Social Sciences, Humanities and Education Journal (SHE Journal)
Volume 4 (1) 145-154, January 2023 | ISSN: 2720-9946 (Online)
The article is published with Open Access at: http://e-journal.unipma.ac.id/index.php/SHE

Impact of Rural Road on Socio-economic Development of Otukpo and Agatu Local Government Area of Benue State

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Abstract: The research aims to analyse the influence of rural roads on the socioeconomic development of Benue state's Otukpo and Agatu local government areas (LGAs). The survey method is used as the research strategy in this study. Traders, farmers, youth, and seniors who have resided in these locations for at least four (4) years are the target responders. The study included 400 participants. In this investigation, the random sampling approach was also used. Five rural villages were selected from each of the LGAs. Data was gathered from both primary and secondary sources. A questionnaire and interviews were the primary sources. Secondary sources included periodicals, textbooks, published or unpublished resources, and internet items that could not be retrieved through primary data. In this study, data was gathered using a questionnaire and an interview with structured questions (both open-ended and closed-ended). The instrument yield reliability coefficient is 0.07, and the data was presented in tabular form using frequencies and percentages. Rural development, according to this work, is the provision of basic amenities, infrastructure, increased agricultural production, extension services, and job creation for rural inhabitants. One of the most prevalent approaches to rural development used by developing nations across the world is infrastructure supply. The infrastructure proposed for rural development might be physical, social, or institutional. This work also suggested that the government construct suitable highways in conjunction with a private organisation in order to enhance the lives of rural inhabitants in the two local government regions and boost rural development in the area.

Keywords: Rural Road, socio-economic, development

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Citation: Olufunke, O, A., Nwokobia, C., & Onuh, O. (2023). Impact of Rural Road on Socio-economic Development of Otukpo and Agatu Local Government Area of Benue State. *Social Sciences, Humanities and Education Journal (SHE Journal)*, *4* (1), 145-154.

INTRODUCTION

Infrastructure such as roads remains one of the major assets, as do the services needed for the sustainability of rural dwellings. Research on development has only recently begun to pay attention to rural roads (Sati & Vangchhia, 2017). Only in the early 1960s did organisations like the World Bank and the International Bank for Reconstruction and Development begin to include Third World issues on their development agenda (Plessis-Fraissard, 2014). Rural roads received very little attention because they were primarily considered a component of the investment in the agricultural sector prior to the 1960s, when these organisations exclusively concentrated on the urgent need for structural infrastructure development.

In the late 1990s and early 2000s, about 900 million people in developing nations lived in rural areas without reliable all-season roads, and about 300 million lived in places that were inaccessible to any kind of vehicle (Lebo & Schelling, 2015). After the 1990s, rural roads gained substantial attention, and organisations like the International Forum of Rural Transport and Development (IFRTD) gained influence in supporting the rural transportation sector in developing nations worldwide (Booth, Hanmer, & Lovell, 2016). The sub-Saharan Africa Transport Partnership (SSATP) programme has been instrumental in advancing policy creation in Africa's road sector.

Rural roads are significant since they make up more than 80% of the overall road networks in developing nations. Additionally, they facilitate up to 90% of all mobility in developing countries' inland regions (Chakwizira, Whemachena, & Mashiri, 2014). According to statistics, more people (more than 63% of the population) live in rural regions than in cities in Africa. Rural roads are significant since they make up more than 80% of the overall road networks in developing nations. Additionally, they facilitate up to 90% of all mobility in developing countries' inland regions (Chakwizira, Whemachena, & Mashiri, 2014; Otu & Nabiebu, 2022). According to statistics, more people (more than 63% of the population) live in rural regions than in cities in Africa.

Additionally, figures revealed that up to 90% of people in rural Asia and Africa live in poverty (Mhlanga et al, 2021). According to studies, isolation is a major contributor to rural poverty in emerging nations (Thiede & Slack, 2017). In research done in 2000, nearly 40,000 people—women and men—in 50 different nations were asked to talk about their lives and explain what poverty meant to them. According to the study's findings, the majority of participants did not express a strong belief that poverty is primarily caused by a lack of resources but rather that it is primarily characterised by physical, social, and political isolation (Plessis-Fraissard, 2014).

Adedeji, Olafiaji, Omole, Olanibi, and Yusuff (2014) observed that rural transportation and infrastructure development in Nigeria are current challenges and are widely seen as essential elements for a nation's economic development. The authors further said that discrepancies in the degree of development are brought about by inequalities in the provision of road infrastructure and road rehabilitation. Agricultural operations, which are the main source of income for locals, are negatively impacted by the poor state of the roads in rural areas, which exacerbates poverty.

An investigation by Kakwagh (2018) in Nigeria, more specifically Benue State, revealed that rural roads are essential to the socioeconomic growth of rural communities. The author pointed out that because of their affordable transportation costs, rural roads improve market accessibility and population accessibility. Good roads connect rural and urban areas, resulting

in more favourable prices for farmers, fewer produce losses, and lower costs for consumers (Otu & Enyia, 2015; Out, 2018). Therefore, this study looks at how roads affect social-economic development in the rural parts of Benue State's Otukpo and Agatu LGAs.

Statement of the problem

Numerous factors influence the social-economic development of rural communities. Access to transportation and services for the population living in rural areas is one of these essential requirements (Otu & Mohammed, 2009; Kakwagh, 2018). Rural roads are the primary factor in poverty reduction in Benue State and Nigeria generally, aside from the movement of people. Rural roads affect how people move, transport their goods, and obtain information. Services can be transported to consumers while roads are open. Roads enable individuals to be mobile (Tighe, 2016).

Good roads are essential for a community to benefit from jobs and surplus crop output. In general, rural roads are tools for reducing poverty (World Bank, 2016). Raising the standard of living in rural areas depends on roads. Additionally, roads lower transportation costs, stimulate market activity, and support the growth of economic ties.

Through increased access to necessary inputs, decreased input costs, and the expansion of rural businesses, improved roads boost both agricultural and nonagricultural production. This demonstrates that when rural roads are repaired, the range of successful trade expands, raising rural income and lowering prices in the process.

Like many other African nations, agriculture plays a significant role in the development of rural areas and is the primary source of income for the rural population in rural Nigeria. The majority of rural households in Nigeria (and elsewhere in Africa) are engaged in farming, and this generates a significant portion of their income (Kakwagh, 2018). The infrastructure of rural transportation is necessary for the promotion of these income-generating opportunities. However, because these items can't be carried constantly and because the expenses are so high when they are, rural transportation routes are in bad condition. It is because of this that poverty is more prevalent in rural areas.

Because of the skyrocketing prices of basic consumables, there has been an increase in population in Benue State and throughout Nigeria. This makes transportation a vital component of rural area growth and production, particularly in regard to agriculture. Transportation is one of the key factors in increasing agricultural output and decreasing post-harvest losses (Dorothy & Otu, 2012). However, due to the generally poor condition of the rural roads, people find it difficult to travel in most rural areas of Benue State. In some of these rural places, travel is quite challenging. Most of the roads deteriorate and become inaccessible, especially during the rainy season, subjecting the populace to poor levels of connectivity. This study looks at the effects of roads on rural development in the two local government districts of Benue State—Otukpo and Agatu.

Objectives of the study

The general objective of this study is to determine the impact of rural roads on the socioeconomic development of Otukpo and Agatu government areas of Benue state. However, specific objectives include:

1. To determine whether the people in rural areas of Otukpo and Agatu LGA have access to good roads
2. To examine the impact of rural roads on the socioeconomic development of Otukpo and Agatu LGA

Research questions

This study is guided by the following research questions:

1. Do people in rural areas of Otukpo and Agatu Local Government Areas have access to good roads?
2. What is the impact of rural roads on the socioeconomic development of Otukpo and Agatu LGAs?

Literature review

The study hinged on the time-geography theory, which was developed in 1970 but whose roots can be traced to the 1953 doctoral research of Torsten Hagerstand (Pred, 1979). His research investigated migration in Sweden and emigration to the United States from Asby, a small parish in the southeast of Sweden, in the 19th century. Hagerstand's study focused on the movement of people between dwellings in Asby and their use of local resources, and it considered the spread of technological innovations in the parish. Hagerstand's research laid the foundation for further studies on migration, migration chains, and time geography. The idea of time geography originated from a seminal address on the research conducted by Hagerstand at the Regional Science Association (Neutens, et al., 2011).

"Rural" has different meanings to different people depending on where they come from. What is considered rural in developing countries can be considered urbanised in the world's developed nations. However, under specific considerations, such as in Nigeria, rural settlements are considered a place harbouring 20,000 dwellers, and such dwellers engage in primitive production activities (Aderamo & Magaji, 2014). Nonurban environments have been defined as regions with a low population density, usually less than 1 person per acre (Burley, 1964).

The concept of rural development in Nigeria lacks a consistent definition, as different scholars tend to view it from different perspectives. Some scholars view rural development in terms of education and training (Anger, 2010). Rural development involves creating and expanding opportunities for rural people to reach their full potential through education and to participate in decisions and actions that affect their lives (Grimes, 2002). The author looks at efforts to increase rural production, create employment opportunities, and eradicate basic or extreme poverty, disease, and ignorance.

Road development in rural areas contributes to infrastructure development, which has been shown to reduce rural poverty (Stifel, Minten, & Koro, 2012). Adarkwa (2015) noted that rural road transport investment in Ghana reduced poverty. In the same vein, a comparative study conducted in China concluded that, when compared to motorways, feeder roads and other roads connecting rural areas made a great contribution to development and poverty reduction (Fan & Chan-Kang, 2015). Mohapatra & Giri, (2022) in India discovered that investment in rural road construction has reduced rural poverty to a significant extent compared to investment in agricultural research, development, and education. All these studies appear to equate rural poverty reduction with improved rural roads, but they neglect other important factors such as the availability and affordability of transport services.

Empirical Review

Adedeji, Olafia, Omole, Olamibi, and Yusuf (2014) carried out a study on the impact of road transport on rural development with a focus on the Obokun local government area of Osun State. The study of the data showed that there were inequalities in the area's road infrastructure provision and road restoration, which led to differences in the level of growth. Since agriculture is the main source of income for the locals and is negatively impacted by the area's poor road conditions, the poverty rate rises.

In Kwara State, Nigeria, Abdulkadir (2014) investigated the state of rural transportation. The study looks

at the state of road transportation in rural Kwara State, Nigeria. The state's rural areas were determined to have generally weak and insufficient road network connections, levels of road accessibility, and transportation services. However, it was discovered that the areas had spatial variances. Among the studied LGAs, Kaiama LGA was determined to have the lowest level of road accessibility, the least connection in the road network, and the worst transport services. This demonstrates that there was a higher level of mobility limitation, which had a detrimental impact on the local population's economic and general well-being. Poor road surface conditions, high transportation costs, overloading, and a constant stream of highway robberies are among the transportation issues faced by the region's rural residents.

Siyan & Adegoriola (2017) looks at the connection between Nigeria's economic growth and investments in road networks. Solow's theory of economic growth and Frischmann's theory of transportation infrastructure served as the study's theoretical compass. According to the research, funding for road networks encourages economic growth and raises Nigerians' standards of living. The availability of transportation infrastructure, such as roads, railways, airports, and waterways, facilitates the movement of people and goods, which is essential for industrialization.

In their 2017 study, Adedeji, et al., (2014) focused on Nigeria's Gombe State and Kwami local government areas to analyse the effects of road travel on rural development. In Nigeria, the development of rural infrastructure and transportation is a pressing issue that many see as essential to the nation's economic growth.

METHODOLOGY

This research uses the survey method as its research design. The reason for using the survey method is to get responses from the sampled respondents. The study was conducted in both Otukpo and Agatu local government areas of Benue State. While the study population comprises both Otukpo and Agatu local government areas of Benue State, the total population of the two LGAs is 515,600. The target respondents are traders, farmers, youth, and elders who may have lived in these areas for a period of four (4) years. The sample size was determined using the Taro Yamane Scientific Formula. With a total population of 512,600, the sample size is 400. The random sampling technique was employed in this study. In each of the five LGAs, five rural communities were drawn. Due to the population of the areas, this study is concerned with traders, farmers, students, and others who are mostly affected by bad roads. Data was obtained from both primary and secondary sources. The primary source was a questionnaire and interviews. Secondary sources included journals, textbooks, published or unpublished materials, and online materials that could not be obtained through primary data. A questionnaire and an interview with structured questions (open and closed-ended questions) were used to collect data in this study. The instrument yield reliability coefficient is 0.07, and the data collected was presented in tabular form using frequencies and percentages.

RESULTS AND DISCUSSION

Research question one: Do people in rural areas of Otukpo and Agatu LGA have access to good roads?

Table 1: Do you have access to good road?

Variable	Frequency	Percentage
Strongly agree	40	11.1
Agree	20	5.5
Disagree	100	27.5
Strongly disagree	200	55.7
Total	**360**	**100%**

Source: Researcher's Survey, 2022

Table 1 revealed respondents' responses on whether they have good roads in their areas. Majority of the respondents represented by 200 (55.7%) strongly disagree that they do not have good roads. Followed by 100 respondents represented by (27.5%) who also agree that they do not have good roads. While 40 respondents represented by (11.1%) strongly agreed that they have good roads and 20 (5.5%) of the respondent said they have good roads. This result showed that majority of the respondents do not have good roads in their areas as represented by 200 (55.5%) of the total population which is the highest response.

Table 2: Rural roads in Otukpo and Agatu LGAs has one lane

Variable	Frequency	Percentage
Strongly agree	190	52.7
Agree	100	27.7
Disagree	30	8.3
Strongly disagree	40	11.1
Total	**360**	**100%**

Source: Researcher's Survey, 2022

Table 2: shows respondents' response on whether rural roads in Otukpo and Agatu LGAs has onelane. Majority of the respondents 190 represented by (52.7%) strongly agree that rural roads in Otukpo and Agatu have only one lane, followed (27.7%) of respondents with a total of 100 who also agree. While 40 (11.1%) of the respondents strongly disagree and 30 (8.3%) disagree too. This result shows that rural roads in these areas have just one lane.

Table 3: Does inaccessible roads in rural areas decline their socio-economic development?

Variable	Frequency	Percentage
Strongly agree	195	54.1
Agree	120	33.3
Disagree	18	5
Strongly disagree	27	7.5
Total	**360**	**100%**

Source: Researcher's Survey, 2022

Table 3 shows respondents' perspectives on whether inaccessible roads in rural areas hinder socioeconomic development. The majority of the 195 respondents, or 54.1%, strongly agree that inaccessible roads in rural areas decline their socio-economic development followed by 120 respondents, representing 33.3% of the total population, who also agree. While 18 (5%) of the respondents disagree and 27 (7.5%) of the respondents strongly disagree, this implies that rural areas are faced with the challenge of inaccessible roads, which affect their socio-economic development.

DISCUSSION OF FINDINGS

Objective one was to determine whether the people in rural areas of Otukpo and Agatu LGA have access to good roads. As shown in Table 1, the majority of the respondents represented by 200 (55.7%) strongly disagree that they do not have good roads. followed by 100 respondents, represented by 27.57%, who also agree that they do not have good roads. This result showed that the majority of rural dwellers do not have good roads in their areas, which affects development.

As shown in Table 2, the majority of the 190 respondents (52.7%) strongly agree that rural roads in Otukpo and Agatu have only one lane, followed by 27.7% of respondents with a total of 100 who also agree. This result shows that rural roads in these areas have just one lane. According to Table 4.8, the majority of the 235 respondents (65.2%) strongly agree that rural roads are unreliable during the rainy season. followed by 105 respondents (29.1%) who also agree that during the rainy season, rural roads are not reliable. This result implies that during the rainy season rural roads are not reliable, thereby making movement in some areas inaccessible, which affects traders, farmers, and other activities. This finding is in line with Akinyosoye (2014), who asserted that most of the poor people in the world live in rural areas where the level of public infrastructure, especially roads, seems low and unconcerning.

Objective two was to examine the impact of rural roads on the socioeconomic development of Otukpo and Agatu LGAs. According to Table 2, the majority of the 195 respondents (54.1%) strongly agree that inaccessible roads in rural areas harm socioeconomic development.This implies that rural areas are faced with the challenge of inaccessible roads, which affect their socio-economic development.

CONCLUSION AND RECOMMENDATIONS

Rural development is the provision of basic services, infrastructure, improved agricultural productivity, extension services, and job

creation for rural residents. The provision of infrastructure as an approach to rural development is one of the techniques most commonly used by the developing countries of the world. The rural development infrastructure proposal can be physical, social, or institutional. And it was recommended that proper roadways be built by the government in collaboration with a private organisation to improve the lives of rural residents in the two local government areas and to improve rural development in the area. By doing this, the majority of farmers, especially the young ones, will continue to live in rural areas and work on their farms, improving food security while lowering crime and rural-urban migration. The region's expensive and sporadic transportation services should be scaled back.

REFERENCES

Abdulkadir, B. U. (2014). Analysis of condition of rural road transport in Kwara State, Nigeria. *European Scientific Journal*, *10*(5).

Adarkwa, E. K. (2015*). Dust roads, rickery trotros and survival: Understanding the nexusbetween road transport investment and poverty reduction in Ghana. Professional inaugural lecture. Kwame Nkrumah University of Science and Technology*. Kumasi University Printing Press.

Adedeji, O. A., Olafiaji, E. M., Omole, F. K., Olanibi, J. A., & Yusuff, L. (2014). An assessment of the impact of road transport on rural development: A case study of Obokun local government area of Osun State, Nigeria. *British Journal of Environmental Sciences*, *2*(1), 34-48.

Aderamo, A. J., & Magaji, S. A. (2014). Rural transportation and the distribution of public facilities in Nigeria: a case of Edu local government area of Kwara State. *Journal of human ecology*, *29*(3), 171-179.

Ahmed, R., & Hossain, M. (1990). *Developmental impact of rural infrastructure in Bangladesh* (Vol. 83). Intl Food Policy Res Inst.

Anger, B. (2010). Poverty eradication, millennium development goals and sustainable development in Nigeria. *Journal of sustainable development*, *3*(4), 138-144.

Bhatta, J. (2015). Theorizing community development. Journal of the community development society.

Booth, d. Hanmer, L., & Lovell, E. (2016). *Poverty and transport. A report prepared for the World Bank in collaboration with DFID*. Overseas development institute.

Burley, T. M. (1964). Non-urban population density and distribution in the Hunter Valley, 1961. *Australian Geographer*, *9*(4), 237-239.

Chakwizira, J., Whemachena, C., Mashiri, M. (2014). Connecting transport, agriculture and rural development: Experience from Mhlontlo local municipality integrated infrastructure Atlas. Proceeding of the 29th South African transport conference.

Dorothy, N., & Otu, M. T. (2012). Guarantee as a Secured Credit Instrument in Contemporary Business Climate. *UNIUYO Journal of Commercial and Property Law, 3*(1), 191-204

Ellegård, K. (1999). A time-geographical approach to the study of everyday life of individuals-a challenge of complexity. *GeoJournal*, *48*(3), 167-175.

Fan, S. & Chan-Kang, C. (2015). Regional road development, rural and

urban poverty: Evidence from China. *Transport Policy,* 15**,** 305-314.

Grimes, S. (2000). Rural areas in the information society: diminishing distance or increasing learning capacity?. *Journal of rural studies*, *16*(1), 13-21.

Kakwagh, V. V. (2018). The impact of roads on rural development in Katsina-Ala, Logo and Ukum local government areas of Benue State. International Journal of Sociology and Anthropology Research Vol.1, No.1.

Mhlanga, D. (2021). Artificial intelligence in the industry 4.0, and its impact on poverty, innovation, infrastructure development, and the sustainable development goals: Lessons from emerging economies?. *Sustainability*, *13*(11), 5788.

Mohapatra, G., & Giri, A. K. (2022). How Farm Household Spends Their Non-farm Incomes in Rural India? Evidence from Longitudinal Data. *The European Journal of Development Research*, *34*(4), 1967-1996.

Neutens, T., Schwanen, T., & Witlox, F. (2011). The prism of everyday life: Towards a new research agenda for time geography. *Transport reviews*, *31*(1), 25-47.

Otu, M. T. (2018). Ownership of Oil and Gas: International and National Regimes. *University of Port Harcourt Journal of Private Law, 3*, 136-155.

Otu, M. T., & Enyia, J. O. (2015). Documentary Credit: An Assessment of its Autonomous Character in Modern day commercial Transactions. *Calabar Law Journal, 16*(1), 295-307

Otu, M. T., & Mohammed, M. A. (2009). The Issue of Compensation on Revocation of Rights of Occupancy under the Land Use Act: Problems and Prospects. *Calabar Law Journal, 13*(1), 316 – 326.

Otu, M. T., & Nabiebu, M. (2022). The Legal Effect of Appointment and Possession of a Receiver Over the Property of a Company. *Tamaddun*, *21*(2), 198-211.

Plessis-Fraissard, M. (2014). Rural Roads: the wealth of nations. *International Road Federation*.

Pred, A. (1979). The academic past through a time-geographic looking glass. *Annals of the Association of American Geographers*, *69*(1), 175-180.

Sati, V. P. & Vangchhia, L. (2017). Sustainable Livelihood Approach to Poverty Reduction. In: A Sustainable Livelihood Approach to Poverty Reduction. *Springer Briefs in Environmental Science. Springer*, Cham.

Siyan, P., & Adegoriola, A. E. (2017). An assessment of nexus between infrastructural development and Nigerian economic growth. *African Journal of Business Management*, *11*(18), 470-477.

Stifel, D., Minten, B., & Koro, B. (2012). Economic benefits and returns to rural feeder roads: Evidence from a quasi-experimental setting in ethiopia. *Addis Ababa: ESSP IFPRI, mimeo*.

Thiede, B., & Slack, T. (2017). The old versus the new economies and their impacts. In *Rural poverty in*

the United States (pp. 231-249). Columbia University Press.

World Bank (2016). Agriculture and Poverty reduction: World Development Report. Accessed 24/10/2022.