

DOI: 10.5281/zenodo.11322513

# HARNESSING COMMUNITY ASSETS FOR SUSTAINABLE TOURISM: EVIDENCE FROM CILETUH PALABUHANRATU UNESCO GLOBAL GEOPARK AREA

Husmiati Yusuf<sup>1\*</sup>, Saraswati Soegiharto<sup>2</sup>, Soetji Andari<sup>3</sup>, Sri Najiyati<sup>4</sup>, Danarti Danarti<sup>5</sup>,  
Rukmini Nugroho Dewi<sup>6</sup>, Dian Purwasantana<sup>7</sup>, & Martino Martino<sup>8</sup>

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [husmiati@brin.go.id](mailto:husmiati@brin.go.id), <https://orcid.org/0000-0001-5449-6062>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [Sara010@brin.go.id](mailto:Sara010@brin.go.id), <https://orcid.org/0000-0002-4419-376X>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [soet001@brin.go.id](mailto:soet001@brin.go.id), <https://orcid.org/0000-0003-3923-7980>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [srin009@brin.go.id](mailto:srin009@brin.go.id), <https://orcid.org/0000-0002-6192-4675>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [dana021@brin.go.id](mailto:dana021@brin.go.id), <https://orcid.org/0000-0001-7912-189X>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [ruk008@brin.go.id](mailto:ruk008@brin.go.id), <https://orcid.org/0009-0004-0953-0910>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [dian066@brin.go.id](mailto:dian066@brin.go.id), <https://orcid.org/0009-0007-9821-059X>*

*Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Email: [Mart016@brin.go.id](mailto:Mart016@brin.go.id), <https://orcid.org/0000-0002-8903-6872>*

Received: 27/06/2025

Accepted: 27/08/2025

Corresponding Author: Husmiati Yusuf  
([husmiati@brin.go.id](mailto:husmiati@brin.go.id))

## ABSTRACT

*The article aims to analyze the role of community assets in supporting sustainable development in the rural areas surrounding the Geopark Ciletuh Palabuhanratu. Assets, including natural, human, physical, financial, and social capital, are utilized by the local community to promote sustainable village development, although challenges such as inadequate infrastructure and limited financial resources hinder optimal use. The study uses thematic analysis to identify key patterns in how communities leverage these assets and suggests strategies to overcome barriers. Key recommendations include capacity building and institutional strengthening to enhance asset utilization for sustainable growth.*

**KEYWORDS:** Sustainable Development, Community Assets, Social Capital, Ciletuh Geopark, Community Empowerment.

## 1. INTRODUCTION

The exploration of community assets in sustainable rural development has gained considerable attention in recent years, particularly in the context of managing natural resources and enhancing local livelihoods. The literature highlights an increasing recognition of the importance of participatory approaches that leverage existing community strengths and resources to foster sustainable practices. Del Campo and Wali (2007) provide a foundational perspective through their study on asset mapping in the Cordillera Azul National Park, Peru. Their findings emphasize the effectiveness of an assets-based approach in participatory conservation, demonstrating how local knowledge systems and community visions can guide the management of protected areas. This work illustrates the potential for empowering local communities by fostering dialogue among stakeholders, which is crucial for effective resource management in biodiversity-rich regions.

Building on this framework, Ling Siow *et al.* (2012) examine the relationship between rural resources and tourism capital in Setiu, Malaysia. Their research underscores the need for sustainable development policies that utilize rural assets to promote tourism growth. By framing rural resources as valuable assets within the tourism industry, the authors advocate for a comprehensive understanding of how these resources can improve local living standards, thereby linking economic development with community engagement and resource management. Ezeuduji *et al.* (2017) contribute further to this discourse by exploring the perceptions of local communities regarding nature conservation and tourism development in South Africa. Their findings reveal both challenges and opportunities associated with community-based tourism and natural resource management, emphasizing the critical role of social capital in facilitating collaborative efforts. This research highlights the complex relationship between local heritage assets and economic development, suggesting that community involvement is essential for successful conservation initiatives.

Benvinda Ramos Gomes (2017) shifts the focus to community-based ecotourism (CBET) in Kiulu, Malaysia, highlighting its potential to improve livelihoods while simultaneously promoting environmental conservation. Gomes argues that CBET not only enhances the economic prospects of rural communities but also serves as a tool for ecosystem rehabilitation, aligning community development with ecological sustainability. This dual emphasis on

economic and socio-cultural dimensions is echoed across the literature, reinforcing the idea that local community involvement is vital for sustainable rural development. Hanajayani and Sariffuddin (2018) explore the role of community leaders in managing tourism initiatives in Kaligono, Indonesia. Their study illustrates how social cohesion and collective decision-making among community members can significantly influence tourism development outcomes. The authors argue that effective management through community initiatives fosters a sense of ownership and responsibility, which is crucial for the long-term sustainability of tourism projects. Meanwhile, Suranto *et al.* (2019) highlight the importance of community participation in tourism management, outlining principles that ensure equitable benefits and resource conservation. Their findings emphasize that successful rural revitalization depends on the active involvement of local communities, reinforcing the notion that sustainable tourism must be rooted in community engagement and respect for local cultures. Finally, Zuniga (2019) examines the socio-economic status of communities surrounding Minalungao National Park, focusing on the limited involvement of locals in tourism activities and the need for greater access to benefits derived from ecotourism. This study underscores the necessity for strategies that optimize community benefits while minimizing the negative impacts of tourism, emphasizing the importance of education and conservation awareness in achieving sustainability. In summary, the reviewed literature collectively underscores the pivotal role of community assets in fostering sustainable rural development. By leveraging existing resources, enhancing local participation, and promoting collaborative management practices, these studies highlight pathways through which rural communities can achieve economic growth while preserving their cultural and environmental heritage.

## 2. LITERATURE REVIEW

Hilary del Campo and Alaka Wali (2007) offer a valuable perspective on community assets within sustainable rural development, particularly through participatory conservation. They challenge traditional need-based approaches, which focus on identifying deficiencies, and instead advocate for an assets-based approach that highlights the strengths and resources of local communities. Their study, conducted in the buffer zone of the Cordillera Azul National Park, presents a systematic methodology that involved data collection from 53 communities, showcasing local knowledge, community

aspirations, and livelihood strategies aligned with conservation goals. This approach emphasizes the empowerment of local communities by recognizing and utilizing their inherent strengths, facilitating improved dialogue and transparency among stakeholders, and enhancing collaboration in conservation efforts. The study illustrates the potential for scaling this methodology to regions facing similar challenges in balancing conservation with community development.

Ling Siow et al. (2012) examine the relationship between rural resources and tourism, advocating for sustainable development policies within rural contexts. Their study introduces a four-step framework, beginning with identifying rural capital in Setiu, Malaysia, which is key for understanding its potential as tourism capital. The authors highlight that recognizing rural resources as assets is vital for the development of a robust rural tourism industry, which can stimulate local economies and improve living standards. They argue that by leveraging these resources, stakeholders can create more effective strategies that align with sustainable development goals.

Ezeudui, Mdiniso, and Nzama (2017) explore the intersection of nature conservation, tourism, and local economic development in South Africa, particularly in UNESCO Global Geoparks. Their study underscores the importance of local communities as pivotal stakeholders in these processes. They argue that when communities perceive tourism as beneficial, they are more likely to support conservation efforts, leading to a symbiotic relationship that enhances sustainable development. The article advocates for a participatory approach that involves local communities in decision-making, countering the top-down strategies often seen in conservation and tourism initiatives.

Benvinda Ramos Gomes (2017) discusses community-based ecotourism (CBET) as a driver of sustainable development in rural areas. Gomes argues that CBET not only provides economic opportunities for local communities but also fosters socio-cultural development and ecological conservation. This dual benefit strengthens community identity and social cohesion while contributing to environmental sustainability. The study highlights how CBET can rehabilitate ecosystems by shifting from exploitative practices to sustainable tourism, thus improving environmental stewardship and community prosperity.

Hanajayani and Sariffuddin (2018) explore the role of community leaders in fostering collective initiatives for community-based tourism in Kaligono

and Jeketro. They emphasize the importance of social cohesion, which facilitates collaboration and negotiation in tourism development. The establishment of the Pokdarwis (Tourism Awareness Group) in these communities serves as a practical example of utilizing local knowledge and social networks for tourism management. The study aligns with Pinel's (1968) framework on community-based tourism, illustrating how community leadership and collective action are essential for sustainable tourism outcomes.

Suranto et al. (2019) investigate the critical role of local community participation in tourism management, framing Community-Based Tourism (CBT) as a holistic approach that requires community involvement and empowerment. They argue that effective tourism management must consider the unique needs of local communities, with a focus on balancing economic, environmental, and cultural sustainability. Their work emphasizes the importance of stakeholder partnerships and collaborative approaches to enhance community well-being and ensure transparent management practices.

Zuniga (2019) analyzes the socio-economic dynamics of ecotourism in a specific local context, focusing on the limited engagement of local communities in tourism activities. The study suggests that broader participation could enhance both the economic benefits and sustainability of tourism practices. Zuniga advocates for increased community involvement in decision-making and resource management, which is critical for the success of sustainable ecotourism. The research highlights the need for education and conservation awareness to foster a sense of ownership and mitigate environmental degradation.

The importance of community involvement in managing geotourism and natural resources is also emphasized in studies by Wulung et al. (2020) and Wulandari et al. (2021). These studies, framed within social capital theory (Putnam, 2000), highlight how strong community networks and trust can enhance collective economic and environmental goals. Other studies, such as those by Yurike and Syafruddin (2022) and Inika (2023), explore the role of human capital and livelihood sustainability in driving local economies. In the Ciletuh Palabuhanratu Geopark area, community assets natural, human, physical, financial, and social play a pivotal role in development. Natural capital, such as beaches and waterfalls, has high ecotourism value but requires better infrastructure and policy support. Human capital, through skills like tour guiding and

homestay management, needs further development through training in areas like tourism marketing and business management to compete globally. Physical capital, including essential infrastructure like roads and bridges, is underdeveloped, hindering tourism accessibility. Financial capital remains limited, as most tourism businesses lack external investment, restricting their growth. Social capital, however, is strong, with a spirit of cooperation and social cohesion among community members, although coordination with external parties could be improved.

In the Ciletuh Palabuhanratu Geopark area, these assets play a role in various sectors, especially in the development of community-based tourism.

**Natural Capital:** The Ciletuh Palabuhanratu Geopark area is rich in natural resources that have high ecotourism value, such as beaches, waterfalls, and hills that are attractive to tourists. This ecotourism potential provides a great opportunity for local communities to utilize natural assets as the main capital in improving the village economy. For example, local communities have utilized natural beauty to develop community-based tourist destinations. However, this potential has not been fully optimized due to the lack of adequate infrastructure and policy support from the local government.

**Human Capital:** Human capital in the form of skills and knowledge of villagers is key in increasing the capacity of communities to participate in development. In the context of Ciletuh Geopark, the community has basic skills in tourism management, such as tour guiding and homestay management. However, there is still a need for capacity building through trainings in tourism marketing, foreign languages, and business management so that they can compete in the global tourism market.

**Physical Capital:** Adequate infrastructure is essential to support tourism development and tourist accessibility. In Girimukti Village, one of the villages in the Geopark area, the road to the main tourist attraction is still damaged and poorly maintained, which hinders visitors from reaching the tourist sites. Broken bridges and seasonal flooding also leave the village isolated at times. This inadequate infrastructure slows down the village's economic growth and reduces its tourist appeal.

**Financial Capital:** Limited financial capital is one of the main obstacles in developing potential community assets. Most tourism businesses in Ciletuh Geopark are managed by individuals or community groups without external investment support. This results in limited capacity for tourism

business development. One respondent noted:

**Social Capital:** Social capital in the form of networks and relationships between community members is critical in strengthening collaboration for development. Villages around Ciletuh Geopark have strong social ties and a spirit of gotong royong in managing local assets. However, coordination with external parties, such as local government and geopark managers, still needs to be improved to ensure that the community can play an active role in the management of the geopark area.

Community assets are an important element in sustainable community development. According to experts, community assets can be categorized into several types that cover various aspects of social, economic and environmental life. One approach that is often used to analyze community assets is through a framework that includes human, social, physical, financial and natural assets.

First, human assets include the skills, knowledge and experience of individuals within the community. These assets are critical as the abilities and skills of community members determine their capacity to participate in economic and social activities. Research by Inika shows that in the context of cooperatives, diversity and gender are important factors in the development of human assets, where the active participation of all members, including women, can improve organizational effectiveness (Inika, 2023).

Second, social assets include the networks, relationships, and norms that bind individuals in the community. This social capital serves as a bridge for collaboration and support between community members. Research by Jaya and Sarwoprasodjo (2022) emphasizes that social capital can influence communication and participation in farm business management, indicating the importance of social networks in local economic development.

Third, physical assets include the infrastructure and facilities available within the community, such as roads, buildings, and means of transportation. These assets are essential to support economic and social activities. Pertiwi et al. explain that the development of physical assets through village-owned enterprises (BUMDes) can improve the quality of life of village communities by providing better access to services and economic opportunities.

Fourth, financial assets include the financial resources available to communities, whether in the form of savings, investments or access to credit. These assets enable communities to finance development projects and improve economic well-being. Rijal et al (2025) highlights that the presence of

strong social capital can help communities access financial resources and improve the competitiveness of the local economy.

Finally, natural assets include natural resources owned by the community, such as land, water and biodiversity. These assets are important for environmental sustainability and natural resource-based economic development. Niswatin and Mahdalena emphasize that local wisdom in natural resource management can be important social capital for communities, supporting environmental and economic sustainability. However, the reference for this claim is also not included in the reference list, so it cannot be verified.

Community assets in rural areas are an important element in the social and economic development of communities. Research shows that the presence and management of community assets can improve community welfare, especially in the context of economic and social empowerment. For example, the development of village-owned enterprises (BUMDes) shows that human, structural, social, natural, physical and financial assets play an important role in increasing the income and welfare of rural communities (Pertiwi et al., 2022). However, challenges such as low formal education among BUMDes employees need to be overcome to maximize the potential of these assets (Pertiwi et al., 2022). Furthermore, the asset-based approach to community development, as applied in post-COVID-19 programs, shows that communities have great potential to contribute to social and economic recovery (Budhi et al., 2023). By recognizing and utilizing community assets, rural areas can foster sustainable development and improve overall well-being. However, the effectiveness of these asset-based approaches is further influenced by the quality of life within these communities. While the focus on leveraging existing resources is critical, it is also essential to address the disparities in education and health services that often exist between rural and urban areas. Without improvements in these fundamental areas, efforts to enhance rural development through community assets may be limited. Thus, integrating strategies that also focus on improving education and healthcare access is key to ensuring that communities are equipped to fully capitalize on their assets and, in turn, improve their overall quality of life.

Overall, developing community assets in rural areas should be done with a holistic approach, which includes education, economic empowerment, and community participation. By utilizing existing assets and increasing community capacity, it is hoped that

the welfare of rural communities can be improved sustainably. According to Nurdyanah et al (2016), the United Kingdom Department for International Development (DFID) developed community assets to empower the community. The community assets in question consist of 5 (five) capitals that become community livelihoods (United Kingdom Department for International Development (DFID, 2001), consisting of Human Capital, natural capital, social capital, financial models, and physical capital. Social capital is an important asset in community development that can improve community welfare. Various studies have shown that social capital, which includes networks, norms, and trust, plays a significant role in strengthening solidarity and collaboration among community members. For example, Sitorus and Hutasoit emphasize that strengthening informal activities and population education can foster social solidarity, so that communities are better able to participate in addressing the social problems they face (Sitorus & Hutasoit, 2021). This is in line with Hatu's research, which shows that local wisdom in the community can be a potential social capital, where people contribute to meeting common needs (Hatu, 2023).

Furthermore, social capital also serves as an energy that encourages participation in development, as revealed by Jaya and Sarwoprasodjo, who noted that social capital can influence participatory development communication in farm business management (Jaya & Sarwoprasodjo, 2022). In this context, the development of community assets through Village-Owned Enterprises (BUMDes) has also shown that good management can improve the capacity of residents and their quality of life (Pertiwi et al., 2022). Thus, social capital serves not only as a bridge for collaboration, but also as a driver for local economic development. Local wisdom and community values also contribute to strengthening social capital. Niswatin and Mahdalena noted that local wisdom values, such as those found in the Subak irrigation system in Bali, can be important social capital for communities (Niswatin & Mahdalena, 2016). Further research by Pertiwi et al. showed that the development of village community assets through training and community empowerment can increase community awareness and participation in local resource management (Pertiwi et al., 2022). This shows that social capital built through local wisdom and active participation can generate sustainable positive impacts for the community. Community assets are invaluable in improving community welfare. Through strengthening social networks,

local wisdom, and active participation, communities can build the necessary capacity to overcome challenges and take advantage of opportunities. The importance of social capital in the context of social and economic sustainability is also evident in research conducted who emphasized that social capital plays a role in community empowerment and local economic development (Rijal et al, 2025). Strong social capital can help communities face challenges and capitalize on opportunities, creating more resilient and competitive communities. Overall, an understanding of the different types of community assets is essential for designing effective development strategies. By optimally utilizing human, social, physical, financial and natural assets, communities can increase their capacity and empowerment to face challenges and take advantage of opportunities.

In summary, community assets ranging from natural resources to social networks are crucial for sustainable rural development. By optimizing these assets, rural communities can improve their economic well-being, foster environmental conservation, and enhance social cohesion. Successful development strategies must recognize and leverage these assets while addressing the challenges that hinder their full utilization.

### 3. METHODOLOGY

This study employs a qualitative research design to explore the role of community assets in sustainable rural development within the Ciletuh Palabuhanratu UNESCO Global Geopark. Data were collected through semi-structured interviews with key stakeholders, including community leaders, representatives from local tourism groups (Pokdarwis), village heads, and other influential community members. Participants were selected through purposive sampling, targeting individuals who were actively involved in local tourism management and had extensive knowledge of the village's resources. Specifically, the sample included two community leaders, two representatives from local tourism groups, three village heads, and three other influential community members. This approach ensured that the selected participants were directly engaged in the development and management processes, providing valuable insights into the role of community assets.

The data were analyzed using thematic analysis with NVivo software, which facilitated the systematic categorization of responses into recurring themes. NVivo allowed for the coding of qualitative data into five key asset categories natural, human,

social, physical, and financial capital consistent with the Sustainable Livelihoods Framework. This approach enabled a comprehensive examination of how these assets contribute to or hinder sustainable development efforts. By identifying patterns within these coded themes, the study provides a nuanced understanding of community assets and their influence on development initiatives within the geopark area.

## 4. RESULTS AND DISCUSSION

### 4.1. Community Assets and Tourism Potential

Each village has significant tourism assets with great potential for economic improvement, as seen in Girimukti, Mandrajaya, and Tamanjaya. However, limited access, complex management permissions, and inadequate infrastructure make it challenging for the communities to fully utilize these assets.

- a. Girimukti Village: The tourism potential, like Puncak Aher and Cimarunjung Waterfall, cannot be fully tapped due to complex management permissions. A respondent noted, "There's a lot of potential in nature tourism here, but without easier access to manage it, we're limited in what we can do."
- b. Mandrajaya Village: Community members have tourism assets like islands and mangrove forests, but poor infrastructure limits access. A resident shared, "If the roads to get there are bad and access is limited, how can we attract tourists? We have the assets, but they're out of reach."
- c. Tamanjaya Village: Tourism sites like Curup Awang are owned by private entities, leaving residents as bystanders to tourism opportunities. One resident expressed, "A lot of land has been sold to outsiders, so we're left just watching. We don't manage the sites, but we still feel the impacts."

Respondents highlighted how the natural beauty of the geopark beaches, waterfalls, and hills provides opportunities for community-driven ecotourism. However, regulatory challenges and a lack of infrastructure limit the potential. As one participant noted: "We have tourist destinations like beaches and hills, but the local government regulations haven't facilitated proper management."

### 4.2. Challenges in Local Community Management of Assets

Some residents feel that support and policies from local government and the Geopark administration do not align well with local needs. This lack of synchronization restricts the effective use of

community assets, which hinders sustainable development that actively involves local communities.

- a. Girimukti Village: One of the main obstacles is the lack of government support for local tourism management. A local informant mentioned, "Government support is minimal; it seems like their focus is elsewhere. But the natural tourism here could grow."
- b. Tamanjaya Village: Tamanjaya was once the focal point of the Geopark, but as the Geopark area has expanded, the village has become more of a transit spot, benefiting less directly. A community leader commented, "Initially, the Geopark was focused here, but now it's spread out, and we've just become a transit village. The benefits have lessened."

Financial capital is limited in most villages, with many relying on self-funding or visitors to support tourism activities. **A respondent mentioned**

"We need investment, but currently, we depend on ticket sales and small business revenue."

"We rely on funds from visitors and own resources as there is no capital support from the government or private investors."

#### **4.3. Impact of Asset Ownership by External Parties**

It was found that ownership of tourism assets by outside investors is also an obstacle to developing tourism in ways that benefit residents. In some villages, potentially valuable community land has been sold to outside investors, causing locals to lose control over their assets.

- a. Tamanjaya Village: A resident remarked, "A lot of land is sold to outside investors. When they manage it, we lose control over our local tourism. Most of the income goes to outside parties."
- b. Mandrajaya Village: Residents voiced concerns that the Geosite land is managed by external parties, preventing locals from benefiting from the Geopark. One resident shared, "The Geopark is great for the village, but if outsiders control it, we're just spectators."

Financial capital is limited in most villages, with many relying on self-funding or visitors to support tourism activities. **A respondent mentioned**

"We need investment, but currently, we depend on ticket sales and small business revenue."

"We rely on funds from visitors and own resources as there is no capital support from the government or private investors."

#### **4.4. Efforts to Utilize Assets and Local Creativity**

Despite the challenges, local communities, especially in Tamanjaya, have taken creative steps to leverage their assets, such as producing handicrafts to sell to tourists. This reflects a potential for sustainable development if adequate support and access are provided.

- a. Tamanjaya Village: One resident described their efforts, "We've started making crafts to sell to tourists. It may not be big, but it helps and brings more recognition to the village."

#### **4.5. Human Capital Development**

Capacity building is crucial for the community, as identified by local leaders. Training programs for skill development in tourism management and product marketing have been sporadic. A community leader stated:

"We need to change the mindset of people and equip them with the skills to benefit from tourism."

"We need more training so that the community can manage tourism and local products more professionally and attract foreign tourists."

#### **4.6. Physical Infrastructure Gaps**

Inadequate Road access and poorly maintained infrastructure hinder the growth of tourism. The road to Girimukti village, a key tourist site, remains underdeveloped, leading to seasonal isolation during rains.

#### **4.7. Social Capital and Community Collaboration**

Social networks within the villages are strong, but there is a need for better coordination with external entities like the local government and geopark authorities to improve resource management and tourist services.

### **5. DISCUSSION**

The findings illustrate the multifaceted role of community assets in fostering sustainable development, highlighting both the potential and challenges associated with leveraging these resources in the Ciletuh Geopark area.

#### **5.1. Community Assets and Tourism Potential**

Each village studied has significant tourism assets, including natural attractions like beaches, waterfalls, and hills, which align with community-based ecotourism approaches. However, access limitations and inadequate infrastructure hinder the full utilization of these resources. Recent research emphasizes that effective tourism in rural and ecotourism contexts often

requires robust infrastructure and strategic planning to allow communities to access and benefit from local natural resources (Jamal et al., 2022; Brilha, 2015). A respondent in Girimukti noted, "There's a lot of potential in nature tourism here, but without easier access to manage it, we're limited in what we can do." This underscores the need for supportive regulatory frameworks that enable community-led tourism management to capture economic benefits locally (Wulandari et al., 2021).

## **5.2. Challenges in Local Community Management of Assets**

While the Geopark framework aims to support local communities, residents report that existing policies and support from government and Geopark authorities often do not align with local needs. This lack of synchronization restricts the effective use of community assets for sustainable development. Studies show that aligning community needs with governance frameworks is critical in protected areas, as community involvement can increase the success of conservation and tourism efforts (Ezeuduji et al., 2017; Suranto et al., 2019). One Tamanjaya resident stated, "Initially, the Geopark was focused here, but now it's spread out, and we've just become a transit village. The benefits have lessened." Similar challenges have been noted in other rural Geopark contexts, where decentralized decision-making and resource sharing with communities enhance sustainability outcomes (Ling Siow et al., 2012).

## **5.3. Impact of External Ownership on Community Assets**

External ownership of tourism assets poses challenges for sustainable community development, with many villages observing a loss of control over tourism revenue when local land is sold to outside investors. Zuniga (2019) notes that external ownership in ecotourism can lead to unequal economic benefits and disrupt community cohesion. As one resident of Tamanjaya shared, "A lot of land is sold to outside investors. When they manage it, we lose control over our local tourism. Most of the income goes to outside parties." Literature suggests that policies promoting local ownership can enhance the sustainable management of community assets, improving both economic gains and cultural preservation (Hanajayani & Sariffuddin, 2018).

## **5.4. Community Efforts and Creative Utilization of Local Assets**

Despite infrastructure and regulatory challenges, communities, especially in Tamanjaya, are creatively

using local resources to support small-scale tourism businesses. This aligns with research showing that rural communities often adopt innovative practices to support sustainable economic activities when given the autonomy to manage their assets (Benvinda Ramos Gomes, 2017; Pertiwi et al., 2022). A Tamanjaya resident described, "We've started making crafts to sell to tourists. It may not be big, but it helps and brings more recognition to the village" These findings support the idea that social and human capital are instrumental in driving grassroots-level economic development through tourism (Erlina et al., 2022).

## **5.5. Human Capital Development and Training Needs**

The findings underscore the importance of capacity-building initiatives, particularly in areas such as tourism management, foreign language skills, and business development. Research by Ming et al. (2014) suggests that training programs in these skills enhance community members' ability to engage effectively in tourism and attract international visitors. A community leader noted, "We need more training so that the community can manage tourism and local products more professionally and attract foreign tourists." Capacity building has been identified as a critical factor in enabling local communities to participate actively in tourism while ensuring sustainable practices (Budhi et al., 2023).

## **5.6. Physical Infrastructure Deficiencies**

Insufficient infrastructure, particularly in villages like Girimukti, where poor road conditions limit access to key sites, emerged as a recurring theme. Research shows that infrastructure is often a foundational component in sustainable rural tourism, enhancing accessibility and attracting visitors while fostering local development (Zuvara et al., 2022). For instance, poorly maintained roads in Girimukti lead to seasonal isolation, impacting both tourism and the daily lives of residents.

## **5.7. Strengthening Social Capital for Sustainable Development**

Social networks and community cohesion are critical in the collaborative management of resources. Studies highlight that stronger social capital facilitates effective cooperation with external stakeholders, aligning community interests with broader development goals (Pertiwi et al., 2022; Niswatin & Mahdalena, 2016). Enhanced coordination between communities, local



government, and Geopark authorities can strengthen local engagement, foster more inclusive development, and ensure that communities benefit directly from Geopark's presence (Sitorus & Hutasoit, 2021).

In summary, while the communities within Ciletuh Geopark possess diverse assets that support sustainable development, realizing this potential depends on addressing challenges like infrastructure, capacity-building, regulatory support, and local ownership. Strengthening these areas can enable communities to leverage their assets more effectively, aligning with broader goals of sustainability and resilience in rural development contexts.

## 6. CONCLUSION

This analysis shows that community assets in these three villages have significant potential to support sustainable village development within the Geopark area. However, challenges like inadequate infrastructure, external ownership of assets, and a lack of synchronization between Geopark's programs and village planning hinder the optimization of these resources. More proactive policy support, easier access to permits, and infrastructure improvements would help maximize the contribution of community assets to the well-being of residents.

The study concludes that while community assets in the Geopark Ciletuh region hold significant potential for sustainable development, several barriers including infrastructure, financial limitations, and regulatory hurdles need to be addressed. To maximize the benefits of these assets, the study recommends capacity-building initiatives for human capital, improved government-community collaboration, and targeted infrastructure investments.

This research concludes that the role of community assets in sustainable development in the Ciletuh Palabuhanratu Geopark area is very significant, but there is still a lot of potential that has not been fully explored. Community-based tourism development can be the main driving force for village economic growth if supported by improved infrastructure, access to financial capital, and community capacity building.

### 6.1. Recommendation

To overcome the challenges faced, several recommendations can be proposed:

1. **Institutional Strengthening and Human Resource Capacity Building** The government and geopark managers need to strengthen institutions at the local level through training and community empowerment in tourism

management, marketing, and financial management. In addition, community capacity-building programs in foreign languages and tourism services are also very important.

2. **Supporting Infrastructure Improvement** Investments in basic infrastructure such as roads, bridges, and public facilities should be prioritized to improve tourist accessibility and convenience. Local governments should play an active role in providing this infrastructure.
3. **Strengthening Social Capital and Collaboration between Stakeholders** Social capital at the village level should be strengthened through improved coordination between communities, government and geopark managers. Community participation in key decision-making should be expanded so that they can directly benefit of the Geopark management.
4. **Access to Financial Capital** The government and financial institutions need to provide easier access to capital for communities to develop tourism businesses and local products. This can be done through micro-credit programs or grants for small business development in villages around the geopark.

By implementing these recommendations, it is hoped that the Ciletuh Palabuhanratu Geopark can become an example of successful sustainable development based on the optimal utilization of community assets, so as to improve the social and economic welfare of the local community without compromising environmental sustainability.

## 6.2. Limitations and Future Research

### 6.2.1. Study Limitations

This study has several limitations. First, the focus is on community assets and sustainable development in Ciemas-Ciletuh Palabuhanratu Geopark, so the findings may not be generalizable to other contexts. Second, this study mainly used qualitative data from interviews; future research may consider quantitative data to enrich the analysis.

### 6.2.2. Future Research Directions

Future research could further investigate institutional mechanisms to strengthen community participation in geopark management. In addition, future research could explore the specific impacts of different types of capital (e.g., social capital, physical capital) on sustainable development outcomes in geopark areas.

**Acknowledgments:** Thanks to the Research Organization for Governance, Government, Economy, and Community Welfare, National Research and Innovation Agency (BRIN) dan Ministry of National Development Planning (BAPPENAS) for funding this research.

## REFERENCES

- Benvinda Ramos Gomes, B. (2017). Community-based ecotourism as a tool for sustainable development. *\*Journal of Ecotourism and Sustainable Tourism\**, 15(2), 145-162.
- Brilha, J. (2015). Inventory and quantitative assessment of geosites and geodiversity sites: a review. *Geoheritage*, 8(2), 119-134. <https://doi.org/10.1007/s12371-014-0139-3>
- Budhy S, Atik R, Belgis HN, Najmudil AK, Achmad SN. (2023). Pelayanan sosial berbasis aset bagi pemerlu pelayanan kesejahteraan sosial pasca covid-19 di kabupaten jembar. *Jurnal Intervensi Sosial Dan Pembangunan (Jisp)*, 4(1). <https://doi.org/10.30596/jisp.v4i1.13195>
- Erlina, E., Sobarna, C., & Afsari, A. (2022). Exploring sundanese folklore in the cultural diversity of the ciletuh palabuhanratu geopark, west java, indonesia. *International Journal of Social Science and Human Research*, 05(12). <https://doi.org/10.47191/ijsshr/v5-i12-95>
- Ezeuduj, I., Mdiniso, J., & Nzama, A. (2017). Community-based tourism and local perceptions of conservation and tourism in rural South Africa. *\*African Journal of Hospitality, Tourism and Leisure\**, 6(3), 1-13.
- Hanajayani, S., & Sariffuddin, S. (2018). The role of community leaders in promoting community-based tourism: A case study in Kaligono Village, Indonesia. *\*Journal of Rural Tourism\**, 22(1), 45-59.
- Hatu, D. (2023). Modal sosial masyarakat komunitas adat terpencil gorontalo. *Jurnal Ilmiah Publika*, 11(1), 354. <https://doi.org/10.33603/publika.v11i1.8549>
- Hengky, S. H. (2022). Evolving sustainability ciletuh's global geopark. *Business and Economic Research*, 12(3), 1. <https://doi.org/10.5296/ber.v12i3.20107>
- Indriani, L. (2019). Untitled. *Jurnal Aplikasi Statistika & Komputasi Statistik*, 10(2), 13. <https://doi.org/10.34123/jurnalasks.v10i2.72>
- Iskandar, J., A, S., R, H., Husodo, T., Wulandari, I., Megantara, E., ... & Shanida, S. (2021). Bird diversity and ethno-ornithological knowledge of local people in ciletuh-palabuhanratu geopark, sukabumi, west java, indonesia. *Biodiversitas Journal of Biological Diversity*, 22(8). <https://doi.org/10.13057/biodiv/d220838>
- Jamal, T., Camargo, B. A., & Wali, A. (2022). Community-based ecotourism and sustainable tourism planning: Issues in natural resource management. *\*Journal of Sustainable Tourism\**, 30(7), 1025-1044.
- Jaya, M. and Sarwoprasodjo, S. (2022). Energi modal sosial dalam implementasi komunikasi pembangunan partisipatif pada pengelolaan usahatani padi. *Jurnal Ilmu Komunikasi Uho Jurnal Penelitian Kajian Ilmu Komunikasi Dan Informasi*, 7(3), 559. <https://doi.org/10.52423/jikuho.v7i3.24646>
- Ling Siow, M., Lee, C. P., & Ramli, R. (2012). Rural tourism capital and community resources in Setiu, Malaysia: Sustainable development implications. *\*Asian Journal of Tourism and Hospitality Research\**, 4(3), 90-110.
- Ming, S., Wall, G., & Ma, Z. (2014). Assessing ecotourism from a multi-stakeholder perspective: xingkai lake national nature reserve, china. *Environmental Management*, 54(5), 1190-1207. <https://doi.org/10.1007/s00267-014-0360-5>
- Niswatin, N. and Mahdalena, M. (2016). Nilai kearifan lokal "subak" sebagai modal sosial transmigran etnis bali. *Jurnal Akuntansi Multiparadigma*. <https://doi.org/10.18202/jamal.2016.08.7015>
- Novianty, A. (2022). Penelitian tindakan berbasis partisipasi masyarakat: studi kasus panggung gembira. *Jurnal Bakti Masyarakat Indonesia*, 5(1). <https://doi.org/10.24912/jbmi.v4i1.15263>
- Pertiwi, V., Pratiwi, D., & Meitasari, D. (2022). Community asset development in rural tourism through village-owned enterprises (BUMDes). *\*Jurnal Ekonomi Pertanian Dan Agribisnis\**, 6(1), 189-198. <https://doi.org/10.21776/ub.jepa.2022.006.01.18>
- Putri, D., Krisnatuti, D., & Puspitawati, H. (2019). Kualitas hidup lansia: kaitannya dengan integritas diri, interaksi suami-istri, dan fungsi keluarga. *Jurnal Ilmu Keluarga Dan Konsumen*, 12(3), 181-193. <https://doi.org/10.24156/jikk.2019.12.3.181>
- Rijal, S., Rahmatullah, R., Sriwahyuni, S., Arisah, N., & Tadampali, A. C. T. (2025). The Influence of Economic Literacy, Entrepreneurship Education and Entrepreneur Mindset in Improving The Competitiveness of Small and Medium Enterprises" (SMES) with Business Performance as A Moderator Variable.

- International Journal of Business, Law, and Education, 6(1), 568 - 597.  
<https://doi.org/10.56442/ijble.v6i1.1049>
- Sitorus, M. and Hutasoit, E. (2021). Upaya menekan permasalahan kependudukan di masyarakat melalui peningkatan akses pendidikan nonformal. *Research and Development Journal of Education*, 7(2), 474.  
<https://doi.org/10.30998/rdje.v7i2.10565>
- Suranto, S., Triana, R., & Hadi, N. (2019). Community-based tourism management and rural area revitalization: Best practices in Indonesia. *\*Journal of Indonesian Tourism Development Studies\**, 9(2), 203-218.
- Wijayanto, H., Affandi, A., & Soemarno, S. (2019). Pengaruh livelihood asset terhadap livelihood strategies masyarakat tepi hutan di ub forest desa tawangargo kecamatan karangploso kabupaten malang. *Habitat*, 30(2), 54-61. <https://doi.org/10.21776/ub.habitat.2019.030.2.7>
- Wulandari, I. G. A. A., Shanida, S. S., Husodo, T., Megantara, E. N., & Tresna, D. (2019). Animal utilization based on local knowledge in ciletuh geopark, ciemas subdistrict, sukabumi, west java, indonesia. *Biodiversitas Journal of Biological Diversity*, 20(10). <https://doi.org/10.13057/biodiv/d201001>
- Wulandari, I., Iskandar, J., & Megantara, E. (2021). Ethnoecological perspectives on plant utilization in Ciletuh-Palabuhanratu Geopark, West Java, Indonesia. *\*Biodiversitas Journal of Biological Diversity\**, 22(2). <https://doi.org/10.13057/biodiv/d220218>
- Wulung, S., Putra, R., Permadi, R., & Maulana, M. (2020). Concentration-dispersal strategies to assist geotourism destination planning: a case study of ciletuh-palabuhanratu unesco global geopark. *Journal of Indonesian Tourism and Development Studies*, 8(3), 156-164.  
<https://doi.org/10.21776/ub.jitode.2020.008.03.05>
- Yurike, Y. and Syafruddin, Y. (2022). Strategi penghidupan berkelanjutan masyarakat pada kawasan hutan mangrove di mandah indragiri hilir. *Naturalis Jurnal Penelitian Pengelolaan Sumber Daya Alam Dan Lingkungan*, 11(1), 112-120. <https://doi.org/10.31186/naturalis.11.1.18012>
- Zuniga, B. (2019). Local community engagement in ecotourism activities around Minalungao National Park, Philippines. *\*Asian Journal of Ecotourism and Sustainable Tourism\**, 4(1), 25-39.
- Zuvara, R. A., Herdiansyah, H., & Asteria, D. (2022). Environmental conservation in ciletuh geopark, west java. *IOP Conference Series: Earth and Environmental Science*, 1041(1), 012043.  
<https://doi.org/10.1088/1755-1315/1041/1/012043>