

# **The relationship between awareness and commitment to participate in the green tourism model of local communities: Evidence from the Hmong people community in Lao Cai province – Vietnam**

THANG NGUYEN DUC

East Asia University of Technology, VIETNAM

Orcid: <https://orcid.org/0000-0001-6456-9480>

THANH NGUYEN NGHI

National Academy of Public Administration, VIETNAM

Orcid: <https://orcid.org/0000-0002-0791-8063>

**Abstract:** The study explores the impact of green tourism on the Hmong community in Lao Cai province, Vietnam. The findings show that the environmental and socio-cultural benefits of green tourism have a positive and significant impact on the community's awareness of green tourism, which in turn fosters their commitment to participate in sustainable tourism practices. However, the study finds no significant evidence of the impact of economic benefits on the community's awareness of green tourism, indicating that the Hmong community values the preservation of their cultural heritage more than economic benefits. The results emphasize the importance of involving local communities in decision-making processes and ensuring that they receive tangible benefits from their participation to promote and support sustainable tourism initiatives.

**Keywords:** Economic; Social; Cultural; Benefits; Green tourism; Hmong people; Awareness; Commitment; Participate.

Received: April 9, 2022. Revised: May 21, 2023. Accepted: June 15, 2023. Published: July 11, 2023.

## **1. Introduction**

Tourism is a crucial contributor to economic growth, job creation, and infrastructure development worldwide (Mishra et al., 2011). However, the rapid expansion of the tourism industry has resulted in negative environmental and social impacts, leading to the emergence of the sustainable or green tourism concept (Manzoor et al., 2019). Green tourism prioritizes responsible travel practices that focus on environmental conservation, social and cultural sensitivity, and economic sustainability while minimizing negative impacts (Mishra et al., 2011).

Recently, there has been increasing interest in the role of local communities in promoting green tourism (Manzoor et al., 2019). Local communities can play a pivotal role in developing and promoting sustainable tourism models that benefit both tourists and the local economy (Iftikhar et al., 2022). To effectively participate in green tourism, local communities require high levels of awareness and commitment to sustainable tourism practices (McCombes et al., 2015).

The success of implementing the green tourism model relies on the participation of local communities in the planning and management of tourism

activities (Manyara & Jones, 2007). Equitable distribution of tourism benefits among community members can foster a sense of ownership and pride in the local tourism industry (Cole, 2006). Economic incentives such as job opportunities, revenue-sharing schemes, and community development funds can encourage local communities to support sustainable tourism practices (Suansri, 2003). Emphasizing the preservation of cultural heritage and local traditions can further strengthen the involvement of local communities in the tourism industry (Mydland & Grahn, 2012; Lordkipanidze., 2005). Finally, training programs and capacity-building initiatives can empower local communities with the necessary skills and knowledge to engage in sustainable tourism practices (Reggers et al., 2016).

The Vietnamese government has prioritized the development of green tourism in the area where the Hmong people reside to preserve cultural heritage, protect the environment, promote sustainable tourism practices, and foster economic growth (Davison et al., 2005; Gerdner, 2015). By promoting green tourism, the government can safeguard the unique traditions, language, and customs of the Hmong people while generating economic benefits such as job creation and increased income for local communities (Nepal, 2002; Cahill, 2018). The region boasts natural beauty and biodiversity, and it is imperative to safeguard these natural resources by promoting responsible tourism practices (Mallick, 2019). Furthermore, the development of green tourism can contribute to the economic diversification

of the region, reducing its reliance on traditional agricultural practices (Davison et al., 2005). The adoption of sustainable tourism practices can guarantee the long-term sustainability of the tourism industry in the region while also benefiting both tourists and local communities (Lansing & Vries, 2007).

The willingness of local communities to participate in the green tourism model hinges on various factors such as their awareness of sustainable tourism practices (Berry & Ladkin, 1997), the potential economic and social benefits, and the adverse effects of traditional tourism practices (Guttentag, 2009). To encourage local community participation, it is crucial to provide them with information on the benefits of sustainable tourism practices and involve them in the decision-making process (Saufi et al., 2014). This can be achieved through community engagement programs, awareness-raising campaigns, and educational initiatives (Chan et al., 2021).

The Hmong people, comprising over a million individuals, are one of Vietnam's major ethnic minority groups residing primarily in the mountainous regions of northern provinces, particularly Lao Cai (Turner, 2012; Turner et al., 2015 ;Tugault- Lafleur & Turner, 2009). Their culture is vibrant and diverse, encompassing their own language, traditions, and beliefs (Turner, 2012). Despite encountering various obstacles such as poverty, illiteracy, and discrimination, the Hmong community has opportunities to maintain and promote their cultural heritage through education,

tourism, and collaboration with other ethnic groups (Briain, 2013). To that end, the Vietnamese government recognizes the importance of developing green tourism in the Hmong community in Lao Cai province as a means of promoting green growth and poverty alleviation (Turner, 2012). Green tourism has the potential to generate income, create green jobs, and lay the foundation for eco-friendly economic development (Turner & Michaud, 2008). Furthermore, the Hmong community's diverse culture, colorful costumes, intricate embroidery, and skillful farming can attract tourists from nearby countries like China, Thailand, Vietnam, and Malaysia (Ó Briain, 2014; Turner & Michaud, 2008).

Developing green tourism in the region would also help to safeguard the natural landscape and biodiversity of protected areas (Eagles et al., 2002; Job et al., 2017). Nonetheless, it remains unclear whether the Hmong community's awareness and commitment to sustainable tourism practices affect their involvement in green tourism (Chen et al., 2017). This study aims to examine the relationship between awareness and commitment and green tourism participation in the Hmong people community of Lao Cai province, Vietnam. The findings of this research will aid in comprehending the factors that influence local communities' participation in green tourism and provide insight into how to encourage sustainable tourism practices in local communities.

## 2. Literature Reviews

### Green tourism

Green tourism, which is also referred to as sustainable tourism, is a type

of tourism that aims to decrease the negative impact of tourism on the environment (Budeanu, 2007), while simultaneously generating economic benefits for local communities and promoting cultural preservation (Mihalic, 2016; Hudson & Miller, 2005). Green tourism practices involve being environmentally responsible, culturally and socially sensitive, and economically feasible (Kiper, 2013). The types of green tourism practices that can be implemented vary depending on the location and context (Garrod & Fyall, 1998). Examples of such practices include utilizing renewable energy sources like solar or wind power to operate accommodations and facilities, reducing waste and conserving water through recycling and composting programs (Kasavana, 2008), promoting local food and agriculture to minimize the carbon footprint of food transportation while supporting the local economy (Bruns-Smith et al., 2015), promoting conservation efforts and responsible wildlife tourism practices, encouraging low-impact activities such as hiking, biking, and kayaking, and engaging and empowering local communities through responsible tourism practices that involve and benefit them (Poponi et al., 2020). Ultimately, the goal of green tourism is to strike a balance between the economic benefits of tourism and the need to preserve the environment (Hunter, 1997), as well as local cultures and communities, for future generations (Hui-Chun et al., 2003).

### Some potential benefits of green tourism

Economic benefits: Green tourism can provide employment opportunities for local communities and contribute to the local economy (Amerta et al., 2018; Niedziółka, 2014). Green tourism can provide various employment opportunities for local communities, ranging from

hospitality and tourism services to ecotourism guides, park rangers, and environmental educators (Amerta et al., 2018). By creating jobs that are environmentally and socially responsible, green tourism can promote economic growth and contribute to the local economy (Goodwin, 1996).

In addition to employment opportunities, green tourism can also support local businesses and agriculture (Lordkipanidze et al., 2018). By promoting local food and agriculture, sustainable tourism practices can reduce the carbon footprint of food transportation and support the local economy (Pan et al., 2018). For example, visitors may be encouraged to dine at local restaurants that serve traditional cuisine using locally sourced ingredients (Boyne et al., 2003). This not only supports the local economy but also helps to preserve local culinary traditions and cultural heritage (Sims, 2009).

Furthermore, green tourism can also support the conservation of natural resources and biodiversity (Catibog-Sinha, 2010). By promoting responsible wildlife tourism practices and supporting conservation efforts, sustainable tourism initiatives can help protect the natural environment and preserve biodiversity for future generations (Kiper, 2013). This not only has environmental benefits but also contributes to the local economy by attracting visitors who are interested in ecotourism and nature-based experiences (Kiper, 2013; Wood, 2002).

Overall, green tourism has the potential to create a variety of employment opportunities and contribute to the local

economy while promoting environmentally responsible practices (Lordkipanidze et al., 2005; Goodwin, 1996). By incorporating sustainable tourism practices into their business models, local communities can attract visitors who are seeking authentic and responsible tourism experiences (Munt, 1994; Goodwin, 2011). This not only benefits the local economy but also helps to preserve the natural environment and cultural heritage of the region (Hoang, 2021).

**Environmental benefits:** Green tourism can help preserve natural and cultural resources and promote conservation efforts. Green tourism plays a crucial role in preserving natural and cultural resources and promoting conservation efforts (Amerta et al., 2018; Niedziółka, 2014). By encouraging sustainable tourism practices, such as low-impact activities and responsible wildlife tourism practices, green tourism can minimize the negative impact of tourism on the environment and local communities (Isaacs, 2000). For example, sustainable tourism initiatives may involve hiking, biking, or kayaking activities, which have minimal impact on the environment compared to other forms of tourism (Olszewski-Strzyżowski, 2022). This helps to protect natural resources, such as forests, rivers, and wildlife habitats, while providing visitors with authentic and responsible tourism experiences (Eagles et al., 2022).

Green tourism can also help preserve cultural heritage by promoting cultural tourism and supporting local communities (Niedziółka, 2014). By

engaging in responsible tourism practices that involve and benefit local communities, visitors can learn about the region's cultural heritage and traditions while supporting local businesses and artisans (Medina, 2005). Sustainable tourism practices can also help to protect historic sites and monuments by promoting responsible tourism behaviors and minimizing the impact of tourism on these cultural resources (Pan et al., 2018; Skanavis & Giannoulis, 2009).

Furthermore, green tourism can support conservation efforts by raising awareness about the importance of environmental conservation and sustainability (Edgell Sr, 2019). By promoting responsible tourism practices and supporting conservation initiatives, green tourism can help protect natural resources and promote environmental sustainability (Neto, 2003). This can include efforts to reduce waste and energy consumption, conserve water resources, and promote the use of renewable energy sources in tourism operations (Bohdanowicz et al., 2001).

In summary, green tourism can help preserve natural and cultural resources by promoting sustainable tourism practices and responsible tourism behaviors (Shasha et al., 2020). By supporting conservation efforts and engaging with local communities, green tourism can contribute to the protection of the environment and cultural heritage, while promoting economic growth and sustainable development (Mihalic, 2016).

Social and cultural benefits: Green tourism can promote cultural exchange and

understanding between tourists and local communities, as well as respect for local traditions and customs. Green tourism can be a powerful tool for promoting cultural exchange and understanding between tourists and local communities (Amerta et al., 2018; Niedziółka, 2014). By providing opportunities for visitors to learn about local customs, traditions, and ways of life, green tourism can promote respect for cultural diversity and help bridge cultural divides (Lordkipanidze et al., 2005).

Through sustainable tourism practices, such as community-based tourism initiatives, visitors can engage directly with local communities (Polnyotee & Thadaniti, 2015), learn about their customs, and participate in local traditions and cultural activities (Reisinger, 1994). This type of cultural exchange can be mutually beneficial, as it allows both visitors and local communities to learn from one another, share experiences, and gain a deeper understanding of each other's cultures (Brislin et al., 2006).

In addition to promoting cultural exchange and understanding, green tourism can also foster respect for local traditions and customs (Edgell Sr, 2019). By promoting sustainable tourism practices that respect local cultures and ways of life, visitors can gain a deeper appreciation for the unique cultural heritage of the region they are visiting (Kiper, 2013). This can include efforts to support local artisans and craftsmen, promote local food and agriculture, and respect local customs and beliefs (Booyens, 2010).

Moreover, green tourism can help preserve traditional knowledge and cultural

heritage (Prasetyo et al., 2021). By supporting cultural tourism and responsible tourism practices, green tourism can help protect traditional practices, such as handicrafts, music, dance, and other cultural expressions, from disappearing due to economic pressures or cultural assimilation (Eagles et al., 2022).

In conclusion, green tourism can promote cultural exchange and understanding, as well as respect for local traditions and customs, by engaging visitors in sustainable tourism practices and community-based tourism initiatives (Asker et al., 2010). By supporting cultural heritage and fostering respect for local cultures, green tourism can promote sustainable tourism practices that benefit both tourists and local communities (Barna et al., 2021).

### **The local communities' awareness of green tourism**

The level of awareness of the green tourism model among local communities can vary depending on several factors (Hassan, 2000). These factors include the level of education, exposure to tourism, and the cultural and social norms of the community (Stem et al., 2003). In some cases, local communities may have a high level of awareness and understanding of the benefits of green tourism, particularly if they have been involved in the development and implementation of sustainable tourism practices in their area (Hassan, 2000). These communities may recognize the importance of protecting the environment and preserving their cultural heritage for future generations, and may actively seek out opportunities to participate in sustainable tourism initiatives (Polnyotee & Thadaniti, 2015).

However, in other cases, local communities may have limited awareness or understanding of the concept of green tourism (Cole, 2006). This may be due to a lack of access to information or education about sustainable tourism practices, or a lack of involvement in tourism development and decision-making processes (Aref, 2011). In some cases, local communities may also have cultural or social norms that prioritize economic development over environmental protection, which can make it more challenging to promote sustainable tourism practices (Tosun, 2001).

Overall, raising awareness among local communities about the benefits of green tourism is an important step in promoting sustainable tourism practices (Frey & George, 2010). This can be done through education and outreach programs, as well as through involving local communities in the development and implementation of sustainable tourism initiatives (Lordkipanidze et al., 2005). By empowering local communities to take an active role in sustainable tourism practices, it is more likely that they will become committed to these initiatives and work to promote them within their community (Cole, 2006).

### *The commitment to participate in the green tourism model of local communities*

The commitment of local communities to participate in the green tourism model can be influenced by several factors (Lee, 2011). One of the crucial factors is the level of awareness and understanding of the benefits of sustainable tourism practices and the drawbacks of traditional tourism practices (Ritchie & Crouch, 2003). When local communities are aware of the positive impact of sustainable tourism practices, they are more

likely to commit to participating in green tourism initiatives (Frey & George, 2010).

Another significant factor is the level of involvement and participation in decision-making processes related to tourism development in their area (Marzuki, 2008). Local communities who are actively involved in the planning and implementation of sustainable tourism practices tend to have a greater sense of ownership and commitment towards these initiatives (Beaumont & Dredge, 2010). This can also create a sense of pride in their community and culture.

Economic benefits are also important in determining the commitment of local communities to participate in the green tourism model (Hassan, 2000). If sustainable tourism practices provide job opportunities, income generation, and support for local businesses, local communities are more likely to commit to these initiatives (Frey & George, 2010).

Finally, the cultural and social values of local communities play a significant role in determining their commitment to sustainable tourism practices (Aman et al., 2019). If sustainable tourism practices align with the cultural and social values of the community, they are more likely to commit to participating in these initiatives (Li & Hunter, 2015). For instance, if cultural preservation and respect for local traditions are emphasized, the community will be more inclined to participate (Giampiccoli & Hayward Kalis, 2012).

In conclusion, the commitment of local communities to participate in the green tourism model depends on a variety of factors, including awareness (Hassan, 2000), involvement in decision-making processes, economic benefits, and cultural and social values (Gamble & Gibson,

1999). To promote greater commitment, it is important to involve local communities in the development and implementation of sustainable tourism practices and to ensure that they receive tangible benefits from their participation (Barbieri et al., 2020).

### **The relationship between awareness and commitment to participate in the green tourism**

The relationship between awareness and commitment to participate in the green tourism model of local communities is a complex one (Frey & George, 2010). On the one hand, greater awareness of the benefits of sustainable tourism practices can lead to increased commitment among local communities to participate in such initiatives (Garrod, 2003). For example, if a community understands the economic, environmental, and cultural benefits of green tourism, they may be more likely to actively participate in sustainable tourism activities (Wheeller, 1991).

On the other hand, even if local communities have a high level of awareness of green tourism practices, their level of commitment may still vary depending on other factors such as their level of involvement in decision-making processes and their economic and social circumstances (Tzschentke et al., 2004). For example, if a community perceives that their participation in sustainable tourism practices will not result in significant economic benefits or if they are facing other economic challenges, they may be less committed to participating in green tourism initiatives (Frey & George, 2010).

Therefore, it is important to not only raise awareness among local communities about the benefits of green tourism but also

to involve them in the decision-making process and ensure that they see tangible benefits from their participation (Scheyvens, 2000). This can help increase their level of commitment to sustainable tourism practices and ensure that they are actively engaged in promoting and supporting these initiatives within their community (Li et al., 2015).

*Based on literature reviews, we propose the following research hypotheses:*

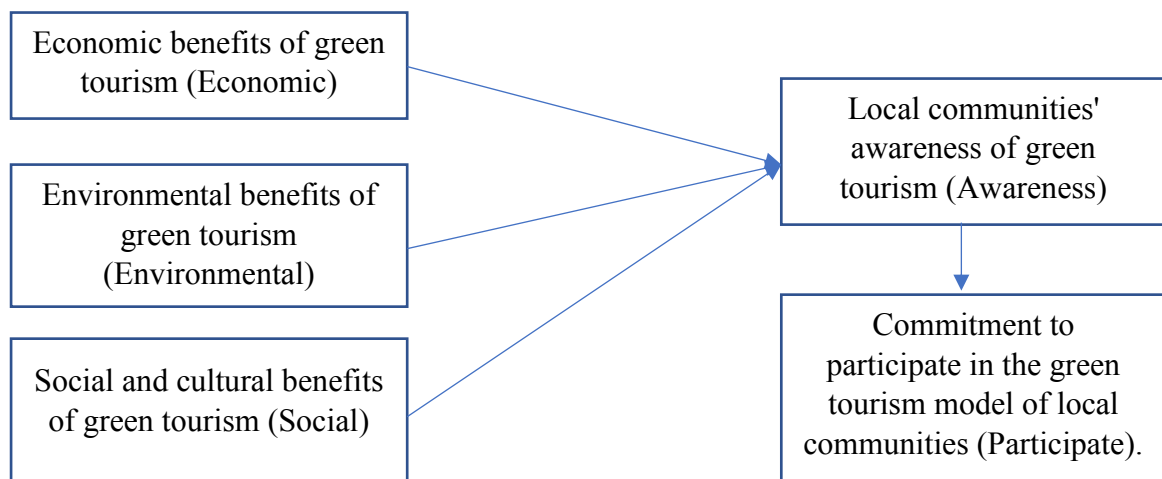
Hypothesis 1 (H1). The economic benefits of green tourism have a positive and meaningful impact on local communities' awareness of green tourism.

Hypothesis 2 (H2). The environmental benefits of green tourism have a positive and meaningful impact on local communities' awareness of green tourism.

Hypothesis 3 (H3). The social and cultural benefits of green tourism have a positive and meaningful impact on local communities' awareness of green tourism.

Hypothesis 4 (H4). Local communities' awareness of green tourism has a positive and meaningful impact on a commitment to participate in the green tourism model of local communities.

*From the above research hypotheses, we propose the following research model (Figure 1):*



**Figure 1** Mô hình nghiên cứu đề xuất



### 3. Method

#### *Instrument and participant*

The questionnaire was constructed in two parts, based on literature reviews and references to two public policy professors, three tourism studies professors, and one psychology professor. Part one collects demographic information, while part two gathers information related to the economic, environmental, and social/cultural benefits of green tourism, as well as local communities' awareness of green tourism and their commitment to participate in the green tourism model. Each factor is measured by four questions on a 5-point Likert scale.

Before the formal research began, a pilot survey was conducted with 40

volunteers to test the questionnaire. Minor corrections were made to the questionnaire based on the analysis of the survey data, and a language expert edited and translated the final version into Hmong for use in the official study. The study was conducted in January 2023, during the traditional Hmong New Year when demand for green tourism services is high. The study utilized the purposeful sampling method, and 200 Hmong individuals from Lao Cai province volunteered to participate. The questionnaire was administered directly to participants in Hmong, and they marked their answers with a pencil. All 200 answer sheets were collected, resulting in a 100% response rate. Table 1 presents the demographic information of the survey subjects. SPSS 20 and AMOS 20 software were used to analyze the research data.

**Table 1** *Demographic characteristics of survey participants*

		Age							
		18 24 years old		25 34 years old		45 54 years old		56 or older	
		Count	Row N	Count	Row N	Count	Row N	Count	Row N
		%		%		%		%	
<b>Gender</b>	<i>Female</i>	10	13.2%	32	42.1%	26	34.2%	8	10.5%
	<i>Male</i>	15	12.1%	52	41.9%	41	33.1%	16	12.9%
<b>Education</b>	<i>Bachelor's degree</i>	3	8.1%	17	45.9%	16	43.2%	1	2.7%
	<i>High school diploma</i>	7	14.0%	19	38.0%	18	36.0%	6	12.0%
	<i>Less than high school</i>	6	18.8%	12	37.5%	10	31.2%	4	12.5%
	<i>Some college/Associate's degree</i>	9	11.1%	36	44.4%	23	28.4%	13	16.0%

### 4. Results

#### *Reliability analysis*

Using Cronbach's alpha, we determine the extent to which the questions in our survey questionnaire are positively correlated, indicating that they are measuring the same underlying construct. A high alpha score indicates that your questionnaire is reliable, while a low score

may indicate that your questionnaire needs to be revised or refined. The interpretation of the results of a Cronbach's alpha analysis can be subjective and depend on various factors, such as the purpose of the research, the type of data being collected, and the target population for the survey (Fornell & Larcker, 1981). Generally, a Cronbach's alpha score of 0.7 or higher is considered acceptable for most surveys, indicating a

high level of internal consistency and reliability (Considine et al., 2005). However, a score between 0.6 and 0.7 may still be considered acceptable for some surveys. Still, it may indicate that some questions in the questionnaire are not contributing to the measurement of the

underlying construct and need to be revised or removed (Hair et al., 2006). Conversely, a score below 0.6 is generally considered low. It may indicate that the questions in the questionnaire are not measuring the same construct and may need to be revised or refined (Cortina, 1993).

**Table 2** *Summary of Reliability*

<b>Scales</b>	<b>Number of variables observed</b>	<b>Reliability coefficients (Cronbach Alpha)</b>	<b>Composite Reliability (CR)</b>	<b>Average variance extracted (AVE)</b>
<i>Economic</i>	4	0.778	0.779	0.468
<i>Environmental</i>	4	0.755	0.756	0.437
<i>Social</i>	4	0.753	0.754	0.435
<i>Awareness</i>	4	0.751	0.751	0.431
<i>Participate</i>	4	0.793	0.793	0.489

Composite reliability (CR) is widely used to assess the internal consistency or reliability of a set of items on a scale or questionnaire (Hair et al., 2006; Henson & Roberts, 2006). It is used to determine whether a group of items intended to measure a single construct or latent variable consistently measures that construct (Zucoloto et al., 2014). CR is calculated as the ratio of the total variance of the observed scores to the total variance of the actual scores of the items (Sijtsma, 2009). It estimates the proportion of the total variance in the observed scores due to the actual conflict in the measured construct rather than to measurement error or other sources of variability (Hair et al., 2010). A CR value of 0.70 or higher is generally considered acceptable for research purposes, indicating that the items are measuring the intended construct with a reasonable level of internal consistency (Zucoloto et al., 2014; Zinbarg et al., 2005). However, the acceptable threshold may

vary depending on the specific research context and the intended use of the scale (Henson & Roberts, 2006).

Average Variance Extracted (AVE) is a statistic used to assess the amount of variance in a set of items explained by their underlying construct or latent variable. AVE is a measure of construct reliability, similar to composite reliability, but is calculated based on the shared variance between the items rather than the total variance. AVE is typically used in the context of confirmatory factor analysis (CFA) and structural equation modeling (SEM). The AVE of a construct is calculated as the average of the squared correlations between the construct and each of its indicator items (Fornell & Larcker, 1981). Specifically, the AVE is the sum of the squared loadings of the items on the construct divided by the sum of the variances of the items and measurement error (Hair et al., 2006). AVE values range from 0 to 1, with higher values indicating

that the construct explains more of the variance in the items. AVE values of 0.5 or higher are generally considered acceptable for research purposes, meaning that the items measure the intended construct with a reasonable level of reliability (Fornell & Larcker, 1981; Hair et al., 2010; Kline, 2015). However, the acceptable threshold may vary depending on the specific research context and the intended use of the scale (Bagozzi & Yi, 2012; Schreiber et al, 2006).

Table 2 presents the results of the reliability and validity tests for the research questionnaire (Hair et al., 2019; Henseler et al., 2015). The Cronbach's alpha coefficients for all items were found to be greater than 0.7, indicating satisfactory internal consistency and reliability of the questionnaire (Henseler et al., 2015). The CR of all items met the minimum threshold of 0.70 (Fornell & Larcker, 1981), indicating good convergent validity (Hair et al., 2019; Henseler et al., 2015). The AVE of all items was approximately 0.50, which is an acceptable threshold for further analysis (Fornell & Larcker, 1981). Overall, these results demonstrate that the questionnaire items have satisfactory

reliability and validity for analyzing the proposed research model.

*Exploratory factor analysis*

Exploratory factor analysis (EFA) is a statistical technique used in the social sciences to identify underlying latent factors or dimensions in a set of variables (Fabrigaret al., 1999). The goal of EFA is to reduce the number of variables in a dataset by identifying patterns of inter-correlation among them and grouping them into a smaller set of underlying factors. In an EFA, a correlation matrix of the variables is created, and factor scores are generated through a series of mathematical operations (Costello & Osborne, 2005). The number of factors to be extracted is often determined through the examination of scree plots and eigenvalues, which represent the magnitude of the factors and their relative importance (Kaiser, 1960). The results of an EFA can help researchers identify the key factors that explain the relationships among the variables in a dataset (Brown, 2006). This information can then be used to guide the development of more refined and focused research questions, hypotheses, and models (Hair, 2006).

**Table 3** *Rotated Component Matrix*

Rotated Component Matrix <sup>a</sup>					
	Component				
	1	2	3	4	5
Participate3	.752				
Participate1	.723				
Participate4	.723				
Participate2	.706				
Awareness4		.740			
Awareness1		.728			
Awareness3		.714			
Awareness2		.651			
Economic2			.743		
Economic1			.732		

Economic3	.725
Economic4	.686
Environmental1	.743
Environmental2	.711
Environmental4	.709
Environmental3	.651
Social3	.740
Social2	.735
Social4	.718
Social1	.693

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

- Rotation converged in 5 iterations.
- KMO =0.870; Bartlett's Test of Sphericity (Chi-Square = 1285.245; df = 190; Sig.=0.000)
- Initial Eigenvalues =1.192; Extraction Sums of Squared Loadings = 60%.

Table 3 presents the results of the factor analysis for the research questionnaire. The Bartlett test was statistically significant (Sig. = 0.000), and the Kaiser-Meyer-Olkin (KMO) coefficient was 0.870 (>0.5), indicating that the observed variables are correlated with each other in the population and, thus, the variables are valid for factor analysis. The factor loading of all variables was greater than 0.5, which means that the factor analysis is valid. Factor loading is the criterion used to ensure the practical significance of factor analysis, where a factor loading greater than 0.3 is considered the minimum, greater than 0.4 is considered important, and greater than 0.5 is considered to be of practical significance. Table 3 shows that all variables have a factor loading greater than 0.5, indicating that the factor analysis is valid. The Extraction Sums of Squared Loadings of seven factors were 60% (>50%), indicating that the factors extracted can explain a significant amount of the variance in the data. The initial eigenvalues of six factors were 1.192 (>1.00), indicating that the

factors extracted have eigenvalues greater than one and thus are valid. Overall, these results demonstrate the validity and suitability of the factor analysis for the proposed research model.

#### *Structural equation modeling*

Structural equation modeling (SEM) is a widely used statistical method in the social sciences to analyze the relationships between variables in a complex system (Byrne, 2016). It is a type of multivariate analysis that combines parts of regression analysis, factor analysis, and causal modeling (Kline, 2015). In SEM, a set of equations are made to show how the variables in a system relate to each other. These equations can be used to estimate the strength and direction of the relationships between the variables and the degree to which underlying latent factors influence the associations (Zaslow et al., 2006). The equations in SEM can also predict changes in one variable based on changes in other variables, which is one of the key advantages of the method (Fornell & Larcker, 1981). SEM can be used to test theories about the relationships between concepts and variables (Bartholomew,

2011). It can also be used to test complex hypotheses about the relationships between variables in a system. Joreskog and Sorbom (1993) found that the results of SEM can give important insights into the mechanisms that drive complex systems and can be used

to guide the development of theories and models for these systems. SEM can also help researchers identify indirect and mediating effects between variables as well as direct effects (Kenny, 2015).

**Table 4** *Regression Weights*

			Estimate	S.E.	C.R.	P	
<b>Awareness</b>	<---	<b>Economic.</b>	.124	.105	1.179	.238	notsupported
<b>Awareness</b>	<---	<b>Environmental.</b>	.249	.118	2.109	.035	supported
<b>Awareness</b>	<---	<b>Social</b>	.234	.093	2.523	.012	supported
<b>Participate.</b>	<---	<b>Awareness</b>	.589	.146	4.028	***	supported
<b>Participate.</b>	<---	<b>Social</b>	.333	.115	2.905	.004	supported

To evaluate the goodness of fit of the structural equation model (SEM), several fit indices were utilized, including the Chi-Square ( $\chi^2$ ) test, Root-Mean-Square Error of Approximation (RMSEA), standardized-root-mean square residual (SRMR), Tucker-Lewis Index (TLI), and Comparative Fit Index (CFI). A well-fitted model should have values of CFI and TLI  $\geq 0.980$ , and RMSEA and SRMR  $\leq 0.024$ . The analysis results, as shown in Figure 2, indicate that the SEM model satisfies the standard requirements. The Chi-square statistic = 181.251 with 162 degrees of freedom (P-value = 0.024, < 0.05), Chi-square/df ratio = 1.119,

Goodness of Fit Index (GFI) = 0.916 (approximately equal to 0.9), TLI = 0.980, and RMSEA = 0.024. The results of the SEM analysis are presented in Table 4, which shows the statistically significant relationship between the independent variables Environmental, Social, Awareness and dependent variables Participate (P-value < 0.050). The remaining variable Economic are not statistically significant (P-value = 0.238 > 0.050). Overall, the results suggest that the SEM model fits well with the data and provides a good representation of the proposed research model.

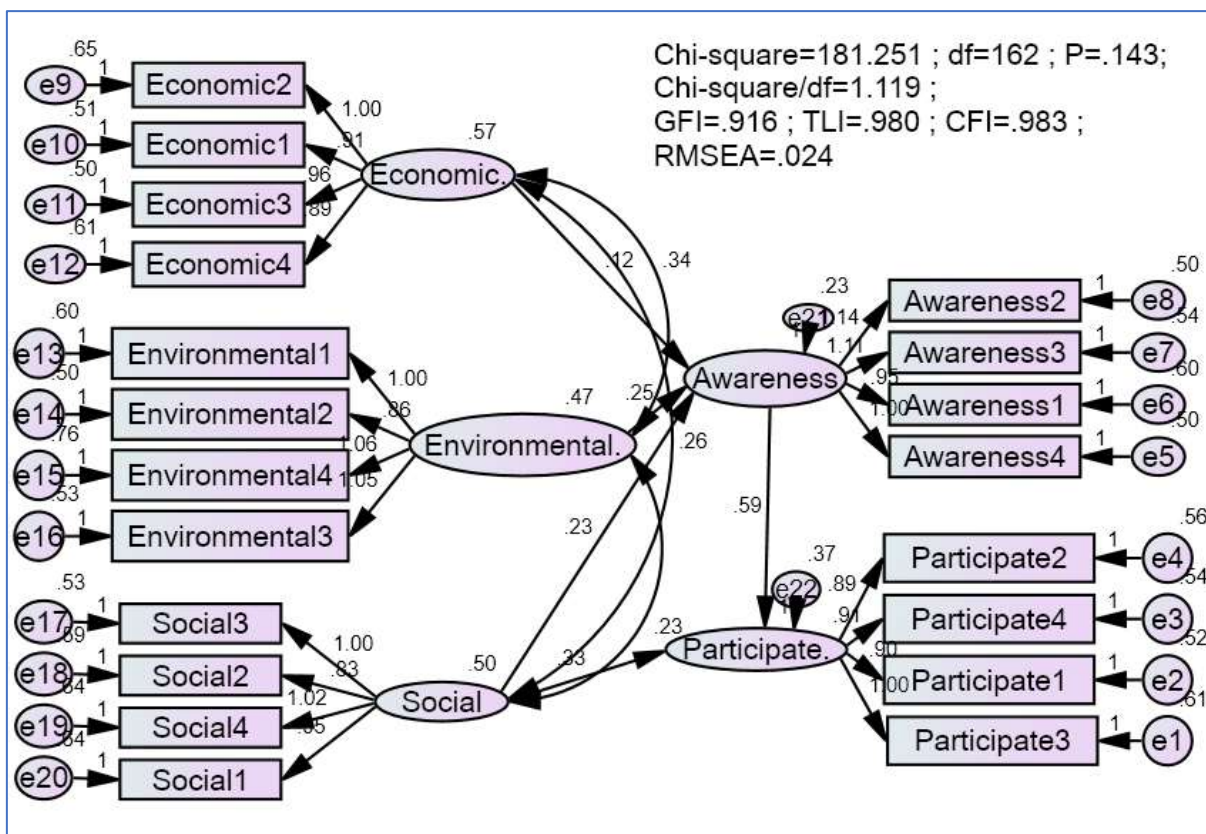


Figure 2 SEM analysis results

## 5. Discussion and Conclusion

### Discussion

Firstly, the SEM analysis results presented in Table 4 indicate that the positive impact of green tourism's environmental benefits on local community awareness of green tourism is statistically significant, confirming H2. The findings suggest that the Hmong community has a long-standing tradition of protecting their environment from external influences, which has contributed to their commitment to sustainable tourism development. This aligns with Niedziółka's (2014) earlier research that showed how green tourism can also aid in preserving cultural heritage by promoting cultural tourism and supporting local communities. Responsible tourism practices that involve and benefit local communities can help visitors learn

about the region's cultural heritage and traditions while supporting local businesses and artisans (Medina, 2005).

Moreover, sustainable tourism practices can also help safeguard historic sites and monuments by encouraging responsible tourism behavior and minimizing the impact of tourism on these cultural resources (Pan et al., 2018; Skanavis & Giannoulis, 2009). Additionally, green tourism can support conservation efforts by raising awareness about the significance of environmental conservation and sustainability (Edgell Sr, 2019). By promoting responsible tourism practices and supporting conservation initiatives, green tourism can help preserve natural resources and promote environmental sustainability (Neto, 2003). This includes efforts to reduce waste and

energy consumption, conserve water resources, and encourage the use of renewable energy sources in tourism operations (Bohdanowicz et al., 2001)..

Secondly, the SEM analysis results presented in Table 4 indicate that the local community's perception of the socio-cultural benefits of green tourism has a positive and significant impact on their understanding of green tourism, supporting H3. This finding highlights the crucial role that socio-cultural benefits play in fostering the Mong people's commitment to participate in the green tourism model in Lao Cai province. This result is consistent with previous research conducted in other cultures by Polnyotee & Thadaniti (2015), suggesting that sustainable tourism practices, such as community-based tourism initiatives, enable visitors to directly engage with local communities, learn about their customs, and participate in local cultural traditions and activities (Reisinger, 1994). This cultural exchange can be mutually beneficial, allowing visitors and local communities to learn from each other, share experiences, and gain a better understanding of each other's cultures (Brislin et al., 2006).

Thirdly, the SEM analysis results in Table 4 demonstrate that the Hmong community's awareness of green tourism has a positive and significant impact on their commitment to participate in the green tourism model in Lao Cai province, supporting H4. This finding is consistent with previous research in other cultures, such as Thais and Laotians, which also suggests that local communities' perception of green tourism positively influences their

commitment to it. Therefore, it is crucial to increase local communities' awareness of the benefits of green tourism and involve them in decision-making processes, ensuring they experience tangible benefits from their participation (Scheyvens, 2000). Doing so can enhance their commitment to sustainable tourism practices and promote and support these initiatives in their communities actively (Li et al., 2015).

Finally, the results of the SEM analysis (Table 4) indicate that there is no statistically significant evidence of the impact of the economic benefits of green tourism on the local community's awareness of green tourism. Therefore, H1 is not accepted. This finding suggests that the Hmong community in Lao Cai province values the preservation of their cultural heritage, traditions, and customs more than economic benefits. They may react positively to external influences that threaten their cultural values. This result differs from studies in other cultures, which have consistently found that green tourism can create job opportunities for local communities and boost the local economy (Amerta et al., 2018; Niedziółka, 2014). Green tourism can offer diverse employment opportunities to locals, ranging from hospitality and tourism services to ecotourism guides, park rangers, and environmental educators (Amerta et al., 2018). By generating environmentally and socially responsible jobs, green tourism can spur economic growth and contribute to the local economy (Goodwin, 1996). Therefore, it is crucial to engage the local community in the decision-making process and ensure that they receive tangible benefits from their participation, which may

strengthen their commitment to sustainable tourism practices and promote and support these initiatives within their community (Li et al., 2015).

### Conclusion

This study has shown that green tourism can have a significant positive impact on local communities in terms of environmental and socio-cultural benefits. The results of the SEM analysis have confirmed H2, H3, and H4, indicating that environmental benefits, socio-cultural benefits, and awareness of green tourism play crucial roles in the Hmong community's commitment to sustainable tourism development in Lao Cai province. The findings align with previous research suggesting that sustainable tourism practices can aid in preserving cultural heritage and conserving natural resources. However, the study's results have also shown that economic benefits may not be the primary driving factor for the Hmong community's participation in green tourism (Tugault- Lafleur & Turner, 2009). Thus, it is important to involve the local community in decision-making processes and ensure that they receive tangible benefits from their participation in sustainable tourism initiatives to foster their commitment to these practices. Overall, this study provides valuable insights into the factors that influence local community participation in green tourism and can inform sustainable tourism development strategies in the region.

The study has some limitations that need to be considered when interpreting the results. Firstly, the research was conducted in a specific context with a particular ethnic

group (Hmong community) in Lao Cai province, Vietnam, which may limit the generalizability of the findings to other cultures and regions. Secondly, the study adopted a quantitative approach, which limits the depth of understanding of the local community's perceptions and experiences of green tourism. Therefore, future research could use qualitative methods to explore the nuances of the local community's attitudes towards green tourism (Turner, 2012; Turner et al., 2015). Thirdly, the study focused only on the local community's perception of green tourism, without exploring the tourists' perspectives and behaviors, which could provide valuable insights into the effectiveness of sustainable tourism practices. Finally, the study did not consider the potential negative impacts of green tourism, such as displacement of local communities, loss of cultural identity, and increased pressure on natural resources. Therefore, future research should also examine the potential negative impacts of green tourism and identify ways to mitigate them.

### References

- [1]. Aman, J., Abbas, J., Mahmood, S., Nurunnabi, M., & Bano, S. (2019). The influence of Islamic religiosity on the perceived socio-cultural impact of sustainable tourism development in Pakistan: a structural equation modeling approach. *Sustainability*, 11(11), 3039.
- [2]. Amerta, I. M. S., Sara, I. M., & Bagiada, K. (2018). Sustainable tourism development. *International research journal of management, IT and social sciences*, 5(2), 248-254.



- [3]. Aref, F. (2011). Barriers to community capacity building for tourism development in communities in Shiraz, Iran. *Journal of Sustainable Tourism*, 19(3), 347-359.
- [4]. Asker, S. A., Boronyak, L. J., Carrard, N. R., & Paddon, M. (2010). Effective community based tourism: A best practice manual.
- [5]. Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the academy of marketing science*, 40, 8-34.
- [6]. Barbieri, C., Sotomayor, S., & Gil Arroyo, C. (2020). Sustainable tourism practices in indigenous communities: The case of the Peruvian Andes. *Tourism Planning & Development*, 17(2), 207-224.
- [7]. Barna, C., Epure, M., & Vasilescu, R. (2011). Ecotourism—conservation of the natural and cultural heritage. *Review of Applied Socio-Economic Research*, 1(1), 87-96.
- [8]. Bartholomew, K. J., Ntoumanis, N., Ryan, R. M., Bosch, J. A., & Thøgersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. *Personality and social psychology bulletin*, 37(11), 1459-1473.
- [9]. Beaumont, N., & Dredge, D. (2010). Local tourism governance: A comparison of three network approaches. *Journal of sustainable tourism*, 18(1), 7-28.
- [10]. Berry, S., & Ladkin, A. (1997). Sustainable tourism: A regional perspective. *Tourism Management*, 18(7), 433-440.
- [11]. Bohdanowicz, P., Churie-Kallhauge, A., Martinac, I., & Rezachek, D. (2001, April). Energy-efficiency and conservation in hotels—towards sustainable tourism. In *4th International Symposium on Asia Pacific Architecture* (Vol. 21).
- [12]. Booyens, I. (2010). Rethinking township tourism: Towards responsible tourism development in South African townships. *Development Southern Africa*, 27(2), 273-287.
- [13]. Boyne, S., Williams, F., & Hall, D. (2003). On the trail of regional success: Tourism, food production and the Isle of Arran Taste Trail. In *Tourism and gastronomy* (pp. 105-128). Routledge.
- [14]. Briain, L. Ó. (2013). “Happy to Be Born Hmong” The Implications of a Transnational Musical Network for the Vietnamese-Hmong People. *Journal of Vietnamese Studies*, 8(2), 115-148.
- [15]. Brislin, R., Worthley, R., & Macnab, B. (2006). Cultural intelligence: Understanding behaviors that serve people’s goals. *Group & Organization Management*, 31(1), 40-55.
- [16]. Brown, D., & Warschauer, M. (2006). From the university to the elementary classroom: Students’ experiences in learning to integrate technology in instruction. *Journal of Technology and Teacher Education*, 14(3), 599-621.
- [17]. Bruns-Smith, A., Choy, V., Chong, H., & Verma, R. (2015). Environmental sustainability in the hospitality industry: Best practices, guest participation, and customer satisfaction.

- [18]. Budeanu, A. (2007). Sustainable tourist behaviour—a discussion of opportunities for change. *International journal of consumer studies*, 31(5), 499-508.
- [19]. Cahill, A. (2018). Sustainable tourism practices in Vietnam: the influence of institutions and case study of sapa's growing tourism industry.
- [20]. Catibog-Sinha, C. (2010). Biodiversity conservation and sustainable tourism: Philippine initiatives. *Journal of Heritage Tourism*, 5(4), 297-309.
- [21]. Chan, J. K. L., Marzuki, K. M., & Mohtar, T. M. (2021). Local community participation and responsible tourism practices in ecotourism destination: A case of Lower Kinabatangan, Sabah. *Sustainability*, 13(23), 13302.
- [22]. Chen, Z., Li, L., & Li, T. (2017). The organizational evolution, systematic construction and empowerment of Langde Miao's community tourism. *Tourism Management*, 58, 276-285.
- [23]. Cole, S. (2006). Cultural tourism, community participation and empowerment. *Cultural tourism in a changing world: Politics, participation and (re) presentation*, 89-103.
- [24]. Considine, J., Botti, M., & Thomas, S. (2005). Design, format, validity and reliability of multiple choice questions for use in nursing research and education. *Collegian*, 12(1), 19-24.
- [25]. Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98.
- [26]. Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research, and evaluation*, 10(1), 7.
- [27]. Davison, R. M., Harris, R. W., & Vogel, D. R. (2005, February). E-commerce for community-based tourism in developing countries. In *Proceedings of the 9th Pacific Asia Conference on Information Systems, Bangkok* (pp. 1396-1403).
- [28]. Eagles, P. F., McCool, S. F., & Haynes, C. D. (2002). Sustainable tourism in protected areas: Guidelines for planning and management (No. 8). Iucn.
- [29]. Edgell Sr, D. L. (2019). *Managing sustainable tourism: A legacy for the future*. Routledge.
- [30]. Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods*, 4(3), 272.
- [31]. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- [32]. Frey, N., & George, R. (2010). Responsible tourism management: The missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. *Tourism management*, 31(5), 621-628.
- [33]. Gamble, P. R., & Gibson, D. A. (1999). Executive values and decision making: The relationship of culture and

- information flows. *Journal of Management Studies*, 36(2), 217-240.
- [34]. Garrod, B. (2003). Local participation in the planning and management of ecotourism: A revised model approach. *Journal of Ecotourism*, 2(1), 33-53.
- [35]. Garrod, B., & Fyall, A. (1998). Beyond the rhetoric of sustainable tourism?. *Tourism management*, 19(3), 199-212.
- [36]. Gerdner, L. A. (2015). *Hmong story cloths: preserving historical & cultural treasures*. Schiffer Publishing.
- [37]. Giampiccoli, A., & Hayward Kalis, J. (2012). Community-based tourism and local culture: the case of the amaMpondo.
- [38]. Goodwin, H. (1996). In pursuit of ecotourism. *Biodiversity & Conservation*, 5, 277-291.
- [39]. Goodwin, H. (1996). In pursuit of ecotourism. *Biodiversity & Conservation*, 5, 277-291.
- [40]. Goodwin, H. (2011). *Taking responsibility for tourism* (pp. 1-256). Woodeaton: Goodfellow Publishers Limited.
- [41]. Guttentag, D. A. (2009). The possible negative impacts of volunteer tourism. *International journal of tourism research*, 11(6), 537-551.
- [42]. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* 6th Edition.
- [43]. Hair, J. F., Gabriel, M., & Patel, V. (2014). *AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool*. *Brazilian Journal of Marketing*, 13(2), 44-55.
- [44]. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- [45]. Hassan, S. S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of travel research*, 38(3), 239-245.
- [46]. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
- [47]. Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. *Educational and Psychological measurement*, 66(3), 393-416.
- [48]. Hoang, K. V. (2021). *The benefits of preserving and promoting cultural heritage values for the sustainable development of the country*. In E3S Web of Conferences (Vol. 234, p. 00076). EDP Sciences.
- [49]. Hudson, S., & Miller, G. A. (2005). The responsible marketing of tourism: the case of Canadian Mountain Holidays. *Tourism Management*, 26(2), 133-142.
- [50]. Hui- Chun, Yu, & Miller, P. (2003). The generation gap and cultural influence— a Taiwan empirical investigation. *Cross*

*Cultural Management: An International Journal*, 10(3), 23-41.

- [51]. Hunter, C. (1997). Sustainable tourism as an adaptive paradigm. *Annals of tourism research*, 24(4), 850-867.
- [52]. Iftikhar, H., Pinglu, C., Ullah, S., & Ullah, A. (2022). Impact of tourism on sustainable development in BRI countries: The moderating role of institutional quality. *Plos one*, 17(4), e0263745.
- [53]. Isaacs, J. C. (2000). The limited potential of ecotourism to contribute to wildlife conservation. *Wildlife society bulletin*, 28(1), 61-69.
- [54]. Job, H., Becken, S., & Lane, B. (2017). Protected Areas in a neoliberal world and the role of tourism in supporting conservation and sustainable development: an assessment of strategic planning, zoning, impact monitoring, and tourism management at natural World Heritage Sites. *Journal of Sustainable Tourism*, 25(12), 1697-1718.
- [55]. Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Scientific software international.
- [56]. Kaiser, J. (1960). The Archimedean two-wire spiral antenna. *IRE Transactions on Antennas and Propagation*, 8(3), 312-323.
- [57]. Kasavana, M. L. (2008). Green hospitality. *Hospitality upgrade, summer*, 140-148.
- [58]. Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2015). The performance of RMSEA in models with small degrees of freedom. *Sociological methods & research*, 44(3), 486-507.
- [59]. Kiper, T. (2013). Role of ecotourism in sustainable development. InTech.
- [60]. Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- [61]. Lansing, P., & Vries, P. D. (2007). Sustainable tourism: ethical alternative or marketing ploy?. *Journal of Business Ethics*, 72, 77-85.
- [62]. Lee, T. H. (2011). How recreation involvement, place attachment and conservation commitment affect environmentally responsible behavior. *Journal of Sustainable tourism*, 19(7), 895-915.
- [63]. Li, Y., & Hunter, C. (2015). Community involvement for sustainable heritage tourism: a conceptual model. *Journal of Cultural Heritage Management and Sustainable Development*, 5(3), 248-262.
- [64]. Lordkipanidze, M., Brezet, H., & Backman, M. (2005). The entrepreneurship factor in sustainable tourism development. *Journal of cleaner production*, 13(8), 787-798.
- [65]. Mallick, U. (2019). Sustainable tourism: tool for sustainable forest management, natural resource & community based natural resource management. Editorial Board & Paper Review Committee.
- [66]. Manyara, G., & Jones, E. (2007). Community-based tourism enterprises development in Kenya: An exploration of

- their potential as avenues of poverty reduction. *Journal of sustainable tourism*, 15(6), 628-644.
- [67]. Manzoor, F., Wei, L., Asif, M., Haq, M. Z. U., & Rehman, H. U. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International journal of environmental research and public health*, 16(19), 3785.
- [68]. Marzuki, A. (2008). Decision making and community participation: A case study of the tourism industry in Langkawi. *Tourism: An International Interdisciplinary Journal*, 56(3), 227-241.
- [69]. McCombes, L., Vanclay, F., & Evers, Y. (2015). Putting social impact assessment to the test as a method for implementing responsible tourism practice. *Environmental Impact Assessment Review*, 55, 156-168.
- [70]. Medina, L. K. (2005). Ecotourism and certification: Confronting the principles and pragmatics of socially responsible tourism. *Journal of Sustainable Tourism*, 13(3), 281-295.
- [71]. Mihalic, T. (2016). Sustainable-responsible tourism discourse—Towards ‘responsustainable’ tourism. *Journal of cleaner production*, 111, 461-470.
- [72]. Mishra, P. K., Rout, H. B., & Mohapatra, S. S. (2011). Causality between tourism and economic growth: Empirical evidence from India. *European Journal of Social Sciences*, 18(4), 518-527.
- [73]. Munt, I. (1994). Eco-tourism or ego-tourism?. *Race & Class*, 36(1), 49-60.
- [74]. Mydland, L., & Grahn, W. (2012). Identifying heritage values in local communities. *International Journal of Heritage Studies*, 18(6), 564-587.
- [75]. Nepal, S. K. (2002). Involving indigenous peoples in protected area management: Comparative perspectives from Nepal, Thailand, and China. *Environmental management*, 30, 0748-0763.
- [76]. Neto, F. (2003, August). A new approach to sustainable tourism development: Moving beyond environmental protection. In *Natural resources forum* (Vol. 27, No. 3, pp. 212-222). Oxford, UK: Blackwell Publishing Ltd.
- [77]. Niedziółka, I. (2014). Sustainable tourism development. *Regional formation and development studies*, 8(3), 157-166.
- [78]. Ó Briain, L. (2014). Minorities onstage: Cultural tourism, cosmopolitanism, and social harmony in Northwestern Vietnam. *Asian Music*, 32-57.
- [79]. Olszewski-Strzyżowski, D. J. (2022). Promotional Activities of Selected National Tourism Organizations (NTOs) in the Light of Sustainable Tourism (Including Sustainable Transport). *Sustainability*, 14(5), 2561.
- [80]. Pan, S. Y., Gao, M., Kim, H., Shah, K. J., Pei, S. L., & Chiang, P. C. (2018). Advances and challenges in sustainable tourism toward a green economy. *Science of the total environment*, 635, 452-469.
- [81]. Polnyotee, M., & Thadaniti, S. (2015). Community-based tourism: A

- strategy for sustainable tourism development of Patong Beach, Phuket Island, Thailand. *Asian Social Science*, 11(27), 90.
- [82]. Polnyotee, M., & Thadaniti, S. (2015). Community-based tourism: A strategy for sustainable tourism development of Patong Beach, Phuket Island, Thailand. *Asian Social Science*, 11(27), 90.
- [83]. Poponi, S., Palli, J., Ferrari, S., Filibeck, G., Franceschini, C., Ruggieri, A., & Piovesan, G. (2020). Toward the development of sustainable ecotourism in Italian national parks of the Apennines: insights from hiking guides.
- [84]. Prasetyo, N., Filep, S., & Carr, A. (2021). Towards culturally sustainable scuba diving tourism: an integration of Indigenous knowledge. *Tourism Recreation Research*, 1-14.
- [85]. Reggers, A., Grabowski, S., Wearing, S. L., Chatterton, P., & Schweinsberg, S. (2016). Exploring outcomes of community-based tourism on the Kokoda Track, Papua New Guinea: a longitudinal study of Participatory Rural Appraisal techniques. *Journal of Sustainable Tourism*, 24(8-9), 1139-1155.
- [86]. Reisinger, Y. (1994). Tourist—host contact as a part of cultural tourism. *World Leisure & Recreation*, 36(2), 24-28.
- [87]. Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. Cabi.
- [88]. Saufi, A., O'Brien, D., & Wilkins, H. (2014). Inhibitors to host community participation in sustainable tourism development in developing countries. *Journal of Sustainable Tourism*, 22(5), 801-820.
- [89]. Scheyvens, R. (2000). Promoting women's empowerment through involvement in ecotourism: Experiences from the Third World. *Journal of sustainable tourism*, 8(3), 232-249.
- [90]. Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of educational research*, 99(6), 323-338.
- [91]. Shasha, Z. T., Geng, Y., Sun, H. P., Musakwa, W., & Sun, L. (2020). Past, current, and future perspectives on ecotourism: A bibliometric review between 2001 and 2018. *Environmental Science and Pollution Research*, 27, 23514-23528.
- [92]. Sijtsma, K. (2009). Reliability beyond theory and into practice. *Psychometrika*, 74, 169-173.
- [93]. Sims, R. (2009). Food, place and authenticity: local food and the sustainable tourism experience. *Journal of sustainable tourism*, 17(3), 321-336.
- [94]. Skanavis, C., & Giannoulis, C. (2009). Improving quality of ecotourism through advancing education and training for eco-tourism guides.
- [95]. Stem, C. J., Lassoie, J. P., Lee, D. R., Deshler, D. D., & Schelhas, J. W. (2003). Community participation in ecotourism benefits: The link to conservation practices and perspectives. *Society & Natural Resources*, 16(5), 387-413.

- [96]. Suansri, P. (2003). *Community based tourism handbook* (pp. 11-14). Bangkok: Responsible Ecological Social Tour-REST.
- [97]. Tosun, C. (2001). Challenges of sustainable tourism development in the developing world: the case of Turkey. *Tourism management*, 22(3), 289-303.
- [98]. Tugault- Lafleur, C., & Turner, S. (2009). The price of spice: Ethnic minority livelihoods and cardamom commodity chains in upland northern Vietnam. *Singapore Journal of Tropical Geography*, 30(3), 388-403.
- [99]. Turner, S. (2012). "Forever Hmong": Ethnic minority livelihoods and agrarian transition in upland northern Vietnam. *The Professional Geographer*, 64(4), 540-553.
- [100]. Turner, S. (2012). Making a living the Hmong way: an actor-oriented livelihoods approach to everyday politics and resistance in upland Vietnam. *Annals of the Association of American Geographers*, 102(2), 403-422.
- [101]. Turner, S., & Michaud, J. (2008). Imaginative and adaptive economic strategies for Hmong livelihoods in Lào Cai Province, Northern Vietnam. *Journal of Vietnamese Studies*, 3(3), 158-190.
- [102]. Turner, S., Bonnin, C., & Michaud, J. (2015). *Frontier livelihoods: Hmong in the Sino-Vietnamese borderlands*. University of Washington Press.
- [103]. Turner, S., Bonnin, C., & Michaud, J. (2015). *Frontier livelihoods: Hmong in the Sino-Vietnamese borderlands*. University of Washington Press.
- [104]. Tzschentke, N., Kirk, D., & Lynch, P. A. (2004). Reasons for going green in serviced accommodation establishments. *International journal of contemporary hospitality management*, 16(2), 116-124.
- [105]. Wheeler, B. (1991). Tourism's troubled times: Responsible tourism is not the answer. *Tourism management*, 12(2), 91-96.
- [106]. Wood, M. (2002). *Ecotourism: Principles, practices and policies for sustainability*. UNEP.
- [107]. Zaslow, M. J., Weinfield, N. S., Gallagher, M., Hair, E. C., Ogawa, J. R., Egeland, B., ... & De Temple, J. M. (2006). Longitudinal prediction of child outcomes from differing measures of parenting in a low-income sample. *Developmental psychology*, 42(1), 27.
- [108]. Zinbarg, R. E., Revelle, W., Yovel, I., & Li, W. (2005). Cronbach's  $\alpha$ , Revelle's  $\beta$ , and McDonald's  $\omega$  H: Their relations with each other and two alternative conceptualizations of reliability. *psychometrika*, 70, 123-133.
- [109]. Zucoloto, M. L., Maroco, J., & Campos, J. A. D. B. (2014). Psychometric properties of the oral health impact profile and new methodological approach. *Journal of Dental Research*, 93(7), 645-650.

**Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)**

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

**Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself**

No funding was received for conducting this study.

**Conflict of Interest**

The authors have no conflicts of interest to declare that are relevant to the content of this article.

**Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)**

This article is published under the terms of the Creative Commons Attribution License 4.0

[https://creativecommons.org/licenses/by/4.0/deed.en\\_US](https://creativecommons.org/licenses/by/4.0/deed.en_US)