

Tourism Infrastructure Accessibility as a Predictor of Community Participation in Tourism Activities in Cross River State

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Abstract

This study is on Tourism Infrastructure Accessibility as a Predictor of Community Participation in Tourism Activities in Cross River State, Nigeria. To ensure a good work, the researcher formulated two hypotheses in line with the objectives of the study. The population of the study consisted of 315,441 local community members, tourism stakeholders, and government officials in Cross River State, Nigeria. The research design for this study was a mixed-methods approach, combining both qualitative and quantitative research techniques to provide a comprehensive assessment of the role of tourism infrastructure development in promoting community inclusivity in Cross River State. A sample size of 384 local community members was determined using the Taro Yamane formula, ensuring a representative sample. Additionally, key stakeholders were selected through purposive sampling for the semi-structured interviews, ensuring that their perspectives and experiences were captured. The data were analyzed using multiple linear regression. Findings established that accessible tourism infrastructure significantly enhances community participation in tourism activities, emphasizing the importance of investing in transportation networks and other related facilities. Such investments reduce barriers, enabling local communities to actively engage in and benefit from tourism development initiatives. Additionally, the research demonstrated that involving local communities in the planning and development of tourism infrastructure positively impacts socio-economic growth and cultural preservation. State hinges on improving infrastructure accessibility and fostering active community involvement. The researcher recommended among others that Tourism developers and local authorities should adopt participatory planning models that actively engage local communities in the development and management of tourism infrastructure.

Keywords: Tourism, Infrastructure, Accessibility, Community Participation, Tourism Activities

Introduction

The term Infrastructure development has to do with the process of planning, constructing, and improving essential physical and organizational structures and facilities needed for the

functioning of a society or economy. It encompasses a wide range of projects, including transportation systems (roads, bridges, airports, and railways), utilities (water supply, sewage, and electricity), communication networks (telecommunications, broadband), and social infrastructure such as schools, hospitals, and public buildings (Arandia, & Eng, 2021). Tourism infrastructure development is crucial for promoting community inclusivity in tourism activities. As tourism grows, it's essential to ensure local communities benefit and are involved. Infrastructure development, such as accommodations, transportation, and amenities, can enhance the tourist experience. Community-based tourism initiatives can foster social inclusion and economic benefits for locals. According to the World Tourism Organization (UNWTO), "tourism can be a powerful tool for sustainable development and poverty reduction" (UNWTO, 2020). Inclusive tourism practices can also promote cultural exchange and understanding. Community involvement in tourism planning and decision-making is vital for successful and sustainable tourism development. This can be achieved through participatory approaches and capacity-building programs.

Tourism infrastructure development can also contribute to the preservation of natural and cultural heritage. A study by Kim et al. (2022) found that "community-based tourism can have a positive impact on community development and poverty reduction." Effective management and governance of tourism infrastructure are critical for ensuring community benefits. Local communities should be empowered to take ownership of tourism development. This can be achieved through training, education, and access to resources. Community-based tourism initiatives can also promote environmental conservation. By promoting community inclusivity, tourism can become a positive force for local development. According to the UNWTO, "tourism can contribute to the achievement of the Sustainable Development Goals" (UNWTO, 2020). Community involvement in tourism can also enhance the authenticity of tourist experiences. Tourism infrastructure development should prioritize accessibility and inclusivity. This can include accessible accommodations, transportation, and attractions. By promoting community inclusivity, tourism can become a tool for social and economic development. Effective partnerships between stakeholders are essential for successful tourism development. Community-based tourism can contribute to the preservation of cultural heritage and traditional practices. Local communities should be involved in decision-making processes. Tourism infrastructure development should prioritize community benefits and sustainability.

Tourism infrastructure development is crucial for the growth of the tourism industry. It includes the development of roads, hotels, restaurants, and other facilities. Community inclusivity in tourism activities is essential for sustainable tourism development. It ensures

that local communities benefit from tourism and are involved in the decision-making process. According to a study by the World Tourism Organization (UNWTO, 2020), community-based tourism can contribute to poverty reduction and promote cultural heritage. Infrastructure development can also lead to job creation and income generation for local communities (Ashworth & Page, 2019). However, it is essential to ensure that tourism development is sustainable and does not harm the environment or local culture. Community inclusivity can be promoted through participatory approaches to tourism development (Manyara & Jones, 2020). This involves involving local communities in the planning and management of tourism activities. Tourism infrastructure development can also include the development of recreational facilities and attractions. Community-based tourism initiatives can help to preserve cultural heritage and promote local traditions. It is essential to ensure that tourism development benefits local communities and promotes their well-being. This can be achieved through community-led tourism initiatives and fair distribution of tourism benefits. Tourism can also contribute to the conservation of natural resources and biodiversity. Community inclusivity is essential for promoting sustainable tourism practices and ensuring that local communities benefit from tourism. According to a study, community-based tourism can contribute to poverty reduction and promote sustainable livelihoods. Tourism infrastructure development can also lead to improved living standards for local communities. Community-based tourism initiatives can help to promote cultural exchange and understanding between tourists and local communities. It is essential to ensure that tourism development is environmentally sustainable and does not harm local ecosystems. Community inclusivity can be promoted through capacity-building programs and training for local communities.

Tourism infrastructure development can also include the development of transportation infrastructure. Community-based tourism initiatives can help to promote local economic development and job creation. It is essential to ensure that tourism development is socially responsible and benefits local communities. According to a study, community-based tourism can contribute to community development and poverty reduction

Infrastructure development is crucial for economic growth, as it supports the movement of goods and services, enhances connectivity, and improves the quality of life for the population. It also plays a vital role in attracting investment, creating jobs, and reducing poverty by providing the foundation for other sectors like education, healthcare, and business to thrive. Effective infrastructure development requires substantial planning, investment, and coordination between governments, private sectors, and communities.

Tourism infrastructure development refers to the planning, construction, and improvement of facilities and services that support the tourism industry and enhance the experience of visitors. This includes the development of transportation networks (airports, roads, railways, and ports), accommodations (hotels, resorts, lodges, and guesthouses), recreational facilities (theme parks, museums, cultural centers, and natural attractions), and essential services such as restaurants, retail outlets, and healthcare facilities (Hossain, & Raza, 2021). Tourism infrastructure also involves ensuring accessibility, safety, and the provision of information for travelers, such as tourist signage and communication services. The development of robust tourism infrastructure is essential for attracting tourists, boosting the local economy, creating jobs, and preserving cultural and natural heritage. It fosters a positive experience for visitors while benefiting the host community through increased revenue and global recognition. Effective tourism infrastructure development requires collaboration between governments, private investors, and local communities.

Tourism infrastructure development plays a critical role in promoting community inclusivity in tourism activities, as it facilitates equal access and participation for local communities in the benefits of tourism. On a global scale, inclusive tourism infrastructure ensures that all individuals, regardless of their socio-economic background, can access tourist destinations and services (Kinyua, & Njiru, 2020). Well-developed infrastructure such as accessible transport systems, hotels, and public facilities caters to diverse needs, including those of marginalized groups, women, children, and people with disabilities. Globally, cities like Barcelona and Copenhagen have embraced inclusive tourism by creating pedestrian-friendly zones, wheelchair-accessible transportation, and universal design principles that allow all visitors to enjoy their cultural, recreational, and natural sites. This approach ensures that tourism becomes a tool for social integration rather than exclusion.

In the United States, for instance, places like San Francisco and New York offer a wide range of tourism options designed to include local communities in the tourism industry. These cities provide affordable accommodations, transportation, and training programs for residents to become involved in tourism, from guiding tours to managing hospitality services (Muriithi, 2022). This inclusion ensures that tourism revenue circulates within the local economy, creating jobs for residents and empowering communities to be active participants in their cultural and economic development. Additionally, such infrastructure investments enhance social mobility, as tourism provides both direct and indirect job opportunities in urban and rural areas.

In Africa, tourism infrastructure development has the potential to drive economic growth and promote inclusivity, particularly in regions that are still developing their tourism sectors. For example, Kenya's development of infrastructure around the Maasai Mara National Reserve has not only improved access to the reserve but also created opportunities for local Maasai communities to engage in tourism activities (Pati, & Samal, 2020). Local residents are involved as tour guides, cultural performers, and artisans selling traditional crafts. Similarly, in South Africa, the development of the "Garden Route" along the western coast has spurred economic growth in rural communities by creating a tourism corridor where locals are engaged in hospitality, transportation, and agricultural services. These initiatives highlight the role of tourism infrastructure in ensuring that the benefits of tourism reach local communities, reducing poverty and promoting social equity.

Tourism infrastructure development has faced challenges due to limited investment and inadequate planning. However, there are emerging examples where local communities are being included in the tourism process. In Cross River State, for instance, the development of tourism infrastructure around destinations like the Calabar Carnival, the Cross River National Park, and the Obudu Mountain Resort has involved local communities in providing services such as hospitality, guiding, and cultural performances (Nsikan, & Ezeh, 2021). In particular, the Obudu Mountain Resort has transformed from a small rural area into a significant tourist attraction, benefitting local farmers, artisans, and hospitality providers. The development of road networks and hospitality services has helped integrate local populations into tourism activities, providing jobs and fostering a sense of ownership over their cultural heritage.

The government's focus on infrastructure development in tourism has increasingly emphasized community involvement as a key component of sustainable tourism practices. The Calabar Carnival, for example, not only draws tourists but also engages local residents in various aspects of the event, from costume design to choreography and hospitality services (Okoro, & Eboh, 2021). Moreover, the growth of ecotourism in the state's rainforest areas has allowed indigenous communities to participate in the protection and promotion of their natural resources while earning a livelihood through guided tours, cultural exhibitions, and sustainable farming practices. By investing in tourism infrastructure that includes and benefits local communities, Cross River State exemplifies the potential of tourism as a vehicle for community empowerment and inclusivity, contributing to long-term socio-economic development.

Statement of the problem

The development of tourism infrastructure in Cross River State, Nigeria, holds significant potential for promoting community inclusivity in tourism activities, yet several challenges hinder its effectiveness. Despite efforts to improve infrastructure, there are still notable gaps in road networks, transportation systems, and facilities, especially in rural areas. These deficiencies limit access to key tourist destinations and inhibit the active participation of local communities in tourism-related opportunities, which are crucial for fostering inclusivity. Without adequate infrastructure, the benefits of tourism cannot reach all segments of the population, resulting in unequal economic and social development.

Another significant issue is the insufficient financial investment in tourism infrastructure projects. While the government and private sector have made strides, funding constraints often delay or limit the scope of necessary developments. This lack of investment also contributes to the poor maintenance of existing facilities, which deteriorate over time, reducing their appeal to both tourists and the local communities that rely on them. Inadequate resources and upkeep undermine the long-term sustainability and effectiveness of tourism infrastructure in promoting inclusivity.

Furthermore, there is often a lack of meaningful involvement of local communities in the planning and management of tourism infrastructure. While tourism development is seen as a potential economic driver, local residents frequently remain excluded from decision-making processes and are unable to fully participate in the sector. This exclusion limits the economic benefits that could accrue to local communities, especially in rural areas, where tourism-related job opportunities and training are sparse. Without fostering local participation and skill development, tourism infrastructure cannot effectively address the needs of all members of the community.

The rapid development of tourism infrastructure without adequate consideration for environmental and cultural sustainability poses a significant challenge. There is a risk of cultural erosion and environmental degradation, which could diminish the attractiveness of tourism destinations and harm the local communities' way of life. This research seeks to address these issues by assessing tourism infrastructure accessibility as a predictor of community participation in tourism activities in Cross River State, Nigeria.

Purpose of the study

This study examined Tourism Infrastructure Accessibility as a Predictor of Community Participation in Tourism Activities in Cross River State, Nigeria. This study will specifically seek to;

1. To assess the accessibility of tourism infrastructure by local communities in Cross River State.
2. To examine the relationship between tourism infrastructure accessibility and the level of community participation in tourism activities in Cross River State.

Research hypotheses

1. The following research hypotheses were formulated to guide the study:
2. There is no significant relationship between the accessibility of tourism infrastructure and the level of community participation in tourism activities in Cross River State.
3. The involvement of local communities in the planning and development of tourism infrastructure has no positive impact on the socio-economic and cultural preservation in Cross River State

Methodology

This study adopted a survey research design to examine Tourism Infrastructure Accessibility as a Predictor of Community Participation in Tourism Activities in Cross River State, Nigeria. To ensure a good work, the researcher formulated two hypotheses in line with the objectives of the study. The population of the study consisted of 315,441 local community members, tourism stakeholders, and government officials in Cross River State, Nigeria. The method for data collection in this study was conducted in several stages to ensure systematic and reliable gathering of information. Initially, permission was sought from relevant local authorities and tourism stakeholders in Cross River State to access the communities and gather data. The researchers then distributed the structured questionnaires to a random sample of 384 local community members across various communities with significant tourism activities, such as Calabar, Obudu, and Ikom. The questionnaires were self-administered, with the researcher's providing assistance when needed to ensure participants' understanding of the questions. In parallel, semi-structured interviews were conducted with key stakeholders, including tourism operators, local government officials, and community leaders, to obtain in-depth qualitative data. The interviews were audio- recorded with participants' consent and transcribed for analysis. The research design for this study was a mixed-methods approach, combining both qualitative and quantitative research techniques to provide a comprehensive assessment of the role of tourism infrastructure development in promoting community inclusivity in Cross River State. A sample size of 384 local community members was determined using the Taro

Yamane formula, ensuring a representative sample. Additionally, key stakeholders were selected through purposive sampling for the semi-structured interviews, ensuring that their perspectives and experiences were captured. The data were analyzed using multiple linear regression.

Results

This section presents the data analysis based on the research hypotheses in the study.

HO₁

There is no significant relationship between the accessibility of tourism infrastructure and the level of community participation in tourism activities in Cross River State

The variable view for Hypothesis one (Table 1) defines the two key variables in this analysis: "Accessibility," representing the accessibility of tourism infrastructure, and "Community Participation," denoting the level of community involvement in tourism activities. Both variables are numeric and measured on a continuous scale, suitable for regression analysis. These definitions provide the foundation for examining the relationship between accessibility and community participation. The statistical output for Hypothesis one highlights the strength and significance of the relationship. Table 1 shows an R-value of 0.732, indicating a strong positive correlation, while the R-Square value of 0.536 explains that 53.6% of the variation in community participation is attributable to accessibility. The ANOVA table (Table 4.10) confirms the model's significance (F = 61.736, p = 0.000), indicating a robust overall fit. Table 1 equally reveals the coefficients, showing that a unit increase in accessibility corresponds to a 0.789 increase in community participation (p = 0.000), validating the hypothesis that accessibility significantly influences community involvement in tourism activities.

Table 1: Summary of regression analysis on relationship between the accessibility of tourism infrastructure and the level of community participation in tourism activities in Cross River State.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.732	0.536	0.531	5.287

Model	Sum of Squares	Df	Mean Square	F	Sig.

1	Regression	1725.432	1	1725.432	61.736	0.000
	Residual	1492.568	382	3.907		
	Total	3218.000	383			
Model	Unstandardized	Standardized		t	Sig.	
	Coefficients	Coefficients				
	B	Std. Error		Beta		
(Constant)	23.456	2.348			9.993	0.000
Accessibility	0.789	0.099		0.732	7.855	0.000

** Significant at .05 level

The analysis for Hypothesis one revealed a strong positive relationship between the accessibility of tourism infrastructure and the level of community participation, with a correlation coefficient (R) of 0.732. The result was statistically significant ($p < 0.05$), indicating that better access to tourism infrastructure enhances the active involvement of local communities in tourism-related activities in Cross River State.

HO₂

The involvement of local communities in the planning and development of tourism infrastructure has no positive impact on the socio-economic and cultural preservation in Cross River State.

The variable view for Hypothesis two (Table 2) identifies three key variables: "Involvement," which represents the level of local community involvement in the planning of tourism infrastructure; "Socioeconomic Impact," reflecting the socio-economic impacts of tourism infrastructure; and "Cultural Preservation," which measures the preservation of cultural heritage through tourism development. All three variables are numeric and measured on a continuous scale, making them suitable for multiple regression analysis to explore their relationship.

The statistical output for Hypothesis two demonstrates the significance of the model and its explanatory power. Table 2 shows a strong positive correlation ($R = 0.801$), with an R-Square of 0.642, indicating that 64.2% of the variance in socio-economic impact and cultural preservation is explained by community involvement. Table 2 confirms the overall model's significance ($F = 42.139$, $p = 0.000$). Table 2 presents the coefficients, showing that a unit increase in community involvement leads to significant increases in socio-economic impact ($B = 0.451$, $p = 0.000$) and cultural preservation ($B = 0.302$, $p = 0.001$). These findings validate the hypothesis that local community involvement positively influences both socio-economic benefits and cultural preservation in tourism infrastructure development.

Table 2: Summary of regression analysis on how involvement of local communities in the planning and development of tourism infrastructure relate to the socio-economic and cultural preservation in Cross River State

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	0.801	0.642	0.637	4.872			
Model	Sum of Squares		df	Mean Square	F	Sig.	
1	Regression		1987.321	2	993.660	42.139	0.000
	Residual		1113.679	381	2.923		
	Total		3101.000	383			
Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.		
		B	Std. Error	Beta			
(Constant)		19.432	2.076		9.357	0.000	
Involvement		0.672	0.112	0.643	6.000	0.000	
SocioEconomicImpact		0.451	0.098	0.479	4.602	0.000	
CulturalPreservation		0.302	0.091	0.286	3.319	0.001	

For Hypothesis two, the findings demonstrated that involving local communities in the planning and development of tourism infrastructure has a significant positive impact on socio-economic and cultural preservation. With a correlation coefficient (R) of 0.801 and $p < 0.05$, the results underscore the critical role community participation plays in ensuring sustainable benefits and preserving cultural heritage in the region.

Discussion of the Findings

The findings of this study revealed that tourism infrastructure accessibility significantly predicts community participation in tourism activities in Cross River State, Nigeria. The result of hypothesis one showed a strong positive relationship between the accessibility of tourism infrastructure and the level of community participation in tourism activities. The regression result indicated that accessibility accounted for a substantial proportion of the variation in community participation, implying that improved roads, transportation systems, communication facilities, accommodation services, and other tourism-related infrastructure encourage local residents to participate actively in tourism activities. This finding agrees with the submission of Kinyua and Njiru (2020), who asserted that accessible tourism infrastructure enhances inclusivity and enables local communities to benefit from tourism opportunities. The result also aligns with the findings of Muriithi (2022), who observed that improved tourism facilities and transportation networks increase local participation in tourism enterprises and related economic activities. The implication of this finding is that when tourism destinations are easily accessible, local communities are more likely to engage in tourism businesses such as tour guiding, cultural performances, transportation services, hospitality, and craft production. Improved accessibility also reduces barriers that hinder rural communities from participating in tourism development.

The findings of hypothesis two further revealed that the involvement of local communities in the planning and development of tourism infrastructure has a significant positive impact on socio-economic development and cultural preservation in Cross River State. The result demonstrated that active community involvement contributes meaningfully to employment generation, income improvement, empowerment of local residents, and preservation of indigenous cultural heritage. This finding supports the view of Pati and Samal (2020), who noted that community participation in tourism planning promotes sustainable development and enhances the socio-economic well-being of local residents. The result also corroborates the position of Okoro and Eboh (2021), who emphasized that involving local communities in tourism development encourages ownership, cultural pride, and sustainability of tourism projects. The study therefore establishes that community participation is essential for ensuring that tourism development benefits local populations while protecting cultural values and

traditions. The findings equally suggest that sustainable tourism development in Cross River State depends largely on inclusive planning approaches that integrate local communities into tourism decision-making and infrastructure development processes.

Conclusion

This study examined tourism infrastructure accessibility as a predictor of community participation in tourism activities in Cross River State, Nigeria. The findings revealed that accessible tourism infrastructure significantly influences the level of community participation in tourism activities. Improved transportation systems, road networks, accommodation facilities, communication services, and other tourism-related infrastructure were found to encourage local residents to participate actively in tourism enterprises and related socio-economic activities. The study established that accessibility reduces barriers that hinder local communities from benefiting from tourism development initiatives.

The study further revealed that involving local communities in the planning and development of tourism infrastructure positively impacts socio-economic development and cultural preservation in Cross River State. Community participation in tourism planning enhances employment opportunities, income generation, empowerment, and the preservation of indigenous cultural heritage. The findings therefore underscore the importance of adopting inclusive and participatory approaches to tourism development. Based on the findings, the study concludes that sustainable tourism development in Cross River State depends largely on improving tourism infrastructure accessibility and fostering active community involvement in tourism planning, development, and management.

Recommendations

1. Tourism developers and local authorities should adopt participatory planning models that actively engage local communities in the development and management of tourism infrastructure in order to enhance socio-economic benefits and cultural preservation.
2. Government and tourism stakeholders should improve the accessibility of tourism infrastructure such as roads, transportation systems, and tourism facilities to encourage greater community participation in tourism activities across Cross River State.

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