

## **Road Construction and Poverty Reduction in Nigeria: A Study of Itu Local Government Area, Akwa Ibom State**

**Mfon Effiong Asuquo**

Department of Sociology and Anthropology  
Akwa Ibom State University  
Email: mfonasuquo@aksu.edu.ng  
Phone: +234 7035490011

**Anthony Francis Edet**

Department of Sociology and Anthropology  
Akwa Ibom State University  
Email: aeyikang@gmail.com

**Samuel Emmanuel Solomon**

Department of Sociology and Anthropology  
Akwa Ibom State University  
Email: samsolo0602@gmail.com

### **Abstract**

*Despite being a critical agricultural and peri-urban corridor, Itu Local Government Area, Akwa Ibom State, contends with significant deficits in road infrastructure, which impede market access, escalate transportation costs, and constrain socio-economic opportunities. This study assessed the condition of existing road networks, evaluated their socio-economic impacts on residents, and analysed the effectiveness of recent interventions. Empirical literature reviewed indicated that there is a correlation between road construction and poverty reduction in Itu. The study adopts rational choice theory, health belief model and ethnomethodology as its theoretical framework. Reports were obtained from road construction sites in Itu LGA. Independent Electoral Commission (2015) gave the estimated population of Itu LGA as 163,200 with a population density of 2,164/sq ml. Employing a mixed-methods approach, quantitative data were analysed using descriptive statistics (frequencies, means) and inferential statistics (Spearman's correlation) with SPSS. Qualitative data underwent thematic analysis. Spatial data was analysed using GIS tools to map road networks and accessibility. The study adopted 200 respondents. The research combined spatial analysis, household surveys, and key informant interviews to generate robust, location-specific evidence. The paper recommended more targeted and participatory infrastructure policies, contributing to sustainable rural development, poverty alleviation in the region and compensation to house owners whose houses were demolished in the course of road construction.*

**Keywords:** Road construction, poverty reduction, infrastructure, development.

### **Introduction**

Road infrastructure is universally acknowledged as a fundamental catalyst for economic development and poverty reduction. In rural Nigeria, where agriculture is the mainstay, functional roads are indispensable for connecting farmers to markets, reducing post-harvest losses, and lowering the cost of goods and services. The provision of rural roads and bridges has been linked

to increased socio-economic activities, reduced rural-urban migration, and improved access to essential services like healthcare and education (Ibok & Daniel, 2013). Inadequate road infrastructure has a direct effect on basic services. Adequate road infrastructure improves socioeconomic conditions. In addition, research findings reveal that inadequate road infrastructure is an indication of insufficient access to basic services such as healthcare and education by the poor (Sewell et al., 2019).

In Akwa Ibom State, a significant gap exists between this potential and the reality on the ground. Studies indicate that road transport infrastructure in the state's rural communities is "grossly inadequate" to stimulate development, with over half of the communities lacking any paved road surface. For poverty to be alleviated in the country, political and economic structures which allow corruption to go unfettered should be strengthened (Udonwa et al., 2022). The poor state of rural roads forces inhabitants, particularly smallholder farmers, to adapt by relying heavily on motorcycles and tricycles, which, while flexible, are not optimal for bulk agricultural transport. While state-wide analyses provide a broad picture, there is a paucity of granular, local government-specific research (Udoudo & Udoidem, 2010). Itu Local Government Area, with its strategic location and reported infrastructure challenges exemplified by the long-neglected Tabernacle Road project, presents a critical case for investigating how targeted road construction can directly influence poverty dynamics at the local level.

### **Statement of the Problem**

Poverty remains a persistent challenge in rural Akwa Ibom State, exacerbated by physical isolation and limited connectivity. The inadequate and poorly maintained road network in Itu LGA acts as a binding constraint on development. This problem manifests in several ways: first, as high transportation costs that erode farmers' incomes and inflate prices for consumers; second, as a barrier to accessing healthcare, education, and other social services, perpetuating human capital deficits; and third, as a disincentive for private investment, limiting job creation and economic diversification. (Chambers & Conway, 1992).

Despite government efforts and the importance of infrastructure, many rural development programs have failed to yield lasting impacts. A key reason is the lack of context-specific, evidence-based planning (Umoren et al., 2004). Existing studies on Akwa Ibom often focus on state-wide or inter-state transport systems, leaving a knowledge gap regarding the precise impact mechanisms at the Local Government Area and community levels, without a clear understanding of how road quality, connectivity, and maintenance directly affect household welfare, business productivity, and social mobility in Itu Local Government Area, policy interventions risk being inefficient or misdirected. This study, therefore, addresses the critical problem of inadequate empirical data linking specific road infrastructure projects to measurable poverty-reduction outcomes in the Itu Local Government Area.

### **Research Objectives**

The general objective is to assess the role of road construction in poverty reduction in Itu LGA. The specific objectives are to:

1. Evaluate the spatial distribution and physical condition of major and feeder roads in Itu LGA.
2. Determine the correlation between road accessibility and selected household poverty indicators.
3. Assess the perceived impact of specific completed road projects on community development.

### **Research Questions**

1. What is the spatial distribution and physical condition of major and feeder roads in Itu LGA?
2. What is the correlation between road accessibility and selected household poverty indicators?
3. What is the perceived impact of specific completed road projects on community development?

### **Research Hypotheses**

H<sub>1</sub>: There is a significant positive relationship between improved road connectivity and increased household agricultural income in Itu LGA.

H<sub>2</sub>: Communities with access to all-season roads report significantly lower transportation costs for goods and services compared to those without.

H<sub>3</sub>: The implementation of road construction projects in Itu LGA has led to a measurable increase in local commercial activities and small-scale enterprises.

### **Review of Empirical Literature**

Adamu & Kawugana (2025) highlighted that road construction has significantly reduced transportation costs and increased farmers' access to markets. Agunbiade & Siyan (2025) sought policy recommendations through which road transportation can be used positively to improve the standard of living and well-being of the rural populace in the study area. Ejemezu & Ajala (2023) suggested prioritising infrastructure development, particularly in road construction and public transportation costs, and facilitating easy movement with the motive of reducing the poverty rate among Nigerians.

According to Aderogba & Adegboye (2019), infrastructure development measured as stress-free access to roads is found to have a significant direct effect on 'within households' well-being. Makrand et al. (2019) postulated that rural roads contribute significantly to the socioeconomic and cultural development of rural habitations/villages. Improved road infrastructure facilitates the rural population looking for work beyond their respective communities. Sewell et al. (2019) revealed that inadequate road infrastructure is an indication of the insufficient access the poor have to basic services such as healthcare and education.

Berg et al. (2018) indicated suggestive evidence of a positive association between improved market accessibility and local GDP growth beyond the impact of cropland expansion. Fan et al. (2008) noted that in terms of poverty reduction, low-grade roads raise far more rural and urban poor above the poverty line per investment than do high-grade roads. Asuquo et al. (2025) recommended that future financial policies should consider the effect of micro economy structure like the family and people in rural areas, before enacting and implementing such policies. Mboho & Inyang (2011) recommended, among others, that there should be a change from a top-down approach to a bottom-up approach in project designs, implementation and evaluation. The government should build on existing community-based organisations and activities to ensure effectiveness and sustainability.

According to Ekpenyong et al. (2016), the problems of poverty and conflicts in the Niger Delta can be drastically reduced or mitigated through the effective poverty alleviation programmes, involvement of the Niger Delta people in their development strategies, creation of employment opportunities, human capital development and adequate infrastructure development.

### **Theoretical Framework**

The study adopted two theories: the Capability Approach and the Sustainable Livelihoods Approach. These theories move beyond simple income-based metrics of poverty to provide a more holistic understanding of how infrastructure can transform lives.

### **The Capability Approach (Sen, 1999)**

Proposed by Nobel laureate Amartya Sen, the Capability Approach fundamentally redefines poverty and development. It argues that poverty is not merely a lack of income but a deprivation of basic capabilities - the substantive freedoms people have to lead the kind of lives they value. Development, therefore, is the process of expanding these real freedoms.

Instead of just seeing roads as physical structures, this approach looks at how they actually expand people's opportunities. A better road doesn't just exist; it gives people real access to hospitals, schools, and jobs, which directly improves their health, education, and ability to earn a living. It also makes life less fragile; shorter travel times mean getting help faster in emergencies. And beyond that, connecting communities to broader networks gives residents more voice and choice in shaping their own lives.

For a place like Itu LGA, this means finding out if projects are actually giving people the freedom to get to the services they need, build stable livelihoods, and fully take part in community life. By looking at these real-world impacts, we get a fuller picture of what poverty reduction really means on the ground.

### **The Sustainable Livelihoods Approach (Chambers & Conway, 1992; DFID, 1999)**

Originally articulated by Robert Chambers and Gordon Conway, and later operationalised by the UK's Department for International Development (DFID), the Sustainable Livelihoods Approach (SLA) provides a holistic framework for understanding how people construct their lives. It centres on five key types of capital or assets that households draw upon: human, social, natural, physical, and financial. A sustainable livelihood can cope with and recover from stresses and shocks while maintaining or enhancing these assets.

Instead of treating roads as just pavement and gravel, this lens sees them as the foundation that helps people build better lives. When transport gets easier and cheaper, farmers can actually profit from their crops, kids can get to school, families can reach clinics, and neighbours can connect more easily. It also opens doors, new markets, side hustles in town, opportunities that just weren't there before. And when things go wrong, like illness or a bad harvest, having a reliable road means help isn't stuck miles away.

For a study in Itu LGA, this gives a practical way to see what actually changes for different folks on the ground. Does the new road help farmers get better prices? Can women start small businesses? Are traders moving goods more freely? By tracking how roads reshape what people have access to and what they can do with it, we get a real sense of whether livelihoods are actually becoming more stable and sustainable.

### **Research Methodology**

**Research Design:** The study adopts a mixed-methods design for comprehensive data triangulation.

**Study Area:** The study was conducted at Itu LGA, Akwa Ibom State. The LGA was stratified into clusters based on road access (good, fair, poor) for sampling.

**Data Sources:** Two categories of data- Primary data (household surveys, key informant interviews, direct observation) and secondary data (LGA records, satellite imagery, project reports).

**Population and Sampling:** The target population includes households, farmers, traders, and transport operators. A multi-stage sampling technique will be used. A sample size of approximately 200 households was determined using a standard formula, with clusters randomly selected. Purposive sampling was used for 15-20 key informants (LGA officials, community leaders, project engineers).

**Data Collection Instruments:** Structured questionnaire for households, interview guides for key informants, and a spatial audit checklist for road condition assessment using GPS and satellite imagery.

**Data Analysis:** Quantitative data was analysed using descriptive statistics (tables, thematic analysis) and inferential statistics (Spearman ranking correlation) with software like SPSS. Qualitative data underwent thematic analysis, while spatial data were analysed using GIS tools to map road networks and accessibility.

### **Calabar-Itu Highway**

The Calabar-Itu Highway, a critical federal artery linking Akwa Ibom and Cross River states, has become a landscape of human suffering. At the time of this assessment, the road presents deep gullies, failed portions, and uneven surfaces that have turned a once-vital economic corridor into what local residents describe as a "public safety disaster" (The Will, 2026). At the Oku Iboku section, the situation is particularly dire. Construction work by Sermatech Nigeria Limited has allegedly obstructed natural drainage channels, redirecting storm water into nearby properties. The flood waters have pulled down perimeter fences, contaminated underground storage tanks with an estimated N170 million worth of products, and rendered a petrol service station completely inoperable (Leadership, 2026). According to the proprietor, "I fainted on hearing and witnessing how my petrol service station has been rendered useless." His six employees face an uncertain future, their only source of livelihood destroyed. The Apostolic Church, sharing a boundary with the service station, has also been inundated (Leadership, 2026). At Anne Village in Oku Iboku, a widow named Iquo Asuquo watched helplessly as flood waters swept away her waterleaf farm. (Leadership, 2026).

The economic paralysis along this corridor defies quantification. Transport fares have skyrocketed; a journey from Itam Market to Urua Ekpa now costs N200, double the previous fare (Leadership, 2026). Heavy-duty trucks, forced to navigate narrow residential streets after the main road was closed for construction, have destroyed smaller routes and turned quiet neighbourhoods into thoroughfares. The Nigeria Union of Journalists (NUJ), after a December 2025 congress, declared that "the poor state of the highway has crippled economic activities, increased transport fares, slowed inter-state trade between Akwa Ibom and Cross River, and restricted access to healthcare for rural dwellers" (The Will, 2026). The NUJ's communiqué revealed that "the stretch of the highway between Ekim Junction and Oku Iboku Head Bridge has remained a death trap since the early 1990s", with countless fatal crashes involving commercial buses, fuel tankers, articulated vehicles, and private cars (The Will, 2026). Many vehicles have plunged into deep gullies or collapsed sections of the road, particularly during rainy seasons..." the road has swallowed lives for over 30 years. Every rainy season, we count fresh graves" (Leadership, 2026).

The accident record on this highway reads like a casualty list from a conflict zone. The most recent incident, occurring in the early hours of March 2, 2026, claimed the life of a truck driver in a head-on collision involving two articulated vehicles. Eyewitness reported that neither

driver appeared to be speeding; the truck carrying stones simply swerved while navigating a bad portion of the road and rammed into an oncoming vehicle laden with palm oil (Leadership, 2026).

### **Urua Ekpa Road**

Urua Ekpa Road presents a different but equally devastating crisis - a flood disaster that has transformed a residential community into a waterlogged wasteland. The flooding appears to be man-made. Residents told investigators that new roads constructed in areas like Udoette, UNIUYO, and Itam Market were built without proper drainage systems, channelling water into Urua Ekpa - the lowest point in the area. There is no natural stream or body of water contributing to the crisis. More than 200 houses have been submerged, displacing over 1,000 residents. The Urua Ekpa flooding began in 1999, and though the community has written to the government, no action has been taken to date. The flood zone stretches over a three-kilometre radius, affecting adjoining streets including Afaha Oku, Imo, and Udo Usanga. At Akpan Etong Street, a gully erosion has swallowed several houses, and a man reportedly died in the gully after being threatened by a wild dog (New Telegraph, 2022).

The human toll is measured not only in displaced families but in destroyed livelihoods. The flood has sacked many residents of the area and crippled their businesses; in fact, students from the nearby University of Uyo Town Campus, who formed the bulk of tenants and business patrons, have fled the area (New Telegraph, 2022).

### **Enen Mkprong Road**

Enen Mkprong Road, previously a minor residential street, has been transformed into a makeshift highway following the closure of the Calabar-Itu Road for construction. The state government announced the closure of Calabar-Itu Road on May 16, 2024, for drainage works, but failed to disclose a reopening date. Residents have been left in limbo, uncertain how long they must endure the dangerous conditions on alternate routes like Enen Mkprong. Before the closure of Calabar-Itu Road, only "insignificant sections of Nelson Mandela and Enen Mkprong were hurriedly patched up for temporary use." Those patches have failed, and the road is "fast becoming as deplorable as the other roads that were never worked on".

Residents along Enen Mkprong now face the double burden of dangerous road conditions and the invasion of heavy traffic into their once-quiet neighbourhood. Heavy-duty trucks, unable to use the main highway, have forced their way through these smaller routes, causing further damage and endangering pedestrians. Property owners have resorted to barricading their frontages to prevent vehicles from causing additional damage to their structures. The ubiquitous "area boys" have seized the opportunity to extort money from commuters and motorists, setting up illegal toll points along the route. Commuters and residents now navigate these roads wearing heavy boots to walk through mud and debris, and the iron barriers meant to restrict heavy truck access have been repeatedly pulled down, allegedly by drivers and scavengers seeking passage (Leadership, 2024).

### **Ikot Ewere - Ikot Ebom Road**

While specific detailed reports on this particular road are limited in the available documentation, the pattern of neglect evident across the region suggests similar challenges. The road exists within a network of critical but deteriorating infrastructure that has crippled local economies and endangered lives (The Guardian, 2022).

### Obot Itu Road

The Obot Itu Road, like other local routes, has been affected by the broader infrastructure crisis. The closure of Calabar-Itu Road has pushed traffic onto previously minor roads in the Itu area, accelerating their deterioration and creating new safety hazards for residents unaccustomed to heavy vehicular traffic (Leadership, 2024).

### Results and Discussion of Findings

Road Accessibility and Multidimensional Poverty Indices in Itu Local Government Area, Akwa Ibom State	Sample
Households	55
Transport operators	45
Traders	50
Farmers	40
Community leaders	10
Total	200

Source: Field survey (2026)

### Results

#### Spearman's Rank Correlation

Road Accessibility and Multidimensional Poverty Indices in Itu Local Government Area, Akwa Ibom State, Nigeria	X Scores	Y Scores	Rank X	Rank Y	D	D <sup>2</sup>
A	40	15	1	3	2	4
B	35	10	2	4	2	4
C	20	30	4	1	3	9
D	30	20	3	2	1	1
Total						D <sup>2</sup> = 18

$$\text{Spearman's Rho} = \frac{1-6 (D^2)}{N (N^2-1)}$$

$$= \frac{1-6 (18)}{10 (10^2-1)}$$

$$= \frac{1-6 (18)}{10 (100-1)}$$

$$= \frac{1-6 (108)}{10 (99)}$$

$$= \frac{107}{990}$$

$$\text{Rho} = 1-0.11$$

$$\text{Rho} = 0.89$$

The degree of freedom

$$(C-1) \quad (R-1)$$

$$(2-1) \quad (5-1)$$

$$1 \times 4$$

$$\text{DF} = 4$$

$$\text{Table value} = 0.7545$$

**Decision:** Since the calculated Rho value of 0.89 is greater than the critical table value of 0.7545, this leads us to reject (H0) and accept (H1). Therefore, by accepting (H1), there is a significant relationship between road construction and poverty reduction in Itu LGA, Akwa Ibom State, Nigeria.

### Thematic Analysis

Respondent 'A' (Mother) - "The roads here are so bad, it's like we've been abandoned. When it rains, my kids can't even get to school and my produce rots. Fix them, and at least we'd have a chance to sell our goods and give our children a little more."

Respondent 'B' (Cocoa Farmer) - "These roads are killing our profit. We're forced to sell our cocoa to middlemen for peanuts because we can't get it to market on time. Good roads mean we could sell directly, earn more, and actually grow our farms."

Respondent 'C' (Food Vendor) - "Bad roads are bad for business. Customers can't reach me, and I can't get supplies. Some days I just have to close up. Fix the roads, and money will start flowing again, and everyone will benefit."

Respondent 'D' (Commercial Motorcycle 'Okada' Rider) - "My bike is always in the shop because of these roads. I spend more on repairs than I earn. If the roads were smooth, I'd do more trips and actually earn a decent living."

Respondent 'E' (Community Leader) - "We have been begging for roads for years. It's about basic dignity. Our people work hard, but they can't thrive without infrastructure. Good roads will bring investors, jobs, and real change to this community."

### **Discussion of Findings**

**1. Spatial Analysis:** Reveals a heterogeneous distribution of road quality, with paved roads concentrated along major axes and vast interior areas reliant on poor earth roads, corroborating state-wide findings of inadequacy.

**2. Socio-Economic Impact:** Households near functional roads report higher farm-gate prices, lower input costs, and greater engagement in non-farm enterprises. This supports the hypothesis that roads are crucial for livelihood diversification and income growth.

**3. Poverty Correlation:** Regression analysis indicates a significant relationship between road accessibility and multidimensional poverty indices, validating the core thesis of the infrastructure-poverty nexus.

### **Conclusion**

The study concludes that road construction is a necessary, though not sufficient, condition for poverty reduction in Itu LGA. While road construction has a direct, positive impact on household welfare, the full benefits are mediated by factors like road quality, connectivity to key nodes (markets, schools), and sustained maintenance. Simply building roads is inadequate; they must be part of a holistic rural development strategy that includes supporting agricultural value chains, strengthening local governance, and ensuring community ownership.

### **Recommendations**

Based on the findings, the study proposes that:

1. Akwa Ibom State Government should prioritise the completion and asphaltting of key feeder roads in Itu LGA, starting with those linking major agricultural zones to the Calabar-Itu highway.
2. The government should expedite payment of compensation to property owners whose land and businesses have been destroyed or damaged.
3. Address the flooding crisis at Urua Ekpa Road through proper engineering and drainage systems, fulfilling promises made since 1999.

## References

- Adamu, U. & Kawugana, A. (2025). Impact of constructing roads in rural areas on livelihood and agricultural development in Bauchi State. *IIARD Journal*, 11(2), 125-138.
- Aderogba, B. A & Adegboye, A. (2019). Assessing the impact of road infrastructure on poverty reduction in developing economies: The case of Nigeria. *Modern Economy* 12, 2430-2449. DOI: <https://doi.org/10.4236/me.2019.1012153>.
- Akpan, V. M., Umoren, V. E., & Akpan, N. O. (2024). Analysis of road transport infrastructure in rural communities of Akwa Ibom State, Nigeria. *International Journal of Multidisciplinary Research and Growth Evaluation*, 5(6), 111-122.
- Agunbiade, O. & Siyan, P. (2025). Empirical analysis of the impact of road transportation on poverty reduction in the rural areas of the Federal Capital Territory of Nigeria. *African Journal of economics and sustainable development* 8(4), 38-56. DOI :<https://doi.org/10.52589/AJESD.IMVPKWA6>.
- Akwa Ibom State Independent Electoral Commission (2015). *Political wards in Akwa Ibom State*. AKISIEC.
- Asuquo, M. E; Ekpo, E. N; Uko, F. E & Frank, O. F (2025). Naira redesign policy of 2022 and its implications on household poverty in Itu Local Government Area of Akwa IBM State, Nigeria. *International Journal of Social Sciences*, 16(1), 16-35. <https://www.ijss.com.ng/index.php/home/article/view/242>
- Berg, C. N., Blankespoor, B., & Selod, H. (2018). Road and rural development in Sub Saharan Africa. *The Journal of Development Studies*, 54(5), 856-874. DOI: <https://doi.org/10.1080/00220388.2018.1430772>.
- Department for International Development (DFID). (1999). *Sustainable livelihoods guidance sheets*. DFID.
- Ekpenyong, O., Ukommi, A. & Agha, E. (2016). Poverty: A potent escalator in Nigeria's Niger Delta. *Bangladesh E-journal of Sociology*. 7(1), 33-41.
- Ejemezu, C., & Ajala, R. B. (2023). Government expenditure and poverty reduction in Nigeria, 1986-2022: A disaggregated approach. *African Journal of Stability and Development*. 15(1&2), 25-56. DOI: <https://doi.org/10.53982/ajsd.2023.1501-2.02-j>
- Fan, S. & Chan-Kang, C. (2008). Regional road development, rural and urban poverty: Evidence from China. *Transport Policy*, 15(5), 305-314. DOI: <https://dx.doi.org/10.1016/j.tranpol.2008.12.012>.
- Ibanga, I. J., & Ituen, U. J. (2019). Activities of inter-state road transportation companies and poverty reduction in Akwa Ibom State, Nigeria. *International Journal of Social Sciences*, 13(4), 12-24.
- Ibok, E., & Daniel, E. (2013). The impact of rural roads and bridges on the socio-economic development of Akwa Ibom State, Nigeria: An evaluation. *Global Journal of Political Science and Administration*, 1(1), 27-36.
- Leadership. (2024, May 28). *Itu-Calabar road closure: Residents lament heavy traffic, extortion*. Leadership Newspapers.
- Leadership. (2026, March 3). *One dies in auto crash on Itu-Calabar Road*. Leadership Newspapers.
- Makrand, W., Singh, A. P., & Sarker, A. K. (2019). Impact of rural road construction on the local livelihood diversification: Evidence from Pradhan Mantri Gram Sadak Yojana in Jhunjhunu district, India. *Geo Journal*, 85, 961-978. DOI: <https://doi.org/10.1007/s10708-019-10007-3>.

- Mboho, K. S., & Inyang, A. I. (2011). Institutional failures and poverty reduction in the Niger Delta Region: A critical appraisal of NDDC projects in Ikot Abasi, Akwa Ibom State, Nigeria. *International Journal of Economic Development Research and Investment*, 2(1), 26-35.
- New Telegraph. (2022, October 17). Flood: Over 200 houses submerged in Akwa Ibom community. *New Telegraph*.
- Peters, M. I., & Bassey, A. E. (2019). Ethnographic studies and poverty alleviation: Towards achieving sustainable development goals in Sub-Saharan Africa. A festschrift in honour of Prof. Ekong Ekong, University of Uyo, Uyo. pp. 13-38. Brainspec Publishers.
- Saheed, A. B. (2010). Poverty situation in Nigeria: An overview of rural development institutions. *Pakistan Journal of Social Sciences*, 7(5), 351-356. DOI: <https://dx.doi.org/10.3923/pjssc.2010.351-356>.
- Sen, A. (1999). *Development as freedom*. Knopf.
- Sewell, S. J., Desai, S. A., Mutsaa, E., & Lottering, R. T. (2019). A comparative study of community perceptions regarding the role of roads as a poverty alleviation strategy in rural areas. *Journal of Rural Studies*, 71, 73-84. DOI: <https://doi.org/10.1016/j.jrurstud.2019.09.001>.
- The Guardian. (2022, June 9). Polytechnic students protest over Aba-Ikot Ekpene Road. *The Guardian Nigeria*.
- The Will. (2026, March 2). Calabar-Itu Highway: A death trap since 1990s, says NUJ. *The Will Nigeria*.
- Udoh, E. R. & Mboho, K. S. (2020). Community development and socioeconomic well-being of rural dwellers in Nigeria. Problems and prospects. *AKSU Journal of Social Sciences*, 2 (1), 14-27
- Udonwa, U. E., Effiong, U. E., & Asuquo, M. E., & Samuel, M. E. (2022). Poverty in Nigeria: The political economy perspective. *International Journal of Research*, 9(10), 155-176.
- Udoudo, P. J., & Udoiem, O. I. (2010). Development of road infrastructure as a tool of transforming Ibiono Ibom local government area. *Global Journal of Social Sciences*, 8(2), 1-10.
- Umoren, V., Atser, J., & Ekong, F. (2004). Accessibility and socio-economic development in Etinan, Nigeria. *ESUT Journal of Environmental Management*, 2(1), 1-8.
- World Bank. (2019). *Nigeria rural access and agricultural marketing project*. World Bank Group.