

## A Sustainable model for community-based tourism in the Muaro Jambi Temple Area, Jambi Province

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### Abstract

This study investigates community participation concerning the potential and benefits of the Muaro Jambi Temple tourism area, identifying key success factors in community-based tourism (CBT). Employing Structural Equation Modeling-Partial Least Square (SEM-PLS) analysis on primary data, this research combines descriptive and quantitative approaches. The findings reveal that variables related to interest, opportunity, and innovation significantly and directly impact economic conditions, while environmental factors notably influence social conditions. In contrast, cultural and political variables do not significantly affect social conditions. Both economic and social factors significantly influence CBT participation. Indirect effects analysis shows that interest, opportunity, innovation, and environmental factors significantly influence CBT participation, whereas cultural and political variables do not exhibit significant indirect effects. Moreover, over 95% of the communities in the villages surrounding Muaro Jambi Temple perceive the basic principles of CBT positively, with 85% recognizing the potential and benefits of supporting the CBT model. These results underscore the importance of fostering interest, opportunity, and innovation to enhance economic conditions and community participation in CBT initiatives.

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**Keywords:** *Community-Based Tourism (CBT), Sustainable tourism, Muaro Jambi Temple*

**JEL Classification:** L83, Q56, Z32

### INTRODUCTION

The tourism industry has continuously expanded and diversified over the past three decades (Fadilah, 2020). The number of foreign tourists is projected to increase by an average of 3.3% annually between 2020 and 2030, reaching 1.8 billion by 2030 (UNWTO, 2017). However, the outbreak of the COVID-19 pandemic has caused a considerable decline in the industry. Consequently, the tourism sector's downturn has had a cascading effect on various other sectors, given its interlinked nature with upstream and downstream industries.

The economic decline brought on by COVID-19 has profoundly impacted the tourism sector, which is among the most affected industries. The pandemic has had a global impact on tourism due to decreased demand from both domestic and international tourists (Pradana & Mahendra, 2021). Before the pandemic, Indonesia's tourism industry developed rapidly, bolstered by the "Wonderful Indonesia" campaign. However, since the onset of the pandemic, the number of local and foreign tourists in Indonesia has dropped significantly. According to the World Travel and Tourism Council (2020), Indonesia's tourism industry has incurred approximately USD 1.5 billion in losses since January. As a result, Indonesia's economic growth in the second quarter of 2020 fell to 5.32 percent and declined to 3.49 percent in the third quarter (Badan Pusat Statistik, 2020).

In March 2020, there were 470,898 international tourists in Indonesia, according to Kemenparekraf (2020). In contrast, March 2019 saw 1,311,911 international tourists, indicating a 64.11 percent decrease from the previous year. The COVID-19 pandemic has negatively impacted various industries, particularly tourism and travel, as well as micro, small, and medium enterprises (MSMEs), which have experienced a significant decline in turnover (Sugihamretha, 2020).

Although the pandemic has left the tourism industry vulnerable, it presents a unique opportunity to promote responsible recovery plans and actions that can benefit communities. This crisis could serve as a turning point for tourism planners to rethink and rebuild tourism in a way that prioritizes community development. Establishing partnerships during these difficult times can be challenging, underscoring the importance of evaluating community-based tourism (CBT) businesses and strengthening partnerships with relevant managers and stakeholders to regenerate a sustainable tourism model.

The role of local communities and indigenous peoples is indispensable in supporting tourism activities. Community-based tourism includes empowering communities with unique characteristics by creating conditions, atmospheres, or climates that can develop community potential (Parmin, 2020). Thus, CBT is an effective solution for recovering the tourism industry after the pandemic.

The Muaro Jambi Cultural Conservation Area presents an opportunity for community-based tourism development in Jambi Province. According to the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 259/M/2013, the conservation area covers 3981 hectares. It spans eight villages in Muaro Jambi Regency, Jambi Province, namely: (1) Danau Lamo Village, Muaro Jambi Village, and Dusun Baru Village in Maro Sebo sub-district; and (2) Tebat Patah Village, Kemingking Dalam Village, Kemingking Luar Village, Dusun Mudo Village, and Teluk Jambu Village in Taman Rajo sub-district.

The Muaro Jambi Temple Compounds, located within the conservation area, represent a legacy of the Malay and Srivijaya kingdoms and served as Indonesia's largest Buddhist religious center from the 7th to 12th centuries AD. The complex includes 82 ancient building ruins, ten of which have been restored: Candi Kembar Batu, Candi Gumpung, Candi Tinggi I, Candi Tinggi II, Candi Astano, Candi Kotomahligai, Candi Kedaton, Candi Gedong I, Candi Gedong II, and Telagorajo. The

site also features old canals across Muaro Jambi Village, Kemingking Dalam Village, and Danau Lamo Village.

Since 2009, Muaro Jambi Temple has been nominated as a UNESCO World Heritage site. The temple complex covers an area of about 12 square kilometers with a length of more than 7 kilometers and an area reaching 260 hectares. The Muaro Jambi Temple Complex contains 61 temple buildings, most of which are still in the form of mounds of soil (menapo) that have not been excavated.

In a study by Zulfanetti et al. (2020) assessing tourists' interest in the Muaro Jambi Temple, 93% of respondents expressed a desire to revisit the area, particularly for recreation and sightseeing purposes (94%). Family-oriented trips were also common (64%), and visitors frequently cited the natural and environmental conditions as their favorite aspects of the temple area (64%). The study also found that tourist attractions, image, and service quality significantly impacted visitors' interest in repeat visits.

Based on these findings, this study aims to analyze the socio-economic conditions of the community surrounding the Muaro Jambi Temple Compounds, as well as the public's perceptions of the basic principles of Community-Based Tourism (CBT), community participation about the potential and benefits of CBT, and the factors that determine the success of CBT in the Muaro Jambi Temple area.

The term “sustainability” is widely used across various fields, including tourism, architecture, agriculture, and community development (Butcher, 2017). It has become a crucial issue for many industries, particularly tourism, the fastest-growing industry globally, and increasingly adopting sustainable and responsible practices. The World Tourism Organization (UNWTO) defines sustainable tourism as an approach that considers the current and future economic, social, and environmental impacts while satisfying visitors' needs, the tourism industry, the environment, and local communities (Ministry of Tourism and Creative Economy, 2012). Similarly, Niedziolka (2012) defines sustainable tourism as all forms of tourism activities, management, and development that preserve natural, economic, and social integrity while ensuring the maintenance of natural and cultural resources.

The primary purposes of sustainable tourism include financial soundness, residents' welfare, conservation of nature, preservation of natural resources, protection of cultural heritage, and the satisfaction of visitors' needs (Muller, 1994, as cited in Kisi, 2019). Sharpley (2006) further explains that sustainable development involves balancing the tourism environment, the local community's, and visitors' needs. In addition, the Ministry of Tourism and Creative Economy (2012) emphasizes that sustainable tourism aims to reduce poverty, maintain socio-cultural authenticity, and use environmental resources responsibly. It also seeks to empower communities to participate in production and benefit directly from tourism activities.

It must adhere to comprehensive principles to ensure sustainable tourism development. These principles, as outlined by Arida (2017), include participation, stakeholder involvement, and ownership by community members. Sustainable use of resources is crucial, along with accommodating the community's goals. Maintaining the carrying capacity, continuous monitoring and evaluation, accountability, training, and effective promotion are essential to sustainable tourism.

Furthermore, policies, directives, or programs to create community-based tourism must be economically viable, environmentally viable, socially acceptable, and technologically appropriate. These criteria ensure that tourism initiatives are sustainable and beneficial in the long term.

Community-Based Tourism (CBT) is a concept that empowers local communities to manage tourist destinations, allowing them to oversee, manage, and develop tourism activities. This approach emerged in response to the shortcomings of the traditional tourism development paradigm, which often marginalized local communities. In contrast, CBT promotes tourism that benefits the local community's economic, social, and cultural aspects. Scholars suggest that sustainable tourism development can be achieved by empowering local communities through capacity building, skill enhancement, and equitable distribution of benefits.

As articulated by Suansri (2003), guiding principles for CBT include recognizing, supporting, and promoting community ownership, involving community members in every activity and aspect; and promoting community pride. Key principles are also key to improving the quality of life, ensuring environmental sustainability, and preserving the area's unique local wisdom and character. Additionally, fostering cross-cultural learning and exchange, respecting cultural differences and human dignity, and distributing benefits fairly among community members is essential. A fixed percentage of income should be contributed to community projects, ensuring that the benefits of tourism are reinvested in the community.

Community-based tourism (CBT) development encompasses several dimensions, including economic, social, cultural, environmental, and political aspects, each with indicators based on their roles and functions. This development aligns with the trends observed in modern society (Song et al., 2024). Historically, the community pillar has played a lesser role in tourism development, resulting in limited benefits for local communities. In some instances, the communities surrounding tourist areas have experienced negative social, economic, and environmental impacts due to tourism development (Anuar & Sood, 2017).

Community development in tourism relates closely to community participation, empowerment, and capacity building (Singh, 2003). Sustainable tourism development necessitates active community participation to increase support and reduce negative effects while amplifying positive outcomes (Okazaki, 2008). According to ecotourism, tourism development based on local communities aims to improve the quality of human resources and enhance community skills (Priono, 2012).

## **METHODS**

### **Approach and research design**

This study employs a Mixed-Methods Research (MMR) approach with a sequential exploratory design that combines qualitative and quantitative research methods sequentially (Creswell, 2013). The qualitative approach is conducted first to establish conducive conditions for stakeholders, village managers, officials, and the community around the tourist areas. The mixed-method strategy in this research involves a sequence of qualitative and quantitative analyses, with qualitative research steps serving as the primary method and quantitative research as the secondary method.

These methods are then analyzed using a combined mixed-method approach, combining qualitative and quantitative data to obtain a more comprehensive analysis.

### **Population and sample**

The population of this study consists of community members from villages around the Muaro Jambi Temple Conservation Area. These villages include Danau Lamo Village, Muaro Jambi Village, and Dusun Baru Village in the Maro Sebo sub-district, as well as Tebat Patah Village, Kemingking Dalam Village, Kemingking Luar Village, Dusun Mudo Village, and Teluk Jambu Village in Taman Rajo sub-district, Muaro Jambi Regency, Jambi Province. The sampling was purposive, focusing on households potentially participating in tourism activities in the temple complex area. The sample size was 106 households, employing proportional sampling across the villages. The determination of the sample size was conducted using a purposive sampling technique. Purposive sampling is a method based on specific considerations deemed suitable for the sample characteristics identified for this study. The selected sample characteristics include individuals with potential for development, such as those possessing land, skills, expertise, human resources, buildings, and the ability to utilize these for agro-tourism, culinary, handicrafts, arts and culture, and homestays.

### **Data collection techniques**

Secondary data were obtained from publications of relevant institutions such as Statistics Indonesia (*Badan Pusat Statistik/BPS*), *Bappeda* (*Badan Perencanaan Pembangunan Daerah* or Regional Development Planning Agency), the Ministry of Tourism and Creative Economy, and the Ministry of Cooperative and SMEs, as well as other publications and literature. The researchers interviewed selected participants and used a structured questionnaire to collect the necessary information and data. For respondent characteristics, the implementation of CBT principles, and the potential and benefits of the area, both open and closed questions were used. The main aspects of CBT development were measured using a Likert Scale (scale 1 to 5), and the validity and reliability of the questionnaire were tested to ensure accuracy and consistency.

### **Data analysis methods and tools**

This study's data analysis employs surveys and Focus Group Discussions (FGDs). Qualitative methods were used to address the first, second, and third research problems, focusing on understanding the socio-economic conditions, community perceptions, and participation related to the potential and benefits of Community-Based Tourism (CBT) in the Muaro Jambi Temple area. The Structural Equation Modeling-Partial Least Square (SEM-PLS) analysis method was utilized to address the fourth research problem, which aimed to identify the factors determining the success of CBT in the area (Ghozali, 2006). The theoretical framework for determining the research model variables was based on concepts from the UNWTO (2017) and Suansri (2005). These frameworks identify various dimensions as the main aspects of CBT development: economic, social, cultural, environmental, and political.

### **Evaluation of the measurement model**

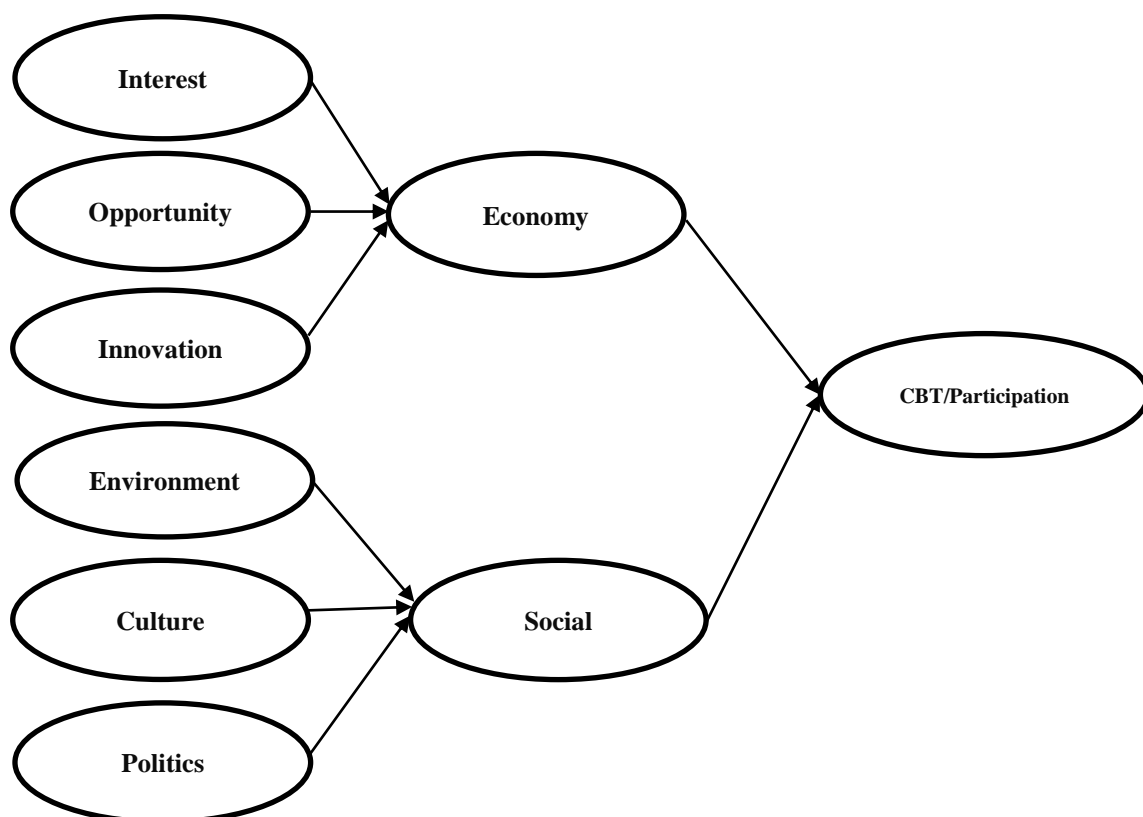
Furthermore, the framework used to identify the factors that determine the success of Community-Based Tourism (CBT) in the Muaro Jambi Temple tourism area is presented in Table 1.

**Table 1.** Evaluation of the measurement model

<b>Validity and reliability</b>	<b>Parameters</b>	<b>Rule of Thumb</b>
Convergent Validity	Loading factor	<ul style="list-style-type: none"> <li>• Greater than 0.70 for confirmatory research</li> <li>• Greater than 0.6 for exploratory research</li> </ul>
	Average Variance Extracted (AVE)	<ul style="list-style-type: none"> <li>• Greater than 0.50 for confirmatory research</li> <li>• AVE &gt; 0.5 indicates a good measurement of diversity.</li> </ul>
Discriminant Validity	Cross Loading	<ul style="list-style-type: none"> <li>• Greater than 0.70 for each variable</li> </ul>
	The square root of AVE and correlation between Latent Constructs	<ul style="list-style-type: none"> <li>• The square root of AVE is greater than the correlation between latent constructs</li> </ul>
Reliability	Cronbach’s Alpha	<ul style="list-style-type: none"> <li>• Greater than 0.70 for confirmatory research</li> <li>• Greater than 0.6 for exploratory research</li> </ul>
	Composite reliability	<ul style="list-style-type: none"> <li>• Greater than 0.70 for confirmatory research</li> <li>• 0.6 - 0.70 is still acceptable for exploratory research</li> <li>• 0.70 is referred to as modest, and above 0.8 indicates good joint reliability</li> </ul>

Source: Chin (1998)

Furthermore, the framework used to identify the factors that determine the success of CBT in the Muaro Jambi Temple tourism area is presented in Figure 1.



**Figure 1.** Variables of factors influencing community-based tourism

The variables employed in this study encompass three aspects. Firstly, the public perception dimension comprises the ten fundamental principles of CBT proposed by Suansri (2003). Secondly, the community participation dimension relates to potential resource variables (land, horticultural land, skills and expertise, human resources, workforce, buildings, and others) and benefit variables (agrotourism, culinary arts, crafts, art and culture, homestay, and others). Lastly, the factors influencing CBT encompass economic variables (interest, opportunity, and innovation) and social variables (environment, culture, and politics), as researched by Polnyotee & Thadaniti (2015), Supriharjo et al. (2015), Sitanggang & Sugiarti (2020), Nugraha & Siti (2020), and Nitikasetsoontorn (2015).

### **Operational definition of variables**

Operationally defining research variables is necessary to determine the type, indicators, or characteristics of the variables concerned and the size, specificity, and scale of the variables involved in the study. This allows for correct hypothesis testing using statistical tools.

A detailed description of the research variables is as follows:

- Community perceptions of implementing the basic principles of CBT include ten key elements: 1). Community ownership is recognized, supported, and developed. 2). Community members are included in every activity. 3). Community pride is fostered. 4). Community quality of life is enhanced. 5). Environmental sustainability is ensured. 6). Unique and characterful local wisdom is preserved. 7). Cultural exchange between communities is promoted. 8). Cultural differences and human dignity are respected. 9). Community members receive equitable benefits. 10). The community plays a role in income distribution.
- Community Participation Related to Potential Resources. This variable pertains to the resources that can be developed, including land, orchards, skills and expertise, human resources and labor, buildings, and others. The benefits of the area's development include agro-tourism, culinary arts, crafts, cultural arts, homestays, and other related activities.
- Factors Influencing CBT. This variable includes economic factors such as interests, opportunities, and innovations and social factors such as environment, culture, and politics.

## **RESULTS AND DISCUSSION**

### **Socio-economic condition of the community**

The socio-economic characteristics of the villages surrounding the Muaro Jambi Temple reveal a diverse demographic profile with varying levels of education, occupations, and age distributions (Table 2). Most respondents are male (76.4%), with a significant proportion within the age range of 29 to 38 years (42.5%). Most community members have completed high school education (49.1%), while a smaller fraction have attained higher education levels (3.6%).

Occupationally, a substantial segment of the population is engaged in roles within the village apparatus (30.2%), followed by farmers (20.8%) and various other occupations (29.2%). This indicates a community heavily reliant on local governance

and agriculture. Additionally, a significant portion of the community is married (67.9%), with many households having dependents; 56.6% have at least one dependent.

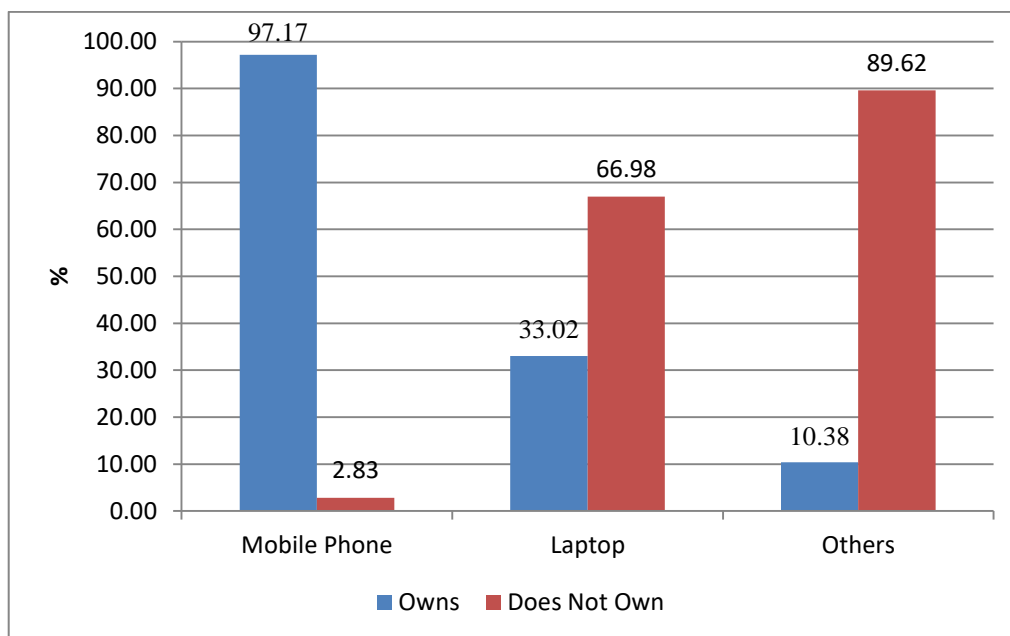
**Table 2.** Socio-economic characteristics of the community in villages surrounding Muaro Jambi Temple

Socio-Economic Characteristics	Frequency	Percent
Sex		
Male	81	76.42
Female	25	23.58
Age		
19 – 28	32	30.19
29 – 38	45	42.45
39 – 48	14	13.21
49 – 58	6	5.66
59 – 67	9	8.49
Education		
Elementary School	15	14.15
Junior High School	14	13.21
Senior High School	52	49.06
Diploma/ Undergraduate	25	23.58
Marital Status		
Married	72	67.92
Widow/Widower	3	2.83
Not married	31	29.25
Number of Dependents		
None	46	43.40
1 - 2	30	28.30
> 2	30	28.30
Main occupation		
Civil servant	4	3.77
Village apparatus	32	30.19
Farmers	22	20.75
Tourism Sector	5	4.72
Self-employed	12	11.32
Other	31	29.25

Regarding information technology device ownership, there is a high prevalence of mobile phone ownership, with 97.17% of respondents owning a mobile phone (Figure 2). However, ownership rates for laptops and other technological devices are significantly lower, with only 33.02% owning a laptop and 10.38% owning other devices. This indicates a digital divide within the community, where access to more advanced technology is limited.

The data suggests that while mobile phones are widely accessible, there is a need for improved access to laptops and other digital devices to enhance the community's technological capabilities. This disparity in technology ownership could impact the community's ability to participate fully in digital and online activities, which are increasingly important for economic and social development.





**Figure 2.** Ownership of information technology devices among communities in villages surrounding Muaro Jambi Temple

Overall, the findings highlight the need for targeted interventions to improve the socio-economic conditions and technological access in the villages surrounding Muaro Jambi Temple. Such interventions could include educational programs, technological infrastructure development, and support for local occupations to foster a sustainable model for community-based tourism in the area.

**Public’s perceptions related to the basic principles of CBT**

The public’s perception of the basic principles of Community-Based Tourism (CBT) for the community around the Muaro Jambi Temple area in 2021 is illustrated in Table 3.

**Table 3.** Community perceptions of the basic principles of CBT

Basic Principles of CBT	Agree (%)	Disagree (%)
Recognize, support, and develop community ownership in the tourism industry.	96.23	3.77
Involve community members in starting every aspect	90.57	9.43
Develop community pride	93.40	6.60
Develop community quality of life	94.34	5.66
Ensure environmental sustainability	97.17	2.83
Maintain unique character and culture in the local area	97.17	2.83
Help develop learning about cultural exchange in the community	96.23	3.77
Respect cultural differences and human dignity	98.11	1.89
Distribute benefits fairly to community members	84.91	15.09
Play a role in determining the percentage of income (distribution of income) in existing projects in the community.	86.79	13.21

Table 3 presents the results of public perception of the basic principles of CBT. Respondents were asked several questions related to the ten basic principles of CBT, and their agreement with each statement was recorded. The findings indicate that most

respondents have a positive perception of CBT principles. Specifically, 98.1% of respondents agreed that cultural differences and human dignity should be respected, while only 1.9% disagreed. This suggests that the community highly values cultural diversity and preserving human dignity.

**Community participation related to the potential and benefits of CBT**

Community participation related to the potential and benefits of the Muaro Jambi Temple area can be seen in Table 4.

**Table 4.** Community participation related to the potential and benefits of CBT

Potential and Benefits of CBT	Participating (%)	Not Participating (%)
Potential		
Land	92.45	7.55
Horticultural Land	85.85	14.15
Skills, Expertise	94.34	5.66
Human Resources, Manpower	88.68	11.32
Buildings	79.25	20.75
Others	78.30	21.70
Benefits	0.00	0.00
Agro Tourism	79.25	20.75
Culinary	83.96	16.04
Crafts	92.45	7.55
Arts and Culture	92.45	7.55
Homestay	81.13	18.87
Others	75.47	24.53

Table 4 indicates that most respondents (94.3%) acknowledged skills and expertise as a significant potential resource for CBT implementation in the Muaro Jambi Temple area. Additionally, most respondents (92.5%) agreed that CBT would provide benefits through the community's crafts, arts, and culture.

Given the community's potential resources, such as land, gardens, buildings, and human resources, developing agro-tourism areas, culinary arts, crafts, homestays, and cultural arts are expected to be strategic. This development is driven by the political will of the local government to advance tourism in the area.

**Statistical analysis**

***Outer model (measurement model)***

Testing convergent validity involves evaluating the loading factor values, which indicate the extent to which a given indicator is considered valid. An indicator is deemed valid if its convergent validity value is greater than 0.70 or within the range of 0.50-0.60 for exploratory research (Ghozali, 2014). The Average Variance Extracted (AVE) value is utilized to determine the total variance of the construct, with a recommended value greater than 0.50. Furthermore, reliability testing assesses the indicators measuring a given construct. A construct is considered reliable if it exhibits high composite reliability and Cronbach’s alpha value. The recommended values are greater than 0.70 for composite reliability and 0.60 for Cronbach’s alpha.

Table 5 provides the values of Outer Loading, Output Correlation between Latent Variables and the Square Root of AVE, and the Reliability Test.

**Table 5.** Outer loading, output correlation between variables latent, square root of AVE and the reliability test

Latent variable	Item	Outer Loading	AVE	Composite Reliability	Cronbach's Alpha
Interest	X <sub>11</sub>	0.793	0.666	0.909	0.876
	X <sub>12</sub>	0.854			
	X <sub>13</sub>	0.841			
	X <sub>14</sub>	0.774			
	X <sub>15</sub>	0.815			
Opportunity	X <sub>21</sub>	0.921	0.801	0.924	0.877
	X <sub>22</sub>	0.839			
	X <sub>23</sub>	0.923			
Innovation	X <sub>31</sub>	0.887	0.756	0.956	0.946
	X <sub>32</sub>	0.903			
	X <sub>33</sub>	0.875			
	X <sub>34</sub>	0.789			
	X <sub>35</sub>	0.862			
	X <sub>36</sub>	0.869			
	X <sub>37</sub>	0.896			
Environment	X <sub>41</sub>	0.919	0.838	0.939	0.903
	X <sub>42</sub>	0.929			
	X <sub>43</sub>	0.899			
Culture	X <sub>51</sub>	0.915	0.834	0.938	0.900
	X <sub>52</sub>	0.898			
	X <sub>53</sub>	0.926			
Politics	X <sub>61</sub>	0.937	0.855	0.946	0.915
	X <sub>62</sub>	0.916			
	X <sub>63</sub>	0.920			
Economy	Y <sub>11</sub>	0.861	0.848	0.957	0.940
	Y <sub>12</sub>	0.944			
	Y <sub>13</sub>	0.943			
	Y <sub>14</sub>	0.934			
Social	Y <sub>21</sub>	0.891	0.782	0.947	0.930
	Y <sub>22</sub>	0.906			
	Y <sub>23</sub>	0.847			
	Y <sub>24</sub>	0.898			
	Y <sub>25</sub>	0.878			
CBT/Participation	Z <sub>1</sub>	0.673	0.669	0.934	0.917
	Z <sub>2</sub>	0.847			
	Z <sub>3</sub>	0.846			
	Z <sub>4</sub>	0.837			
	Z <sub>5</sub>	0.844			
	Z <sub>6</sub>	0.841			
	Z <sub>7</sub>	0.823			

The loading factor values for the indicators measuring the latent variables of interest (X<sub>11</sub>, X<sub>12</sub>, X<sub>13</sub>, X<sub>14</sub>, X<sub>15</sub>), opportunity (X<sub>21</sub>, X<sub>22</sub>, X<sub>23</sub>), innovation (X<sub>31</sub>, X<sub>32</sub>, X<sub>33</sub>, X<sub>34</sub>, X<sub>35</sub>, X<sub>36</sub>, X<sub>37</sub>), environment (X<sub>41</sub>, X<sub>42</sub>, X<sub>43</sub>), culture (X<sub>51</sub>, X<sub>52</sub>, X<sub>53</sub>), and politics (X<sub>61</sub>, X<sub>62</sub>, X<sub>63</sub>) were all found to be greater than 0.7, indicating that these indicators were valid and effective in measuring the latent variables. Similarly, the loading factor values for indicators measuring the latent variables of economic variables (Y<sub>11</sub>, Y<sub>12</sub>,

Y<sub>13</sub>, Y<sub>14</sub>) and social variables (Y<sub>21</sub>, Y<sub>22</sub>, Y<sub>23</sub>, Y<sub>24</sub>, Y<sub>25</sub>) were all greater than 0.7, indicating that these indicators were valid as well. The loading factor values for the indicators measuring the latent variables of CBT/Participation (Z<sub>2</sub>, Z<sub>3</sub>, Z<sub>4</sub>, Z<sub>5</sub>, Z<sub>6</sub>, Z<sub>7</sub>) were found to be greater than 0.6, except for Z<sub>1</sub>, which had a loading factor value slightly more than 0.6 but still acceptable. Therefore, the indicators for this study were considered valid in measuring the latent variables as their loading factor values met the recommended threshold.

The AVE values for the latent variables of interest, opportunity, innovation, environment, culture, politics, economy, social, and CBT/Participation were greater than 0.50, indicating that the indicators used can measure the latent variables well. Furthermore, the composite reliability (CR) values were greater than 0.70 for all latent variables, indicating that the measurement results are reliable and can thoroughly explain the variables. Additionally, Cronbach's alpha values were greater than 0.60 for all latent variables, indicating that the constructs used to measure the variables are reliable.

**Path coefficients**

Path coefficients are measured to evaluate the significance and strength of the relationships between constructs and to test hypotheses. These values can range from -1 to +1, with values closer to +1 indicating a strong and positive relationship between the two constructs and values closer to -1 indicating a weak and negative relationship.

**Table 6.** Path coefficients

	<b>Economy</b>	<b>Social</b>	<b>CBT/Participation</b>
Interest	0.158		
Opportunity	0.334		
Innovation	0.380		
Environment		0.470	
Culture		0.223	
Politics		0.213	
Economy			0.423
Social			0.465

Table 6 indicates that the variables of interest, opportunity, and innovation directly influence the economic variable with path coefficients of 0.158, 0.334, and 0.380, respectively. These values suggest that a 1% increase in these factors can lead to a 15.8%, 33.4%, and 38% economic increase, respectively.

Similarly, the direct influence of environmental, cultural, and political factors on social variables is 0.470, 0.223, and 0.213, respectively. This implies that a 1% increase in these factors can lead to a 47%, 22.3%, and 21.3% increase in social variables, respectively.

Additionally, the economy's and social variables' direct influence on community-based tourism/participation are 0.423 and 0.465, respectively. This indicates that a 1% increase in the economy and social factors can lead to a 42.3% and 46.5% increase in CBT/participation, respectively.

**Inner model (structural model)**

The hypothesis testing criteria in this study involve comparing the p-value of the results with a significance level of 0.05. When the p-value is less than 0.05, the statistical hypothesis is considered valid, indicating that the exogenous variable significantly directly affects the endogenous variable.

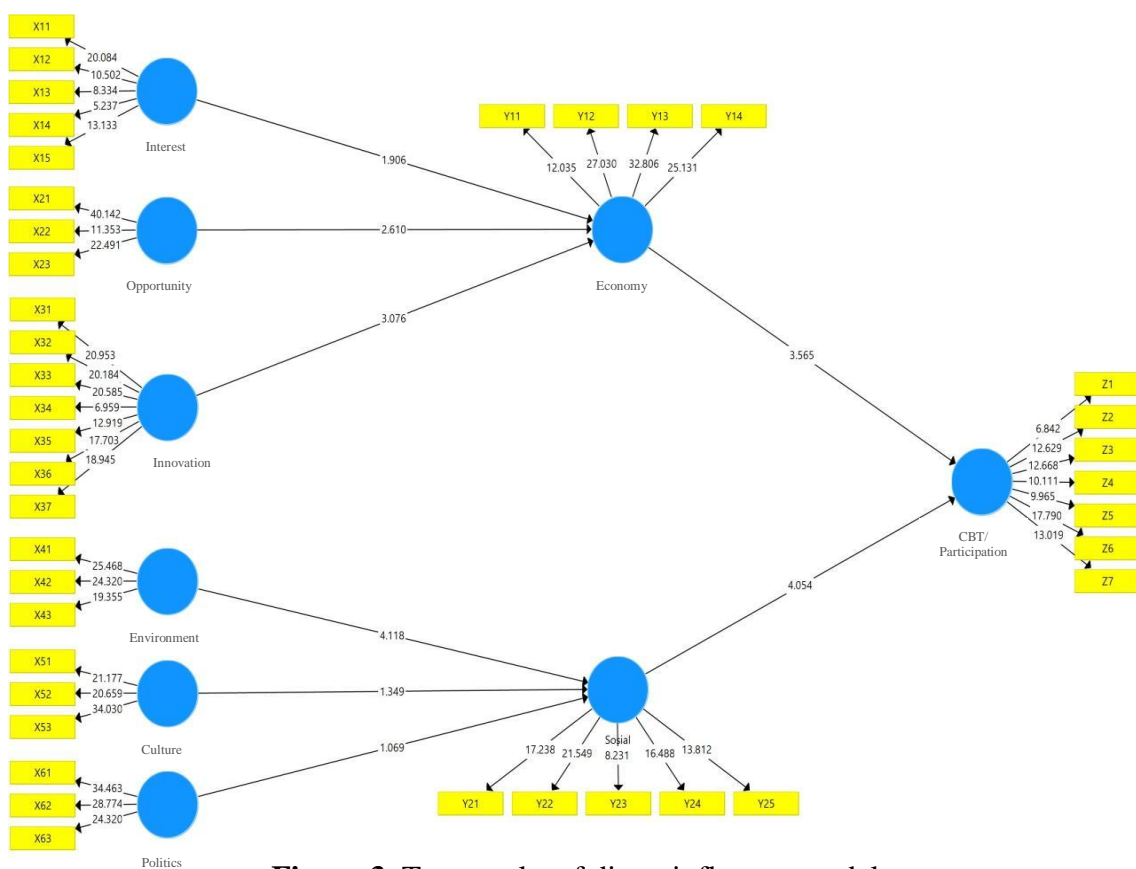
**Table 7.** Results of testing direct effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Interest -> Economy	0.158	0.161	0.083	1.906	0.057
Opportunity -> Economy	0.334	0.328	0.128	2.610	0.009
Innovation -> Economy	0.380	0.357	0.124	3.076	0.002
Environmental -> Social	0.470	0.449	0.114	4.118	0.000
Culture -> Social	0.223	0.180	0.166	1.349	0.178
Political -> Social	0.213	0.250	0.199	1.069	0.285
Economic -> CBT/Participation	0.423	0.416	0.119	3.565	0.000
Social -> CBT/Participation	0.465	0.454	0.115	4.054	0.000

The analysis found that the effect of opportunity on the economy, the effect of innovation on the economy, the influence of the environment on the social variable, and the influence of the economy and social variables on CBT/participation have p-values smaller than the significance level of 0.05. This means that the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted for these variables, indicating that each variable has a significant direct effect.

On the other hand, the influence of interest on the economy, the influence of culture on social variables, and the influence of politics on social variables have p-values greater than 0.05. This means that H0 is accepted and Ha is rejected for these variables, indicating that each variable does not have a significant direct effect.

The results of the analysis of the direct influence for each variable can be shown in Figure 3.



**Figure 3.** Test results of direct influence model

The analysis examined the indirect effects of interest, opportunity, and innovation on CBT/Participation through economic variables and the indirect effects of environment, culture, and politics on CBT/Participation through social variables.

**Table 8.** Results of testing indirect effects

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics ( O/STDEV )</i>	<i>P Values</i>
Interest -> CBT/Participation	0.067	0.066	0.040	1.681	0.093
Opportunity -> CBT/Participation	0.141	0.130	0.062	2.273	0.023
Innovation -> CBT/Participation	0.161	0.153	0.074	2.176	0.030
Environment -> CBT/Participation	0.218	0.222	0.092	2.375	0.018
Culture -> CBT/Participation	0.104	0.094	0.082	1.268	0.205
Politics -> CBT/Participation	0.099	0.095	0.099	1.002	0.317

The results of the hypothesis testing for the indirect effects on CBT/Participation reveal several key findings. Firstly, the indirect effect of interest on CBT/Participation through the economy has a p-value of 0.093, greater than the significance level of 0.05. Similarly, the indirect effect of culture on CBT/Participation through social has a p-value of 0.205, and the indirect effect of politics on CBT/Participation through social has a p-value of 0.317. These p-values greater than the significance level indicate that the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected for these relationships. Thus, the relationships between interest, culture, and politics on CBT/Participation through their respective mediating variables do not have significant indirect effects.

On the other hand, the analysis shows that the indirect effects of opportunity on CBT/Participation through the economy, innovation on CBT/Participation through the economy, and the environment on CBT/Participation through society are statistically significant. The p-values for these relationships are 0.023, 0.030, and 0.018, respectively, all of which are less than the significance level of 0.05. Therefore, H0 is rejected, and Ha is accepted for these variables, indicating that these relationships have significant indirect effects.

**R-squared**

The R-squared (R<sup>2</sup>) value is a critical metric used to determine the impact of exogenous latent variables on endogenous latent variables in a structural model. According to Chin (1998, as cited in Ghazali, 2011), an R<sup>2</sup> value of 0.67 or higher for endogenous latent variables indicates a strong impact, an R<sup>2</sup> value of 0.33 indicates a moderate impact, and an R<sup>2</sup> value of 0.19 or lower indicates a weak model.

**Table 9.** Coefficient of determination (R-squared)

	<b>R-squared</b>	<b>R-squared Adjusted</b>	<b>Information</b>
Economy	0.616	0.604	Moderate
Social	0.718	0.710	Good
CBT / Participation	0.731	0.726	Good

The R-squared values for different models involving endogenous and exogenous latent variables are presented in Table 9. The model with the economy as the endogenous variable and interest, opportunity, and innovation as exogenous latent variables has an R-squared value of 0.616. This indicates a moderate model where the exogenous variables explain 61.6% of the variance in the economic variables.

Similarly, the model with social as the endogenous variable and environment, culture, and politics as exogenous latent variables has an R-squared value of 0.718. This indicates a strong model, meaning that the exogenous variables explain 71.8% of the variance in social variables.

Finally, the model examining the influence of interest, opportunity, innovation, environment, culture, and politics on CBT/Participation has an R-Square value of 0.731. This also indicates a strong model where the exogenous variables explain 73.1% of the variance in CBT/Participation.

The remaining percentage of variance not explained by the exogenous variables in each model is influenced by other factors not included in the study. This highlights the complexity of the factors influencing economic and social variables and CBT/Participation, suggesting that future research could explore additional variables to explain these models' variance further.

## **Discussion**

The present study examined various exogenous variables' direct and indirect effects on endogenous variables within Community-Based Tourism (CBT) participation. The findings revealed that opportunity and innovation variables had a significant direct effect on economic variables, while environmental variables had a significant direct effect on social variables. Furthermore, both economic and social variables directly affected CBT/Participation. These results highlight the crucial role of opportunity, innovation, and environmental factors in influencing economic and social outcomes, impacting community-based tourism initiatives.

However, the study found that interest variables did not have a significant direct effect on economic variables, corroborating the research of Andalecio et al. (2022). Similarly, cultural and political variables did not significantly influence social variables, suggesting that these factors may not be as pivotal in driving social outcomes in CBT.

The indirect effects analysis further elucidated the pathways through which certain variables impact CBT/Participation. Specifically, the indirect effects of opportunity on CBT/Participation through economic variables, innovation on CBT/Participation through economic variables, and environment on CBT/Participation through social variables were significant. Conversely, the indirect effects of interest on CBT/Participation through economic variables, culture on CBT/Participation through social variables, and politics on CBT/Participation through social variables were insignificant. These findings suggest that while opportunity, innovation, and environmental factors play crucial indirect roles, interest, culture, and politics do not significantly contribute to CBT/Participation through their respective mediating variables.

Regarding cultural factors, the findings align with prior research by Adikampana et al. (2019), which indicated that rural communities' rural environment and daily life primarily drive CBT products. The unique characteristics and routines of village life are key tourism resources, as noted by Arisanty et al. (2019). Additionally, the fair sharing of benefits and participation in decision-making are fundamental aspects of CBT

products. Nugraha and Siti (2020) also identified the unique attractions of Pemo Village, emphasizing its natural beauty, culture, and the hospitality of its residents. Their research underscores the need to leverage external opportunities and overcome internal weaknesses to enhance the village's potential, echoing the present study's findings.

In the realm of social and cultural factors, this study is consistent with the research conducted by Supriharjo et al. (2015), which used root cause analysis to identify factors influencing CBT sustainability. Key factors included a sense of belonging, relationships with local government and socio-cultural communities, proximity to tourist attractions, and creative community involvement, as Adi et al. (2017) supported. Polnyotee and Thadaniti (2015) also found high negative impacts between economic, social, and environmental variables, concluding that CBT should be adopted to mitigate these impacts.

The study's findings on political factors align with prior research by Sitanggang and Sugiarti (2020), which examined the management of the Sipiso-piso Waterfall Tourism Object. Their study revealed that participation varied across different stages of tourism management, highlighting the importance of community involvement. Similarly, Kampetch and Jitpakdee (2019) emphasized the potential of CBT in promoting economic and community independence through activities that showcase traditional lifestyle, culture, nature, and the environment.

Finally, the study's findings on political, opportunity, and innovation factors are consistent with those of Nitikasetsoontorn (2015), who investigated the success factors for CBT in Sam Chuk and Klong Suan markets. Their research highlighted the significance of participation in decision-making, local ownership, collective responsibility, resource sharing, effective leadership and management, authenticity, and uniqueness in the success of CBT. However, they found that local innovation did not significantly impact the success of CBT in the Sam Chuk traditional market, indicating that the role of innovation may vary across different contexts.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The study reveals that over 95% of the community in the villages surrounding Muaro Jambi Temple have a positive perception of the basic principles of Community-Based Tourism (CBT), with 85% of the community demonstrating the potential and recognizing the benefits to support the CBT model in the Muaro Jambi Temple Compounds tourism area.

The results indicate that the opportunity and innovation variables significantly and directly affect the economy, while the environmental variable directly impacts social variables. Both economic and social variables have a significant direct effect on CBT/Participation. Conversely, the interest variable does not directly affect the economy; neither the cultural nor political variables significantly affect social variables.

Regarding indirect effects, the opportunity and innovation variables significantly impact CBT/Participation through the economy, while the environmental variable significantly impacts CBT/Participation through social variables. However, the interest variable on CBT/Participation through the economy, the cultural variable on CBT/Participation through social variables, and the political variable on CBT/Participation through social variables do not show significant indirect effects.



## **Recommendations**

It is recommended that the local community take an active role in managing the area's potential to optimize the benefits of the CBT model. This can be achieved by:

1. Providing regular training and capacity-building programs for community members to enhance their skills and knowledge in tourism management, hospitality, and customer service. This will empower the community to take ownership of tourism activities and ensure high-quality services for visitors.
2. Investing in constructing and maintaining essential infrastructure such as roads, bridges, water transportation facilities, and public amenities. This will improve accessibility to the Muaro Jambi Temple area and enhance the overall visitor experience.
3. Encouraging the development and promotion of local arts, crafts, culinary products, and cultural performances. This can be facilitated by establishing markets and exhibition spaces where local artisans and producers can showcase and sell their products.
4. Implementing sustainable practices in tourism activities to preserve the natural and cultural heritage of the Muaro Jambi Temple area. This includes waste management, conservation of natural resources, and promoting eco-friendly tourism options such as guided nature walks and eco-tours.
5. Ensuring active participation of community members in decision-making processes related to tourism development. This can be achieved through regular consultations, workshops, and the establishment of community-based tourism committees that represent the interests and needs of local residents.
6. Developing comprehensive marketing strategies to attract both domestic and international tourists. This includes leveraging digital marketing platforms, social media, and collaborations with travel agencies and tourism boards to promote the unique attractions of the Muaro Jambi Temple area.
7. Establishing mechanisms for continuous monitoring and evaluation of tourism activities to assess their impact on the community and the environment. This will help identify areas for improvement and ensure that the benefits of tourism are distributed equitably among community members.

Additionally, it is suggested that future research explore the potential of art, culture, culinary practices, and local wisdom in the development of CBT in the Muaro Jambi Temple tourist area. Such research would be useful in providing additional literature and study material for developing tourism economics, especially in Community-Based Tourism (CBT). By focusing on these areas, the Muaro Jambi Temple tourism area can further develop its unique offerings and enhance its appeal to local and international visitors, fostering sustainable tourism growth.

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