THE ROLE ERRATIC POWER SUPPLY IN THE ECONOMIC PRODUCTIVITY OF YOUTHS IN THE TOURISM AND HOSPITALITY INDUSTRY OF NIGERIA

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ABSTRACT

This paper examined the implications of erratic electricity supply on the socio-economic productivity of Nigerian youths within the area of hospitality and tourism sub-sector. The study assessed how unstable electricity supply affects productivity, operational cost, service delivery, customer satisfaction and coping strategies of hospitality and tourism entrepreneurs. The study adopted a descriptive survey research method. Structured questionnaires were used to collect primary data for the study. Simple random sampling was used to select 384 respondents from hotels, restaurants, catering, lounges, event centres, and tourism business operators across Nigeria. Data were analysed using descriptive statistics and One-Sample t- test using SPSS. The study established that power outage has negative effects on productivity, operational cost, service delivery and customer satisfaction. It also induces the production operators to heavily depend on generator and other alternative sources of energy for operational purpose. The study further confirmed the relationship existing between erratic power supply and economic productivity of the respondents using t (44.72); $p<0.05$. It was concluded that efficient and stable power supply facilitates the development of tourism and hospitality sub- sector in Nigeria. The government is recommended to provide low-interest loans, tax incentives, renewable energy support schemes to facilitate the development of youth owned tourism and hospitality enterprises.

Keywords: Erratic electricity supply, economic productivity, youths, tourism and hospitality industry, Nigeria.

INTRODUCTION

Erratic power supply continues to remain a key development and economic setback facing Nigeria today, thereby impacting negatively on the businesses and household economies as well as the overall productivity of the nation. Globally, reliable electric power supply exerts a significant influence in creating conducive conditions for industrialisation, entrepreneurship, technological progress and service provision. For all service-oriented industries that engaged in tourism and hospitality, a consistent power supply is a sine qua non. The reason is because their activities depend substantially on electric lighting, cold storage, internet, card payment system, air conditioning (AC), security system and ensures ease and comfort for clients. Developed countries such as the United States, Germany, Singapore and the United Kingdom have sustained their private tourism and hospitality industry through stable electric power supply that optimises business efficiency and consumer satisfaction. Conversely, most developing countries are still plagued with erratic power supply that impairs the growth of their private industry and prospects for economic development and prosperity. In Nigeria, the electric power sector is plagued by poor generation capacity, weak transmission network, mounting tariff hikes and frequent national grid collapse despite interventions through reform agenda over the years (Nigerian Electricity Regulatory Commission [NERC], 2024). As a result, tourism and hospitality businesses, mainly youth-owned enterprises, are persistently beset by obnoxious operational inconveniences that impede service providers' satisfaction and create additional business distress.

The tourism, hospitality and travel industry in Nigeria is becoming an entrepreneurial-driven contributor of job creation for the youth and for economic diversification. Tourism related enterprises, such as hotels, restaurants, lounges, event centres and other businesses generate employment and income for the average Nigerian youth. However, the profitability and survival of these various tourism enterprises continue to be threatened by the Nigerian unstable electricity supply. Nigerian hotels, restaurants, event-centres and other hospitality enterprises face chronic electricity problem leading to unstable business operation, delays, unnecessary damage to electrical appliances, customer dissatisfaction and loss of repeat patronage. Tourism and hospitality businesses operate in a highly competitive environment as the quality of customer satisfaction and continuous service delivery determine business success, market and profitability. The insecure public power supply has led to the huge reliance of the tourism and hospitality industry on alternative sources such as gensets, inverters and solar systems to sustain operations. These measures not only disrupt business operations, but also increase operational costs drastically decreasing return on investment and profit margin. Nigerian businesses have been forced to spend heavily on self-generation of electricity, increasing the already high cost of doing business (BusinessDay, 2024). Similarly, Akinyele et al., (2023) observed that the evident flaws in Nigeria's electricity infrastructure continue to constrain business competitiveness, productivity and the potential for sustainable economic expansion across the business world. Studies such as

Nagy (2025); and Afolabi, Adeniyi and Orekoya (2025) have highlighted the negative implications of power instability on business performance which include reduced productivity, increased cost of business and reduced profitability. Although, previous evidences on electricity instability investigated key issues related to business performance, the overwhelming focus has been on manufacturing industry, general small and medium level industries and macro-economic values of unstable power supply (Mudany, Ngala & Gituro, 2021). Specifically, most of the previous studies do not focus on youth-owned tourism and hospitality sectors in Nigeria which presents a notable gap because of the unique composition of the hospitality business from other sectors.

Additionally, despite reforms by the Nigerian government such as the Electricity Act 2023 and the privatisation of the power sector by the government aimed at strengthening electricity generation and distribution, power stability has remained unsatisfactory. Increasing electricity tariffs, diminishing generation capacity, outdated infrastructure and successive failures on the grid continue to expose businesses to serious operational and financial challenges (NERC, 2024). For youths in Nigeria engaged in the hospitality and tourism industry, these challenges drag down productivity and profitability of the businesses and thus hamper entrepreneurship development, employment generation and business sustainability. Thus, this study becomes important as it attempts to empirically provide evidence on the effect of erratic power supply on youth-owned businesses within the hospitality and tourism industry of Nigeria. The study is equally pertinent to policy makers, electricity regulators, private investors, and other business stakeholders willing to adopt tangible measures in improving power stability, strengthening youth entrepreneurship and developing sustainable economy in the hospitality industry in Nigeria.

Purpose of the study

The purpose of the study was to assess the impact of erratic power supply on the socio-economic productivity of the Nigerian youths in the tourism and hospitality industry.

Statement of Hypothesis

H_0: There is no significant effect on power outages on the economic productivity of youth in the hospitality and tourism sub sector in Nigeria.

H_1: There is a significant effect of power outages on the economic productivity of youth in the hospitality and tourism sub sector in Nigeria.

LITERATURE REVIEW

Several researches confirm that erratic electricity supply has always remained the most pressing business operational, profitability, service delivery and economic growth constraint, especially in developing economies (Mohammed & Yusuf, 2021). According to Mohammed and Yusuf (2021), 90.91% of SMEs in Samaru, Zaria considered the problem of unstable electricity as the main barrier to productivity and profitability, while also showing high amounts lost as financial

losses during extended periods of power outage. The report also showed that these losses are a substantial proportion of the business income. Ohajianya et al. (2014) indicated that the cause of the electricity crisis in Nigeria is due to inadequate policies, ineffective generation and distribution networks, technical incapacity, and waste of electricity and concluded that unreliable electricity is a key barrier to the growth of the national economy and industry. Omeiza and Ahmed (2023) also confirmed that erratic electricity supply in Kaduna State, Nigeria has been responsible for business failures, unemployment, poverty, and dwindling of the socio-economic activities. On electricity problems in service-oriented and hospitality sector, Babatunde (2026) found that increasing electricity tariffs led to high cost of operation and a decline in profitability for hospitality businesses. Owusu et al. (2022) established that insufficient access to electricity and use of alternative sources to meet demands of SMEs caused a drop in their profits in Ghana. In addition, Twenefour et al. (2015) found that frequent power interruptions have affected hotel operation through increase in maintenance costs, service quality, and damage of equipment, hence a reduction in hotel productivity. On business aspect and the role of electricity service quality to it, Odunlami and Sokefun (2022) in Nigeria confirmed that quality of electricity service has significant impact on the satisfaction of their customers and so reliable electricity supply is crucial for service businesses. Businesses and households resort to alternatives like generators, solar, inverters, mini-grids and energy efficiency strategies due to inconsistent supply from the grid but this costs businesses and households money (Oladipupo, 2024; Onyeukwu, 2025).

METHODOLOGY

For the purpose of this research, a quantitative survey research design was employed as it allows gathering of responses from a relatively large sample size, enabling objective test of relationship among variables. The data was collected primarily through a structured questionnaire using Google Form to Nigerian youths in tourism and hospitality related business owners of hotel, restaurant, event centres, lounges, caterers and tourism entrepreneur by utilizing 5-point Likert scale. Secondary data such as electricity supply, economic productivity and business operations were obtained from academic journals, textbooks, conference proceedings, Government documents, reports of Nigeria Electricity Regulatory Commission (NERC), World Bank report, International Energy Agency (IEA) reports, African Development Bank (AfDB) reports and other sector specific electricity and business development reports. The target population in this study consists of Nigerian youth that run and operate tourism and hospitality related businesses in the major commercial cities and towns in Nigeria, including owners, managers and employees of hotel, restaurant, lounge, event centers and other tourism related business. Since Nigerian population is large and spread over a wide range, a sample size was determined using Cochran's formula (1977) for large population and indefinite population at 95% confidence level and 5% margin of error, which amounts to 384. The sample was selected using purposive sampling for the first set of respondents engaged in tourism and hospitality related business and then, snowball sampling was used to reach other potential respondents in the sector. Data was

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collected electronically through Google Forms disseminated through WhatsApp, emails and also to different meta networks such as Facebook and Instagram to reach a large and wide geographic coverage of the respondents and timely data collection, at reduced cost. The questionnaires used for the survey were validity and reliability tested before been applied for data collection. The collected data was coded and analysis was performed using the SPSS version 27 software package, descriptive statistical tool for demographic characteristics of respondents and other information, and One Sample t-test was used for hypothesis testing in order to determine the effect of power failure on the economic productivity of Nigerian youths in the tourism and hospitality sector.

RESULTS

Information from figure 1, shows the type of establishment that respondents operate. The findings shows that 31.5% as majority of the respondents operate a hotel business, thus confirming hotel business to be the highest dominant sector in the industry within the research area. Following this was restaurants, with 25.0% of respondents, while lounges/bars represented 16.4% of respondents. Event centers accounted for 10.9%, tourism service providers were 9.9% while other types of related businesses were 6.3% of respondents. This profile confirms that the survey managed to capture and include major operational areas of the tourism and hospitality industry whose performance rely on adequate and stable electricity supply.

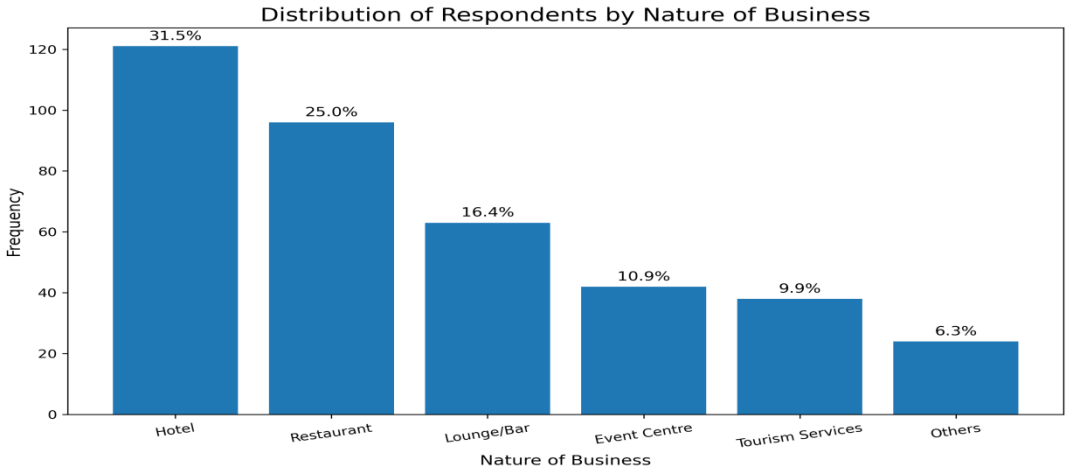


FIG 1: Nature of Business
Source: Researcher's fieldwork, (2026)

Information in figure 2, shows the distribution of respondents according to business establishments. From the findings, business owners are the highest number of respondents at 43.5%. Thus, a substantial proportion of responses received were from the individual in-charge of operations and decision-making processes of business. Managers were recorded to have 31.0% respondents while employees are with 25.5%. This means that respondents were from

varied level of operations within the tourism and hospitality industry thereby improving validity and reliability of data on impacts of inconsistent supply of power on business productivity and operations.

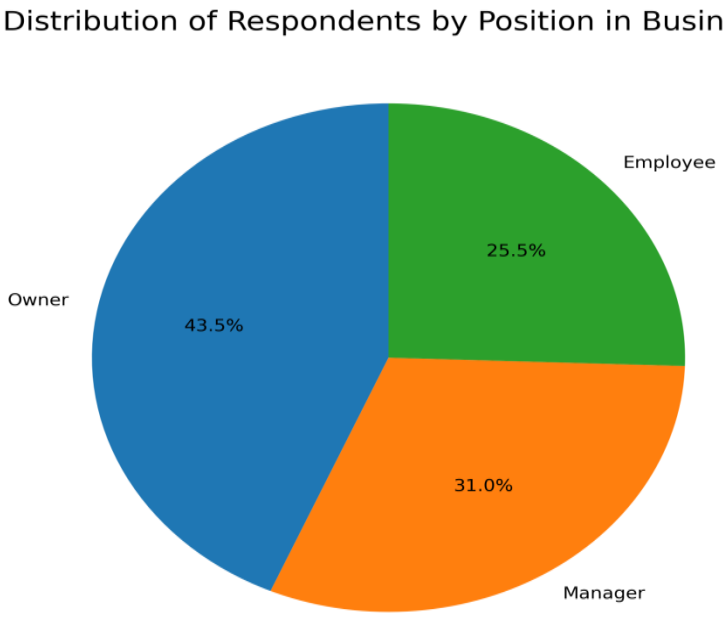


FIG 2: Position in Hospitality Establishment

Source: Researcher's fieldwork, (2026)

Data presented in Table 1 shows respondents' opinion on the effect of erratic power supply on business operations and productivity in the tourism & hospitality sector in Nigeria. The respondents revealed that the greater majority strongly agreed that their business daily production would be greatly reduced due to unstable power supply; where 291 respondents are said to be agreeing to the assertion which is 76% of the respondents, 18% representing 69 respondents also agree while 3% are undecided, 2% disagreed while 1% strongly disagree. A majority of 74% of the respondents strongly agree that unstable supply of power will adversely affect the revenue generation of their business and 19% agree. Majority 83% strongly agreed that business operational cost would increase if there is unstable supply of power, majority 86% strongly agree that their business expends a large amount of money on generators and fuel or alternative source of power to operate. Majority 79% strongly agreed that customer services would be affected by instability of power while 71% strongly agreed that customers' satisfaction and patronage will reduce. Majority 77% strongly agreed that the speed of services rendered by their business will be reduced due to unstable supply of electricity and 80% strongly agreed that

damage would be caused to appliances/equipment in their business. Majority 91% strongly agreed that the major alternative strategy for power problem is the purchase of generator, while majority 82% strongly agreed that they are using alternative power source in order to be able to cope with the irregular supply of electricity to their business while 84% strongly agreed that they require solar system, inverters or alternative power source for their business to survive. Majority 92% of respondents strongly agreed that their daily production/operations would increase and profitability will also grow if they have regular supply of electricity.

Table 1: Erratic Power Supply and Economic Productivity in the Tourism and Hospitality industry

Questions	SA	A	U	D	SD	Frequency	Percentage
Frequent power outages reduce the daily productivity of your hospitality establishment.	291 (76%)	69 (18%)	11 (3%)	9 (2%)	4 (1%)	384	100
Erratic power supply negatively affects the income generated from your business operations.	284 (74%)	73 (19%)	11 (3%)	12 (3%)	4 (1%)	384	100
Unstable electricity supply increases the operational cost of running your business.	319 (83%)	49 (13%)	8 (2%)	4 (1%)	4 (1%)	384	100
Your business spends a significant amount of money on generators, fuel, or alternative power supply.	330 (86%)	38 (10%)	8 (2%)	4 (1%)	4 (1%)	384	100
Frequent electricity outages disrupt effective service delivery to customers.	303 (79%)	61 (16%)	8 (2%)	8 (2%)	4 (1%)	384	100
Poor electricity supply reduces customer satisfaction and patronage in your business.	273 (71%)	81 (21%)	15 (4%)	11 (3%)	4 (1%)	384	100
Power outages negatively affect the quality and speed of services rendered to customers.	296 (77%)	65 (17%)	11 (3%)	8 (2%)	4 (1%)	384	100
Frequent power interruption causes damage to electrical appliances and equipment in	307 (80%)	57 (15%)	8 (2%)	8 (2%)	4 (1%)	384	100

your business.							
My business relies on generators as a major coping strategy against erratic power supply.	349 (91%)	23 (6%)	4 (1%)	4 (1%)	4 (1%)	384	100
The use of alternative power sources has helped sustain your business operations despite unstable electricity supply.	315 (82%)	49 (13%)	8 (2%)	8 (2%)	4 (1%)	384	100
Solar systems, inverters, and backup energy solutions are becoming necessary for business survival in the tourism and hospitality sector.	323 (84%)	42 (11%)	8 (2%)	7 (2%)	4 (1%)	384	100
Stable electricity supply would significantly improve the productivity and profitability of your business.	353 (92%)	19 (5%)	4 (1%)	4 (1%)	4 (1%)	384	100

Source: Researcher's fieldwork (2026)

The findings below in Table 2 and 3 analyse the hypothesis that power supply is significantly related to the economic productivity of youths in the tourism and hospitality industry in Nigeria. The mean score obtained is 4.61 which shows that respondents overwhelmingly agree that irregular electricity supply reduces the productivity of businesses and increases the operational cost and level of service delivered, thereby decreasing customer satisfaction and increasing the risk of equipment failure. It forces businesses to resort to usage of generators and the search for alternatives sources of electricity. The result also shows a significant difference from the mean value 3, the value of a neutral position. The t-value obtained (44.72) shows a significant departure from 3. It shows that respondents agree strongly with the statements that irregular electricity affects the productivity and operations of business in Nigeria in a way not due to chance. Therefore, null hypothesis was rejected and alternative hypothesis was accepted positing that inconsistency in power supply rate affects the economic productivity, efficiency, customer service delivery, profitability and overall survival of Nigerian youths operating within the tourism and hospitality sector.

Table 2: One-Sample Statistics

Variable	N	Mean	Std. Deviation	Std. Error Mean
Erratic Power Supply and Economic Productivity	384	4.61	0.71	0.036

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Table 3: Test Value = 3.00

Variable	t	df	Sig. (2-tailed)	Mean Difference	Lower Difference	Upper Difference
Erratic Power Supply and Economic Productivity	44.72	383	0.000	1.61	1.54	1.68

DISCUSSION

The study found that hotel operators were the dominant survey respondents, followed by restaurant operators, lounge/bar operators, event centres, and other tourism service providers which explained that the study addressed the realities of electricity-dependent hospitality businesses. Further, the respondents occupied strategic places of leverage as owners and managers of business enterprises thus assured the researcher that the data collection was based on practical operational experiences on the impacts of unstable power supply to business activities. The results from the composite descriptive analysis showed that majority of the respondents overwhelmingly agreed to the assertion that erratic power supply is a major factor affecting productivity, profitability, operational costs and service delivery in the tourism and hospitality industry in Nigeria. Most respondents strongly agreed that unstable power supply causes low productivity, income reduction, high operational cost and high expenditure on generators and fuel as well as alternative power sources respectively. The results confirm Mohammed and Yusuf (2021)'s report that erratic power supply was the number one challenge affecting SMEs' productivity and profitability in Samaru Zaria Nigeria. The results further support the works of Ohajianya et al. (2014) and Omeiza and Ahmed (2023) who noted that power instability hinders economic productivity, business endurance and socio-economic development in Nigeria. This study also established that inconsistent electricity supply, leads to entire disruption of services, causes loss of patronage by customers, results in damage to electrical appliances, and causes the usage of expensive equipment such as generators, inverters and solar systems as a coping strategy within the Nigeria's hospitality sector. The respondents in the study confirmed that inconsistency in electricity supply affects the provision of quality and fast services and inhibits the patronage from customers within their businesses. These results agree with the findings of Twenefour et al. (2015), who found that frequent power outage affected hotel operations and services, customers' satisfaction and general business efficiency in Ghana. The findings are also in tandem with the work of Babatunde (2026) who revealed that the escalation of the costs of electricity and the inconsistency in its supply have resulted in a significant increase in the operating costs and undermined profitability within Nigeria's hospitality sector. Finally, the hypothesis test confirmed that inconsistent power supply rate affects the value of the economic productivity of Nigerian youths in the tourism and hospitality industry.

CONCLUSION

The study established that the erratic power supply has a negative and significant effect on the economic productivity of Nigerian youths engaged in the tourism and hospitality sector. The results show that an unstable electricity supply causes an increase in operational costs, decreases the productivity and profitability of the tourism and hospitality enterprises, affects the service delivery of the tourism and hospitality enterprises, reduces customer satisfaction, causes damage to the service equipment and business equipment, and necessitates over reliance on the use of generator sets and alternative power sources to survive. The result further shows that the erratic nature of the supply of electricity imposes weighty operational and financial costs and jeopardizes the sustainability of the tourism and hospitality businesses, specifically hotels, restaurant, lounges and tourism-related businesses that operate with the need to deliver services at optimum efficiency through stable supply of electricity. The hypothesis testing supported a significant effect of erratic power supply on the economic productivity of tourism and hospitality enterprises with empirical evidence pointing to the fact that the instability of the electricity supply was statistically significant from the already reported effect of erratic power supply on the Nigerian economy.

RECOMMENDATIONS

1. The Federal Government of Nigeria, Ministry of Power and electricity distribution companies in Nigeria should upgrade and expand the power generation, transmission and distribution infrastructure in key commercial and tourism centers in Nigeria through increased investment, rehabilitation of aging facilities and comprehensive power sector reforms to have reliable electricity supply for hospitality enterprises.

2. Hotel, restaurant, lobby, wedding, conferencing centre, or tourism businesses owners and managers should introduce alternative sources of energy such as solar systems, hybrids invertors, and mini grids to reduce the cost by limiting reliance on the generators to manage irregular electricity supply.

3. The Nigerian government, financial institutions and private investors are recommended to provide low-interest loans, tax incentives, renewable energy support schemes to facilitate the development of youth owned tourism and hospitality enterprises.

4. Operators of the hospitality business and tourism players are also advised to adopt sound energy practices in their establishments, for routine maintenance of electrical equipment and appliances-easy to operate appliances-all of which are energy efficient and-training staff in conservation measures.

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