

# Potential of Implementing Community Based Agro Tourism in the Minneriya Tank Area of Sri Lanka

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## Abstract

Community-based agro-tourism offers a transformative impact on rural areas. This study focused on identifying the potential of implementing community-based agro-tourism in the Minneriya Tank area in Polonnaruwa district of Sri Lanka. Primary data was collected through a survey using a pre-tested structured questionnaire conducted in the Rotawewa village in Minneriya Tank area. The target respondents included local residents in the Minneriya Tank area (n=30) and tourists (n=50) who made visits to this area during the data collection period. Tourists and local residents were selected through non-probability purposive sampling and random sampling methods, respectively. Tools relating to descriptive and inferential statistics were employed in data analysis. The study revealed positive perceptions of community-based agro-tourism, in terms of knowledge (p=0.806), attitude (p=0.72), and awareness (p=0.53) and it highlights opportunities and challenges to implement community-based agro-tourism. In conclusion, study highlights a strong interest in implementing community-based agro-tourism in the Minneriya Tank area

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*Keywords: Community-based agro-tourism; Community perception; Minneriya tank area; Rotawewa village*

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## Introduction

The travel industry that is commonly referred to tourism is a diverse and versatile industry that significantly contribute to the global economy (WTTC, 2020). This is a wide-ranging activity involving the movement of people across borders. Tourism has a lasting and deep-rooted economic effect. According to the World Travel and Tourism Council (WTTC), tourism contributes to the global GDP, employment and also the investments. The travel industry is vital to the global economy, contributing 10.4% to global GDP by 2020 (WTTC, 2020). It supports business diversity, encourages economic diversification, and creates employment opportunities and revenues (Leonard, 2016). The community-based agro-tourism is an emerging trend that combines agriculture and tourism to provide enriching experiences for tourists and local communities (Nguyen et al., 2018). Unlike traditional or conventional tourism, it emphasizes interaction with rural communities and agricultural practices, aimed at showcasing rural life, promoting cultural exchange, and preserving local traditions (Zapata et al., 2013). Although, there are various forms of activities and resources linked with the agricultural sector towards agro-tourism, it has not been captured adequately in Sri Lanka (Rambodagedara et al., 2015). The Minneriya Tank area in the Polonnaruwa district of Sri Lanka is a well-known place characterized by scenic beauty, full of wild animals that live within the thick forest (Jayawardana, 2022). Apart from that, this specific location is characterized by widely practiced agricultural activities including paddy cultivation and chena cultivation. In this area, the village of Rotawewa stands out due to its high potential for agro-tourism based on community.

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According to the Central Bank of Sri Lanka (CBSL), in 2022, the agricultural sector contributed only 8.7% to the GDP, and it faces serious challenges, including a sharp reduction in young people's involvement caused by outdated and less profitable perceptions of agriculture (CBSL, 2022). This detachment is dangerous not only for the future of the sector but also for the continuity of rural cultures. At the same time, the conventional tourism, especially in the Minneriya Tank area, caused negative effects such as environmental destruction, overcrowding, and disruption of local culture (Petrović et al., 2017). Thus, balancing economic growth with the preservation of culture and the environment has become critical. The concept of community-based agro-tourism offers a potential solution to these complex challenges. By blending elements of agriculture and tourism, it not only rejuvenates the agricultural industry but also tackles the problems commonly associated with traditional tourism models. However, prior research has primarily investigated the economic and socio-cultural effects of the community based agro-tourism model, but without considering the perceptions of the communities. Therefore, this research endeavored to establish the community's perceptions, expectations, and issues relating to agro-tourism development in the Minneriya Tank area. The main goal of this research was to contribute to the sustainable development of agriculture and tourism and enhancing the quality of local people's lives while respecting their culture's identity.

### **The objective of the study**

The primary objective of this study was to identify the potential of implementing community-based agro-tourism in the Minneriya Tank area through examining community perception and tourist preferences and willingness to pay for different agro-tourism activities.

### **Literature Review**

Agro-tourism, which involves community participation, is becoming a dynamic model of rural development that provides a mutually beneficial relationship between the locals and tourists wanting genuine, sustainable travel experiences (Chemnasiri & Kaewmoung, 2008). The study by Rambodagedara and the team (2015) suggests that farmers and producers are the key to successful agro-tourism ventures. They also do farm stays and involve tourists in various activities, such as crop harvesting. The involvement does not only diversify their sources of income but also helps preserve the traditional mode of existing agricultural activities. As outlined by Srithong et al. (2019), the central role of local communities in community-based agro-tourism initiatives is emphasized. They are actively engaged in different types of activities like agriculture, food processing, and presenting their culture. These communities are empowered economically as they take part in the process and own it; therefore, there is a sense of ownership and pride.

Community perception plays a pivotal role in the success of community-based agro-tourism initiatives. In the context of the Minneriya Tank area, where the research was centered. Understanding the local communities' knowledge, attitude, and awareness towards agro-tourism is essential for fostering sustainable and community-centric tourism practices. Community-based agro-tourism can provide numerous benefits, including those for communities, tourists, and the entire country. These benefits range from economic, social, and environmental perspectives (Khanal & Shrestha, 2019). In terms of rural development, it fosters employment and the generation of income. It also emphasizes sustainable agriculture practices that ensure organic farming, preservation, conservation, and responsible stewardship. The success of community-based agro-tourism depends on tourists' attitudes towards such activities. The tourists want to have unique experiences, get close to nature, and connect with local culture. Many times, positive attitudes also attract repeated visits.

The Minneriya Tank area is known for its rich biological and cultural heritage, providing unique opportunities for the development of community-based agro-tourism. It is also a vital water source for local wildlife and serves as a venue for the famous Minneriya Elephant Gathering during the dry season (Simane & Aseres, 2016). Archaeological findings prove that the Minneriya Tank area has a rich cultural heritage. This will provide information about the antiquity of this site, and its inscriptions will provide information regarding the role this region played in our history. The unique opportunities

offered by this natural landscape attract wildlife enthusiasts who prefer agro-tourism, contributing to its appeal. However, the implementation of community based agro-tourism in the Minneriya Tank area also faces several challenges. The accessibility of agro-tourism strongly depends on transportation infrastructure (Bhatta & Ohe, 2019). These opportunities and challenges which are critical for the successful integration of agro-tourism in an ecologically and culturally significant area, must be effectively managed.

## **Methods**

This study focused on identifying the potential for implementing community-based agro-tourism in the Minneriya Tank area, with a specific emphasis in the Rotawewa village. Primary data was collected through a field survey conducted in the study location using a pre-tested, structured questionnaire. The respondents included local community members (n=30) as well as tourists (n=50) who visited the area during the data collection period (From 28th August to 17th September 2023). Respondents were selected through non-probability purposive sampling for tourists and random sampling for local community members. The data was analyzed using descriptive statistics and inferential statistics, such as reliability tests, factor analysis, and Wilcoxon signed-rank tests.

## **Results and Discussion**

The results indicate that the respondents mostly having sound knowledge on the subject matter with a positive attitude and awareness level. The study found no significant differences between community members and tourists in terms of knowledge ( $p=0.806$ ), attitude ( $p=0.72$ ), and awareness ( $p=0.53$ ). It shows that both community members and the tourists are having similar level of perception on implementing agro tourism activities in the study location. There were no agro-tourism activities in the Minneriya Tank area at the time of data collection, with wildlife tours (34%) and scenic beauty (18%) as the main attractions. High level of interest in organic farm tours, rice paddy experience, and cooking workshops, with varying preference for different price ranges. Willingness to pay for various activities will offer valuable insights into the economic potential and visitor preferences, essential for planning and implementing community-based agro-tourism activities in this area. The study found that the majority of respondents expressed a willingness to pay between Rs.1, 000 and 10,000 for various activities, particularly organic farm tours and rice paddy experiences. Overall, there is a strong demand for affordable, immersive experiences in rural tourism. Community members and tourists expressed a desire to embark on community-based agro-tourism in this area. Among various activities, feeding and rearing of livestock emerged as the most favoured, with community members (mean = 4.4  $p = 0.00$ ) and tourists (mean = 4.54  $p = 0.00$ ). This research also recognized significant opportunities for community-based agro-tourism, including existing farming activities such as chena cultivation, fishing, and paddy cultivation, which were rated as strong opportunities (mean = 4.96,  $p = 0.00$ ). These activities already exist in the local culture and may offer a correct base for support for agro-tourism. However, the impact of wild animals (mean = 4.98), transportation problems (mean = 4.89), and lack of infrastructure (mean = 4.68) were also identified as the major challenges of any future initiative on community-based agro-tourism in the area. The study highlighted the need to address these challenges in order to achieve a suitable agro-tourism model.

In conclusion, therefore, the study suggests that there is a need to encourage people to practice traditional farming techniques because they represent the culture of the region (mean = 4.62,  $p = 0.000$ ). Overall, the findings suggest that although community based agro tourism has promising opportunities, so that addressing key challenges will be necessary for its successful implementation in the Minneriya Tank area.

## **Conclusion**

This research reveals a strong desire among the local community and the tourists to implement community based agro tourism in the Minneriya Tank area. All groups have considerable awareness and a positive attitude towards community-based agro-tourism, and possess goodwill regarding the possibilities for local economic development. Although the direct activities relating to the agro-tourism does not exist currently in the area, there is a clear preference to develop it, especially activities such as feeding and rearing livestock, organic farm tours, and rice paddy experiences. The tourists showed a willingness to pay a fair price for these activities, implying that agro-tourism can be operated as a profitable business in this area. Though the Minneriya Tank area has great potential for being an agro-tourism region due to its agricultural richness and natural beauty, there are several challenges. The main issue is the impact of wild animals. Additionally, challenges encompass transportation, amenities, and cultural barriers that create the complexity of developing community based agro-tourism in this area. In response to these challenges, strategic solutions such as introducing traditional farming practices and creating a model for the farmers for learning and development should be in place. In conclusion, this research offers important information for stakeholders aiming to start community based agro tourism in the Minneriya Tank area, and it helps balance economic growth with cultural conservation.

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