Physical Activity Journal (PAJU)
Volume 7, Number 2, October 2025
e-ISSN : 2686-5807 | p-ISSN : 2686-5793

The Potential of Tubing Ecotourism for the Empowerment of Kali Pucung Kemuning Community

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: https://doi.org/10.20884/1.paju.2025.7.2.15831

Abstract

Ecotourism is a form of tourism that prioritises the principle of sustainability by utilising natural resources and involving the active participation of local communities. The Pucung River in Kemuning, Karanganyar Regency, possesses natural resources and potential that support its development as a tubing ecotourism destination capable of improving the welfare of the local community. This study aims to analyse the potential of tubing ecotourism for community empowerment. The research method employed a quantitative descriptive approach. Data were collected through observation, interviews, and documentation of data sources with ecotourism managers, the local community, and visitors to the Kali Pucung Tubing ecotourism site. The results indicate that ecotourism tubing at Kali Pucung holds high potential in terms of natural appeal, community participation, and economic opportunities. This opens up strategic opportunities for targeted training and mentoring for the local community regarding sustainable tourism management. The findings of this study indicate that the development of tubing ecotourism not only contributes to the growth of the local tourism sector but is also capable of promoting community empowerment both economically and socially. In conclusion, Tubing Kali Pucung ecotourism has the potential to become a flagship sector that increases tourist visits and drives the economic empowerment of the local community.

Keywords: *Ecotourism, Tubing, Community, Empowerment, Natural*

INTRODUCTION

Sustainable tourism is increasingly becoming a key focus in regional development, particularly in supporting the well-being of local communities. One rapidly growing form of sustainable tourism is ecotourism, which combines environmental, economic and social aspects. Ecotourism is a form of tourism that offers sustainable travel experiences and is responsible towards the surrounding environment. Ecotourism programmes encourage communities to develop local potential to become tourist destinations (Yunika et al., 2022).

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Ecotourism is a type of tourism conducted with a commitment to the conservation of the natural environment, providing economic benefits for local communities, and preserving the cultural values of the region (Adharani et al., 2020). The primary focus of ecotourism is to preserve the natural environment and local culture. Consequently, this concept seeks to create harmony between environmental conservation, educational aspects, and sustainable development (Susanto et al., 2021).

The development of ecotourism is a strategic step towards creating sustainable tourism, emphasising the importance of environmental and cultural conservation, and the active role of local communities (Waluyo et al., 2025). The aim of ecotourism is to raise awareness and appreciation of cultural heritage, whilst generating positive economic impacts for the local community and safeguarding the natural environment (Qomariyah, 2017).

Key aspects to consider in the implementation of ecotourism include natural or cultural attractions, conservation, education, and the involvement of local communities. The attractions referred to here pertain to travel experiences that offer natural beauty and interaction with authentic local culture. The conservation aspect relates to support for environmental preservation, encompassing the protection of biodiversity, the conservation of flora and fauna, and the preservation of local cultural values. Meanwhile, the educational dimension of ecotourism involves providing information and learning opportunities to tourists regarding the importance of protecting the environment and respecting local culture. The active participation of the local community is a vital element that not only supports the management of tourist destinations but also directly contributes to improving their economic well-being through the benefits derived from tourism activities.

Community empowerment within the context of sustainable development is a key component, particularly in regions with significant potential for nature-based tourism. Tourism is a vital component of Indonesia's national development (Tri et al., 2014). Tourism that focuses on environmental conservation and the empowerment of local communities is increasingly being recognised as an alternative approach that is not only economically beneficial but also safeguards the ecological functions of the region.

One example of the implementation of this ecotourism concept can be found at Kali Pucung. Kali Pucung in the Kemuning area boasts extraordinary natural beauty, and offers the opportunity for tubing, which attracts many visitors. Water tubing on the Pucung

https://doi.org/10.20884/1.paju.2025.7.2.15831
e-ISSN : 2686-5807 | p-ISSN : 2686-5793

River is one of the famous natural attractions in the Kemuning area (Rahma & Soemanto, n.d.). This activity not only raises awareness of the importance of environmental conservation but also provides economic opportunities for the local community. Community participation in the management of natural resources plays a significant role and has the potential to become a tourist attraction (Talib & Usu, 2019). Ecotourism is vital for empowering communities through skills development, job creation, and the growth of local businesses.

Empowerment begins with the wise and responsible management of nature, which can be harnessed to foster community economic growth (Nazarullail & Sugeng Desyanty, 2017a). In terms of community empowerment, those living around the Kali Pucung river benefit in many ways, including increased income through the rental of tubing equipment, accommodation, and local food. This is because the Kali Pucung Kemuning area also features numerous ecotourism sites such as tea plantations, jeep tours, tubing, and paragliding. Ecotourism also helps communities participate in the management of natural resources, which can strengthen social and cultural ties.

Although nature-based tourism holds great potential, several challenges remain in its implementation, such as a lack of knowledge regarding sustainable tourism management and negative environmental impacts. Therefore, studying how tourism benefits communities around the Kali Pucung tubing area is crucial for understanding the current situation and identifying the best ways to enhance community well-being whilst maintaining environmental sustainability. With the development of the concept of sustainable tourism, ecotourism is now regarded as a strategic approach to promoting the empowerment of local communities. Ecotourism plays a vital role in creating employment opportunities, increasing community income, and reinforcing local cultural values (Putri et al., 2022). However, on the other hand, the potential of Kali Pucung Kemuning as an ecotourism destination has not yet been fully utilised, both in terms of infrastructure supporting outdoor sports activities and the empowerment of the surrounding community.

This study is expected to provide an overview of the benefits of tubing tourism for the local community and to offer recommendations for the development of sustainable tourism in the Kemuning area of Karanganyar Regency.

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METHOD

This study employs a qualitative case study approach, which is both descriptive and analytical (Charismana et al., 2022). The qualitative approach was chosen because this study aims to gain an in-depth understanding of the potential for tubing ecotourism on the Pucung Kemuning River and its impact on community empowerment. The case study method allows researchers to focus on specific phenomena in a single location, thereby obtaining rich and detailed information regarding the dynamics occurring in the field (Nartin et al., 2024). The research location is situated in the Kali Pucung Tubing tourism area, located in Jlono Hamlet, Kemuning Village, Ngargoyoso Sub-district, Karanganyar Regency.

It possesses unique tubing ecotourism potential that has a direct impact on the surrounding community. Through a case study approach, researchers can obtain more detailed information about the social and economic conditions of the local community and their interactions with the tourism industry (Poltak & Widjaja, 2024). The focus of this study is on the managers, operators, and visitors within the Kemuning tubing sports industry in Karanganyar Regency.

The data collection techniques used in this study are interviews, observation, and documentation. Data obtained through in-depth interviews with local residents, tourism managers, and local visitors were analysed to understand the impact of ecotourism on the communities involved in social, economic, and environmental aspects. Observations were conducted to identify natural potential, supporting infrastructure, and existing tubing tourism activities. Secondary data, such as visitor numbers, available equipment or tools, tourism planning, promotional materials, and relevant literature, were used to supplement the analysis.

Data validity was ensured through triangulation of sources and methods. Triangulation is a data collection technique used to obtain more accurate and credible findings and data interpretations (Luthfiyah, 2017). The data analysis process involves data reduction, data presentation, and drawing conclusions to describe the relationship between the development of tubing ecotourism and the empowerment of local communities, including increased income, employment opportunities, and environmental conservation.

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RESULT and DISCUSSION

The Potential for Tubing Ecotourism on the Pucung River

Based on the results of interviews, observations and documentation, the tubing tourist site offers relatively comprehensive facilities to ensure visitors' comfort and safety. The main equipment for tubing includes helmets, inner tubes, life jackets, and professional guides who accompany visitors throughout the activity. This tubing site also provides facilities such as toilets and a prayer room to enhance visitor comfort. Environmental management at this site is well maintained, with a focus on cleanliness. This is done to ensure the comfort of visitors. This tubing attraction is situated near the main road, making it very easy to access. Visitors can easily reach the site by private car or bus. Road conditions around Kemuning still require improvement to make the journey more comfortable, but the tubing area remains accessible. The tubing attraction features a spacious car park approximately 5 to 7 metres wide, allowing large vehicles such as buses and various private cars to park safely and orderly. Overall, this tubing attraction is an appealing destination for lovers of nature tourism and water sports. The combination of adequate facilities, good access, a spacious car park, and well-managed surroundings makes this location a comfortable and safe choice for visitors

Community Empowerment through Kali Pucung Tubing

Based on the results of interviews, observations and documentation, the Kali Pucung Tubing tourism initiative has had a significant positive impact on the community of Jlono Hamlet. As well as being an eco-based recreational destination, this ecotourism initiative also creates new economic opportunities and improves the welfare of the local community. Kali Pucung Tubing ecotourism provides employment opportunities for people from various backgrounds, including young people, men and women involved in various operational activities. One example of their involvement is in helping to retrieve and move the tubes at the finish area, as well as providing catering and selling goods around the tourist site. This reflects inclusive community empowerment, where every individual has the opportunity to contribute to the management of the tourism site.

This ecotourism initiative also has a significant impact on the economy by increasing residents' income. In addition to boosting the local economy, this ecotourism initiative also encourages collaboration with neighbouring villages. Some residents from

https://doi.org/10.20884/1.paju.2025.7.2.15831
e-ISSN : 2686-5807 | p-ISSN : 2686-5793

surrounding villages participate in tourism management, fostering income equality and strengthening the spirit of mutual cooperation in managing the tourist destination. This demonstrates that the Kali Pucung Tubing Ecotourism project is not solely focused on economic gains, but also prioritises social aspects and community empowerment.

Management of Tubing Tourism on the Pucung River

Pucung River Tubing Ecotourism is managed professionally through the implementation of a fair and transparent profit-sharing system. 40% of revenue is allocated to staff, 30% to facility maintenance, and 30% to the development of the tourist area. According to the final financial report for December 2024, total revenue amounted to Rp. 166,814,785. As part of efforts to develop facilities, the management has established a partnership with the village government to build a suspension bridge. This additional facility is expected to serve as a new attraction for visitors who are not interested in tubing activities, allowing them to still enjoy the natural beauty of the tourism area. This initiative demonstrates the management's commitment to providing a diverse and enriching tourism experience for both the local community and visitors.

The management of Kali Pucung Tubing Ecotourism is well-organised and efficiently run, featuring structured administration and a well-ordered queuing system for visitors. Through this structured system, tourists can enjoy tubing without hassle or long waiting times. All operations are supported by local residents who work as staff, creating meaningful employment opportunities for the surrounding community. The management continues to strive to develop this tourism initiative to make it more attractive and comfortable for visitors. One of the main aspirations is to improve facilities and introduce new attractions that can enrich the tourism experience. In this way, Tubing Kali Pucung can become a premier destination offering not only tubing but also a variety of other recreational experiences.

Eco-tourism tubing has a significant positive impact on community empowerment through this initiative; one example is the provision of training and capacity-building for residents involved in managing the tourism site. The tourism management team has established partnerships with various parties to provide training on tourism services, business management, and digital promotion to ensure the eco-tourism site continues to thrive.

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e-ISSN : 2686-5807 | p-ISSN : 2686-5793

Community empowerment through Kali Pucung Tubing Ecotourism has brought significant benefits to the economy and social life of local residents. With the active involvement of the community in various aspects of management, this tourism initiative serves as a source of additional income and also provides a means for the community to preserve and safeguard their local culture.

Promotion and Marketing Strategies for Tubing Tourism on the Pucung River

Pucung River Tubing Ecotourism has implemented various promotion and marketing strategies to boost its appeal and attract more visitors. One of the key strategies employed is the use of social media platforms such as TikTok, Instagram, WhatsApp, and the official website. The management actively shares engaging content, including videos of tourist experiences, visitor reviews, and the various exciting activities available on-site. This strategy has proven effective in boosting the tourism destination's visibility, particularly after several uploaded posts went viral, achieving very high view counts.

A concrete example of this strategy's effectiveness is the impressive achievement on TikTok, which garnered 9 million views and 23,000 followers before the account was hacked. Despite this setback, the management swiftly adapted by creating a new account and rebuilding a strong digital community. Consistency in producing high-quality content remains the key to maintaining the interest of potential tourists.

In addition to digital promotion, Kali Pucung Tubing Ecotourism has also established partnerships with various Event Organisers (EOs) and travel agencies. These partnerships operate on a revenue-sharing basis, with 10% of revenue allocated to the relevant EOs and agencies. Thanks to these partnerships, tourists arriving in groups can enjoy a range of more attractive and affordable tour packages. Furthermore, the management offers special discounts to visitors arriving via EOs, which further enhances the appeal of this attraction. To expand its market reach, the management has also established partnerships with local and national travel agents. One approach to optimising the use of local resources is to develop tourism based on the concept of ecotourism (Satria, 2009). In this way, Tubing Kali Pucung can form part of a broader tour package, encompassing visits to various other attractive destinations in the surrounding area. This initiative increases visitor numbers and also provides a more engaging experience for tourists.

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Socio-Cultural Impact

The Kali Pucung Tubing ecotourism initiative has had a significant socio-cultural impact on the local community. Prior to the establishment of this tourism venture, the majority of residents relied solely on the agricultural sector as their primary source of livelihood. However, with the growth of ecotourism—an activity that directly engages and involves the community—it has brought about various impacts on the local population (Mahendrayani & Suryawan, 2018). The community has new opportunities to improve their economic well-being, such as selling food around the tourist area and providing support services for visitors. The community gains employment, increased income, and can also create new job opportunities that support tourism activities (Hijriati & Mardiana, 2014). Another positive impact is the increased community participation in the tourism sector without having to abandon their main professions. Some residents have begun to capitalise on these opportunities through innovation, such as renting out ATVs or offering catering services to tourists. This demonstrates that ecotourism not only creates new job opportunities but also fosters creativity and economic self-reliance among the local community.

The presence of ecotourism not only provides economic benefits but also contributes to preserving and introducing local culture to tourists. The appeal of tourism stems from nature and the culture of the community (Putra et al., 2022). The local community continues to uphold their cultural values in their daily activities, such as the spirit of mutual cooperation in managing tourism and the hospitality shown in welcoming visitors. Through more intensive interaction between tourists and the local community, local culture is becoming increasingly known and appreciated by tourists from various regions.

The local community is satisfied with the positive impact provided by this Kali Pucung tubing ecotourism. This is evident in economic terms, as well as in the opportunity to better introduce local wisdom to visitors. Kali Pucung Tubing Ecotourism serves as a tourist attraction, and also as a means of cultural preservation and social welfare improvement for the local community. Looking ahead, it is hoped that this ecotourism initiative can continue to develop whilst maintaining a balance between economic development and cultural preservation. Tourism managers and the community need to continue collaborating to ensure the sustainability of this ecotourism initiative, so that it

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e-ISSN : 2686-5807 | p-ISSN : 2686-5793

continues to benefit all parties whilst preserving the cultural identity that has long been deeply rooted in the local community.

CONCLUSION

The eco-tourism tubing activity on the Pucung Kemuning River in Karanganyar Regency, Central Java, holds excellent potential, supported by natural attractions and adequate accessibility. This eco-tourism initiative has a positive impact on community empowerment through the local economy by creating job opportunities and increasing income. Tourism management is conducted transparently with a fair revenue-sharing system. Promotional strategies via social media and collaboration with relevant stakeholders are continuously being developed. Furthermore, this ecotourism initiative raises public awareness of the importance of environmental conservation and introduces local culture to visitors, thereby providing sustainable benefits for residents and the community.

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https://doi.org/10.20884/1.paju.2025.7.2.15831
e-ISSN : 2686-5807 | p-ISSN : 2686-5793