




Sustainable Ecotourism Development and Community Empowerment: A Case Study of the Center for Environmental Education in Seloliman Village, Indonesia

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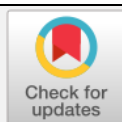
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ABSTRACT

The ecotourism-based community empowerment model is designed to uplift local farmers by fostering the cultivation of organic agricultural plants and promoting sustainable ecotourism by utilizing natural resources and local cultural values. This study aims to illustrate the phenomenon within the community empowerment model for groups of organic farming practitioners engaged in ecotourism, as facilitated by the Center for Environmental Education (PPLH) Seloliman, Trawas, Mojokerto Regency. This study uses a qualitative descriptive approach to gather data through in-depth interviews, document analysis, focus group discussions, and field observations. The analysis reveals that the success in empowering local farmers is attributed to the maturity of ecotourism organizations and political development. Furthermore, the research findings indicate that economic empowerment has heightened farmers' interest in cultivating organic rice due to its enhanced economic value. Simultaneously, social empowerment has broadened farmers' perspectives, fostering openness to change and enabling them to interact and participate as surrogate hosts for ecotourism guests over a few days. This program carries implications for enhancing farmers' understanding and commitment to leveraging natural resources and the environment. This study proposes that sustained ecotourism development necessitates a steadfast commitment to preserving environmental benefits and expanding the involvement of local communities. It is essential to uphold a cultural approach prioritizing sustainable ecotourism.

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1. Introduction

Ecotourism is currently the fastest-growing form of global tourism (Odede et al., 2015). It is one of the most crucial industries for generating employment and income (Nouri Kouchi et al., 2018), particularly in areas where tourist attractions are located (Kurniawan & Zauhar, 2013). It represents a harmonious blend of environmental conservation and development, emphasizing preserving local culture and demographic integrity without violating human rights (Musleh et al., 2023; Yacob, 2010). As an integral part of sustainable tourism, ecotourism should be promoted optimally to achieve sustainable development in tourism (Higgins-Desbiolles, 2011) and align with conservation principles to maintain the integrity and authenticity of ecosystems in natural areas (Prihanta et al., 2020) while empowering residents (Das & Chatterjee, 2020). Community empowerment is vital to ecotourism, contributing to community development (Winkler & Zimmermann, 2014).

In the global development context, empowerment has gained widespread usage in recent decades across various entities, including governments, donor agencies, development banks, non-governmental organizations, and companies, addressing issues such as participation, community, gender, and welfare (Scheyvens & van der Watt, 2021). The success of ecotourism businesses is contingent on local communities having control measures and equitable benefit-sharing from ecotourism activities (Scheyvens, 1999), with residents playing an integral role in these activities (Yacob et al., 2007). Numerous researchers have explored the intersection of ecotourism, community empowerment, and recreational tourism, including (Nault & Stapleton, 2011), (Butarbutar & Soemarno, 2012), (Ramos & Prideaux, 2014), (Odede et al., 2015), (Hanumantha et al., 2019), (Prihanta et al., 2020), and (Lelloltery et al., 2021). Research focusing on ecotourism and community empowerment includes (Ramos & Prideaux, 2014) and (Widowati et al., 2019).

Indonesia, ranking second in biodiversity after Brazil (Kravtsov et al., 1998), boasts rich flora, fauna, ecosystems, and cultural diversity, forming the basis for potential ecotourism development. Recognizing ecotourism and natural tourism as conducive to enriching and enhancing tourism while also respecting natural heritage and acknowledging local capacities, community participation becomes crucial in managing ecotourism (Kencana & Mertha, 2014). One prominent ecotourism destination in Mojokerto is the Environmental Education Center (Indonesian: Pusat Pendidikan Lingkungan Hidup or PPLH) in Seloliman, situated in Trawas. Established in 1990 by Prince William Bernard, President of the World Wide Fund for Nature (WWF), the ecotourism program of the Environmental Education Center in Seloliman has been operational for thirty-two years. Attracting diverse groups, including academics, the public, and foreign tourists, the center recorded an annual pre-COVID-19 visitor count of 21,000, with 55% representing academics, 44% the general public, and 1% foreign guests (8,360 guests). Monthly visitor data for 2019 is illustrated in Figure 1.

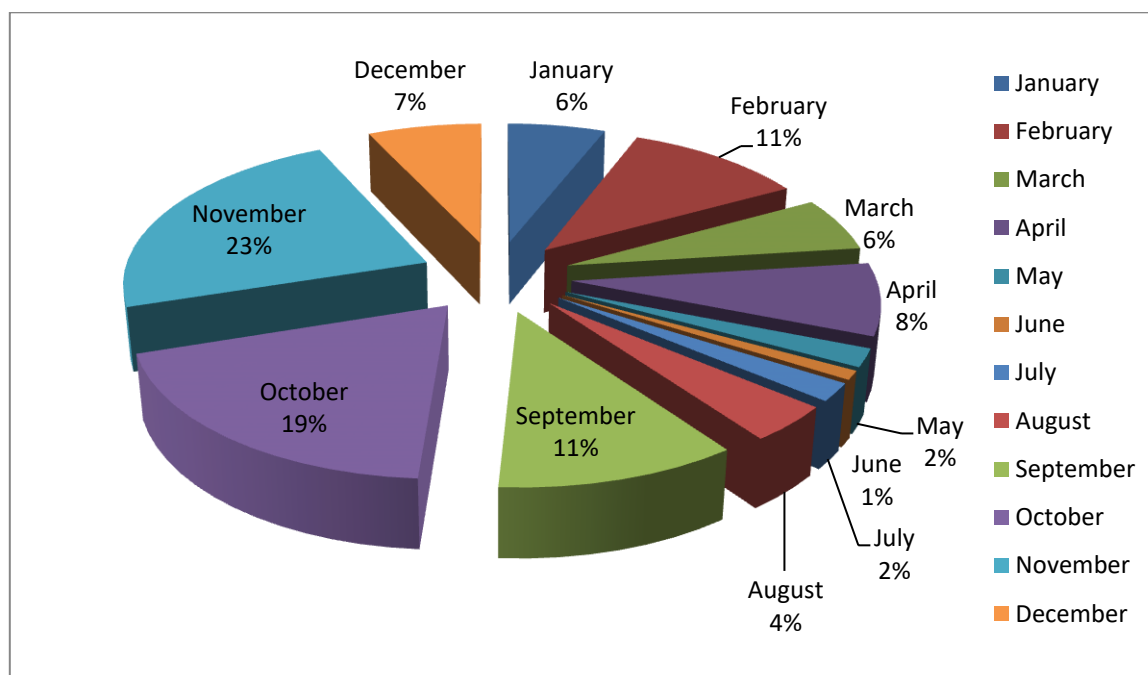


Figure 1. Visitor Data of PPLH Seloliman in 2019

Source: (PPLH Seloliman, 2020)

Studies related to the role of ecotourism in empowering local communities for nature conservation in Tanzania, Indonesia, and India were identified. The research by (Pasape et al., 2014) on community empowerment for sustainability in Tanzania highlighted that stakeholders in tourism lacked sufficient knowledge about conservation and ecotourism preservation. This knowledge gap was addressed through an education program, enhanced access to information, and the use of the local language. The community faced challenges accessing information due to inadequate ecotourism publications and the use of foreign languages in most available materials.

The research model developed by (Pasape et al., 2014) adopted a typology of empowerment framework from (Osborne, 1994) and community empowerment models from Scheyvens (Scheyvens, 1999). This framework was employed to formulate and assess the best strategy for empowering ecotourism stakeholders, as illustrated in Figure 2.

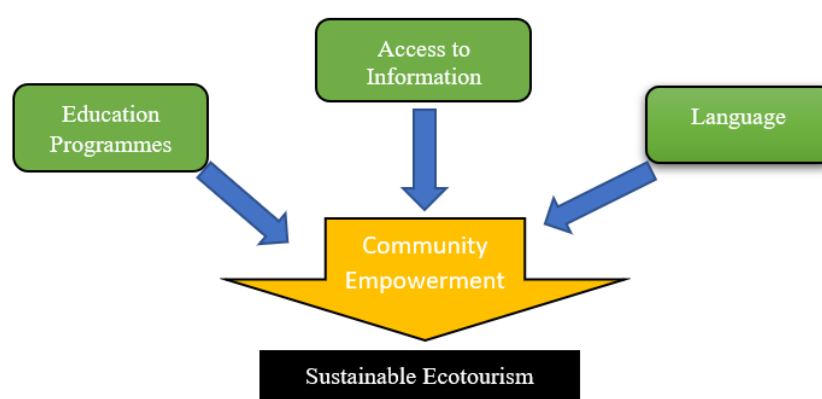


Figure 2. Community Empowerment Framework

Source: (Pasape et al., 2014), adopted from (Osborne, 1994) and (Scheyvens, 1999)

The study by (Hidayat et al., 2017) utilizes the community empowerment model developed by (Scheyvens, 1999) (Table 1). Research on the level of community empowerment, encompassing economic, psychological, social, and political aspects in the Plempoh cultural tourism village in Seloliman, Indonesia, revealed that the empowerment initiatives undertaken by village stakeholders were not optimal. This suboptimal outcome was attributed to some stakeholders not demonstrating strong commitment and failing to gain the local community's trust.

Table 1. Aspects of Community Empowerment

Aspects	Indicators of Empowerment
Economy	Tourism provides sustainable benefits
Psychology	People's self-esteem increases due to recognition of their uniqueness, cultural values, natural resources, and traditional knowledge.
Social	Tourism maintains or enhances the balance of local communities.
Politics	The community's political structure represents its needs and interests, provides an ecotourism forum, and provides an opportunity to be represented in decision-making.

Source: (Hidayat et al., 2017), adopted from (Scheyvens, 1999)

The research conducted by (Das & Chatterjee, 2020) employed the community empowerment model proposed by (Scheyvens, 1999) and (Boley & McGehee, 2014). This involved the development of a framework aimed at environmental conservation and empowering residents in conservation ecotourism areas (Table 2). The investigation into environmental conservation, specifically focusing on maintaining a balance between conservation and the empowerment of local communities in Odisha, India, revealed that environmental development groups and non-governmental organizations have not effectively empowered communities. This deficiency was attributed to the failure of ecotourism to fulfill the principles of ecotourism empowerment.

Table 2. Variables of Community Empowerment

Aspects Empowerment	Variables
Social	Engagement centered on community organizations (formal or informal); Capacity building and skills (benefits); Sense of group cohesiveness (community ties in different organizations)
Political	Access to information (decision-making process & ecotourism policy)
Psychological	Cultural Promotion (ecotourism); Awareness of the uniqueness of resources (indigenous peoples); Increase in the number of tourists (implications for local communities)

Source: (Das & Chatterjee, 2020), adopted from (Scheyvens, 1999), and (Boley & McGehee, 2014)

This research introduces novelty by incorporating environmental and cultural aspects from (Scheyvens & van der Watt, 2021) and the political development dimension from (Ife, 1995). The study utilizes these elements to discuss a community empowerment model designed to support local farmers through assistance in developing sustainable ecotourism (Figure 3).

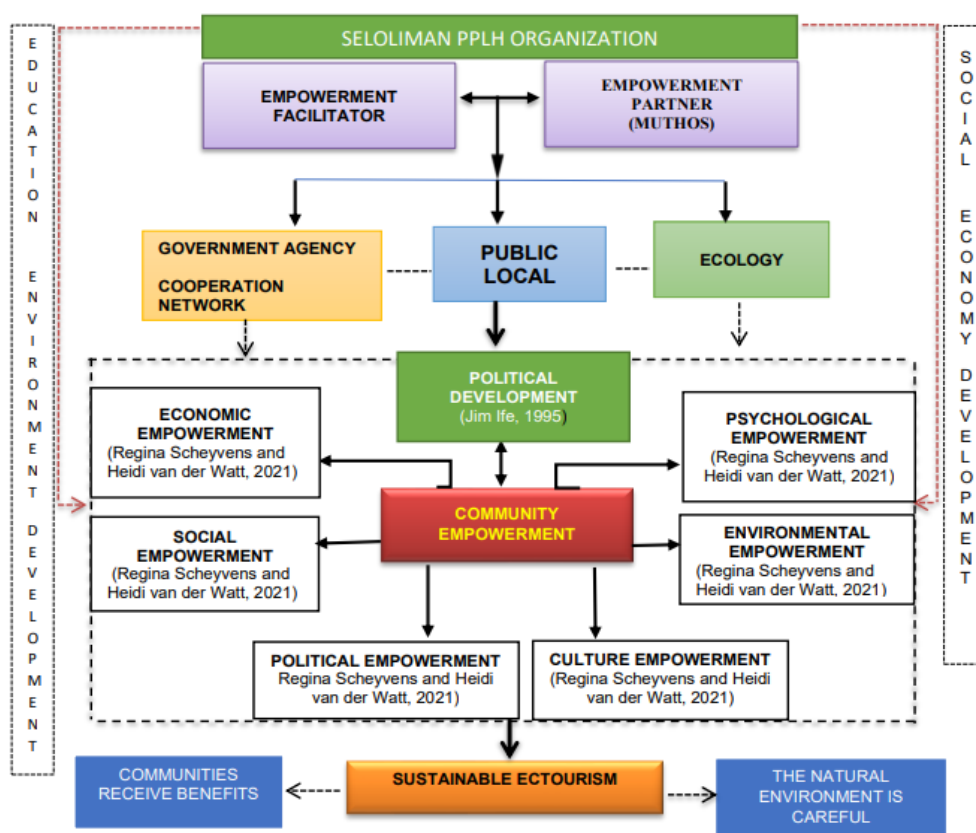


Figure 3. Community Empowerment Model in Ecotourism Development at PPLH Seloliman
Source: Modification of the Community Empowerment Model adopted from (Scheyvens & van der Watt, 2021) and (Ife, 1995)

This study delineates two interconnected processes. Firstly, it examines Seloliman Ecotourism as an ‘iconic’ tourism site and the role played by PPLH Seloliman in empowering local farmers. Secondly, it investigates various forms of empowerment, including economic, psychological, social, political, environmental, and cultural dimensions, alongside political development factors. Additionally, the study explores the community empowerment model developed at PPLH Seloliman. A noteworthy finding of this research underscores the model’s success in empowering local farmers by cultivating organic crops and supporting sustainable ecotourism initiatives implemented by PPLH Seloliman.

The primary objective of this research is to scrutinize the implementation of the community empowerment program at PPLH Seloliman, executed by the Environmental Foundation of Seloliman (Indonesian: Yayasan Lingkungan Hidup Seloliman or YLHS) and two implementing units – the environmental education center and organic farming management – for the benefit of local farmers. This implementation encompasses individual and group assistance to foster sustainable ecotourism development. The community empowerment approach encompasses six dimensions of empowerment and one dimension of development, including economic, psychological, social, political, environmental, and cultural aspects, as well as political development.

There are two key processes: first, describing Seloliman ecotourism as 'iconic' tourism and outlining the roles of PPLH and Seloliman Farming Business and Organic Produce Management (Indonesian: Manajemen Usaha Tani dan Hasil Organik Seloliman or MUTHOS) in empowering local farmers; second, analyzing economic, psychological, social, political, environmental, and cultural empowerment, along with political development factors. Additionally, the study analyzes the community empowerment model developed at PPLH Seloliman. In conclusion, the research aims to demonstrate the success of the community empowerment model implemented by the environmental education center and organic farming management in empowering local farmers through the cultivation of organic crops to support sustainable ecotourism. The findings are anticipated to provide valuable insights and enhance commitment to the responsible utilization of natural resources and the environment.

2. Literature Review

The International Ecotourism Society (TIES) defines ecotourism as responsible tourism in natural areas that conserves the environment, supports local communities' well-being, and incorporates environmental interpretation and education (Bricker, 2017). The concept of ecotourism emerged in response to the adverse effects of mass tourism, which continues to grow and harms the environment (Mcgahey, 2012). (Oktami et al., 2018) the decentralized management involving local communities is a key aspect of ecotourism.

The fundamental principles of ecotourism encompass nature-based activities, conservation, sustainability, ethical management, and a local focus on control, benefits, scale, and environmental education (Kontogeorgopoulos & Chulikavit, 2010). The critical factor in ecotourism development lies in its implementation at the local level or within local governments, where the diverse interests of ecotourism service providers align with the needs of tourists.

Sustainable tourism development prioritizes goals and synergy among the local community, tourists, and destinations, ensuring the harmonious coexistence of natural resources and the local community's culture to meet the needs of tourists. This approach establishes harmony between the tourism industry, environmentalists, and the local community (Wijaya et al., 2021).

According to (Laverack, 2006), community empowerment focuses on nine domains: improving participation, developing local leadership, enhancing problem assessment capacity, improving asking ability, developing empowering organizational structures, enhancing resource mobilization, reinforcing relationships with other organizations and people, creating fair relations with external agents, and increasing control over program management. The basic principle of community empowerment assistance lies in recognizing the experience and traditional knowledge of the community. Therefore, community knowledge and external knowledge or innovation must be chosen wisely and complement each other. Consequently, empowerment is identified as a multifaceted concept related to various outcomes such as participation, agency, autonomy, and the transfer of power (Coy et al., 2021).

Community empowerment, as conceptualized by (Scheyvens & van der Watt, 2021), is delineated across six dimensions. First and foremost is economic empowerment, encompassing income derived from ecotourism-related activities and access to productive resources. This is substantiated by evidence such as employment and business opportunities, sustainable economic benefits, equitable distribution of benefits, and infrastructure and building improvements. Recognizing abilities contributes to a better economic future for the local community.

Psychological empowerment involves the development of self-esteem, self-confidence, and dignity through community participation in ecotourism. According to (Scheyvens & van der Watt, 2021), social empowerment is characterized by strengthening community cohesion and integrity through ecotourism, as evidenced by the project investigation's positive impact on community welfare.

Political empowerment is realized when the community actively participates in and guides decision-making regarding tourism in their area. This includes the ability to choose not to depend solely on ecotourism. Meanwhile, environmental empowerment, drawing from Regina Scheyvens in the work of (Ramos & Prideaux, 2014), is indicated by factors such as knowledge and commitment to biodiversity conservation, the presence of environmental education programs, rehabilitation initiatives, and conservation research, as well as engagement in environmental management activities. These factors collectively contribute to the community's ability to exert power in protecting and preserving the surrounding ecosystem.

Cultural empowerment involves recognizing and respecting the cultural heritage of places and people where ecotourism is practiced. This acknowledges the local community's role in maintaining cultural diversity, moral and spiritual values, ethical roots, and sustainable ways of life. Furthermore, it emphasizes the importance of respecting culture in ecotourism activities.

The understanding of the empowerment process, as demonstrated through awareness stages and the organization of organic farmer groups, aligns with the community development theory proposed by (Ife, 1995). This is elaborated through political development, involving support from various entities such as government, environmental organizations, and partnerships with private institutions. This collaborative effort aims to create power at the macro level, impact structures at the local level, and contribute to a fair distribution of power in society – a key objective of political development.

3. Research Methodology

The study employs a case study research design to elucidate the organic farming community empowerment phenomenon in ecotourism development. Employing a qualitative descriptive approach, this research provides a comprehensive description using a single-case approach (Dickson et al., 2018), critically analyzing the reality constructed locally and specifically (Denzin & Giardina, 2016). The study was conducted over six months, from May 2021 to January 2022, utilizing data collection techniques such as observation and unstructured interviews through snowball sampling. Research notes, archives, websites, and cross-verification with other studies support the findings. The analysis follows the approach of (Creswell & Creswell, 2017), and a focus group discussion (FGD) supplements the study by examining local community empowerment in the nearby village of Biting, Seloliman, Trawas district, Mojokerto Regency, led by the non-governmental organization PPLH.

The informant determination technique employs snowball sampling (Sugiyono, 2016). Fifteen individuals, selected based on their experience, roles, and influence in managing PPLH in Seloliman ecotourism since 1990, serve as main informants. This includes the management of PPLH Seloliman, MUTHOS Seloliman, Organic Farmers Group of Sempur Hamlet (Indonesian: Kumpulan Petani Organik Dusun Sempur or KAPOR), PHSR, OBER, village farmers group, Natural Resources Conservation Center (Indonesian: Balai Konservasi Sumber Daya Alam or BKSDA) in Mojokerto, the culture and tourism office in Mojokerto, schools participating in ADHIWIYATA training in PPLH, Tourism Awareness Group (Indonesian: Kelompok Sadar Wisata) in Seloliman village, Trawas community, and informants around PPLH Seloliman, including land providers supporting the education program.

The data analysis technique involves source snowball sampling (Moleong, 2021), and the measurement tool for research variables follows the four steps proposed by (Miles et al., 2014).

The theoretical framework combines community empowerment from (Scheyvens & van der Watt, 2021), encompassing six aspects of empowerment: economic, psychological, social, political, environmental, and cultural. The empowerment process is applied through phases including awareness raising, group organizing, and community development theory from (Ife, 1995), specifically political development factors. This framework assesses the support for organic community empowerment in Seloliman, building on the thirty-two years of empowerment initiatives in the PPLH organization through local community programs and natural environmental initiatives.

4. Results and Discussion

4.1. Geographical and Demographic Overview of Seloliman Village, Trawas, Mojokerto

Mojokerto, situated in East Java, boasts significant potential for tourism development. The district's topography is predominantly influenced by its soil structure, featuring a concave shape in the middle and highlands to the south and north. The southern region, encompassing Pacet, Trawas, Gondang, and Jatirejo, is characterized by mountainous terrain with fertile soil conditions. Mojokerto has twenty-two tourist destinations, encompassing cultural, natural, cultural heritage, religious, educational, and recreational attractions. Among these destinations, PPLH in Seloliman stands out as one of Mojokerto's prominent tourist spots (Wisatapro.com, 2021).

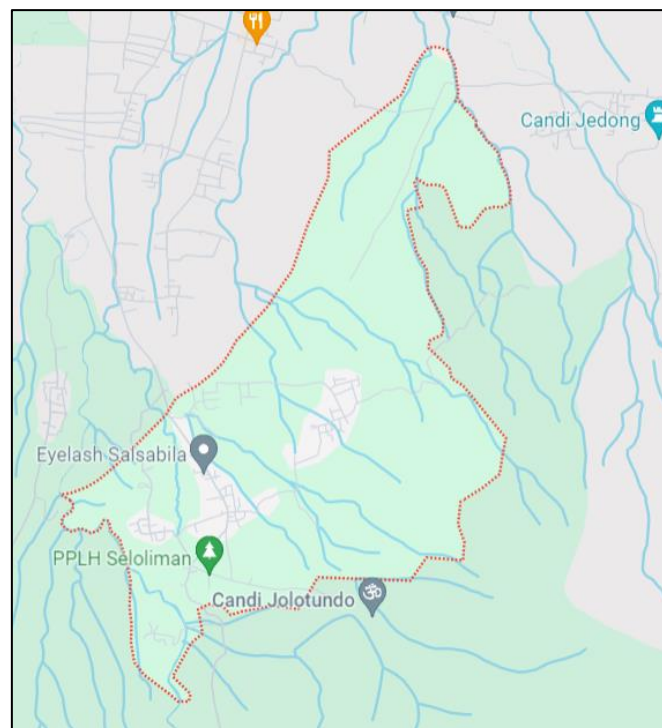


Figure 4. Map of Seloliman Village

Source: (Google Maps, n.d.)

Seloliman is approximately ± 350 meters above sea level, experiencing an average annual rainfall of 2,625 mm and a temperature of $\pm 18^\circ$ Celsius. The village covers an area of 4.62 km², with its northern boundary including Srigading village and Kemen in Ngoro sub-district. The

southern boundary encompasses Kedungudi village, the eastern part consists of a forested area, and the western part is Sugeng village. Seloliman is divided into three areas: Balekambang, Biting, and Sempur.

As of 2020, the village had a total population of 2,660 in 892 households. The primary economic activities of the majority of the population are in the agricultural sector, given that 83.18% of the area is moorland and 16.82% is devoted to rice fields, covering 63.50 km² (14.43% of the total sub-district area). In terms of housing, there are 892 households, with approximately 109 houses (12.21%) not relying on the state electricity company for electricity, while 783 houses (87.79%) utilize electricity from the state electricity company.

Notably, out of the total 10,361 electricity users in all sub-districts served by the state electricity company, only 109 houses in Seloliman are not connected to this service ([Badan Pusat Statistik Kabupaten Mojokerto, 2020](#)).

4.2. Seloliman Village Ecotourism and Community Empowerment

PPLH in Seloliman is a non-governmental organization situated on the western slope of Penanggungan Mountain, within the hills of Seloliman village in Trawas – Mojokerto, East Java. Since 1990, PPLH has been dedicated to environmental management. In education, it offers informal, open, and relaxed services. The institution's primary objective is to foster public awareness of the importance of a sustainable environment through environmental education and various ecotourism training programs. Additionally, it provides environmental and natural education to the public. All activities are conducted independently and are not affiliated with the government or any political institution.

This goal is pursued through diverse programs and activities within and outside the PPLH location or directly within the community. Key programs and activities include environmental education for all societal groups and levels, focusing on three strategic issues: environmental education for the awareness process, assistance for community empowerment and development, and promoting ecological (organic) agriculture for sustainable farming. PPLH actively engages in community assistance and empowerment programs, offering environmental education, consultation services, and skill improvement training for the communities and individuals in Trawas, Pacet, and Ngoro Sub-districts.

PPLH in Seloliman operates under the auspices of the environmental foundation called YLH (Yayasan Lingkungan Hidup or YLH), dedicated to the environmental sector and the conservation of endangered species. The first PPLH in Indonesia was established on the slopes of Penanggungan Mountain in Trawas. Financial support from the World Wide Fund (WWF) in 1988 facilitated the construction of physical buildings, including a dormitory, pavilion, restaurant, and seminar building. PPLH was officially founded on May 15, 1988, and inaugurated on May 15, 1990, with Prince Bernhard from the Netherlands serving as the President of WWF. Soeryo Wardoyo Prawiroatmodjo was appointed as the director of PPLH. The initial step involved seeking donations to support PPLH's operations, donating seven bungalows, and establishing a library. PPLH continued to evolve, and in 2008, the TLH foundation granted PPLH Seloliman the status of Seloliman Environmental Foundation (Indonesian: Yayasan Lingkungan Hidup Seloliman or YLHS). As a result, various programs have been implemented ([Table 3](#)).

Table 3. Programs at PPLH Seloliman

No.	Program Classification	Program	Program Review
1	Environmental Education	Tropical forest ecosystem, pollution bio-indicator, souvenirs from natural/used materials, renewable energy, and environmentally appropriate technology, micro-hydropower plants, healthy food and drink, organic farm, family medicinal plants, rural social economy, ADIWIYATA cultured school, environmental education methodology, environmental architecture landscape, and others.	Organic farm, family medicinal plants, rural social economy (2021)
2	Leadership	Outbound kids PLH, basic student leadership training (LDKS), outbound PLH, and family gatherings.	-
3	Training	ADIWIYATA training, organic farming training, micro-hydro training, and others.	Organic farming training (2021)
4	Ecotourism	Educational ecotourism (forest, rice fields, villages, PLTMH), nature ecotourism (PPLH, forest, Jolotundo), Penanggungan mountain ecotourism, and Live In PPLH Seloliman.	Nature ecotourism (PPLH Seloliman) (2021)

PPLH Seloliman possesses a moderately sized land that has transitioned from dry and barren to natural, resembling forest land. Consequently, land management and processing are naturally applied, enabling the land to be utilized for various activities, particularly for producing economically valuable plant products. The outcomes of PPLH management have demonstrated the necessity of integration in ecological agriculture, involving land management with animals and households. The community empowerment program, in the form of organic agricultural land management, aims to achieve community self-sufficiency. Community self-reliance implies that the village community is not dependent on middlemen and focuses on community-oriented organic farming land management programs.

The organic farming land management program is pro-community, aligning with the conditions of the people in Seloliman village. Notably, most % of the population engages in agricultural activities, comprising 80.38% (farmers and farm laborers), while 19.62% are involved in trading, retired civil service, and other occupations (PPLH Seloliman, 2020).

The community empowerment process for developing ecotourism at PPLH is influenced by several factors, as applied in this study. These factors include the community empowerment theory from (Scheyvens & van der Watt, 2021) and the community development theory (Ife, 1995), focusing on building personal empowerment or empowering groups involved in empowerment activities. Additionally, there are six dimensions of community empowerment and one community development factor, namely economic empowerment, psychological

empowerment, social empowerment, political empowerment, environmental empowerment, cultural empowerment, and political development factors.

4.3. Economic Empowerment

Economic empowerment is achieved by implementing an organic farming program, where the community acknowledges the benefits of selling rice to PPLH. This is because organic rice is purchased at a price ten percent higher than regular rice. Furthermore, the program provides access to fertilizer derived from livestock waste and knowledge capital on processing it into economically valuable fertilizer, thus fulfilling the community's need for organic fertilizer (Laverack, 2006).

4.4. Psychological Empowerment

The initial empowerment phase involves PPLH taking responsibility for raising community awareness regarding adopting an organic farming cropping pattern. The execution of the organic farming program, as an approach through an awareness process, did not always proceed seamlessly, given the community's prior familiarity with agricultural methods utilizing fertilizers and chemicals. The community perceives organic cropping activities, from land management and planting to maintenance, pre-harvest, and post-harvest processes, as prolonged and demanding. Nevertheless, the community recognizes the benefits derived from this transition (Laverack, 2006).

4.5. Social Empowerment

Social empowerment within the community fosters openness to change, enabling farmers, such as organic farmers in Srigading village, to develop a broader perspective. This is manifested through regular communication during meetings among organic farming actors, where some farmers interact using Indonesian with guests from PPLH to share insights into organic farming. The local community actively participates in daily activities, engaging in agricultural community groups and animal husbandry. PPLH Seloliman is an empowerment facilitator implementing an irrigation development program in collaboration with the local community to support water needs in organic farming. This water source is also utilized for an ecotourism program as a Micro Hydro Power Plant (refer to Table 4) channeled to Balekambang. This finding aligns with the results reported by (Laverack, 2006).

4.6. Political Empowerment

Political empowerment through community awareness is implemented by the non-governmental organization (PPLH), which collaborates with MUTHOS to instill an organic ideology among its members and the community. This is achieved by adopting organic practices on small land or rice fields. The empowerment initiatives include the establishment of OBER (Organic Group Building Together) and a village farmer group. The first category involves empowering approximately thirty local community members who engage in house renovation while receiving education on growing organic vegetables in limited spaces or utilizing house yards. The second category comprises activities related to an organic farmer group for rice fields, involving approximately fourteen people. Community engagement is fostered through partnerships in community empowerment and support by PPLH and MUTHOS around ecotourism sites, forming various groups and communities (refer to Table 4). This aligns with the findings of (Oktami et al., 2018), who emphasize the involvement of the local community in ecotourism management, and (Bista, 2018), who suggest that a group-based

extension approach can effectively provide agricultural extension services to farmers with limited personal financial resources.

Table 4. Partnerships of PPLH in Community Empowerment

No.	Empowerment of Community Groups	Location	Years of Development
1	PKM (Micro Hydro Power Plant Association of Kalimaron) as the manager of Kalimaron Micro Hydro Power Plant and Wotlemah Micro Hydro Power Plant 'Wotlemah' PLTMH	Seloliman Village, Trawas, Mojokerto	2007
2	Kelopak (A group of organic rice-producing farmers)	Krapyak Village, Kutogirang, Kecamatan Ngoro, Mojokerto	2007
3	KAPOR (Rice organic farmer group)	Seloliman Village, Trawas, Mojokerto	2007
4	PHSR (A group of fruit-producing forest farmers)	Seloliman Village, Trawas, Mojokerto	2007
5	Hasanah (Group of housewives producing processed food)	Seloliman Village, Trawas, Mojokerto	2007

Source: (PPLH Seloliman, 2020)

Explanation: PLTMH (Micro-hydro power plant); PHSR: Sri Rejeki Forest Association

4.7. Environmental Empowerment

Community empowerment in organic farming is a program aligned with the organization's mission, involving members and encouraging community participation in preserving and utilizing natural resources and the environment through an organic ideology focused on (1) organic awareness, (2) promoting healthy food, and (3) effective waste management. The organic vegetable farmers' group in Sempur and Biting Hamlet, Seloliman, exemplifies using land around houses or limited spaces.

The behavior exhibited by this organic group serves as a model for enhancing community awareness in implementing organic farming, contributing to increased capacity for organic practices within the community, and fostering the development of the organic groups. Apart from the OBER group, an active group of organic farmers concentrates on rice and vegetable fields, specifically in Sempur Hamlet and Biting Hamlet. In Seloliman Village, seven individuals are involved, while Srigading Village has nine farmers (refer to [Table 5](#)), as documented by (Laverack, 2006).

Table 5. Evolution of Organic Crop Farmers from 1994 to 2017

No	Number of Farmers (Person)	Location	Get Started Organically	Active Time (Years)	Types of Organic Plants	Status
1	4	Seloliman Village, Trawas Sub-district	1994	27	Rice	not active

No	Number of Farmers (Person)	Location	Get Started Organically	Active Time (Years)	Types of Organic Plants	Status
2	6	Seloliman Village, Trawas Sub-district	1995	26	Rice	Not Active
3	2	Sempur Hamlet, Seloliman Village	2005	16	Vegetables	Active
4	2	Biting Hamlet, Seloliman Village	2005	16	Vegetables	Active
5	2	Biting Hamlet, Seloliman Village	2005	16	Rice	Active
6	1	Sempur Hamlet, Seloliman Village	2005	16	Rice	Active
7	9	Sukorejo Hamlet, Srigading Village, Ngoro Sub-district	2017	4	Rice	Active

Source: PPLH and MUTHOS in 2021

Table 5 displays active and inactive organic crop farmers from Biting, Sempur, Sukorejo, and Seloliman villages. Those classified as inactive are no longer contributing at their full capacity to the subsequent generations within their families. Consequently, their lands are transformed into villa homestays or sold to individuals outside the village. This phenomenon encompasses the initial organic community groups that were part of the empowerment program with the support of organic farmers. However, the sixteen remaining active organic farmers adhere to local wisdom by incorporating traditional practices into their farming endeavors.

4.8. Cultural Empowerment

The facilitators in PPLH do some activities through community awareness to change the behavior of non-organic agriculture to become an organic farm. Therefore, the community needs an approach based on resources and the environment through organic plant education, strengthening organic ideology, and developing local cultural values in the culture of sustainable organic farming. Organic behavior in the Seloliman community has existed since ancient times as part of local tradition. According to the locals, farmers do their activities according to the natural pattern because of limited knowledge and capital to buy fertilizer. The natural farming patterns use fertilizers from livestock manure and green leaves, which people plant with limited knowledge. The culture or tradition of the local community in the agricultural sector, namely the calculation of the time for planting preparation, tillage, nursery, harvest (pranamatangsa), ceremony, prayers, and how the rice is stored in the barns.

This organic behavior is still applied today as the local tradition and culture in behaving organically. Earth charity activity is a form of community gratitude for the sustenance from God Almighty through the symbol of crops showing in an attraction in Seloliman village every year. The culture of agriculture is a form of cooperation named KODUR culture in which rice field work activities involve the community with their respective expertise. As (Laverack, 2006) stated, empowerment can increase problem assessment capacity. These cultural values are a form of pride in the environment so that they can provide them to the community outside Seloliman village.

4.9. Political Development

PPLH is an established organization since 1990, with 80% of its members serving in the management of PPLH. Additionally, the management of the Seloliman Environmental Foundation is predominantly composed of individuals from the local community (80%), with the remaining 20% hailing from outside the village area (refer to Table 6).

Table 6. Composition of Management at Seloliman Environmental Foundation (YLHS)

No.	Name	Function/Position
1	Suroso	Chief Builder
2	Anna Regina Frey Vander	Founder Member
3	Satrijo Wiweko	Founder Member
4	Diana	Secretary
5	Maimanah	Treasurer

The members' daily responsibilities encompass technical and administrative duties to facilitate the management and service of ecotourism activities at PPLH in Seloliman. These include roles such as Manager, Coordinator of Public Relations Division, Education Division, Agriculture Division, Restaurant Division, Facility Division, and MUTHOS Coordinator.

Since its establishment in 1990, PPLH has received support from various stakeholders, as evidenced by the founding process. The environmental organization WWF provided funding of approximately 150,000,000.00 rupiah for land acquisition and supporting facilities. With thirty-two years of experience, PPLH has thrived due to favorable ecological conditions, which have become a strength in developing ecotourism. The power sources in PPLH Seloliman can alter the distribution of societal empowerment. They should be shared fairly, aligning with political development goals, as (Coy et al., 2021) stated.

The implications of this study reveal that for the sustainability of ecotourism, increased local community involvement is necessary while preserving local cultural values and expanding stakeholder participation. This research is limited to community empowerment by ecotourism managers with the community, and it does not represent a pattern of community empowerment in ecotourism involving multi-stakeholders. Community empowerment through ecotourism is not only related to the institutional aspects of managing ecotourism but also requires a commitment to community involvement and the sustainable preservation of local cultural values. Future researchers should focus on developing local community empowerment in ecotourism by involving multi-stakeholders.

The results of this case study indicate that PPLH and MUTHOS have successfully empowered the community, especially the farmers, over thirty-two years. This success is

supported by the six dimensions of community empowerment and one dimension of community development implemented by PPLH, making it a potential support for sustainable ecotourism in Seloliman. Developing one form of capital is not enough to ensure the empowerment of farmers in four dimensions unless the other two forms of capital already exist. Community empowerment requires support from all six dimensions (Scheyvens & van der Watt, 2021).

The findings of this study support the research findings of (Pasape et al., 2014), (Hidayat et al., 2017), and (Das & Chatterjee, 2020), revealing that farmer empowerment has not been optimal and has even failed. This is attributed to stakeholders' lack of knowledge in conservation and ecotourism preservation, poor community access to information, lack of stakeholder commitment to ecotourism, and low trust from the local community towards stakeholders.

The study also shows that economic empowerment has increased farmers' interest in growing organic rice due to its higher selling price than ordinary rice. Social empowerment has broadened farmers' horizons, making them open to change and allowing interaction with ecotourism guests. Additionally, local people actively participate in daily agricultural and animal husbandry activities and act as adoptive parents for a few days. Psychological empowerment involves raising awareness of the importance of organic behavior, where organic cropping patterns are considered a long and arduous process. In political empowerment, PPLH Seloliman has partnered with MUTHOS to raise community awareness through an organic-minded ideology, involving members and the community in implementing organic behavior on narrow land and rice fields. The political development dimension indicates that PPLH is an established organization with international network connections (WWF), and the management still involves the local community.

These findings have implications for ensuring the sustainability of ecotourism. Therefore, local community involvement needs to be expanded, local cultural values preserved, and the number of stakeholders involved increased. This research focuses on community empowerment by ecotourism managers with the community, and it does not represent a pattern of community empowerment in ecotourism involving multi-stakeholders. Community empowerment through ecotourism is not only related to the institutional aspects of managing ecotourism but also requires a commitment to community involvement and the sustainable preservation of local cultural values. Future researchers should concentrate on developing local community empowerment in ecotourism by involving multi-stakeholders.

5. Conclusion

This study employs a six-dimensional analysis of community empowerment and one dimension of community development. It reveals that the implementation of community empowerment in PPLH Seloliman has evolved over thirty-two years, successfully empowering local farmers through an organic farming program model. This model includes environmental education, various ecotourism training programs, culture maintenance, local wisdom, and active engagement of the local community.

The community empowerment model in PPLH Seloliman ecotourism is executed by developing an organic farming program for the community. This involves an approach to community awareness and individual engagement through groups. It aims to instill practical organic knowledge in economic, psychological, social, political, environmental, cultural empowerment and political development. A crucial lesson from the success of community empowerment in ecotourism is that well-established organizations, supported by quality

facilitators, empowerment partners, collaborative networks, village governments, local communities, and ecological aspects, contribute to this success. A continued commitment to developing PPLH Seloliman ecotourism sustainability is recommended, emphasizing the importance of maintaining environmental benefits and expanding local community involvement, prioritizing a cultural approach toward sustainable ecotourism.

This research has implications for future researchers, encouraging them to delve deeper into community empowerment, especially concerning local wisdom. Future studies can explore more extensively the role of community empowerment in preserving sustainable local wisdom.

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7. Declaration of Conflicting Interests

The authors have declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

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