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ABSTRACT

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Phan Thi Anh Hong Email: PTAnhHong@hvpnvn.edu.vn This study conducted in collaboration with the local community focused on sustainable agricultural tourism development in Dak Lak, Vietnam. Using a qualitative research method, we conducted in-depth interviews with 29 households and agricultural cooperatives, combined with case studies. The results showed that agricultural tourism, a product of our joint efforts, played a significant role in diversifying livelihood sources and contributing to the preservation of ethnic and cultural identity. However, the sustainable development of this sector was hindered by limitations in infrastructure, lack of investment and uneven management capacity. Based on these findings, we propose specific policies and solutions to promote sustainable agricultural tourism development and support rural communities in the context of economic transition.

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1. Introduction

Agricultural tourism, a harmonious combination of agriculture and tourism, has become an effective model for sustainable rural development globally (Barbieri et al., 2019; Phillips et al., 2021). This model helps diversify income sources for farming households and contributes to the preservation of local culture the protection of the natural environment (Ghaderi et al., 2022; Ruiz-Labrador et al., 2023). In the context of developing countries, agricultural tourism offers attractive opportunities for socioeconomic transformation, particularly in regions with rich agricultural heritage and biodiversity (Despotović et al., 2017).

With its diverse terrain and long-standing agricultural tradition, Vietnam offers great potential for agricultural tourism development (Pham, 2023). Remarkably, the Central Highlands region, known for being the largest coffee-producing area in the country and its cultural diversity among ethnic minorities, is gaining attention as a potential destination for agricultural tourism (Bui & Nguyen, 2014). Dak Lak province, located in the heart of the Central Highlands, with its extensive coffee cultivation and ethnic diversity, faces both opportunities and challenges in developing this tourism model.

Although there has been considerable research on agricultural tourism globally (Kline et al., 2016; Ospanova et al., 2022), studies within the context of Vietnam, particularly in the Central Highlands with its unique cultural diversity among ethnic minorities, remain limited. Existing research mainly focuses on the economic aspects of agricultural tourism (Nguyen, 2022), while the reciprocal relationship between agricultural tourism and the preservation and enhancement of ethnic minority cultural identity has not been fully explored. Specifically, the role of local communities in integrating traditional cultural values into agricultural tourism activities, as well as the impact of tourism on cultural change and adaptation among ethnic minority communities, are areas that require further investigation.

Findings from previous studies highlight the need for a more comprehensive and multidimensional approach to researching agricultural tourism development in Dak Lak. This approach should consider the multifaceted nature of sustainability within the specific local context, particularly the relationship between agricultural tourism, community livelihoods and the preservation of ethnic minority cultures. This study aims of this study is to provide insights into the current situation, challenges and solutions for sustainable agricultural tourism development in Dak Lak, from the perspective of the local community.

This study focuses on three main aspects: (1) How is agricultural tourism in Dak Lak

impacting the livelihoods and culture of the local community? (2) What challenges and barriers do the local community face in developing agricultural tourism in Dak Lak? (3) What policies and solutions need to be implemented to support sustainable agricultural tourism development in Dak Lak?

This study is significant both for Dak Lak province and for contributing to the literature on sustainable tourism in developing countries (Sharpley, 2020) and addresses the need for more specific research on the impacts of agricultural tourism (Gomez-Arroyo et al., 2013). The research findings will provide additional information for policymakers and practitioners in similar global contexts and contribute to the theory of sustainable rural development within transitional economies.

2. Literature Review

2.1. Agricultural tourism and sustainable development

In the broader picture of sustainable rural development, agricultural tourism emerges as an indispensable piece. In recent years, there has been a surge in research on this field, ranging from a global perspective to analyses within the context of Vietnam.

Kline et al. (2016) initiated research on the multifaceted impacts of agricultural tourism, highlighting its role in generating income and preserving agricultural heritage. Barbieri et al. (2019) found that communities engaged in agricultural tourism are more resilient to economic and environmental shocks. Ospanova et al. (2022) linked agricultural tourism to food security, viewing it as a bridge between production and sustainable consumption. Phillip et al. (2021) introduced a new framework for assessing the sustainability of agricultural tourism under climate change, emphasizing adaptability as a key factor for future success.

In the context of Vietnam, the wave of research on agricultural tourism is equally dynamic. Agricultural tourism has become an effective tool for preserving and promoting the traditional cultural values of ethnic minority communities (Do et al., 2022; Duong et al., 2023). Nguyen et al. (2022) emphasized that despite being heavily impacted by Covid-19, agri-tourism in Dak Lak province still plays an important role in the local economy, accounting for a significant proportion of production value. Duong et al. (2023) analyzed the potential for developing various types of ecotourism in Dak Lak, including the integration of agri-tourism and ecotourism, by building branded tourism products that create unique experiences, combining environmental protection with sustainable development.

2.2. The role of local communities in sustainable agricultural tourism development

Local communities play a crucial role in sustainable agricultural tourism. Wannaprasert & Choenkwan (2021) argue that active community participation improves tourism experiences and enhances resilience against economic and environmental challenges. Karim et al. (2021) highlight the importance of social capital, noting that strong social networks and community trust are vital for sustainable development. Ciolac et al. (2022) add that digital technology can support this by connecting farmers with tourists and optimizing resource management through online platforms.

In Vietnam, many studies found that community participation in planning and management enhances project effectiveness and ensures equitable distribution of benefits (Le, 2020; Bui, 2021). The involvement of local communities in decision-making, implementation and sharing of tourism benefits is considered a key factor in sustainable tourism development in that area (Bui, 2021). The community's indigenous knowledge is crucial for creating unique and attractive tourism products (Nguyen & Truong, 2019). Le (2020) emphasized that local community involvement in agri-tourism planning in Dak Lak is essential to balance economic growth and environmental protection, enhancing their understanding of sustainable resource use.

2.3. Sustainable livelihoods and cultural preservation in agricultural tourism

In the broader context of rural development, agricultural tourism emerges as a versatile tool that b enhances livelihoods and preserves the cultural identity of local communities. Gao & Wu (2017) assert that agricultural tourism is not merely an economic activity but also a catalyst for comprehensive rural development and poverty reduction. Similarly, Ghaderi et al. (2022) found that agri-tourism in Iran has provided an economic safety net for farmers, enhancing their livelihoods by stabilizing incomes and strengthening community resilience to economic shocks. Garrido-Pérez et al. (2022) noted its role in preserving agricultural heritage, while Ruiz-Labrador et al. (2023) emphasized its value in maintaining biodiversity and transmitting indigenous knowledge.

In Vietnam, the wave of research on agricultural tourism is equally dynamic. Thieu (2021) emphasizing that agricultural tourism has become a "two-in-on" tool, improving income while also serving as an effective means for preserving and promoting local culture. Vu (2023) argued that agricultural tourism has created a new "stage" for traditional crafts, helping them survive and thrive in the modern context. Dao (2021) suggested that agricultural tourism has transformed cuisine from an "intangible" cultural aspect into a "tangible" tourism product, contributing to both the preservation and widespread promotion of local culinary values. Nguyen (2022) emphasized that agri-tourism contributes both to the preservation of indigenous culture and to the diversification of livelihoods for local residents. The integration of agricultural activities with tourism creates economic opportunities while facilitating the preservation and promotion of the community's traditional cultural values.

Overall, despite numerous studies on sustainable agricultural tourism, some important aspects remain underexplored, especially in the context of Dak Lak province. Additionally, long-term research on the impact of agricultural tourism on the livelihoods and culture of ethnic minority communities in Dak Lak is limited, with a lack of in-depth studies on the local communities involved in agricultural tourism and the challenges and barriers they face. Focusing on the voices of these communities helps address these research gaps and ensures that policies and practices in agricultural tourism development accurately reflect the needs and perspectives of local residents, contributing to the creating of a truly sustainable and equitable agrarian tourism model in Dak Lak.

3. Research Methodology

This study employs a qualitative approach and a case study methodology, to explore sustainable agricultural tourism development in Dak Lak province, Vietnam. This method is chosen for its ability to provide a comprehensive view of the experiences, perspectives and challenges faced by local communities in developing agricultural tourism (Creswell & Poth, 2016).

3.1. Research objectives and sampling method

This study employs a purposive sampling method combined with snowball sampling to ensure the inclusion of diverse and relevant participants aligned with the research objectives (Patton, 2015). The data collection was conducted from January to June 2024. Table 1 presents a summary of the specialized agricultural cultivation areas and the distribution of samples across five distinct subregions in Dak Lak province. The selection of participants was conducted carefully, based on the characteristics of each subregion, and focused on individuals actively involved in agricultural production.

No.	Code	Sub-region	Area (%)	Specialized crops	Sample
1	SR1	Krong Ana - Serepok	14.51	Food production such as rice and	10
		River Delta		corn, cocoa	
2	SR2	Chu Yang Sin high- lands	3.98	Forestry and agroforestry	2
3	SR3	Ea Sup Plain Subre-	28.43	Cashew, wet rice, fruit trees and me-	4
		gion		dicinal plants, industrial crops	
4	SR4	Buon Ma Thuot –	16.17	Long-term industrial crops for com-	11
		Ea H'leo Plateau		mercial production, such as coffee,	
				rubber, pepper and durian	
5	SR5	M'Drak Highland and	15.82	Industrial crops such as cocoa, fruit	2
		Mountainous		trees and plantation forests	

Table 1. Summary of the area of specialized agricultural cultivation and the number of samples

The study ultimately included 29 participants with diverse occupations in the field of agricultural tourism, including individuals and households involved in agricultural tourism, representatives from cooperatives and local tourism managers currently engaged in agricultural tourism activities. Table 2 provides a summary of the occupations of the participants.

Table 2. Summary of surveyed participants

No.	Code	Tourism - related Job	Sub-region	Location	Gender	Age
1	LP001	Coffee plantation and processing facility	SR4	Buon Ma Thuot	Male	45
2	LP002	Coffee plantation owner	SR4	Buon Ma Thuot	Male	33
3	LP003	Coffee plantation owner	SR4	Buon Ma Thuot	Male	51
4	LP004	Coffee plantation owner	SR4	Cu M'gar	Male	38
5	LP005	Coffee plantation owner	SR4	Cu M'gar	Male	60
6	LP006	Coffee plantation owner	SR5	M'Drak	Male	36
7	LP007	Cocoa farm owner	SR4	Buon Ma Thuot	Male	45
8	LP008	Cocoa farm owner	SR1	Krong Ana	Female	37
9	LP009	Pepper plantation owner	SR4	Buon Ma Thuot	Male	43
10	LP010	Pepper plantation owner	SR1	Krong Ana	Male	35
11	LP011	Pepper plantation owner	SR1	Buon Don	Female	65
12	LP012	The fruit orchard owner	SR5	M'Drak	Female	46
13	LP013	The fruit orchard owner	SR1	Buon Don	Female	58
14	LP014	The fruit orchard owner	SR3	Ea Sup	Male	55
15	LP015	The fruit orchard owner	SR1	Krong Ana	Male	37
16	LP016	Vegetable garden owner	SR3	Ea Sup	Female	45
17	LP017	Vegetable garden owner	SR4	Cu M'gar	Female	58
18	LP018	Herb garden owner	SR4	Buon Ma Thuot	Female	42
19	LP019	Herb garden owner	SR1	Buon Don	Female	65
20	LP020	Goat farm owner	SR1	Buon Don	Male	45
21	LP021	Fish farm owner	SR3	Ea Sup	Male	33
22	LP022	Fish farm owner	SR2	Lak	Male	60
23	LP023	Agricultural cooperative	SR1	Buon Don	Male	46
24	LP024	Agricultural cooperative	SR4	Cu M'gar	Male	41
25	LP025	Local tourism management	SR3	Ea Sup	Male	50
26	LP026	Local tourism management	SR1	Krong Ana	Male	55
27	LP027	Homestay owner	SR2	Lak	Female	47
28	LP028	Homestay owner	SR1	Krong Ana	Female	49
29	LP029	Farm product store	SR4	Buon Ma Thuot	Female	60

Among the 29 interviewees, 18 were male (62.1%) and 11 were female (37.9%). The average age of the participants was approximately 46.3 years. Their occupations were diverse within the agricultural tourism sector, including coffee plantation owners (6), cacao growers (2), pepper plantation owners (3), fruit orchard managers (4), vegetable and medicinal herb garden owners (4), goat and fish farmers (3), agricultural cooperative members (2), local tourism managers (2), homestay operators (2) and farm product retailers (1).

The sample size was determined based on the principle of data saturation, which means that data collection continued until no new information or themes emerged (Guest et al., 2020).

3.2. Data collection method

In-depth interview method

In-depth interviews were conducted with all survey participants (n = 29). Each interview lasted between 60 to 90 min and was recorded with the participants' consent. The main topics covered in the in-depth interviews are presented in Table 3.

Code	Theme	Description
TH1	Agricultural tourism activities	Current activities and plans
TH2	Impact of agricultural tourism	Effects on local livelihoods and culture
TH3	Opportunities and challenges	Development potential and encountered difficulties
TH4	Cultural preservation measures	Efforts and methods for preserving culture during
		tourism development
TH5	Proposals and expectations	Opinions on the support needed from government
		and relevant organizations

Table 3. Main topics in In-depth interviews

Non-participant observation method: Nonparticipant observation was conducted at key agritourism sites in Dak Lak, including coffee plantations, pepper gardens, livestock farms, fruit orchards and agritourism tours. Observations were meticulously recorded in field notes.

Secondary data analysis method: Secondary data analysis involved collecting and analyzing secondary documents published between 2018 and 2023, including socio-economic development reports, tourism and agriculture statistics and local agritourism policies and development plans.

3.3. Data analysis

The collected data were analyzed using the thematic analysis method outlined by Braun and Clarke (2006). The analysis process included six steps: (1) becoming familiar with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes and (6) writing the report. To ensure the reliability and validity of the study, we applied data triangulation, comparing results from various data sources (Denzin, 2017). Additionally, the analysis results were sent back to some of the research participants for verification and confirmation (member checking).

4. Study Site and Context

Dak Lak, located in the Central Highlands of Vietnam, has significant potential for agricultural tourism development due to its unique combination of diverse cultural heritage and rich agricultural resources. With over 650,000 ha of fertile land, primarily basalt soil, the province specializes in economic crops such as coffee, rubber, black pepper, and durian, with coffee being the main product, accounting for about 30% of the country's coffee-growing area (DLSD, 2023). Additionally, Dak Lak has 237 OCOP (One Commune One Product) products with export potential, providing favorable conditions for developing agricultural tourism tied to local produce (Nguyen et al., 2022). Moreover, the distinctive culture of 47 ethnic minorities, notably the E De and M'Nong communities, along with traditional farming practices and cultural festivals, has become a unique tourism resource, attracting visitors for agricultural tourism combined with cultural exploration (DLDCST, 2022). However, this development faces infrastructure and environmental conservation challenges, requiring a balance between agricultural production and natural resource protection (Nguyen, 2022). Nevertheless, Dak Lak remains a promising hotspot for sustainable agricultural tourism, contributing to economic development and the preservation of local culture.

5. Findings

5.1. Current status of Agri-Tourism development in Dak Lak

5.1.1. Livelihood diversification through Agri-Tourism

Agri-tourism in Dak Lak has developed into a multi-layered system, reflecting a transitioning from traditional tourism models to an integrated form combining agriculture, culture and services. Based on the community participation framework in tourism proposed by Tosun (1999) and the agri-tourism development model by Phillip et al. (2010), agri-tourism activities in Dak Lak can be categorized into three primary levels of participation: passive observation, interactive experiences and value chain integration. The classification of agri-tourism activities according to the levels of participation is summarized in Table 4, which presents the key activities corresponding to each level of involvement.

No.	Level of participation	Main activities	Quantity (n = 29)	Percentages (%)
1	Passive observation	Opening for visitors; Selling entrance tickets; Direct sales of products to visitors	19	65.52
2	Interactive experience	Organizing experiential activities (from harvesting, processing, finished products); Workshops and short courses; On-site dining services	7	24.14
3	Value chain integra- tion	Building a complete value chain (from production to consumption); Organ- izing specialized courses; Combining tourism with related sectors (e.g., healthcare, therapy)	3	10.34

Table 4. Levels and percentage of Agri-Tourism activities in Dak Lak province

Level 1: Passive observation - Initial connection between Agriculture and Tourism

At the most basic level, agri-tourism in Dak Lak is manifested through passive observation, where farms and gardens open their doors to tourists primarily for observation and learning. Although simple, this form plays a crucial role in establishing an initial connection between farmers and visitors and opens up income diversification opportunities for rural communities. As shown in Table 5, the comparative price analysis of key agricultural products in Dak Lak reveals a significant increase in income through tourism channels.

-			-	
Product type	Price for traders (VND/kg)	Price for tourists (VND/kg)	Increase in income through	Average entrance fee (VND/person)
		-	tourism (%)	
Coffee	116,200 - 121,700	135,000 - 150,000	16.2 - 23.3	60,000 - 90,000
Durian (Thai variety)	90,000 - 98,000	120,000 - 135,000	33.3 - 37.7	75,000 - 100,000
Pepper	147,000 - 149,000	160,000 - 180,000	8.8 - 20.8	40,000 - 60,000
Avocado	45,000 - 52,000	65,000 - 80,000	55.5 - 63.4	30,000 - 50,000
Cocoa	55,000 - 60,000	80,000 - 95,000	45.5 - 58.3	50,000 - 70,000

Table 5. Comparative price analysis of key agricultural products in Dak Lak province

Since we started welcoming visitors, my family's income has increased by about 20%. Tourists pay for entry tickets and also buy coffee as souvenirs. This will give us have an additional sales channel for our products (LP002). These remarks indicate that agritourism generates direct income from ticket sales and expands the distribution channels for local products. Visitors' ability to purchase products directly from the farm provides additional income for the residents and offers an opportunity to sell products at better prices compared to selling to traders.

We organize tours to visit avocado orchards during the harvest season. Tourists really enjoy seeing how we care for and harvest the avocados. Many people order avocados directly from the orchard, which helps us get a better price than selling to traders (LP012, LP013). Through tourism activities, residents also have the chance to interact directly with customers, allowing them to take orders and build long-term relationships, which contributes to diversifying and stabilizing income sources for the local community.

The current status of agri-tourism in Dak Lak shows that passive observation is predominant (LP025, LP026). According to practical surveys, 65.52% of agri-tourism services in the province are purely sightseeing tours. This reflects two critical aspects of the current passive observation model: (1) generating direct income from entrance fees and (2) expanding the distribution channels for agricultural products.

However, despite its prevalence, the passive observation model still has limitations. It is "... limited in creating added value and profound experiences for visitors" (LP023) and "has not fully exploited the potential of combining agriculture with tourism" (LP026). Agri-tourism needs to move beyond the simple concept of "farm visits" to create more prosperous and more meaningful experiences for visitors (LP022).

Level 2: Interactive experiences - Enhancing engagement and adding value

A prominent development in the growth of agri-tourism in Dak Lak is the emergence of interactive experience models, accounting for 24.14% of the surveyed entities, as shown in Table 4. At this level, tourists observe and actively participate in agricultural activities and product processing. This approach enhances the experience for tourists and adds considerable value to agricultural products. This model marks a significant step forward in the local tourism industry and opens up many opportunities for sustainable development in rural communities.

Interactive experiences in agri-tourism in Dak Lak have evolved beyond mere "*farm visits*". Instead, tourists engage directly in agricultural activities, from harvesting to processing products (LP001). This enhances the tourist experience and adds significant value to agricultural products and benefits the local community (LP021).

We have a program called "A day as a coffee farmer". Tourists experience the entire process, from picking coffee, drying, roasting, to tasting. This not only increases income for the cooperative but also helps promote our coffee brand (LP005). Currently, we host around 500 domestic and international visitors each month who come to explore and learn about the coffee cultivation, care and processing process (LP001).

Notably, the interactive experience model extends beyond pure agricultural activities. At Yok Don Community Tourism Village, tourists have the opportunity to participate in traditional cooking classes using ingredients from the garden: *"Tourists experience both the* culinary culture and learn how to prepare local specialties" (LP016). This creative integration of agriculture, culture and tourism creates a multidimensional and unique tourism product that offers memorable experiences for tourists.

Agri-tourism in Dak Lak is undergoing a notable transformation through a strategy of diversifying experiences. The cooperative at Serepok 3 hydropower reservoir leverages the natural advantages and connects local farming households to create unique tourism activities. This approach contributes to preserving and promoting local natural resources and supports sustainable tourism development, harmonizing economic benefits with environmental protection.

With the advantage of the 2,000-ha water surface and five large and small islands of the Serepok 3 reservoir, the cooperative utilizes this resource for agri-tourism. The cooperative collaborates with local residents to develop various agricultural activities: homestays, ecotourism, clean pepper and coffee production, livestock aquaculture, raising, etc. The cooperative has invested in building stilt houses, pavilions, accommodations and resorts to create a tourism ecosystem for agri-experiences. This ecosystem helps all members share and increase income by extending guest stays and providing a more comprehensive range of services (LP023).

The development of the agri-tourism model in Dak Lak also reflects trends toward sustainable and responsible tourism. A farm owner shares: With the goal of sustainable agriculture, we have focused on developing naturally friendly coffee gardens, without using any chemicals in production and processing. This is also why our farm attracts visitors interested in agri-tourism (LP004). This indicates that interactive agritourism brings economic benefits and promotes sustainable farming practices, contributing to environmental protection.

From the above analysis, it can be observed that diversifying agri-tourism activities in Dak Lak provides three main benefits: (1) Enhances the value of experiences for tourists, potentially allowing for increased service prices. (2) Creates educational opportunities and raises awareness about agricultural production processes. (3) Builds emotional connections between consumers and products, contributing to longterm marketing strategies. Interactive agritourism has demonstrated significant potential in creating multi-dimensional value for local communities. By combining unique experiences, education and emotional connections, this model enhances economic value and contributes to the sustainable development of the tourism and agriculture sectors.

Level 3: Value chain integration – Towards Sustainable Development

Agri-tourism in Dak Lak is evolving through interactive experiences and transitioning into an integrated value chain model, which currently accounts for 10.34% (3 out of 29 respondents) of the total surveyed agri-tourism activities (Table 4). This value chain integration covers the entire production process, starting from the initial cultivation stage to the final consumption stage, forming a cohesive tourism experience. Although this model constitutes a smaller proportion compared to other levels of participation, its impact is substantial as it focuses on high-valueadded products and specialized services.

An owner of coffee plantation and processing facility shared: "We have established a complete value chain for coffee, from the nursery to the final cup. Tourists experience the production process and participate in professional coffee tasting courses (LP001)". Moreover, this integration extends to related fields: We not only grow and process medicinal herbs but also organize health tourism tours, combining visits to herbal gardens with traditional health treatments (LP019).

This demonstrates the tremendous potential of combining agriculture with other industries to create unique and high-value tourism products. Professional coffee-tasting courses and health tours that combine herbal medicine enhance the tourist experience and generate new income streams for businesses and local communities.

The combination of high-quality agricultural products and unique tourism experiences has contributed to building a solid brand for Dak Lak's agricultural products: The cooperative has organized for members and local farmers to change cultivation practices, produce products meeting international standards, obtain certification and affix traceability labels... to sell products at higher prices. At the same time, we have linked with export businesses to gradually form a value chain and build a brand for the coffee region (LP025, LP029).

This integrated agri-tourism model has positively impacted on the local socio-economic development. In Cu M'gar district, thanks to the formation of specialized cultivation areas and brand development for agricultural products, the

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poverty rate has decreased to about 5.1% and the *plar* near-poverty rate is 7.6% (LP024). *This*

Agri-tourism in Dak Lak is moving towards sustainable development, harmoniously combining agriculture, tourism and local cultural preservation. This provides economic benefits and plays a vital role in enhancing the community's quality of life and protecting the Central Highlands' unique ecological environment, specifically Dak Lak.

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5.1.2. Agri-Tourism's contribution to local cultural preservation

The survey process shows that agri-tourism in Dak Lak has actively integrated local cultural elements into the tourism experience. An E De farmer shared: We introduce coffee and allow tourists to experience the traditional coffee brewing method of the \hat{E} Dê people. This helps us preserve and share our culture (LP006).

Agri-tourism has significantly contributed to the revival and development of traditional crafts. An M'Nong person stated: By incorporating our traditional crafts into tourism activities, tourists visit and purchase local handicrafts, allowing us to revive traditional weaving techniques. This creates additional income and helps preserve the weaving skills of our ancestors (LP018).

Through agri-tourism activities, a platform is also created to preserve and share indigenous agricultural knowledge. A long-term Kinh farmer in Dak Lak shared: *"We introduce tourists to the cultivation of coffee combined with native* plants, a method learned from ethnic minorities. This is beneficial for the crops helps protect the environment" (LP005, LP015).

Agri-tourism also facilitates cultural and local exchanges between tourists communities. An Ê Đê homestay owner shared: When tourists stay with us, we organize cultural exchange events, introducing them to the culture of the local ethnic minorities. Many tourists are very interested and want to learn more about our culture, promoting positive cultural interaction between tourists and the local community (LP027).

This study shows that agritourism in Dak Lak has made significant contributions to preserving local culture by integrating cultural elements into the tourism experience, reviving traditional crafts, preserving indigenous agricultural knowledge, and enhancing cultural exchange. However, attention must also be paid to challenges such as the risk of cultural commercialization.

5.2. Barriers and challenges faced by the community in developing agricultural tourism in Dak Lak province

Agri-tourism in Dak Lak is evolving with promising potential, yet it encounters several barriers that hinder its growth. The analysis and synthesis from interviews and reports highlight the primary challenges as summarized in Table 6, which outlines the key factors affecting the development of agricultural tourism in Dak Lak.

No.	Factor	Description	Households respondings (n = 29)	Response rate (%)
1	Poor infrastructure	The transportation system and tour- ism facilities do not meet demand	22	78
2	Lack of investment capital	Difficulty in accessing investment capital and preferential loans	19	65
3	Lack of management and service skills	Farmers lack management experience and tourism service skills	17	59
4	Language barriers	Barriers in communicating with inter- national tourists	12	43
5	Seasonality	Agricultural tourism mainly takes place during the harvest season	16	55

Table 6. Factors affecting the development of agricultural tourism in Dak Lak

(1) Infrastructure and amenities limitations: One of the biggest challenges farmers in Dak Lak face in developing agri-tourism is the limited infrastructure and amenities. According to survey data, 78% of the interviewed households identified poor infrastructure as a critical factor affecting their capacity to attract tourists. A coffee farm owner in Cu M'gar district shared: "The road to our farm is still difficult, especially during the rainy season. We want to attract more visitors, but the difficult travel conditions make many people hesitant" (LP004). Many homestays and agri-tourism sites lack basic amenities expected by tourists, especially international guests. A homestay owner in Krong Ana district stated: "We want to maintain traditional aspects of our stilt house, but we also understand that tourists need modern amenities such as internet and hot water. Balancing these two factors is not easy" (LP025).

(2) Lack of investment capital: Another major constraint, as highlighted by 65% of respondents, is the lack of investment capital. Most agri-tourism initiatives are small-scale and

self-funded, making it difficult for farmers to expand or upgrade their facilities. Farmers often find it challenging to access bank loans due to stringent requirements and high interest rates. Farmers expressed: "We have ideas to develop our farm into a tourist attraction, but lack the capital to invest in facilities and build guest reception areas. Bank loans have high interest rates and we are concerned about the risks" (LP008, LP004, LP020).

(3) Lack of management and tourism service skills: Despite having a rich agricultural base, 59% of the surveyed households acknowledged that they have experience in agriculture but lack skills in tourism management and service (LP010, LP014, LP028). A pepper farm owner combining tourism shared: "Initially, we faced many difficulties in welcoming and guiding tourists. We know how to grow and care for peppers, but explaining this process to tourists in an engaging way is a challenge" (LP009, LP011).

(4) Language barriers: For 43% of respondents, language barriers are a significant challenge, especially for attracting international tourists (LP007, LP024, LP027). "We are very eager to welcome international guests, but most people in our community cannot speak English" (LP006, LP007). These shortcomings limit the ability to communicate and share culture with foreign tourists (LP021, LP025).

(5) Seasonality of agricultural activities: Agri-tourism in Dak Lak heavily depends on seasons, particularly for critical crops such as coffee and pepper, as indicated by 55% of survey respondents. A coffee farm owner shared: "*The coffee harvest season from November to January is when we receive the most visitors*" (LP003). Coffee and other crops like pepper, avocado, vegetables and fruits also have seasonal patterns. During off-seasons, the number of visitors significantly decreases, "…*impacting the income of local residents*" (LP007, LP009, LP017).

5.3 Solutions for promoting sustainable agricultural tourism development in Dak Lak

Based on the research results and the analysis of the current state of agri-tourism in Dak Lak, this section proposes several solutions to promote sustainable development. These include both short-term and long-term measures, with a focus on balancing economic development, cultural preservation and environmental protection, as follows:

First, improving infrastructure and facilities: To address the issue of inadequate infrastructure and facilities, collaboration between local authorities and tourism businesses is essential. Local governments and the Department of Transport should prioritize upgrading roads to agri-tourism sites, especially rural roads. Additionally, farm owners and agri-tourism businesses should improve facilities at tourist sites, focusing on providing basic amenities such as clean restrooms, drinking water and resting areas for visitors, ensuring a harmonious blend of local cultural characteristics and tourism service standards.

Second, investment support: To tackle the issue of insufficient investment capital, local authorities should collaborate with relevant departments such as the Department of Planning and Investment and the State Bank of Vietnam, Dak Lak Branch, to develop a special investment support program for agri-tourism with favorable interest rates. Furthermore, the provincial Tourism Association can act as an intermediary to connect large tourism enterprises with small businesses, creating opportunities for investment collaboration. Regular consultations on accessing funding and financial management should also be organized to support agri-tourism businesses.

Third, enhancing management and service skills: To improve management and service skills, the Department of Tourism and the Department of Labor, Invalids and Social Affairs should collaborate with local management boards to organize short-term training courses on tourism management, marketing, guest reception and customer care for farm owners and staff. Universities and colleges in the province should develop short-term training programs on agri-tourism, combining theory with practical experience at farms. A mentoring program connecting tourism experts with agri-tourism businesses is also a feasible proposal for longterm benefits.

Fourth, enhancing language skills for community: The Department of Education and Training should organize free basic English classes for local communities involved in agri-tourism. The Department of Tourism could collaborate with technology companies to develop multilingual mobile applications introducing agri-tourism sites and local culture. The provincial Tourism Association could connect and create a network of volunteers who

know foreign languages (students, retirees) to assist with translation at agri-tourism sites when necessary.

Fifth, diversifying seasonal tourism activities: To address the seasonality of agricultural activities, farm owners and agri-tourism businesses should develop additional tourism activities that are not dependent on the season, such as crafts, traditional cooking classes and local cultural experiences. The Department of Tourism and the Department of Agriculture and Rural Development should coordinate to create a year-round agri-tourism calendar, incorporating various crops and livestock to provide diverse experiences for visitors.

Last, enhancing branding and marketing: To improve branding and marketing effectiveness, the Department of Tourism and the Department of Information and Communications should develop a comprehensive branding strategy for Dak Lak agri-tourism, including creating a unified online platform to promote all agritourism sites in the province. The Dak Lak Tourism Association and travel companies should organize familiarization tours for media and travel bloggers and develop travel packages combining agri-tourism with other popular tourist attractions in the province to increase appeal and diversify visitor experiences.

6. Discussion

This study has explored the current state, potential and challenges of agritourism in Dak Lak, Vietnam. The findings indicate that agritourism is playing an increasingly important role in diversifying rural livelihoods, preserving local culture and promoting sustainable development. However, the sector also faces significant challenges that need to be addressed.

The research shows that agri-tourism in Dak Lak is not merely an economic activity but an ecosystem where economic, cultural and environmental factors interact closely. This reflects the global trend towards sustainable rural tourism development (Gao & Bryan, 2017) but it also has the unique characteristics of Dak Lak. In particular, combining coffee cultivation, ethnic minority cultures and tourism in Dak Lak creates a unique model that differs from traditional agri-tourism models. While Barbieri's (2013) study in the U.S. focused on the economic aspects of agri-tourism, the model in Dak Lak demonstrates a profound intersection between agriculture, culture and tourism.

Another finding of this study is the role of agri-tourism in preserving and promoting local culture, especially the culture of indigenous ethnic minorities. This is evident through the integrating of E De and M'Nong cultural elements into the agri-tourism experience. Unlike many traditional cultural tourism models that face the risk of excessive commercialization (Rana et al., 2021), agri-tourism in Dak Lak provides a natural platform for preserving and sharing culture.

The challenges faced by agri-tourism in Dak Lak, such as infrastructure limitations, lack of investment capital and management skills, reflect common issues in rural tourism development in many developing countries (Lack, 1997; Rambodagedara et al., 2015; Mahmoodi et al., 2022). However, the specific context of Dak Lak creates unique challenges and opportunities. Language barriers, rather than merely a challenge, can be seen as an opportunity to develop new forms of communication and cultural experiences. Some communities have started using virtual reality technology and mobile applications to overcome this barrier, creating unique tourism experiences. Similarly, the seasonality of coffee and other crops has been turned into an opportunity to develop unique events and festivals that attract visitors year-round. This demonstrates the potential of local communities to transform challenges into opportunities for development.

7. Conclusions

The research indicates that agricultural tourism in Dak Lak has made significant contributions to the diversification of rural livelihoods, the preservation of local culture and the promotion of sustainable development. However, this model still faces several limitations, including inadequate infrastructure, lack of investment capital and insufficient management skills. Additionally, language barriers and seasonality pose challenges to the long-term development of the tourism sector. Nonetheless, the active and innovative engagement of the local community has turned these obstacles into opportunities by organizing cultural events, enhancing tourism experiences and utilizing technology to attract visitors. This highlights Dak Lak's substantial potential to become a leading model of sustainable agricultural tourism development, harmoniously integrating economic growth, cultural preservation and environmental conservation.

Limitations and Further Research

Although this study provides insights into agricultural tourism in Dak Lak, it still has several

limitations. The research primarily focuses on the perspectives of the local community, without incorporating the viewpoints of other stakeholders. Additionally, the number of surveyed households and cooperatives remains limited, necessitating a broader sample size to achieve a more comprehensive assessment. Furthermore, the reliance on qualitative data has restricted the capacity for quantitative analysis of the specific economic impacts of agricultural tourism.

To overcome these limitations and expand the understanding of the topic, future research should focus on evaluating the long-term socioeconomic impacts of agricultural tourism in Dak Lak, comparing this model with other regions in Vietnam and Southeast Asia and analyzing tourist experiences and satisfaction. These efforts would provide valuable insights for policy-making and sustainable development of agricultural tourism in the region.

Conflict of interest

The author confirms that there are no conflicts of interest regarding this study. The research was carried out independently and there were no financial or personal influences impacting the results or conclusions.

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References

- Barbieri, C. (2013). Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures. *Journal of Sustainable Tourism* 21(2), 252-270. https://doi.org/10.1080/09669582.201 2.685174.
- Barbieri, C., Sotomayor, S., & Aguilar, F. X. (2019). Perceived benefits of agricultural lands offering agritourism. *Tourism Planning and Development* 16(1), 43-60. https://doi.org/10.1080/21568316. 2017.1398780.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), 77-101.
- Bui, Q. D., & Nguyen, H. S. (2014). Agricultural, rural, and farmer issues in sustainable development of the Central Highlands region. *Vietnam Social Science Journal* 7(80), 2014.
- Bui, T. N. (2021). An overview of agri-tourism. Retrieved February 15, 2023, from https://file. vnua.edu.vn/data/39/documents/2021/01/28/ btvkhoakt/tong-quan-ve-du-lich-nongnghiep. pdf.
- Ciolac, R., Iancu, T., Popescu, G., Adamov, T., Feher, A., & Stanciu, S. (2022). Smart tourist village -An entrepreneurial necessity for maramures rural area. *Sustainability* 14(14), 8914.
- Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.). London, UK: Sage Publications.
- Dao, N. C. (2021). Agricultural tourism development in Can Tho city. In Proceedings of The Conference of Current Status of Regional Linkages in Agricultural Tourism Development in The Mekong Delta 2020 - 2030 (20-33). University of Social Sciences and Humanities,

Vietnam National University, Ho Chi Minh City, Vietnam. https://hcmussh.edu.vn/static/ document/T%C3%A0i%20li%E1%BB%87u%20 h%E1%BB%99i%20th%E1%BA%A3o. pdf#page=22.

- DLDCST (Dak Lak Department of Culture, Sports, and Tourism). (2022). Dak Lak promoting tourism in Ha Noi. Retrieved March 02, 2023, from https://vietnamtourism.gov.vn/en/ post/17081.
- DLSD (Dak Lak Statistics Department). (2023). Announcement of socio-economic statistics for the year 2023. Dak Lak, Vietnam: Dak Lak Statistics Department.
- Denzin, N. K. (2017). Critical qualitative inquiry. *Qualitative Inquiry* 23(1), 8-16. https://doi. org/10.1177/1077800416681864.
- Despotović, A., Joksimović, M., Svržnjak, K., & Jovanović, M. (2017). Rural areas sustainability: Agricultural diversification and opportunities for agri-tourism development. *Transcultural Studies* 63(3). https://doi.org/10.17707/ AgricultForest.63.3.06.
- Do, C., Hoang, L., Chau, L., Nguyen, N., Duong, D. T., & Truong, T. (2022). Some results achieved in developing the OCOP model (One Commune One Product) based on community internal resources in Dak Lak province. *Tay Nguyen Science Journal* 16(55).
- Duong, T. T., Pham, Q. T., & Truong, Q. H. (2023). Assessment of the potential for ecological tourism in Dak Lak Province. *Journal of Science* 20(6), 1004.
- Gao, J., & Wu, B. (2017). Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. *Tourism Management* 63, 223-233. https://doi. org/10.1016/j.tourman.2017.04.003.
- Gao, L., & Bryan, B. A. (2017). Finding pathways to national-scale land-sector sustainability. *Nature* 544(7649), 217-222. https://doi.org/10.1038/ nature21694.

- Garrido-Pérez, E. I., Tella-Ruiz, D., Sidali, K. L., Lincango-Vega, J. G., Vélez-Sabando, L. M., & Andrade-Alcívar, L. D. (2022). Land-use, abuse, and institutional attempts for correcting human-nature relationships: Europe vs The Americas. *Ethnobiology and Conservation* 11. https://doi.org/10.15451/ec2022-06-11.13-1-15.
- Ghaderi, Z., Shahabi, E., Fennell, D., & Khoshkam, M. (2022). Increasing community environmental awareness, participation in conservation, and livelihood enhancement through tourism. *Local Environment* 27(5), 605-621. https://doi.org/10. 1080/13549839.2022.2048812.
- Gomez-Arroyo, S., Martinez-Valenzuela, C., Calvo-Gonzalez, S., Villalobos-Pietrini, R., Waliszewski, S. M., Calderón-Segura, M. E., Martínez-Arroyo, A., Félix-Gastélum, R., & Lagarda-Escarrega, A. (2013). Assessing the genotoxic risk for Mexican children who are in residential proximity to agricultural areas with intense aerial pesticide applications. *Revista Internacional de Contaminación Ambiental* 29(3), 217-225.
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *Plos One*, *15*(5), e0232076.
- Karim, A., Musa, C. I., Sahabuddin, R., & Azis, M. (2021). The increase of rural economy at Baraka Sub-district through village funds. *The Winners* 22(1), 89-95.
- Kline, C., Barbieri, C., & LaPan, C. (2016). The influence of agritourism on niche meats loyalty and purchasing. *Journal of Travel Research* 55(5), 643-658. https://doi. org/10.1177/0047287514563336.
- Lack, K. J. (1997). *Agri-tourism development in British Columbia* (Unpublished master's thesis). Simon Fraser University, Burnaby, Canada.
- Le, M. T. (2020). The pressure of forest land use by local communities and solutions for harmonizing with the function of the Krong Nang protective forest,

Dak Lak province (Unpublished master's thesis). Tay Nguyen University, Dak Lak, Vietnam.

- Mahmoodi, M., Roman, M., & Prus, P. (2022). Features and challenges of agritourism: Evidence from Iran and Poland. *Sustainability* 14(8), 4555. https://doi.org/10.3390/su14084555.
- Nguyen, D. H. D., & Truong, T. T. H. (2019). Local community participation in tourism development at Thanh Thuy Chanh village, Hue. *Hue University Journal of Science: Social Sciences and Humanities* 128(6D), 101-119.
- Nguyen, N. D. (2022). Sustainable agriculture: A theoretical overview and its applicability in Vietnam. *Ho Chi Minh City Journal of Social Sciences* 10(290), 9-18.
- Nguyen, Q. C. (2022). Evaluation of private enterprise investment attraction activities in Dak Lak province during 2017-2021. *Journal of Economics and Forecasting*, 27(817), 77-79.
- Nguyen, T. K. O. (2022). Assessment of tourism resources and solutions for developing community-based tourism in Ako Dhong village, Buôn Ma Thuot City, Dak Lak province. *Tay Nguyen Journal of Science* 16(54), 101-106.
- Nguyen, T. M. P., Nguyen, T. M. T., & Bui, N. T. (2022). Solutions for tourism development in Dak Lak province during the COVID-19 pandemic. *Economy and Forecast Review Journal* 2022(4), 88-90.
- Ospanova, G. S., Saipov, A. A., Sergeyeva, A. M., Saparova, K. T., Omirzakova, M. Z., & Nurymova, R. D. (2022). Potential for the development of agritourism in the food supply zone of the Republic of Kazakhstan, Nur-Sultan City. *Geo Journal of Tourism and Geosites* 44(4), 1253-1259. https://doi.org/10.30892/gtg.44409-941.
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Minnesota, USA: Sage Publications.
- Pham, T. M. D. (2023). Content, nature, and role of rural agricultural tourism. In *Proceedings of*

The Scientific Conference on Developing Criteria for Assessing Agricultural and Rural Tourism Development Towards Green and Sustainable Growth in Ha Noi (4-12). Ha Noi, Vietnam: Vietnam National Authority of Tourism.

- Phillip, S., Hunter, C., & Blackstock, K. (2010). A typology for defining agritourism. *Tourism Management* 31(6), 754-758. https://doi. org/10.1016/j.tourman.2009.08.001.
- Phillips, J., Westergren, M., Bojkovski, D., Bozzano, M., Kharrat, M. B. D., Fjellstad, K. B., Kraigher H., Lefèvre, F., Maxted, N., Pérez-Espona, S., Sæther, N., Sturaro, E., Vozlič, J. Š., & Myking, T. (2021). Hotspots of genetic resources for animals, plants, and forests. Joensuu, Finland: European Forest Institute.
- Rambodagedara, R. M. M. H. K., Silva, D. A. C., & Perera, S. (2015). Agro-tourism development in farming community: Opportunities and challenges (1st ed.). Colombo, Sri Lanka: Hector Kobbekaduwa Agrarian Research and Training Institute.
- Rana, R., Rana, K., & Chhabra, G. (2021). Economic development of rural India through establishment of agri-tech park. *Indian Journal* of Economics and Finance 1(2), 15-23. https:// doi.org/10.35940/ijef.B2506.111221.

- Ruiz-Labrador, E. E., Sánchez-Martín, J. M., & Gurría-Gascón, J. L. (2023). The agritourism value chain: an application to the dehesa areas of extremadura. *Agriculture* 13(2078), 118. https:// doi.org/10.3390/agriculture13112078.
- Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism* 28(11), 1932-1946. https:// doi.org/10.1080/09669582.2020.1779732.
- Thieu, Q. T. (2021). Utilizing the cultural values of rivers in agricultural tourism development in the Mekong Delta. *Journal of Science and Technology Development - Social Sciences and Humanities* 5(1), 908-918.
- Tosun, C. (1999). Towards a typology of community participation in the tourism development process. *Anatolia* 10(2), 113-134. https://doi.or g/10.1080/13032917.1999.9686975.
- Vu, V. V. (2023). Exploiting agri-tourism to contribute to socio-economic development in Quang Yen town, Quang Ninh province. *Journal of Ethnic Studies* 12(4), 120-126.
- Wannaprasert, P., & Choenkwan, S. (2021). Impacts of the COVID-19 pandemic on ginger production: Supply chains, labor, and food security in Northeast Thailand. *Forest and Society* 5(1), 120-135. http://orcid.org/0000-0002-9604-5291.