



FACTORS INFLUENCING LOCAL COMMUNITY PARTICIPATION IN SUSTAINABLE ECOTOURISM DEVELOPMENT AT VAM SAT TOURIST SITE, CAN GIO COMMUNE

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ARTICLE INFO	ABSTRACT
<p>DOI: 10.52932/jfmr.v4i2ene.1004</p> <p><i>Received:</i> June 24, 2025</p> <p><i>Accepted:</i> February 24, 2026</p> <p><i>Published:</i> March 25, 2026</p> <p>Keywords: Can Gio, Local community's decision to participate, Sustainable ecotourism, Vam Sat Ecotourism Area</p> <p>JEL codes: Q56; L83; R58</p>	<p>This study addresses a critical gap in the ecotourism literature by examining the determinants of local community participation in sustainable ecotourism development within a biosphere reserve context, where empirical evidence remains limited and fragmented. Drawing on established theoretical perspectives, the study proposes a conceptual model that integrates community attitude, institutional policy barriers, service capacity, local resources, perceived benefits, and social capital as key explanatory factors. Data were collected from 150 local residents at the Vam Sat Tourist Site and analyzed using SPSS 27 through reliability testing, exploratory factor analysis, correlation analysis, and linear regression. The findings reveal that community attitude, institutional policy barriers, service capacity, local resources, and social capital exert positive and significant effects on participation decisions, with community attitude emerging as the strongest predictor. Notably, perceived benefits do not show a statistically significant effect, suggesting that community engagement in ecotourism is driven less by short term economic expectations than by institutional trust, social relationships, and attitudinal commitment. This unexpected result offers an important theoretical insight by challenging benefit centered participation assumptions in ecotourism research. The study contributes to the literature by refining participation theory in protected areas and provides policy relevant implications for ecotourism governance in biosphere reserves, emphasizing the need for institutional transparency, capacity building, and network-based community engagement mechanisms.</p>

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1. Introduction

In the context of global economic development, sustainable ecotourism has gained increasing attention, not only for its role in environmental protection but also for its potential to create employment opportunities and improve the livelihoods of local communities (Chan et al., 2021; Kim et al., 2019; Nguyen et al., 2024a). Sustainable ecotourism is a form of environmentally responsible tourism that aims to conserve natural resources and local cultures while ensuring socio economic benefits for local communities (Honey, 1999). It represents a significant trend in the global tourism industry, particularly in light of escalating climate change and environmental degradation. Sustainable ecotourism not only generates economic benefits but also enhances environmental awareness and promotes the value of indigenous cultures (Da Silva et al., 2025; Kumar et al., 2023). Globally, sustainable ecotourism has been successfully implemented in countries such as Costa Rica and Nepal, largely due to supportive institutional frameworks, effective policy implementation, and the active participation of local communities in tourism planning and management processes (Jones & Spadafora, 2016; Tiwari & Nguyen, 2024). Despite the growing body of international literature emphasizing the critical role of local communities in sustainable ecotourism development, empirical evidence from developing countries remains limited, particularly with regard to the mechanisms that shape local community participation decisions. Existing studies have primarily focused on the economic impacts of ecotourism or tourists perspectives, while insufficient attention has been paid to the combined influence of social, institutional, and resource related factors on local community decision making. In Vietnam, although sustainable ecotourism has been widely promoted in policy discourse,

practical implementation still faces numerous challenges, most notably the limited and passive participation of local communities (Ngo, 2018). This gap between policy orientation and actual community engagement highlights an unresolved research problem that warrants further investigation.

In Vietnam, ecotourism has been identified as one of the key orientations in the National Tourism Development Strategy to 2030, with a vision toward 2045 (Ministry of Culture, Sports & Tourism, 2020). Can Gio District, the only coastal area of Ho Chi Minh City, possesses a distinctive mangrove forest ecosystem and was recognized by UNESCO as a World Biosphere Reserve in 2000. This area holds significant potential for the development of sustainable ecotourism. Among its attractions, the Vam Sat Tourist Site is considered a representative model, attracting tens of thousands of visitors annually due to its natural landscapes and ecological conservation activities. However, despite this potential, the level of local community participation in tourism activities remains modest. Participation is largely characterized by passive involvement, with limited roles in decision making, service provision, and benefit sharing. Previous studies have consistently emphasized that active community participation is a fundamental prerequisite for achieving sustainability in tourism development, as it enhances local ownership, strengthens responsibility for resource conservation, and ensures long-term socio-economic benefits for communities (Tosun, 2006; Pearce et al., 1996; Pham, 2012; Nguyen et al., 2024a). Nevertheless, most existing research in Vietnam tends to examine community participation in a fragmented manner, often addressing individual factors in isolation and lacking an integrative analytical framework that captures the simultaneous effects of community attitudes, perceived benefits, social

capital, institutional barriers, service capacity, and local resources on participation decisions. In the specific context of Can Gio, sustainable ecotourism development is further constrained by pressures from natural resource exploitation, the absence of specific and effective support policies, and limited awareness among local residents regarding their role and potential benefits in sustainable tourism development. Given these limitations, there remains a clear research gap in systematically identifying and empirically validating the key factors that influence local community participation decisions within a sustainable ecotourism context in Vietnam. Addressing this gap is essential not only for enriching the academic literature on community-based ecotourism in emerging economies but also for providing practical insights to policymakers and tourism managers.

This study was conducted to identify the factors influencing local community participation in the development of sustainable ecotourism at the Vam Sat Tourist Site, located in Can Gio District, Ho Chi Minh City. By adopting an integrated research framework that simultaneously examines community attitudes, perceived benefits, social capital, institutional and policy related barriers, service capacity, and local resources, this study offers a more comprehensive explanation of local community participation decisions than prior studies. Based on the findings, the research proposes context specific solutions to enhance proactive and effective community involvement, thereby contributing both theoretically, by extending community participation models in sustainable ecotourism research, and practically, by supporting evidence-based policy formulation for the long-term development of sustainable ecotourism in coastal biosphere reserve areas.

2. Theoretical framework and research model

2.1. Concept of sustainable ecotourism

Sustainable ecotourism is a nature-based form of tourism that emphasizes environmental conservation, respects local cultures, and enhances the socio-economic benefits for local communities (Honey, 1999). This model is guided by three core principles: resource conservation, community benefit enhancement, and environmental education (Fennell, 2021; Singh et al., 2021). To be effective, it is essential to maintain a balance between tourism development and the preservation of ecological and cultural values. Moreover, active community participation plays a crucial role in sustaining long-term benefits and fostering the sustainable development of destinations (Stronza & Gordillo, 2008).

2.2. Theories used in the research

This study adopts an integrative and multi-level theoretical framework to explain local community participation in sustainable ecotourism development. Rather than applying theories in isolation, the framework combines the Theory of Planned Behavior (TPB), Institutional Theory, Social Capital Theory, and the Triple Bottom Line (TBL) to capture both individual-level behavioral mechanisms and structural-level contextual influences.

At the individual level, the Theory of Planned Behavior (Ajzen, 1991) provides the core explanatory mechanism for participation decisions. TPB posits that behavior is primarily driven by intention, which is shaped by attitudes, subjective norms, and perceived behavioral control. In the context of sustainable ecotourism, community attitude reflects residents' overall evaluation of tourism-related economic, social, and environmental outcomes, and therefore represents a central determinant of participation.

At the structural and collective level, Institutional Theory and Social Capital Theory define the contextual conditions under which individual attitudes and intentions are formed. Institutional Theory emphasizes the influence of regulatory, normative, and cognitive structures, including policies, governance arrangements, and shared rules, on individual behavior. Within sustainable ecotourism development, institutional conditions affect residents' perceptions of feasibility, fairness, and legitimacy, thereby shaping both attitudes toward participation and perceived behavioral control.

Social Capital Theory complements this perspective by highlighting the role of trust, cooperation, and social networks within communities. High levels of social capital strengthen social norms, facilitate information sharing, reduce uncertainty, and enhance collective efficacy. These relational resources indirectly influence participation decisions by shaping community attitudes and reinforcing supportive subjective norms.

The Triple Bottom Line framework (Elkington, 1997) provides the substantive content of perceived benefits associated with participation. It conceptualizes benefits across three dimensions: economic (income and employment), social (community cohesion and quality of life), and environmental (resource conservation). These perceived benefits are theorized to influence participation primarily through their effect on attitudes rather than as purely direct motivators.

By integrating these theories, the study conceptualizes community participation as the outcome of an interaction between individual psychological mechanisms and broader institutional and social contexts. This multi-level integration enables a more comprehensive explanation of participation behavior in sustainable ecotourism development.

2.3. Proposed research model

Building on the integrative framework, the proposed research model reflects a contextualized application of TPB, in which individual attitudes serve as the primary psychological driver of participation, while institutional conditions and social capital shape the broader environment in which attitudes and intentions are formed. According to the Theory of Planned Behavior (TPB), attitude toward a behavior is a key determinant in shaping both intention and actual behavior (Ajzen, 1991). When individuals evaluate a behavior positively, they are more likely to engage in that behavior. In the context of sustainable ecotourism, the attitudes of local communities toward the economic, social, and environmental benefits of tourism significantly influence their level of participation. Previous studies have suggested that residents with positive attitudes are more willing to engage in ecotourism development (Dung & Ha, 2019; Luong et al., 2022). At the Vam Sat Tourist Site in Can Gio, an area with high potential due to its mangrove ecosystem and natural resources, the role of the local community is particularly important in ensuring the sustainability of tourism activities. When residents hold positive attitudes, they are more likely to participate proactively, which in turn enhances management effectiveness, resource conservation, and tourism development aligned with community benefits. Based on this rationale, the following hypothesis is proposed:

H1. The attitude of the local community has a positive influence on their decision to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

The system of policies and management mechanisms plays a crucial role in either promoting or hindering community participation in the development of ecotourism. When local authorities fail to implement supportive policies in a consistent and effective

manner, it can reduce the motivation and level of engagement among residents (Thu et al., 2019). Additionally, a lack of transparency and fairness in ecotourism management can undermine community trust in local governance, thereby obstructing cooperation and proactive participation (Ngo, 2018; Thanh & Hoa, 2022). Based on this rationale, the following hypothesis is proposed:

H2. Institutional and policy-related barriers have a negative impact on the decision of local communities to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

The service capacity of local communities including knowledge, skills, and experience in tourism activities is considered a fundamental factor influencing their level of participation in sustainable ecotourism initiatives. According to Stronza and Gordillo (2008), in many Latin American communities, training programs in hospitality, tour guiding, and tourism management have contributed to capacity building and encouraged proactive community involvement in ecotourism models. Similar findings were reported by Dung and Ha (2019) in Hue, indicating that individuals with strong service skills tend to participate more actively. In Hoi An, Thu et al. (2019) also highlighted that practical experience gained from previous tourism models plays a motivating role in encouraging continued community engagement in future tourism activities. Based on this rationale, the following hypothesis is proposed:

H3. Service capacity has a positive impact on the decision of local communities to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

Natural resources, biodiversity, and distinctive landscapes are foundational elements that shape the potential for sustainable ecotourism development and influence the level

of community participation (Huynh et al., 2024). When these resources are clearly identified, properly conserved, and reasonably utilized, they not only facilitate economic development but also motivate local communities to actively engage in tourism activities (Stone & Stone, 2010). Local resources are considered a catalyst for fostering a sense of ownership and responsibility among community members in the tourism development process. Communities are more willing to participate when they perceive their resources as unique, valuable, and capable of generating sustainable benefits. The sustainable use of local resources helps strengthen community identity, enhance pride and self-governance, and build trust and cohesion, thereby encouraging long-term participation in tourism development programs (Nunkoo & Ramkissoon, 2011).

H4. Local resources have a positive impact on the decision of local communities to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

The benefits brought by ecotourism play a crucial role in encouraging local community participation in the development of sustainable ecotourism. According to the Triple Bottom Line model proposed by Elkington (1997), these benefits can be analyzed across three main dimensions: economic, social, and environmental. In addition to the benefits already realized, expected benefits that individuals believe they will gain through participation are also considered important factors influencing community decisions (Nguyen & Truong, 2021). Hsu and Lin (2014) suggest that expected benefits can foster positive attitudes, which in turn lead to specific behaviors. In the field of natural resource management, numerous studies have shown that both financial and non-financial benefits can motivate individuals to engage in conservation and sustainable development

activities (Adhikari et al., 2014; Coulibaly-Lingani et al., 2011; Lokonon et al., 2023). Therefore, when local residents perceive the potential to gain both tangible and intangible benefits from participating in sustainable ecotourism activities, they are more likely to engage actively in the process (Nguyen et al., 2024b). It is important to distinguish between different dimensions of perceived benefits, including expected benefits, realized benefits, and perceived fairness in benefit distribution. While expected benefits may shape initial attitudes toward participation, realized benefits and perceived distributive fairness determine whether individuals perceive participation as worthwhile and equitable over time. Failure to differentiate these dimensions may obscure the true relationship between benefits and participation behavior.

H5. Perceived benefits have a positive impact on the decision of local communities to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

Social capital, reflected through mutual trust, cooperation, and community cohesion, is considered a critical foundation for encouraging local participation in ecotourism development (Huynh et al., 2024). This concept extends beyond economic dimensions to include cultural, social, and environmental factors that influence how communities collaborate and interact with stakeholders in the local development process (Huynh et al., 2024). Previous studies have also demonstrated that indicators of social capital such as participation in community groups, transparency of information, and benefit-sharing significantly affect the decision of local communities to engage in tourism development (Nghien et al., 2012; Dung & Ha, 2019; Huynh et al., 2024; Nguyen et al., 2024b). Based on this rationale, the following hypothesis is proposed:

H6. Social capital has a positive impact on the decision of local communities to participate in the development of sustainable ecotourism at Vam Sat, Can Gio.

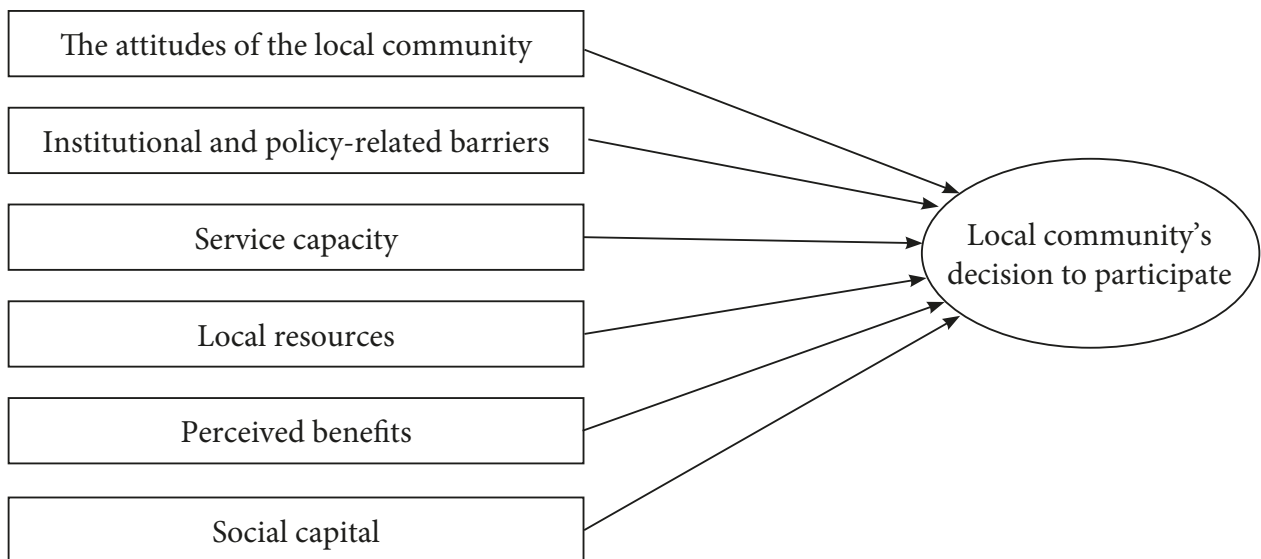


Figure 1. Proposed research model

3. Methodology

The study was conducted in two phases. The first phase involved qualitative research aimed at developing and refining the theoretical model through interviews with experts and local officials experienced in ecotourism at the Vam Sat Tourist Site in Can Gio Commune, as well as a review of relevant literature. The second phase consisted of quantitative research designed to identify and measure the extent to which various factors influence the decision of local communities to participate in the development of sustainable ecotourism.

3.1. Data collection method

This study employed a face-to-face survey method using a structured questionnaire to collect primary data from households residing in the Vam Sat area, Can Gio Commune, Ho Chi Minh City. The survey targeted individuals representing each household, with only one respondent selected per household to ensure the independence of observations. The sample was selected using convenience sampling combined with proportional allocation based on residential areas. Data collection was conducted through direct household interviews, in which the research team visited each household to administer and collect the questionnaires. During the survey process, explanations were provided when necessary to minimize response bias and enhance data reliability. The data collected were subsequently analyzed using quantitative methods in accordance with statistical procedures appropriate to the research objectives.

The sample size was determined based on the requirements of exploration factor analysis (EFA). According to the recommendation by Hair et al. (1998), a minimum sample size for EFA should be at least five times the number of observed variables. With 29 observed variables, the minimum required sample size is 145. Additionally, Tabachnick and Fidell

(2013) suggest that the sample size for multiple regression analysis should follow the formula $n \geq 50 + 8p$, where p is the number of independent variables. With six independent variables, the minimum sample size is 98. Therefore, the research team decided on a sample size of 165 to account for potentially invalid responses. After removing incomplete or invalid questionnaires, the final valid sample size was 150, which meets the minimum requirement for statistical analysis. (see Appendix 1)

The survey sample consisted of 150 residents, with males accounting for a higher proportion than females, reflecting the labor structure and patterns of economic participation in the study area. Respondents aged between 20 and over 40 constituted the majority, indicating that individuals of working age were the primary participants. In terms of occupation, small scale traders, wage laborers, and government officers or public servants represented a substantial share, highlighting a diversified livelihood structure closely associated with tourism and local service activities. Most respondents had an education level of upper secondary school or below and had resided in the area for more than ten years, suggesting that the sample possessed relatively in-depth knowledge of the local socio-economic conditions and tourism development context.

3.2. Scales

All measurement scales in this study employed a five-point Likert format, with the following response options: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. (see Appendix 2)

3.3. Data analysis method

All collected data were coded and processed using SPSS version 27. The analysis included descriptive statistics, assessment of scale reliability through Cronbach's Alpha and Exploratory Factor Analysis (EFA), as well

as multiple linear regression to examine the relationships among variables.

The multiple linear regression equation of the research model is specified as follows:

$$\text{LCD} = B_0 + B_1\text{AT} + B_2\text{IPR} + B_3\text{SC} + B_4\text{LR} + B_5\text{PB} + B_6\text{SOC} + \varepsilon \quad (1)$$

Where:

LCD: the dependent variable, measured by the participation decision of the local community in the development of sustainable ecotourism at Vam Sat, Can Gio.

B_0 : the intercept (constant term).

B_i ($i = 1...5$): the regression coefficients of the corresponding independent variables.

AT, IPR, SC, LR, PB, SOC: groups of independent variables.

ε : the error term.

4. Research findings

4.1. Reliability testing of the measurement scales using cronbach's alpha

To ensure the reliability of the measurement scales, the study employed Cronbach's Alpha coefficient. Accordingly, observed variables with item-total correlation coefficients below 0.3 were eliminated. In addition, a scale was only accepted if the Cronbach's Alpha coefficient reached a value of 0.6 or higher (Nguyen, 2013) (see Appendix 3).

The results indicate that all 29 observed variables, which belong to six independent factors and one dependent factor, met the acceptable thresholds for Cronbach's Alpha and item-total correlation. Therefore, all observed variables were retained for subsequent Exploratory Factor Analysis (EFA).

4.2. Exploratory factor analysis EFA

The results of the EFA indicate that Bartlett's test of sphericity was statistically significant (Sig. = 0.000 < 0.05), and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.890

(> 0.5), suggesting that the data were suitable for factor analysis. All factors had eigenvalues greater than 1, with the total variance explained reaching 84.411% (> 50%). Moreover, all observed variables had factor loadings greater than 0.5. The rotated factor matrix revealed that the 29 observed variables were grouped into six distinct factors, corresponding to the six hypotheses proposed in the research model (see Appendix 4).

The EFA results for the dependent factor show that the KMO value was 0.818 (> 0.5) and Bartlett's test of sphericity was statistically significant (Sig. = 0.000 < 0.05), indicating that the data were suitable for factor analysis. One factor was extracted with an eigenvalue of 2.881 (> 1), and the total variance explained reached 72.034% (> 50%). All factor loadings exceeded 0.5, ranging from 0.831 to 0.868, demonstrating good convergent validity of the scale and confirming its suitability for subsequent analyses.

4.3. Pearson Correlation Analysis

The Pearson correlation coefficient is used to quantify the strength of the linear relationship between two quantitative variables. Correlation analysis helps determine whether there is a statistically significant relationship between variables, thereby serving as a basis for applying regression analysis to examine causal relationships between independent and dependent variables. Table 5 presents the Pearson correlation matrix between the dependent variable and the independent variables. The results indicate that all six independent variables are significantly correlated with the dependent variable (Sig. < 0.005), thus satisfying the necessary condition for inclusion in the subsequent regression analysis (Hoang & Chu, 2008).

4.4. Regression Analysis

The results of the linear regression analysis show that the model has an R^2 of 0.785 and an adjusted R^2 of 0.776. The adjusted R^2 value of

0.776 indicates that the model explains 77.6% of the variance in the dependent variable – the local community's participation decision (LCD). The R^2 value of 0.785 suggests that 78.5% of the variation in LCD is jointly explained by the six independent factors (AT, IPR, SC, LR, PB, SOC).

The Durbin-Watson is 1.853, which falls within the acceptable range of 1.5 to 2.5, indicating no autocorrelation among the residuals. Therefore, the research model is statistically valid.

Table 1. Results of multiple linear regression analysis

Model	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t-value	Sig.	Collinearity Statistics	
					Tolerance	VIF
Constant	0.487		1.804	0.073		
AT	0.390***	0.436***	9.611	0.000	0.731	1.367
IPR	-0.169***	-0.201***	-4.254	0.000	0.671	1.491
SC	0.149***	0.173***	3.890	0.000	0.762	1.312
LR	0.164***	0.173***	3.977	0.000	0.795	1.258
PB	0.060	0.063***	1.346	0.180	0.684	1.461
SOC	0.238***	0.245***	5.436	0.000	0.738	1.355
Model fit						
R^2		0.785				
Adjusted R^2		0.776				
Durbin-Watson		1.853				
F		87.003				
Sig.		0.000				

Note: *, **, and *** denote significance levels at 10%, 5%, and 1%, respectively.

The ANOVA results show that the F-test value is 87.003 with a significance level of Sig. = 0.000 < 0.05, indicating the existence of a statistically significant relationship between the independent variables (AT, IPR, SC, LR, PB, and SOC) and the dependent variable (LCD). This confirms that the multiple linear regression model fits the data well and is valid at the 99% confidence level.

According to Table 1, the results of the multiple linear regression analysis between the six independent variables (AT, IPR, SC, LR, PB, and SOC) and the dependent variable (LCD) show that the standardized Beta coefficients are as follows: 0.436, 0.201, 0.173, 0.173, 0.063, and 0.245, respectively. Most of the regression

coefficients have significance levels of Sig. = 0.000 < 0.05 (except for the variable PB, which has Sig. = 0.180), indicating that they are statistically significant in explaining the dependent variable (LCD).

Additionally, all six independent variables have Tolerance values greater than 0.0001, meeting the acceptance threshold, and all Variance Inflation Factor (VIF) values are less than 2, indicating that multicollinearity is not a concern in the model.

The histogram displaying the standardized residuals of the regression model indicates that the residuals are approximately normally

distributed, exhibiting a bell-shaped curve. The mean of the residuals is approximately zero (Mean $\approx -9.24E-16$), and the standard deviation is close to one (Std. Dev. = 0.980), which aligns with the characteristics of standardized residuals (see Appendix 6). Additionally, the histogram does not reveal any clear signs of skewness (neither left nor right) or the presence of severe outliers. These features suggest that the assumption of normality of residuals—a fundamental requirement of linear regression—has been met. Therefore, the regression model

can be considered statistically appropriate and reliable.

The standardized regression equation, using Beta coefficients at the 1% significance level (99% confidence level), is presented as follows:

$$\text{LCD} = 0.436 \cdot \text{AT} - 0.201 \cdot \text{IPR} + 0.173 \cdot \text{SC} + 0.173 \cdot \text{LR} + 0.245 \cdot \text{SOC} \quad (2)$$

Based on the results of the regression analysis, the hypothesis testing outcomes of the research model are presented in Table 2.

Table 2. Hypothesis testing results of the research model

Hypothesis	Expectation	Regression Sign	Beta Coefficient	Accept
H1 AT → LCD	Positive	+	0.436***	Yes
H2 IPR → LCD	Negative	-	-0.201***	Yes
H3 SC → LCD	Positive	+	0.173***	Yes
H4 LR → LCD	Positive	+	0.173***	Yes
H5 PB → LCD	Positive	+	0.063	No
H6 SOC → LCD	Positive	+	0.245***	Yes

Note: *** denotes significance at the 1% level.

4.5. Discussion

This study contributes to the expansion of the theoretical framework on factors influencing local community participation in sustainable ecotourism development in Vietnam, particularly in the context of green tourism within biosphere reserves such as Can Gio. The empirical results indicate that Community Attitude, Institutional and Policy Barriers, Service Capacity, Local Resources, and Social Capital have statistically significant effects on participation decisions, which is largely consistent with both the theoretical foundation and previous empirical studies (Dung & Ha, 2019; Luong et al., 2022; Thu et al., 2019; Huynh et al., 2024). At the same time, the findings reveal important conceptual tensions,

especially regarding the assumed role of perceived benefits in motivating participation.

Community Attitude emerges as the strongest predictor of participation decisions, with the highest standardized coefficient, confirming earlier findings by Dung and Ha (2019) and Luong et al. (2022). This result reinforces the argument that participation in sustainable ecotourism is primarily value driven rather than purely income oriented. Local residents, particularly women, tend to associate ecotourism not only with livelihood improvement but also with environmental conservation, community cohesion, and long-term local development. Such attitudinal consensus reflects a deeper psychological commitment that may sustain participation

even when short term economic returns are uncertain.

The hypothesis related to Institutional and Policy Barriers indicates a significant negative impact on participation decisions, which aligns with the findings of Thu et al. (2019). This result highlights a structural contradiction: positive community attitudes alone are insufficient when institutional arrangements remain opaque or burdensome. Unclear legal regulations, complex administrative procedures, and limited transparency in policy implementation undermine trust and reduce residents' willingness to engage, suggesting that governance quality is a critical precondition for effective community participation.

Service Capacity is also confirmed as a significant determinant, supporting previous empirical evidence. The findings suggest that limited skills and knowledge constrain local participation to low value roles, reinforcing dependency rather than empowerment. Conversely, when residents perceive themselves as capable of delivering tourism services, guiding visitors, and engaging in conservation activities, they are more likely to participate actively and take initiative in tourism development. This result underscores the importance of capacity building as a central rather than peripheral component of sustainable ecotourism strategies.

The positive effect of Local Resources further corroborates earlier studies (Huynh et al., 2024), emphasizing the foundational role of natural assets in ecotourism development. In the case of Vam Sat, the mangrove ecosystem and biodiversity not only provide ecological value but also shape local identity and attachment. When residents recognize that environmental conservation ensures long term livelihood security, participation becomes a rational and ethically grounded choice rather than a purely economic calculation.

Social Capital also shows a statistically significant influence, consistent with Dung and Ha (2019) and Huynh et al. (2024). Trust, reciprocity, and cooperation among community members function as informal institutions that facilitate collective action and reduce coordination costs. This internal social foundation strengthens community-based tourism initiatives and enhances their long term sustainability.

The insignificant effect of Perceived Benefits may be attributed to the heterogeneous nature of benefits perceived by local residents. While some respondents focus on expected economic gains, others emphasize realized outcomes or fairness in benefit distribution. In contexts where benefits are unevenly distributed or not transparently communicated, perceived benefits may fail to translate into stronger participation decisions. This finding suggests that perceived benefits influence participation indirectly through attitudes and trust, rather than exerting a direct linear effect.

Overall, the findings indicate that local community participation in sustainable ecotourism is shaped by a complex interplay of attitudinal, institutional, social, and environmental factors rather than by perceived benefits alone. This study therefore argues for a more integrative approach to sustainable ecotourism development, in which governance quality, capacity building, social cohesion, and value alignment are treated as core drivers of participation alongside economic considerations. Such an approach aligns with successful international experiences and offers a realistic pathway for destinations such as Vam Sat in Can Gio to achieve inclusive and sustainable ecotourism development.

5. Conclusion

This study aimed to identify the factors influencing local community participation in

the development of sustainable ecotourism at the Vam Sat tourist area, Can Gio district. Based on a review of relevant theories and survey data from 150 respondents, the initial research model included six independent variables. After reliability testing and regression analysis, the final model retained five statistically significant factors: Community Attitude, Institutional and Policy Barriers, Service Capacity, Local Resources, and Social Capital. The results show that all these factors have a positive impact on community participation, with Community Attitude and Social Capital exerting the strongest influence. These findings highlight the importance of awareness, community cohesion, and enabling conditions in promoting local engagement in sustainable ecotourism. They also provide a practical foundation for formulating appropriate policy interventions.

Based on the above findings, the authors propose several recommendations to enhance community participation and contribute to the sustainable development of the local area as follows:

First, Community Attitude is the strongest determinant of participation decisions. This indicates that enhancing residents' awareness, trust, and sense of ownership should be prioritized. Targeted communication activities, community dialogues, and experiential learning programs that demonstrate the long term environmental and social value of ecotourism are essential to reinforce positive attitudes, particularly among groups with moderate or neutral perceptions.

Second, the significant negative effect of Institutional and Policy Barriers suggests that administrative complexity and limited policy accessibility constrain participation. Simplifying procedures, improving transparency, and providing direct policy guidance at the community level are therefore critical to reducing institutional friction and

restoring residents' confidence in governance mechanisms.

Third, Service Capacity has a positive and significant influence, indicating that participation is conditional upon residents' perceived ability to deliver tourism services. Practical, skill based training programs linked to actual ecotourism activities in Vam Sat should be prioritized to enhance confidence, service quality, and integration into the tourism value chain.

Fourth, the positive effect of Local Resources confirms that participation is strengthened when residents recognize the link between resource conservation and long term livelihoods. Actively involving the community in conservation based tourism activities can reinforce this perception and promote sustainable resource use.

Fifth, Social Capital plays a pivotal role in strengthening community cohesion and ensuring the sustainability of ecotourism. In Vam Sat, the establishment of tourism groups or cooperatives is essential for coordinating resources, assigning responsibilities, monitoring service quality, and distributing benefits transparently. To enhance effectiveness, government support is needed in areas such as training, legal assistance, and market access. Community trust should also be reinforced through transparent mechanisms, collective consultation, and regular meetings. High levels of social capital not only reduce potential conflicts of interest but also foster innovation and increase the capacity to mobilize external resources.

Finally, although Perceived Benefits are not statistically significant, this finding indicates that benefits alone do not directly motivate participation when they are unevenly distributed or insufficiently visible. Transparent and equitable benefit sharing mechanisms are therefore necessary to support participation

indirectly through improved attitudes and social trust.

6. Limitations and Future Research

Although this study achieved its research objectives and generated findings of practical relevance, several methodological limitations should be acknowledged.

First, the use of convenience sampling limits the generalizability of the results. The sample may not fully represent the broader population of local communities involved in ecotourism, and potential sampling bias could influence the estimated relationships among variables. Future studies should employ probability based sampling techniques and larger sample sizes to improve external validity.

Second, although multivariate linear regression with Likert scale based latent constructs is acceptable at a basic analytical level, this approach does not fully capture the underlying conceptual structure of the proposed model. The use of regression analysis constrains the ability to simultaneously assess measurement validity and structural relationships. Future research is therefore encouraged to apply Structural Equation Modeling or Partial Least Squares SEM to

better examine latent constructs, mediating mechanisms, and overall model fit.

Third, as the study relies entirely on self reported survey data, the potential for Common Method Bias cannot be ruled out. This research did not explicitly test for such bias, which may inflate observed relationships among variables. Future studies should incorporate procedural remedies or statistical tests to assess and mitigate common method variance.

Finally, several measurement scales exhibited very high Cronbach's alpha values exceeding 0.95, suggesting possible item redundancy and limited discriminant validity. Future research should refine these scales by reducing overlapping items and employing complementary reliability and validity indicators to strengthen measurement robustness.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used ChatGPT (OpenAI, GPT-5.2, accessed in 2026) to improve readability, grammar, and language quality, as well as to assist with translation. The authors reviewed, edited, and take full responsibility for the final content of the manuscript.

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