



**AFRICAN JOURNAL OF ECONOMIC
TRANSFORMATION AND DEVELOPMENT**
African Academic Imprint Press

VOL. 1 Issue 1 July 2026 (pp34-58)

Email: ajetdpres@gmail.com

Submitted March 2026, Published July 2026

Website: www.aaimp.ng

Print ISSN: 3156-5123, E-ISSN:3156-5352

**THE ECONOMIC CONTRIBUTION OF THE OKADA AND KEKE NAPEP
INDUSTRY TO YOUTH EMPLOYMENT AND INCOME IN IKWO,
EBONYI STATE**

Oko Victor Chukwuebuka

Department of Economics, Alex Ekwueme Federal University Ndufu Alike, Ebonyi State,
Nigeria

Correspondence: victorc@yahoo.com

ABSTRACT

This study examined the economic contribution of the Okada and Keke Napep industry to youth employment and income generation in Ikwo Local Government Area of Ebonyi State, Nigeria. The study adopted a cross-sectional research design and collected primary data from 200 respondents. Binomial logistic regression was employed to examine youths' perceptions of the industry's contribution to employment and household income. The findings indicate that the Okada and Keke Napep industry provides an important avenue for youth self-employment and economic participation. The results further show that the perception that the industry reduces youth unemployment significantly influences sustainable employment. With respect to income generation, the perception that income from the business is sufficient to meet basic needs was positive and statistically significant, while stable income, improved income after joining the business, and improved economic well-being were not statistically significant. The study concludes that the Okada and Keke Napep industry contributes meaningfully to youth employment and income generation in Ikwo, although the sustainability of these benefits remains constrained by operating conditions. The study recommends supportive financing, improved transport infrastructure, skills development, security, and appropriate regulation to strengthen the industry's contribution to youth livelihoods and local economic development.

Keywords: Okada, Keke Napep, Youth Employment, Income Generation, Informal Transport, Ikwo, Ebonyi State.

JEL Classification: J21, J46, O17, R41.

1. INTRODUCTION

Economic development remains a major concern in developing economies, where unemployment, poverty, and limited formal-sector opportunities have encouraged the expansion of informal economic activities (Habiyaemye et al., 2022; Sultana et al., 2022). In Nigeria, the informal sector provides an important source of employment and income, particularly for youths who face difficulties accessing formal employment (Uzoechina et al., 2023; George, 2024). Consequently, many young people engage in informal activities as alternative means of livelihood and economic participation (Chipangura et al., 2026).

Among these activities, informal transportation, particularly okada (motorcycle taxis) and keke napep (tricycles), has become an important source of employment and income. These modes of transport provide mobility where conventional public transportation is inadequate and require relatively low entry capital, making them accessible to unemployed and underemployed youths (Lenshie et al., 2022; Adenutsi, 2023). Their flexibility and ability to operate on difficult or poorly developed road networks also make them particularly useful in rural and semi-urban communities.

The economic importance of the industry extends beyond the direct earnings of operators. Okada and keke napep facilitate access to markets, workplaces, schools, healthcare facilities and other economic opportunities, thereby supporting the movement of people, agricultural products and services. The industry also generates indirect livelihood opportunities for mechanics, spare-parts dealers, fuel vendors and other businesses that depend on transportation operators (Adomabea et al., 2023; Omowole et al., 2024). Thus, informal transportation can serve both as a source of livelihood and as an important mechanism for promoting wider local economic participation (Tucho, 2022).

The expansion of the okada and keke napep industry is closely associated with unemployment, inadequate public transportation, and the search for accessible sources of income among young people. Compared with many formal businesses, participation in motorcycle and tricycle transportation requires relatively modest capital and does not necessarily demand high educational qualifications (Adenutsi, 2023). This makes the industry particularly attractive to youths who are unemployed or underemployed and seeking immediate sources of income.

Despite these contributions, informal transportation is frequently examined from the perspectives of road safety, traffic congestion, environmental concerns, and regulatory compliance, with comparatively less attention given to its employment and income-generating functions (Tucho, 2022). While these challenges remain important, excessive emphasis on them may obscure the livelihood significance of the industry, particularly among youths with limited access to formal employment. A balanced assessment should therefore consider both the challenges and the potential economic benefits of informal transportation.

Participation in the industry may also be influenced by educational attainment, access to finance, operating costs, road conditions, regulatory requirements, and youths' perceptions of the sustainability of the occupation. These factors can determine whether participation in okada and keke napep provides stable employment and adequate income or merely serves as a short-term coping strategy. Examining youths' perceptions and economic experiences is therefore important for understanding the actual contribution of the industry to employment and income generation.

At the sub-national level, the significance of informal transportation varies according to infrastructure, geography and the structure of local economic activities. **Ebonyi State** provides an important context for

this study because of its predominantly agrarian economy, limited industrial base and employment challenges among youths. The combination of limited formal employment opportunities and transportation infrastructure has encouraged participation in informal economic activities, including motorcycle and tricycle transportation.

Ikwo Local Government Area presents a particularly relevant setting for examining this relationship. The area comprises rural and semi-urban communities where farming, small-scale trading and other informal activities constitute important sources of livelihood. Limited conventional public transportation has increased reliance on motorcycles and tricycles for commuting, transporting agricultural produce, accessing markets and connecting relatively remote communities. For many youths, participation in the okada and keke napep industry therefore represents an important source of livelihood and household support.

However, despite the visible presence of okada and keke napep operators in Ikwo, there is limited empirical evidence establishing the extent to which the industry contributes to youth employment and income. Existing studies on informal transportation have largely concentrated on urban transportation, safety and regulatory issues, while less attention has been given to its economic contribution in rural and semi-urban communities. This evidence gap makes it difficult to determine whether the industry substantially improves employment opportunities and income generation among youths in Ikwo.

The absence of reliable local evidence also has important policy implications. Policies designed to regulate or restrict informal transportation without considering its livelihood function could unintentionally reduce employment and income opportunities for youths. Conversely, evidence-based interventions could improve the sector through appropriate regulation, safer operating conditions, access to finance, skills development and improved transportation infrastructure. Against this background, this study examines the economic contribution of the okada and keke napep industry to youth employment and income in Ikwo, Ebonyi State. Specifically, the study focuses on youths' perceptions of the industry and examines whether such perceptions significantly influence the likelihood of employment promotion and income generation. The study is expected to provide empirical evidence that can support balanced policies for youth employment, informal-sector development, and inclusive local economic growth in Ikwo Local Government Area.

Research Objectives

- a) To determine the effect of youths' perception of the Okada and Keke industry on the likelihood of employment promotion among youths in Ikwo Local Government Area.
- b) To examine the effect of youths' perception of the Okada and Keke industry on the likelihood of income generation among youths in Ikwo Local Government Area.

Research Questions

- a) What is the effect of youths' perception of the Okada and Keke industry on the likelihood of employment promotion among youths in Ikwo Local Government Area?
- b) What is the effect of youths' perception of the Okada and Keke industry on the likelihood of income generation among youths in Ikwo Local Government Area?

2. LITERATURE REVIEW

2.1 Conceptual Review

Youth Empowerment in Nigeria

Youth empowerment in Nigeria involves providing young people with the skills, resources, opportunities, finance, and supportive environment needed to participate effectively in economic and social activities (Adejoke, 2025). It is particularly important given persistent youth unemployment, poverty, skills gaps, and limited formal-sector opportunities (Virk et al., 2023; Okorie et al., 2024). As the formal sector cannot absorb the growing youth population, many young Nigerians participate in informal activities such as commercial transportation, petty trading, agriculture, and digital services to generate income and achieve economic independence (Ibrahim et al., 2023).

Skills development and access to finance are important components of youth empowerment. Education, vocational training, and entrepreneurship skills can improve employability and productivity, although inadequate funding, poor coordination, and unequal access limit the effectiveness of existing programmes (Onwuchekwa et al., 2024). Similarly, limited access to affordable credit, high interest rates, and collateral requirements constrain young people's ability to establish or expand businesses (Uduji & Okolo-Obasi, 2022).

Youth empowerment also has important social and institutional dimensions. Economic and social inclusion can reduce vulnerability to crime, drug abuse, and other forms of social instability while encouraging constructive participation in community development (Bakare, 2024). However, gaps in policy implementation, monitoring, funding, and institutional coordination continue to limit the effectiveness of government youth programmes (Eze et al., 2024; Ojo & Afolaranmi, 2024). Overall, youth empowerment is a multidimensional process involving employment, entrepreneurship, skills acquisition, access to finance, and social inclusion. Strengthening opportunities for self-employment and productive participation in the informal sector is therefore essential for reducing youth unemployment, improving livelihoods, promoting inclusive economic growth, and supporting long-term economic stability in Nigeria (Okoro & Ojo, 2024).

Economic Development and Income Generation in Nigeria

Economic development in Nigeria is closely linked to the economy's ability to create productive employment and sustainable income opportunities, particularly for its growing youth population (Edewor et al., 2023). Persistent unemployment, underemployment, limited industrial expansion and skills mismatches have constrained the capacity of the formal sector to absorb the growing labour force (Abdulrazaq & Lambe, 2024). Consequently, informal activities, including commercial motorcycle (*okada*) and tricycle (*keke napep*) transportation, have become important sources of employment and livelihood for Nigerian youths (Lenshie et al., 2022).

The *okada* and *keke napep* industry contributes to economic development by providing accessible employment and income opportunities with relatively low entry requirements. Earnings from these activities enable operators to meet household needs, support dependants and participate in local markets, thereby stimulating consumption and other economic activities (Abubakar et al., 2024). The sector also facilitates the movement of people, agricultural produce and goods, particularly in communities where conventional public transportation is inadequate, thereby supporting local productivity and market access (Olutayo & Adeyemo, 2024).

Income generation is particularly important in Nigeria because of widespread poverty, unemployment and limited access to stable formal-sector employment. The large informal sector provides alternative sources of income through trading, agriculture, artisan activities and transportation (Nwosu & Folarin, 2025). For many youths, participation in *okada* and *keke napep* operations provides an accessible entry into economic activity and promotes financial independence. However, incomes are often unstable because of rising fuel prices, poor infrastructure, limited access to finance and regulatory restrictions (Akamike & Okonkwo, 2024; Owusu, 2025).

Although informal transportation contributes to employment, mobility and income generation, its developmental impact is constrained by safety risks, income instability, weak social protection and operating costs. These challenges suggest the need for policies that improve working conditions, access to finance, skills development and appropriate regulation. Supporting productive informal activities can therefore strengthen youth livelihoods while contributing to inclusive economic development in Nigeria (Uchegbue & Ifedi, 2023; Fobosi et al., 2026).

2.2 Theoretical Review

Keynesian Theory of Employment and Income

The Keynesian Theory of Employment and Income, developed by Keynes (1936), explains employment and income in terms of effective demand. The theory argues that when demand for goods and services increases, production, employment, and income also increase. Conversely, weak demand can result in unemployment and reduced income. In the context of Nigeria, income earned through informal activities such as *okada* and *keke napep* operations is spent on food, housing, education and other goods and services, thereby stimulating local demand and further economic activity (Nwaka & Emeagwali, 2024).

The theory is particularly relevant to this study because the *okada* and *keke napep* industry responds to the demand for affordable and accessible transportation, especially where formal public transport is inadequate. By meeting this demand, the industry creates employment for youths and generates income that circulates within local communities. The theory therefore provides a useful framework for explaining how participation in informal transportation can contribute to youth employment and income generation in Ikwo.

Human Capital Theory

Human Capital Theory, associated with Schultz (1961) and Becker (1964), explains how education, skills, training and experience influence individuals' productivity, employment opportunities and income. The theory views investment in human capital as a means of improving productivity and increasing an individual's economic returns. In Nigeria, limited access to appropriate education and vocational skills has contributed to youth unemployment and underemployment, encouraging many young people to seek opportunities in the informal sector (Chukwu, 2023).

The theory is relevant to the *okada* and *keke napep* industry because entry into the sector generally requires limited formal qualifications, while practical experience and skills acquired through continuous participation can improve productivity and earnings. Operators develop competencies such as route knowledge, customer relations, traffic awareness, and basic vehicle maintenance, which may influence their income-generating capacity (Adeniran, 2020; Busari, 2024). Human Capital Theory therefore helps explain

differences in employment and income outcomes among youths engaged in informal transportation and supports the importance of skills development for improving their economic opportunities.

2.3 Empirical Review

Mohammed, Canice, and Caleb (2026) examined coping strategies among informal transport operators in Sokoto State following fuel subsidy removal, using 400 respondents and a mixed-methods approach. The study found that operators relied mainly on fare increases, route adjustments, reduced household spending, fuel conservation, and longer working hours, while formal institutional support was largely absent. The study concluded that these strategies were unsustainable and recommended targeted microcredit, fuel support, sector-specific welfare programmes, and improved government communication.

Adetunji and Akintayo (2026) examined the effectiveness of tricycles as public transportation in Osogbo using 400 operators and users. The study found that tricycles were widely used because of their affordability, accessibility and flexibility, while also generating employment for riders and related service providers. It concluded that improved roads, designated parking spaces and appropriate regulation are necessary to sustain the sector. Igiegba, Iyoha and Chukwudi (2025) examined the relevance of NAPEP to economic development in Edo State using questionnaire data and a one-sample *t*-test. The study found that NAPEP significantly improved living standards and entrepreneurial activities, although implementation challenges persisted. It recommended policies that reflect local conditions and encourage wider participation. Lawal (2025) investigated the emergence and socio-economic contributions of *Achaba* (commercial motorcycle transport) in Katsina Metropolis. Using historical methods and primary and secondary sources, the study found that the sector generated employment for riders and related service providers while improving intra-city mobility through affordable and flexible transport. It recommended effective regulation to address operational challenges and promote sustainable development.

Atuchukwu and Leonard (2024) examined entrepreneurs' perceptions of tricycle brands in South-East Nigeria, focusing on reliability, serviceability, fuel economy, safety and durability. The study found significant differences across brands, with Bajaj RE rated highest for reliability and serviceability, while TVS King performed better in fuel efficiency and durability. The study concluded that product quality influences entrepreneurs' repurchase decisions and recommended improved product innovation. Pagi et al. (2024) examined the tricycle business value chain and its contribution to poverty reduction in Mubi Metropolis. The study found that *keke napep* generated employment, income, wealth and government revenue, with participants earning substantially above the national minimum wage. It recommended improved road infrastructure and security to strengthen the sector's contribution to youth employment and economic development. Ibrahim and Magaji (2024) examined *keke napep* transportation services on a Nigerian campus using 307 respondents. The study found that cost-effectiveness, user convenience, maintenance requirements and infrastructure significantly influenced implementation success, with cost-effectiveness being the strongest factor. It recommended effective management of campus tricycle services to enhance revenue generation. Agbabiaka et al. (2023) examined tricycle patronage and revenue generation in Kano City using 653 riders and users. The study found high patronage and substantial income generation, with the sector supporting riders' livelihoods and contributing significant government revenue. Flexibility, mobility, convenience, and economic factors influenced patronage. The study recommended structured training to improve operators' efficiency and service delivery. Hayatu et al. (2023) found that *keke napep* operations significantly promoted youth employment, poverty reduction, improved household welfare and self-reliance in Sokoto North, although security concerns remained a major challenge. Similarly, Wycliff

and Sararinkuka (2017) reported that *Achaba* operations promoted self-employment and youth empowerment while generating income and stimulating small businesses.

Other studies highlight the broader economic and mobility benefits of tricycle transportation. Pagiél et al. (2024) found that *keke napep* generated employment, income, wealth and government revenue in Mubi, while Oluyinka et al. (2019) established that tricycles improved last-mile connectivity because of their accessibility and affordability. However, fare increases, poor roads and multiple levies constrained their effectiveness. Ibrahim and Magaji (2024) similarly found that cost-effectiveness, convenience, maintenance and infrastructure significantly influenced the effectiveness of tricycle services.

The sustainability of the sector is also affected by maintenance and institutional challenges. Abasili et al. (2022) found that appropriate maintenance practices and operator training could improve tricycle reliability and reduce downtime. Abdullah et al. (2022) further showed that demographic and travel characteristics influence public transport use and called for policies that address users' different mobility needs.

3. METHODOLOGY

Research Design

This study adopts a logit regression research design. The design is appropriate because it enables the systematic collection and analysis of data from okada and keke napep operators on their employment status and income levels within a defined period. The survey approach allows the researcher to describe existing economic conditions of youths engaged in informal transport services in Ikwo Local Government Area and to examine relationships between selected socio-economic factors and participation in the industry without manipulating any variables.

Area of the Study

The study is conducted in Ikwo Local Government Area of Ebonyi State, Nigeria. Ikwo is characterized by rural and semi-urban settlements where informal transport services such as okada (commercial motorcycles) and keke napep (tricycles) play a vital role in daily mobility and economic activities. The area is suitable for this study due to the high presence of youths engaged in informal transport operations as a means of livelihood and income generation.

Population of the Study

The population of the study comprises all youths actively engaged in okada and keke napep operations in Ikwo Local Government Area. This includes registered and unregistered operators who use motorcycles and tricycles for commercial transportation within the study area. The population is considered appropriate because these youths directly experience the employment and income effects of the industry under investigation.

Sample size determination

Scholars stress the significance of having a sufficiently large sample size to attain ample statistical power. If the sample size is too small, it could result in low power, making it challenging to identify genuine effects. Moreover, a bigger sample size enhances the accuracy of estimates, thereby decreasing the margin of error in the results. According to Gosling (2015), the larger the percentage of the population used as a sample, the greater the probability that the sample will be a true reflection of the population. In regards to this, various experts in the field have conflicting views on the topic of sample adequacy. Some argue that the sample size should constitute 5% of the study population, whereas others propose a larger proportion, advocating for a sample size of 7%, or 10% of the total population.

Hence, this study will utilize the Yamane (1967) formula for sample size determination. The corresponding equation is provided below:

$$S = \frac{N}{[1 + N(e^2)]}$$

Where;

N = Estimated population of customers per day

S = Sample size

e = Level of Significance

The estimated population of youths in Ikwo Local Government Area is 96,000 youths according to a report by xplorer.ng (Ebonyi State Population by Local Government Area, 2026), and for our research, we use the 7% margin of error, to account for a 93% confidence level.

Thus;

N = 96,000 (estimated population)

e = 0.07 (7% margin of error for 93% confidence level)

Hence, N from the population of the study given above is 1500 persons (respondents), and the level of significance ‘ e ’ is 0.07 (7%), which was selected by the researcher. This decision strikes a balance between the need for statistical accuracy and the practical constraints of time, cost, and respondent accessibility. A 7% margin of error corresponds approximately to **93% confidence level**, a which is reasonably high for social science research where perfect precision is not always feasible. Given the large and dispersed population of fast food consumers in Lagos Island, a slightly broader margin was appropriate to ensure a manageable and cost-effective sample size without significantly compromising the validity of the findings, the sample size ‘ S ’ for this study is determined thus:

$$S = \frac{96000}{[1 + 96000(0.07^2)]}$$

Calculate the square of 0.07:

$$(0.07)^2 = 0.0049$$

Multiply 96,000 by $(0.07)^2$:

$$96000 \times 0.0049 = 470.4$$

Add 1 to the result from step 2:

$$1 + 470.4 = 471.4$$

Divide 1500 by the result from step 3:

$$\frac{96000}{471.4} = 203.65 \cong 203$$

Thus, while the calculated value was 203.65, the study purposively used 203 respondents to ensure robustness, reliability, and adequate representation of the study population. The equation demonstrates that, with a confidence level of 93%, the sample size required for this study is 203 participants. A representative sample is drawn from the population using a multi-stage sampling technique. First, selected communities and major transport routes within Ikwo Local Government Area are purposively chosen due to their high concentration of okada and keke napep activities. Second, respondents are selected using simple random sampling to ensure that every operator has an equal chance of being included in the study. The sample size is determined based on feasibility within the six-month research period and the need to obtain reliable data for descriptive and inferential analysis.

Data Collection Instrument and Validation

Validation of Instruments:

The instruments' validity was assessed through face and content validation by my supervisor to ensure accurate evaluation before being given to the participants.

Instrument Reliability:

The reliability of the instrument is ensured through a pilot study, where copies of the questionnaire are administered to a small group of okada and keke napep operators outside the selected sample. The responses are tested for consistency, and ambiguous questions are modified before final administration.

The Cronbach's Alpha Reliability Test was employed to assess the internal consistency of the instrument. The Cronbach's Alpha Co-efficient of the Reliability test is given as: The formula for Cronbach's alpha is:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2} \right) \dots \dots \dots (1)$$

Where:

α = Cronbach's Alpha Coefficient of Reliability

k = No of questions in the questionnaire

σ_i^2 = The variance of the observed total test scores

σ_t^2 = The sum of the variances

Now we have the necessary information to calculate Cronbach's alpha.

Where:

K = 18 (number of items), excluding the demographic questions

$\sigma_i^2 = 7.251055$ (variance of each item)

$\sigma_t^2 = 26.77817$ (total variance)

Now, input the values:

$$\alpha = \frac{18}{18-1} \left(1 - \frac{7.251055}{26.77817} \right)$$
$$\alpha = \frac{18}{17} (1 - 0.271)$$

Thus;

$$\alpha = 1.06 (0.729) = 0.77 \sim 0.8$$

Cronbach's alpha is approximately 0.8, indicating excellent internal consistency reliability among the 18 items.

From the pilot study carried out, and according to the Cronbach's alpha coefficient reliability test, a value below 0.5 is deemed insignificant, while a value of 0.5 and above is considered significant. Therefore, the instrument is considered reliable since the obtained value is 0.8 and it is greater than 0.5.

Administration of the research instrument:

The primary instrument for data collection is a structured questionnaire, designed to capture information on;

Demographic characteristics of respondents (age, education, household responsibilities)

Nature of engagement in okada and keke napep operations

Employment status and duration of operation

Income levels and income stability

Access to capital and operational challenges

Where necessary, interviews are conducted to clarify responses and obtain additional insights on employment and income dynamics.

Sources of Data

The study relies mainly on primary data, while secondary data are used to complement the analysis.

Primary Data: Collected directly from okada and keke napep operators through structured questionnaires and oral interviews.

Method of Data Collection

The questionnaires are administered personally by the researcher, with assistance where necessary, to ensure a high response rate. This approach allows for proper explanation of questions to respondents who may have varying levels of education. Data collection is carried out within the six-month study period.

Method of Data Analysis

Data collected are analyzed using descriptive and inferential statistical techniques. Descriptive statistics, including frequencies, percentages, tables, and charts, are used to summarize respondents' characteristics and participation in the Okada and Keke industry. Binary logistic regression is employed to determine the effect and statistical significance of youths' perception of the industry on the likelihood of employment promotion and income generation in Ikwo Local Government Area. The analysis uses regression coefficients, odds ratios, Wald statistics, and p-values to determine the direction, magnitude, and significance of the effects. The technique is appropriate because the dependent variables are measured as

binary outcomes and the study uses cross-sectional data. To achieve this goal, a meticulously designed questionnaire was given to the participants for completion. Collected data were analyzed using SPSS27, which is the statistical app used to analyze primary data.

From the first objective, the regression is stated below;

$$\text{Logit } (P_{\text{Employment}}) = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{Gender} + \beta_3 \text{Educational Level} + \beta_4 \text{Perception} \dots \dots (1)$$

For the second objective, the regression is stated below;

$$\text{Logit } (P_{\text{Income}}) = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{Gender} + \beta_3 \text{Educational Level} + \beta_4 \text{Years of experience} + \beta_5 \text{Perception} \dots \dots \dots 2$$

Ethical Considerations

Ethical standards are observed throughout the study. Respondents are informed about the purpose of the research, and participation is strictly voluntary. Confidentiality of responses is assured, and no personal information is used for purposes other than academic analysis.

Limitations of the Methodology

The study is limited to okada and keke napep operators within Ikwo Local Government Area and covers a period of six months. As such, findings reflect short-term employment and income dynamics and may not capture long-term trends. However, these limitations do not undermine the validity of the study, as the scope is consistent with the research objectives.

4. RESULTS AND DISCUSSION OF FINDINGS

Descriptive statistics, including frequencies and percentages, were used to summarize the socio-demographic characteristics and responses of the respondents. Binary logistic regression (logit model) was employed to examine the effect and statistical significance of youths' perception of the Okada and Keke industry on the likelihood of employment promotion and income generation in Ikwo Local Government Area. The results of the logistic regression were evaluated using the estimated coefficients, odds ratios, Wald statistics, and probability values to determine the direction, magnitude, and significance of the effects. The results from the analysis are presented below;

Demographic Analysis:

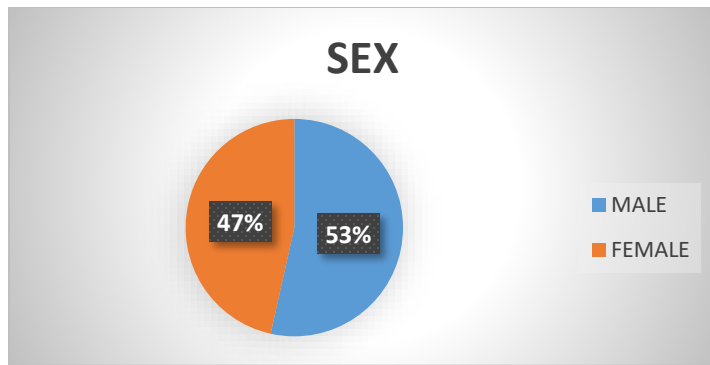


Fig. 1: Gender Distribution of Respondents

The pie chart above represents the gender of the respondents. It shows that a greater percentage of the respondents were male, with 53 percent, while the rest were female, with a percentage of 47 percent.

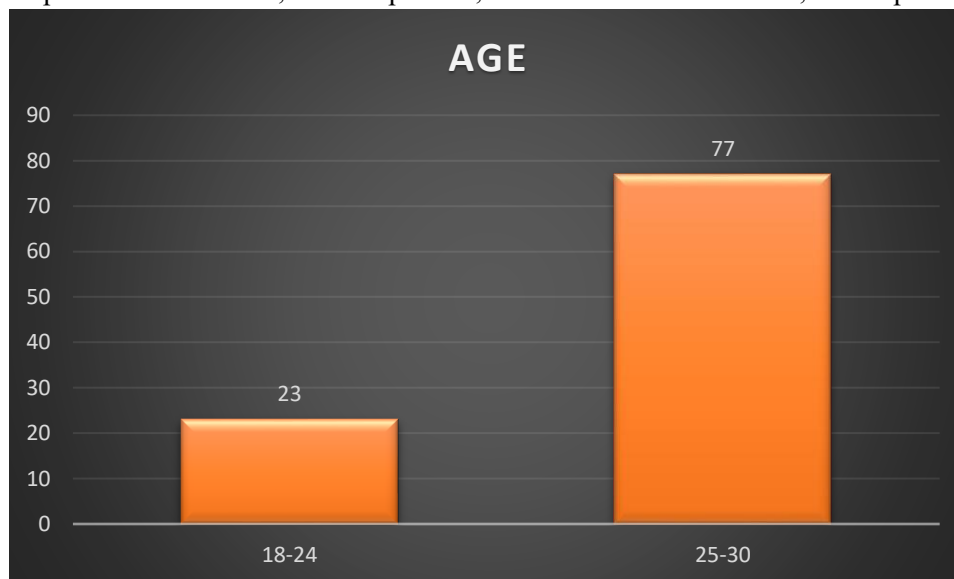


Fig.2: Age Range of the Respondents

This chart shows the categories of ages of the respondents. The majority of the respondents are within the ages of 25 and 30 years having a percentage of 77.0; the respondents within the ages of 18 and 24 have a percentage of 23.0.

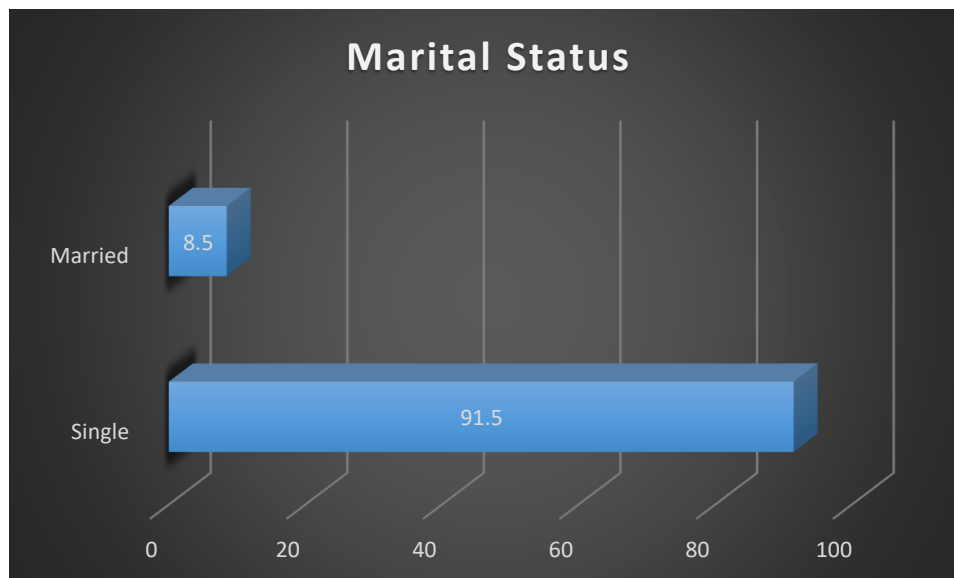


Fig.3: Marital Status of Respondents

This chart shows the marital status of the respondents. The majority of the respondents are single, with a percentage of 91.5, while respondents who are married have a percentage of 8.5.

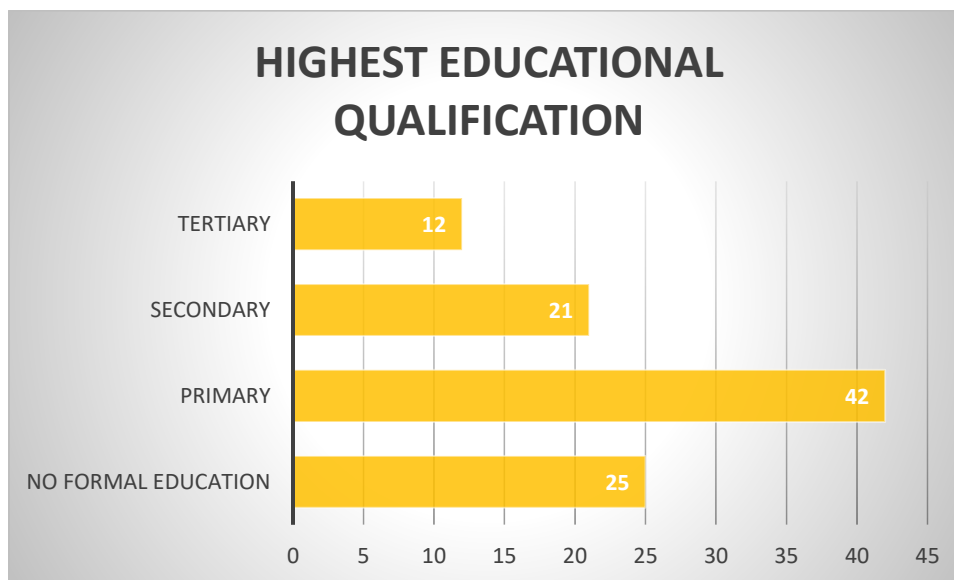


Fig.4: Educational Qualification of Respondents

The chart above shows the educational qualification held by the respondents. The majority of the respondents with primary school qualification had a percentage of 42.0, while respondents with no formal education had a percentage of 25.0, respondents with secondary school qualification had a percentage of 21.0, and respondents with tertiary school qualification had a percentage of 12.0.

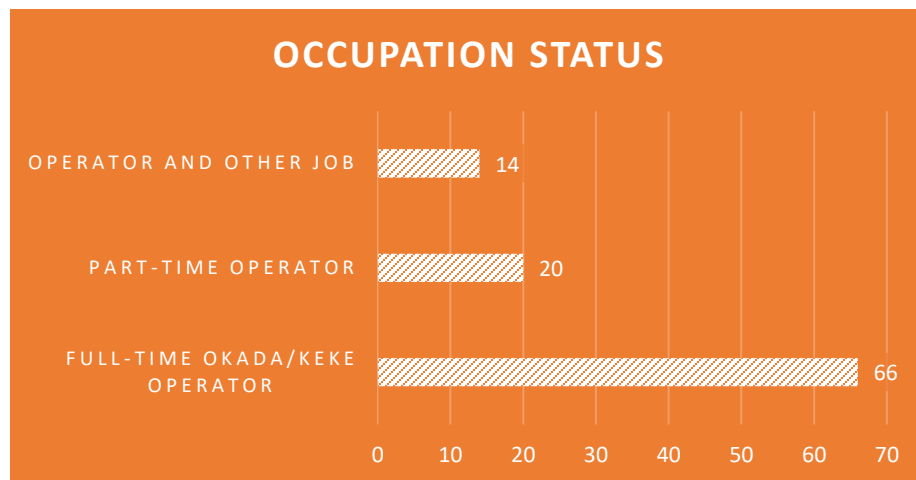


Fig. 5: Occupation Status of Respondents

The chart above shows the occupational status of the respondents. The majority of the respondents were full-time okada/keke operators with a percentage of 66.0, while the respondents who were part-time operators had a percentage of 20.0, and the respondents who were operators but had other jobs had a percentage of 14.0.

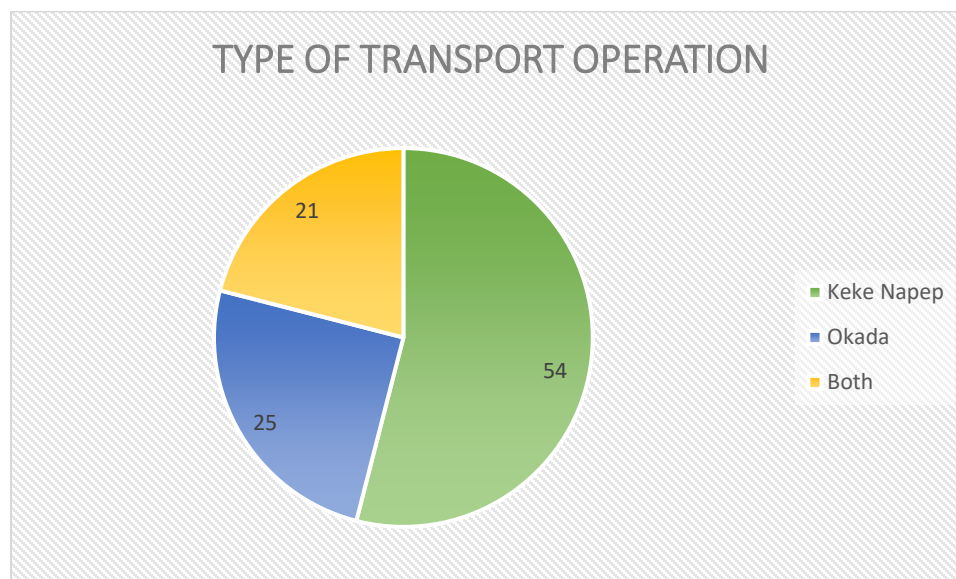


Fig. 6: Type of Transport Operation

The chart above shows the type of transport system operated by the respondents. Respondents who operated Keke Napep have a percentage of 54.0, while the respondents who operated Okada have a percentage of 25.0, and the respondents who operated both have a percentage of 21.0.

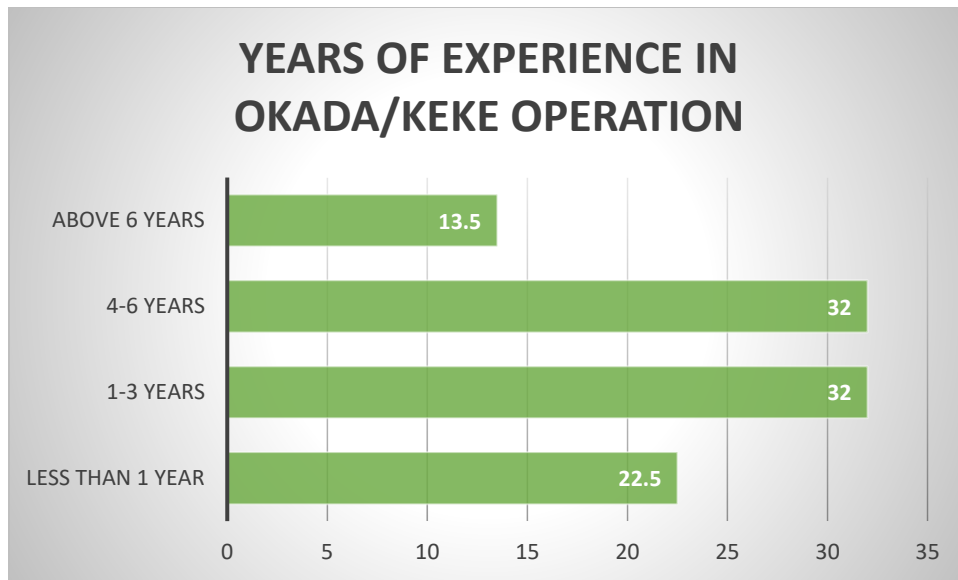


Fig 7. Years of Experience in Okada/Keke Operation

The chart above shows the respondents' years of experience in the system operated. Respondents with both 1-3 years and 4-6 years of experience in Okada/Keke operation both have a percentage of 32.0, respectively, while the respondents that have less than a year of experience have a percentage of 22.5, and the respondents that have above 6 years of experience have a percentage of 13.5.

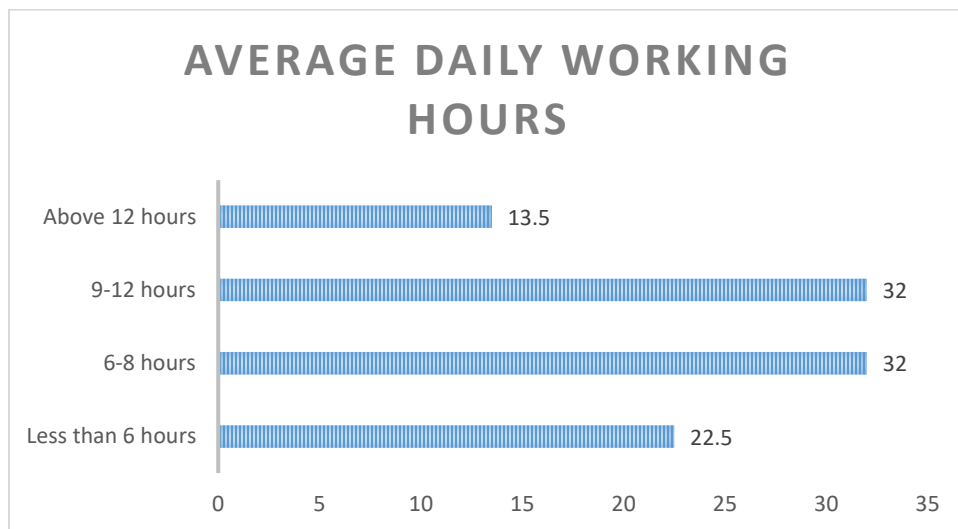


Fig 8: Average Daily Working Hours

The chart above shows the respondents' average daily working hours in the system operated. Respondents with both 6-8 hours and 9-12 hours of average daily working hours in Okada/Keke operation both have a

percentage of 32.0 respectively, while the respondents less than 6 hours have a percentage of 22.5, and the respondents with above 12 hours of working time have a percentage of 13.5.

Economic Contribution of Okada and Keke in Ikwo LGA, Ebonyi State

The First objective of the study

To determine the effect of youths' perception of the Okada and Keke industry on the likelihood of employment promotion among youths in Ikwo Local Government Area; thus, we interpret the result;

Table 4.1: Binomial Logistic Regression Result

Number of Obs =				200
LR chi ² =				14
Prob > chi ² =				0.000
-2 Log Likelihood =		180.076	Nagelkerke R ² = 0.458	
Industry provides sustainable employment	Coef,	Std. Err,	z	Prob
Okada/Keke industry created employment opportunities	-0.137	0.571	0.872	0.810
Industry reduced youth unemployment	1.647	0.468	5.193	0.012
Industry provides self-employment opportunities	-0.404	0.461	0.668	0.381
Industry encouraged unemployed youths to become economically active	-3.364	0.526	0.026	0.008

Source: Researcher's Compilation 2026

From the table above, the dependent variable used for this analysis was the sustainable employment the Okada/Keke industry provides. The independent variables were the creation of employment opportunities, reduction of youth unemployment, self-employment opportunities, and youth becoming economically active.

The probability value on the omnibus test results indicates that the model is a good fit is given that the p-value, which is 0.000, is less than the 0.05 level of significance. The Nagelkerke R² of 0.458, which is greater than the 0.05 significance level, shows that the predictor variables adequately predict the model (dependent variable).

The variable 'Okada/Keke industry created employment opportunities' is negative (-0.137) and not significant, as the P-value of 0.810 is greater than the 0.05 significance level. Therefore, a unit increase in the item "Okada/Keke industry created employment opportunities" negatively affects sustainable employment, but it is insignificant. "Industry reduced youth unemployment" is positive (1.647) and is significant as the p-value of 0.012 is less than the 0.05 significance level. This implies that a one-unit increase in the item "industry reduced youth unemployment" will result in a significant increase in sustainable employment. "Industry provides self-employment opportunities" is negative (-0.404), and it is insignificant as the p-value of 0.381 is greater than the 0.05 level of significance. This implies that a one-unit increase in the item "Industry provides self-employment opportunities" will result in a decrease in sustainable employment, but it is insignificant. "Industry encouraged unemployed youths to become

economically active” is negative (-3.634) and it is significant given that the p-value of 0.024 is less than the 0.05 level of significance. This implies that a unit increase in the item “Industry encouraged unemployed youths to become economically active” will significantly decrease sustainable employment.

The Second Objective of the Study

To examine youths’ perception of how the Okada and Keke industry influences income generation in Ikwo Local Government Area; thus, we interpret the results;

Table 4.2: Binomial Logistic Regression Result

Number of Obs =				200
LR χ^2 =				11
Prob > χ^2 =				0.000
-2 Log Likelihood =		232.989	Nagelkerke R^2 = 0.078	
Industry contributes significantly to household income	Coef,	Std. Err,	z	Prob
Okada/Keke business provides you with a stable source of income	0.438	0.327	1.550	0.180
Income improved since you joined the Okada/Keke business	-0.409	0.428	0.665	0.339
Income from the business sufficient to meet your basic needs	0.708	0.344	2.031	0.040
Okada/Keke industry improved your economic well-being	0.039	0.106	1.040	0.711

Source: Researcher’s Compilation 2026.

From the table above, the dependent variable used for this analysis was the Okada/Keke industry significant contribution to household income. The independent variables were the creation of a stable source of income and improved income. Business sufficiency to meet basic needs, and improved economic well-being.

The probability value on the omnibus test results indicates that the model is a good fit is given that the p-value, which is 0.023, is less than the 0.05 level of significance. The Nagelkerke R^2 of 0.078, which is greater than the 0.05 significance level, shows that the predictor variables adequately predict the model (dependent variable).

The variable ‘Okada/Keke business provides you with a stable source of income’ is positive (0.438) and not significant, as the P-value of 0.180 is greater than the 0.05 significance level. Therefore, a unit increase in the item “Okada/Keke business provides you with a stable source of income” positively affects industry contribution to household income, but it is insignificant. “Income improved since you joined the Okada/Keke business” is negative (-0.409) and is insignificant, as the p-value of 0.339 is greater than the 0.05 significance level. This implies that a one-unit increase in the item “Income improved since you joined the Okada/Keke business” will result in a decrease in industry contribution to household income, but it is insignificant. “Income from the business sufficient to meet your basic needs” is positive (0.708), and it is significant as the p-value of 0.040 is less than the 0.05 level of significance. This implies that a one-unit increase in the item “Income from the business sufficient to meet your basic needs” will result in a significant increase in industry contribution to household income. “Okada/Keke industry improved your

economic well-being” is positive (0.039), and it is insignificant given that the p-value of 0.711 is greater than the 0.05 level of significance. This implies that a unit increase in the item “Okada/Keke industry improved your economic well-being” will increase industry contribution to household income, but it is insignificant.

4.2 DISCUSSION OF FINDINGS

The findings indicate that the Okada and Keke Napep industry contributes to youth employment in Ikwo Local Government Area. The regression results show that the model is statistically significant, while the perception that the industry reduces youth unemployment has a positive and significant effect on sustainable employment. However, the perception that the industry creates employment opportunities and provides self-employment was not statistically significant. This suggests that although the industry is widely perceived as an avenue for employment, its capacity to provide sustainable employment may depend on broader economic and operational conditions. The finding is consistent with Hayatu et al. (2023), who found that Keke Napep operations significantly promoted youth employment, poverty reduction, and self-reliance in Sokoto North. Similarly, Wycliff and Sararinkuka (2017) reported that commercial motorcycle operations promoted self-employment and provided income opportunities for unemployed youths. Pagiél et al. (2024) also established that Keke Napep generates employment and income across its value chain. These findings reinforce the view that informal transport provides an important entry point into economic activity for youths who face limited formal employment opportunities.

The second objective examined the effect of the industry on income generation. The results show that the model is statistically significant, although its explanatory power is relatively low (Nagelkerke $R^2 = 0.078$). Of the explanatory variables, the perception that income from the business is sufficient to meet basic needs had a positive and statistically significant effect on the industry's contribution to household income. In contrast, having a stable income, experiencing improved income after joining the business, and improved economic well-being were not statistically significant. This suggests that the industry contributes to household income, but the income generated may not always be stable or sufficient to produce broader improvements in economic welfare. The finding agrees with Agbabiaka et al. (2023), who reported substantial income generation among tricycle operators in Kano, and Pagiél et al. (2024), who found that Keke Napep generated income and wealth for participants. However, Oluyinka et al. (2019) noted that operational constraints such as fare increases and poor road conditions can affect the effectiveness of tricycle services. Similarly, Ibrahim and Magaji (2024) identified cost, maintenance, and infrastructure as important factors affecting the effectiveness of Keke Napep operations. Thus, while the findings confirm the income-generating role of the industry in Ikwo, its sustainability depends on improving the operating conditions of young transport operators.

Overall, the findings support the argument that the Okada and Keke Napep industry is an important component of youth employment and income generation in Ikwo, although its contribution is constrained by factors that may limit employment sustainability and income stability. This is consistent with the broader evidence that informal transport can support livelihoods while remaining vulnerable to infrastructure, maintenance, security and regulatory challenges (Abasili et al., 2022; Hayatu et al., 2023; Pagiél et al., 2024).

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study examined the economic contribution of the Okada and Keke Napep industry to youth employment and income generation in Ikwo Local Government Area of Ebonyi State. The findings indicate that the industry serves as an important avenue for youth self-employment and economic participation, particularly in an environment where formal employment opportunities are limited. The results further show that youths generally perceive the industry as contributing to employment creation and providing opportunities for economic self-reliance.

The study also established that the industry contributes to income generation among youths. In particular, income earned from the business was found to significantly contribute to the ability of operators to meet their basic needs. However, the insignificant effects observed for stable income, improved income, and overall economic well-being suggest that income from the industry may not always be sufficiently stable or substantial to guarantee sustained improvements in living standards.

Overall, the study concludes that the Okada and Keke Napep industry constitutes an important informal economic activity that supports youth employment and income generation in Ikwo. Its contribution can be strengthened through appropriate regulation, improved road infrastructure, access to affordable finance, skills development, security measures and better operating conditions. Such interventions would enable the industry to provide more sustainable livelihood opportunities while contributing to inclusive local economic development.

5.2 Recommendations

Based on the findings of the two objectives, the study makes the following broad recommendations:

1. Strengthen Youth Employment through the Okada and Keke Napep Industry: Government and relevant authorities should recognize the industry as an important source of youth employment in Ikwo and provide supportive measures such as affordable financing, improved road infrastructure, skills training, security, and appropriate regulation to make participation more sustainable.
2. Enhance Income Generation and Economic Well-being: Access to affordable credit, savings schemes, business-management training, and supportive operating conditions should be improved for operators. These measures would help increase the income generated from the industry, improve operators' ability to meet basic household needs, and strengthen its contribution to local economic development.

REFERENCES

Abasili O. M., Okonkwo U. C., & Iweriolor S. (2022), Effective Tricycle Maintenance Strategy in a Growing Economy: Case Study of Selected Brands in Nigeria. *Journal of Recent Activities in Production*, Volume-7, Issue-3 (September-December, 2022). e-ISSN: 2581-9771.

- Abayomi, A. A., Adeola, O. J., Boluwaji, A. R., Oluremi, A. H., Bolanle, O., Sina, O. J., ... & Adeyemi, O. E. (2024). Youths' Engagement in Agriculture: Implications for Rural Development in Nigeria. *African Journal of Development Studies (formerly AFFRIKA Journal of Politics, Economics and Society)*, 14(4), 471-487.
- Abdullah A., Ababio-Donkor A., & Adams C. A. (2022). Gender Disparities in the Access and Use of Urban Public Transport in Abuja, Nigeria. *Sustainability* 2022, 14, 5219. <https://doi.org/10.3390/su14095219>.
- Abdulrazaq, B. O., & Lambe, E. O. (2024). Unemployment Challenges in Nigeria: The Imperative for Economic Diversification. *Kashere Journal of Politics and International Relations*, 2(2), 302-317.
- Abubakar, S. S., Ying Hooi, K., & Rogers, R. A. (2024). Riding the dragon's rails: unpacking the impacts of Chinese-built railway in Nigeria. *Journal of Asian and African Studies*, 00219096241295630.
- Achieng, C. F. (2024, December). *An Assessment Of Enterprise Dynamics Of Women Street Food Vendors In Urban Informal Settlements: The Case Of Mukuru Kwa Reuben, Nairobi, Kenya*.
- Adejoke, O. I. (2025). Youth educational empowerment through entrepreneurial skills development: A transformative strategy for long-life impact in Lagos State. *Journal of Educational Foundations*, 14(1), 133-147.
- Adeniran, A. (2020). Employment Generation Through Informal Transport Business: A Case Study of Ilorin Metropolis. *Contemporary Macroeconomic Developments in Nigeria: Implications for Rapid Growth and Sustainable Development*, 205-219.
- Adenutsi, D. E. (2023). Entrepreneurship, job creation, income empowerment and poverty reduction in low-income economies. *Theoretical Economics Letters*, 13(06), 1579-1598.
- Adetunji A. E., & Akintayo F.O. (2026), Evaluation of Tricycle as a Public Transportation System in Osogbo Town, Nigeria. *Journal of Empirical and Non-Empirical Research* Volume 2, Issue 1, Page 247-262 | Article No. 29. DOI: 10.4898/jener.v2i1.a29.
- Adeyanju, D. F., Akomolafe, K. J., Mburu, J. I., Ohanwusi, E. O., Adebayo, S. A., & Joy, C. (2023). Does entrepreneurship improve the livelihood of young people? Evidence from the NDE program beneficiaries in Kano state, Nigeria. *Cogent Business & Management*, 10(2), 2248735.
- Adomabea, O., Quaye, I., Yeboah, M., & Adarkwa, K. K. (2023). Socio-economic factors contributing to crashes involving motor tricycles in greater Kumasi Metropolitan Area, Ghana. *Transportation Research Record*, 2677(7), 459-473.
- Agbabiaka H. I., Maina B. J., Oladeji P. B. (2023), Towards Poverty Reduction and Economic Development of Kano City: An Assessment of the Tricycles Transportation Patronage and its Revenue Generation Capacity. *FUOYE PLANNING JOURNAL (FJP) VOL. 1, NO. 1, JULY 2023. ISSN 2992-3840*.
- Akamike, J. O., & Okonkwo, O. N. (2024). INNOVATIVE TRANSFORMATIONS FOR SUSTAINABLE DEVELOPMENT IN NIGERIA'S MONETARY AND FISCAL POLICIES. *African Journal of Social and Behavioural Sciences*, 14(4).
- Akanmu, A. A., Salisu, U. O., & Olorunfemi, S. O. (2025). Operational Characteristics of Transport Modal Choice in Lagos, Nigeria: Implications for Meeting Commuters' Mobility Demand and Satisfaction. In *Transport Services Management in Africa* (pp. 305-328). Routledge.
- Akinrinlola, A. D. (2025). THE ROLE OF MIGRANTS AS AGENTS OF SUSTAINABILITY AND DEVELOPMENT WITHIN THE INFORMAL ECONOMY OF ONDO STATE, NIGERIA. *MULTIDISCIPLINARY JOURNAL OF MANAGEMENT AND SOCIAL SCIENCES*, 2(2).

- Arize, B. C. (2023). The challenges of industrialization in Nigeria and the way forward. *International Journal of Research and Innovation in Social Science*, 7(5), 691-704.
- Atuchukwu O. L., & Leonard U. O. (2024). Entrepreneurs' Perceived Quality of Tricycle Brands for Transportation in South-East, Nigeria. *International Journal of Scientific Research in Humanities Legal Studies and International Relations*, Vol. 8, No. 1, November, 2024. e-ISSN: 2579 – 0994.
- Bakare, M. I. (2024). Curbing Social Vices through Social Studies Curriculum in Nigeria. *African Journal of Educational Management*, 25(2), 438-449.
- Busari, D. A. (2024). Female commercial three-wheel tricycle (kèké marwa) riders in the Ibadan metropolis, Nigeria. *The African informal economy: structure, dynamics, and resilience*, 5, 23.
- Busari, D. A. (2024). Female commercial three-wheel tricycle (kèké marwa) riders in the Ibadan metropolis, Nigeria. *The African informal economy: structure, dynamics, and resilience*, 5, 23-44.
- Bykova, V., Khasanova, M., & Polonkoeva, F. (2024). The Role of Human Capital in Economic Development: an Analysis of Factors Contributing to Economic Growth. *Reliability: Theory & Applications*, 19(SI 6 (81)), 1676-1682.
- Chidozie I. C., and Sunday O. P. (2016), Experiential Factors Affecting the Effectiveness of the National Poverty Eradication Program (Napep) as Poverty Eradication Strategy in Ebonyi State. *Global Journal of Applied, Management and Social Sciences (GOJAMSS)*; Vol.11 February 2016; P.233 – 245 (ISSN: 2276 – 9013).
- Chipangura, M., Magidi, M., & Brown-Luthango, M. (2026). Is the informal economy a space for 'waithood' or a long-term livelihood strategy? Experiences of graduates in Bulawayo, Zimbabwe. *Humanities and Social Sciences Communications*.
- Chukwu, C. C. (2023). Education no longer at ease: The necessity to build a new employable and productive Society for Nigerian Youths through quality education. *International Journal of Education and Evaluation*, 9(6), 7-27.
- Conable, J. E., & Onwuka, S. C. (2024). Poverty Alleviation in Nigeria: A Decadal Examination of Political Economic Forces and Implications for Future Initiatives, Spotlighting Microfinance Banks. *interventions*, 14(2).
- Das, P. (2025). Unlocking potentials: The impact of human capital investment in youth informal employment in emerging markets and developing economies. *International Journal of Educational Development*, 116, 103302.
- Edewor, S. E., Kollie, G. B., & Olaoye, I. J. (2023). Conditions driving youth employment in key sectors of the Nigerian economy. *Sustainability*, 15(7), 6096.
- Effiong, U. E. (2022). Industrial policies and industrial sector performance in Nigeria. *Asian Journal of Economics, Finance and Management*, 7(2), 24-45.
- Eze, C., Chikeleze, O., & Okwueze, O. (2024). Youth as Catalysts for Socio-Economic Development: The Role of Technological Innovation and Social Change in Enugu State, Nigeria. *Journal of Policy and Development Studies*, 16(1), 329-346.
- Feye, D. D. (2025). The effect of increased student enrolment at Ethiopian universities on graduates' employment prospects and educational quality. *Review of Education*, 13(2), e70084.
- Fobosi, S., Malandela, G., & Toshę-Mlambo, Y. (2026). Navigating Regulatory Challenges Within Paratransit Operations in Africa: Balancing Safety and Socio-economic Equity. *The Informal Business Sector in BRICS+ Countries*, 189-202.

- Gábos, A., Binder, B., Branyiczki, R., & Tóth, I. G. (2024). Unravelling the relationship between employment, social transfers and income poverty: Policy and measurement. *Journal of European Social Policy*, 34(3), 289-308.
- George, A. S. (2024). India's employment crisis: causes, consequences, and potential solutions. *Partners Universal International Research Journal*, 3(3), 38-60.
- Habiyaremye, A., King, N. A., & Tregenna, F. (2022). Innovation and socio-economic development challenges in South Africa: An overview of indicators and trends. *The South African Research Chair in Industrial Development (SARChI)*.
- Haruna, H., & Haliru, A. M. (2025). Youth Unemployment and Rising Inflation in Nigeria: A Call for Sustainable Economic Empowerment Strategies. *Journal of Philosophy, Policy and Strategic Studies*, 1(5), 129-137.
- Hayatu M., Ibrahim N. T., Isma'ila A., & Chiranchi H. M. (2023), Assessment of the Contribution of the Keke Napep on Youth Employment in Sokoto North Local Government Area. KASU JOURNAL OF ECONOMICS AND DEPARTMENT STUDIES (KJEDS) – Vol. 9 No. 1 June, 2023.
- Ibrahim A., and Magaji A. M. (2024), Keke Napep Business Service on Campus as a Means of Transportation: A Conceptual View. *International Journal of Entrepreneurship, Technology and Innovation (IJETI)* Volume 1, Issue 2, October 2024.
- Ibrahim, A. A., Kiiza, J., & Atekyereza, P. (2023). Youth empowerment against poverty in Yobe State, northern Nigeria. *Journal of community service and empowerment*, 4(3), 442-458.
- Igiegba S., Iyoha A. E., & Chukwudi O. A. (2025), Poverty Eradication Program (NAPEP) and its Relevance in National Economy: A Study of the National Directorate of Employment in Edo State. African Scholar Publications & Research International, VOL. 08 NO. 6, MAY, 2025. E-ISSN 3027-1401.
- Ikenna, O. M., sinnarong, N., Nuthasen, K., & Nuthasen, W. (2025). JOB CREATION THROUGH THE INFORMAL ECONOMY IN THE SOUTHEAST OF NIGERIA. *Procedia of Multidisciplinary Research*, 3(5), 83-83.
- Inikpi A. R., and Matthew O. D. (2022), Assessment of Alternative Sources of Revenue Generation for Sustainable Economic Development in Kogi State, Nigeria (2010-2018). *IJHRD* Vol. 8 (1), September, 2022.
- Inikpi, A. R., & Okwoli, D. (2022). ASSESSMENT OF ALTERNATIVE SOURCES OF REVENUE GENERATION FOR SUSTAINABLE ECONOMIC DEVELOPMENT IN KOGI STATE, NIGERIA (2010-2018). *INTERNATIONAL JOURNAL OF HUMAN RESOURCE DEVELOPMENT (IJHRD)*, 85.
- Kaiser, N., & Barstow, C. K. (2022). Rural transportation infrastructure in low-and middle-income countries: a review of impacts, implications, and interventions. *Sustainability*, 14(4), 2149.
- Korede, H. I., & Olufemi, F. J. (2024). Rethinking transportation mobility and social equity policy in Lagos metropolis. *Journal of Social Commerce*, 4(2), 65-79.
- Lawal A. (2025), A Historical Analysis of the Rise of “Achaba” (Commercial Motorcycle Transport) in Katsina Metropolis, Katsina State, 1987 – 2015. AREWA HOUSE JOURNAL, Vol. 7 (October, 2025). DOI: <https://doi.org/10.63725/ahj.v7.i1.05>.
- Lenshie, N. E., Ezeibe, C. C., Joshua, M. M. A., & Nwangwu, C. (2022). From motorcycle to tricycle: neoliberal political economy, informal transportation, and urban/peri-urban Mobility in Nigerian cities. *Transportation journal*, 61(2), 195-227.

- Lenshie, N. E., Ezeibe, C. C., Joshua, M. M. A., & Nwangwu, C. (2022). From motorcycle to tricycle: neoliberal political economy, informal transportation, and urban/peri-urban Mobility in Nigerian cities. *Transportation journal*, 61(2), 195-227.
- Leonard, O. (2024). Entrepreneurs' Perceived Quality of Tricycle Brands for Transportation in South-East, Nigeria. *International Journal*, 8(1).
- Magaji, S., & Temitope, Y. A. (2022). Government Intervention in Small Scale Road Transport Business and Poverty Alleviation. *Indiana Journal of Economics and Business Management*, 2(2), 28-34.
- Magaji, S., & Temitope, Y. A. (2022). Government Intervention in Small Scale Road Transport Business and Poverty Alleviation. *Indiana Journal of Economics and Business Management*, 2(2), 28-34.
- Mchunu, G. G., Kuupiel, D., Ncama, B. P., Isike, C., Kistan, M., Pillay, J. D., & Duma, S. E. (2025). Public transport systems and safety of female commuters in low-and-middle-income countries: a systematic scoping review. *BMC Women's Health*, 25(1), 264.
- McMillan, M., & Zeufack, A. (2022). Labor productivity growth and industrialization in Africa. *Journal of Economic Perspectives*, 36(1), 3-32.
- Mohammed S. N., Canice E. E., & Caleb R. L. (2026), Coping Strategies of Sokoto State Informal Transport Sector Operators and Government Policy Responses Post Fuel Subsidy Removal in Nigeria. *International Journal of Latest Research in Humanities and Social Science (IJLRHSS)* Volume 09 - Issue 01, 2026. www.ijlrhss.com || PP. 13-22.
- Nwaka, I. D., & Emeagwali, O. L. (2024). Participation and returns from informal service-oriented non-farm enterprises: Evidence from a survey of Nigerian households. *Plos one*, 19(3), e0298794.
- Nwosu, J., & Folarin, O. (2025). Bridging the formality divide: A cross-national analysis of economic informality determinants. *Journal of Business and Economic Options*, 8(2), 1-9.
- Ogbodo, J. A., Okonkwo, P. C., & Ezema, F. S. (2022). Agricultural co-operatives and income generation for farmers in Ebonyi State, Nigeria. *International Network Organization for Scientific Research (INOSR) Arts and Humanities*, 8(1), 21-39.
- Ogbuabor, J. E., Emeka, E. T., & Iheonu, C. O. (2025). Do industrialization, trade openness, and labor force participation enhance Africa's productive capacity?. *Innovation and Development*, 15(1), 207-232.
- Ojo, S. O., & Afolaranmi, A. O. (2024). From Protests to Progress: Unlocking the Potential of the Nigerian Youth for Political Reform. *British Journal of Multidisciplinary and Advanced Studies*, 5(4), 100-115.
- Okorie, C. O., Nwosu, C. P., Nwaigwe, H. C., Atukpa, E. I., Onele, S., & Nwigwe, C. N. (2024). Youth-Related Crises and the dynamics of Public Sector Management in Nigeria. *Nigerian Journal of Social Psychology*, 7(2).
- Okoro, A. N., & Ojo, C. O. (2024). BREAKING THE CYCLE: UNIVERSITY EDUCATION AND POVERTY ALLEVIATION IN NIGERIAN YOUTH DEVELOPMENT. *Allied Journal of Psychology and Counseling*, 12(1), 13-20.
- Oladele, M. A. (2024). Investing in transportation: An effective road map to sustainable economic growth. *International Journal of Humanities, Social Sciences and Education (IJHSSE)*, 11(3), 53-62.
- Olutayo, M. A., & Adeyemo, M. A. (2024). Women's Involvement in Keke and Boda Boda Transport Business in Nigeria and Kenya. *The African Informal Economy: Structure, Dynamics and Resilience*, 5, 7-22.
- Oluyinka O. A., Olasunkanmi O. O., & Saanu B. S. (2019), Effect of Keke Napep (Tricycle) On Last Mile Transportation of Commuters in Ojo Local Government Area of Lagos, Nigeria. *Global Academic*

- Journal of Economics and Business, 2019; 1(2) 43-50. DOI: Available online at <https://gajrc.com/gajeb>.
- Omoju, O. E., Ikhide, E. E., Olanrele, I. A., Abeng, L. E., Petreski, M., Adebayo, F. O., ... & Muhammed, A. M. (2023). Empirical Review of Youth-Employment Policies in Nigeria. *arXiv preprint arXiv:2310.07789*.
- Omoju, O. E., Ikhide, E. E., Olanrele, I. A., Abeng, L. E., Petreski, M., Adebayo, F. O., ... & Muhammed, A. M. (2023). Empirical Review of Youth-Employment Policies in Nigeria. *arXiv preprint arXiv:2310.07789*.
- Omolo, J. (2022). Growth Sectors, Youth and Employment: Challenges and Way Forward: A Synthesis Paper of Ethiopia, Mali and Nigeria Country Case Studies.
- Omowole, B. M., Olufemi-Phillips, A. Q., Ofodile, O. C., Eyo-Udo, N. L., & Ewim, S. E. (2024). The role of SMEs in promoting urban economic development: A review of emerging economy strategies. *Journal Name Unspecified*.
- Onwuchekwa, N. B., Onyezere, C. V., & Ewa, O. I. (2024). IMPACT OF HUMAN CAPITAL DEVELOPMENT ON YOUTH EMPOWERMENT IN NIGERIA (2013-2023). *INTERNATIONAL JOURNAL OF PUBLIC ADMINISTRATION AND DEVELOPMENT STUDIES*, 1(1), 30-48.
- Owusu, V. (2025). Effect of rising fuel prices on small-scale fisheries livelihoods and marine sustainability in Ghana. *PloS one*, 20(1), e0317260.
- Pagiel A. E., Mijah E. E., Asaph P., Michael F., and Tumba E. H. (2024), X-Raying the Value Chain of Tricycle Business as a Means of Transportation and Its Impact on Poverty within MUBI Metropolis, Adamawa State, Nigeria. *International Journal of Humanities Social Science and Management (IJHSSM)* Volume 4, Issue 4, Jul.-Aug., 2024, pp: 1087-1100. www.ijhssm.org.
- Popogbe, O. O., & Olohunlana, A. O. (2025). Africa's Structural Transformation and Inequality Dynamics: Could Governance Quality Explain the Developer's Dilemma?. *The Journal of Developing Areas*, 59(2), 109-123.
- Sultana, N., Rahman, M. M., & Khanam, R. (2022). Informal sector employment and economic growth: evidence from developing countries in SDG perspective. *Sustainability*, 14(19), 11989.
- Tucho, G. T. (2022). A review on the socio-economic impacts of informal transportation and its complementarity to address equity and achieve sustainable development goals. *Journal of Engineering and Applied Science*, 69(1), 28.
- Tucho, G. T. (2022). A review on the socio-economic impacts of informal transportation and its complementarity to address equity and achieve sustainable development goals. *Journal of Engineering and Applied Science*, 69(1), 28.
- Uchegbue, B. C., & Ifedi, F. O. (2023). Unemployment, insecurity and The Nigerian national directorate of employment. *Caritas Journal of Management, Social Sciences and Humanities*, 2(2).
- Udodiugwu, M. I. (2022). Entrepreneurship Skill Acquisition and Poverty Eradication in Rural Communities in Anyamelum Local Government Area, Anambra State, Nigeria. *International journal of Business, Economic and Entrepreneurship Development in Africa*.
- Udoikah, J. M., & Nkwede, V. I. (2023). YOUTH ENTREPRENEURSHIP DEVELOPMENT PROGRAMME AND UNEMPLOYMENT IN THE SOUTH EASTERN NIGERIA: EBONYI STATE IN PERSPECTIVE (2015-2023). *SOUTH EAST JOURNAL OF POLITICAL SCIENCE*, 9(2).

- Uduji, J. I., & Okolo-Obasi, E. N. (2022). Empowerment of rural young people in informal farm entrepreneurship: the role of corporate social responsibility in Nigeria's oil producing communities. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(6), 924-947.
- Uduji, J. I., & Okolo-Obasi, E. N. (2022). Empowerment of rural young people in informal farm entrepreneurship: the role of corporate social responsibility in Nigeria's oil-producing communities. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(6), 924-947.
- Umoh, E. (2025). Unemployment as a driver of crime: Exploring the roles of poverty, youth restiveness, and effectiveness of government interventions in emerging economies. *Unemployment as a Driver of Crime: Exploring the Roles of Poverty, Youth Restiveness, and Effectiveness of Government Interventions in Emerging Economies* (February 12, 2025).
- Uzoechina, B. I., Ibikunle, J. A., Olasehinde-Williams, G., & Bekun, F. V. (2023). Illicit financial outflows, informal sector size and domestic resource mobilization in selected African countries. *Journal of Economic and Administrative Sciences*, 39(4), 1137-1159.
- Virk, A., Nelson, E. U., & Dele-Adedeji, I. (2023). The challenge of youth unemployment in Nigeria. *Journal of International and Comparative Social Policy*, 39(3), 319-329.
- Wycliff S., & Sararinkuka A. A. (2017). Urban Transportation in Northern Nigeria: An Exploratory Study of Commercial Motorcycle (Ahaba) Transport System in the Socio-economic Growth and Development of Katsina Metropolis, *Lapa Journal of Nigerian History*, Vol. 13 (3)