e-ISSN: 2279-0837, p-ISSN: 2279-0845.

www.iosrjournals.org

# Infrastructure and Sustainable Tourism Development in Nigeria

# Eno Eyak James<sup>1</sup> and Aniedi Udo Essien<sup>2</sup>

<sup>1</sup>Dept. of Urban and Regional Planning University of Uyo, Uyo.
<sup>2</sup>Dept. of Geography and Natural Resources Management, University of Uyo, Uyo.

Corresponding Author: Eno Eyak James

**Abstract**: Infrastructure is critical to the sustainable development of the tourism sector in any society. This study assessed the availability of general infrastructure, tourism infrastructure and other social services in thirty randomly selected tourists' destinations in South-South Nigeria. Data for the study were generated with the aid of infrastructure/social services checklist alongside oral interview with tourism officials in the area. Findings revealed a significant deficit in the number and types of infrastructure available as more than fifty percent of sampled tourist destinations lack the basic infrastructure such as tourist accommodation, transport infrastructure and health services. The sustainability of tourism in this area is in doubt except effort is made to engage the public-private partnership for the provision of critical infrastructure in these tourist destinations.

**Keywords**: Infrastructure, South-South Nigeria, Tourism, Tourists Destinations, sustainable development.

Date of Submission: 01-01-2019 Date of acceptance: 15-01-2019

\_\_\_\_\_\_

### I. INTRODUCTION

Tourism has been identified as a catalyst for driving sustainable development in the post-modern era (WTTC, 2011). Tourism accounts for nearly ten percent of the World Gross Domestic Product (GDP) comprising \$5.89 trillion in economic activity and is expected to double by 2020 (WTTC, 2011). To tap into the tourism gold mine, the Nigerian Government in 2017 held the First Tourism Conference/Symposium in Abuja to marshal out strategies for repositioning the tourism sector for sustainable development. One of the key resolutions at the conference included the review of national tourism policy framework for the provision of infrastructure to drive sustainability in the tourism sector.

Infrastructure is critical to sustainable tourism development particularly in an emerging economy such as Nigeria. Infrastructure refers to the fundamental facilities and systems serving a country, city or area; including the services and facilities necessary for its economy to function. As a subsector of the economy, tourism is dependent on basic infrastructure to function. The World Tourism Organisation (2005) observed that tourism infrastructure is bifurcated – consisting of the main tourism infrastructure and the additional or support infrastructure. Tourist equipment/services such as hotels, restaurants, recreational facilities, souvenir shops, tour guide, information centre, billboards/sign posts, and many others come under the ambit of main tourism infrastructure.

On the other hand, roads, railways, airports, electricity, water supply, sewage and waste disposal, medical facilities, communications, security apparatuses and the like represents supporting tourism infrastructure (Boers and Conttrel, 2007; Seetanah et. al, 2011).

According to Barbosa (2009), Core tourism equipment such as lodging facilities, restaurant, built attractions, retail shops and information centre are critical to the development of tourism, because tourists' satisfaction is influenced, among other variables, by the availability and quality of tourist equipment and services.

Specifically, most authors agree that comfortable and affordable accommodation facilities play a very important role in popularizing any tourist location as it forms a base for tourist's exploration of the urban and rural environments. (Kusen, 2010; Navarro, 2015). Though the provision of accommodation remains the business of the private sector, Jackson (2006) believed that accommodation could feature as an element in wider economic development strategies of regional tourism. Cracolici, Nijkamp and Rietveld (2008) outlined two classes of accommodation that can serve the needs of tourists in both urban and rural locations. These include serviced accommodation and non-serviced accommodation. The serviced accommodation (which ranges from Five Star Hotels to One Star Hotel) provides accommodation and all the services for which the visitor has to pay for at once for the stipulated time. They are designed to provide lodging and are strictly business-oriented. The non-serviced accommodations provide lodging for tourists without further services. This type of accommodation is however common in rural locations.

The support infrastructure such as transportation, water supply, electricity, medical facilities, waste disposal, security and communications have been described as being catalytic to successful tourism at all levels. Smith (1994) acknowledged the role of service infrastructure in creating product experience. He argued that service infrastructure is housed within the larger macro-environment of the destination and that infrastructure and technology is key feature that can enhance experience.

Navarro (2015) believed that a region capacity to attract people and business in a sustainable way is associated among other factors with the local infrastructure. Crouch and Ritchie (1999), who examined tourism infrastructure in the context of comparative and competitive advantage, stated that tourism planning and development would not be possible without roads, electricity, sewage, potable water and airport/ harbour in terms of international tourism. Furthermore, the UNWTO (2007) asserted that the development of tourism especially in rural locations requires infrastructure capable of serving the host population and the temporary population that arises at the location for business or leisure purpose.

Empirically, several studies have lends credence to the importance of infrastructure in tourism. The first set of studies is for national levels. Gearing (1974) studied Turkey as a tourist destination and found that infrastructure (comprising roads, water, electricity, safety services, health services, communication and public transportation) is a key determinant explaining tourist arrival. Tang and Rochananond (1990), concluded that infrastructure is an important element in promoting Thailand as a destination. Naude and Saayman (2004) applied regression analysis to demonstrate the importance of infrastructure across several African countries.

In Nigeria, and in the South-South Region where this study is based, developing the tourism potential of the region has received significant boost in the past few years owing to economic diversification from oil. However, the challenge of inadequate infrastructure provision remains largely intractable and likely to undermine progress in the tourism sector if left unattended. This study was designed to examine the status of infrastructure availability in tourist destinations in the south-south Nigeria, and how improvement in infrastructure could guarantee sustainable tourism development in the region.

## II. MATERIALS AND METHOD

The study used a sample of 30 tourism destinations selected from a population of 81 tourism points all located in rural settlements of the study area. To achieve this, a sampling frame containing the list of existing rural tourism destinations in three States namely Akwa Ibom Cross River and Rivers States was obtained from respective States Tourism Board. The simple random sampling technique was applied to select 30 tourism destinations (representing 37% of the total population of 81 existing rural tourism destinations. Figure 1 shows the study sample.

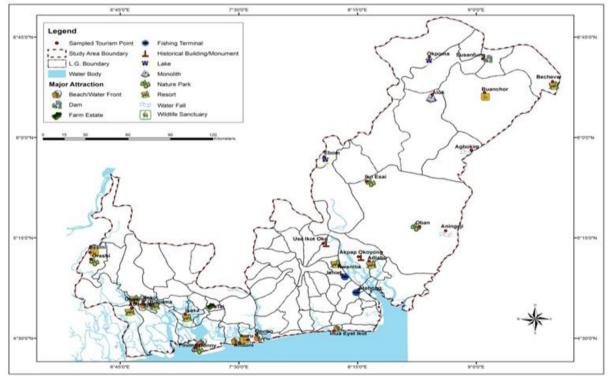


Figure 1: The Study Sample

The main data required for the study were those related to tourism. The study identified key infrastructures that drive tourism in any given destination (rural or urban). These are presented in Table 1.

Table I: Tourism infrastructure

Table 1: Tourism imrastructure					
Variable					
Types of Created Attraction					
Number of Tour Guide					
Number of Retail Shop					
Number of Souvenir Shop					
Number of Tourist Sign Post					
Number of Restaurant					
Number of Accommodation					
Water Supply					
Electricity Supply					
TV Advert					
Health Centre/Post					
Type of Road					
Type of Transport Service					
Tourism Information Centre					
Police Station/Post					
Local Vigilante					
Waste Facility					
Tourism website					
Communication Facility (GSM)					

Source: Essien, 2016

To generate the above data, a checklist was designed and used to take stock of infrastructure. Through direct observation and oral interview with local tourism officers, trained field assistants were able to obtain firsthand information on the tourism infrastructure of the area. Secondary data gleaned from tourism brochure, tourism map and annual tourism report, obtained from the State Tourism Board were used to complement those from the primary sources

## III. RESULTS AND DISCUSSION

In line with the extant theoretical proposition in the tourism discipline, infrastructure elements were selected and used to assess the stock of tourism infrastructure in the study area.

Data in Table 2 display the distribution of the tourism infrastructure for the entire study area. For each tourism infrastructure considered, values were attached to depict the frequency and percentage of tourism destinations with such infrastructure.

**Table 2: Frequency Distribution of Tourism Infrastructure in the Study Area (N = 30)** 

	Infrastructure	Frequency	Percentage of Total
1.	Created attraction		
	Resort	11	36.6
	Historical event/monument	3	10.0
	Cultural/religious festival	8	26.6
	Sports/recreational	14	46.6
	Business/educational	16	53.3
2.	<b>Tourists accommodation</b>		
	Hotel	11	36.6
	Guest house	21	70.0
	Suites/motel/lodge	14	46.6
3.	Transportation		
	Taxi/bus service	11	36.6
	Motorcycle	30	100
	Canoe/boat	10	33.3
4.	Road		
	Paved	19	63.3
	Unpaved	11	36.6

DOI: 10.9790/0837-2401067280

5.	Water supply (pipe borne)	10	33.3
6.	Electricity supply (PHCN)	25	83.3
7.	Communication (GSM, Mast)	29	96.6
8.	Waste facility (dumpsite,	12	40.0
	collecting/disposal)		
9.	Health facility (clinic, HC, HP, Hospital)	20	66.6
10.	Tour guide	29	96.6
11.	Retail shop	25	83.3
12.	Souvenir shop	12	40.0
13.	Sign post/bill boards	23	76.6
14.	Restaurant	30	100
15.	Information centre	9	30.0
16.	Police station/post	22	73.3
17.	Vigilante	24	80.0
18.	Website	13	43.3
19.	TV advert	15	50.0

Source: Author's Field Survey (2016)

#### **Created Attraction**

Attraction (both natural and created) provides the tourist destination with the reason for leisure tourism. It is the primary reason why tourists go to a particular local area. It is important to note that tourism destination with a monolithic attraction would have a less competitive advantage. Therefore, tourist destinations need a wide range of both natural and created attractions to create the character and attractiveness of the area for visitors and residents. In this study, a range of created attractions were considered. These included resort, historical event, monuments, and cultural/religious festivals, sport/recreational and business/educational attractions. As data in Table 2 indicated, the study area possesses a limited range of created attractions. Except for business/educational attraction available in 53.3% of sampled tourism points, there are only 11 tourist points with resort; 3 with historical event/monument; 8 with cultural/religious festival and 14 tourism points with sports/recreational attraction. The development of cultural tourism is critical for enriching and expanding the tourism base of rural localities. The study area has a long history of rich cultural heritage that need to be commoditized and put up for tourists consumption.

For instance, the annual boat Regatta Festival at Opobo, River State, (Plate 1) and the Aji Festival at Ebom. Abi L. G. A, Cross River State (Plate 2) are part of an attempt to develop cultural tourism in the area.



Plate 1: Annual Boat Regatta at Opobo, Rivers State

Plate 2: Aji Festival at Ebom, Abi L.G.A, Cross River State

## Abi L.G.A, Cross River State

The Aji festival is an annual event celebrated by various groups of the Agbo tribe, specifically the Itigidi people in Abi L.G.A., Cross River State. The festival has religious as well as social importance. During the festival, the people pay homage to their ancestors and pray for another successful year, good health and prosperity. The festival serves as a major rallying point for the people of the area – those at home and the Diaspora including domestic tourists.

A major sporting event that attracts tourists globally is the Obudu International Mountain race at Obanliku L.G.A., Cross River State (Plate 3).



Plate 3: Mountain Race at Obudu Cattle Ranch, Becheve, Obanliku L.G.A, Cross River State

The Obudu International Mountain Race is regarded as the biggest mountain race in the world because of the distance of the challenging route of 11.25km up to a height of 1,600m (over 5000ft) above sea level. The race is a major event in the calendar of the World Mountain Running Association (WMRA), as well as the International Association of Athletics Federation (IAAF). The race is held on the last Saturday of November every year following the winding road that leads up the Obudu Mountain Resort.

In terms of recreation, the Ibom Golf Resort at Nwaniba, Uruan L.G.A, Akwa Ibom State represents a well developed attraction that provide recreation for local and foreign visitors (Plate 4).



Plate 4: Ibom Golf Resort at Nwaniba, Uruan L.G.A, Akwa Ibom State

# Accommodation, Road and Transportation Services

Accommodation is a critical tourism infrastructure as it provides temporary home and other services for the visitors. In this study, five types of accommodation were considered. These include hotel, guest house, suites, motel and lodge. Tourism destinations were considered to possess accommodation for tourists if the accommodation was located not farther than five kilometers away from the tourism point. In this regard, 21 tourism points representing 70.0% had guest houses located within five kilometers radius; 11 tourism points representing 36.6% of tourism points had hotels while 14 tourism points (46.6%) possessed either, suites, motels or lodges. It is important to note that tourism services, such as accommodation is largely the concern of the private sector.

Essentially, the threshold population is an important factor that influences the location of tourist accommodation not only in the study area but elsewhere. For instance, the Ibom Le Meridian Hotel located at

Nwaniba, Uruan L.G.A, Akwa Ibom State (Plate 5) is an important tourist accommodation that serves local and international tourists to Nwaniba and Uyo the capital city of Akwa Ibom State.



Plate 5: Le Meridian Hotel, Nwaniba, Uruan L.G.A, Akwa Ibom State

Transport infrastructure is another important element of tourism. Though there may be several factors to attract tourists to a given destination, the accessibility component is essential because the security of access to the destination may discourage the traveler trip to the planned destination (Imikan, 2010). In this study, the type of transport service and transport infrastructure (roads) available in a given tourism point was considered. Roads, transportation terminals, taxi/bus/motorcycle services are the factors that facilitates or obstructs the movement of tourists at different stages of a trip (Lamb and David, 2008).

For the study area, the distribution of transportation structure is fairly even. As data in Table 2 indicate, 100% of tourism points have motorcycle/tricycle services; 63.3% have paved roads linking the tourism point to the nearest urban centre while 33.3% of tourism points can be accessed by canoe/boat. However, the difficult terrain of the Niger-Delta act as an impediment to enhanced accessibility to some tourist destinations.

## Water, Electricity, Communication, Health and Waste Facility

General infrastructure/amenities are vital elements of tourism that cater for the needs of both host population and the temporary population (that is, tourists, visitors) of a place. In this study, consideration was given to availability of five basic amenities – water, electricity, communication, health and waste facility. Data in Table 2 reveal that 96.6% of tourist destinations are provided with communication amenity. That is, the global system of mobile communication (GSM); 83.3% are served with the Port Harcourt electricity Distribution (PHED) electricity supply; 66.6% have health facility (either hospital, clinic, health centre or health post); 40.0% have dump site/waste collection and disposal structure while only 33.3% of tourism points are served with pipe-borne water. The provision of portable (safe and clean water) remains a major setback for most rural locations in Nigeria and the study area in particular. Most of tourism points rely on river/stream/rain harvested water which may not be safe for both the host and the visiting population.

# Tour Guide, Retail Shop, Restaurants, Souvenir Shop, Sign Post/Bill Boards and Information Centre

The availability and quality of tourist services and equipment are sine qua non of successful tourism activity in any destination. In this study, the availability of tour guide, retail shop, souvenir shop, restaurant, tourists sign posts and information centre were considered. Findings as evident in Table 2 show that tour guide and restaurant are common place and ubiquitous in the study area. But information centre and souvenir shops are highly restricted.

However, there is a relative abundance of retail shop (83.3%) and tourists sign posts (73.3%) in the study area. Plate 6 shows one of the few souvenir shops in the study area.



Plate 6: Souvenir Shop at Degema, Rivers State

## Police Post, Local Vigilante, Tourism Website and Television Advert

Both security and marketing structure are core elements of tourism. Security structure provides the safe environment for tourists and tourism activities while marketing structure provide information and persuade possible tourists to visit a location (Esu, 2013). In this study, the availability of police station/post, local vigilante, tourism website and television advert were the core indicators of security and marketing infrastructure. As data in Table 2 indicates, 73.3% of tourist points have police station/post; 80.0% have local vigilante; 43.3% have tourism website while 50.0% run television adverts of their tourism products.

### Relative Advantage/Disadvantage of Tourist Destinations

The comparative advantage that each tourism point enjoys on the different tourism structure is shown in figure 2. It is important for tourism planners to conduct strength/weakness analysis for tourism destinations as a basis for upgrading the competitiveness of such tourist destination. Data in figure 2 exposes the strength and weaknesses of the tourist destinations in relation to a given tourism infrastructure. All the tourist destinations are bedeviled with at least one deficiency or the other in the volume of tourism infrastructure. There exists just a few tourist destinations with relative advantage on the tourism infrastructure considered in the study. These include: Becheve, and Adiabo in Cross River State. However, 16 tourist destinations, namely, Aningeji, Use Ikot Oku, Atabong, Ikuru, Agbokim, Alok, Ishiet, Orashi, Ebom, Degema, Ibaka, Ifoko, Biseni, Buguma, Okpurua, Susanfang, and Akpap Okoyong are the most deficient on tourism infrastructure.

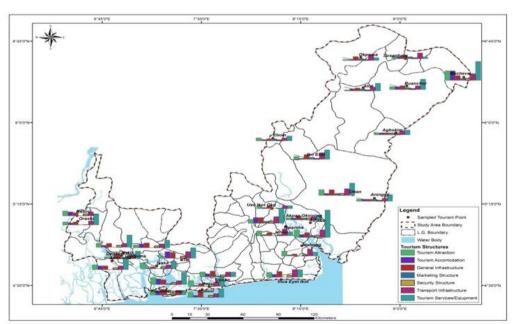


Figure 2: Spatial Distribution of Tourism Infrastructure of Sampled Tourist Destinations on the Map of the Study Area

#### Tourism sustainability in the Study Area

Tourism sustainability in rural areas requires a thorough investigation into the existing infrastructure. This research has demonstrated the need to assess the spatial distribution of the elements or infrastructure that sustains the tourism sector. For the study area, as findings have shown, there is a serious concern regarding the sustainability of tourism in most of the tourism destinations. This is so because a majority of the sampled tourism points are lame and deficient on several components of tourism infrastructure.

For instance, the general infrastructure components constituted a major challenge to tourism in the sampled destinations. Apart from the GSM communication facilities which are ubiquitous in the entire study area, aspects of water supply (pipe-bone/bore-hole), electricity, paved road, health and waste facilities are problematic. Previous studies (Deller, Tsai, Marcouiller and English, 2001; Rim, Marcouiller and Deller, 2005; Imikan and Udofia 2013), have demonstrated and corroborated the fact that the general infrastructure component is critical to tourism development. There is the need to provide accessible safe water and stable electricity supply at tourism destination. This is so because studies (Dwyer and Kim, 2003; Meng, 2006) have shown that tourists perception of a destination depends on the level of comfort and satisfaction derived during his visit/stay in a given destination. Furthermore, the development of tourism requires the availability of an infrastructure capable of serving the residents population and the temporary population who arrive at the location for business, leisure or other purposes.

On the aspect of created attractions, findings indicate that only ten percent of tourism points showcased historical event /monuments; twenty –six percent displayed seasonal cultural /religious festivals and less than fifty percent had sports/recreational facilities. However, as Bell-ham (2012) observed, the study area has a rich diverse cultural heritage that can be commoditized for tourists consumption. The cultural elements of tourism bears great advantages for rural areas in the study area and beyond. This observation has been corroborated by Janeaka (2009) findings in Venkov, (a small rural tourism point in Czech Republic). Venkov had a small population of two hundred and fifty –four people as at 2005. But it has been successful at attracting large crowds of tourists annually. This is so because of "Lidova Remesla" (a one-day annual cultural festival where local culture and art, are on display). In 2008 alone, over eight thousand tourists attended the festival. Perhaps this is why cultural tourism has formed the major component of tourism in most part of Africa including Kenya, Malawi, Zimbabwe, Tanzania and South African (Kibochi 2005; Ward, 2007).

The low volume of recreational attractions observed in the study area explains partially why rural areas suffer pervasive rural-urban migration in Nigeria and in other developing countries. This is so because providing recreational attraction in rural tourism points have been linked to population stability in those tourism points (Mili, 2012). Essentially, providing recreational structures would not only serve tourists need, but also the recreational need of the host population.

#### IV. CONCLUSION AND RECOMMENDATIONS

Tourism infrastructure being the indispensable elements that drive tourism was found to be inadequately distributed in the study area. Majority of tourism destinations lacked competitive advantage owing to the low stock of these essential elements of tourism. Specifically, the distribution of general infrastructure (such as water, electricity, paved road, health facility) marketing services and created attractions were largely segregated among tourism destination. This brings to the fore the issue of low tourism competitiveness in the study area. Based on the findings of this study, enhancing the sustainability of tourism in the study area requires massive infrastructural intervention, creating further attractions and aggressive effort at marketing the rural landscape. The public private partnership framework is hereby proposed as feasible solution to the underlying issue of tourism infrastructure deficit in the study area.

#### **REFERENCES**

- [1]. Barbosa, L. G. (2009). Measuring Tourism Destination Development: The Brazilian Model. ENZO Pac Papers, Volume 6, 2009.
- [2]. Bell-ham, L. H (2012). Strategies for the Development of Tourism and Theatre Industries in Nigeria: Rivers State perspective. An online publication Available at http://www.academicjournal.com. Retrieved, 10th October, 2013.
- [3]. Boers, B. and Conttrel, S. (2007). Sustainable Tourism Infrastructure Planning: A GIS Supported Approach. *Tourism Geography*, 9(1): 1-21.
- [4]. Cracolici, M., Nijkamp, P. & Rietveld, P. (2008). Assessment of Tourism Development by Analyzing Destination Efficiency. *Tourism Economic*, 14(2): 325-342.
- [5]. Crouch, G., and Ritchie, J. (1999). Tourism Competitiveness and Societal Prosperity. *Journal of Business Research*, 44 (3): 137-152.
- [6]. Deller, S., Tsai, T., Marcouiller, D. and English, D. (2001). The Role of Amenities and Quality of Life in Rural Economic Growth. *American Journal of Agricultural Economics*, 83(2): 352-365.

- [7]. Dwyer, L. and Kim, C. (2003). Tourism Destination Competitiveness: Determinants and Indicators. Current Issues in Tourism 5 (6), 369-4 14.
- [8]. Essien, A. U. (2016). Tourism Structure in South-South Nigeria Unpublished Ph.D Thesis, Department of Geography, University of Uyo, Uyo, Nigeria.
- [9]. Gearing, C. (1974). Establishing a Measure of Tourist Attractiveness. Journal of Travel Research 12:1-8.
- [10]. Jackson, J. (2006). Developing Regional Tourism in China: The Potential for Activating Business Clusters in a Socialist Market Economy. Tourism Management. 27 (4): 695-706.
- [11]. Imikan, A. and Udofia, E. (2013). Tourism and Infrastructure Correlate: A Stepwise Regression Approach. *Journal of Environmental Design*. 8(5):155-163.
- [12]. Imikan, A. M. (2010). Tourism and the Development of Rural Infrastructure in Rivers State, Nigeria. Unpublished Ph.D Thesis, Department of Geography and Regional Planning, University of Uyo, Nigeria.
- [13]. Janeaka, N. (2009). Is Tourism the solution to Rural Decline? Evaluating the "Promise of Rural Tourism" to close the Gap between Rhetoric and Practice" M.Sc. Thesis, Department of Geography, University of Waterloo, Ontario, Canada.
- [14]. Kusen, E. (2010). A System of Tourism Attractions. Tourism Review 58(4): 409 424.
- [15]. Kibicho, W. X. (2005). Tourism and the Sex Trade in Kenya's Coastal Region. *Journal of Sustainable Tourism*, 13(3): 256-280.
- [16]. Meng, F. (2006). An Examination of Destination Competitiveness from the Tourists Perspective: The Relationship between Quality of Tourism Experience and Perceived Destination Competitiveness. Unpublished Ph.D Dissertation, Virginia State University.
- [17]. Mili, N. (2012). Rural Tourism Development: An Overview of Tourism in the Tipam Phakey Village of Naharkatia in Dibrugarh District India. *International Journal of Scientific Research* 2 (12); 10-21.
- [18]. Naadi, F. and Akwiwu, C. (2005). Potentials of Agro-tourism for Rural Development in Nigeria. *Journal of Agriculture and Social Research* 5(1): 96-106.
- [19]. Navarro, D. (2015). Tourists Resources and Tourist Attractions: Conceptualization, Classification and Assessment. *Caudernos de Turismo*, *35*: 481-484.
- [20]. Sectanah, B., Juwaheers, T., Lamport, M., Rojid, S., Sannasse, R. and Subadas, A. (2011). "Does Infrastructure Matter in Tourism Development?" *University of Mauritius Research Journal* 17:89-107.
- [21]. Smith, S. (1994). The Tourism Product. Annals of Tourism Research, 21(3): 582-595.
- [22]. Tang, J., and Rochananond, N. (1990). Attractiveness as a Tourist Destination: A Comparative Study of Thailand and Selected Countries. *Socio-econ Planning* 24(3): 34-43.
- [23]. World Tourism Organization (2005). Tourism Year Book Madrid: WTO.
- [24]. World Travel and Tourism Council (2011). *Travel and Tourism Economic Impact 2011*. London, UK. The World Travel and Tourism Council.
- [25]. Rim, K., Marcouiller, D., and Deller, S. (2005). Natural Amenities and Rural Development: Understanding Spatial and Distributional Attributes. *Growth and Change*, 36(2): 273-297.
- [26]. UNWTO (2007). Socio-economic Impact of Tourism. World Tourism Barometer 5(2): 6-12.
- [27]. Ward, T. (2007). International Hotel Chains Wake up to Africa Potentials. *African Business*, August September; pp. 48-50.

Eno Eyak James. "Infrastructure and Sustainable Tourism Development in Nigeria." IOSR Journal of Humanities and Social Science (IOSR-JHSS). vol. 24 no. 1, 2019, pp. 72-80.