Community-Based Tourism Approach for Sustainable **Development: A Study of the Lepcha Community,** Kalimpong District, India

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Abstract

Tourism is associated with the principles of Sustainable Development Goals (SDGs) in many ways because of its linkages with poverty alleviation, economic development, and environmental sustainability. The Community-Based Tourism (CBT) approach is one of the newly developed tourism types designed to resist mass tourism's adverse environmental impacts with an aim for sustainable development. The present study was carried out to evaluate sustainable development using the CBT approach for the Lepcha community in the Kalimpong district of India. A self-designed, validated, semi-structured questionnaire survey was used to conduct the study with 250 participants selected through purposive sampling. The collected data were analyzed by both descriptive and inferential statistics in SPSS 20. Qualitative techniques also were used to verify the quantitative results of the study. The findings indicate that CBT and sustainability factors (economic, sociocultural, and environmental) have a statistically significant positive correlation. So, the development of CBT is expected to bring economic sustainable development, followed by social-cultural and environmental development in the study area.

Keywords

Community-Based Tourism; Sustainable development; Lepcha; Economic sustainability

1. Introduction

The concept of sustainable development (SD) was presented in the well-known Brundtland Commission report 'Our Common Future' of 1987 (Dangi & Jamal, 2016). Sustainable development meets the needs of the present generation while protecting and enhancing opportunities and possibilities for future generations (Juma & Khademi-Vidra, 2019). Tourism is an economic resource that has been crucial in achieving sustainable development worldwide. Sustainable tourism development has been essential for increasing economic growth, reducing poverty, job creation, and addressing major environmental issues (Richardson, 2021). The United Nations (UN) sustainable development goals 8.9 and 12.b have emphasized the framing and implementation of policies to promote sustainable tourism for the sustainable development of an area. However, there are scenarios where social, economic, environmental, and cultural factors negatively influence destinations for mass tourism development, causing significant losses to the tourism sector (Mtapuri et al., 2022). The approaches of sustainable tourism in the form of Community-Based Tourism (CBT) can be used to minimize the negative impacts of mass tourism (Murphy & Price, 2012). CBT can be an alternative tourism approach for achieving sustainability principles and simultaneously enhancing tourism (Giampicooli & Saayman, 2016). CBT is managed and owned by the community to enable tourists to increase their awareness and learn about the community and their ways of life (Suansri, 2003). Therefore, organized, controlled, or coordinated tourism primarily at the local level is known as Community-Based Tourism. By encouraging sustainable livelihoods, it supports community well-beina.

Additionally, CBT seeks to protect important socio-cultural heritage and natural elements (Chadha & Onkar, 2019; Goodwin & Santilli, 2009; Mann, 2000; Twining-Ward, 2007). The main characteristics of CBT include community management and control, conservation of nature and culture, and community empowerment and development (Zielinski et al., 2020). CBT strives to be equitable within society, environmentally conscious, and economically prosperous over the long run, sharing sustainable development goals (Bagus et al., 2019; Dodds & Galaski, 2018). CBT shares events like festivals, music and dance, traditional sports, local crafts, cuisine, and hospitality between the hosts and the guests. In addition, the community products are exposed to new markets for handmade goods that help to open different types of businesses (Rey Bolanos, 2019). Therefore, the CBT approach mainly focuses on involving local communities in the tourism planning and development process (Bagus et al., 2019). The local community's support directly influences a tourism destination's development, maintenance of its quality, and sustainability (Muresan et al., 2019).

CBT has received endorsements as a tool for sustainable development for many reasons. Firstly, it canpositively impact the conservation benefit of natural and cultural resources. Secondly, CBT tries to bring socioeconomic upliftment of the local community. Thirdly, there is a chance to increase the number of business opportunities for the local people if appropriate planning and management are implemented. Finally, tourists' experiences are considered for sustainable development (Armstrong, 2012; Juma & Khademi-Vidra, 2019).

CBT has been implemented by many countries because it can improve local economies (Lee & Jan, 2018). The Kalimpong district of India, the study area, is inhabited by many communities with unique cultural attractions, like folk dances, folk songs, local cuisines, and traditional festivals. Apart from the cultural attractions, the district is endowed with abundant natural resources, spectacular scenic beauty, and unique varieties of flora and fauna. But, it is a matter of concern that the inclination of tourists to mass tourism in popular places with simultaneous development for increasing commercialization may hinder the development of CBT in the study area. Also, due to spatial development, particularly in terms of urbanization for mass tourism activities, there has been a need to enhance environmental awareness among the local community with respect to the benefits that CBT provides by its unique characteristics both for the local people and tourists (Lee, 2013; Lee & Jan, 2018; Lepp, 2007).

Tribal communities belonging to different races with different cultures and religions are found in the Kalimpong district, including Tibetans, Bhutanese, Limbu, Tamang, Gurung, Magar, Rai, Chettri, Kami, and Damai. Lepchas are the most indigenous and primitive tribe in Kalimpong district (Lepcha, 2007). According to Census 2011, 68 percent of the Lepcha people lived in rural areas.

The main source of income for the Lepcha community is based on agricultural activities. The Lepcha community also is associated with hunting and food gathering, and it practices shifting cultivation. The Lepchas rely heavily on the forest, and if their agricultural production is inadequate, they obtain fruits and tubers from the forest as an alternative sustenance. Thus, they are closely connected with nature and depend on it for their livelihood (Mandal, 2018).

Kalimpong is the home of the Lepcha people and has a unique, rich cultural and traditional heritage characterized by lush green hills, terraced agricultural fields, community lifestyle, and mountains. The community is known particularly for its traditional dances performed during auspicious occasions and this has become an important tourist attraction. The homelands of the Lepcha people are endowed with a rich biodiversity that includes dense subtropical and temperate forest and this natural environment also has become a major attraction for tourists.

Several villages in the Kalimpong district have potential for Community-Based Tourism, and each offers its own unique characteristics. Pedong, Gitdabling, Samthar, Lungsel, Ramdhura, Rishab, Gumbadara, Samalbong, Lolaygoan, Kolbong, Sillery gaon, Gorubathan and Munsong are some of the most well-known destinations in the Kalimpong district.

It has been argued that development of the tourism industry can be truly sustainable through the CBT approach, which relies on communities and their resources. CBT is a tool for empowerment of local people, by focusing on ownership and management of their unique natural and cultural heritage that makes up a community is essence (Al-Oun & Al-Homoud, 2008). The Lepcha community has a considerable potential for CBT but to be optimally-developed, a deeper exploration of potentials and constraints is necessary. As such, this study was carried out with the objective to assess the relationship between CBT and economic sustainability, socio-cultural sustainability, and environmental sustainability as per the residents' perceptions.

2. Materials and Methods

The study was carried out using a mixed-method approach (Creswell & Creswell, 2013) consisting of both quantitative as well as qualitative methods. Four different Lepcha community-based destinations were chosen as the study sites based on potential CBT attractions like traditional cultural heritage, natural resources, and traditional cuisine (Figure 1). The authors visited West Bengal Mayal Lyang Lepcha Development Board (Kalimpong) to collect information about the Lepcha community. Pedong is a small hill in the northeastern part of Kalimpong. It has fascinating historical views of the ruins of the old Bhutanese fort of Damsong. The Lepchas of Kalimpong celebrate the birth anniversary of King Gaebo Achyok on 20th December at Damsong Fort in an annual festival. Lungshel is situated in the southern part of Kalimpong, the birthplace of Gaebo Achyok, the legendary Lepcha King. The beautiful and scenic rural village is surrounded by a steep mountain ridge system. The indigenous Lepcha people have long resided at Lungshel village and preserved their rich culture and heritage. Gitdabling is a traditional rural community located in the northeastern part of Kalimpong. Samthar is a sleepy hamlet inhabited mainly by the Lepcha community, located in the central part of Kalimpong. All four destinations allow tourists to experience and understand the local cultures and, at the same time, enjoy traditional hospitality.

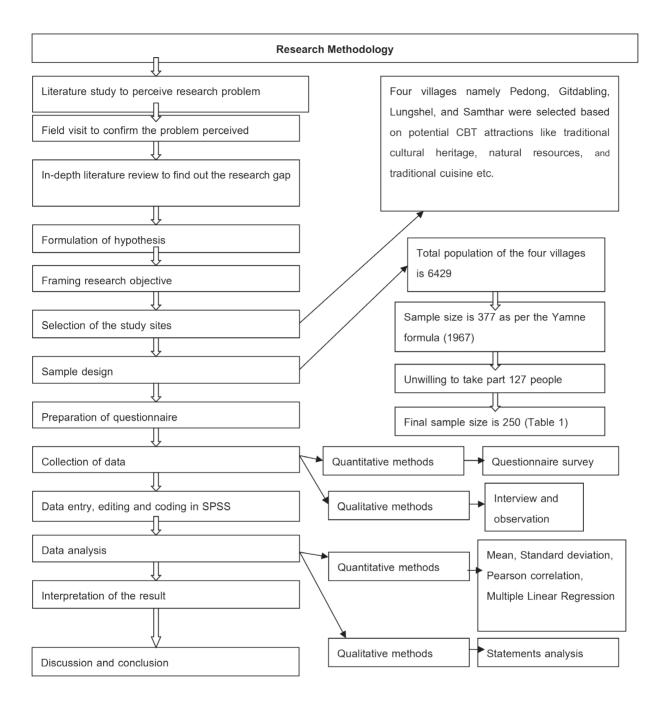


Figure 1. Research methodology (Source: Prepared by authors, 2023)

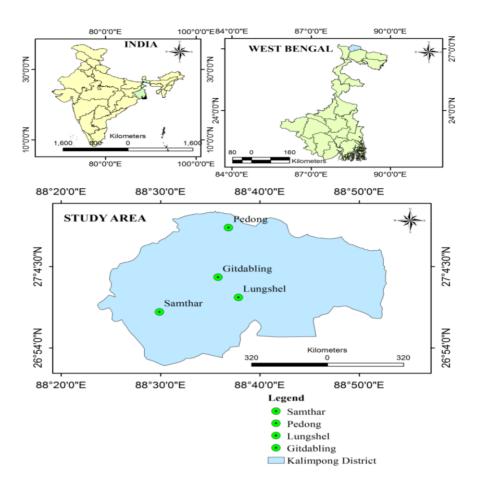


Figure 2. Location of the study area (Source: Prepared by authors, 2023).

Figure 2 summarizes the study workflow. A total of 6429 Lepcha people from the four Lepcha villages were identified as the population for the study. Of the 6429 Lepcha people, 250 were selected for inclusion in the survey although the sample size should be 377 as per the Yamane formula (1967) with a 95% confidence level and a 5% margin of error (Chaokromthong & Sintao, 2021). The smaller sample size resulted because 127 Lepcha people were unwilling to take part in the survey. Hence, a total of 377 questionnaires were distributed among the Lepcha people and 250 completed questionnaires were returned, of which160 participants were male and 90 were female (Table 1).

Table 1 Characteristics of the Sample (N).

	Ger		
Surveyed destination	Male	Female	Total
Pedong	29	21	50
Lungshel	36	14	50
Gitdubling	64	36	100
Samthar	31	19	50
Total	160	90	250

The questionnaire included four sections: i) Community-Based Tourism consisted of five items based on the findings of Sharma (2018) and Lee (2013); ii) economic sustainability consisted of six items based on the findings of Choi and Sirakaya (2006), Lee (2013), and Lee and Jan (2018); iii) socio-cultural sustainability consisted of six items based on the findings of Choi and Sirakaya (2006), Lee (2013), Lee and Jan (2018), and iv) environmental sustainability consisted of three items based on the findings of Lee and Jan (2018). A five-point Likert scale was employed to evaluate the perceptions and understandings of sustainability, with scores ranging from 1 for 'strongly disagree' to 5 for 'strongly agree' (Maddox, 1985).

Collected data were analyzed using SPSS version 20. Descriptive statistics used in this study include Cronbach alpha for checking the reliability of the interview schedule, frequency, and percentages for showing respondents' demographics, mean, and standard deviation showing sustainability factors based on respondents' perception (George & Mallery, 2018; Jasrai, 2020). Next, measures of association between the four domains were analyzed by the Pearson correlation coefficients (r) (George & Mallery, 2018; Jasrai, 2020). In addition, Multiple Linear Regression (MLR) was applied to predict the dependent domain (Community-Based Tourism) based on the independent domain (economic, socio-cultural, and environmental sustainability) (George & Mallery, 2018; Jasrai, 2020).

The qualitative approaches included in this study are the observation and interviews conducted with the community. Specifically, interviews were conducted through informal discussion with community members while in-depth interviews were carried out with Lepcha community leaders in the Kalimpong district. Passive observation of the four communities also was performed by the study team to help characterize the natural and cultural attractions, as well as infrastructural facilities. Further, qualitative data were obtained by conversation analysis in the form of individual statements.

3. Results

3.1 Socio-Demographic Characteristics of the Respondents

Table 2 Socio-Demographic Profile of the Respondents.

Demo	graphics	Sample (N)	Percentage
Gender Male		160	64.0
Gender	Female	90	36.0
	18-35	89	35.6
Age Category	35-60	86	34.4
	>60	75	30.0
	Primary	69	27.6
	Secondary	73	29.2
Educational Status	Higher Secondary	53	21.2
	Above higher secondary	55	22.0
	Married	193	77.2
Marital Status	Unmarried	57	22.8
	<3	59	23.6
Family Size	4-6	153	61.2
	>6	38	15.2

	Govt. job	9	3.60		
	Private job	39	15.6		
Employment Status	Agriculture	120	48.0		
	Tourism	27	10.8		
	others	55	22.0		
	<5000	51	20.4		
M III (MP)	500-10000	108	43.2		
Monthly Income (INR)	1000-15000	61	24.4		
	>1500	30	12.0		
Total sample (N): 250					

Source: Primary survey, 2023

The respondents' demographics consist of 64% male and 36% female with 35.6% of participants belonging to the age group of 18 to 35; 34.4% belonging to 35 to 60; and 30% belonging to > 60 age groups, respectively (Table 2). Concerning the education status, 27.6% of respondents in the study area have completed the primary level of education; 29.2% have completed secondary education; 21.2% have achieved higher secondary education, and 22% have completed above higher secondary education. Most people are married (77.2%), and the remaining 22.8 % are unmarried in the study area. Of the population, 3.6% belong to <3 family size; 61.2% belong to 4 to 6 family sizes, and 15.2 % belong to 7 to 9 family sizes. Concerning the employment status, 3.6% are government job holders; 15.6% are private job holders; 48% are engaged with agricultural practices; 10.8% are involved in the tourism sector; and 22% are in the "other" category. In addition, 20.4%, 43.2%, 24.4% and 12% of the respondents have a monthly income of INR <5000(USD 60), 5000 to 10000 (USD 60 - USD 120), 10000 to 15000 (USD 120-180), and above 15000 (above USD 180), respectively (as of December 20, 2022).

3.2 Residents' Perception of CBT for Sustainable Development

Residents' perception shows the villages have natural and cultural attractions that are of interest to tourists (Mean= 3.58), strong support towards the development of Community-Based Tourism initiatives (3.58), active participation in sustainable tourism-related plans and development (3.62), followed by participating in cultural exchange between residents and tourists (3.20), and Lepcha culture and heritage are different from others (3.57) (Table 3).

Table 3 Residents' Perception of CBT.

Domain	Variables	Mean	SD
	The village has natural and cultural attractions that attract tourists	3.58	0.96
	Support the development of community-based tourism initiatives	3.58	1.01
Community-based tourism	Participation in sustainable tourism-related plans and development	3.62	0.97
	Participation in cultural exchanges between local residents and tourists	3.20	1.24
	Culture and heritage are different from others	3.57	0.80
Note: SD= Standard Deviation			

Table 4 shows the residents' perception of CBT approaches for sustainable development wherefrom it is believed that there would be more investment opportunities by entrepreneurs (Mean= 3.31) for the development of CBT that may bring economic sustainability by promoting local business opportunities and increasing employment opportunities (3.27), improving the living standard of the community (3.26), increasing local government tax revenues (3.25), and increasing shopping opportunities (3.16) both for tourists and local people.

As per the residents' perception, there would be a positive impact on the cultural identity (3.3) of local people, followed by the preservation of local culture (3.08), cultural exchanges between residents and tourists (2.99), increasing infrastructure facilities (2.97), community member participation in cultural activities (2.87), and improvement of cultural activities (2.76) for the development of CBT under socio-cultural sustainability domain.

In addition, the study results show that participants believe the community's biodiversity (3.83) would be protected followed by an increase in environmental awareness (3.50), and protection of the natural environment and wildlife habitats (3.42) under the environmental sustainability domain.

Table 4 Residents' Perception of Sustainability Factors.

Domain	Variables	Mean	SD
	Increase employment opportunities	3.27	1.25
	Increase shopping opportunities	3.16	1.17
	Increase local government tax revenues Promote local business opportunities Attracts more investment opportunities Improve the standard of living Participation in cultural activities	3.25	1.25
Economic Sustainability		3.27	1.29
		3.31	1.26
		3.26	1.25
	Participation in cultural activities	2.87	0.99
Socio-cultural Sustainability	Development of cultural activities	2.76	1.10
	Preservation of the local culture	3.08	1.16
	Cultural exchange	2.99	1.13
	Positive effects on cultural identity	3.33	1.09
	Increase infrastructure facilities		1.17
	Protection of the natural environment and wildlife habitats	3.42	1.12
Environmental Sustainability	Protection of the community's biodiversity	3.83	1.01
	Increase the environmental awareness	3.50	1.01

Source: Primary survey, 2023

Table 5 Relationship between CBT and Sustainability Factors.

Domains	(1)	Cohen's f	(2)	Cohen's f	(3)	Cohen's f	(4)
Community-based tourism (1)	1						
Economic Sustainability (2)	0.721**	0.520	1				
Socio-cultural Sustainability (3)	0.484**	0.234	0.194**	0.038	1		
Environmental Sustainability (4)	0.426**	0.181	0.233**	0.054	0.221**	0.049	1
** Correlation is significant at the 0.01 level (2-tailed).							

The correlation matrix indicates that CBT is strongly and positively associated (r = 0.721) with economic sustainability, followed by socio-cultural sustainability (r = 0.484), and environmental sustainability (r = 0.426) at the 0.01 significance level (Table 5). Residents' perceptions reveal that if there is an increase in economic sustainability for the development of Community-Based Tourism, the level of sustainable development also increases. The correlation effect size values (Cohen's f) range from 0.1 to 0.5 which indicates small to large effects. So, the Community-Based Tourism has a large effect on the economic sustainability, which effect size is 0.520 (Cohen, 1998). The rest of the independent domains have significant positive effects on each other. Therefore, a direct link is noticed between economic, socio-cultural, and environmental factors and CBT.

Table 7 shows the results of a Multiple Linear Regression (MLR) model which is based on the enter method (Jasrai, 2020). MLR is used to assess the impact of explanatory or independent variables on the outcome or dependent variable. The significance values of the unstandardized and standardized residuals in the MLR are normally distributed. The Kolmogorov-Smirnov and Shapiro-Wilk tests were significant at the >0.05 level (Table 6). The linear relationship between explanatory and outcome variable was examined by plotting scatter diagrams (Figure 3).

The model summary suggests a strong positive multiple correlation coefficient (R = .827) between predictors (Environmental Sustainability, Socio-cultural Sustainability, Economic Sustainability) and dependent domain (CBT). The value of R-square (.684) suggests that collectively all three predictors in the model explain 68% of the variance in the CBT development. The MLR effect size values range from 0.01 to 0.40 which indicates small to large effects. The MLR model effect size is 1.471 (Cohen, 1998). So, the sustainability factor has a large effect on the CBT development.

Table 6 Tests of Normality for MLR Model

B	Kolmogorov-Smirnova			Shapiro-Wilk		
Residual	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.042	250	.200*	.992	250	.228
Standardized Residual	.031	250	.200*	.995	250	.560

^{*.}This is a lower bound of the true significance. a. Lilliefors Significance Correction. Significant at the >0.05 level

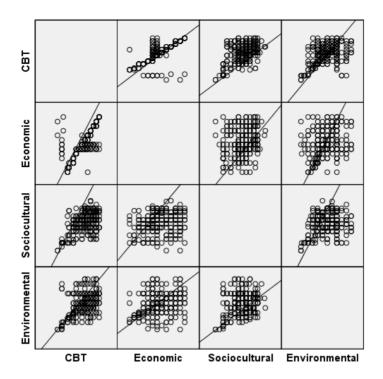


Figure 3. Scatter plot matrix (Source: Primary survey, 2023)

Table 7 Multiple Linear Regression Model (MLR) Summary.

Model	R	R-Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson	Cohen's f	
1	.827	.684	.680	.38434	1.026	1.471	
a Predictors: (Constant) Environmental Sustainability Socio-cultural Sustainability Economic sustainability							

Source: Primary survey, 2023

The F - ratio in the ANOVA test suggests that the model has a significant fit for explaining CBT (F (3, 246) = 177.68, p < 0.05, 0.00) (Table 8).

Table 9 shows the t-test statistics and p-values to determine the significant effect of the independent domain on the dependent domain. Economic Sustainability has the greatest significant effect on sustainable development (t = 16.34, p <0.05, 0.00) followed by Socio-cultural Sustainability (t = 8.58, p <0.05, 0.00), and Environmental Sustainability (t = 5.69, p<0.05, 0.00). As the values of tolerance for all the predictors also are near 1 and VIF values for all the predictors are less than 10, the regression model is unaffected by the multicollinearity.

Table 8 ANOVA

b. Dependent Variable: CBT

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.739	3	26.246	177.681	.000
	Residual	36.338	246	.148		
	Total	115.077	249			

a. Dependent Variable: CBT b. Predictors: (Constant), Environmental Sustainability, Socio-cultural Sustainability, Economic Sustainability b. Significant at the <0.05 level

Table 9 Estimated Multiple Linear Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	800	.199		-4.025	.000		
	Economic Sustainability	.710	.043	.609	16.342	.000	.924	1.082
	Socio-cultural Sustainability	.484	.056	.319	8.584	.000	.930	1.076
	Environmental Sustainability	.188	.033	.213	5.692	.000	.914	1.095

Source: Primary survey, 2023

3.3 Qualitative analysis of residents' statements

Residents of the Lepcha villages i.e. Pedong, Lungshel, Gitdabling, and Samthar, shared their opinions about Community-Based Tourism that contributes to sustainable development; one of them opined as follows: Our village has tourism potential because of its natural beauty and unique cultural heritage, which are different from other cultures. If community-based tourism is developed, tourism and agricultural practices can be performed simultaneously to solve our economic problems. (Participant 1, male, age 42).

This statement suggests that Pedong village is a CBT potential village due to its natural attractions (mountain, river, wildlife, and waterfall) and cultural heritage (traditional cuisine, folk music, dance, fairs, and festivals). Residents' opinions show a need for support from the villagers and local government to improve tourism and agriculture for economic sustainability in the area.

Tourists are coming from different areas of the country and abroad. The tourism business has been a source of interest for many local people and stakeholders. My job involves working in a guest house while my son is a tourist guide. Applying tourism businesses through community-based tourism would be beneficial, providing income opportunities and eliminating the need to go outside for work. (Participant 2, male, age 51).

From this statement, it is clear that tourists visit the area from different areas across the country, even abroad. Many local people and other stakeholders have opened homestays, guest houses, lodges, and hotels to develop the tourism industry. The residents need to be involved more in tourism planning and management for the betterment of the entire community. Therefore, CBT creates employment and business opportunities for the local people and provides a better standard of living.

I see the current situation; tourism has generated income but affects our nature and society. If all people in community are concerned about doing the tourism business, they must be responsible for culture and nature. (Participant 3, male, age 55).

In this statement, the participant expressed the opinion that CBT can have positive and negative impacts on the community. It has an economically beneficial approach but simultaneously affects the environment and society. However, residents strongly support the CBT approach to preserving local cultural heritage for its positive effects on the socio-cultural identity, and economic and environmental sustainability.

I am the owner of this homestay, involved in the tourism business for the last 6 years. There was only my homestay in this village when tourism development did not flourish in the true sense. This village has historical significance, which is the birthplace of Lepcha King Gaeboo Achyok which is the main attraction of this area, followed by the scenic beauty of the hill, landscape beauty, waterfalls, organic farming, broom cultivation, and trekking opportunities for the tourists. The majority of the people is engaged in agriculture and goes to work outside as daily labour. If CBT is developed, the village will be economically prosperous, and our culture will be spread across the country, but infrastructure is needed. In addition, the protection of the environment is essential for us. (Participant 4, male, age 37).

In this statement, Lungshel village has yet to experience a full-fledged form of development of CBT despite the village having natural, historical, and cultural attractions. Most of the community members involved in agricultural practices migrate to other villages as daily labour during non-agricultural seasons. The Lepcha society respects all-natural elements, including trees, shrubs, soil, rocks, rivers, streams, lakes, hillocks, the moon, the sun, the stars, mist, rain, and snowfall. They believe that nature provides everything needed for livelihood and accept adequate responsibility for protecting and preserving the natural elements (Roy and Roy, 2017). Thus, infrastructure development is necessary to pull the tourists, which may facilitate a better understanding of the Lepcha community's traditional culture and further improve community sustainable economic development.

I support tourism and want to help new entrepreneurs to develop tourism. We take care of the environment and tell everyone about environmental values. I talk to the tourists and tell them about the village attraction and do not litter everywhere. (Participant 5, male, age 39).

In this statement, new entrepreneurs interested in developing CBT for better livelihood are supposed to be supported and assisted by residents. The residents are conscious of environmental values and want to spread awareness among the local community and tourists.

I have been associated with tourism for the last 3 years. Tourists come to this village across the country and stay at homestays, hotels, and guest houses. My jobs are to provide hospitality to the guests. If CBT is developed, many villagers can be engaged in tourism, which shall reduce unemployment. We can learn different things about CBT and shall prepare the next generation to retain our socio-cultural heritage. (Participant 6, female, age 31).

This statement reveals that tourism has been developed in this village and attracts tourists. Only some local people are currently engaged in tourism activities; if CBT is properly developed, it may engage more people from the community and consequently, economic, socio-cultural, and environmental benefits for future generations may be achieved.

4. Discussion

Both the qualitative and quantitative results confirm that sustainable development is possible through Community-Based Tourism (CBT). Three dimensions of sustainable development (economic, socio-cultural, and environmental) used in this study show a significant relationship between CBT and economic, socio-cultural and environmental factors. Therefore, sustainable development factors are key determinants because of their larger effect sizes as derived from the results of the study on the development of CBT. Economic factors relating to the sustainable CBT were found to be the foremost attribute based on the largest effect size, followed by socio-cultural and environmental sustainable development factors of CBT. More broadly, it can be predicted that conservation of natural and cultural resources leads to economic benefits by attracting tourists to the pristine quality of natural and cultural resources available within the community that shall further bring both sustainable economic development in the area and sustainable natural resource management by forming CBT (Lee, 2013). To achieve the aforesaid benefits, it is essential for the local residents to take part in the CBT to exhibit their culture, tradition and other heritages. By conserving both tangible and intangible attractions through CBT, adverse impacts of tourism can be minimized (Polnyotee & Thadaniti, 2015), an issue faced by many populous tourist destinations at present.

5. Conclusion

The study findings reveal the need for multiple and target-based awareness programmes to be implemented by governmental and non-governmental organizations through a Public-Private Partnership (PPP) model in tourism planning and development. Simultaneously, Higher Education Institutes (HEIs) may play a crucial role by making local people of the CBT potential areas aware of the benefits of CBT through different life-long learning and intervention programmes. In addition, local government can arrange community-based festival or cultural events; exhibition of their traditional cuisines and handicrafts, indigenous natural resource management strategies; marketing opportunities of their local products; storytelling and conservation of their culture and heritages to explore their CBT potentials for wide publicity to attract tourists. Thus, the findings of this study offer important insights on tourism academia, policy makers and/or community associations to develop community-based tourism. While conducting the study, a few limitations have been experienced like varied perceptions of local residents and other stakeholders regarding development of CBT, lack of secondary data, and exclusion of political factors in the study that may have some impact.

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Author Contributions

Conceptualization, B.D. and D.B.; Methodology, B.D. and D.B.; Software, B.D.; Formal Analysis, D.B.; Writing-Original Draft Preparation, B.D. and D.B. All authors have read and agreed to the published version of the manuscript.

References

- Al-Oun, S., & Al-Homoud, M. (2008). The potential for developing community-based tourism among the Bedouins in the Badia of Jordan. Journal of Heritage Tourism, 3(1), 36-54.
- Armstrong, R. (2012). An analysis of the conditions for success of community based tourism enterprises. ICRT Occasional Paper, (OP21), 1-52.
- Bagus, S. I., Imade, S. U., Nyoman, S. I. A., & Putu, W. S. N. (2019). Community based tourism as sustainable tourism support. Russian Journal of Agricultural and Socioeconomic Sciences, 94(10), 70-78.
- Chadha, H., & Onkar, P. (2019). An exploration of community-based tourism within the context of tourism planning and development. E-review of Tourism Research, 17(1).
- Chaokromthong, K., & Sintao, N. (2021). Sample size estimation using Yamane and Cochran and Krejcie and Morgan and green formulas and Cohen statistical power analysis by G* Power and comparisions. Apheit International Journal, 10(2), 76-86.
- Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. Tourism management,
- Cohen, J. (1998). Statistical power analysis for the behavioral science (2nd ed.). Lawrence Erlbaum.
- Creswell, J. W., & Creswell, J. D. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Dangi, T. B., & Jamal, T. (2016). An integrated approach to "sustainable community-based tourism". Sustainability, 8(5), 475.
- District Magistrate, Kalimpong. (2018). Kalimpong the nest of smiles. Darpan Publication.
- Dodds, R., Ali, A., & Galaski, K. (2018). Mobilising knowledge: Determining key elements for success and pitfalls in developing community-based tourism. Current Issues in Tourism, 21(13), 1547-1568.
- George, D., & Mallery, P. (2028). IBM SPSS statistics 23 step by step: A simple guide and reference. Routledge.
- Giampiccoli, A., & Saayman, M. (2016). Community-based tourism: From a local to a global push. Acta Commercii, *16*(1), 1-10.
- Goodwin, H., & Santilli, R. (2009). Community-Based Tourism: a success? ICRT Occasional Paper. 11.
- Jasrai, L. (2020). Data analysis using SPSS. Sage.
- Juma, L. O., & Khademi-Vidra, A. (2019). Community-based tourism and sustainable development of rural regions in Kenya; Perceptions of the citizenry. Sustainability, 11(17), 4733.
- Lee, T. H. (2013). Influence analysis of community resident support for sustainable tourism development. Tourism management, 34, 37-46.
- Lee, T. H., & Jan, F. H. (2018). Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of the sustainability. Tourism Management, 70, 368-380.
- Lepcha, A. P. (2007). The socio-economic tensions of the Lepchas in Post Colonial Darjeeling district with special reference to Kalimpong. NL Publishers.
- Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. Tourism management, 28(3), 876-885.
- Maddox, R. N. (1985). Measuring satisfiaction with tourism. Journal of Travel Research, 23(3), 2-5.
- Mandal, N. G. (2018) An essay on the Lepcha community: The autochthones of Sikkim and Darjeeling. International Research Journal of Human Resources and Social Sciences. 5(02), 50-73.
- Mann, M. (2000). The community tourism guide. Earthscan Publications.

- Mtapuri, O., Camilleri, M. A., & Dluzewska, A. (2022). Advancing community-based tourism approaches for the sustainable development of destinations. Sustainable Development, 30(3), 423-432.
- Muresan, I. C., Harun, R., Arion, F. H., Oroian, C. F., Dumitras, D. E., Mihai, V. C., Ilea, Marioara., Chiciudean, D.I., Gliga, I D., & Chiciudean, G. O. (2019). Residents' perception of destination quality: Key factors for sustainable rural development. Sustainability, 11(9), 2594.
- Murphy, P. E., & Price, G. G. (2012). Tourism and sustainable development. In Global tourism (pp. 167-193). Routledge.
- 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.
- Rey Bolaños, M. A. (2019). The role of community-based tourism in sustainable rural development: Case studies from Ecuador [Doctoral dissertation, Universitat Politècnica de Catalunya].
- Richardson, R. B. (2021). The role of tourism in sustainable development. In Oxford research encyclopedia of environmental science.
- Roy, D.C., & Roy, D. (2017) A complete Lepcha life: Culture, custom, tradition, belief, language & religion of a hill community. Samikshya Print'z, Kalimpong.
- Sharma, V. (2018) Geographical perspective of community based tourism in Chamoli district of Garhwal Himalaya. [Doctoral thesis, Hemvati Nandan Bahuguna Garhwal University].
- Suansri, P. (2003). Community based tourism handbook. Responsible Ecological Social Tour-REST.
- Twining-Ward, L. (2007). A toolkit for monitoring and managing community-based tourism. SNV University
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. UN Doc. A/ RES/70/1. https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2125&menu=1515
- Zielinski, S., Jeong, Y., Kim, S. I., & B. Milanés, C. (2020). Why community-based tourism and rural tourism in developing and developed nations are treated differently? A review. Sustainability, 12(15), 5938.