



Reproduction of Sidamanik Tea Garden as an Effort for Tourism Development and Community Economic Empowerment

Jumaria Sirait, Natasya Pasaribu*, Risma Siburian, Winda Sitorus

Universitas HKBP Nommensen Pematangsiantar, Indonesia

Abstract

Sidamanik Tea Plantation has great potential as a sustainable agro-tourism destination in North Sumatra. This study aims to examine the tea plantation reproduction process as an effort to maintain production quality while supporting tourism development and economic empowerment of the surrounding community. Field data shows that plant rejuvenation and sustainable plantation management are able to maintain plantation productivity and tourist attractions. The development of tourism facilities and community involvement in various tourism activities have a positive impact on increasing the income and welfare of local communities. In conclusion, the integration of tea plantation reproduction, agro-tourism development, and community economic empowerment can make Sidamanik Tea Plantation a model for sustainable tourism development and socio-economic benefits.

Keywords:

Sidamanik Tea Plantation, agro-tourism, tea plantation reproduction, community empowerment, sustainable tourism development.

Corresponding Author:

Natasya Pasaribu
Email: natasyapsr07@gmail.com



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INTRODUCTION

The Sidamanik Tea Garden is one of the oldest tea plantations in North Sumatra, playing a significant role in the agricultural sector while also holding great potential to be developed as an agro-tourism destination. Located in Simalungun Regency, this tea garden is well-known for its vast green and lush tea fields, as well as its traditional tea processing methods. This uniqueness makes the Sidamanik Tea Garden an attractive tourist destination for visitors who wish to experience natural beauty while also learning about the local culture of the tea garden's managing community (Dumairy, 1986).

According to data from the Simalungun Regency Tourism Office, the number of visitors to the Sidamanik area has been increasing every year. However, the agro-tourism management of the tea garden remains suboptimal. The vast tourism potential has not yet been fully supported by a well-organized and sustainable management system. This is evidenced by the limited tourist facilities, lack of digital promotion, and minimal community involvement in tourism development (Batubara et al., 2023).

As interest in nature-based and cultural tourism grows, the development of the Sidamanik Tea Garden as a tourist destination becomes a strategic effort to encourage economic growth in the surrounding community. The success of this agro-tourism development heavily depends on the sustainability of the tea garden itself. Therefore, the reproduction of the tea garden, including plant rejuvenation, environmental management, and facility upgrades,

is crucial to ensure that the garden remains productive and attractive to tourists (Banerjee & Tyagi, 2025; Damanik & Purba, 2020).

In the context of community empowerment, the development of agro-tourism should involve the active participation of local residents (Nastiti & Hakim, 2020). The involvement of the community in providing services such as tour guides, accommodations, and processing local products can be a tangible form of economic empowerment based on local potential (Khalid et al., 2019). This concept aligns with the theory of sustainable tourism, which emphasizes the balance between economic, social, and environmental aspects (Shekhar, 2024).

Based on the above discussion, this study aims to analyze the reproduction of the Sidamanik Tea Garden as an effort in sustainable tourism development and the economic empowerment of the surrounding community. Through this study, it is hoped that a comprehensive management strategy will be identified, allowing the tea garden to provide optimal benefits for regional development and the improvement of community welfare.

METHOD

This study uses a qualitative approach with a case study method. This approach was chosen to deeply explore the process of the reproduction of the Sidamanik Tea Garden, the development of agro-tourism, and the forms of economic empowerment of the local community in the region. The qualitative approach allows the researcher to gain a comprehensive understanding of the social and economic phenomena occurring in the tea garden environment (Dźwigoł, 2024).

The population in this study includes all parties involved in the management and development of tourism in the Sidamanik Tea Garden area (Tobing, 2021). The research sample was determined using purposive sampling, a technique that intentionally selects informants based on specific considerations. The sample consists of tea garden managers who understand the process of reproduction and plant management, local tourism entrepreneurs such as homestay owners, vendors of local products, and tour guides, as well as local residents who are actively involved in tourism-based economic empowerment activities. In addition, several tourists were also selected as informants to obtain perspectives on the appeal and tourism experience at the tea garden.

Data collection techniques were carried out through direct observation, in-depth interviews, and documentation. Observation was used to examine the condition of the garden, tourism activities, and community involvement. In-depth interviews were conducted with managers, community members, and tourists to obtain richer qualitative data. Documentation was used to complement the data in the form of activity photos, management reports, and other supporting documents.

The data obtained were analyzed using the interactive analysis technique developed by Miles and Huberman, which includes three stages: data reduction, data presentation, and drawing conclusions. All stages were carried out continuously throughout the research process to maintain the validity and consistency of the findings.

RESULT AND DISCUSSION

The study shows that the reproduction process of the Sidamanik Tea Garden is carried out periodically through the use of superior seedlings and the application of sustainable plantation management practices. These efforts have successfully maintained the quality of the plants and significantly increased tea productivity year after year. Additionally, the garden management implements environmentally friendly techniques, such as organic waste management and the planting of protective trees, to maintain the ecological balance around the plantation area (Danil, 2013; Dumairy, 1986).

In terms of agro-tourism development, the management has built several supporting facilities, such as trekking trails, selfie spots, and rest areas for visitors. These facilities are aimed at enhancing comfort and enriching the visitor experience at the tea garden. However, observational results indicate that local community involvement in tourism management is still limited. Most of the tourism activities are still managed by the tea garden authorities, while the community plays a role primarily in the informal sector.

Economic empowerment of the community has started to be visible through local residents' participation in tourism activities, such as being guides, selling processed tea products, and providing homestay services. This involvement provides additional income for the community and contributes to the improvement of family welfare. However, interview results revealed that the community still requires ongoing training to improve service quality and the competitiveness of local products.

Table 1. Research Results on Reproduction, Tourism Development, and Community Empowerment at Sidamanik Tea Garden

No	Research Aspect	Key Findings	Supporting Data	Implications
1	Tea Garden Reproduction	Reproduction is carried out periodically using superior seedlings and environmentally friendly techniques.	- 85% of the plants are the result of rejuvenation in the last 5 years. - Production increased by 20% compared to the previous year.	Ensures sustainability of tea production and quality.
2	Environmental Management	Organic fertilizers and natural pest control are applied.	- 70% of the garden area has switched to an organic system. - Soil sustainability increased (based on local laboratory tests).	Supports eco-tourism and sustainable agriculture.
3	Agro-tourism Facilities	Enhancement of facilities such as trekking paths, gazebos, and photo spots.	- 3 new tourist trails were opened in 2024. - Tourist numbers increased by 35% compared to 2023.	Increases tourism appeal and visitor experience.
4	Community Involvement	The community has begun to participate as guides, sellers of processed tea, and homestay managers.	- 45 households are directly involved in tourism activities. - Average additional income of IDR 1,500,000–2,000,000/month.	Increases local welfare and participation.
5	Training and Mentoring Needs	Limited service skills and business management capabilities.	- Only 25% of tourism stakeholders have attended tourism training.	Ongoing training is required to maintain service quality and product standards.

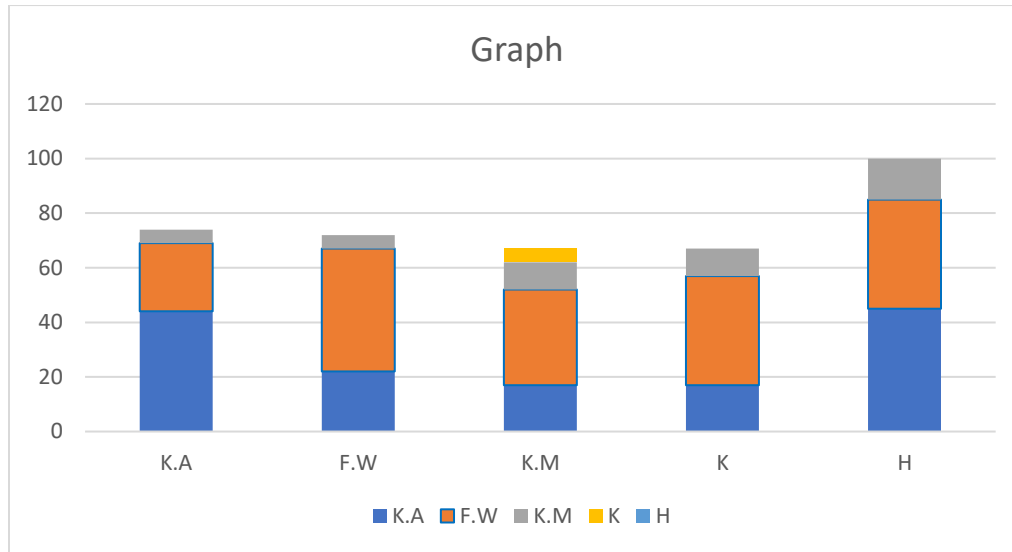
Table 2. Tourist Satisfaction with Agro-Tourism at Sidamanik Tea Garden (N = 50 Respondents)

Aspect Evaluated	Very Satisfied (%)	Satisfied (%)	Moderately Satisfied (%)	Dissatisfied (%)
Natural Beauty	44	25	5	0
Tourism Facilities	22	45	10	5
Local Hospitality	17	35	10	0

Cleanliness	17	40	10	0
Price	45	40	15	0

Graph

The following graph shows the level of tourist satisfaction with the agro-tourism at Sidamanik Tea Garden. It illustrates that natural beauty received the highest “very satisfied” rating (50%), while tourism facilities were the most commonly rated as “moderately satisfied” or “dissatisfied,” indicating areas for improvement in the management of tourism.



Graph 1. Tourist Satisfaction Levels by Key Aspects at Sidamanik Tea Garden

Explanation:

- K.A = Natural Beauty
- F.W = Tourism Facilities
- K.M = Local Hospitality
- K = Cleanliness
- H = Price

This graph displays the distribution of tourist satisfaction levels across several key aspects. The results show that natural beauty is the factor with the highest satisfaction level, while tourism facilities require improvement to support an optimal tourism experience.

The sustainable reproduction process of the tea garden forms an essential foundation for maintaining productivity and preserving the appeal of agro-tourism. According to the theory of sustainable development (Azamatova, 2025), the balance between economic, social, and environmental aspects is the key to successful tourism destination management. The application of environmentally friendly techniques at Sidamanik Tea Garden demonstrates that agricultural economic activities can go hand-in-hand with environmental conservation efforts.

The development of adequate tourism facilities plays an important role in enhancing visitor comfort and prolonging the length of stay. However, as noted by Nopiyani and Wirawan, the success of a tourist destination is not solely determined by infrastructure but also by the quality of social and cultural interactions with the local community

(Nopiyan & Wirawan, 2021). Therefore, empowering the local community should be a primary focus in the development of Sidamanik's agro-tourism.

Community participation in tourism management adds value to the social and cultural aspects of the destination. When the community actively engages as economic participants, tourism activities become more authentic and sustainable. This aligns with the concept of community-based tourism, which emphasizes local involvement and ownership of local resources (Prasad, 2024).

Economic empowerment through small tourism-based businesses, such as processed tea products, souvenirs, and homestays, is a strategic step to improve welfare. Ongoing training and mentoring will strengthen the community's ability to manage its regional potential. With the synergy between tea garden reproduction, tourism facility development, and community empowerment, Sidamanik Tea Garden can serve as a model for implementing sustainable agro-tourism in Indonesia.

CONCLUSION

The Sidamanik Tea Garden has significant potential to be developed as a sustainable agro-tourism destination in North Sumatra. The research findings indicate that the reproduction process of the tea garden through plant rejuvenation and the implementation of environmentally friendly management practices has successfully maintained both tea production quality and environmental sustainability. In terms of tourism, the management has improved facilities such as tourist trails and recreational areas, which has had a positive impact on increasing the number of visitors. However, local community participation remains limited, and this should be enhanced through training and mentoring to enable them to play a more significant role in tourism management and the development of local products.

From an economic perspective, community involvement in tourism activities such as providing homestays, selling processed tea products, and offering tour guide services has led to increased income and improved welfare for the surrounding community. Overall, the success of the Sidamanik Tea Garden's development is determined by the synergy between tea garden reproduction, agro-tourism development, and community economic empowerment. The integration of these three aspects makes the garden a model for sustainable tourism development, providing socio-economic benefits for the community while preserving the environment for future generations.

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