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An evaluation on community participation in ecotourism activities post Covid-19 pandemic at Tan Loc islet, That Not district, Can Tho city

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ABSTRACT

The article aims to assess the status of community participation and the factors affecting community participation in ecotourism activities at Tan Loc islet, That Not district, Can Tho City after the Covid-19 pandemic. This study is conducted through documents, field trips, and questionnaires. The empirical results show five factors affecting community participation: perception of economic benefits, social capital, local resources, local policies, and lessons from the Covid-19 pandemic. Based on those mentioned earlier, the paper proposes several solutions to enhance community participation in ecotourism development in this area.

1. INTRODUCTION

According to the report by the Vietnam National Administration of Tourism and the General Statistics Office (2023), the first half of 2023 witnessed an impressive recovery in Viet Nam's tourism sector. Specifically, the tourism industry in Vietnam has shown promising signs as it welcomed nearly 5.6 million international visitors, reaching 70% of the annual target. Many markets have exceeded the levels of recovery compared to 2019. Domestic tourists reached 64 million visits. The total revenue from tourism reached 343 trillion Vietnamese dong. Therefore, the domestic tourism market has almost fully recovered compared to pre-Covid-19.

Tan Loc islet is approximately 40km from the city center of Can Tho. It belongs to Tan Loc ward, That Not district, Can Tho city. It was once known as the "Sweet Land" due to its history as a sugarcane

cultivation area with hundreds of traditional sugar processing facilities. Currently, Tan Loc Islet has embraced a new identity. Alongside ancient houses that have withstood the test of time and the warm, rustic way of life of the Mekong Delta region, Tan Loc Islet boasts fertile land highly conducive to the development of various forms of tourism. The predominant form of tourism on Tan Loc Islet is ecotourism. However, because of the significant challenges posed by the Covid-19 pandemic, people still have numerous concerns about participating in this tourism activity. To conduct an in-depth study on the participation of the local population in ecotourism activities after the Covid-19 pandemic, the research team performed this study to assess the community's involvement in ecotourism activities in Tan Loc Islet. The results will be valuable for the local government, tourism businesses, and the community, providing support for strategic decision-making and policies to recover and

develop the ecotourism industry in the post-pandemic period.

2. THEORETICAL REVIEWS AND RESEARCH MODEL

2.1. Theoretical reviews

Ecotourism is the fastest-growing form of tourism in the world, becoming environmentally friendly and minimizing harmful impacts on the tourism environment while generating economic opportunities for the local people (Farrell & Runyan, 2001; Watkin, 2003; Nyaupane & Thapa, 2004; Bhattacharya et al., 2012; Eshun & Tagoe-Darko (2015). Many research works on ecotourism have confirmed that ecotourism is a form of tourism that does not damage natural areas, for the purpose of contemplating and understanding nature (Fennell (2002b); Lim & McAleer, 2005). According to researchers, ecotourism is a new field but has attracted special attention from researchers on tourism and the environment. Ecotourism is responsible travel to natural areas that help to conserve the environment and improve the lives of local people (Boo, 1991; Ross & Wall, 1999). According to the World Union for Conservation of Nature (IUCN) also introduced the concept: "Ecotourism is environmentally responsible sightseeing and travel to natural sites that are not damaged. explore to enjoy nature and cultural features that have existed in the past or present, encouraging protection activities, limiting negative impacts caused by visitors, and creating benefits for those local people (Ceballos - Lascura in, 1996).

At the seminar on: "Building a strategy for developing ecotourism in Vietnam" (09/1999) of the tourism development research institute under the Vietnam National Administration of Tourism in collaboration with many international organizations such as Economic and Social Commission for Asia and the Pacific (ESCAP), World Wide Fund For Nature (WWF), International Union for Conservation of Nature (IUCN) with the participation of international and Vietnamese experts and scientists gave a definition of ecotourism: "Ecotourism is a type of tourism based on nature and indigenous culture, associated with environmental education, contributing to conservation and sustainable development efforts, with the active participation of local communities". This definition is considered a favorable prelude to ecotourism research and development activities in Vietnam (Ba, 2009).

Ecotourism can stimulate economic development and social welfare of the people as well as protect the natural environment and cultural heritage by creating awareness (Manu & Kuuder, 2012). It should be used as an ecotourism development approach to natural resource management based on community and livelihood diversification. It is helpful to help develop the economy through increased employment and income in the locality. Besides, community involvement functions as an incentive to protect the natural and cultural environment of the community as tourism products, while at the same time encouraging higher tourism-related income (Felstead, 2000; Snyman, 2013). Aref & Ma'rof (2008) also argue that community participation is the core of community development and a component of sustainable tourism development.

In ecotourism, stakeholders can range from the public sector, private sector, non-governmental organizations (NGOs), tourism operators, tourism sites, academic researchers, as well as local communities (Snyman, 2016). The development, success and sustainability of ecotourism depend on the active participation of various stakeholders. All these stakeholders play different roles depending on their capacity, type of ecotourism and the necessary level(s) of participation (Stronza, 2007; Eshun et al., 2015; Snyman, 2016; Kline & Slocum, 2017).

The concept 'local community participation' has emerged, been popularized, and advocated, especially in developing countries, as one of the essential components or principles of ecotourism development (United Nations Development Programme [UNDP], 2003; Honey, 2008; Fletcher, 2009; Wang et al., 2015), many developing countries, especially those within the African continent have been declared as non-compliant to this phenomenon. For instance, the study conducted by Gabriel and Eva (2015) shows that ecotourism activities undertaken in the Owabi Wildlife Sanctuary in Ghana are more concerned with the conservation of natural resources than the well-being of local communities.

According to Tosun (2006), the ability of the community to take part in tourism activities is a crucial condition in the construction and development of various types of tourism. Studies by Bramwell & Sharman (2002), Liu (2006), Kang (2008), Kayat (2009), and Santikul (2009) have shown that the factors determining the willingness of local people to take part in tourism activities are:

the support and contribution of the local government in tourism development, characteristics of the family (family size, income-generating professions, income-generating occupations, traditional family occupations, social relationships, membership in unions, etc.), and factors belonging to the household head (education level, age, social status, prestige).

Key & Pillai (2006) studied minority community participation and attitudes towards tourism in Belize, Central America. The author does not state the underlying theory. Quantitative research method (through a questionnaire with 107 households). Factors affecting community participation include socio-economic status (income, education, and occupation) of local people, intensity of contact with tourists, awareness of environmental impacts from tourism, and ethnicity.

Zhang (2010) studied the individual characteristics that influence community participation in tourism planning in the southeastern region of India. Research shows that people prefer to take part spontaneously rather than encouraged to take part. There are five factors affecting community participation including demographic characteristics, assessment of current participation, self-assessment of tourism knowledge, attitudes towards tourism career choice, and perception of tourism impacts (perception of economic benefits, environmental sustainability, perception of social costs).

Wei et al. (2012) used research methods such as field surveys, household questionnaire surveys, and logistic regression analysis to determine the influencing factors of community participation in process tourism development. The results show that there are four main factors affecting community participation: comparative benefits of the tourism industry, subjective desire of residents to take part, conscious preferences for acquiring work opportunities in tourism enterprises, and participants' skills. Since then, the authors have proposed several solutions to improve the participation of local communities: increasing the comparative benefits of the tourism industry, enhancing tourism attraction to promote participants' desire, improving the sense of interest in opportunistic work in the tourism industry, and cultivating residents' participation skills through training.

Salleh et al. (2016) have identified factors that can specifically stimulate communities to engage in tourism-related business. Direct interviews with local communities using a questionnaire as a

research tool were conducted to achieve the objectives. Data were analyzed using SPSS and Linear Structural Analysis using Analysis of Moment Structures (AMOS) software. The results show that the participation of local business communities related to tourism is influenced by two main factors: income and encouragement from family. Next are factors such as confidence, interest, and opportunities available in Langkawi.

2.2. Research model

There are currently numerous studies on factors influencing community participation in tourism, such as Tosun (2006), Zhang (2010), Thammajinda (2013), Mohd et al. (2013), Styliadis et al. (2014), Yun et al. (2017). Besides, numerous investigations have been carried out in Vietnam regarding this subject, including the research conducted by Nghi et al. (2012), Toan et al. (2016), Dung & Ha (2019), and others. Overall, these studies have developed models of factors influencing community participation that are quite comprehensive. However, to date, there has been no study on the participation of the local population in Tan Loc islet. There has been no research evaluating the participation of the local population in this activity since the Covid-19 pandemic.

The authors of this study identify ecotourism as a business form that involves the participation of various stakeholders, including the local community, local authorities, tourism organizations, and tourists. Based on the characteristics of this form of tourism and integrating previous research frameworks, the authors have developed the following research hypotheses:

2.2.1. Perception of economic benefits

"Perception of economic benefits" refers to the ability to understand and recognize the economic aspects of participating in ecotourism activities for individuals and organizations. Studies by Tosun (2000), Nghi et al. (2012), and Thammajinda (2013) have showed that the measure of "Perception of economic benefit" influences the participation of residents in ecotourism activities. Therefore, the research team expects and hypothesizes:

H1: Perception of economic benefit positively influences the community's participation in ecotourism activities in Tan Loc islet.

2.2.2. Social capital

"Social capital" in ecotourism activities typically refers to the social resources that each individual

brings and contributes to the community during their participation in tourism activities. Social capital includes not only economic factors but also various dimensions such as culture, environment, and society. Studies by Thammajinda (2013), Dung & Ha (2019), and Nghi et al. (2012) have showed that the measure of social capital influences their participation in ecotourism activities. Therefore, the research team expects and hypothesizes:

H2: Social capital positively influences the community’s participation in ecotourism activities in Tan Loc islet.

2.2.3. Local policies

“Local policies” refer to regulations, decisions, and guidelines set forth by local authorities to manage and govern ecotourism activities. Studies by Zhang (2010), Hanafish et al. (2013), Toan et al. (2016) have showed that the measure of “Local policies” influences the participation of residents in ecotourism activities. Therefore, the research team expects and hypothesizes:

H3: Local policies positively influence the community’s participation in ecotourism activities in Tan Loc islet.

2.2.4. Local resources

“Local resources” include the resources and capabilities available to the local government for utilization and management. These resources apply to ecotourism activities and may comprise budget, land, technology, human resources, culture, and tourism. Studies by Zhang (2010), Styliadis et al. (2014), Yun et al. (2017) have showed that the measure of local resources influences the

participation of residents in ecotourism activities. Therefore, the research team expects and hypothesizes:

H4: Local resources positively influence the community’s participation in ecotourism activities in Tan Loc islet.

2.2.5. Lessons from the Covid-19 Pandemic

The Covid-19 pandemic has significantly affected various aspects of global life and the economy, with the tourism industry being one of the hardest hit. Lessons from the pandemic refer to the conditions, mechanisms, and solutions developed to cope with similar pandemics like Covid-19. The research team has developed a specific measurement scale for this study and sets the following hypothesis:

H5: Lessons from the Covid-19 pandemic positively influence the community’s participation in ecotourism activities in Tan Loc islet.

To represent these relationships, the study presents the equation for community participation in ecotourism activities in Tan Loc Island:

$$CPEA = \beta_0 + \beta_1 \times PEB + \beta_2 \times SOC + \beta_3 \times LOP + \beta_4 \times LOR + \beta_5 \times LFCP + \varepsilon$$

In which: CPEA: Community participation in ecotourism activities; PEB: Perception of economic benefits; SOC: Social capital of local residents; LOP: Local policies; LOR: Local resources; LFCP: Lessons from the Covid-19 pandemic; ε : Residual: the error term

Based on the stated hypotheses, the group authors depict these causal relationships in Figure 1 below.

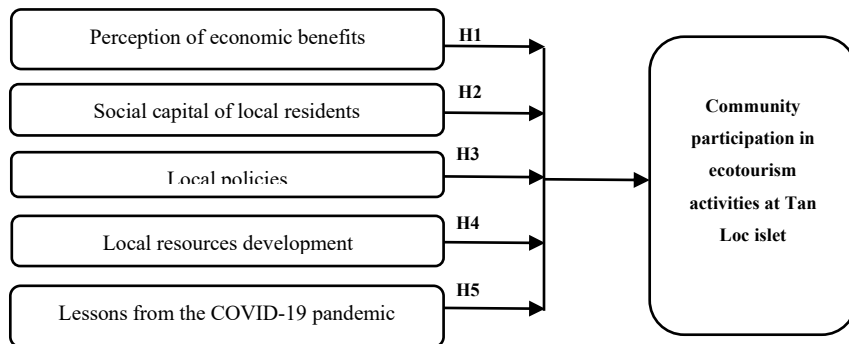


Figure 1. Proposed research model

(Source: Authors’ proposal, 2023)

3. RESEARCH METHODS

3.1. Secondary data collecting and processing

Secondary data related to ecotourism at Tan Loc islet, Thot Not district, and Can Tho city are collected from various sources in the last five years, such as the Internet, books, newspapers, scientific journals, documents, resolutions, statistics, and reports related to the research problem. This source of data is processed by comparison, evaluation, and synthesis methods to ensure the validity and relevance of transferred data.

3.2. Primary data collection and processing

3.2.1. Field survey method

Field surveys were conducted at Tan Loc islet from February to April 2023 for observations, interviews,

Table 1. Measurement variables of survey scales

Code	Measurement Variable
PEB01	Ecotourism generates stable income for the community
PEB02	Ecotourism enhances job opportunities for residents
PEB03	Ecotourism creates new business opportunities for residents
PEB04	Ecotourism increases the personal income of residents
SOC05	Pride in sharing the community’s culture and traditions with tourists
SOC06	Ecotourism helps me build and maintain positive relationships with the community
SOC07	Ecotourism helps me expand my network and create new collaborative opportunities
SOC08	Conserving the environment is a way to protect resources for future generations
LOP09	Local policies support fairness and sustainability
LOP10	Local policies prioritize the preservation of culture and the environment in ecotourism development
LOP11	Local policies emphasize the rights and participation of residents
LOP12	Local policies are effectively addressing social issues
LOR13	The locality has the capacity to provide quality ecotourism experiences and attract tourists
LOR14	The locality has the skills and resources to promote ecotourism development
LOR15	The locality has the ability to maintain and preserve natural and cultural resources
LOR16	The locality has the capacity to establish support systems and collaborate with partners to promote ecotourism
LFCP17	The local community has learned lessons and experiences to cope with the pandemic
LFCP18	The pandemic has encouraged collaboration among stakeholders to build a robust ecotourism model and mitigate risks
LFCP19	Lessons from the Covid-19 pandemic have created opportunities for more sustainable ecotourism development
LFCP20	The pandemic has prompted positive changes in the management and implementation of ecotourism
CPEA21	I observe active community participation in promoting and marketing ecotourism
CPEA22	Local communities frequently provide opinions and contribute to decision-making in ecotourism development
CPEA23	The participation of residents is a key factor in building a unique and successful ecotourism experience
CPEA24	Providing opportunities for residents to participate in ecotourism enhances pride and compassion within the community

photographs, and actual data collection. This field survey method helps to assess the potential and advantages of ecotourism development. It also shows the limitations in tourism development in Tan Loc islet nearby.

3.2.2. Interview method via questionnaire

The research team conducted a qualitative study using group discussion techniques to construct a questionnaire for surveying residents. The questionnaire served the purpose of data collection using a 5-point Likert scale with 1 representing “Strongly Disagree,” 2 representing “Disagree,” 3 representing “Neutral,” 4 representing “Agree,” and 5 representing “Strongly Agree”.

Subsequently, the research team collected primary data by directly surveying households that have been or are currently taking part in ecotourism activities in Tan Loc Island. The sampling method used was non-probability convenience sampling. The interviews with the households were conducted at their respective residences. After completing the interviews, the research team compiled the data for processing using the SPSS software.

Sample size: The study uses two techniques for analysis to clarify the research issue: Exploratory Factor Analysis (EFA) and multiple linear regression analysis. According to Hair et al. (2006, cited in Tho, 2011), the number of observations should be greater than 100, with a minimum ratio of 5:1 to the number of measurement variables. Since the study employs 24 measurement variables, the minimum required sample size would be $24 \times 5 = 120$ observations. For multiple linear regression analysis, according to Tabachnick and Fidell (1996), the minimum sample size should follow the formula $n = 50 + 8 \times m$ (m : number of independent variables). For this study, there are 5 independent variables, so the expected sample size would be $50 + 8 \times 5 = 90$ observations. Combining these two criteria, the study needs to collect and analyze a minimum of 120 valid observation variables.

Data analysis method: The study conducted a survey of 126 residents who have been or are currently taking part in ecotourism activities on Tan Loc Island. After data cleaning and validation, the research team retained 120 survey responses for analysis and evaluation. Descriptive statistics were used to assess the level of participation of the residents. The Cronbach's Alpha coefficient was employed to examine the reliability of the measurement scales. Exploratory Factor Analysis (EFA) was conducted to assess the convergence and discriminant validity of each factor influencing the residents' participation. Last, the study performed correlation and multiple regression analysis to evaluate the extent of the impact of each factor on the residents' engagement in this activity.

4. RESULTS AND DISCUSSION

4.1. Analyzing of research samples

4.1.1. Summary of the demographics of respondents

Interview via questionnaire was conducted through 120 units of households involved in tourism activities.

Respondents' gender: Through the survey of 120 samples in Tan Loc, the respondents showed no ordinate amount of gender disparity, with 52% males and 48% females.

Respondents' age: The research sample was diversified with different ages, of which respondents under 25 years old accounted for 5.8%; from 25 to 35 years old accounted for 28.3%; 35-45 years old accounts for 42.2% and over 45 years old accounts for 21.7%. Through the results of the number of people surveyed, respondents from 35 to 45 years old accounted for the majority of the total sample. The above respondents, most of them are middle-aged people, have a stable life and have lived on the islet since birth, and they are the main source of income for their families.

Respondents' educational level: The number of people with a secondary school education has the highest percentage, accounting for 37.5%; followed by people with primary education with 25%; university level has 24 votes, accounting for 14.7%; people with high school education accounted for 14.2% and people with Intermediate/College education for 9.2%. The majority of people have a high level of education and education has been paid much attention.

Respondents' occupation: The survey shows that the people here live mainly trading and are farmers because the conditions here are suitable for farming and gardening, in which farmers accounted for 14.2%, workers for 15%, gardeners for 26.7%, business people accounted for 34.2%, and government employees for 10%.

Respondents' marital status: According to the survey, about the marital status of the respondents, the majority is married with 101 people (accounting for 84.2%); the single status accounted for only a small part of 19 people (getting for 15.8%). Also, because most surveyed people are 35 years old or older, most of them are married and have stable lives.

Respondents' average monthly income: According to the survey, about the marital status of the respondents, the majority is married with 101 people (accounting for 84.2%); the single status accounts for only a small part of 19 people (getting for 15.8%). Also, because most people are 35 years old or older, most of them are married and have stable lives.

4.1.2. Summary the status of community participation in ecotourism development at Tan Loc islet

Reasons for community participation in tourism activities: The main reason is income improvement, accounting for 59.2%; Matching family occupation accounted for 22.5% and following the encouragement of local government got for 17.5%, 0.8% chose other. The survey shows that tourism plays an important role in the local economy.

Economic benefits for community participation in tourism activities: Tourism helps to raise incomes and improve lives, accounted for 91.7% in the survey, created more jobs, accounted for 87.5%, and was favored by local authorities for 60% and 39.2%. is knowledge enhancement.

Number of years taking part in tourism activities: According to the survey results, most households engaged in tourism have only participated in tourism in the past few years. Up to 50.8% of people took part from 1-3 years; 24.2% of people joined 4-6 years; 14.2% of people attended over 7 years; 10.8% have not taken part in tourism.

Activities serving tourists: According to the survey results, most households engaged in tourism have only participated in tourism in the past few years. Up to 50.8% of people participated from 1-3 years; 24.2% of people joined 4-6 years; 14.2% of people attended over 7 years; 10.8% have not participated in tourism.

Income from tourism activities: People at Tan Loc islet, besides being the main economic source of the family, do tourism mainly to raise their income to improve their lives. According to a survey of 120 votes, partial support accounted for the majority with 59.2%. The main income from tourism is 31.7%, and 9.2% is the insignificant source of income from tourism.

Community participated in training courses on tourism services: The survey showed that 55.8% took part in refresher courses and tourism professional training, and 44.2% did not take part, showing that the locality has focused on tourism training, but the implementation of campaigning is not enough. has not been effective.

Community participated in classes to propagate knowledge about the Covid-19 pandemic, preventive measures to ensure safety when participating in tourism activities: The survey shows that most people have responded to the prevention and control of the disease. During the Covid-19 epidemic, 70.8% of people attended

classes to propagate knowledge about the Covid-19 epidemic, preventive measures to ensure safety when participating in tourism activities and 29.2% did not participate in tourism activities.

Difficulties when community participates in tourism activities: Surveys show that people are facing many difficulties in tourism such as lack of capital 34% over 100%, lack of human resources 32.9% over 100%, limited communication/foreign language skills 50% of the time. One hundred percent and professionalism in service 42.5% over 100% and 34.2% over 100% are not difficult when participating in tourism.

Community's understanding of local tourism activities: Through the survey, people are interested in the local tourism situation with 120 votes, accounting for 100%. Understanding the strengths and the tourist attractions helps them overcome the weaknesses and promote the advantages for the local tourism to develop more and more.

Types of community participation in tourism activities: The most suitable tourism activity for families is serving visitors to the orchard, accounting for 43.3%, followed by serving food services 29.2%, followed by serving souvenirs, handicrafts accounting for 11.7%, serving passenger transportation (boat rental, bicycle rental and others) is 10.8% and the activity that is chosen by few people is accommodation service.

Expectations of community when participating in tourism activities: The survey shows that there are three main aspirations that the author has surveyed 120 people living at Tan Loc islet to be supported with capital (75.8%), receive professional training, tourism skills (83.3%) and finally look forward to legal help (75%).

4.2. Reliability testing of the measurement scale

The study conducted reliability testing of the measurement scale using Cronbach's Alpha coefficient for each scale of the independent variables and the scale of community participation in ecotourism (dependent variable). The test results showed that the Cronbach's Alpha coefficients for all scales were > 0.7 , as shown in Table 2. This shows good measurement reliability. The observed variables of the 06 scales: PEB, SOC, LOP, LOR, LFCP, and CPEA, all had item-total correlations > 0.3 , and the Cronbach's Alpha coefficients of the subscales were lower than the Cronbach's Alpha coefficient of the overall scale. Therefore, all observed variables were deemed acceptable.

Table 2. Reliability Testing of the Measurement Scale using Cronbach’s Alpha coefficient

No.	Scale	Observed Variables	Coefficient
1	Perception of Economic benefits	PEB01, PEB02, PEB03, PEB04	0.804
2	Social capital	SOC05, SOC06, SOC07, SOC08	0.722
3	Local policies	LOP09, LOP10, LOP11, LOP12	0.898
4	Local resources	LOR13, LOR14, LOR15, LOR16	0.866
5	Lessons from the Covid-19 pandemic	LFCP17, LFCP18, LFCP19, LFCP20	0.811
6	Community participation in ecotourism activities	CPEA21, CPEA22, CPEA23, CPEA24	0.854

(Source: Results from the authors’ empirical data analysis survey, 2023)

4.3. Exploratory Factor Analysis

The exploratory factor analysis (EFA) method was used to assess the convergent validity and discriminant validity of the measurement scale. The study employed the Principal Component Analysis with Varimax rotation and stopped extracting factors with eigenvalues greater than 1 (Trong & Ngoc, 2008).

4.3.1. Exploratory Factor Analysis of the independent variables

The results of the first EFA of the independent variable scale, comprising 20 observed variables, revealed the formation of 5-factor groups. However, the measurement variable SOC05 appeared in both the first and third-factor groups with a factor score difference of < 0.3. Therefore, the variable was removed, and a second EFA was conducted. The results of the second EFA of the independent variable scale, with the remaining 19 observed variables. The KMO coefficient for the analysis was

0.748 (within the range of [0.5 - 1.0]), showing that the research data were suitable for exploratory factor analysis. The Sig. value of Bartlett’s test was $0.001 < 0.05$, showing the appropriateness of the second EFA and the inter-correlation of the observed variables in the overall analysis. At the eigenvalue of 1.217, five-factor groups were extracted. The total variance extracted was 69.450%, which exceeded 50%. Therefore, the analysis met the requirements, and the factor analysis results were meaningful. These results indicate the five formed factor groups can explain 69.450% of the variation in the survey data. The Rotated Component Matrix revealed that all observed variables had factor loadings > 0.5. Thus, six factor groups were extracted from the 19 observed variables of the independent variable scale. Since the variables did not exhibit cross-loading across the factor groups, the author retained the names of the groups as initially proposed in the research model.

Table 3. Rotated component matrix

Measurement variable	Factor group				
	1	2	3	4	5
LOP09	0.943				
LOP11	0.865				
LOP12	0.824				
LOP10	0.802				
PEB15		0.851			
PEB14		0.843			
PEB16		0.797			
PEB13		0.788			
PEB03			0.805		
PEB04			0.794		
PEB02			0.722		
PEB01			0.714		
LFCP19				0.885	
LFCP17				0.881	
LFCP18				0.850	
LFCP20				0.564	
SOC08					0.726
SOCH07					0.687

Measurement variable	Factor group				
	1	2	3	4	5
SOC06					0.600
Eigenvalues	4.824	2.759	2.342	2.053	1.217
Extraction Variance	25.391	39.914	52.239	63.046	69.450

(Source: Results from the authors' empirical data analysis survey, 2023)

4.3.2. Exploratory Factor Analysis of the dependent variable

The analysis results in Table 4 indicate that the KMO index is 0.559 (within the range of [0.5 - 1.0]) and the Sig. value of Bartlett's test is 0.001 < 0.05. This shows the appropriateness of the exploratory factor analysis (EFA) results and the inter-correlation of the observed variables in the EFA analysis overall. The Initial Eigenvalues extraction yielded one factor with a value of 2.811 > 1, and the total extracted variance was 70.281% > 50%. Therefore, the analysis met the requirements. All observed variables had factor loadings > 0.5.

Table 4. Results of the Exploratory Factor Analysis of the Dependent Variable Scale

Measurement Variable	Factor
CPEA23	0,861
CPEA21	0,841
CPEA22	0,832
CPEA24	0,819
Eigenvalue: 2.811 - Extraction Variance: 70.281 – KMO: 0.559 – Sig. (Bartlett's): 0.001	

(Source: Results from the authors' empirical data analysis survey, 2023)

4.4. Regression Analysis

4.4.1. Pearson Correlation Matrix Analysis

To ensure the reliability of the research model, the author conducted a Pearson correlation matrix

Table 5. Results of the multiple linear regression analysis

Variable	Unstandardized Coefficient		Standardized Coefficient	Sig.	Tolerance	VIF	Strong/Weak Impact
	β	Error					
Constant	-0.092	0.331		0.783			
PEB	0.154	0.068	0.162	0.026	0.783	1.276	5
SOC	0.169	0.049	0.245	0.001	0.775	1.290	4
LOP	0.200	0.046	0.291	0.000	0.879	1.138	2
LOR	0.226	0.050	0.315	0.000	0.837	1.195	1
LFCP	0.260	0.065	0.255	0.000	0.984	1.016	3
Sample Size: 120 - Adjusted R-squared: 52.3% - Durbin Watson: 2.143 - Sig. (F): 0.001							

(Source: Results from the authors' empirical data analysis survey, 2023)

The estimation results show that all five independent variables included in the regression

analysis among the variables in the model that influence community participation in ecotourism. The results of the correlation analysis showed that all factors had significance levels (Sig.) < 0.05. There was no significant correlation among these factors (correlation coefficient < 0.5). This implies that these five factors do not exhibit multicollinearity.

4.4.2. Multiple Linear Regression Analysis

Based on the results of the Pearson correlation matrix analysis, the author performed a multiple linear regression analysis. The results of the multiple linear regression model analysis (Table 5) showed an adjusted R-squared coefficient of 0.523. This indicates that the independent variables included in the model explain 52.3% of the variation in the dependent variable, which is community participation in ecotourism on Tan Loc islet. The remaining 47.7% of the model variation is attributed to other factors not included in the model. The Durbin-Watson statistic yielded a value of 2.143, indicating no correlation among the residuals. The result of the analysis of variance (ANOVA) showed a significance value (Sig. F.) of 0.001 < 5%. This suggests that the multiple linear regression model constructed is suitable for the collected dataset and can be used. The model does not exhibit multicollinearity as all factors have variance inflation factor (VIF) values < 10.

model, namely perception of economic benefits, social capital, local policies, local resources, and

lessons from the Covid-19 pandemic, have a significant impact on community participation in ecotourism on Tan Loc islet with a 95% confidence level. Based on these results, the standardized REGRESSION equation can be written:

$$CPEA = 0,315 \times LOR + 0,291 \times LOP + 0,255 \times LFCP + 0,245 \times SOC + 0,162 \times PEB + \varepsilon$$

4.5. Discussion

Based on the results of the multiple linear regression analysis, the author identified the strongest influencing factor on community participation in ecotourism on Tan Loc islet, which is local resources with a standardized beta coefficient of 0.315. This means that when local resources increase by 1 unit, holding other factors constant, community participation in ecotourism on Tan Loc islet will increase by 0.315 units. Similarly, other factors such as local policies have the second-strongest impact with a beta coefficient of 0.291, followed by lessons from the Covid-19 pandemic with a beta coefficient of 0.255, and social capital with a beta coefficient of 0.245. The weakest influencing factor is economic benefit perception with a beta coefficient of 0.162.

From this research outcome, the author's team found similarities with studies conducted by Tosun (2000), Zhang (2010), Nghi et al. (2012), Thammajinda (2013), Mohd et al. (2013), Styliadis et al. (2014), Toan et al. (2016), and Yun et al. (2017). The distinctive aspect of this study is that the authors have added the variable of lessons from the Covid-19 pandemic. The research results have also proven that lessons from the pandemic significantly influence community participation in ecotourism on Tan Loc Islet because if the local authorities and residents are equipped with prepared coping strategies, it will enhance community participation in ecotourism on Tan Loc islet.

4.6. Solutions to enhancing community participation in ecotourism development at Tan Loc islet

The study identified five factors that have a positive influence on the participation of local residents in community-based tourism activities on Tan Loc Island. Therefore, to promote this participation in the future, it requires the local government to focus on the following issues:

1. Enhancing the local capacity by learning from and referring to other models to leverage the natural strengths of the Tan Loc islet. Develop and

implement policies and measures to conserve the environment and cultural heritage, ensuring the sustainability of ecotourism.

2. Adjusting local policies to focus on developing supportive policies that ensure fairness in the distribution of benefits from ecotourism and guarantee the sustainability of the activities. The policies should aim to preserve culture and the environment, ensuring that ecotourism does not have negative impacts but contributes to conservation and development. Build policies that encourage and support active participation of residents in the decision-making and implementation processes of ecotourism projects. Develop and implement policies that address social issues such as job creation, infrastructure improvement, and education to optimize the positive impact of ecotourism.

3. Lessons from the Covid-19 pandemic: The government should organize training sessions and conferences to share lessons and experiences in responding to the pandemic, particularly those related to ecotourism. Build strong collaborative models among the government, tourism businesses, and the community to enhance resilience and develop a robust ecotourism sector. Seize the opportunities from the lessons learned from the previous pandemic to develop and promote sustainable ecotourism, creating long-term economic and social benefits. The government should regularly adjust and improve management strategies to respond to positive changes driven by the pandemic, ensuring that ecotourism activities are performed effectively and sustainably.

4. Promoting the social capital of the residents by organizing cultural events and activities to encourage them to share their culture and traditions with tourists. Establish programs that provide financial support for local cultural and artistic activities. The local government should create infrastructure to support the expansion of networks and new collaborations, including community meeting spaces and commercial areas. Additionally, develop and enforce environmental conservation policies, particularly those related to ecotourism.

5. Increasing awareness of the economic benefits of participating in ecotourism activities by developing supportive policies that benefit the community, ensuring fair income distribution, and creating favorable conditions for entrepreneurship. The government should organize training programs on tour guiding, culinary arts, and traditional arts to

enhance skills and preparedness for residents to engage in ecotourism activities. The government should continue to organize events and conferences to provide opportunities for networking, sharing experiences and opinions, and making the local community more friendly and supportive in ecotourism. Facilitate and provide financial support for social enterprises in the ecotourism sector, helping them develop and create new business opportunities for the community.

5. CONCLUSION

Community participation is a crucial element in promoting sustainable tourism development in tourist destinations. Based on a case study of Tan Loc islet, the researchers analyzed the influencing factors on residents' participation in tourism using Exploratory Factor Analysis. The result showed that community participation in tourism development at Tan Loc islet was influenced by seven factors and

the order of influences is: (1) Local resources, (2) Local policies, (3) Lessons from the Covid-19 pandemic, (4) Social capital, and (5) Perception of economic benefits.

Through implementing this study, the authors have identified several limitations. Due to the specific nature of Tan Loc being a small islet, the sample size of the study was relatively small. As a result, the study only accepted a model with an acceptable fit of 52.3%. The study only surveyed individuals who have already taken part in ecotourism activities, making it difficult to determine the barrier factors. Therefore, the proposed direction for future research is to expand the target population to include individuals who have expressed an intention to take part but have not yet done so. This can be achieved through binary logistic regression analysis to predict a more comprehensive model.

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