

JOURNAL OF ENVIRONMENTAL SCIENCES AND BUILT ENVIRONMENT RESEARCH (JESBER)

2026, Vol. 1, No. 1, pp. 227-240

Published by Faculty of Environmental Sciences, University of Calabar, Nigeria

Print ISSN: 3141-5547 | OPEN ACCESS

DOI: <https://doi.org/10.83109/jesber.vol1no1.23>



Research article

TOURISM SUPPORT SERVICES, ENVIRONMENTAL MANAGEMENT AND SUSTAINABLE DESTINATION DEVELOPMENT IN UYO, NIGERIA: SPATIAL AND SOCIO-ECONOMIC EVIDENCE

Violet Bassey Eneyo^{1*}

¹ Department of Geography and Environmental Management, University of Calabar, Calabar, Nigeria

*Corresponding author: violetteffiom@yahoo.com

ABSTRACT

Objective: This study examined how tourism support services contribute to environmental management and sustainable tourism development in Uyo Local Government Area, Akwa Ibom State, Nigeria. **Method:** A cross-sectional survey design combined field observation, GPS-based mapping, questionnaires, interviews and documentary records on registered tourism support services, employment, patronage and tourism development levy remittance. Data were analysed using descriptive statistics, GIS visualisation, Welch independent-samples t-test and one-way analysis of variance. **Results:** The study identified 156 registered tourism support services, dominated by hotels and guest houses (50%). The sector employed 744 workers, with unskilled staff representing 59.14% and females 60.75%. Total patronage reached 189,440 visits, while levy remittance amounted to N53.66 million. **Implications:** Support services strengthen urban tourism capacity, but weak tourism programming, taxation pressure, low patronage, training gaps and security concerns constrain sustainability. **Contribution:** The article reframes tourism support services as spatial, socio-economic and environmental management infrastructure for urban destination development.

KEYWORDS

Tourism support services; environmental management; sustainable tourism development; ecotourism; environmental education; spatial distribution; employment generation; Uyo

LICENSE STATEMENT:

All articles are published under Creative Commons Attribution 4.0 International License (CC BY 4.0). Users may share, adapt, and distribute the work provided appropriate credit is given to the authors and JESBER.

Introduction

Tourism support services constitute the operational backbone through which destinations become usable, competitive and socially meaningful. They include accommodation facilities, food and beverage outlets, travel agencies, transport operators, tourism promoters, entertainment spots and recreational parks that make it possible for visitors to sleep, eat, move, obtain information, participate in leisure activities and extend their stay. In the language of environmental management, these establishments are not simply private businesses; they are service nodes that shape land-use intensity, traffic movement, waste generation, water demand, energy consumption, public safety and the everyday quality of the visitor experience. Their location and operational standards therefore affect both the economic performance and the environmental sustainability of a destination. The renewed global importance of tourism strengthens the need to examine these support systems more carefully. UN Tourism reported that international tourism virtually recovered to pre-pandemic levels in 2024, with approximately 1.40 billion international arrivals, while the World Travel and Tourism Council estimated that the sector contributed US\$10.90 trillion to global GDP and supported about 357 million jobs in 2024 (UN Tourism, 2025a, 2025b; World Travel & Tourism Council [WTTC], 2025). These global figures are important

for sub-national destinations because the benefits of tourism are realised through the quality, distribution and regulation of local services. Where tourism support services are weak, even attractive natural and cultural resources may fail to generate sustained livelihoods, revenue or positive visitor experience.

Sustainable tourism requires that economic gains are pursued without undermining environmental quality or host-community wellbeing. UN Tourism (2021) and the United Nations Department of Economic and Social Affairs (2026) emphasise that sustainable tourism must consider current and future economic, social and environmental impacts. This understanding is particularly relevant to rapidly urbanising destinations in Nigeria, where hotel growth, restaurant clusters, transport hubs and entertainment corridors often develop faster than waste-management systems, drainage infrastructure, destination marketing, training frameworks and regulatory monitoring. The central policy question is therefore not only whether tourism support services exist, but whether their pattern, quality and contribution are consistent with sustainable destination governance. Akwa Ibom State has invested in tourism, urban renewal and institutional coordination as part of a broader economic diversification agenda. Uyo, as the state capital, is a strategic administrative, commercial, cultural and leisure node. The city hosts government functions, educational activities, business travel, social events and recreational consumption, all of which generate demand for accommodation, eateries, restaurants, amusement parks, transport services, travel agencies and entertainment spots. Previous work on tourism-support-service contribution in Uyo showed that these services can contribute to employment, revenue generation and auxiliary enterprise growth (Eneyo & Ekpenyong, 2018b). Yet, the rapid spread of such services also raises questions about spatial concentration, urban environmental pressure and equitable benefit distribution.

This study instead of treating tourism support services only as hospitality businesses, it examines them as spatially distributed infrastructure for sustainable urban destination development. This repositioning reflects the author's specialisation in environmental management, ecotourism and environmental education. It also aligns with recent tourism scholarship that links ecotourism, cultural events, livelihood development and environmental responsibility to destination competitiveness and host-community benefits (Eneyo, 2025a, 2025b, 2025c, 2025d; Eneyo & Essien, 2023; Eneyo & Itu, 2024). The problem addressed is the limited empirical evidence on how tourism support services in Uyo are distributed, what categories dominate, how much employment they generate, how they contribute to public revenue, where patronage originates and what sustainability challenges constrain their performance. Reconnaissance observations suggested that several support services were located close to major streets and activity corridors, including Ewet Housing Estate, Udo Udoma Avenue and Nsikak Eduok Avenue.

However, professional tourism planning requires more than impressionistic observation; it requires systematic classification, spatial mapping, quantitative analysis and interpretation of development implications. This gap is important because the clustering of hotels, eateries and entertainment services can either strengthen destination accessibility or increase pressure on waste, traffic, drainage, sanitation, noise and security systems if not properly managed. The aim of the study was to examine the contribution of tourism support services to environmental management and sustainable tourism development in Uyo Local Government Area, Akwa Ibom State. The specific objectives were to identify and categorise tourism support services; assess their spatial distribution; analyse employment generation and workforce composition; examine tourism development levy remittances; evaluate patronage and visitor-origin patterns; and identify the challenges affecting sustainable operation. The article contributes to knowledge by integrating spatial, economic and environmental management evidence in a single destination-level framework. It also provides practical guidance for tourism boards, planning authorities, business associations and environmental managers seeking to transform tourism support services into tools for sustainable urban tourism development.

Literature review

Tourism support services and destination competitiveness

Tourism destinations are systems rather than isolated attractions. The presence of beaches, cultural festivals, heritage sites, entertainment spaces or natural resources does not automatically produce sustainable tourism unless visitors can access reliable accommodation, food, transport, information, recreation and safety services. In this sense, tourism support services function as destination-enabling infrastructure. Agina and Nwambuko (2023) show that infrastructural development is closely related to destination competitiveness in Nigeria, while Eneyo and Itu (2024) demonstrate that visitor numbers at tourism attractions vary according to enabling and constraining destination factors. The quality and distribution of support services therefore affect the capacity of Uyo to convert visitor interest into actual patronage, revenue and livelihoods. The literature on tourism development in Cross River and Akwa Ibom contexts also confirms that tourism support services are central to destination experience. Eneyo and Ekong (2019) link heritage interpretation and theatre to tourist pull, while Eneyo et al. (2022b) demonstrate that niche tourism products such as the Iboku Boat Regatta require deliberate marketing strategies and supporting services. Similarly, the study of Calabar Carnival shows that cultural festivals can produce economic and social benefits when the host environment provides services that retain visitors and distribute benefits across businesses (Eneyo & Essien, 2023). These studies collectively suggest that support services are not secondary to tourism development; they are part of the tourism product itself.

Environmental management and sustainable tourism

Environmental management is essential because tourism facilities consume resources and generate environmental externalities. Hotels and guest houses require water, energy, waste disposal, parking and safety systems. Eateries and restaurants generate organic waste, plastics, wastewater and public-health obligations. Entertainment spots influence the night-time economy, noise, crowding and security. Transport companies affect mobility, emissions and congestion. These relationships make tourism-support-service planning a practical environmental management issue, especially in growing cities where land-use controls and service infrastructure may be uneven. The connection between tourism and environmental responsibility is emphasised in Eneyo's work on ethics and social responsibility in hospitality and tourism education (Eneyo, 2025b), as well as in studies on plastic-waste generation by eateries and the spatial pattern of eateries in Calabar (Eneyo et al., 2018; Eneyo et al., 2022a). These studies are directly relevant to Uyo because eateries, restaurants and entertainment clusters are among the major tourism-support-service categories found in the study area. If such establishments are not linked to sanitation, waste minimisation, drainage protection and staff training, their economic contribution may be weakened by environmental costs. Sustainable support-service development therefore requires minimum facility standards, environmental education and routine monitoring.

Ecotourism, environmental education and local livelihoods

Ecotourism and environmental education provide a useful lens for interpreting tourism support services. Ecotourism is often associated with protected areas, community-based initiatives and nature-based experiences; however, its sustainability principles also apply to urban support systems that serve visitors travelling to cultural, coastal and ecological attractions. Eneyo (2025c) highlights the relationship between sustainable livelihoods and socio-economic constraints in the Cross River National Park, while Eneyo (2025d) shows how Efik cultural festivals can be leveraged for tourism development and poverty reduction. These perspectives suggest that tourism support services should not be viewed narrowly as profit-seeking enterprises, but as livelihood platforms that can promote responsible behaviour, local identity and environmental stewardship. Recent international literature reinforces this argument. Nkambule and Venter (2026) position hiking as a soft-adventure tourism niche that can support conservation, community-based tourism and environmental education when trails are

strategically managed. Samal and Dash (2024) also stress stakeholder engagement in sustainable ecotourism, while Tiarantika et al. (2024) demonstrate the need for decision-support systems in community-based ecotourism management. For Uyo, these works imply that hotels, restaurants, transport providers and tourism promoters can participate in environmental education by communicating responsible visitor practices, supporting clean-destination campaigns and linking visitors to local cultural and ecological attractions.

Spatial distribution, service clusters and urban governance

Spatial distribution is central to environmental management because the location of support services determines where pressure and benefits accumulate. Eneyo et al. (2017) mapped hotel distribution in Calabar, demonstrating the value of spatial analysis in understanding hospitality concentration. Eneyo and Ekpenyong (2018a) similarly examined the spatial distribution of petrol filling stations, showing that service-location studies are important for urban environmental management. In a related spatial tourism study, Eneyo et al. (2022a) found that eateries in Calabar exhibited identifiable patterns with planning implications. These works justify the use of GIS mapping in the present study and support the argument that the spatial clustering of tourism support services should be interpreted in relation to roads, settlements, land use and public-service capacity. Service clustering has both positive and negative implications. On one hand, clusters can reduce search costs for visitors, strengthen destination convenience, create enterprise linkages and increase patronage. On the other hand, excessive clustering can intensify traffic congestion, waste accumulation, noise, informal parking, security risks and pressure on drainage systems. Nkogho-Beyeme et al. (2026) show that tourism entrepreneurial ecosystems depend on opportunities, infrastructure, regulation, safety and stakeholder support. Their analysis of small and medium-sized tourism enterprises around Kruger National Park is relevant to Uyo because it demonstrates that tourism enterprises thrive where the wider ecosystem supports finance, promotion, safety, public services and community participation. Thus, spatial concentration should be managed through zoning, standards and coordinated support rather than left to unregulated market forces.

Human resources, work conditions and service quality

Tourism support services are labour-intensive and depend strongly on employee skills, motivation and wellbeing. Mafini and Slabbert (2026) show that job satisfaction in tourism and hospitality is influenced by remuneration, working conditions, management practices, skills and team spirit. Adam et al. (2026) further demonstrate that occupational stress can undermine the psychological wellbeing of hotel employees, especially where reward systems, physical work environments and organisational justice are weak. These findings are important for Uyo because the field data show a high proportion of unskilled workers, low remuneration concerns and training gaps. The sustainability of tourism support services should therefore be measured not only by the number of jobs created, but also by whether those jobs build skills, provide fair rewards and support service quality. Workplace dynamics also influence service performance. Öztürk (2026) shows that destructive competition, hierarchy, knowledge withholding and perceived injustice can weaken motivation and employee retention in hotel kitchens. Although the present study does not examine crab-bucket syndrome directly, the finding reinforces the need for transparent management, staff training and fair promotion systems in tourism support services. Eneyo (2025e) further emphasises the role of higher education in tourism and hospitality development, while Eneyo (2025f) and Eneyo and Eneyo (2025) provide foundational tourism concepts that support professionalisation of the sector. Together, these works show that tourism education and workforce development are central to the transformation of Uyo's support services into a competitive, sustainable and environmentally responsible destination system.

Conceptual positioning of the study

The study is conceptually positioned at the intersection of destination competitiveness, environmental management and sustainable livelihood development. Tourism support services are treated as: (1) destination

infrastructure that enables visitor movement and experience; (2) environmental management units whose location and practices affect urban quality; (3) livelihood platforms that generate employment and auxiliary businesses; and (4) governance objects that require policy, training, security and monitoring. This integrated positioning advances the earlier empirical evidence on tourism-support-service contribution in Uyo (Eneyo & Ekpenyong, 2018b) by connecting it with contemporary debates on sustainable tourism, ecotourism, environmental education and tourism entrepreneurial ecosystems.

Methodology

Research design and study area

The study adopted a cross-sectional survey design. This design was appropriate because the research examined the distribution, structure and socio-economic contribution of tourism support services within a defined urban destination. Uyo Local Government Area was selected because it is the capital of Akwa Ibom State and a major administrative, business, recreational and cultural node in southern Nigeria. It also contains a growing number of hotels, guest houses, restaurants, eateries, entertainment spots, travel agencies, transport companies and amusement parks that support visitor movement and urban leisure activity. Uyo Local Government Area lies between approximately longitudes 7°54' and 8°00' East and latitudes 4°59' and 5°05' North. It is bounded by Itu, Ibiono Ibom and Ikono Local Government Areas to the north; Etinan, Nsit Ibom and Ibesikpo-Asutan to the south; Abak to the west; and Uruan to the east. The area is accessible from major urban centres within Akwa Ibom State and from Calabar in Cross River State. Its ecological setting falls within the moist lowland forest zone, although urbanisation, roads, residential estates and commercial activity have transformed large portions of the landscape. These physical and socio-economic characteristics make Uyo suitable for examining the relationship between tourism support services, spatial distribution and environmental management.

Population, data sources and sampling

The population comprised operators and staff of registered tourism support services in Uyo Local Government Area. The service categories examined were hotels and guest houses, eateries and restaurants, tourism promoters, transport companies, travel agencies, amusement parks and entertainment spots. Records from the relevant tourism authority identified 156 registered tourism support services. Employment records and survey responses covered 744 workers across the service categories. The study used purposive sampling because the required information could only be obtained from registered tourism support services and relevant institutional sources. Primary data were collected through field observation, questionnaire administration, oral interviews and GPS-based mapping of facility locations. The questionnaire captured staff characteristics, employment type, skill level, sex distribution, remuneration and perceived challenges. A checklist was used to obtain information on registered services, patronage, revenue remittance, facilities and visitor origins. Secondary data were obtained from tourism records, facility operators and documentary materials. The combination of quantitative and observational sources strengthened the reliability of the analysis and allowed the findings to be interpreted within both statistical and spatial contexts.

Variables and analytical procedure

The main variables were service category, number of outlets, employment, skill composition, gender composition, worker origin, tourism development levy remittance, patronage, visitor origin, auxiliary businesses, facilities and operational challenges. All percentages were recomputed and rounded to two decimal places for professional reporting. Descriptive statistics were used to summarise service classification, employment, revenue, patronage and challenges. GIS visualisation was used to present the spatial distribution of tourism support services. Welch independent-samples t-test was applied to compare employment generation by worker origin, while one-way analysis of variance was used to test whether revenue remittance and annual patronage

varied significantly across service categories. The regenerated map was rendered at 500 dpi to meet publication-quality expectations. Ethical consideration was observed by treating respondent information confidentially and reporting only aggregate data. The study did not identify individual respondents or disclose commercially sensitive facility-level information. The analysis is therefore presented at the category and destination level in order to support academic interpretation, environmental planning and tourism-policy learning.

Results and discussion

Spatial distribution of tourism support services

Figure 1 presents the spatial distribution of registered tourism support services in Uyo Local Government Area. The map shows that services are concentrated around the central urban corridor and around connected activity nodes, while some peripheral parts of the local government area remain less intensively served. This pattern indicates that tourism support services tend to locate where road access, commercial activity, visitor movement and urban demand are strongest. From a destination-development perspective, such clustering can improve visitor convenience because accommodation, food, entertainment and mobility services are located within accessible corridors. At the same time, Figure 1 has important environmental management implications. Where hotels, eateries, entertainment spots and transport services cluster, pressure on roads, parking, sanitation, waste disposal, noise control and public safety may increase. The figure therefore supports the need for spatial governance rather than uncoordinated facility growth. Uyo requires a planning framework that identifies tourism-support corridors, sets facility standards and ensures that waste collection, drainage, security and traffic management are strengthened in areas of high service concentration. This interpretation aligns with spatial planning studies on hotel distribution, eateries and urban service facilities in southern Nigeria (Eneyo et al., 2017; Eneyo & Ekpenyong, 2018a; Eneyo et al., 2022a).

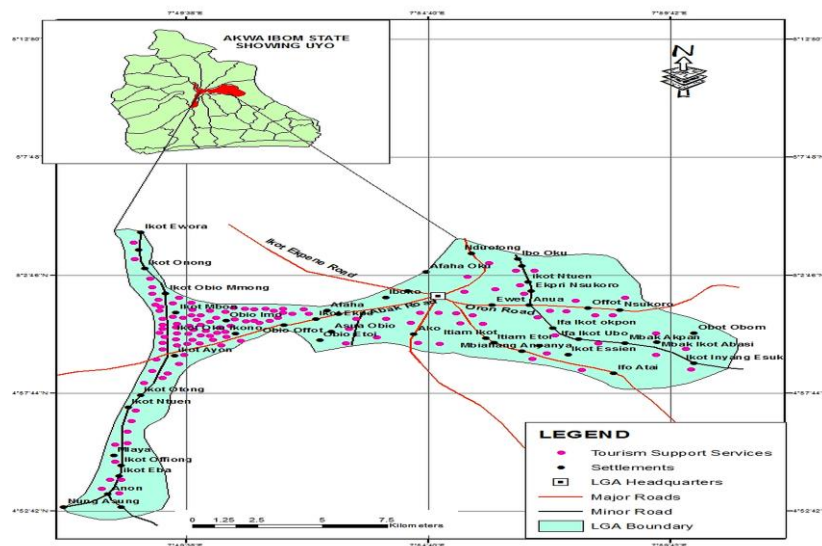


Figure 1. Spatial distribution of tourism support services in Uyo Local Government Area

Classification and structure of tourism support services

Table 1 summarises the classification and primary destination functions of tourism support services in Uyo. A total of 156 registered support services were identified. Hotels and guest houses were the dominant category, accounting for 78 outlets or 50% of the total. Eateries and restaurants, and entertainment spots each accounted for 24 outlets or 15.4%. Tourism promoters, transport companies, amusement parks and travel agencies

represented smaller shares. The structure indicates that Uyo's support-service economy is accommodation-led but complemented by food, recreation, travel and entertainment functions.

Table 1. Classification and functions of tourism support services in Uyo Local Government Area

Tourism support service	Outlets	Percentage	Primary destination function
Hotels and guest houses	78	50	Accommodation, hospitality, lodging and leisure services
Eateries and restaurants	24	15.4	Meals, confectioneries, drinks and visitor refreshment
Tourism promoters	12	7.7	Tour packaging, event promotion and cultural tourism facilitation
Transport companies	9	5.8	Visitor mobility, inter-city transfer and local destination access
Travel agencies	3	1.9	Travel arrangement, tour packaging and business/leisure trip support
Amusement parks	6	3.9	Children's recreation, leisure and family entertainment
Entertainment spots	24	15.4	Refreshment, recreation, relaxation and night-time leisure
Total	156	100	

The dominance of hotels and guest houses in Table 1 suggests that Uyo functions strongly as a lodging and business-travel destination. However, the combined role of eateries, restaurants and entertainment spots confirms that visitor experience is also shaped by everyday urban leisure consumption. The small share of travel agencies and amusement parks points to an underdeveloped destination-packaging and family-recreation segment. This result supports the argument that tourism development in Uyo should not only increase the number of facilities but should diversify the service mix and strengthen linkages among accommodation, recreation, culture, transport and environmental interpretation.

Employment generation and workforce composition

Table 2 reports employment distribution across the seven tourism-support-service categories. The sector employed 744 workers. Hotels and guest houses employed the largest workforce with 318 workers, representing 42.74% of all staff. Eateries and restaurants employed 135 workers, while entertainment spots employed 120 workers. The data also show that 304 workers were skilled (40.86%) and 440 were unskilled (59.14%). Female workers accounted for 452 staff (60.75%), compared with 292 male workers (39.25%).

Table 2. Employment distribution in tourism support services

Service category	Staff	Skilled	Unskilled	Male	Female
Hotels and guest houses	318	98 (30.82%)	220 (69.18%)	105 (33.02%)	213 (66.98%)
Eateries and restaurants	135	52 (38.52%)	83 (61.48%)	77 (57.04%)	58 (42.96%)
Tourism promoters	36	22 (61.11%)	14 (38.89%)	20 (55.56%)	16 (44.44%)
Transport companies	42	19 (45.24%)	23 (54.76%)	24 (57.14%)	18 (42.86%)
Travel agencies	21	15 (71.43%)	6 (28.57%)	4 (19.05%)	17 (80.95%)
Amusement parks	72	49 (68.06%)	23 (31.94%)	14 (19.44%)	58 (80.56%)
Entertainment spots	120	49 (40.83%)	71 (59.17%)	48 (40.00%)	72 (60.00%)
Total	744	304 (40.86%)	440 (59.14%)	292 (39.25%)	452 (60.75%)

The employment pattern in Table 2 is developmentally important because it shows that tourism support services create direct livelihood opportunities. Yet, the predominance of unskilled labour reveals a service-quality challenge. If most employees enter the sector without adequate technical preparation, customer-care skills, hygiene knowledge, safety awareness and environmental sanitation training, the destination may experience low productivity and uneven service standards. This finding is consistent with hospitality literature which emphasises the importance of remuneration, working conditions, skills, management practices and psychological wellbeing for service delivery (Adam et al., 2026; Mafini & Slabbert, 2026).

Worker origin and local livelihood inclusion

Table 3 presents the broad origin distribution of workers. Indigenous workers accounted for 561 employees, representing 75.40% of the workforce, while non-indigenous workers accounted for 183 employees or 24.60%. This result indicates that tourism support services contribute directly to local livelihood inclusion. The high

indigenous share suggests that support-service enterprises provide employment access to the host population, particularly in entry-level and routine service positions.

Table 3. Employment status by origin of worker

Worker group	Staff	Share of staff (%)	Interpretation
Indigenous workers	561	75.40	Majority local labour participation and livelihood inclusion
Non-indigenous workers	183	24.60	Supplementary labour supply and specialised service contribution
Total	744	100	

The implication of Table 3 is that tourism support services can strengthen host-community benefits when local workers are trained and supported to move beyond low-skill positions. Local employment alone is not sufficient for sustainable tourism if workers remain concentrated in poorly paid and insecure positions. Tourism education, vocational certification, workplace mentorship and practical environmental-management training are therefore necessary to transform employment access into upward mobility. This supports Eneyo's (2025e) argument on the role of higher education in tourism and hospitality development and extends the livelihood perspective advanced in ecotourism scholarship (Eneyo, 2025c; Samal & Dash, 2024).

Revenue remittance and fiscal contribution

Table 4 shows the tourism development levy remittance by service category. Total remittance amounted to N53,659,938.00. Eateries and restaurants contributed the largest share, with N14,460,560.00 or 26.95%. Amusement parks followed with N11,767,478.00 or 21.93%, while entertainment spots contributed N10,530,046.00 or 19.62%. Travel agencies, hotels and guest houses, transport companies and tourism promoters also made measurable contributions. The table shows that tourism support services function as fiscal contributors and not only as visitor-service outlets.

Table 4. Tourism development levy remittance by service category, 2020-2025

Service category	Total remittance	Share (%)
Travel agencies	N6,406,666	11.94
Eateries and restaurants	N14,460,560	26.95
Tourism promoters	N1,982,424	3.69
Transport companies	N2,441,164	4.55
Hotels and guest houses	N6,071,600	11.31
Amusement parks	N11,767,478	21.93
Entertainment spots	N10,530,046	19.62
Total	N53,659,938	100

The pattern in Table 4 suggests that food, amusement and entertainment services are particularly important for internally generated tourism revenue in Uyo. This may be because such services attract frequent local and visitor patronage, including repeat consumption. However, the relatively low contribution from tourism promoters and transport companies indicates an underdeveloped tourism value chain. A stronger destination-management model should broaden revenue generation by improving tour packaging, cultural-event promotion, transport coordination and digital marketing. Revenue policy should also avoid excessive taxation because operators facing high costs may reduce investment in facility upgrading, staff welfare and environmental compliance.

Annual revenue and patronage trends

Table 5 combines annual tourism development levy remittance and patronage. Revenue rose from N4,095,296.00 in 2020 to N14,703,280.00 in 2024 before declining to N12,159,559.00 in 2025. Patronage increased more steadily, from 25,897 visits in 2020 to 36,366 visits in 2025. The trend shows that patronage continued to improve across the period, while revenue fluctuated. This difference suggests that revenue performance may be influenced not only by visitor numbers but also by compliance levels, service-category performance, levy administration and operational costs.

Table 5. Annual revenue and patronage trend summary

Year	Revenue remittance	Revenue share (%)	Patronage	Patronage share (%)
2020	N4,095,296	7.63	25,897	13.67
2021	N3,734,397	6.96	27,904	14.73

2022	N6,948,736	12.95	30,358	16.03
2023	N12,018,670	22.40	33,876	17.88
2024	N14,703,280	27.40	35,039	18.50
2025	N12,159,559	22.66	36,366	19.20
Total	N53,659,938	100	189,440	100

The steady increase in patronage shown in Table 5 is encouraging for destination development, but the revenue decline in 2025 requires policy attention. One possible interpretation is that the sector attracted more users but did not convert all patronage into proportionate revenue remittance. Another possibility is that service operators experienced cost pressures or tax fatigue. For environmental management, the increasing patronage trend means that waste collection, traffic control, sanitation, public safety and emergency response should be scaled in advance of visitor growth. Sustainable tourism policy must therefore treat patronage growth as both an economic opportunity and an environmental-management responsibility.

Patronage by support-service category.

Table 6 presents patronage by tourism-support-service category. Entertainment spots received the highest patronage with 58,269 visits or 30.76% of the total, followed by eateries and restaurants with 51,384 visits or 27.12%. Tourism promoters accounted for 25,149 visits, while hotels and guest houses, travel agencies and transport companies recorded moderate shares. Amusement parks recorded only 359 visits or 0.19%, indicating a very weak family-recreation segment within the support-service structure.

Table 6. Patronage by tourism support service category, 2020-2025

Service category	Total patronage	Share (%)
Hotels and guest houses	19,445	10.26
Eateries and restaurants	51,384	27.12
Travel agencies	18,144	9.58
Transport companies	16,690	8.81
Amusement parks	359	0.19
Tourism promoters	25,149	13.28
Entertainment spots	58,269	30.76
Total	189,440	100

The patronage pattern in Table 6 confirms that Uyo's visitor economy is strongly driven by leisure, refreshment and entertainment consumption. This is consistent with studies showing that tourism benefits often depend on the services and events that keep visitors engaged within the destination (Eneyo & Essien, 2023; Eneyo et al., 2022b). However, low amusement-park patronage suggests a missed opportunity for family-oriented recreation. Destination planners should therefore encourage diversified leisure infrastructure, including safe, environmentally managed parks, cultural interpretation centres, family recreation spaces and event-linked services. Such diversification would reduce overdependence on entertainment spots and eateries while broadening the visitor base.

Domestic and international source markets

Table 7 reports the leading domestic and international source markets. Domestic visitors dominated the patronage structure, with Port Harcourt contributing 36,470 visitors or 29.08% of domestic-origin visitors, followed by Uyo Local Government Area with 28,202 visitors or 22.49%. Abia, Enugu, Imo and Ebonyi were also important domestic origins. Internationally, Cameroon was the leading source, with 25,320 visitors or 39.55% of international-origin visitors, followed by Togo and China. These patterns show that Uyo's tourism support services are strongly connected to short-haul regional mobility and neighbouring markets.

Table 7. Major domestic and international source markets

Market	Origin	Visitors	Share within market (%)
Domestic	Port Harcourt	36,470	29.08
Domestic	Uyo Local Government Area	28,202	22.49
Domestic	Abia	15,934	12.70

Domestic	Enugu	13,946	11.12
Domestic	Imo	10,000	7.97
Domestic	Ebonyi	9,794	7.81
International	Cameroon	25,320	39.55
International	Togo	12,761	19.93
International	China	9,449	14.76
International	India	4,427	6.92
International	Ghana	3,700	5.78
International	USA	2,570	4.01

The evidence in Table 7 has important marketing and environmental-management implications. Since a substantial share of visitors comes from nearby Nigerian states and neighbouring countries, Uyo can strengthen short-haul tourism through regional event calendars, road-access information, weekend leisure packages and cross-border cultural promotion. The dominance of Cameroon among international origins also suggests potential for regional tourism cooperation. However, visitor-origin data should be matched with safety, transport and sanitation planning, especially during peak travel periods. This is consistent with recent work on tourism entrepreneurial ecosystems, which stresses that safety, infrastructure and business promotion influence tourism enterprise performance (Nkogho-Beyeme et al., 2026).

Auxiliary businesses and multiplier effects

Table 8 identifies auxiliary businesses that emerged around tourism support services. Mobile phone operators were the most frequently reported auxiliary business, followed by supermarkets, barbing and hair-dressing salons, laundry services, mechanic shops, rental shops and retail shops. These activities demonstrate the multiplier effect of tourism support services. Once hotels, eateries and entertainment outlets cluster, other businesses emerge to serve workers, visitors, operators and surrounding residents.

Table 8. Auxiliary businesses emerging around tourism support services

Auxiliary business	Frequency	Percentage
Mobile phone operators	156	20.97
Supermarkets	152	20.43
Barbing/hair-dressing salons	152	20.43
Laundry services	130	17.47
Mechanic shops	65	8.74
Rental shops	50	6.72
Retail shops	32	4.30
Others	7	0.94
Total	744	100

The auxiliary businesses in Table 8 show that tourism support services are embedded in a wider urban economy. Laundry services support hotels and restaurants; mechanic shops support mobility; supermarkets and retail shops support both visitors and workers; phone operators support communication and digital transactions. These linkages are important for poverty reduction and local enterprise development. They also require planning because business clusters increase demand for waste collection, parking, signage, drainage maintenance and public safety. In this sense, the tourism-support-service cluster should be treated as an enterprise ecosystem rather than a set of isolated facilities.

Facilities, challenges and sustainability risks.

The field evidence showed that support services provided facilities such as cocktail bars, garaging, radio/television/video facilities in rooms, banqueting facilities, sport facilities, restaurants, valet services and cinema or entertainment facilities. These facilities enhance destination appeal, but they also increase environmental management obligations. Bars and entertainment facilities require noise and crowd management; restaurants require food hygiene and waste control; parking and garaging require traffic and drainage planning; and accommodation facilities require water, energy and safety standards. Facility quality is therefore both a tourism-competitiveness issue and an environmental-compliance issue. Table 9 presents the major service-

development and workplace challenges. Lack of tourism activities was the leading service-development challenge, with 225 responses or 30.24%. Low patronage, high taxation, increase in crime rate, lack of manpower and high cost of equipment were also important. At the workplace level, low patronage, low remuneration, lack of training, obsolete facilities, job insecurity and poor management were reported. The table therefore shows that the sustainability of tourism support services is constrained by both destination-level and organisation-level factors.

Table 9. Main challenges affecting tourism support services and staff

Dimension	Challenge	Frequency	Percentage
Service development	Lack of tourism activities	225	30.24
Service development	Low patronage	123	16.53
Service development	High taxation	92	12.37
Service development	Increase in crime rate	89	11.96
Service development	Lack of manpower	75	10.08
Service development	High cost of equipment	65	8.74
Staff/workplace	Low patronage	169	22.72
Staff/workplace	Low remuneration	153	20.56
Staff/workplace	Lack of training	132	17.74
Staff/workplace	Obsolete facilities	99	13.31
Staff/workplace	Job insecurity	95	12.77
Staff/workplace	Poor management	62	8.33

Note Percentages are based on the 744-response base and reflect multiple-response reporting

The challenge profile in Table 9 is critical for policy. Lack of tourism activities implies that support-service demand is not sustained by a strong year-round destination calendar. High taxation can reduce the ability of operators to reinvest in staff welfare, environmental compliance and facility improvement. Crime concerns can damage the destination image and reduce patronage. At the workplace level, low remuneration, lack of training and obsolete facilities threatens service quality and employee retention. These findings align with recent hospitality research showing that stress, poor rewards, weak working conditions and organisational injustice reduce employee wellbeing and service performance (Adam et al., 2026; Mafini & Slabbert, 2026; Öztürk, 2026; Eneyo & Ekong, 2019; Eneyo & Essien, 2023; Eneyo et al., 2022b; Nkambule & Venter, 2026; Samal & Dash, 2024; Tiarantika et al., 2024).

Hypothesis testing and statistical interpretation

Table 10 reports the inferential statistics. Welch independent-samples t-test indicated a statistically significant difference in employment generation between indigenous and non-indigenous workers, $t = 2.73$, $df = 7.86$, $p = 0.03$. One-way analysis of variance showed significant variation in tourism development levy remittance across support-service categories, $F(6, 35) = 4.05$, $p = 0.003$. Annual patronage also varied significantly across service categories, $F(6, 35) = 105.84$, $p < 0.001$. These results confirm that the service categories do not contribute equally to employment, revenue or patronage.

Table 10. Inferential statistics for employment, revenue and patronage patterns

Hypothesis focus	Test	Statistic	p-value	Decision
Employment generation between indigenous and non-indigenous workers	Welch independent-samples t-test	$t = 2.73$; $df = 7.86$	0.03	Significant difference
Tourism development levy remittance across support-service categories	One-way ANOVA	$F(6, 35) = 4.05$	0.003	Significant variation
Annual patronage across support-service categories	One-way ANOVA	$F(6, 35) = 105.84$	< 0.001	Significant variation

The statistical results in Table 10 strengthen the descriptive findings. The significant employment difference indicates that worker-origin distribution is not trivial and requires policy attention if local communities are to benefit equitably from tourism growth. The significant revenue and patronage variation shows that some service categories are much more economically active than others. This justifies targeted planning rather than uniform policy treatment. For example, entertainment spots and eateries may require stronger waste, noise and crowd-management controls because of their patronage intensity, while travel agencies and tourism promoters may

require business-development support to increase their contribution to destination packaging and visitor flow. The results demonstrate that tourism support services are central to the socio-economic and environmental management landscape of Uyo. The dominance of hotels and guest houses reflects the city's function as an administrative and business destination, while the importance of eateries, restaurants and entertainment spots shows that leisure consumption is a major component of the urban tourism economy. This confirms that tourism development is supported not only by attractions but by the everyday services that allow visitors to stay, move, eat, interact and participate in destination life.

The employment findings show that the sector contributes to household income and local economic circulation. However, the predominance of unskilled staff reveals a sustainability gap. Without deliberate training, many workers may remain in low-productivity and low-remuneration positions. This could undermine both employee wellbeing and visitor satisfaction. Workforce development should therefore be treated as part of destination management, not only as a private human-resource issue. Tourism education, hospitality certification and environmental sanitation training can increase the sector's contribution to both livelihoods and service quality. The revenue findings show that tourism support services contribute to public income through development levy remittance. Food, amusement and entertainment services were especially important fiscal contributors. However, revenue generation must be balanced with supportive taxation. Where taxation is perceived as excessive, operators may avoid compliance or reduce investment in facility improvement. A sustainable fiscal framework should therefore encourage compliance while helping enterprises to upgrade facilities, train staff and implement environmental standards. The patronage pattern indicates a seasonal and service-specific tourism economy. Entertainment spots and eateries attracted large patronage shares, while domestic and regional markets dominated visitor origins. This pattern provides an opportunity for destination planners to develop cultural events, weekend tourism, festival packages and short-haul marketing. It also creates environmental responsibilities during high-patronage periods. Waste collection, traffic control, security, sanitation and emergency response should be planned ahead of peak seasons and major events. The emergence of auxiliary businesses confirms that support services have multiplier effects. Phone operators, supermarkets, salons, laundry services and mechanics benefit from the visitor economy and from the concentration of tourism services. These linkages strengthen the argument that tourism development should be integrated with urban economic planning. Support-service clusters can become local enterprise nodes if supported by infrastructure, security, environmental regulation and destination marketing. The study confirms that tourism support services can act as catalysts of environmental management and sustainable tourism development when they are well planned. They can also become sources of environmental pressure when their spatial distribution, facility standards and operational practices are not properly managed. Uyo therefore requires an integrated tourism-support-service framework that connects spatial planning, environmental standards, enterprise support, staff development, public safety, cultural programming and destination marketing.

Implications and conclusion

Implications for environmental management and tourism development

The study has several practical implications. First, the clustering of support services around key urban corridors requires coordinated land-use planning. Zoning and facility guidelines should prevent congestion, waste accumulation, unsafe night-time environments and unmanaged noise. Second, environmental compliance standards should be mainstreamed into hotels, eateries, entertainment spots, amusement parks and transport services. These standards should cover waste disposal, water use, sanitation, noise control, parking, fire safety, emergency response and visitor information. Third, tourism support services should be linked to ecotourism and environmental education. Operators can promote responsible visitor behaviour, provide basic destination information and support local conservation messages. Hotels and restaurants can adopt resource-efficient

practices, while transport and entertainment providers can participate in clean-destination campaigns. Fourth, workforce development should be prioritised. Training in hospitality service, environmental sanitation, customer relations, safety and digital marketing will improve service quality and employment outcomes. These recommendations are consistent with sustainable tourism and ecotourism literature that emphasises stakeholder engagement, livelihood inclusion and responsible management. Fifth, public-private collaboration is necessary. Government agencies, tourism boards, business associations, host communities and educational institutions should jointly develop a tourism-support-service improvement programme. Such a programme should provide training, enforce minimum standards, improve data collection, support marketing and encourage investment in underserved locations. It should also link tourism-support-service development to cultural festivals, heritage interpretation and environmental education, building on the opportunities identified in Nigerian tourism studies.

Conclusion

This study shows that tourism support services in Uyo Local Government Area are important drivers of employment, revenue generation, visitor patronage and auxiliary business development. A total of 156 registered support services were identified, with hotels and guest houses forming the largest category. The sector employed 744 staff, generated tourism development levy remittances and attracted substantial patronage across the study period. The findings also show that entertainment spots, eateries and restaurants are major patronage drivers, while auxiliary businesses demonstrate the wider multiplier effect of support-service clusters. At the same time, the sector faces sustainability challenges, including lack of tourism activities, high taxation, low patronage, increased crime concerns, lack of manpower, low remuneration, lack of training and obsolete facilities. Spatial concentration also requires environmental planning to reduce pressure on roads, waste systems, sanitation and safety infrastructure. The study concludes that tourism support services can enhance the socio-economic wellbeing of Uyo if their growth is guided by integrated planning, environmental standards, workforce development, public-private coordination and ecotourism-oriented environmental education.

Declarations

Ethics approval and consent to participate: The study used aggregate field survey and institutional record data. Respondents were approached for academic purposes and information was treated confidentially.

Consent for publication: Not applicable; the manuscript reports aggregate data without identifying individual respondents.

Availability of data: The data used in this study are derived from the field survey and may be made available by the author upon reasonable request.

Competing interests: The author declares no competing interests.

Funding: No external funding was reported for this study.

Author contribution: Violet Bassey Eneyo is responsible for the conceptualisation, data interpretation, manuscript development and final approval of the article.

References

- Adam, I., Bukari, S., & Amuquandoh, F. E. (2026). Hospitality on the edge: Effects of occupational stress on the psychological wellbeing of hotel employees in Ghana. *African Journal of Hospitality, Tourism and Leisure*, 15(1), 68–78. <https://doi.org/10.46222/ajhtl.19770720.718>
- Agina, E. K., & Nwambuko, T. C. (2023). Assessing the relationship between infrastructural development and tourism destination competitiveness: Evidence from Nigeria. *European Journal of Hospitality and Tourism Research*, 11(1), 17–26. <https://doi.org/10.37745/ejht.2023/vol11n11726>
- Eneyo, V. B. (2025a). *Essentials of tourism for beginners* (pp. 1–91). University of Calabar Press.
- Eneyo, V. B. (2025b). Ethics and social responsibility in hospitality and tourism education. In *Tourism and the environment* (Vol. 1, pp. 358–374). University of Calabar Press.
- Eneyo, V. B. (2025c). Exploring sustainable livelihoods and socio-economic constraints in the Cross River National Park, Oban Division, Nigeria. *Journal of Environmental and Tourism Education*, 8(1), 569–587.
- Eneyo, V. B. (2025d). Leveraging Efik cultural festivals as strategic tools for tourism development and poverty reduction in Calabar, Nigeria. *Journal of Environmental and Tourism Education*, 8(1), 530–547.

- Eneyo, V. B. (2025e). The role of higher education in tourism and hospitality development. In *Tourism and the environment* (Vol. 1, pp. 340–357). University of Calabar Press.
- Eneyo, V. B. (2025f). *Tourism for beginners II* (pp. 1–117). University of Calabar Press.
- Eneyo, V. B., & Ekong, M. O. (2019). Slave history “theatre” as center for tourists’ pull in Cross River State, Nigeria. *Journal of Tourism and Heritage Studies*, 8(1), 100–123.
- Eneyo, V. B., & Ekpenyong, E. J. (2018a). Spatial distribution of petrol filling stations in Calabar South Local Government Area, Cross River State. *Multi-Disciplinary Journal of Research and Development Perspectives*, 7(1), 66–83.
- Eneyo, V. B., & Ekpenyong, E. J. (2018b). The contribution of tourism support services in the socio-economic development of Uyo Urban, Nigeria. *Multi-Disciplinary Journal of Research and Development Perspectives*, 7(2), 28–44.
- Eneyo, V. B., & Eneyo, M. B. (2025). *Philosophy of tourism: A philosophical approach to tourism studies*. University of Calabar Press.
- Eneyo, V. B., & Essien, D. A. (2023). Economic and social impacts of cultural festivals: A comprehensive analysis of Calabar Carnival, Nigeria. *Nigerian Journal of Social and Development Issues*, 11(1), 116–133.
- Eneyo, V. B., & Itu, P. C. O. (2024). Variation in visitor numbers and contributing factors at tourism attractions in Akwa Ibom State, Nigeria. *World Tourism Journal*, 2(2), 83–98.
- Eneyo, V. B., Ajake, A. O., & Ekpenyong, E. J. (2018). Assessing plastic wastes generation by eateries in Calabar, Nigeria. *World Environment Journal*, 2(1), 95–106.
- Eneyo, V. B., Ajake, A. O., Offiong, E. E., Ushie, M. A., & Akpan, N. A. (2022a). Exploring spatial pattern of eateries in Calabar City, Cross River State, Nigeria. *Spatial Information Research*, 31(2), 167–179.
- Eneyo, V. B., Attah, F. M., Ekong, M. O., Offiong, E. E., Ekpo, E. E., Antai, A. S., Obi, F. B., & Essien, D. A. (2022b). Marketing strategies of niche tourism products: A case study of Iboku Boat Regatta practised by the Efik people of South Eastern Nigeria. *African Journal of Hospitality, Tourism and Leisure*, 11, 541–554.
- Eneyo, V. B., Bassey, B., & Ekpenyong, E. J. (2017). Mapping hotel distribution in Calabar, Cross River State, Nigeria. *World Environment Journal*, 1(1), 66–83.
- Eneyo, V. B., Oba, D. O., Ochiche, C. A., Essien, D. A., & Antai, A. S. (2021). Economic impacts of curfew imposition on the nightclub industry in Calabar Metropolis, Nigeria. *African Journal of Hospitality, Tourism and Leisure*, 10(3), 955–971.
- Mafini, M., & Slabbert, E. (2026). Money matters: Job satisfaction in the South African tourism and hospitality industry. *African Journal of Hospitality, Tourism and Leisure*, 15(1), 11–20. <https://doi.org/10.46222/ajhtl.19770720.713>
- Nkambule, N. M., & Venter, D. (2026). Hiking as soft adventure tourism in South Africa: Insights from a systematised literature review. *African Journal of Hospitality, Tourism and Leisure*, 15(1), 1–10. <https://doi.org/10.46222/ajhtl.19770720.712>
- Nkogho-Beyeme, R., Thomas, P., & Schachtebeck, C. (2026). Exploring the tourism entrepreneurial ecosystem of Kruger National Park: Opportunities, challenges, and strategic solutions for small and medium-sized enterprises. *African Journal of Hospitality, Tourism and Leisure*, 15(1), 177–185. <https://doi.org/10.46222/ajhtl.19770720.728>
- Öztürk, İ. (2026). If I can’t do it, you can’t do it: Crab mentality in hotel kitchens. *African Journal of Hospitality, Tourism and Leisure*, 15(1), 242–252. <https://doi.org/10.46222/ajhtl.19770720.734>
- Samal, R., & Dash, M. (2024). Stakeholder engagement in advancing sustainable ecotourism: An exploratory case study of Chilika Wetland. *Discover Sustainability*, 5, Article 50. <https://doi.org/10.1007/s43621-024-00233-2>
- Tiarantika, R., Soemarno, Efani, A., & Koderi. (2024). Developing a decision support system for sustainable management of community-based ecotourism: A case study of CMC Tiga Warna. *International Journal of Sustainable Development and Planning*, 19(6), 2205–2219. <https://doi.org/10.18280/ijstdp.190620>
- UN Tourism. (2021). What is sustainable tourism? <https://www.unwto.org/sustainable-development>
- UN Tourism. (2025a). *World Tourism Barometer: January 2025*. UN Tourism.
- UN Tourism. (2025b). *World Tourism Barometer: May 2025*. UN Tourism.
- United Nations Department of Economic and Social Affairs. (2026). Sustainable tourism. Sustainable Development Knowledge Platform. <https://sdgs.un.org/topics/sustainable-tourism>
- World Travel & Tourism Council. (2025). *Travel & Tourism Economic Impact Research*. WTTC.