

Vol. 9, No. 1, June (2026) JOURNAL OF ENVIRONMENTAL AND TOURISM EDUCATION  ISSN: 2659-0794 (PRINT) ISSN:2659-0808(ONLINE) Content Available at: https://jeate.k-injo.com/index.php/Jete		
Community Environmental Strategies and Sustainable Tourism Management in Cross River State, Nigeria.		
Nyam, Agnes Etta. Email: etfavour8@gmail.com	A	Department of Environmental Education, Faculty of Arts and Social Science Education, University of Calabar
Keywords Community waste, recycling, sustainable Tourism, management		Abstract The main purpose of this study was to examine the contribution of community environmental strategies to sustainable tourism management in Cross River State, Nigeria. To achieve the purpose of this study a null hypothesis was generated to direct the study. Literature review was done according to the variables under study. Correlational research design was adopted for the study. A sample of 1148 respondents was randomly selected for the study. The selection was done through the stratified random sampling technique. The questionnaire was the main instrument used for data collection. Regression analysis was the statistical analysis technique adopted to test the hypotheses under study. This statistical tool was used because of the nature of the variables involved in the study. The hypotheses was subjected to testing at .05 level of significance with relative degrees of freedom. The results of the analysis revealed that, community led conservation initiatives significantly contribute to sustainable tourism management in Cross River State, Nigeria. The study concluded that community-driven efforts contribute to sustainable tourism management. Based on the findings of the study it was recommended among others that government should implement effective waste management systems that promote recycling and minimize waste in tourist areas. Educate tourists and local communities on the importance of waste reduction and recycling.
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INTRODUCTION

Tourism is recognized as one of the swift developing and most dynamic worldwide industries across the globe. Sustainable tourism development is an important topic of discussion in the tourism sector, as it provides opportunities to meet the needs of tourists while strengthening local economic growth and environmental quality, thereby improving residents' Quality of Life (QoL). In particular, sustainable tourism development requires that local residents actively and positively perceive tourism development when considering paths for the economic revitalization of their local communities that maintain a balance between society and the environment (Reindrawati, 2023).

Despite the growing recognition of community environmental strategies as a vital component of sustainable tourism management, many tourism destinations continue to face significant environmental and socio-cultural challenges. The lack of effective community engagement, inadequate environmental conservation measures, and inequitable distribution of tourism benefits have hindered the achievement of

sustainable tourism outcomes. Furthermore, the limited understanding of the relationship between community environmental strategies and sustainable tourism management has constrained the development of effective policies and practices. This study seeks to address this knowledge gap by investigating the contribution of community environmental strategies to sustainable tourism management, with the aim of informing policy and practice in the tourism industry.

Tourism development brings various economic, socio-cultural, and environmental changes to the lives of local communities and individual residents (Budiman, 2018). Drawing on tourism impact analysis, Social Exchange Theory (SET) puts forth certain factors as key contributors in explaining the exchange process that takes place in tourism development. This suggests that when residents perceive that the benefits of tourism development exceed the costs, they will support tourism development. In addition, when residents are aware of the impacts of tourism, their lives are affected materially, emotionally, health-wise, and safety-wise, which in turn can contribute to improving their overall life satisfaction, or QoL (Reindrawati, 2023).

A strategy framework that governs local, national, and even regional tourism growth reasonably and cohesively, both in and relative to the rest of the global and subnational economy, is required for the successful implementation of sustainability policies (Iqbal & Ahmed, 2022). Tourism development is plagued by a slew of difficulties that threaten its long-term viability in Cross River State. Some of the factors that threaten its development includes; involvement of the locals in decision-making, environmental conservation, conceptions of autonomy and cultural exclusivity.

Community environmental conservation is widely accepted as one of the factors that threaten sustainable tourism especially in Cross River State. Local communities represent the group of key players in the development of tourism, while they are also considered as legitimate and moral actors in its development, because their interests influence and are influenced by the decisions of key policy makers (Stefan, 2015). The degree of involvement of local communities in decision-making and various policy issues is determined by the extent to which they affect or are affected by these decisions and policies. Budiman, (2018) noted that the development of local tourism requires people who are influenced by tourism to be involved both in the planning process and in policy implementation and action plans. This ensures that the development meets the perceived needs of local community. If decisions about tourism development were not made in consultation with local communities during the design phase, it will be impossible for local communities to be involved during implementation. Whatever the circumstances, it is vitally important to identify and involve key actors in design phase.

Communities are typically involved at this stage to gain a better knowledge of their existing requirements or to seek input for better and fresh solutions (El-Kassar & Singh, 2019). It is critical to stress citizens' engagement and role in the renewable-energy transition while dealing with social concerns which necessitate a focus on policy frameworks and social innovation. Thus, developing the notion that includes the locals in the solution fosters a sense of ownership. This, in principle, might lead to a greater inclination among individuals to modify their behaviour, become involved, and stay active in renewable-energy initiatives (Budiman, 2018). Some of the community initiative programmes that contribute to suitability of tourism include: community led conservation initiatives, waste recycling programme, energy efficient practices in accommodation tour operation, sustainable transportation options, sustainable water management practice, community engagement in tourism planning/decision making process, encouragement of responsible travel behaviours and environmental education/ awareness programme.

Community-led conservation initiatives involve local communities actively engaging in decision-making processes, utilizing traditional knowledge, promoting sustainable livelihoods, and environmental conservation. Examples include protected areas, sustainable forest management, eco-tourism, wildlife conservation, and watershed management (Sharma & Bhat, 2022). Benefits include empowered communities, effective conservation, economic benefits, and cultural preservation, promoting collaborative governance and sustainable development. Also, a community waste recycling programme aims to minimize waste, promote recycling, and foster sustainable practices. It involves education, waste segregation, recycling infrastructure, and community engagement. Benefits include reduced landfill waste, environmental protection, community involvement, and economic savings. Examples include curbside recycling, composting programmes, zero-waste initiatives, and community clean-up events. Implementing these programmes reduces environmental footprints and promotes sustainable living.

Furthermore, to maintain responsible and sustainable tourism, unique and integrated strategies are required to address the sector's significant present difficulties (e.g., Rapid expansion of world tourist movements, changing customer preferences, digitalization, safety concerns, and climate change adaption)

(Sharma & Bhat, 2022). At present, innovation has attracted the attention of many researchers and business owners. Tourism has grown steadily to become one of the fastest-growing sectors in the world. As a result, tourism innovation must be regarded as one of the most crucial activities in every tourist business (Budiman, 2018). Social innovation not only provides a stimulating environment for study and discussion, but it also can bring about radical improvements in resource allocation, policy, and societal institutions to solve the key concerns of modernity in a variety of nations. The research investigation to evaluate and map the impact and efficacy of social innovation is still in its early stages of development, but it is revealing patterns, ideas, difficulties, and opportunities that have yet to be determined. Thus, offering a gap to the researchers for further inquiry into the tourism sector. Hence, the study examined the relationship between community environmental strategy and sustainable tourism management.

Statement of the problem

Cross River State is an important tourist center in the country. The practice of tourism development in the Cross River State has proven that the schemes used for tourism planning and management have not produced the desired results for improving the quality of life of the resident.

Cross River State has abundant rich natural and cultural heritage in every community, but she finds it difficult to manage tourism sustainably leading to environmental deterioration, cultural exploitation and economic imbalance. Inadequate waste management and infrastructure has put the state's biodiversity and natural beauty at jeopardy, deterring potential tourists and endangering the development of sustainable tourism. Due to lack of proper tourism planning and management, local communities have lost their cultural heritage and artifacts. The tourism industry is plagued by poor road networks, dearth of services, and inadequate infrastructure, which has hindered the growth of sustainable tourism and lessens the benefits to local populations economically. The absence of a regulatory framework has also, led to cultural exploitation, environmental degradation, and uncontrolled behaviours.

The government of Cross River State and Stakeholders in tourism development has over the years made frantic effort to sustain tourism development in the study area by providing very remarkable programmes. National Strategy for the Sustainable Development of Tourism 2018-2022, equally emphasized on the importance of implementing sustainable tourism development policies and strategies. It seems that, all the efforts put into tourism programmes and policies in Cross River State are still not applaudable, maybe due to the strategies employed and the deplorable nature of the environment where these tourism activities takes place. It is therefore hope that if community environmental strategies are adopted it will help to sustain tourism development such as environmental protection, Ecotourism, cultural promotion such as homestay programmes, community workshops, and community engagement such as community-based tourism. It is on this premise that the researcher wishes to examine whether community environmental strategies contributes to sustainable tourism management in Cross River State, Nigeria.

Purpose of the study

The current research is poised to investigate if community environmental strategies contribute to sustainable tourism management in Cross River State, Nigeria. More specifically, the study will focus on the following objectives:

1. To determine if community led conservation initiatives contribute to sustainable tourism management.

Research questions

The study is design to provide answers to the following questions:

1. To what extent does community lead conservation initiatives contribute to sustainable tourism management?

Statement of hypotheses

The following hypotheses are formulated for the study:

1. Community-led conservation initiatives does not significantly contribute to sustainable tourism management.

LITERATURE REVIEW

Community led conservation initiatives and sustainable tourism management

Community-led conservation refers to a re-imaging of conservation as a primarily locally driven action where indigenous peoples and local communities take the lead in managing natural resources, caring for their lands and resources and sustaining their own cultures. Community-led initiatives originated from and are run by the people themselves who strive to benefit from the project. These projects and organizations believe that change is most effective when it comes from within, so they are driven by individuals who

understand the needs of their area best. Such initiatives focus on creating meaningful and impactful social changes to better the community. The ultimate goal of these initiatives is to empower communities and give the community the tools they need to create positive and lasting changes in the environment. External organizations often support community-led initiatives, but the local people take the lead in making meaningful improvements for their benefit (Herdiansyah, Saiya, Afkarina, and Indra, 2021).

According to Perkumienė, Ahmet, Safaa, and Grigienė, (2023), Community-based initiatives typically involve small-scale projects and programmes to benefit a specific geographic area. Examples of such economic empowerment efforts include food banks, cooperative farms, and community centers, all of which are aimed at providing direct assistance to local individuals and families. Such initiatives can have a tremendous impact on the local population, helping to ensure that everyone is provided with the resources they need to succeed. In addition, by engaging community members in these efforts, everyone can help contribute to the betterment of their area and those around them.

However, some of these communities have come together to form activist organizations. An example of this is March for Our Lives a youth-led organization that emerged from protests after a school shooting in the United States. Here, 'community' is not only about geography; it can also be about shared values and identities, such as race, sexual orientation, or a shared experience like gun violence. These communities are connected by something much more profound than their physical location (Herdiansyah, Saiya, Afkarina, and Indra, 2021).

The advantages of a community-led approach are becoming increasingly acknowledged, as communities have often proven to be the most capable of addressing and contributing to solutions for their issues (such as healthcare and pandemic response) and overall community well-being (Perkumienė, Ahmet, Safaa, and Grigienė, 2023). Participating in these initiatives can also provide an empowering and transformative experience for those involved. When this approach is successful, it involves a shared vision specific to the local context that informs and guides the way forward. Then, utilizing existing relationships and resources, stakeholders can develop solutions that benefit the entire community (Perkumienė, Ahmet, Safaa, and Grigienė, 2023).

The rise of community-led initiatives has been attributed to the critique surrounding traditional philanthropy. This approach, where outsiders enter a community without fully understanding local needs, has been particularly criticized in international development circles the infamous Play pumps project being one example of many which resulted in millions of dollars being wasted due to assumptions about what would best benefit the community (Ahmet, Perkumiene, Aleinikovas, and Skema, 2023).

Ahmet, Perkumiene, Aleinikovas, and Skema, (2023), explained that local initiatives are more accountable than externally-run projects as contributors are embedded in the community and less likely to leave abruptly. This accountability allows for long-term, durable change that creates positive outcomes for those involved. In addition, Stott, and Tracey, (2018), community members who take ownership of local issues can be confident that their efforts will have a lasting impact on their community. The involvement of community members in these initiatives also increases their understanding of the problem. In addition, it allows them to come up with more meaningful solutions that directly impact those affected. This leads to improved outcomes for the community as a whole. Ultimately, community-led initiatives can effectively tackle local issues sustainably and create tangible results for communities in need.

Also, Perkumienė, Ahmet, Safaa, and Grigienė, (2023) emphasized that the way forward is to ensure that local communities are provided with the necessary support they need to lead these initiatives to create meaningful change and lasting impact in their community. This includes providing access to resources such as funding and technical expertise so that projects can be implemented quickly and effectively. It also involves empowering community members to take the lead in making decisions and driving their initiatives, so they can be sure that their efforts have a positive impact. By doing this, we can ensure that local communities have an effective platform to create meaningful change and make a difference.

According to Herdiansyah, Saiya, Afkarina, and Indra, (2021) they must be aware of the potential risks involved in a community-led approach. For example, if there are existing power imbalances within the community, these could be further entrenched through decisions and activities that may only benefit some members equally. In such cases, funding this type of initiative could even reinforce damaging inequalities. While passion and lived experience are essential elements of running successful community initiatives, it is also necessary to bring specific expertise for effective organizational management. Such knowledge is required for the potential of these programmes to be realized, and inefficiencies may occur. Therefore, more than relying on good intentions alone is necessary when managing a social agenda.

In a study carried out by Walkowski, Pires, and Tricário (2019), in Brazil, titled Community-based tourism, (CBT) initiatives as well as the challenges that exist in the sustainable local development perspective. We based this exploratory research on extensive bibliographic research on the theme in addition to field observations. As a research strategy, we used the multiple case study involving two Brazilian initiatives: the Rede Tucum, in Ceará, and the Acolhidana Colônia, in Santa Catarina. The main results showed that despite the difficult disassociated with the CBT development, both projects have remained due to the strong articulation between the leaders, partnerships with educational institutions and entities, the methodology maintenance provided by the project's technical team, and the diversification of tourism offer based on sustainability actions.

In another related study carried out by Khalid, Ahmad, Ramayah, Hwang, and Kim (2019), carried out in Pakistan, and examines the relationship between community empowerment and STD, along with the mediating role played by community support for tourism. Using social exchange theory, this research establishes theoretical relationships between vital variables for STD. A survey of empirical study was undertaken, and data were collected from 353 local residents in the northern area of Pakistan. The results for data analyses demonstrated a significant relationship between community empowerment and STD initiatives, and community support for tourism was shown to partially mediate the relationship between the two variables. The findings imply that high community empowerment enables the community to establish successful sustainable tourism development through local people's support for tourism. This study contributes theoretically to identifying the idea that community members' support for tourism has a crucial function bridging the link from community empowerment to sustain tourism in a local area.

In another qualitative research study carried out by Velan, Rosazman, and Roslizawati (2022), carried out in Malaysia, which used in-depth interviews, and field observations were performed and actively involved the pioneers of ecotourism development and community members in the state of Sabah, Malaysia. Through thematic analysis, community-based ecotourism as social transformation tools were identified focusing on economic, socio-cultural, and environmental aspects. The study uncovered that community-based ecotourism has delivered more positive social transformation impacts to the local community than negative ones. Despite the positive impacts of community-based ecotourism on the local community, this study warned that negative impacts of community-based ecotourism may jeopardize the ecotourism's potential as a social transformation tool for the local community, thus weakening its sustainability.

In a study carried out by Yusuf, and Serap, (2023), in Aksaray province of Türkiye, investigated the relationships among residents' perceptions, community participation, ecotourism development, and sustainable tourism development. The relationships were examined using the serial mediation model of Hayes (2013). Data were collected from the local people living in Hasan Mountain Culture and Tourism Conservation and Development Area (CTCDA) in Aksaray province of Türkiye (N = 568). The findings show that community participation and ecotourism development serially mediate the effects of residents' perceptions on sustainable tourism development. In the light of the findings, positive residents' perceptions establish the eligible conditions for the strong community participation. Enhanced community participation contributes to ecotourism development, and as a result, ecotourism development promotes sustainable tourism development. This study is the first study in the literature that reveals the relationships between residents' perceptions, community participation, ecotourism development, and sustainable tourism development through the serial mediation model. The current study contributes to the literature by addressing the direct and indirect effects of residents' perceptions on sustainable tourism development. We suggest planners in CTCDAs to pay attention to residents' perceptions and community participation as the weakest link during development processes.

Also, in another study carried out by Muhammad, Muhammad, and Rulia (2021), investigated the role of community participation and its impact on economic, environmental, and social sustainability in marine protected areas (MPAs) in Malaysia through the development of ecotourism. A structured questionnaire was employed for collecting data and analyzed using the partial least square method. The results indicate that community participation explains a significant amount of variance in ecotourism development. The findings reveal that ecotourism development contributes toward economic, social, and environmental sustainability directly and indirectly. This implies that ecotourism development and community participation are of paramount importance in achieving sustainable development in MPAs.

Similarly, in a study carried out Jinkun, Linchuan, and Haitao (2022), explored the community regeneration approach in the context of urban regeneration in a typical village community in China. This study finds that participatory planning, which is mainly characterized by public participation, can be an

effective way of communication and cooperation. The collaborative workshops provide a participatory platform for stakeholders and promote sustainable community development. Therefore, traditional planning approaches may need to be changed. The contribution of this article is to develop a collaborative planning approach for sustainable community development, which can serve as a reference for community governance in China and other developing countries.

In a study carried out by Draçi, and Kraj (2023), examined the support of the community in the area of Cross-River State and Ksamil for sustainable tourism, as one of the most important industries on which the growth of its well-being is based. The reasoning focuses on the sociological tradition of social exchange that is guided by the premise that individual feelings can be important elements that influence the social response of people and the supportive or non-supportive attitude of the community toward the development of tourism. Based on this reasoning, we will try to find answers to the following questions: How do the residents of Cross-River State and Ksamil evaluate the development of tourism in their area? Are the residents of Cross-River State and Ksamil interested in the process of planning and developing tourism in their area? Does the community support the development of sustainable tourism in the study area? Residents of the Municipality of Cross-River State and Ksamil are the target population that possesses the desired information to answer the research questions. In this study, the fact that the community in Cross-River State and Ksamil strongly supports sustainable tourism development strategies is evidenced. The study shows that the panorama of the development of the tourism industry in this area and its problems are clear for the residents who express that they are worried about the situation and the community finds the solution in sustainable tourism policies and strategies.

Also, in another study carried out by Vivek, and Dada (2022), examined the contribution of community involvement toward social and environmental innovation to achieve sustainable tourism development. Perceptions of 650 local community members of different tourist destinations of Jammu and Kashmir have been used to meet the objectives of the study. The structural equation modelling (SEM) technique has been used for determining the structural estimates between constructs with the help of Statistical Package for the Social Science (SPSS) and Analysis of Moment Structure (AMOS) software. Hypothesis testing revealed a positive impact of community involvement on social and environmental innovation. The results also depicted a positive impact of social and environmental innovation on sustainable tourism development.

RESEARCH METHODOLOGY

The research design adopted for the study is correlational research design. According to Asim, Idaka and Eni (2017) correlational research design investigates relationships between variables without the researcher controlling or manipulating any of them. A correlation reflects the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative. Inference about relations among variables is made without direct intervention from concomitant variables of independent and dependent variables. The correlational research design is suitable for this study because of the nature and magnitude of relationship among independent variable and the dependent variable. It is economical for measuring several variables and their interrelationship simultaneously.

The area of study is Cross River State; the state was created from the South Eastern State of Nigeria in 1976 by the Federal Military Government led by General Murtala Mohammed. Calabar is the state capital. Geographically, Cross River State is located in the rain forest Zone of West Africa. It is found between latitudes 5° 53 and 4° 32 North of the equator and longitudes 7° 50 and 9° 28 East of the Greenwich meridian.

The population of this study includes all the 4,407,812 staff of Department of Arts & Culture, Department of Tourism, Department of Diaspora Affairs, department of Entertainment, Head of Service, National population commission average projection of (2023), Calabar Education Zone, Calabar Education Zone and Calabar Education Zone as presented in Table 1. Source: (Head of Service, 2024 and National population commission average projection of 2023).

The sampling technique adopted for the study was stratified sampling technique. The stratification was based on education zones. Thus a total of 3 strata were formed where each of the public university was made a stratum. From each of the public university 5% of students were randomly sampled for the study. To ensure adequacy of sample size, the Taro Yamene's method of estimating sample size was applied with students' population of 7020, the Taro Yamene's estimation was applied as:

$$n = \frac{N}{1+N(e^2)}$$

Where n = sample size; N = Population; I = Constant; e – degree of error expected (.05)

This means that a sample of 400 respondents out of the entire population of 407,812 was the lowest acceptance number of respondents required to maintain a 95% confidence level. In other words, any sample size lower than 400 would not have been accepted. Therefore, the sample size of 1182 representing .027% used in this study is acceptable, being above the Taro Yamene's estimated sample size. The breakdown is as presented in Table 1.

The sample of the study consist of one thousand one hundred and eighty two (1182) stakeholders and local residents with randomly and purposely sampled from 4 departments in the ministry of culture and tourism and 3 education zones in Cross River State. This sample size was a good representative or proportion of the finite population. Full details of the sample distribution are presented in Table 1.

TABLE 1

Distribution of the study population based on education zones

S/N	Education zones	Total	Sampled
1	Calabar Education Zone	1,457,600	394
2	Calabar Education Zone	1,866,219	504
3	Calabar Education Zone	1,082,381	284
Total		4,407,812	1,182

Source: (Head of Service, 2024 and National population commission average projection of 2025).

The instrument was used for data collection was a questionnaire designed by the researcher. The instrument is titled “community environmental strategies and sustainable tourism management questionnaire” (CESSTMQ). The questionnaire has four sections. Section A of the questionnaire is the respondents demographic information and section B provided information on community strategies, section C provided information on environmental strategies and section D provided information on sustainable tourism management. The respondents ticked (✓) according to the agreed items. Respectively, items on a modified four Likert scale were designed to measure each of the variable or programmes. Each item on the questionnaire required the respondents to indicate their opinions under; strongly agree (SA), Agree (A), disagree (D), and strongly disagree (SD). In rating the scale, positively worded items were rated 4,3,2,1 while negative worded items were rated 1,2,3,4.

The questionnaire was the main instrument used for data collection. The questionnaire was administered in each of the sample departments in the ministry of culture and tourism and citizens in Cross-River State. The respondents were informed of the exercise and the essence of given objective responses to the items as the information obtained were treated with all amount of confidentiality and would be used as data for research only.

The instrument were administered personally by the researcher with the help of trained research assistants. Out of one thousand one hundred and eighty two (1182) copies of questionnaires administered only one thousand one hundred and forty-eight (1148) were successfully completed and retrieved and were used as sample for that study. After collecting the questionnaire, codes and scores will be assigned to each item. For ease of data preparation, a coding schedule was prepared by developing a key for each of the constructs of the instruments in a tabular form.

RESULTS AND DISCUSSION

Presentation of result

In this section each hypothesis is re-stated, and the result of data analysis carried out to test it is presented. Each hypothesis of the study was tested at .05 level of significance.

Hypothesis

Community led conservation initiatives does not significantly contribute to sustainable tourism management. The independent variable in this hypothesis is community led conservation initiatives; while the dependent variable is sustainable tourism management. Simple regression analysis was the employed to test this hypothesis. The result of the analysis is presented in Table 2. The simple regression analysis of the contribution of community led conservation initiatives on the sustainable tourism management yielded a coefficient of multiple regression (R) of .987 and a multiple regression R-square (R^2) of .975 and an adjusted R^2 of .975. The adjusted R^2 of .975 indicated that the Community led conservation initiatives account for 97.5% of the variance in sustainable tourism management in the study area. This finding is a critical

indication that community led conservation initiatives are relatively high in the area of the study. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was $F = 44967.704$ and the sig. value of .000 (or $p < .05$) at the degree of freedom (df) 1 and 1146. The implication of this result is that community led conservation initiatives is significantly related to sustainable tourism management. The identified equation to understand this relationship was that sustainable tourism management = $-2.177 + 1.766$ (community led conservation initiatives).

The implication of this result is that community led conservation initiatives is significantly relate to sustainable tourism management. The finding of this hypothesis is in line with the view of Khalid, Ahmad, Ramayah, Hwang, and Kim (2019) who, observed that high community empowerment enables the community to establish successful sustainable tourism development through local people's support for tourism. This study contributes theoretically to identifying the idea that community members' support for tourism has a crucial function bridging the link from community empowerment to sustain tourism in a local area. Velan, Rosazman, and Roslizawati (2022) also uncovered that community-based ecotourism has delivered more positive social transformation impacts to the local community than negative ones. Despite the positive impacts of community-based ecotourism on the local community, this study warned that negative impacts of community-based ecotourism may jeopardize the ecotourism's potential as a social transformation tool for the local community, thus weakening its sustainability.

Yusuf, and Serap, (2023) also stated that reveals the relationships between residents' perceptions, community participation, ecotourism development, and sustainable tourism development through the serial mediation model. The current study contributes to the literature by addressing the direct and indirect effects of residents' perceptions on sustainable tourism development. We suggest planners in CTCDA to pay attention to residents' perceptions and community participation as the weakest link during development processes. Also Muhammad, Muhammad, and Rulia (2021) indicated that community participation explains a significant amount of variance in ecotourism development. The findings reveal that ecotourism development contributes toward economic, social, and environmental sustainability directly and indirectly. This implies that ecotourism development and community participation are of paramount importance in achieving sustainable development in MPAs.

Similarly, Jinkun, Linchuan, and Haitao (2022) finds that participatory planning, which is mainly characterized by public participation, can be an effective way of communication and cooperation. The collaborative workshops provide a participatory platform for stakeholders and promote sustainable community development. Therefore, traditional planning approaches may need to be changed. The contribution of this article is to develop a collaborative planning approach for sustainable community development, which can serve as a reference for community governance in China and other developing countries. Draçi, and Kraj (2023) also stated that the community in Cross-River State and Ksamil strongly supports sustainable tourism development strategies is evidenced. The study shows that the panorama of the development of the tourism industry in this area and its problems are clear for the residents who express that they are worried about the situation and the community finds the solution in sustainable tourism policies and strategies.

TABLE 2

Simple regression result of the contribution of community led conservation initiatives and sustainable tourism management

Model	R	R. square	Adjusted R. square	Std error of the estimate		
1	.987(a)	.975	.975	.47273		
Model	Sum of square	Df	Mean square	F	p-value	
Regression	10048.992	1	10048.992	44967.704	.000(a)	
Residual	256.098	1146	.223			
Total	10305.090	1147				
Variables	Unstandardized regression weight B	Standardized regression weight	Beta weight	t	p-value	
(Constant)	-2.177	.180		-12.104	.000	
Community led conservation initiatives	1.766	.008	.987	212.056	.000	

* Significant at .05 level.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study provides conclusive evidence that community-led initiatives and sustainable practices play a significant role in promoting sustainable tourism management in Cross River State, Nigeria. The findings suggest that various community-driven efforts, including conservation initiatives contribute to sustainable tourism management.

The study's results highlight the importance of community involvement and participation in sustainable tourism management. The findings suggest that when local communities are engaged and empowered to take ownership of sustainable tourism initiatives, it can lead to more effective and sustainable outcomes.

The study's findings have significant implications for tourism stakeholders, policymakers, and local communities. The results emphasize the need for collaborative efforts between local communities, tourism operators, and government agencies to promote sustainable tourism practices and ensure that tourism development benefits both the local economy and the environment.

This study contributes to the existing body of knowledge on sustainable tourism management and community-led initiatives. The findings provide valuable insights for stakeholders seeking to develop and implement effective sustainable tourism strategies in similar contexts.

Implications of the findings

The study's findings have significant implications for sustainable tourism management in Cross River State, Nigeria. The results indicate that various community-led initiatives and practices contribute to sustainable tourism management, including community-led conservation initiatives, waste reduction and recycling programs, energy-efficient practices, sustainable transportation options, sustainable water management practices, community engagement in tourism planning and decision-making, encouragement of responsible travel behaviours, and environmental education and awareness programs.

The findings suggest that community-led conservation initiatives can play a crucial role in protecting and preserving natural resources, which is essential for sustainable tourism development. By empowering local communities to take ownership of conservation efforts, tourism stakeholders can promote sustainable tourism practices that benefit both the environment and local communities.

Recommendations

Based on the findings of the study, the following recommendations are made to promote sustainable tourism management in Cross River State, Nigeria:

- 1 Government should empower local communities to take ownership of conservation initiatives and involve them in decision-making processes. This will encourage local communities' members to participate in conservation initiatives.
- 2 Government should provide support and resources to community-based conservation initiatives that promote sustainable tourism practices.
- 3 Government should implement effective waste management systems that promote recycling and minimize waste in tourist areas. Educate tourists and local communities on the importance of waste reduction and recycling.

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