Prosperity
Journal of Society and Empowerment

Prosperity: Journal of Society and Empowerment
Vol 5 No 1 (2025), pp. 53-68
DOI: 10.21580/prosperity.2025.5.1.25921

Synergy between Biodiversity Conservation and Community Empowerment in Mendolo Village

Nur Nilam Sari[1]*, Agus Riyadi[2], Kasmuri Kasmuri[3], Isma. Ae. Lijea[4]

[1 2 3]Universitas Islam Negeri Walisongo Semarang, Indonesia; [4]Mahad Darul Maarif Al-Fathani Selatan, Thailand

*Corresponding author: nilamsari3133@gmail.com

History of Article:

Submitted: Jan 17, 2025
Accepted: Jun 16, 2025
Published: Jun 18, 2025

Citation Style (APA):
Sari, N. N., Riyadi, A., Kasmuri, K., Lijea, I. A. (2025). Synergy between Biodiversity Conservation and Community Empowerment in Mendolo Village. *Prosperity: Journal of Society and Empowerment*, 5(1), 53-68. https://doi.org/10.21580/prosperity.2025.5.1.25921

Abstract: Mendolo Village is an area of high biodiversity, including five species of Javanese primates and a variety of unique flora and fauna. Biodiversity conservation in high biodiversity areas often faces complex challenges, especially in accommodating the ecological and economic interests of local communities. This research aims to find out the process, program implementation, and impact of synergy of biodiversity conservation and local community empowerment. This research used a qualitative method with a case study approach involving informants through in-depth interviews and participant observation. Data were analyzed using the Miles and Huberman model with triangulation of sources, methods, and time. The results showed that the synergy process starts from (1) identification of village potential, (2) application of participatory approaches, and (3) revitalization of local wisdom. Implementation includes four main programs with significant impacts: economic improvement, social transformation, and ecological restoration.

Keywords: Biodiversity Conservation, Community Empowerment, Mendolo Village

Abstrak: Desa Mendolo merupakan wilayah dengan keanekaragaman hayati yang tinggi, mencakup lima spesies primata Jawa dan beragam flora-fauna yang unik. Konservasi keanekaragaman hayati di wilayah dengan keanekaragaman hayati tinggi seringkali menghadapi tantangan yang kompleks, terutama dalam mengakomodasi kepentingan ekologi dan ekonomi masyarakat lokal. Penelitian ini bertujuan untuk mengetahui proses, implementasi program, dan dampak sinergi konservasi biodiversitas dan pemberdayaan masyarakat lokal. Penelitian ini menggunakan metode kualitatif dengan pendekatan studi kasus yang melibatkan informan melalui wawancara mendalam dan observasi partisipan. Data dianalisis menggunakan model Miles dan Huberman dengan triangulasi sumber, metode, dan waktu. Hasil penelitian menunjukkan bahwa proses sinergi dimulai dari (1) identifikasi potensi desa, (2) penerapan pendekatan partisipatif, dan (3) revitalisasi kearifan lokal. Implementasi meliputi empat program utama dengan dampak signifikan: peningkatan ekonomi, transformasi sosial, dan pemulihan ekologis.

Kata Kunci: Konservasi Biodiversitas, Pemberdayaan Masyarakat, Desa Mendolo

Introduction

Indonesia's strategic location along the equator positions it as a megabiodiversity hotspot, encompassing 17% of the world's total species. Biodiversity is crucial for maintaining the balance of ecosystems and holds significant potential for the economic development of communities, particularly within the agricultural sector. However, the ongoing intensification of modern agricultural practices poses a threat to biodiversity, which in turn affects food security and diminishes the economic prospects of rural communities. One effective approach to address this challenge is the integration of conservation efforts with community empowerment, especially in regions rich in natural resources. In this context, conservation can be defined as the endeavor to protect the diverse values of natural resources and ecological processes essential for sustaining all species and preventing extinction (Darmayani et al., 2022).

The step that can be taken to realize sustainable development, especially in conservation areas, is community empowerment. Community empowerment is a method used to be able to manage the environment and help individuals or groups to maximize their quality of life (Sany, 2019). Community empowerment in conservation area management is defined as a process to realize community independence and welfare through conservation activities (Massiri, 2022).

Mendolo Village, situated in the Lebakbarang District of Pekalongan Regency, boasts remarkable biodiversity. Positioned at an elevation of 600 meters above sea level, the village is home to an impressive variety of wildlife, including 131 species of butterflies, 27 species of dragonflies, 65 species of orchids, 36 species of herpetofauna, 112 species of birds, and 5 species of Javanese primates (Ahmaddin, 2023). The village has a tradition of hunting honey in the forest as one of the community's economic resources. This practice is highly dependent on ecosystem balance and forest sustainability as habitat and food source for bees (Harjanto, 2019). The intensification of forest honey harvesting, if not properly managed, poses a threat to the sustainability of current populations and ecosystems. Additionally, bird poaching persists, even though these birds play a crucial role as pest controllers for coffee plants, significantly impacting the success of the harvest.

The economic reliance of communities on forest products and agroforestry, alongside the necessity to safeguard Javan gibbon habitats and other forms of biodiversity, presents intricate conservation challenges. An integrated approach that maximizes economic potential while conserving biodiversity is essential. However, the methods for effectively fostering synergy between biodiversity conservation and community empowerment at the village level remain insufficiently understood. Consequently, researchers are keen to explore agricultural practices that align with biodiversity conservation goals while providing economic benefits to local farmers. This study aims to examine the processes, implementation, and impacts of the synergy between biodiversity conservation and community empowerment in Mendolo Village.

Methods

This research was conducted using a qualitative method with a case study approach. Case study is a research approach that closely investigates a particular event, activity, or group (Rusli & Rusandi, 2021). In this case, researchers try to explore the phenomenon of synergy between biodiversity conservation and community empowerment that occurs in Mendolo Village.

Location and time of research

This research was conducted in Mendolo Village, Lebakbarang District, Pekalongan Regency, Central Java, from February 22 to March 1, 2025. Its diverse topography and rich biodiversity make it an ideal location to study the synergy of conservation and empowerment.

Sampling and Respondents

This study utilized purposive sampling to select 11 key informants, comprising: one representative from the SwaraOwa Foundation, one government official from Mendolo Village, four members from the Paguyuban Petani Muda (PPM) Mendolo, four local farmers, and one leader from the Brayan Urip group. The selection criteria included direct involvement in conservation and empowerment initiatives, a comprehensive understanding of the village's socio-economic conditions, and a minimum residency of five years in the village.

Data Collection

Primary data was collected using in-depth interviews and participant observation. Secondary sources included documentation and related literature. Data collection was conducted through:

1. Semi-structured interviews with key informants to explore the process, implementation, and impact of the program.
2. Participant observation of agricultural practices and conservation activities.
3. Documentation through photographs, audio recordings, and secondary data from village and foundation records and reports.
4. Literature study from academic sources and policy documents.

Data Analysis

Data analysis followed the Miles and Huberman model which involved data reduction, data presentation, and data verification (Sugiyono, 2022). Data validity was ensured through triangulation of sources, methods, and time to verify credibility from multiple perspectives (Sidiq & Choiri, 2019).

Results and Discussion

Profile and Ecological Conditions of Mendolo Village

Mendolo village is located in Lebakbarang sub-district, Pekalongan district, Central Java. The majority of the population are farmers with an average of 30 years of farming experience, indicating a strong intergenerational transfer of knowledge.

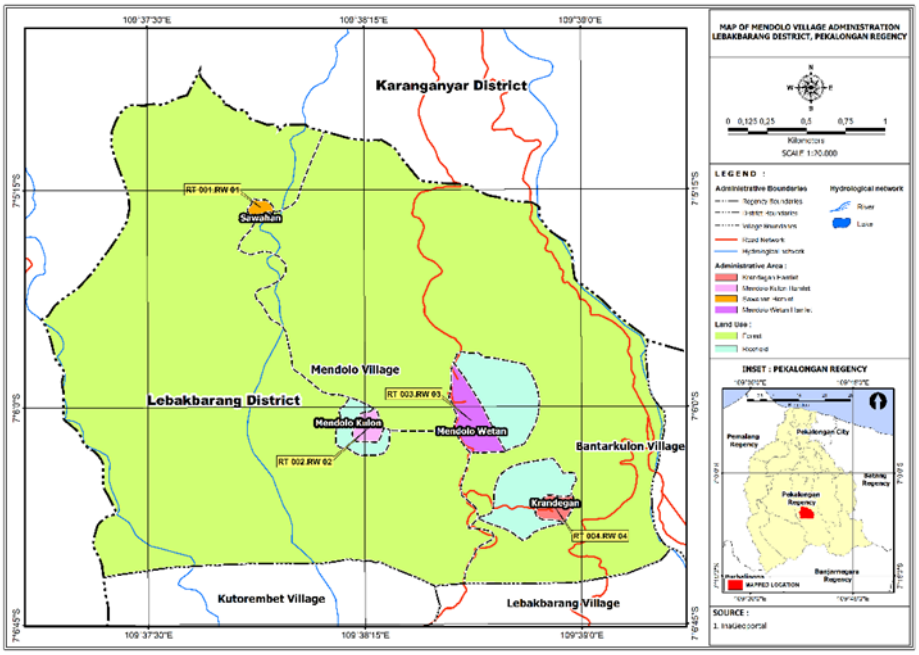
Table 1. Demographic Summary of Mendolo Village

Indicator	Value
Total population	804 souls
Male Population	437 people (54.4%)
Female Population	367 people (45.6%)
Number of Households	224 Household
Main Commodities	Honey, coffee, durian, cardamom, rice

The distinct biodiversity of Mendolo Village is highlighted by the presence of five species of Javanese primates that coexist within a single ecosystem: the Javan Gibbon, Javan Lutung, Long-tailed Monkey, Javan Kukang, and Surili. This aligns with a statement from the SwaraOwa foundation, which noted:

> "There are five complete Javanese primates in Mendolo. This is extraordinary and may not be found in other areas of Java, but here there are five". (S.H., Bee Farming Expert and Community Development Specialist at the SwaraOwa Foundation).

This phenomenon is rare elsewhere in Java, making Mendolo Village a unique conservation laboratory. The high biodiversity potential is influenced by diverse geographical and topographical conditions and wide tree canopies (Kärnä, 2019).



Picture 1. Mendolo Village Administration Map

The map above illustrates that Mendolo Village is administratively divided into four hamlets: Sawahan Hamlet, Mendolo Kulon Hamlet, Mendolo Wetan Hamlet, and Krandegan Hamlet. Covering an area of 767 hectares, Mendolo Village is predominantly surrounded by forest. The Wisnu River flows from the south, serving as a vital source of clean water for the community while also playing an essential role in supporting the ecosystem.

Initiation Process of Biodiversity Conservation and Community Empowerment Program

The initiation of the program cannot be separated from the role of the SwaraOwa Foundation, a foundation that focuses on primate conservation, especially Javan gibbons, including those in Mendolo Village. The synergy process began through three key stages:

1. Identification of Village Potential

   SwaraOwa's extensive journey commenced with the surveying, identification, and data collection of the flora and fauna in Pekalongan Regency, particularly in Mendolo Village. Following this initial phase, SwaraOwa engaged intensively with the local community to establish communication and identify priorities that would support conservation efforts while simultaneously fostering economic development based on the region's existing potential (Setiawan, 2021).

   In addition to the presence of rare primates, Mendolo Village engages in honey harvesting by dismantling beehives and removing entire colonies, a practice that disrupts the local bee population. In response, the SwaraOwa Foundation introduces a more sustainable alternative to traditional klanceng beekeeping. Initially, the community was skeptical of this method, as they were accustomed to quick honey harvesting. To demonstrate the viability of sustainable beekeeping, Yayasan SwaraOwa established demonstration plots. This approach successfully persuaded the community to transition from extractive harvesting methods to more sustainable cultivation practices.

2. Implementation of Participatory Approach

   Yayasan SwaraOwa applies community-based conservation techniques, building trust through informal relationship building rather than direct conservation messages. Community-based conservation is also defined as an environmental management effort that emphasizes the participation and active role of the community (Billah, Sari, & Khasanah, 2018). This is in accordance with the statement of the SwaraOwa Foundation which says:

   > "We came to seek friendship, at first we didn't talk about primates, we just talked as we were. Until we found a common point of unrest". (S.H. Beekeeping Expert and Community Development Specialist of SwaraOwa Foundation).

   This statement is also in line with that delivered by PPM members:

"We feel uneasy about the free sale of birds so that birds here become rare and even cause crop failure because of the scarcity of birds as caterpillar control and fish in the river also run out". (I, Mendolo Village PPM member).

The unrest felt by both parties creates a joint commitment to preserve the environment. This participatory approach is in line with the principle of empowerment that the community is the main actor of development (Sangian, Dengo, & Pombengi, 2018).

3. Revitalizing Local Wisdom

Exploring and reviving existing local wisdom that has been eroded by the times. The local wisdom of "Brayan Urip", a philosophy of life to not only share space with fellow humans, but also share space with the flora and fauna in the forest.

This philosophy is in line with the modern conservation approach of egalitarianism, which means the attitude and commitment that humans have equal rights in various ways (Widianto & Mahfud, 2023). Egalitarianism views that all people are equal and should be treated equally (Laws, 2022). This is supported by Lase & Hulu (2024) that the utilization of local wisdom is not only important for the environment, but can also improve community welfare.

Implementation of Biodiversity Conservation and Community Empowerment Program in Mendolo Village

1. Meliponiculture: Klanceng Bee Farming as a Pioneer Program

The klanceng bee farming initiative was implemented with the objective of alleviating pressure on forest resources while promoting economic productivity among local communities. This program was selected due to the longstanding tradition of honey hunting in the area and the ecological advantages that bees provide as pollinators for agricultural crops. Additionally, it requires minimal capital investment and features techniques that are easy to learn.

Table 2. Implementation of Meliponiculture

Component	Details
Timeline	2017-sustainable
Participants	25 farmers
Main Activities	Training, colony farming
Harvest distribution/month	1.84 liters/box
Increased honey prices	IDR 100,000-110,000 to 130,000-150,000/460 ml

Picture 2. Stup of bee klanceng

(Source: researcher documentation)

The main positive impact of beekeeping is that there is more fruit in the forest, especially for gibbon food. This is in accordance with the statement of a local farmer in Mendolo Village who said:

> "In the past, fruit in the forest was rarely seen, but after cultivation there are more and more, especially for feeding gibbons and other primates". (R, local Mendolo Village farmer).

This statement is in line with research Herlinda & Milinia Puspita (2022) that pollination carried out by bees produces one-third of all food, such as stingless bees that produce higher fruit production. Honey bees are increasingly recognized as the most economically valuable pollinators for crops, owing to their versatility and practicality.

Furthermore, the primary benefits of contemporary beekeeping practices include: (1) enhanced safety of bee colonies, which are now more readily accessible than in previous cultivation methods, (2) improved honey quality resulting from more sterile harvesting techniques, (3) better control over harvesting timing to preserve honey quality, and (4) adaptable placement of cultivation boxes, which can be tailored to meet the needs of the ecosystem

2. Sustainable Coffee Product Development

Another program developed is to increase the added value of coffee products through sustainable harvesting and processing practices.

Table 3. Summary of coffee development

Indicator	Before Program	After Program	Changes
Coffee Price (kg)	Rp 50,000-Rp 60,000	Rp80,000-Rp 100,000	+60-65%
Harvest method	Mixed picking	Red-picking	Quality improvement

Processing tools	Traditional	Modern (Huller, pulper, dryer)	Technology upgrade
Product branding	None	"Batir Coffee"	Market identity
Training session	None	There is	Capacity building

Introducing selective harvesting through red-picking methods, along with effective post-harvest processing. The coffee culture in Mendolo Village has inspired the Paguyuban Petani Muda (PPM) to launch "Kopi Batir," embracing the slogan "nepungke seduluran," which translates to "strengthening brotherhood." This brand identity, aligned with its linguistic roots, creates opportunities to build meaningful connections with consumers, ultimately enhancing loyalty and trust.

The findings indicated that coffee sales have doubled. It was observed that the post-harvest process plays a crucial role in determining the quality and value of the produced coffee. Furthermore, the program positively impacts habitat conservation. The coffee plantation land is allowed to rest and rejuvenate after the post-harvest period, during which farmers wait for the processing to be completed. This practice helps prevent the expansion of land that could potentially harm the habitat.

3. Kebun Brayan Urip: Women's Empowerment through Sustainable Agriculture

The role of women in conservation and community empowerment is exemplified by the women's group "Brayan Urip," which focuses on sustainable agriculture. This initiative, started by SwaraOwa in collaboration with local women, aims to cultivate native vegetables as an alternative for tourists wishing to experience local flora without venturing into the forest.

Table 4. Women's Empowerment Program

Component	Specifications
Group Size	15 women
Farm Size	50 meters
Crop Variety	Vegetables & local crops, medicinal plants, and herbs
Product Development	Gadung tuber flour, gadung chips
Product Price (Gadung chips)	IDR 35,000/kilogram
Travel Services	Provision of local food
Future Plans	Product branding, online marketing, and formalization of Women Farmers Group (KWT)

Garden produce is not only used for self-consumption, but also sold at competitive market prices and the provision of local food for tourists, with ferns being a favorite of foreign tourists.

Picture 3. Processing Gadung Tubers

(Source: PPM Mendolo)

The documentation provided outlines the process of transforming gadung tubers as part of the development of processed non-timber forest products (NTFPs) and highlights a significant innovation from this group. The processing method honors local wisdom while presenting it in a new form. This approach aligns with government initiatives aimed at promoting food diversification and reducing dependence on a limited food supply (Sutrisno et al., 2023).

Saleh (2022) in his research emphasizes that women have an important role in the successful management of natural resources. Gender equality is said to be beneficial in economic development (Afni, Reza, & Latoki, 2022). Widyaningrum (2022) also explains that actively involving women in the processing of Non-Timber Forest Products (NTFPs) can create a sense of belonging so as to achieve common goals. Through the Women Farmers Group (KWT), agricultural yields will economically increase and make women independent and productive (Afifah & Ilyas, 2021).

4. Community-based Ecotourism Development

The rich biodiversity in Mendolo Village is a special attraction for tourists and nature observers. Responding to this potential, the community developed community-based ecotourism with a focus on special interest tourism.

Table 5. Special interest tourism in Mendolo Village

Activity Type	Source of Income
Bird Watching	Guide service, homestay, documentation
Primate monitoring	Guide service, homestay, documentation
Honey harvest experience	Activity cost, product sales
Annual event	Multiple services

The development of specialized ecotourism relies on active community involvement, which includes homestay accommodations, tour guiding services provided by Paguyuban Petani Muda (PPM), and the preparation of refreshments by the Brayan Urip group. Key annual events feature the celebration of World Food Day, the hosting of the Dragonfly Jamboree, and the Indonesian Birdwatchers Meeting.

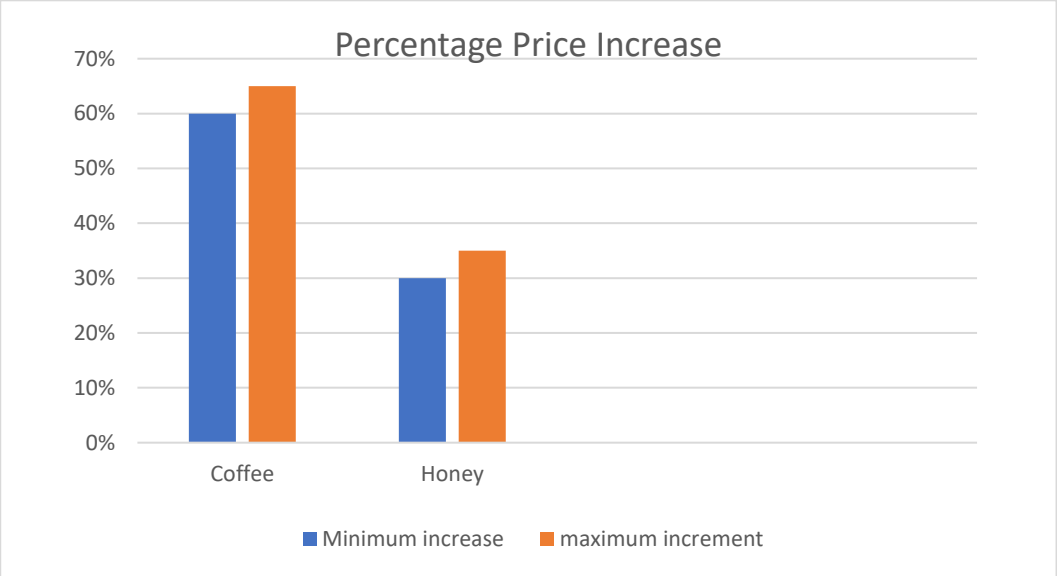
Picture 4. Monitoring of Javan Gibbons by PPM Mendolo

The image above depicts the primate monitoring activities routinely conducted by Paguyuban Petani Muda (PPM), which have become a notable aspect of special interest tourism in Mendolo. To bolster the growth of ecotourism, PPM has engaged in various training programs, including ecotourism principles, tour guiding, wildlife photography, and recording and monitoring techniques. The youth play a vital role as agents of change, driving the acceleration of village development (Mardhatillah et al., 2024). Studies conducted by Sary & Santoso (2024) show that the key success factor of ecotourism management is the active involvement of the community. Community participation is also important in running the development program (Riyadi, Qotrun Nada, Hamid, & Karim, 2024).

This demonstrates that special interest ecotourism caters to tourists keen on exploring the ecosystems of Mendolo. In this context, ecotourism involves traveling to pristine areas with the purpose of understanding local cultures, preserving ecosystems, and generating economic opportunities from natural resources that benefit local communities (Hidayatullah, Kamal, Himawati, & Darmaningrum, 2022). Ecotourism provides opportunities for tourists to gain knowledge and experience about the environment and local culture for sustainable conservation (Fahrian, Putro, & Muhammad, 2015). Ecotourism in Mendolo is not only an alternative source of income for the community, but also a medium of conservation education for visitors and local communities.

Impact of Biodiversity Conservation and Community Empowerment Program

1. Economic Impact



Picture 5. Comparison of Percentage Increases in Coffee and Honey Prices

Table 6. Economic impact through increased product prices

Impact Category	Before Program	After Program	Changes
Honey Price (IDR/460ml)	100.000-110.000	130.000-150.000	+30-36%
Coffee Price (IDR/kg)	50.000-60.000	80.000-100.000	+60-66%
Ecotourism revenue/month	0	3.000.000-4.000.000	New sources of income

Conservation and empowerment initiatives in Mendolo Village have resulted in substantial economic benefits for the community. Key indicators of this economic impact include: (1) an increase in the selling prices of klanceng honey and coffee products, (2) diversification of income sources through ecotourism and processed goods, (3) additional income generated from offering homestays and tour guide services to visitors, and (4) enhanced economic participation of women through the management of non-timber forest products (NTFPs).

Increased income can create a strong economic intensive for the community to continue participating in conservation efforts. Nurhidayat (2023) explains that community empowerment is an effort to improve the quality of life and welfare, one of which is by improving the community's economy.

2. Social Impact

Social transformation through this initiative is evidenced by: (1) greater youth engagement in agriculture and conservation efforts, (2) the empowerment of women via the Brayan Urip group, (3) enhanced community capacity and skills through a variety of training programs, (4) strengthened social cohesion through collaborative activities, (5) increased community confidence in external interactions, and (6) a shift in the community's mindset towards nature conservation. This transformation is further supported by the remarks of the Mendolo Village Head, who stated:

> "The most significant change experienced by the community is in their perspective toward nature and their heightened awareness of the need to protect their natural surroundings. Additionally, the community has gained confidence in their potential, which has undoubtedly boosted their economy through initiatives like this". (K, Mendolo Village Head).

It can be concluded that this activity has changed the perspective of the Mendolo Village community towards the natural potential they have. The education and learning that has been received has increased the community's capacity to recognize what coexists with them. Indriyani & Nugraheni (2024) added that the integration of conservation and sustainable development is important and mutually supportive to realize a prosperous and equitable life for all living beings.

3. Ecological and Conservation Impacts

Table 7. Summary of Ecological Impacts

Indicator	Before Program	After Program	Impact
Bee Colony Population	Declining	Stable/increasing	Substantial recovery
Forest Fruit Availability	Limited	Abundant	Improved primate diet
Bird Hunting Activities	General	Rare	80% decrease
Habitat Connectivity	Fragmented	Improving	Tree planting corridor
Monitoring System	None	Routine	Monthly biodiversity survey

Ecological improvements include (1) increased klanceng bee populations as ecosystem pollinators, (2) increased availability of forest fruits for primate food, (3) decreased bird poaching activities (5) habitat fragmentation mitigation efforts, and (6) sustainable biodiversity monitoring systems.

Through routine monitoring activities conducted by PPM, there are indications that primate populations are maintained in quantity. However, the challenge of habitat fragmentation is still faced. The main factor causing this is massive deforestation (Sodik, Pudyatmoko, Semedi, Yuwono, & Imron, 2019). Wahyuni & Suranto (2021) states that forest land loss can be a threat to living things that have an impact on global warming.

To address this, the youth are trying to reconnect the main forest with the small forest by planting trees in waterways in the hope that primate habitats can become more extensive and connected. A study conducted by Banks-Leite, Ewers, Folkard-Tapp, & Fraser (2020) revealed that habitat restoration is an appropriate step to reduce the impact of habitat change due to fragmentation and degradation. Ecological corridors with landscape connections are land routes that connect each habitat block to allow free movement of animals and maximum plant growth (Situmorang, 2024). This approach should be supported by scientific studies of animal movement patterns and the characteristics of the habitat required.

Conclusion

The integration of biodiversity conservation and community empowerment in Mendolo Village illustrates how ecological protection and community upliftment can mutually reinforce one another. This is achieved through: (1) the identification of village potential, (2) a participatory approach, and (3) the revitalization of local wisdom. Initiatives such as meliponiculture, sustainable coffee development, women empowerment, and ecotourism have led to significant outcomes, including economic enhancement (a 30-65% increase in prices), social transformation (improved capacity and cohesion), and ecological restoration (increased biodiversity indicators).

The model illustrates that: (1) community-based conservation necessitates a participatory approach and draws upon existing practices, (2) aligning economic incentives with conservation goals fosters sustainable motivations for community engagement, (3) the integration of local knowledge with contemporary conservation techniques is essential, (4) involving women in the processing of non-timber forest products (NTFP) and sustainable agriculture enhances both conservation and empowerment outcomes, and (5) engaging youth in monitoring and ecotourism promotes the continuity of programs across generations.

Future studies should: (1) identify the long-term sustainability of economic benefits, (2) investigate the optimal scale for community-based conservation programs, (3) evaluate the effectiveness of habitat corridor restoration efforts, and (4) long-term ecological monitoring to assess the sustainability of biodiversity trends.

References

Afifah, S. N., & Ilyas. (2021). Pemberdayaan Kelompok Wanita Tani Asri. *Journal of Nonformal Education and Community Empowerment, 5*(1), 1–17. https://doi.org/10.15294/pls.v5i1.36404.

Afni, N., Reza, M., & Latoki, L. (2022). Konsep Kesetaraan Gender dalam Pembangunan dan Pemberdayaan Ekonomi Masyarakat. *Musawa Journal for Gender Studies, 14*, 19–48. https://doi.org/http://dx.doi.org/10.24239/msw.v14i1.980.

Ahmaddin, K. (2023). *Monitoring Bersama Keanekaragaman Hayati Hutan Petungkriyono dan Lebakbarang*. Retrieved January 8, 2025, from swaraowa.blogspot website: https://swaraowa.blogspot.com/2023/04/monitoring-bersama-keanekaragaman.html.

Banks-Leite, C., Ewers, R. M., Folkard-Tapp, H., & Fraser, A. (2020). Countering the effects of habitat loss, fragmentation, and degradation through habitat restoration. *One Earth, 3*(6), 672–676. https://doi.org/10.1016/j.oneear.2020.11.016.

Billah, N. S., Sari, D. K., & Khasanah, A. N. (2018). Cobent (Community Based Environment) Dalam Pengelolaan Sampah Mandiri Guna Mewujudkan Pembangunan Berkelanjutan di Dusun Sukunan Banyuraden Sleman DIY mandiri dilakukan sejak tahun 2004 adalah pengelolaan sampah Dengan. *Jurnal Administrasi Dan Kebijakan Publik, 3*(2), 195–213. https://doi.org/10.25077/jakp.3.2.195-213.2018.

Buckley, S., & Nabhan, G. P. (2016). Food Chain Restoration for Pollinators: Regional Habitat Recovery Strategies Involving Protected Areas of the Southwest. *Natural Areas Journal, 36*(4), 489–497. https://doi.org/10.3375/043.036.0414.

Budiarto, T., Ayun, L., & Nurulhaq, M. I. (2023). Pemberdayaan Petani Pada Pengolahan Pascapanen Kopi Arabika (Coffea arabica L.) di Desa Kalisat Kidul, Kecamatan Kalibening, Kabupaten Banjarnegara. *Jurnal Resolusi Konflik, CSR, Dan Pemberdayaan, 8*(1), 11–20. Retrieved from https://journal.ipb.ac.id/index.php/jurnalcare/article/view/47867/25942.

Darmayani, S., Juniatmoko, R., Martiansyah, I., Puspaningrum, D., Zulkarnaen, Nugroho, D., … Wattimena, C. (2022). *Dasar - Dasar Konservasi.* Bandung: Bandung: Penerbit Widina Bhakti Persada.

Fahrian, H. H., Putro, S. P., & Muhammad, F. (2015). Potensi Ekowisata di Kawasan Mangrove, Desa Mororejo, Kabupaten Kendal. *Journal of Biology & Biology Education, 7*(2), 104–111. https://doi.org/10.15294/biosaintifika.v7i2.3953.

Harjanto, S. (2019). *Tradisi Pemanenan Madu Hutan Desa Mendolo*. Retrieved January 21, 2025, from swaraowa.blogspot website: https://swaraowa.blogspot.com/2019/08/tradisi-pemanenan-madu-hutan-desa.html.

Helmi, Y., Lukman, L., & Gusnawaty, G. (2024). Pengaruh Nama Merek terhadap Citra pada Kuliner Lokal di Kota Makassar. *Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra, 10*(1), 284–293. https://doi.org/10.30605/onoma.v10i1.3206.

Herlinda, S., & Milinia Puspita, J. (2022). Revitalisasi Sumber Pangan Nabati dan Hewani Pascapandemi dalam Mendukung Pertanian Lahan Suboptimal secara Berkelanjutan. *Prosiding Seminar Nasional Lahan Suboptimal, 10*(1), 40–60. https://conference.unsri.ac.id/index.php/lahansuboptimal/issue/view/41.

Hidayatullah, A., Kamal, M. R., Himawati, I., & Darmaningrum, K. T. (2022). Pemberdayaan Masyarakat berbasis Ekowisata (Studi Kasus Alih Fungsi Lahan Bengkok Menjadi Ekowisata "Taman Stambran" di Desa Tambangan Kec. Mijen Kota Semarang). *Jurnal at-taghyir. 4*(2), 277–292. https://doi.org/10.24952/taghyir.v4i2.4851.

Indriyani, N. R., & Nugraheni, N. (2024). Integrasi Konservasi dan Pembangunan Berkelanjutan dalam Mewujudkan Kehidupan Sehat dan Sejahtera. *Madani: Jurnal Ilmiah Multidisiplin, 2*(11), 263–270. https://doi.org/10.5281/zenodo.14286302.

Kärnä, O. M. (2019). Geography meets ecology: developing proxies to understand variations of stream biodiversity. *Nordia Geographical Publications, 48*(5), 72. Retrieved from https://nordia.journal.fi/article/view/88531.

Lase, B. R., & Hulu, F. (2024). Model Pengelolaan Ekologi Berbasis Kearifan Lokal dalam Peningkatan Kesejahteraan Masyarakat di Kabupaten Nias. *Jurnal Manajemen Pendidikan Dan Ilmu Sosial, 5*(6), 2485–2494. https://doi.org/https://doi.org/10.38035/jmpis.

Laws, M. (2022). Egalitarianism. *In The Cambridge Encyclopedia of Anthropology*, (Seremetakis 2009), 1–15. https://doi.org/10.29164/22egalitarianisme.

Mardhatillah, M., Kesha, C. N., Marlizar, D., Jahria, S., Ilmu, P., Negara, A., … Umar, T. (2024). Penguatan partisipasi generasi muda dalam berkontribusi terhadap pembagunan daerah. *PROFICIO: Jurnal Abdimas FKIP UTP, 5*(2), 663–670. https://doi.org/10.36728/jpf.v5i2.3637.

Massiri, S. D. (2022). *Strategi Pemberdayaan Masyarakat Pada Kawasan Konservasi.* Bandung: Bandung: Cv. Smart Media Publishing.

Nurhidayat, I. (2023). Pemberdayaan Masyarakat Untuk Meningkatkan Ekonomi Di Desa Kertajaya Kecamatan Cigugur Kabupaten Pangandaran. *E-Gov Wiyata: Education and Goverment, 1*(1), 10–29. Retrieved from https://journal.wiyatapublisher.or.id/index.php/e-gov.

Rahayu, R. D., Setia, T. M., & Mangunjaya, F. (2021). Pemahaman Keanekaragaman Hayati Pada Guru Dan Penggunaan Ruang Terbuka Hijau Dalam Pembelajaran Keanekaragaman Hayati. *Jurnal BIOEDUIN : Program Studi Pendidikan Biologi, 11*(2), 88–95. https://doi.org/10.15575/bioeduin.v11i2.14314.

Riyadi, A., Qotrun Nada, W., Hamid, N., & Karim, A. (2024). Relasi Aktor dalam Perencanaan Pembangunan Desa Trembes Kecamatan Gunem Kabupaten Rembang. *Jurnal Empower: Jurnal Pengembangan Masyarakat Islam, 9*(1), 97–118. http://dx.doi.org/10.24235/empower.v9i1.12892.

Rusli, & Rusandi. (2021). Merancang Penelitian Kualitatif Dasar/Deskriptif dan Studi Kasus. *Jurnal Pendidikan Dan Studi Islam, 2*(1), 48–60. https://doi.org/10.55623/au.v21.18.

Saleh, M. (2022). Partisipasi Perempuan Dalam Pengelolaan Lingkungan. *UNM Environmental Journals, 5*(2), 22. https://doi.org/10.26858/uej.v5i2.42831.

Sangian, D. A., Dengo, S., & Pombengi, J. D. (2018). Pendekatan Partisipatif Dalam Pembangunan Di Desa Tawaang Kecamatan Tenga Kabupaten Minahasa Selatan. *Jurnal Administrasi Publik, 4*(56), 1–10. https://ejournal.unsrat.ac.id/v3/index.php/JAP/article/view/19754.

Santika, T., Meijaard, E., & Wilson, K. A. (2015). Designing multifunctional landscapes for forest conservation. *Environmental Research Letters, 10*(11). https://doi.org/10.1088/1748-9326/10/11/114012.

Sany, U. P. (2019). Prinsip-Prinsip Pemberdayaan Masyarakat Dalam Perspektif Al Qur'an. *Jurnal Ilmu Dakwah, 39*(1), 32–44. https://doi.org/10.21580/jid.v39.1.3989.

Sary, F. P., & Santoso, T. I. (2024). Inovasi dalam Peningkatan Kesadaran dan Pengelolaan Wisata Berbasis Komunitas di Desa Tenjolaya untuk Pembangunan Berkelanjutan. *Jurnal Pengabdian Masyarakat: Pemberdayaan, Inovasi dan Perubahan, 4*(6), 54-62. https://doi.org/10.59818/jpm.v4i6.900.

Setiawan, A. (2021). *Merawat Warisan Alam : Hutan Mendolo*. Retrieved January 7, 2025, from swaraowa.blogspot website: https://swaraowa.blogspot.com/.

Sidiq, U., & Choiri, M. (2019). *Metode Penelitian Kualitatif di Bidang Pendidikan. In Journal of Chemical Information and Modeling (Vol. 53).* Ponorogo: CV. Nata Karya. Retrieved from http://repository.iainponorogo.ac.id/484/1/METODE PENELITIAN KUALITATIF DI BIDANG PENDIDIKAN.pdf

Situmorang, M. T. N. (2024). Mitigasi Satwa Liar di Koridor Ekologi Taman Nasional Gunung Halimun Salak. *Jurnal Ilmu Pengetahuan, 4*(3), 271–278. https://doi.org/10.51878/cendekia.v4i3.3114.

Sodik, M., Pudyatmoko, S., Semedi, P., Yuwono, H., & Imron, M. A. (2019). Okupansi Kukang Jawa (Nycticebus javanicus E. Geoffroy 1812) di Hutan Tropis Dataran Rendah di Kemuning, Bejen, Temanggung, Jawa Tengah. *In Jurnal Ilmu Kehutanan, 13.* https://doi.org/10.22146/jik.46141.

Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D.* Bandung: Alfabeta.

Sutrisno, E., Dewi, D. O., Ariani, M., Sayekti, W. D., Lestari, D. A. H., Syafani, T. S., … Hassanah, I. F. (2023). *Diversifikasi Pangan Lokal untuk Ketahanan Pangan: Perspektif Ekonomi, Sosial, dan Budaya*. BRIN Publishing. https://doi.org/10.55981/brin.918.

Wahyuni, H., & Suranto, S. (2021). Dampak Deforestasi Hutan Skala Besar terhadap Pemanasan Global di Indonesia. *JIIP: Jurnal Ilmiah Ilmu Pemerintahan, 6*(1), 148–162. https://doi.org/10.14710/jiip.v6i1.10083.

Widianto, A. T., & Mahfud. (2023). Kajian Egalitarianisme Dalam Kehidupan Sosial Masyarakat Osing. *Pendidikan Dan Humaniora, 7*(2), 858–863. https://doi.org/10.36526/js.v3i2.1960.

Widyaningrum. (2022). Pemberdayaan Perempuan Petani Hutan (Pesanggem) Melalui Pengolahan Hasil Hutan Bukan Kayu (Hhbk) Sebagai Upaya Mengatasi Kemiskinan Di Dusun Katikan Desa Katikan Kecamatan Kedunggalar Kabupaten Ngawi. *Journal of Islamic Community Development, 2*(2). https://doi.org/10.15642/jicd.2022.2.2.71-88.