Factors Affecting the Ability of Local People to Participate in Community-Based Tourism in the Non Nuoc Cao Bang UNESCO Global Geopark Vietnam

Cao Thi Thanh Phuong¹, Tran Chi Thien¹, Le Ngoc Nuong¹
¹Thai Nguyen University of Economics and Business Administration, Tan Thinh, Thai Nguyen City, Thai Nguyen Province, Viet Nam

Abstract

Cao Bang province has great potential for tourism development in general and community tourism in particular thanks to its wealth of geological, geomorphological, biodiversity, environmental and cultural heritages, unique culture and humanity. Since UNESCO recognized Non Nuoc Cao Bang Global Geopark in 2018, tourism in the province has made great progress. However, CBT here has not yet developed strongly due to many barriers. Summarizing the opinions of 250 people from 06 CBT villages in the province and the comments of the Standing Committee of 6 Commune People's Committees with CBT villages will see the factors affecting the decision to participate in CBT development of households. Indigenous people. Using exploratory factor analysis and multivariate regression methods with interview information from 250 people, it shows the influencing factors and their importance in influencing the decision to participate. CBT of households. In descending order of importance, these factors are arranged in the following order: economic benefits of households when participating in CBT, support policies of local authorities, support from businesses and non-governmental organizations, local resources, social capital and the conditions of natural, material, financial, and labor resources of households. Impacting on these influencing factors is the solution to promote CBT in the province.

Introduction

Cao Bang is a beautiful land at the top of the country; There are up to 05 national-level scenic spots including Ban Gioc Waterfall, Nguom Ngoa Cave, Thang Hen Lake complex, Nui Than Eye and Bat Cave. In which, Ban Gioc Waterfall is one of the 10 most beautiful waterfalls in the world, the largest waterfall in Southeast Asia, one of the 10 most beautiful landscapes in Vietnam (Phuong, 2022). This is an ancient land with a rich history and culture, where the cultural quintessence of the community of nine ethnic groups Tay, Nung, Dao, Mong, Kinh...
with rich intangible cultural treasures and rich cultural heritage characterized by customs, practices, beliefs, festivals, folk art, folk dance, traditional crafts and cuisine. Cao Bang was also the cradle of the Vietnamese revolution during the struggle against the French colonialists (Minh, 2018).

In 2018, the Non-Nuoc Cao Bang area was recognized by UNESCO as the second global geopark in Vietnam; where can explore the evolutionary history of over 500 million years of the Earth's crust through fossils, marine sediments, volcanic rocks, minerals, limestone landscapes, caves are special geological heritages global color (Lee & Jayakumar, 2021). Therefore, Cao Bang has great potential in tourism development, especially community-based tourism. However, up to now, the development of CBT here is still very limited, the province has only 07 community tourism villages, of which 6 villages have been put into operation with 28 homestay households in 04 districts. In order to successfully implement the Resolution of the 19th Congress of Cao Bang Provincial Party Committee for the 2020-2025 term, one of the three breakthrough tasks is to develop sustainable tourism and services, step by step turning Cao Bang tourism into a spearhead economic sector, developing CBT through increasing the participation of households in the region is of particular importance (Kolotov, 2021; Cheng et al., 2020). Therefore, it is necessary to do research to find out what factors really limit the participation in CBT of indigenous people, from which there are stions on solutions to solve.

Methods

Theoretical basis

Community participation is the heart and nucleus of community development and a pillar of sustainable tourism development (Bachouch, 2022). But this participation often faces many barriers Tourism often creates opportunities for people to participate in community development, but a number of influencing factors still exist that limit this participation, and at the same time limit the effectiveness of tourism development in community development. Aref & Ma'rof (2008) suggest that in developing countries, there can be three types of negative factors (barriers) that hinder people's participation in tourism development: that are policy factors, operational factors (organization and coordination) and cultural factors (people's awareness and understanding). The factors affecting the participation in the development of additional tourism services of local people at historical sites in Quang Tri province into two categories: mechanism factors and power; business organization factors.

However, to be clearer and more relevant to the context of CBT of Cao Bang province, the factors that are limiting CBT participation of indigenous people can be divided in more detail, into 4 groups: mechanism and policy factors; resource factors - household capital (physical capital, financial capital, human capital and social capital); factors of limited support from enterprises and NGOs (SOEs) and; organizational factors of tourism business (Pemberton et al., 2017).

Research Methods

Barriers limiting people's participation in CBT in Cao Bang were assessed through analysis of survey data collected in 2020 by structured interview method with 250 people (Nong et al., 2020). They include all participating households and people who have not participated in CBT in 06 CBT villages that have been put into operation in Cao Bang province, including hamlets: Pac Rang, Phja Thap (Phuc Sen commune, Quang Hoa district), Ban Giuong (Tien Thanh commune, Quang Hoa district), Khuoi Khon (Kim Cuc commune, Bao Lac district), Lung Nic, Khuoi Ky (Dam Thuy commune, Trung Khanh district). In addition, a survey of the Standing...
People's Committees of communes with CBT villages including: Phuc Sen commune, Tien Thanh commune (Quang Hoa district), Kim Cuc commune (Bao Lac district), Dam Thuy commune (Trung Khanh district) about the factors affecting the participation of the CBT of the people were also conducted with a similar set of questions (Garland et al., 2018). Based on the survey results of 250 people, the multivariate regression function will be applied to analyze the factors affecting the ability of indigenous people to participate in community tourism (KN). The regression function will allow to assess the level and direction of impact of each factor affecting the ability of people to participate in CBT.

Results and Discussion

Regression analysis of factors affecting the ability of households to participate in community tourism

The regression function will allow to assess the level and direction of impact of each factor affecting the ability of people to participate in CBT. The independent variables include: Local resources (DF); Conditions of the household (natural, material, financial, labor) (Regulation); Social capital of the household (social capital); Policy of the State (CS); Support from businesses and non-governmental organizations (DN); Economic benefits (LI). The result of running the function is as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.600(^a)</td>
<td>0.360</td>
<td>0.344</td>
<td>0.896</td>
<td>1.661</td>
</tr>
</tbody>
</table>

a. Predictors: ĐF, ĐK, VXH, CS, DN, LI.

b. Dependent Variable: KN

*Source: Investigation data processing*

This result has an adjusted R\(^2\) value of 0.344 indicating that the independent variables in the model can explain 34.4% of the change in the dependent variable, which means that the variables in the model can explain 34.4% of the change in the dependent variable. 4% of people's decision to participate, the rest depends on other variables not included in the model. Durbin-Watson (d) of the regression function has a value of 1.661 < 3, showing: there is no first order series autocorrelation, or in other words: the estimated residuals of the model are independent, there is no linear relationship with each other.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>109,891</td>
<td>6</td>
<td>18,315</td>
<td>22,804</td>
<td>0.000(^b)</td>
</tr>
<tr>
<td>Residual</td>
<td>195,165</td>
<td>243</td>
<td>0,803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>305,055</td>
<td>249</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: ĐF, ĐK, VXH, CS, DN, LI.
b. Dependent Variable: KN

*Source: Analysis of survey data*

Table 2 shows the coefficients F = 22,804 and Sig = 0.000, that is, the regression model is statistically significant and the regression results are usable.

Cao Thi Thanh Phuong et al.
### Table 3. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Ustd Coefficients</th>
<th>Std Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-0.823</td>
<td>0.621</td>
<td>-1.324</td>
<td>0.187</td>
<td></td>
</tr>
<tr>
<td>Local resources (DF)</td>
<td>0.143</td>
<td>0.062</td>
<td>0.120</td>
<td>2.300</td>
<td>0.022</td>
</tr>
<tr>
<td>Conditions of the household (DK)</td>
<td>0.220</td>
<td>0.107</td>
<td>0.107</td>
<td>2.060</td>
<td>0.040</td>
</tr>
<tr>
<td>Social capital (VXH)</td>
<td>0.107</td>
<td>0.053</td>
<td>0.112</td>
<td>2.030</td>
<td>0.043</td>
</tr>
<tr>
<td>Support from businesses and non-governmental organizations (DN)</td>
<td>0.175</td>
<td>0.064</td>
<td>0.142</td>
<td>2.754</td>
<td>0.006</td>
</tr>
<tr>
<td>Policy of the State (CS)</td>
<td>0.191</td>
<td>0.065</td>
<td>0.155</td>
<td>2.918</td>
<td>0.004</td>
</tr>
<tr>
<td>Economic benefits (LI)</td>
<td>0.397</td>
<td>0.050</td>
<td>0.440</td>
<td>7.915</td>
<td>0.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: KN

Source: Investigation data processing)

When considering the variance exaggeration factor (VIF) of each factor, the value from 1.013 to 1.172 is less than 10, showing that the regression model does not have multicollinearity between the independent variables. According to the table of multivariable regression results, we see that in 6 factors considered, all 6 factors have a linear relationship with the ability to implement CBT with significance level sig. < 5% (P-value < 0.005). This means that we have a basis to reject the hypothesis H0 that there is no linear relationship between the ability to participate in CBT and the above independent variables. According to the unnormalized regression coefficients, we have the following multivariable regression equation:

\[
KN = -0.823 + 0.143*DF + 0.220*DK + 0.107*VXH + 0.175*DN + 0.191*CS + 0.397*LI
\]

According to the normalized regression coefficients, we have a multivariable regression equation presented in order of increasing importance on the influence of the independent variables as follows:

\[
KN = 0.440 LI + 0.155 CS + 0.142 DN + 0.120 DF + 0.112 VXH + 0.107 DK
\]

According to the values of the normalized regression coefficients, we see that the factors affecting the ability of households to participate in CBT have their influence in descending order as follows: economic benefits, government policies, water, support from businesses and NGOs, local resources, social capital of the household and conditions (natural, material, financial, labor) of the household. The different importance of factors will set priorities at different levels for policy makers and tourism managers in the process of promoting CBT development in the locality.

**Proposing solutions to enhance people's participation in CBT in Cao Bang Geopark**

Based on the assessment results of the people and commune officials on the factors affecting the decision to participate in CBT of people in Cao Bang Geopark, in order to increase the participation of people in the region in CBT, it is necessary to implement some of the main solutions.

**First, invest in overcoming bottlenecks in infrastructure**

As assessed by local people and local government leaders, there are difficulties in transport infrastructure to the village and in the CBT; as well as there are difficulties in communication for CBT development (Bitar Rodrigues & Prideaux, 2018). Infrastructure has also been considered as one of the three bottlenecks and bottlenecks of Cao Bang province as pointed out...
by the Resolution of the Party Congress of Cao Bang province. Traffic difficulties have always been considered an important factor making domestic and international tourists hesitate to come to Cao Bang in general and Cao Bang Geopark in particular. Speeding up the construction of Dong Dang - Tra Linh expressway, to connect Cao Bang with the tourist market of Hanoi and the whole country as well as international tourists; Upgrading National Highway 34 and National Highway 4A connecting National Park Geopark with Dong Van Karst Plateau Geopark are important solutions to attract tourists to visit Geopark (Anh et al., 2019; Liberatoscioli et al., 2018).

It is necessary to review to repair the ground, widen inter-communal and inter-village roads leading to tourist attractions, parking spots along the way to Long Noi brocade weaving village, the way to King Le temple, especially the entrance road Heritage Beer Ma Nhai Ngu Che. In addition to traffic infrastructure, it is necessary to overcome the limitation of telecommunications infrastructure. The wifi network needs to have strong and stable coverage throughout the entire Geopark. Currently, Khou Khon CBT village has no electricity and no internet. The internet signal is not stable, it is lost quite often in many locations along the tourist routes. In addition to the investment and construction of social welfare and cultural works, the CBD also needs to improve the quality of medical facilities so that they are capable of doing good health care for local people and visitors. Focus on solving and investing in renovating and upgrading clean water supply systems and waste treatment systems in the locality, paying special attention to tourist areas and attractions (Subramaniyaswamy et al., 2019).

**Second, support financial and material resources for households participating in RED**

It is necessary to fully equip CBT facilities and synchronously build quality standard public sanitation facilities at tourist sites and households in the project. At homestay households, because households often face difficulties in terms of facilities and financial resources, the State, businesses, and NGOs need to support them to purchase and shipment and facilities. Suitable for accommodation and dining of tourists. Calling for domestic and foreign investment support to build accommodation services of all types from affordable prices such as motels and homestays with high-class services but still retain the unique characteristics of the locality to meet the demand for vacation, variety of domestic and foreign tourists. In addition, a public-private partnership model can be applied to build homestay catering services in collaboration with a professional management unit for business. The province needs to have preferential policies to support investors in order to attract them to invest in tourism as well as supporting industries for tourism in Cao Bang. Creating favorable conditions for investors by simplifying, publicizing and transparent procedures and processes related to opening a business or tourism business, ancillary services in Cao Bang (Finegan et al., 2020; Dessie et al., 2019).

**Third, it is necessary to create jobs and stable incomes for people doing RED activities**

Tourism is seasonal because it depends on weather conditions and climate change in terms of roads and traffic to Cao Bang, to the CBT and in the village, there are still many limitations (Nguyen & Hens, 2019). First of all, it is necessary to develop products that are local strengths that can serve the visitor's experience during the tourist season but can also be consumed at home and abroad during the tourist season.

It is necessary to research and identify products suitable to the strengths of each community, thereby building projects to develop these products to serve tourism development. For example, areas with a high level of development like Hoa An can develop high-tech agriculture or areas with favorable natural conditions like Phja Oac-Phja Den can develop temperate and subtropical agriculture; Localities with specialty products such as Phja Den vermicelli (Nguyen Binh), Trung Khanh chestnuts, Thach An black jelly can develop these products to create...
opportunities for tourism to experience agriculture for tourists, develop agricultural production, consume inside and outside the province, can even export when the tourist season ends or when tourism is delayed due to the impact of climate change or disease (Tu Nguyen et al., 2022).

In addition, at each CBT site, it is necessary to develop and diversify types of entertainment, entertainment, enjoyment of popular culture, folk art, and shopping for souvenirs for tourists. It is necessary to properly plan entertainment areas, eco-tourism, spiritual tourism, resort tourism, tourism to discover nature, culture, historical sites, learn from village models’ Traditional crafts and villages are successful throughout the country to apply to the specific conditions of each CBT village (Huong et al., 2020). It is necessary to combine local festivals to organize tourism activities; planning types of nightlife entertainment for visitors such as campfires combined with Vietnamese folk games, performances of traditional music and dance of local ethnic groups.

**Fourth, it is necessary to strengthen the training of human resources for tourism in the locality**

Community-based tourism development completely depends on the people, and the tourists’ experiences depend on the quality of services provided by the people (Yanes et al., 2019). Although people and commune leaders believe that households have enough labor resources to do tourism, most of these workers have not been trained and have no experience in providing CBT services. Therefore, people need the State, businesses, and non-governmental organizations to provide professional knowledge and skills to participate in tourism professionally such as: organizing training courses, opening training courses and fostering on tourism knowledge, skills, help them have the necessary skills to provide the best community-based tourism products (Deale & Lee, 2021).

Prioritize the development of human resources to serve tourism activities for local workers, especially local ethnic minorities, by supporting policies in training, vocational training, and mobilizing enterprises. Businesses participating in tourism business give priority to using this labor source. Strengthen cooperation and exchange of experiences through conferences, scientific seminars, tourism fairs in countries and localities with tourism industry development calendar (Kapera, 2018). CBT management boards and people need to be trained to improve their knowledge and expertise. Training tourism workers not only improves labor quality, but also contributes to building a friendly destination image through professional service, creating a healthy tourism environment, and increasing job opportunities. and income, ensuring social security, and at the same time positively impacting the development of tourism (Ashbaugh et al., 2021).

**Fifth, focus on the conservation of natural resources and environmental protection in the process of tourism development in general and CBT in particular**

Natural resources and environment are prerequisites for tourism development; Conservation of resources and protection of the environment are prerequisites for sustainable development of tourism in general and CBT in particular (Phuong et al., 2020; Giampiccoli et al., 2020). In fact, there have been a number of phenomena of encroachment on tourism resources such as illegal exploitation of stalactites in Bat Cave, selling traditional antiques such as stone mortars, looms to foreign countries. Some degraded relics have not been embellished, such as To Thi Phuc Than Temple (Dong Loan commune, Ha Lang district) a provincial relic, which was roofed with yin and yang packages, has now been replaced by fibro panels cement, needs to be embellished Ma Nhai Ngu Che stele of King Le Thai To (Hong Viet commune, Hoa An) has 15 columns of letters, but now only 9 columns of text are clear, 6 columns of letters on the left are blurred due to weathered lime but not yet painted conservation and restoration.
Environmental sanitation at some heritage sites is not guaranteed, which also greatly affects the beauty and attractiveness of destinations for tourists (Wall, 2019; Armis & Kanegae, 2020).

**Conclusion**

CBT development is the right direction of Non Nuoc Cao Bang Geopark in order to preserve, preserve and promote the values of beautiful natural landscapes, diverse and unique ethnic cultures that are inherently unique. The analysis of factors as well as finding the similar assessment views between the people and the local government is to find a common voice between them. The reason is that not many people participate in CBT, households and leaders of communes all think that the locality has beautiful scenery, cultural and historical resources are very convenient, but the roads to the village and the interior are very convenient. limited edition. From their own side, they still lack physical facilities and financial resources even though they have favorable natural conditions and have enough labor to participate. They also acknowledge local supportive policies, but they have little support from businesses and NGOs. They believe that although CBT brings economic benefits and jobs, it is not stable.

Among the 6 influencing factors, the survey respondents said that the economic benefits of households when participating in CBT is the most important factor, followed by state policies, then the support of enterprises and INGOs. Next is the local condition, the social relationship of the household and finally the condition of the household's resources. From there, the solutions to increase the participation of people in CBT are the solutions directed at the community. overcome the above limitations.

**References**


Cao Thi Thanh Phuong et al.


Nguyen, A. T., & Hens, L. (2019). Climate change-associated hazards, impacts, and vulnerability at regional level. In *Human Ecology of Climate Change Hazards in Vietnam* (pp. 37-60). Springer, Cham. [https://doi.org/10.1007/978-3-319-94917-8_2](https://doi.org/10.1007/978-3-319-94917-8_2)


*Journal of Social Commerce* is licensed under Creative Commons Attribution-ShareAlike 4.0 International License (http://creativecommons.org/licenses/by-sa/4.0/)