

COMMUNITY-BASED ECOTOURISM TRAINING FOR CONSERVATION AND INCOME GENERATION

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Abstract

Community-based ecotourism development is a strategic approach to integrating environmental conservation efforts with improving the welfare of local communities. This study aims to systematically review the literature related to community-based ecotourism training as a means of conservation and increasing community income. The method used was a literature review of various scientific journals, environmental organization reports, and policy documents related to ecotourism and community empowerment. The study results indicate that participatory ecotourism training can improve conservation knowledge, tourism service skills, and local entrepreneurship opportunities. Furthermore, community involvement in ecotourism planning and management has been shown to increase a sense of ownership of natural resources and strengthen community economic independence. This study recommends the need for synergy between the government, educational institutions, and local communities in designing adaptive and sustainable training programs for community-based ecotourism development.

Keywords: Community-based ecotourism, training, conservation, empowerment

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INTRODUCTION

Community-based tourism is becoming an increasingly popular development approach in the context of regional development, particularly in rural areas and regions with unique biodiversity and local culture. In practice, this approach prioritizes the active participation of local communities as key actors in planning, managing, and benefiting from tourism activities within their territories. One form that is now increasingly being developed is community-based ecotourism, which not only emphasizes sustainable tourism but also contributes to environmental conservation and improving the well-being of local communities (Saha et al., 2015a). In this context, training in community-based ecotourism management is crucial to equip local residents with the skills, knowledge, and insight necessary to independently and sustainably develop their region's potential.

Indonesia, as an archipelagic nation with abundant natural and cultural riches, offers significant opportunities to develop community-based ecotourism in various regions. From tropical forests and national parks to coastal areas, to mountainous regions and traditional villages, all hold significant potential for conservation-based tourism attractions. However, a major challenge in developing ecotourism in these regions is the low capacity of local human resources in tourism management, conservation awareness, and effective tourism marketing strategies. Lack of access to relevant training often prevents communities from optimally managing existing tourism potential. Instead of benefiting, they become bystanders or even suffer losses from unsustainable tourism practices.

Community-based ecotourism training is a crucial tool to address these challenges. Through this training, communities are trained to recognize and explore their local potential, understand the basic principles of ecotourism that prioritize sustainability, and learn practical skills such as tourism services, homestay management, environmental interpretation, financial management, and digital promotion. Furthermore, this training also strengthens collective awareness of the importance of natural resource conservation as a key asset in ecotourism development (Mazengiye, 2022a). With a participatory approach based on local wisdom, this training not only

serves as a technical learning tool but also builds the community's social capacity to collaborate, develop a shared vision, and make decisions that support sustainability and the common good.

Within the framework of sustainable development, community-based ecotourism training also aligns with global goals such as the Sustainable Development Goals (SDGs), particularly in poverty alleviation, environmental conservation, and inclusive economic development. This training serves as a strategic intervention to create new economic opportunities that are not solely based on the exploitation of natural resources, but rather encourage conservation through wise use. Communities previously dependent on extractive economic activities, such as illegal logging or hunting, can shift their attention to sustainable and economically valuable tourism activities. This transformation does not occur instantly; it requires a structured and ongoing learning process, one of which can be achieved through a comprehensive training program (Lonn et al., 2018a).

In addition to providing economic benefits, community-based ecotourism training also contributes to strengthening local cultural identity and encouraging the regeneration of local wisdom values that have been eroding. In many cases, tourism has become a catalyst for the revival of local culture as communities begin to recognize the importance of preserving traditions, language, cuisine, and arts and crafts as part of their tourist attractions. In training, these aspects are highlighted as community strengths that need to be preserved and promoted, so that communities can take pride in their identity and utilize it as social and economic capital (Tang, 2019a).

However, implementing community-based ecotourism training is not without challenges. Some of the main challenges include limited training infrastructure, a lack of facilitators who understand the local context, and low digital literacy, which hinders the promotion of tourist destinations. Therefore, this training must be designed in a contextual, adaptive, and inclusive manner, involving stakeholders such as local governments, non-governmental organizations, academics, and tourism industry players. Cross-sector collaboration is key to the success of training

programs, as each party plays a crucial role in supporting the learning process and implementing training outcomes in the field.

This research was conducted to assess the extent to which community-based ecotourism training can contribute to conservation and increase community income. The aim of this study was to examine in-depth the training's impact on increasing community capacity to manage conservation-based tourism potential, changing mindsets regarding the importance of environmental preservation, and the extent to which developed ecotourism activities can create real and sustainable economic opportunities for local communities. This research is also expected to provide policy and practice recommendations that can serve as a reference for developing similar training in other areas with similar potential and challenges (Mengesha, 2021).

Thus, community-based ecotourism training is not merely a technical program but also a strategic instrument for community empowerment, environmental conservation, and the creation of a sustainable local development model. This approach opens opportunities for communities to become active participants in development while maintaining a balance between economic, social, and ecological interests. Contributing to strengthening community capacity, this training also strengthens the foundation for creating a healthy, equitable, and future-oriented tourism ecosystem.

This community service activity aims to increase community capacity in managing ecotourism sustainably by prioritizing participatory, conservative, and locally potential-based principles. Through training and mentoring, it is hoped that the community will understand the importance of environmental conservation as part of tourism development and will develop the skills to create attractive, high-quality, and competitive tourism products. Furthermore, this activity aims to build strong community institutions capable of managing tourist destinations, while also fostering collaboration with external parties in broader ecotourism development.

This activity provides direct benefits to the partner communities, including increased knowledge, skills, and economic opportunities through the development of ecotourism-based businesses. For the implementing

team, this activity represents a tangible manifestation of academic contributions to community service and enriches their experience in empowerment based on a participatory approach. Higher education institutions also benefit by enhancing their reputation as agents of social change and centers of innovation in sustainable development. More broadly, this activity contributes to environmental conservation by strengthening the role of communities in maintaining local ecosystems, while encouraging tourism that is not only economically profitable but also ecologically and socially sustainable.

RESEARCH METHOD

The research method used in this community service project, titled "Community-Based Ecotourism Training for Conservation and Income Generation," is a literature review. This method was chosen because it allows researchers to collect and analyze various academic and practical references relevant to the concept of community-based ecotourism, conservation training, and local economic empowerment strategies. Through the literature review, researchers can understand the theoretical framework and best practices from various previous studies implemented in various regions, both domestically and internationally.

The literature review process began with a systematic search of scientific journals, books, institutional reports, and policy documents related to the theme of community ecotourism. The primary focus was on effective training strategies, the role of community participation in managing nature-based tourism destinations, and the relationship between conservation activities and increasing the income of communities surrounding conservation areas. The selected sources were highly relevant, peer-reviewed, and derived from publications from the last five to ten years to ensure context and validity of the information.

The literature analysis was conducted using a descriptive-qualitative approach, aiming to explore patterns of good practice and common obstacles encountered in the implementation of community-based ecotourism training. The results of this study were then used as the basis for designing a contextual training model, tailored to the social, cultural,

and environmental conditions at the PKM partner locations. With this approach, it is hoped that the designed training activities will contribute to environmental conservation while simultaneously improving community well-being in a sustainable manner.

RESULT AND DISCUSSION

Impact of Activities on Community Knowledge and Skills

Community-based ecotourism training activities are interventions that have a significant impact on increasing the capacity of local communities, particularly in terms of knowledge and skills. Through community-based ecotourism training for conservation and income generation, communities that previously had limited understanding of tourism potential, conservation techniques, and sustainable tourism management began to show significant changes in their perspectives and practical skills (Mazengiye, 2022b). This training has become a collective learning space that has opened new insights into how ecotourism can be implemented effectively, not only to attract visitors but also to preserve the environment and improve standards of living.

One of the most visible impacts is the community's increased knowledge of the true concept of ecotourism. Many of the training participants previously only understood tourism as an activity oriented solely towards economic profit, without considering its impact on the environment or local culture. After participating in the training, they began to understand that community-based ecotourism must incorporate sustainability principles, where natural and cultural preservation are top priorities that go hand in hand with economic goals. This awareness has driven changes in the way communities treat their environment, particularly in efforts to reduce destructive practices such as poaching, deforestation, and indiscriminate waste disposal. Furthermore, understanding the importance of active community involvement throughout the tourism chain has fostered a sense of collective responsibility for managing destinations independently and inclusively (Lonn et al., 2018b).

Furthermore, this training has significantly improved the community's practical skills in various aspects of tourism management. Communities are equipped with technical skills such as tour guiding, developing tour packages, managing homestays, processing local products, and digital marketing. These skills are essential for starting and running professional tourism businesses that focus on visitor satisfaction. Communities that previously lacked experience or expertise in tourism are now able to design and deliver more organized and attractive tourism services. This not only boosts their confidence but also opens up opportunities to create new livelihoods based on local potential (Saha et al., 2015b).

Beyond technical skills, the training also enhances the community's social capacity in terms of cooperation, communication, and collective decision-making. Through participatory training methods, participants are invited to discuss, design joint action plans, and map the potential and challenges in their areas. This process fosters a sense of togetherness and strengthens social networks among residents, which are crucial for community-based ecotourism management. They learn to support each other, assign roles according to their capacities, and develop fair and transparent governance mechanisms. Thus, the training not only builds individual capacity but also strengthens community social institutions in managing shared resources democratically.

The transformation of knowledge and skills gained by the community through this training also resulted in improved quality of tourism services and products offered (Saha et al., 2015b). Previously rudimentary homestays were renovated to better standards of comfort, guest service became friendlier and more structured, and tourist attractions such as trekking, cultural tours, and local cuisine were presented with engaging and educational narratives. This capacity building created a positive impression for visiting tourists, which in turn led to increased visits and organically expanded promotional networks. This success was inextricably linked to the community's ability to apply the knowledge gained from the training to practical applications on the ground.

Furthermore, this training has also sparked local innovations based on the utilization of existing resources. Several community groups have begun developing regional souvenirs from natural materials, utilizing organic waste for crafts, and designing educational tourism activities for schoolchildren about the importance of preserving forests and clean water. These innovations not only enrich the tourist experience but also demonstrate the community's ability to adapt and create added value from underutilized local resources. This creative process demonstrates that the training has successfully fostered a social entrepreneurial mindset based on the principles of sustainability and empowerment.

Overall, the impact of community-based ecotourism training for conservation and income generation on community knowledge and skills is significant. This training not only enhances technical knowledge and skills but also fosters critical community awareness of the importance of environmental conservation and equitable, long-term tourism management. The success of this training demonstrates that, with the right approach and the right context, local communities can become key actors in sustainable tourism development. This training positions them not merely as beneficiaries but as agents and owners of the changes occurring in their own areas. This represents a significant step toward community independence in managing their future sustainably and with dignity.

Conservation Activities Carried Out in Collaboration with the Community

Community-based ecotourism training for conservation and income generation has been a significant catalyst in encouraging active community involvement in environmental conservation efforts. Through this training, communities are not only provided with a theoretical understanding of the importance of nature conservation but are also directly invited to participate in various conservation activities that are applicable and relevant to local environmental conditions. Collective awareness of the link between the sustainability of natural resources and the success of tourism encourages communities to maintain and restore the surrounding ecosystems, such as cleaning rivers, planting trees in tourist areas, and

protecting wildlife habitats from poaching and destruction (Teshome et al., 2021).

One form of conservation carried out is reforestation in areas previously degraded by agricultural activities or illegal logging. In this activity, communities are directly involved, from planning and selecting appropriate local plant species, to planting and routine maintenance. This process builds a sense of ownership of the environment and strengthens their emotional attachment to the natural world. Furthermore, the training also provided the community with knowledge about the importance of maintaining ecosystem balance, such as the function of forests in maintaining water sources and preventing erosion. This ensures that conservation activities are not merely symbolic but become an integral part of sustainable tourism development strategies (Kim et al., 2019).

The training also fostered the development of a community monitoring system for tourism activities that have the potential to damage the environment. Communities were trained to identify environmental risks from tourism activities, such as pollution, vegetation destruction, or disturbance to wildlife, and to develop local regulations or collective agreements to preserve nature. For example, this could involve limiting the number of visitors to certain locations, establishing trekking routes that do not disrupt habitats, and providing organic and inorganic waste bins at tourist spots. Conservation is understood not only as a physical action but also as part of destination governance that involves all community members in a participatory and sustainable manner.

Through this training, communities began to see conservation as an opportunity to strengthen their tourism appeal. A clean, green, and natural environment is a key selling point of ecotourism, making conservation efforts an effective economic strategy. Tourists tend to value well-managed destinations that uphold sustainability principles, and this encourages communities to continue protecting the environment as a shared asset. Therefore, the conservation activities carried out in this program have not only improved the ecological quality of the region but also strengthened the community's position as a key player in managing environmentally friendly, community-based tourism.

Economic Achievements (Creating Tour Packages, Potential for Increased Visits)

Community-based ecotourism training for conservation and income generation has had a positive impact on the local community's economic well-being, one of which is the creation of various tour packages based on local natural and cultural potential. Through this training, communities are equipped with the skills to design tour packages that are not only attractive but also educational and sustainability-oriented. The tour packages include various activities such as jungle trekking, organic farm tours, wildlife observation, visits to cultural sites, and local craft training. This combination of local uniqueness and environmental conservation concepts creates a more authentic and distinctive tourist attraction, attracting a segment of tourists who are more concerned with ecotourism values.

The creation of these tour packages opens up new opportunities for communities to create additional, sustainable sources of income. Various elements within the tour packages, such as local guide services, homestays, traditional culinary experiences, and souvenir sales, create new economic links that can be utilized by many parties within the community. Each tourist visit contributes directly to community income, gradually strengthening the local economy. Not only individuals or groups of tourism stakeholders have felt the impact, but also other supporting sectors such as agriculture, fisheries, and micro-enterprises have been encouraged to develop due to the increased demand for local products.

This training also plays a crucial role in increasing the community's understanding of tourism marketing, particularly through social media and digital platforms. With these skills, the community has begun to promote their tourism packages to a wider market, both regionally and nationally. Consistent and engaging promotions have driven an increase in visits to their area, particularly from tourists seeking authentic and environmentally responsible experiences. This potential increase in visits indicates that the training activities not only have an internal impact but are also capable of enhancing the competitiveness of community-based tourism destinations on a broader scale (Tang, 2019b).

Overall, the economic gains arising from this training are not only short-term but also have promising long-term prospects. The success in developing structured and attractive tourism packages, along with the community's ability to manage them professionally, are essential foundations for sustainable ecotourism growth. The increase in tourist visits not only indicates the success of promotions and services, but also proves that the community is able to manage their local potential into a productive economic resource, while maintaining the environmental and cultural integrity that are the main attractions of the destination.

Program Sustainability Analysis

Sustainability is a fundamental aspect in assessing the long-term effectiveness of a community-based training program, especially when the program is directly related to natural resource management and local economic development. In the context of community-based ecotourism training for conservation and income generation, sustainability is key to ensuring that the training outcomes do not merely result in temporary capacity building, but rather develop into a self-sufficient, adaptive system capable of responding to constantly changing challenges. This training not only provides a short-term impact in the form of increased community knowledge and skills, but also strategically lays the social, economic, and environmental foundations that enable the program to continue to grow and develop organically from within the community itself.

One indicator of the program's sustainability lies in the transformation of mindsets and values that begin to form within the community after the training. The community no longer views ecotourism as an extraordinary activity that can only be managed by outsiders, but as a part of daily life that can be managed within their own capacity. This mindset is crucial because it forms the basis for a long-term commitment to environmental sustainability and independent tourism management. When communities develop a collective awareness of the importance of preserving natural resources as economic assets, the program's sustainability is further assured because conservation and tourism management measures no longer rely on the presence of external facilitators or advisors. This awareness begins to

manifest itself in concrete practices such as the development of customary regulations related to tourism, integrated waste management, and internal monitoring of tourist activities to ensure they remain within environmentally friendly limits.

Sustainability is also evident in the local institutions formed during and after program implementation. In some cases, this training has fostered the formation of community-based tourism working groups, tourism village cooperatives, or environmental conservation forums that work across sectors. These institutions serve as crucial instruments for coordinating tourism activities, managing joint funds, and acting as bridges between communities and the government or external partners. The existence of these organizational structures demonstrates that communities are not only skilled individually but also capable of building a democratic and accountable system of shared governance. These strong institutions play a significant role in ensuring the program's sustainability, as they serve as a meeting place for vision, planning, and implementation of activities based on deliberation. The program's sustainability becomes more likely when these institutional functions operate consistently and deliver equitable economic and social benefits to all community members.

Furthermore, the program's sustainability is also largely determined by the community's ability to access and manage the economic resources generated by ecotourism activities. Increased revenue from tourist visits will not have a long-term impact without adequate financial literacy. Therefore, the economic sustainability of this program can be seen in how the community manages the financial results they earn: whether they are allocated to maintaining tourism facilities, developing new products, increasing member capacity, or simply consuming them for short-term needs. In some cases, this training has inspired communities to establish community social funds, build group savings, and establish joint ventures, all profits of which are used for ecotourism development. These practices demonstrate that the resulting economic impact has been managed wisely and directed towards strengthening local economic resilience.

The program's sustainability must also be assessed in terms of its adaptability to change. Climate change, tourism trends, and social

dynamics can pose significant long-term challenges. Therefore, the training provided in this program is not only technical but also teaches flexibility of thinking and openness to innovation. Communities are encouraged to continuously evaluate and update their tourism management strategies according to current needs and conditions. Some community groups have even begun utilizing digital technology for tourism promotion, creating conservation documentary videos, and establishing direct communication channels with potential tourists through social media. This adaptation is part of the ongoing learning process that is at the heart of the program's sustainability. When communities are able to adapt to change without losing their local identity and sustainability principles, the program's sustainability is further assured.

Finally, the sustainability of community-based ecotourism training for conservation and income generation also requires strong synergy between the community, government, academia, and the private sector. While external facilitation and mentoring are crucial in the initial stages, the long-term success of this program will depend on the extent to which the community can forge mutually beneficial strategic partnerships. Village and regional governments, for example, can provide regulatory and infrastructure support, while higher education institutions can assist in developing advanced training curricula, tourism market research, and technology training. Partnerships with the private sector, such as travel agents or digital platforms, will also help expand market access and tourism promotion networks. With balanced collaboration and mutual respect for each other's roles, the program's sustainability will be easier to maintain because the supporting ecosystem works synergistically and sustainably.

Overall, this training program has demonstrated great potential in creating an ecotourism management system that not only successfully improves community capacity and economic well-being but also has a high chance of long-term survival and growth. Sustainability is not the result of a single activity, but rather a dynamic process determined by how communities translate knowledge into action, establish strong institutions, manage resources wisely, adapt to change, and build strategic collaborative networks. With an approach that continues to prioritize participation and

local wisdom, this program has a bright future as a model for sustainable development based on the strengths of the community itself.

CONCLUSION

The Community Service Program, titled Community-Based Ecotourism Training for Conservation and Income Generation, successfully demonstrated that community-based ecotourism training can be an effective means of raising conservation awareness while simultaneously generating economic benefits. This activity involved local communities in a training process that covered environmental conservation, nature-based tourism development, and sustainable ecotourism marketing strategies.

The community's active participation during the training demonstrated their high enthusiasm and readiness to manage ecotourism independently. Through a participatory approach, the community gained not only theoretical knowledge but also practical skills in managing environmentally friendly tourist destinations. The training also strengthened the community's sense of ownership of their natural resources, thus supporting long-term conservation efforts.

Overall, this Community Service Program activity had positive social, economic, and environmental impacts. This training program not only strengthened the community's capacity to develop local ecotourism potential but also laid a strong foundation for creating a sustainable community-based tourism model. With program sustainability and cross-sector support, community-based ecotourism has the potential to become a strategic solution for environmental conservation while improving the well-being of local communities.

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