakat Dalam Taman Nasional di Indonesia: Dari Gambaran Umum ke Studi Kasus di Kawasan Hutan Geo Sukamade

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This study explores the challenges encountered by residents within Indonesian national parks, focusing specifically on the local communities in the Sukamade Geoforest Coastal area of Meru Betiri National Park. Despite the recognized need for regional government and community involvement in park management, this research identifies a significant gap in effective community empowerment and management practices. Employing qualitative descriptive methods, including observations, interviews, and literature reviews, the study analyzes data using the Miles, Huberman, and Saldana interactive method, which includes data condensation, display, and verification. The findings reveal multifaceted issues faced by the Sukamade community, ranging from administrative and legal challenges to socio-cultural and environmental awareness problems. These results underline the necessity of integrating local communities into national park management to enhance environmental conservation efforts and community welfare, suggesting a reevaluation of current governance frameworks to address these complexities.

## Highlights:

- Lack of community empowerment hampers park management.
- Challenges include administrative, legal, socio-cultural, and environmental issues.
- Integrated management involving local communities is vital.

**Keywords:** Indonesian National Parks, Community Involvement, Challenges, Multifaceted Issues

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## Introduction

In various countries, managing national parks is an effort to preserve nature, biodiversity, and the ecosystem contained therein. These efforts generally consist of a series of monitoring activities, environmental education, law enforcement, national and international cooperation to ensure the environment is always well protected. Therefore, many countries have established special institutions responsible for managing their national parks. For example, the United States of America has a special agency that manages national parks, namely the National Park Service – NPS. In this case, the NPS is tasked with protecting more than 60 national parks throughout the

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United States, complete with the history and culture within them [1].

Besides the United States, several countries in the Asia-Pacific region have strong conservation policies to preserve their ecosystems so they are very good at managing national parks. These countries include New Zealand which has a good reputation for managing national parks such as Tongariro and Fiordland for nature conservation and sustainable tourism experiences [2], Australia has various national parks with extraordinary natural beauty, such as Kakadu and the Great Barrier Reef [3], Japan has several national parks with stunning panoramas, such as Nikko, Fuji-Hakone-Izu, and Daisetsuzan [4], and Canada, although most of it is in North America, some of its territory is still in the Asia-Pacific region, including Banff National Park as a superior conservation area [5].

Looking at the facts above, the management of national parks in developed countries appears to be very good because they have more adequate resources and infrastructure for monitoring, maintenance, and sustainable funding. This is also supported by environmental awareness and high community participation in nature conservation efforts. However, this does not mean that there are no developing countries that can manage national parks well. One of the developing countries in the Asia-Pacific region that has a good reputation is Nepal [6]. This country, which is famous for the Himalayan mountains and Sagarmatha National Park, has made various efforts, such as educating the community, monitoring human activities, enforcing laws against illegal hunting, and collaborating with international conservation institutions. However, it is important to remember that the level of effectiveness of national park management can vary, and many other countries in the Asia-Pacific region are also committed to nature conservation in their way.

Most national parks in the world are managed to preserve nature, so generally, these areas are not inhabited by permanent residents. However, some national parks are also known to have local or tribal communities living around or within the national park with special permits. One example is Virunga National Park in the Democratic Republic of the Congo. Although the main goal is the preservation of nature and wildlife, some local communities are allowed to live within the park to support the conservation and sustainable management of natural resources [7]. Seeing the presence of local communities in conservation areas could trigger various consequences. Therefore, community empowerment is necessary to improve their standard of living and understanding of environmental sustainability.

In the last few decades, the global trend of community empowerment in national park areas has increased with a focus on sustainable and participatory approaches [8]. These programs are generally realized in the form of training, skills development, and active community involvement in the management and conservation of natural resources. This approach aims to create a balance between environmental preservation and improving the welfare of local communities. However, the problem of community empowerment in national park areas is not always the same, because it depends on the needs and context of each national park. This can also be influenced by government policies and the conditions of local communities, such as their awareness of the need to participate in preserving the environment.

Moreover, it must be acknowledged that in around 36 countries in the Asia-Pacific region, several countries have not made environmental education a priority agenda [9]. Therefore, each country has a unique context for empowering communities in their national park areas, both from historical, cultural, socio-economic, and political perspectives [10]. Based on the description above, community problems in Indonesian national parks are interesting to study in depth. Therefore, the first aim of this research is to investigate the overview of community problems living inside Indonesian national parks so that they need to be empowered. Furthermore, to deepen the investigation, this research will focus on one of the national parks in Indonesia which has been inhabited by the local community for generations, namely Meru Betiri National Park in East Java Province. Therefore, the second aim of this research is to map the problems of local communities in Meru Betiri National Park, especially regarding the urgency of empowering community in the the Sukamade Geoforest Coastal area.

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## Methods

This research began with mapping a general overview of the national park's problems in Indonesia. Then, this case study research was conducted in the Sukamade Geoforest Coastal area, Meru Betiri National Park, East Java Province, Indonesia. Astronomically, this national park is located at coordinates 8°21'-8°34' South Latitude and 113°37'-113°58' East Longitude. Around the Sukamade, there is a local community who have lived in Sukamade Hamlet for generations. This hamlet is located in the utilization zone and rehabilitation zone of Meru Betiri National Park. Administratively, Sukamade Hamlet is part of Sarongan Village, Pesanggaran District, Banyuwangi Regency. However, even though they are administratively recognized as part of the population of Banyuwangi Regency, they live inside national parks without clear permission and documents [11].

This research uses a single case study design with a descriptive qualitative approach type. Single case studies concentrate on an exploratory in-depth study of one case to explain and understand the nature of a particular phenomenon [12]. To realize this research design, researchers need to collect credible data. Therefore, researchers use several techniques including observation, interviews, and literature study. In qualitative research, the data analysis process can begin as soon as possible before all the data is collected. This means that data analysis can be carried out in stages during the research process and this is useful in guiding the subsequent data collection process. This allows for some dynamic and interactive back-and-forth between data collection and data analysis as needed.

Therefore, in this research, collected data was analyzed using the interactive analysis model from Miles, Huberman, and Saldana [13]. The interactive analysis model has three stages: data condensation, data display, and data verification. Data condensation refers to the process of selecting, focusing, simplifying, and abstracting the data contained in the field notes. Data display refers to providing an overview of the raw data, mapping the research results, and highlighting important aspects. While, data verification refers to drawing conclusions based on the analysis carried out in the previous stage and re-checking it based on evidence found in the field.

## Results and Discussion

### A. Indonesian National Parks and Its Community Problems

Similar to the countries mentioned in the introduction part, Indonesia also has a special institution that has the authority to manage national parks. This institution is the National Park Office (*Balai Taman Nasional* - BTN), which is directly responsible for maintaining the sustainability of the ecosystem and the conservation of flora and fauna in the national park [14]. Hierarchically, this institution is under the auspices of the Ministry of Environment and Forestry, specifically the Directorate General of Natural Resources and Ecosystem Conservation. However, even though they have special institutions, national parks in Indonesia have a very basic weakness, easily broken into and looted by irresponsible people. The cases that occur are very diverse, ranging from forest encroachment, wild animal hunting, illegal logging, illegal settlements, illegal plantations, and illegal mining [15].

Even though the BTN has tried to resolve these cases, similar cases continue to occur due to treatment that is still partial and not permanent. There is a tendency for environmental damage in national park areas is increase because it is only defensive so that the damage can be minimized, but preventive efforts are weak. It is claimed that a state system that is too centralized is one of the causes of this problem, which has never received the right solution [16]. In the last decade, the Indonesian government has begun to realize the importance of decentralizing natural resource management and conservation. This government awareness is manifested by the issuance of Government Regulation Number 28 of 2011, which regulates the involvement of regional governments and provides access to the local community to participate in utilizing national park

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resources [17].

Decentralization not only improves public services through the formulation and implementation of policies that are closer to the people and their problems, but it can also cut bureaucratic flows and increase the efficiency of funds that must be allocated by the government [18]. By looking at this perspective, ideally, the central government, regional government, and other stakeholders can work together to maintain and manage a national park. The involvement of regional governments and local communities in maintaining and managing national parks is necessary to eliminate the impression that the BTN works alone. Especially considering that some national parks are inhabited and have permanent residents who depend on forest products for their livelihood.

Therefore, the existence of local communities inside and around national parks needs to be empowered so that their existence does not conflict with the conservation mission. For example, the local community is allowed to take part in managing utilization zones for tourism and recreation activities. Several stories produce best practices for empowering communities inside the national parks. For example, Gunung Leuser National Park has several local communities living around it. Although the main focus of the national park is preserving the rainforest ecosystem and wildlife, some villages traditionally live there and have participated in conservation efforts. This effort includes a conservation approach that involves local communities in managing natural resources. In this case, a bottom-up approach to tourism planning in utilization areas where the community has control has a significant impact on tourism development [19].

However, not all national park development has a good impact on the community side. For instance, the plan to develop Komodo Island as a high-cost premium tourist destination is full of controversy [20]. In this project, there is a strong discourse that the community should be relocated outside the national park. The community opposes this plan because they consider that the project - which is often referred to as Indonesia's version of Jurassic Park -will disrupt the natural habitat of the Komodo dragon, the surrounding environmental ecosystem, and the social life of the local community which has been established for a long time. Apart from that, forced relocation will reduce Indonesia's image in international eyes because the state does not protect its citizen's human rights [21]. Besides Gunung Leuser National Park and Komodo National Park, Indonesia still has 53 other national parks, each of which has its uniqueness. One of them is Meru Betiri National Park, which will be the case study of this research.

## **B. Community Problems at Sukamade Geoforest Coastal Area**

One of the national parks that is unique in Indonesia is Meru Betiri National Park, which is located in East Java Province. Based on the preliminary research and supported by various literature, there are at least two reasons why Meru Betiri is unique and has become popular. First, Meru Betiri is the last home for the Javan Tiger which was officially declared extinct in 1980. In this national park, the Javan Tiger was last detected in 1976. Although some local residents claim to have seen the reappearance of this big cat, but until now this recognition has not been scientifically proven [22]. Second, within Meru Betiri National Park, there is Sukamade Geoforest Beach, a hidden exotic beach that is a landing location for various rare turtles to lay their eggs. From the seven species of turtles that still exist in the world, four of them can be found in Sukamade and remain sustainable today [23].

Around the Sukamade, there are local communities who live traditionally in the national park. This community group has lived for generations in the utilization zone. Even though they live in the middle of a national park forest, administratively this community has an identity as residents of Banyuwangi Regency Considering that Banyuwangi Regency is a region a rich in natural landscapes, one of the leading sectors in regional development is tourism, precisely ecotourism. In this context, the Sukamade Geoforest Beach is the main ecotourism development project within Meru Betiri National Park. However, the existence of communities in national parks is often forgotten. Therefore, community empowerment at Sukamade area is a very important action to

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take. However, this is not a simple matter because community empowerment efforts must deal with various problems, including:

First, administrative and legal problems. Meru Betiri National Park is hierarchically under the authority of the central government through the BTN. The presence of Government Regulation Number 28 of 2011 which provides access to forest use to regional governments and local communities, on the one hand, has strategic value so that forest protection and management can be closer and maximized. However, on the other hand, the involvement of regional governments also creates bias and overlap in the distribution of authority. This situation creates uncertainty for both the BTN and Banyuwangi Governments to empower the community. According to population administration, the local community around Sukamade is indeed residents of Banyuwangi Regency. However, they do not have ownership rights to the land they live on because they live in forests belonging to the BTN. In easier terms, the status of settlements in the Meru Betiri is illegal because the residents who live there do not have written permission. This administratively and legally complicated situation means that BTN and regional governments are not free to make policies.

Second, infrastructure problems. The uncertainty regarding population administration and legal problems above has an impact on infrastructure problems. Sukamade is quite an isolated area, especially when the rainy season arrives, because there is a large river with fast currents. More than a decade ago, a bridge was built to Sukamade, but the bridge only lasted a few months because it was hit by a flash flood and has not been rebuilt until now. As a result, access to Sukamade can only be done by crossing the river using a bamboo raft or special 4-wheel-drive car in the dry season when the river water level recedes. This difficulty in access has bigger impacts, such as limited electricity sources and the absence of cellular network connectivity in residential areas. To meet electricity needs, people rely on diesel generators, which have limited operational capacity.

Third, economic problems. The lack of access and infrastructure harms the community's economy. One of the poverty pockets in Banyuwangi Regency is the community around the Sukamade Geoforest Coastal area. In this case, quite a lot of Sukamade residents earned less than IDR 1,000,000, or USD 65 per month [24]. In fact, according to one of Sukamade's youth leaders, who also assists in community empowerment projects, residents in this area rarely receive social assistance from the government. They only received direct cash assistance when the COVID-19 pandemic occurred. The low-income condition makes it difficult for local communities to have capital when they want to open a business in response to ecotourism development projects.

Fourth, human resources and socio-cultural problems. The number of people living in Sukamade is quite large. Currently, 692 people are living in. However, infrastructure and economic problems hurt human resources, especially in accessing education. The number of residents who have received an education is only 59.7%, with details of 36.8% completing elementary school and 22.9% having a secondary school education. Low education levels have direct implications for the socio-cultural life of the community, where they only depend on the forest for their livelihood and have minimal means for self-development. They have the view that forests are public property controlled by the state, so everyone has the right to take it. It must be acknowledged that historically, there has been a long and close interaction between communities and forest areas. This is because the existence of local communities in the forest has been established much longer than the establishment of the national park which was initiated in 1982.

Fifth, the issue of environmental awareness. Human resource and socio-cultural issues are closely related to the level of environmental awareness. History records that when President Soeharto's authoritarian regime fell in 1999 and was in chaos, there was quite a massive forest encroachment in the Meru Betiri National Park. Encroachers invaded the area and cut down rare and valuable trees. During that period, the Meru Betiri forest turned into a dry and barren area. In an instant, the area looted exceeded 20 square kilometers, or 2,000 hectares [25]. Currently, local communities have been given access to legal forest management while still implementing



conservation principles and obtaining economic benefits from managed forest products. However, in fact, local communities still often experience conflict with the BTN because the local community's agricultural activities use chemical fertilizers and pesticides. Apart from that, at Sukamade Geoforest Beach, there is also frequent theft of turtle eggs, both for trade and consumption by the local community. The points above show that in terms of environmental awareness, local communities do not seem ready enough to be involved in forest resource management. Therefore, community empowerment is needed which can be implemented in real ways so that community activities in national parks do not conflict with conservation principles.

## Conclusion

Based on the analysis above, it can be concluded that: First, the involvement of regional governments and local communities in managing Indonesian national parks is necessary so that BTN does not work alone. The presence of local communities in national parks needs to be empowered so that it does not conflict with the conservation mission, such as the opportunity to participate in managing utilization zones for tourism and recreation activities. Regarding these community empowerments, on the one hand, there are good practices that are examples of this community empowerment, such as the Gunung Leuser National Park which applies a bottom-up tourism planning approach in use areas controlled by the community. However, on the other hand, there are controversial examples of plans to develop Komodo Island National Park as a high-cost premium tourist destination which marginalizes local communities. Apart from the two national parks mentioned above, Indonesia still has 53 others, each with its uniqueness and problems.

Second, to see concrete examples of the urgency of empowerment, this research takes a case study in Meru Betiri National Park, especially in Sukamade, which is an area where the local community lives in this national park. This community group has lived in the utilization zone for generations and their existence is accompanied by various problems, including: Administrative and legal problems, they are registered as residents of Banyuwangi Regency but do not have ownership rights to the land they live on because the land belong to BTN; Infrastructure problems, Sukamade is a remote area that is difficult to reach due to collapsed bridges and lack of cellular connectivity; Economic problems, because quite a lot of Sukamade residents have low incomes; Human resource and socio-cultural problems, due to difficult access to education and the view that everyone is free to take forest products; Environmental awareness issues, such as the use of pesticides and theft of turtle eggs.

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