

The Impact of Road Development on Rural Employment (Farming) in Etsako West Local Government Area of Edo State

Okhani, Vincent Ayegwalo and Asunogie, Faruk Osigbhemhe.

Department of Urban and Regional Planning, School of Environmental Studies, Auchi Polytechnic, Auchi, Nigeria

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150600234>

Received: 13 July 2026; Accepted: 18 July 2026; Published: 28 July 2026

ABSTRACT

Development can be defined as improving the welfare of a society through appropriate social, political, and economic conditions including employment opportunities. This study is aimed at examining the impact of road development on rural employment (farming) in Etsako West local government area of Edo state through, taking inventory of rural employment in the study area, examining the existing road transport facilities in the area, assessing the effect of roads on rural employment and analyzing the impact of road transport on rural employment. Using both primary and secondary data for the study, the primary data were obtained through the use of questionnaires administered on 12 wards in the study area, administering 485 questionnaires in total and Scheduled interviews with the LGA secretariat. This was done using a systematic random sampling method. Findings revealed that farming accounts for 55.7% of employment, shifting cultivation is the most prominent type of agricultural practice, with represents 91.1%, Cassava, with 33. 3% is the predominant crop cultivated alongside Vegetables, Maize, Beans Groundnut and Yam, types of roads used to farms are mainly footpaths, earth roads and Tarred roads and majority of the farms are only connected with footpaths making accessibility to farm very poor and increasing the expected time spent to go to the farm and from the farm to the communities, this led to high cost of transport and abandonment of produce in farms, among others. The study therefore recommended Construction and Rehabilitation of Farm Access Roads, Adoption of Rural Road Network Planning, Provision of Maintenance Framework for Rural Roads, Subsidy and Transport Support for Farmers, Promotion of Larger and Commercial Farm Sizes and Integration of Agricultural and Road Development Policies

Keywords: Rural Employment, Farming, Development, Access, Impact

INTRODUCTION

Background

Development can be defined as improving the welfare of a society through appropriate social, political, and economic conditions. The expected outcomes are quantitative and qualitative improvements in human capital (e.g. income and education levels) as well as physical capital such as infrastructures (utilities, transport, telecommunications), (Ogunleye, Ajibola, Enilolobo, and Shogunle, 2018).

Majority of the poor people in the world live in rural areas where the public infrastructure especially road is poor. About 70% of the population of Nigeria lives in the rural areas (Aboyade 1976, Onokerhoraye and Okafor 1984, Yesufu, 2005). This majority of the rural population depends on agriculture for livelihood (Akinbode 2005). The inadequate and poor condition of roads reduce the access to rural areas, limit the use of local market for the sales of agricultural products, the purchase of consumer goods and opportunities for off-farm employment. This is because the natural and human environment must be properly managed and harnessed so that it can result in enhanced and sustainable development, (Ufuah,1998).

The development of roads in the rural area is not taken seriously in Nigeria. According to Umoren *et al.*, (2009), it is either taken for granted or it is difficult to quantify its direct and indirect effects. Over the years federal and state government place emphasizes on the construction, reconstruction and rehabilitation of federal and state

roads, and intra – urban and inter – urban roads to the complete neglect of the rural roads. Rural road network must be seen as an integral part of the entire road transport framework, since they constitute a major factor in rural growth and development. In the rural environment, the physical condition of most of the existing earth or laterite roads, especially during the rainy season is quite bewildering.

According to Jerry and Dietal (2005), road transportation in most developing countries is poor. It is estimated that about 900 million rural dwellers in developing countries do not have reliable all-season access to main road networks and about 300 million do not have motorized access at all (Saburi, 2012). During the wet season, the roads become almost inaccessible. This results in substantial loss of perishable agricultural produce, high cost of moving agricultural produce, and other products and exorbitant cost of vehicle maintenance. Thus culminating into inefficiency and high cost of food stuffs and other products derived from rural area (Ogunsanya, 1987). Attempt to solve this problem have been made severally.

The World Bank assisted agricultural development projects have been no exception. As a result of the engraving poverty of the Rural economy, according to Olisa and Obiukwu (1992) the World Bank in 1970 decided to shift more attention to rural development as a means of alleviating the problems of the rural poor. The programme did not really yield much dividend to the assaulted peasants, roads were not constructed to open up the rural areas which Etsako region belongs. Rural employment is concerned with the employment opportunities available in rural settlements.

Employment opportunities need road transportation to increase economic activities that contribute to rural development. According to Ali and pernia, (2003), rural infrastructure investments can lead to higher farm and non-farm productivity, employment and income opportunities, and increased availability of wage goods, thereby reducing poverty by raising mean income and consumption. This perhaps is the link between rural employment and road development, a visible reality that is persistently glaring in Etsako West local government area – the study focus.

The justification for the study lies in the critical role that road infrastructure plays in unlocking agricultural productivity and livelihood opportunities in rural areas. Etsako West LGA is predominantly agrarian, with a large population of farmers engaged in the cultivation of yam, cassava, maize, and cash crops. However, poor road networks have long constrained access to farmlands, increased post-harvest losses, and limited farmers' ability to transport produce to major markets in Auchi, Jattu, and neighboring states at competitive costs. This has resulted in low farm incomes, youth migration to urban centers, and underemployment within the agricultural sector. Understanding this relationship will provide empirical evidence to guide policymakers, the Edo State Ministry of Agriculture, and local government authorities in prioritizing road investments that directly improve rural livelihoods, reduce poverty, and enhance food security in Etsako West.

Aim and Objectives

This study is aimed at examining the impact of road development on rural employment (farming) in Etsako West local government area of Edo state. This will be achieved through the following objectives.

1. Take inventory of rural employment in the study area.
2. Examine the existing road transport facilities in the area.
3. Assess the effect of roads on rural employment.
4. Analyze the impact of road transport on rural employment

Method of Study

The data for this study were obtained mainly from primary and secondary sources. The research population of the study area is the households. One settlement each was selected from each ward for this study. This was based on the most populated settlement in the ward. A sample size of 4.5% of the households from the population was taken, representing 485 respondents. A systematic random sampling technique was adopted, using an interval of 10 households in each settlement.

LITERATURE REVIEW

Impact of Road Transport on Rural Development

Generally, rural areas server as the base for the production of food and fiber, the major sources of capital formation for a country, and a principal market for domestic manufactures (Olayiwola and Adeleye, 2005). In general terms, the rural areas engage in primary activities which form the foundation for any economic development. Despite this level of contribution to economic development, rural areas have been neglected in terms of development which has made it non- attractive to live in and also increase poverty level in the rural areas (Adediji, et al, 2014). In Nigeria, the issue of rural transportation development has continued to be of national importance. For instance, most of the rural roads are in poor condition, and this has imposed significant cost on the national economy especially to the agricultural activities due to increased vehicle operating costs and travel times (Akintola, 2007). This reality shows that there is a relative interrelation between rural development and existing transportation opportunities thereof

According to Olusola, (2018) empirical studies show that deficiencies in infrastructure could be a critical development constraint. The Asian Development Bank, (2012) finds that poor infrastructure and lack of investment in infrastructure have constrained growth. Poor infrastructure, a major factor for increasing the cost of doing business, has a significant adverse impact on the perceived competitiveness and attractiveness of the Philippines as an investment destination. The models of development which focus on agriculture also bring about the role that infrastructure play in agricultural development in particular (Olusola, 2018). Rural infrastructure leads to agricultural expansion by increasing yields, farmers' access to markets and the availability of institutional finance. The kind of infrastructure put in place also determines whether growth does all that it can to reduce poverty. Most of the poor are in rural areas, and the growth of farm productivity and non-farm rural employment is linked closely to infrastructure provision (World Bank, 1997). It is estimated that 15 per cent of the crop produce is lost between the farm gate and the consumer because of poor roads and inappropriate storage facilities alone, adversely influencing the income of farmers (World Bank, 1997).

Socio-economic Activities and Road Transportation in Rural Areas

Though the concept of rural transformation has been variously defined by scholars and policy makers to mean quite a number of things. A host of multi-sectoral activities, including the improvement, of agriculture, the promotion of rural justice, the creation of requisite infrastructure and social overheads, as well as the establishment of appropriate decentralized structures in order to allow mass participation, (Ogunleye, Ajibola, Enilolobo, and Shogunle, 2018). Rural transformation is perceived as a design to improve the economic and social conditions of rural inhabitants, which must involve strategies for extending the benefits of the development of the rural majority (Ukoha, 2016). According to him, the objectives of rural transformation efforts include the elimination of poverty, creation of rural employment opportunities, elimination of major inequalities, and ensuring adequate participation of the rural populace in the transformation process. A number of strategies have been adopted for this process and these include agricultural development, infrastructural development, industrialization, and integrated rural development and community development in Nigeria (Emenike, 2016).

Rural Development in Nigeria

Rural development is a comprehensive concept that encompasses the development of agriculture, village and cottage industries and crafts, socio-economic infrastructure, community services and facilities and, human resources in rural areas (Ale, 2013). Rural development is the final result of interactions between various physical, technological, economic, social, cultural and institutional factors to improve the well-being of the rural people. Rural areas are engines of industrial and economic development in most cities, as result of its dependant on agricultural produces

Nigeria is estimated to be the largest country in sub-Saharan Africa in terms of size of both the economy and the population. Nigeria's population at the end of 2020 was estimated to range from 200.96 million¹ to 206 million.

Nigeria has a young Population with people aged 0 – 14 years making up 43.2% of the population, and with 63% 24 years old or younger (UN-NIGERIA, 2022). Core of this population are residents in our rural areas.

The development of the rural areas of the country has always been stressed by federal, state and local governments in the country because of the realization that the previous urban-biased developments from above strategies adopted in Nigeria so far have proved counterproductive. According to United Nation Department of Economic and Social Affairs - UNDESA, (2018), Sub-Saharan Africa (SSA) has 40% urban and 60% rural population and it has the fastest growing rate of urbanization globally according to the United Nations Department of Economic and Social Affairs. It is projected that 56% of SSA will be urbanized by 2050. In light of the need to develop rural areas through road transport, this study, reviewed this literature to covers the rural transport, rural development in Nigeria, problems of rural development in Nigeria, strategies of rural development, and road transport and economic development in developed countries with United Kingdom and United State of America as examples.

RESULTS

Types of Rural Employments

Based on the data provided in Table 1, rural employment in the study area is largely agrarian with a small but diverse informal and service sector driven. Thus farming accounts for 55.7% of employment, making it the single largest occupation. This shows that the study area is primarily rural and dependent on agriculture as the main source of livelihood. Civil service represents 9.1% of employment and the second largest category, indicating that government jobs provide a modest but stable source of formal employment in the area. The remaining 35.2% is spread across various informal and small-scale occupations like Transport-related (Driving 6.6% and Auto mechanics 5.7%) which reflect the importance of movement of people and goods, Commerce (Commercial activities 3.6% and Trading 2.6%), Artisanal/technical skills (Welding and fabrication 2.3%, Saw milling 2.1%, Carpentry 1.5% and Industrial activities 3.1%) and Personal services (Hairdressing 2.5%, Tailoring 1.7%, Barbing 1.6%, Computer services 1.5%, and Phone repairs 0.4%) indicate the growth of service jobs catering to daily needs, though at low percentages.

Table 1: Types of Rural Employments

S/N	Employment Activities	Respondents	Percentage (%)
1	Farming	270	55.7%
2	Civil Service	44	9.1%
3	Industrial Activities	15	3.1%
4	Auto Mechanics	28	5.7%
5	Driving	32	6.6%
6	Commercial activities	18	3.6%
7	Hair Dressing	12	2.5%
8	Sawmilling	10	2.1%
9	Welding	11	2.3%
10	Trading	13	2.6%
11	Tailoring	8	1.7%
12	Carpentry	7	1.5%
13	Barbing	8	1.6%
14	Computer services	7	1.5%

15	Phone Repair	2	0.4%
Total		485	100.0%

Source: Field Survey, 2026

Types of Agricultural Practice

The major types of agricultural practice in the area are shifting cultivation, crop rotation and continues cropping as shown in Table 2. The agricultural practice involves the preparation of soil, sowing, adding manure and fertilizers, irrigation, removal of weeds, harvesting and storage of produce. When examined spatially, shifting cultivation is the most prominent type of agricultural practice, which represents 91.1%, followed by continuous cropping and crop rotation which represents 5.3% and 3.3% respectively. This is shown in Table 2.

Table 2: Types of Agricultural Practice

s/n	Types of farming	Respondents	Percentage (%)
1	Shifting Cultivation	442	91.1%
2	Crop Rotation	16	3.3%
3	Continues Cropping	27	5.6%
4	Total	485	100%

Source: Field Survey, 2026

Types of crops produced

The major types of food crops produced in the study area are Cassava, Vegetables, Maize, Beans Groundnut and Yam while the major cash crops are Cashew, Ducanut and Oil palm as shown in Table 4.38. The average produce in tons between 2023 to 2025 per farmer in the study area shows that Cassava, which represents 33.3% is the predominant crop cultivated in the study area. This is followed by Oil palm, vegetables, cashew and maize which represents 8.3% respectively. While Groundnut represent 10.4%, beans represent 6.3% and yam represent 4.2% this is shown in Table 3.

Table 3: Types of crops produced

s/n	Types of crops	Average Produce Between 2023/2025 per farmer (Tons)	Percentage (%)
1	Cassava	11 tons	33.3%
2	Vegetables	2 tons	8.3%
3	Maize	2 tons	8.3%
4	Beans	3 tons	6.3%
5	Groundnut	3 tons	10.4%
6	Rice	4 tons	8.3%
7	Yam	1 tons	4.2%
8	Cashew nut	4 tons	8.3%
9	Ducanut	2 tons	4.2%
10	Oil Palm	16 liters	8.4%
Total			100%

Source: Field Survey, 2026

Types and Condition of Roads used to Farms

The types of roads used to farms are mainly footpaths, earth roads and Tarred roads as shown in Table 4. The footpaths are not motorable by vehicles, hence the evacuation of farm produce from the farms becomes difficult. Farm produces are carried from the farms on foot by human efforts and motorcycles. The earth roads are characterized with eroded and failed portions, and no linkage to majority of the farms. The tarred roads are not maintained, they are full of port holes with eroded portions, and they do not link the majority of the farms which leads to the perishing of large quantities of cassava and maize, as shown in Table 4

Table 4: Types and Condition of Roads used to Farms

Types of Roads	condition	Location/Name of Road
Footpaths	Not Motorable by Vehicle, Only Accessible by foot and Motorcycles	Iyuku – Imeke
		Iyamho – Uluoke
		Iyora – Ikabigbo
Earth Road	Eroded and Failed Portions	Iyuku – Okhu II
		Jagbe - Ewora
		Nichoho Barake - Imeke
	No Road Linkage	Ewora – Idegun
		Afashio – iyerekhu
		Ayoghena - Ikholo
Tarred Roads	Port Holes with Eroded portions	Igbira Camp – Aibotse
		Ayogwiri – Irekpa
		Elele – Afowa

Source: field survey 2026

Effects of the Condition of Roads on Farming

The effects of the condition of roads on farming is discussed by examining the access to farms, time spent in accessing farms, farm size, cost of transportation, and loss of harvest

Poor Accessibility to Farms: The majority of roads to farm are not motorable by vehicles and only accessible by foot and motorcycle. This condition makes accessibility to farm very poor, and 49.1% of the farm roads are in this condition. Hence assessing farms, and evacuating maize and cassava produce is very difficult. The harvested products perish on the farm due to inability to transport the farm products to the market, as shown in Table 5

Table 5: Poor Accessibility to Farms

Types of Roads	condition	Accessibility	Percentage (%)
Footpaths	Not Motorable by Vehicle, Only Accessible by foot and Motorcycles	238	49.1%
Earth Road	Eroded and Failed Portions	112	23.1%

	No Road Linkage	88	18.1%
Tarred Roads	Port Holes with Eroded portions	47	9.7%
Total		485	100%

Source: field survey 2026

Time Spent in Accessing Farms: The time spent to go to the farm and from the farm to the communities is shown in Table 6. The farm sites are far from the neighborhoods; hence they spend more time on roads, especially with the poor condition of the roads. The longer time on road reduces the needed time to be spent in the farms. This condition reduces crop production since there is always little time left to work in the farm after spending much of it on the road.

Table 6: Time on Farm Road

Settlements	Average Time Spent on Roads		Total
	To Farm	From Farm	
Iyora	1h30min	1hrs 30mins	3hrs
Aibotse	1hr 30mins	1hr 30mins	3hrs
Iyerekhu	1hr 30mins	1hr 30mins	3hrs
Agbede	1hr	1hr	2hrs
Idegun	1hr	1hr	2hrs
Jagbe	1hr	1hr	2hrs

Source: field survey 2026

Inability to Cultivate Large portion of Farm: The average farm size for crop production in the study area are between 1 hectare to 9 hectares as shown in Table 7. The farmers engage in small farm sizes in order to reduce their produce getting perished when farms are large. There are no roads to evacuate produce to the final consumers, due to poor roads and No-road connection between their farms, market and other settlements.

Table 7: Reduction in Farm Size by Farmers

Location to Farm	Year	Farm Size (Hectares)								
		Cassava	Maize	Yam	Beans	Rice	G.nut	Vegetable	Oil	Cashew
Iyora	2023	5	2	6	4	6	3	8	7	6
	2025	3	1	3	2	3	1	4	3	4
Aibotse	2023	5	2	4	5	4	5	6	6	6
	2025	3	1	2	3	3	4	3	3	5
Iyerekhu	2023	5	2	5	4	5	4	5	6	7
	2025	3	1	2	3	3	2	2	2	3
Agbede	2023	7	4	7	6	5	7	6	5	6
	2025	4	2	3	3	2	3	2	2	3
Idegun	2023	7	4	8	7	5	8	5	6	7
	2025	4	2	4	3	2	4	3	2	2

Jagbe	2023	7	4	9	7	6	8	8	6	7
	2025	4	2	4	4	2	5	3	2	4

Source: field survey 2026

Cost of Accessibility to Farms: The average cost of transport to and from farm in the study area between 2023 to 2025 is shown in Table 8. The cost includes both to and from farm per day. The percentage increase in the cost of assessing farms is between 80.0% to 85.0% in 2023 and 2025. The high cost of transport to farm reduces the profits from the farms.

Table 8: Cost of Accessibility to Farm in 2023 and 2025

Location to Farm	Cost in 2023 (₦)	Cost in 2025 (₦)	Increase (₦)	Percentage Increase (%)
Iyora	800	4000	3,200	80.0%
Aibotse	1000	5000	4,000	80.0%
Iyerekhu	1000	5000	4,000	80.0%
Agbede	600	4000	3,400	85.0%
Idegun	600	4000	3,400	85.0%
Jagbe	600	4000	3,400	85.0%

Source: field survey 2026

Loss of Harvest Due to Poor Accessibility: There is loss of harvest in the study area as a result of the nature of roads on crop production. In the 2022/2023 farming season there was 23.4% loss of harvest in all the crops investigated as shown in Table 9, while in 2024/2025 farming season, there was 39.8% loss of harvest. Of these crops in question, maize had the highest loss in 2023 and 2025 alongside groundnut, while vegetable had the highest loss in 2023 and beans had the highest loss in 2025. The high rate of loss of harvest is as a result of the non-accessibility to the farms because of the poor conditions of the roads while the produce perished in the farms. In respect of farm site that are not accessible by road, the evacuation of farm produce to markets and settlements becomes impossible, the agricultural extension workers do not have access to educate the farmers on modern methods of farming. The farm produce are not harvested, hence they get perished at the farm site as shown in Table 9

Table 9: Average Output and Loss of Crops Between 2023 to 2025 per Farmer

Crop	Production/Output (bags)					
	2022/2023			2024/2025		
	Output	Loss	Percentage (%)	Output	Loss	Percentage (%)
Cassava	70	19	27.1%	37	17	45%
Maize	8	5	62.5%	5	3	60.0%
Yam	81	14	17.3%	59	24	40.7
Beans	12	4	33.3%	7	3	30%
Rice	35	7	20.0%	21	6	28.6%
G.nut	14	3	21.4%	5	3	60.0%
Vegetable	39	7	7.7%	23	9	39.1%
Oil	61	12	19.7%	43	15	34.9%

Cashew	17	4	23.5%	11	4	36.4%
Total	320	75	23.4%	211	84	39.8%

Source: field survey 2026

SUMMARY OF FINDINGS

Based on available data rural employment in the study area is largely agrarian with a small but diverse informal and service sector driven. Thus, farming accounts for 55.7% of employment, making it the single largest occupation, (see Table 1). The major types of agricultural practice in the area are shifting cultivation, crop rotation and continues cropping. However, shifting cultivation is the most prominent type of agricultural practice, which represents 91.1%, (see Table 2). The major types of food crops produced in the study area are Cassava, Vegetables, Maize, Beans Groundnut and Yam while the major cash crops are Cashew, Ducanut and Oil palm. However, Cassava, which represents 33. 3% is the predominant crop cultivated in the study area, (See Table 3). The types of roads used to farms are mainly footpaths, earth roads and Tarred roads and majority of the farms are only connected with footpaths, hence the evacuation of farm produce from the farms becomes difficult. The earth roads are mostly eroded, failed and no linkage to majority of the farms, (see Table 4). This condition makes accessibility to farm very poor, and 49.1% of the farm roads are in this condition, (see Table 5). This increases the expected time spent to go to the farm and from the farm to the communities. Thus, the longer time on road reduces the needed time to be spent in the farms, (see Table 6). Due to the lack of accessible roads to these farms, the farmers engage in small farm sizes in order to reduce their produce getting perished when farms are large, (see Table 7). As a result of the poor accessibility to these farms, the average cost of transport to and from farm in the study area increased by 80.0% to 85.0% in 2023 and 2025. This high cost of transport to farm reduces the profits from the farms, (see Table 8). This high cost of Transportation leads to the abandonment of farm produce in the farm. In the 2022/2023 farming season there was 23.4% loss of harvest in all the crops and, there was 39.8% loss of harvest in 2024/2025 farming season. The farm produce are not harvested due to the plethora of factors discussed, hence they get perished at the farm site, (see Table 9).

CONCLUSION

Based on the findings from this study it is safe to conclude that,

- 1 Rural employment in the study area is largely agrarian (farming), although with a small but diverse informal and service sector driven. Shifting cultivation is the most prominent type of agricultural practice even though there are others like crop rotation and continues cropping.
- 2 The major types of food crops produced in the study area are Cassava, Vegetables, Maize, Beans Groundnut and Yam while the major cash crops are Cashew, Ducanut and Oil palm, but Cassava is the predominant crop cultivated in the study area.
- 3 The types of roads used to farms are mainly footpaths, earth roads and Tarred roads and majority of the farms are only connected with footpaths. The earth roads are mostly eroded, failed and no linkage to majority of the farms.
- 4 Accessibility to farm is very poor, and 49.1% of the farm roads are in this condition. The poor accessibility increases the expected time spent to go to the farm and from the farm to the communities.
- 5 Due to the lack of accessible roads to these farms, the farmers engage in small farm sizes in order to reduce their produce getting perished when farms are large. As a result of the poor accessibility to these farms, the average cost of transport to and from farm in the study area increased by 80.0% to 85.0% in 2023 and 2025.
- 6 The high cost of transport to farm reduces the profits from the farms and leads to the abandonment of farm produce in the farm. Hence there is constant loss of harvest in all the crops.

In conclusion, improving road development and accessibility in Etsako West LGA will directly reduce cost of transportation, minimize post-harvest losses, expand farm sizes, and ultimately strengthen rural employment in agriculture. This will enhance food security, increase farmers' income, increase rural Development and reduce rural-urban migration in the study area.

Recommendation

Based on the conclusion above this study, therefore recommends the following:

- 1 **Construction and Rehabilitation of Farm Access Roads:** Government at both state and local government levels should prioritize the construction, rehabilitation, and grading of earth roads and farm access roads linking communities to farmlands. Special attention should be given to the 49.1% of farm roads currently in poor condition to reduce travel time, vehicle wear, and post-harvest losses.
- 2 **Adoption of Rural Road Network Planning:** There is need for proper articulation and redesign of rural transport routes to ensure that majority of farms are no longer dependent only on footpaths. feeder roads should be mapped to connect clusters of farms directly to major tarred roads and market centers in Auchi, Jattu, and other hubs.
- 3 **Provision of Maintenance Framework for Rural Roads:** Etsako West LGA, in collaboration with community development associations and farmers' cooperatives, should establish a maintenance system for rural roads. This will prevent rapid erosion and failure of earth roads, especially during rainy seasons when accessibility is worst.
- 4 **Subsidy and Transport Support for Farmers:** To cushion the 80% - 85% increase in transport cost recorded between 2023 and 2025, government and NGOs should provide transport subsidies, farm produce evacuation vehicles, or cooperative haulage schemes. This will reduce cost burden, increase profit margins, and discourage abandonment of harvest.
- 5 **Promotion of Larger and Commercial Farm Sizes:** With improved road access, extension services should encourage farmers to move from small subsistence plots to larger farm sizes. Better road linkage will reduce risk of perishability and enable farmers to cultivate cash crops like cashew, oil palm, and groundnut at commercial scale.
- 6 **Integration of Agricultural and Road Development Policies:** Road development projects in Etsako West should be deliberately linked to agricultural zones. Future road planning must consider areas with high concentration of cassava, yam, and oil palm production so that infrastructure investment directly supports rural employment in farming.

REFERENCES

1. Aboyede .O. (1976): *Issue in the development of tropical Africa*. Ibadan: University Press
2. Adedeji, O.A; Olafiaji, E.M; Omole, F.K; Olanibi, J.A; and 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 Vol.2(1),34-48*
3. Akinbode A. (2005). *Agriculture and Agricultural Geography similarities in objectives, scope and Research methodology*: Occasional publications edited by Segynola A.A in the department of Geography and Regional planning, Ambrose Alli University Ekpoma
4. Akintola, S.R. (2007) Coping with infrastructural deprivation through collective action among rural people in Nigeria. *Nomadic Journal of African Studies*, 16 (1). 30- 46
5. Ale A.S.(2013) „Rural Transportation to Food Crop Production. *Journal of Environment*, vol-02, issue 05, pp.112-117
6. Ali, A., and Pernia, C.C (2003). *Infrastructure and Poverty Reduction-What is the Connection? ERD Policy Brief No 13, Economic and Research Department*, Asian Development Bank, Manila
7. Asian Development Bank (2012). *Infrastructure for Supporting Inclusive Growth and Poverty Reduction in Asia*. 1550 Metro Manila, Philippines
8. Diestel, R. (2005). *Graph Theory, Electronic Edition modelling*, Akdure: Millennium Publishers
9. Emenike, G. C. (2016). *Essentials of Logistics and Transport in a Developing Economy*. University of Port Harcourt press Limited.
10. Ogunleye, O, Ajibola, A, Enilolobo, O. and Shogunle, O. (2018). "Influence of road transport infrastructure on agricultural sector development in Nigeria" *Logistics, Supply Chain, Sustainability and Global Challenges*, 9(1),39-50. <https://doi.org/10.2478/jlst-2018-0004>
11. Ogunsanya A.A (1987). "Food production problems in rural Nigeria Habitat" *International* 11 (2): 71-75

12. Okafor, F.C. (1984). Dimensions of Community Development projects in Bendel State, Nigeria, Public Administration and Development vol.4 pp.249 – 258.
13. Olayiwola, L.M., and Adeleye, O.A. (2005) Rural Infrastructural Development in Nigeria between 1960-1990- Problems and Challenges. *Journal of Social Science*, 11 (2): 91-96.
14. Olisa, M.S.O, & Obiukwu J.I (1992). “*Rural Development in Nigeria Dynamics and strategies*”, 1st edition Nigeria Mekclink Publishers
15. Olusola J. K. (2018). *The Effect of Rural Transport Infrastructure on Agricultural Productivity in some selected Local Governments of Oyo state*. 85-94.
16. Saburi A.A (2012) Determining the consisting in implementary Rural Road Transport Development using Pest Analysis: The case of Kilimanjaro Region, Tanzania *International Journal of Trade, Economics and Finance*, Vol. 3, No: 4 August 2012
17. Ufuah M.E (1998). Mapping: An Essential tool for effective environmental management in Nigeria: in Environmental management for sustainable Human development, Edited by Omofonmwan S.I. and Segynola A.A EDSU library Catalogue
18. Ukaoha, K. (2016). *2012 Nigeria Agriculture Budget Appraisal. Nigeria: National Association of Nigerian Traders – NANTS*.
19. Umoren, V, Ikurekong E.E, A, and Udida A.A (2009). Development of Road Infrastructure as a tool of Transforming Ibionolbom Local Government. *Global Journal of social science* 8 (2); 53-59. Nigeria, Bachudo science 10 Limited
20. Umorn, V., Atser, J. and Ekong, F., (2004). "Accessibility and Socio-Economic Development in Etinan, Nigeria" *EsutJournal of Environmental Management* 76(4):71 - 91.
21. UN-NIGERIA Department of Economic and Social Affair, (2022). *World Social Report, 2021: Reconsidering Rural Development*.
22. World Bank (1997): *_Rural Development: Vision to Action: A Sector Strategy ‘, The World Bank, Washington DC*.
23. Yesufu, A.O. (2005). “Economic Geography. An Introduction” printed and published by Maramon brothers, Benin City.