

Assessing the Relationship Between Infrastructural Development and Tourism Destination Competitiveness: Evidence from Nigeria

¹Agina, Emeka Kenechi, ²Nwambuko, Temple Chukwukadibia,

¹Department of Hospitality Management & Tourism, Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.

²Department of Public Administration, Coal City University, Enugu State, Nigeria.

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ABSTRACT: *The travel and tourism industry is considered one of the growth sectors of the Nigerian economy. As a result, the government is looking to diversify the economy that is currently dependent on crude oil by harnessing the tourism potential in the country. That said, many factors lead to tourism development and destination competitiveness. One such factor is infrastructural development. This study, therefore, focuses on the effect of infrastructural development on destination competitiveness using Nigeria as a case study. The study made use of secondary data from various publications of the World Bank, World Economic Forum and United Nations World Tourism Organisation. Regression analysis was applied to assess the effect of infrastructure on international tourist arrivals, while Pearson Correlation was applied to understand the relationship between the dependent and independent variables. The findings show that various forms of infrastructural development in Nigeria had negative effects on the number of international tourists visiting the country. Visitors expect easy access to destinations either by road, air or sea, as well as information communication technology. When a country lacks infrastructure, it affects the number of visitors arriving in the country negatively. The study concludes that the findings can contribute to the limited literature on destination competitiveness and help to guide policymaking in the future.*

KEYWORDS: tourism, infrastructure, destination competitiveness, Nigeria.

INTRODUCTION

The effort of various governments toward the development of travel and tourism has led to the movement of people from one destination to another. United Nations World Tourism Organisation

estimated that over 1.403 billion tourists travelled all over the world in 2018 (UNWTO, 2019). The increase in tourist arrivals requires adequate infrastructural development to cater for the mobility and access needs of the tourists (Seetanah et al., 2011). Despite the continuous growth of the tourism industry, the

“Private and public infrastructure investments – airport development, accommodation rooms stock, road and rail, and communication technologies have lagged, leading to significant bottlenecks. Such infrastructure is not only critical for the continued development of the tourism industry but also key in providing employment opportunities and regional development” (WEF, 2017).

Poor infrastructure is among the various factors impeding tourism development in countries of Africa, including Nigeria, and little or no attention is given to this sector, especially in Nigeria where critical infrastructures are lacking. In destination development and management, physical evidence in the form of an adequate transportation system is a necessity (Prideaux, 2000). It has been observed that when destinations have an efficient and effective transportation system in place, it can lead to tourists' satisfaction, improved destination image, increase in tourist arrivals and tourists' expenditure (Park et al., 2020). In the same vein, an adequate transportation system gives room for effective management of visitors and also helps in the reduction of traffic congestion (Guitierrez & Miravet, 2016). In Nigeria, it is disheartening that inadequate infrastructure is complicated and worsened by insecurity in the country. For example, the recently completed railway from Kaduna to Abuja has been attacked and vandalized by bandits and several passengers kidnapped and killed. In the same Kaduna, bandits invaded the Kaduna airport and stopped the Lagos-bound flight for that day and many were injured in the process. Most roads in Nigeria have been taken over by bandits and kidnappers and all of these have portrayed the country in a bad light. These ills are a result of inadequate policies of the Government in tackling infrastructural and security challenges in Nigeria.

World Economic Forum classifies infrastructure in terms of air transport, ground and port, and tourist service. Meanwhile, five key infrastructure components are considered as a classification and they are water, transport, electricity, communication and accommodation (Imikan & Ekpo, 2012). In another study, available rooms in a destination country were used to classify tourism infrastructure (Seetanah, Juwaheer, Lamport, Rojid, Sannasee, & Subadah, 2011). In their opinion, the higher the number of rooms, the more competitive is the tourism sector. In a bid to widen the definition of infrastructure for tourism development in Australia, Sydney Olympic stadia and supporting infrastructure, conventions and exhibition centres and some development of open recreation areas were added (Nina, 1999). Various studies have investigated why people travel to different destinations. Some of the reasons for the increase in tourists travelling include the income levels of the tourists, the cost-effectiveness of the travel, the value of the currency in the market, and effective and efficient infrastructural development in destination tourism (Lim, 1997).

Adequate infrastructural development also contributes significantly to the attractiveness of a tourism destination (Gunn, 1988; Inskeep, 1991). Meanwhile, various authors have also established a link between infrastructural development and tourism development (Adebayo & Iweka, 2014; Alex-Onyeocha et al., 2015; Nina, 1999; Olusola, 2016; Alex-Onyeocha, 2015; Imikan & Ekpo, 2012; Tampakis al., 2012). It is believed that there are relationships between the provision of basic infrastructure and the satisfaction of tourists in particular destinations (Imikan & Ekpo, 2012). Besides, a lack of infrastructural development in a particular destination can increase the cost of operations for the stakeholders in the industry and it is capable of affecting the performance of the destination negatively (Prideaux, 2000).

Therefore, this study focuses on the effect of infrastructural development on the performance of Nigeria as a tourist destination, looking at the key infrastructure components: Air transport; Ground and Port; Tourist service infrastructure; and ICT infrastructure, as classified by World Economic Forum. This focus is due to the fact that previous studies did not cover the infrastructure framework of destination competitiveness by the World Economic Forum.

LITERATURE REVIEW

Infrastructure and Tourism Development

The complexity of the tourism industry makes it possible to have a multiplier effect on the programme and prosperity of a country if properly developed and harnessed (Jovanovic & Illic, 2016). Tourism factor forms part of the components of developmental policies and programmes within any economic system and obviously, there is a mutual relationship between travel and tourism, and economic growth and development within a national or regional economy (Zhang, 2015; Agina, 2018; Ajake, 2015; Yusuff & Akinde, 2015). Tourism has experienced continuous growth for over five decades and some of the major indicators supporting travel and tourism growth are the improvement in transportation and adequate infrastructural development (Matias et al., 2007).

Various authors have emphasized the importance of infrastructural development towards competitiveness of a destination. Jovanovic & Illic, (2016) opine that for a destination to compete favourably, there is a need for countries to invest massively in basic infrastructures. Tourism infrastructure can be seen as the physical elements that are designed and created to take care of the mobility and access needs of the tourists (Adebayo & Iweka, 2014). Tourism infrastructure primarily includes, local and international airports, railways, roads, sea ports, and information communication technology, which enables the tourist easy access to the destination.

A study was conducted to examine the importance of infrastructural development as a determinant of the development of Mauritius as a tourism destination. Panel data was employed to assess the importance of transport capital in the competitiveness of Mauritius as a destination. The study

modelled tourist arrivals over the period 1985-2006. The tourist arrivals measure the demand for tourism in Mauritius. A number of available rooms were used to capture tourism. The findings show that international tourists especially from America, Asia, and Europe are very sensitive to the provision of infrastructure (Seetanah et al., 2011). In a similar study examining the determining factors of tourist arrivals in Africa, it was discovered that inadequate infrastructure forms a major factor (Naude & Saayman, 2005). This shows that adequate infrastructural development is a major determinant of international tourist arrivals in many destinations in Africa.

In Nigeria, a study was conducted to examine the impact of infrastructural development on job creations in the travel and tourism industry in for tourism and tourism industry in Lagos State, Nigeria. The study employed structured questionnaires to gather data from the population studied. Descriptive statistics were employed in analyzing the collected data. The study found that electricity generation and road infrastructure are essential for the development and attractiveness of the travel and tourism sectors of the economy. The study further states that investment in infrastructure will have positive impact not just on the tourism sector but also complement other sectors in employment generation (Olusola, 2016). A similar study in Nigeria on the relationship between infrastructure and tourism development, employed a cross-sectional survey. It was discovered that there is a highly significant relationship existing between infrastructural components and tourism development. It further revealed that for the tourism industry to thrive in Nigeria, there is a need to pursue aggressive infrastructural development especially in the area of transportation (Imikan & Ekpo, 2012). This finding is in line with a study that assessed the influence of road transport on accessibility and rural development. The finding shows that developing a road transportation system would open up destinations and prove access roads for people to visit tourist sites in rural areas, which in turn, boost revenue generation of the locals (Alex-Onyeocha et al., 2015).

Tourism infrastructure serves as the basis of tourist destinations development, as well as the bases for using the available resources in the destination. The tourist infrastructure contributes to the proper utilization of tourism resources in the production and distribution processes and also helps in accessing remote areas for an effective and efficient supply of tourism services (Jovanovic & Illic, 2016). Different models have been developed by various authors and organisations in an attempt to monitor the competitiveness of nations regarding tourism development, though the various models differ in the factors that determine competitiveness (Tanja et al., 2011), they recognized the importance of infrastructure to tourism development and destination competitiveness.

Tourism in Nigeria

Nigeria is blessed with enormous tourism potentials that if properly harnessed, will attract a significant number of tourists and herald huge revenues into the country (Aiyemnkhue, 2010). In Nigeria, tourism is contributing to the economic growth of the nation's economy. The industry has

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contributed to the GDP and this has grown from 3.2% in 2003 to 4.0% in 2015. It is also predicted to increase by 6.0% annually by 2015 (WTTC, 2015). The international tourist arrivals increased from 656,000 in 1995 to 1,285,000 in 2015 (World Bank 2016). The arrivals of the international tourists contributed NGN 108.8bn in visitor receipts in 2014 and it is expected to rise to NGN 170.7bn, an increase of 3.9% per annum by 2025 (WTTC, 2015). Though, there are slight increases in economic growth and international tourist arrivals, Nigeria as a destination is not competing favourably with other competing nations of Africa based on the prioritization of tourism, investment in infrastructure development, the number of international tourists arriving at the country, and the visitor exports.

Meanwhile, consumer preferences and market demand characteristics are changing on daily basis; tourists now want to move to various destinations quickly and seamlessly, and are open to choosing/switching alternative destinations when it is difficult to access a particular destination irrespective of the attractiveness. Therefore, for a destination to provide seamless movement of tourists, such destinations need adequate infrastructural development both at the local, regional and national levels (WEF, 2017).

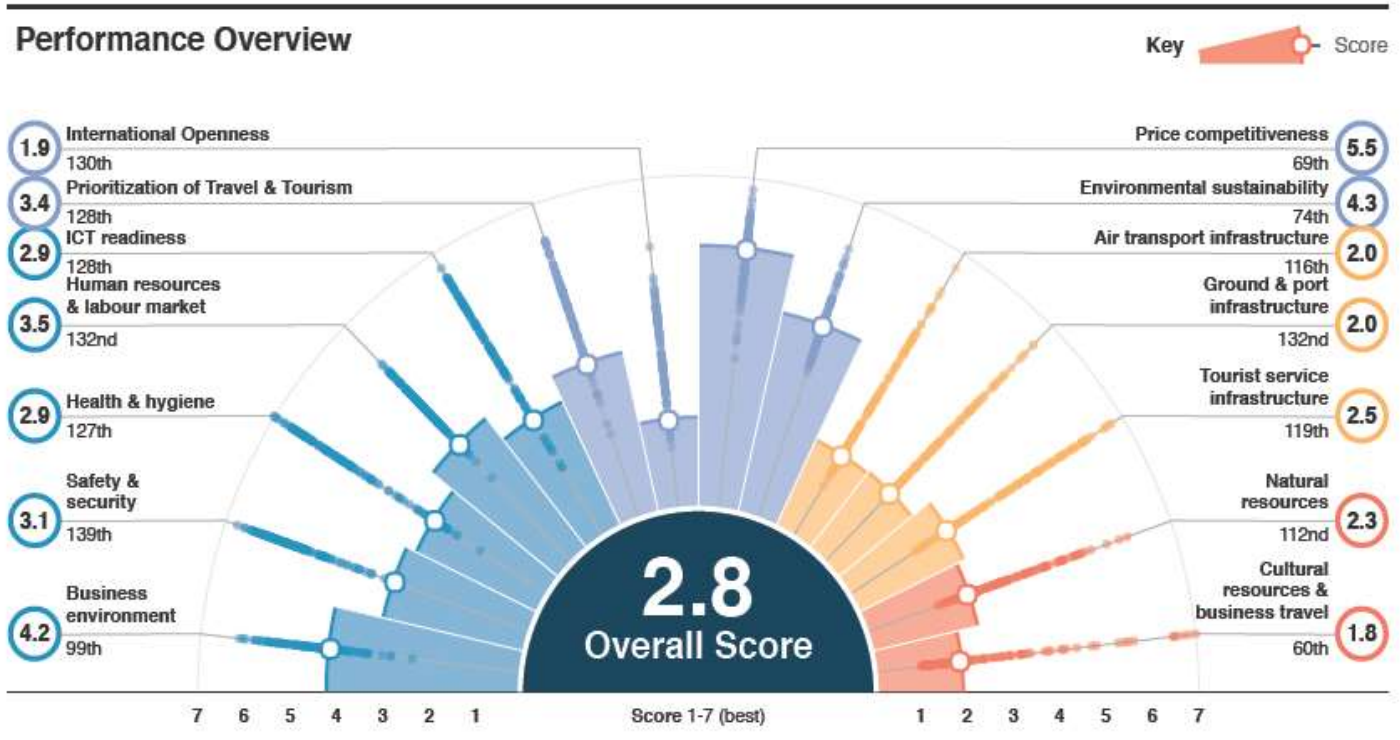


Figure 1: Performance Overview of Nigeria's Tourism Competitiveness Index Report, 2019.

Source: World Economic Forum (2019).

The figure above shows the travel and tourism performance overview for Nigeria from 2018-2019. Generally, Nigeria scored 2.8, which is below an average. The shows that the country performed poorly in comparison with other countries of the world. Besides, looking at the performance of the key variables of the current study, it reveals that the variables also performed poorly (Air Transport Infrastructure, 2.0; Ground and Port Infrastructure, 2.0; Tourist Service Infrastructure, 2.5; and ICT readiness, 2.9). These variables performed below average which shows that the country has not invested much in infrastructural development.

METHODOLOGY

This study adopted the panel data analysis in obtaining analysis and interpreting data relating to the relationship between international tourist arrivals and infrastructural development in Nigeria. Trend studies are concerned with the study of changes over time within some general population. The most important advantage of this form of study is that it permits companions of data or observation over time within some general population. The most important advantage of this form of study is that it permits comparisons of data or observation over time. Other advantages include the generally better quality and enhanced comprehensiveness of data may usually be more accurate (Ezejelue et al., 2008). Therefore the dependent variable (International Tourist Arrivals) and the independent variables (air transport, ICT, ground and Port, Tourist Service) infrastructures from 2008-2019. Data on these variables were collected from World Bank, WTTC, UNWTO, and World Economic Forum. Data were presented with tables and the relationship between the variables were analyzed with SPSS 20.0, and tested with Pearson correlation.

FINDINGS AND DISCUSSION

Data on the dependent and independent variables are presented and studied (2008-2017). The values of the independent variables (Infrastructure) were compiled by the World Economic Forum in a 7 points Scale (1 = extremely inefficient; 7 = extremely efficient) for Air, ground and port Infrastructure while tourism Infrastructure was rated in the 7 points scale (1 = very poor; 7 = excellent).

Table I – International Tourist Arrivals and Infrastructure for Nigeria

Years	International Tourist Arrivals	Air Transport	Ground and Port	Tourist services	ICT
2019	1,889,000	2.0	2.0	2.9	2.9
2018	1,276,000	2.0	2.0	2.9	2.9
2017	1,964,000	2.0	2.1	2.7	3.2
2016	1,889,000	2.0	2.1	2.7	3.4
2015	1,255,000	2.02	2.42	2.70	3.2
2014	854,000	2.02	2.42	2.70	2.8
2013	600,000	2.51	2.77	2.37	2.2
2012	486,000	2.51	2.51	2.52	2.2
2011	715,000	2.0	2.0	2.0	3.0
2010	1,555,000	2.0	2.0	2.0	3.0
2009	1,414,000	2.53	2.39	.1.40	1.9
2008	1,313,000	2.32	2.68	2.29	1.8

Source: WEF & World Bank databases

Table 1 shows the performance of the variables from 2008 – 2019 (International Tourist Arrivals, Air Transport Infrastructure, Ground and Port Infrastructure, Tourist Service Infrastructure, and ICT readiness). The table reveals that the performance of Nigeria in infrastructural development is below average and can be judged to be poor and inadequate

Table 2: Correlation Results

		International Tourist Arrivals	Air Transport	Ground and Port	Tourist Service	ICT
International Tourist Arrivals	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	12				
Air Transport	Pearson Correlation	-.484	1			
	Sig. (2-tailed)	.156				
	N	12	12			
Ground and Port	Pearson Correlation	-.467	.731*	1		
	Sig. (2-tailed)	.174	.016			
	N	12	12	12		
Tourist Service	Pearson Correlation	-.003	-.411	.089	1	
	Sig. (2-tailed)	.994	.238	.806		
	N	12	12	12	12	
ICT	Pearson Correlation	.397	-.888**	-.742*	.499	1
	Sig. (2-tailed)	.256	.001	.014	.142	
	N	12	12	12	12	12

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the correlation results testing the relationship that exist between international tourist arrivals and Infrastructural development components. The correlation coefficients show that there exists a relationship between tourist arrivals and infrastructural development components, though the relationship was weak and not significant. The air transport Infrastructure ($r = .484$; $p = .156$). Ground and Port Infrastructure ($r = .467$; $p = .174$) Tourist service Infrastructure ($r = .003$; $p = .994$), ICT infrastructure ($r = .397$; $p = .256$). These results show that inadequate infrastructural development had a negative effect on international tourist arrivals to Nigeria under the period covered. This confirms the assertion that the most international tourists prefer destinations with similar quality and availability of infrastructure to their homeland (Mo et al., 1991; Cohen, 1979). The results also confirmed that the infrastructural base of any nation serves as a potential determinant of its attractiveness and competitiveness (Inskeep, 1991).

CONCLUSION AND MANAGERIAL IMPLICATIONS

There are theoretical underpinnings linking infrastructural development and successful tourism development in a destination, but not many empirical researches exist to verify this hypothesis using the infrastructure variables by the United Nations World Tourism Organization (UNWTO) and World Economic Forum (WEF), Travel and Tourism Competitiveness Index (TTCI). This study used panel data to assess the contribution of infrastructural development to international tourist arrivals to Nigeria. These findings show that the value of infrastructure is low and has no significant contribution to the arrivals of tourist in the country. The values of Air transport, Ground and Port, Tourist Service, and ICT infrastructures are below average. This shows the government's level of effective policy formulation and implementation in the area of infrastructural development. From 2014, the value of Tourist service infrastructure increased to a steady value of 2.9 till 2019. The increase in values could be attributed to private sector intervention in increasing the number of hotel rooms, and the quality of tourism infrastructure. The findings of this study are vital to tourism policy formulation and implementation in the area of infrastructure because it has been proven that adequate infrastructure is a strong determinant in destination competitiveness. Based on the findings, we recommend the following:

1. Nigeria is facing major infrastructure challenges due to lack of political will and high level of corruption by successive governments. Poor infrastructure development has affected various economic activities in the country including tourism. Therefore, we recommend that there is need to do more on infrastructure development in the area of ICT, tourist service infrastructure, roads, sea, airport and railway system.
2. Tourism is a complex industry, with interactions with other sectors of the economy. Tourist's needs should be integrated in the infrastructure planning by various regional governments or states as most tourist attraction sites are located in the rural communities. Access road and railway pay key roles in linking tourists to these sites.

3. The government prioritization of tourism industry is not encouraging. Government should do more on the development and promotion of the industry by adequate budget provisions and monitoring the projects to meet international standards.
4. Most facilities and infrastructure provided are of poor quality due to lack of standards. Therefore, stakeholders in the industry should work closely to make sure that high quality infrastructures are developed and maintained at all times.

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