

IMPACT OF GOVERNMENT POLICIES ON ROAD INFRASTRUCTURE AND FOOD SECURITY IN OBAFEMI-OWODE LOCAL GOVERNMENT AREA OF OGUN STATE, NIGERIA.

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Abstract

This paper examines the relationship among governance, road infrastructure and food insecurity in Obafemi-Owode Local Government Area of Ogun State, Nigeria. One germane onus of government is the welfare of the citizens. Food is an imperative welfare package and its sufficiency cum security is paramount for growth and development. Access to this food is another germane impetus for the survival of the State, where road infrastructure is lacking, its poses serious challenge to food security. The paper adopts a descriptive analysis, simple percentage as well as chi-square for the analysis of data. Findings reveal that government policies have great relationship with the level of good road infrastructure in farm areas. It was also discovered that many motorists avoid plying routes that will cause damage to their vehicles and the few that ply these roads charge exorbitant amount. Food items often get destroy due to bad road networks resulting to higher prices of the available food, thus, bringing about food insecurity in the country. The paper therefore, recommends that policy actors should extend road infrastructure to the rural areas where farms are located, for easy access and movement of farm produce to the urban areas. With this, the rate of wastage due to bad road will be reduced drastically.

Keywords: Access, food insecurity, governance, government, infrastructure, roads

Introduction

One germane onus of government across the globe is the provision of welfare services for the people. This can be in form of social services or creating enabling terrain for economic development of the people. Agriculture is germane in the provision of welfare service to the citizens of any state in the world. In essence, needed infrastructural facilities remain pivotal for the

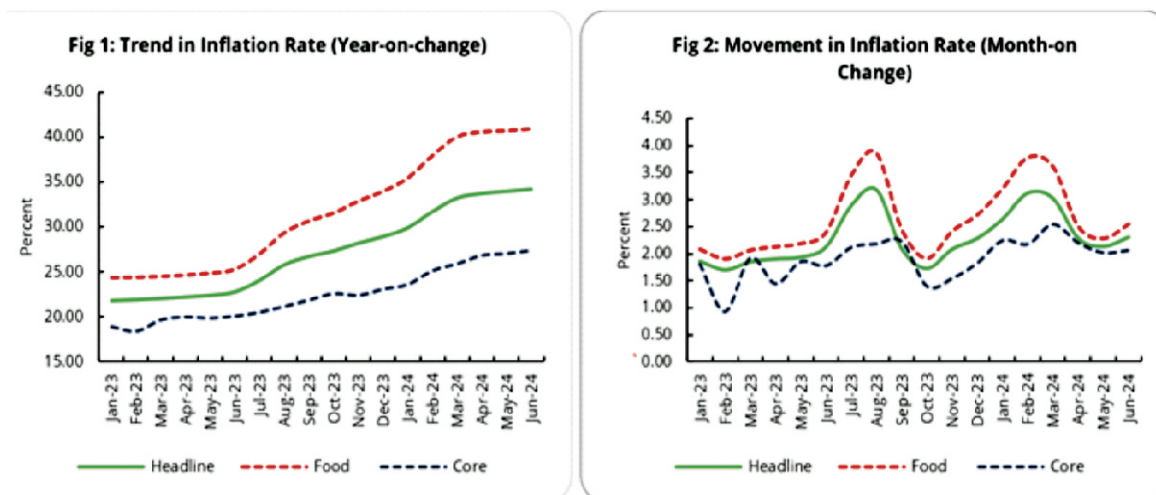
development of Agricultural sector in a given state for there to be enough production on the one hand, and on the second hand for the availability of these products at affordable prices for the people's consumption and storage.

Food security has emerged as a serious concern for both developed and developing nations, despite the fact that the bulk of those experiencing food insecurity reside in

developing nations (Mohammed, Wassie, &Teferi, 2021). In sub-Saharan Africa region, rural areas which are capable of offering the highest agricultural opportunity capable of transforming the continent through adequate production of crops and plants to ensure food security have been over the years hampered by poor road infrastructure (Olorunfemi & Adenigbo, 2017) making the transportation of the products from the farms (rural areas) to the cities cumbersome. Effective road transportation is crucial for agricultural growth because it enables farmers to obtain data and inputs in a timely manner and sell their produce at fair prices (Angmor, 2012), which will allow them to make a profit after

all expenses are deducted.

Global Food Security Index 2022 report ranked Nigeria as 107th out of 113 countries with food security (GFSI, 2022), with a population estimate of 232, 679, 478 (National Bureau of Statistics, 2024), the country still battles food insecurity as food inflation reported by the Nigerian Economic Summit Group (NESG) rose to 40.9 percent in June, 2024, an upward movement from 40.7 percent in May, 2024 and significantly higher than 25.3 percent in June 2023 (NESG, 2024). Figure 1 and 2 below shows protend enormous challenges to the survival of the citizens and the country as a whole.



Source: NESG, 2024.

The Global Hunger Index (GHI) of 2024 ranked Nigeria 110th out of 127 with 28.8 per cent which is the lowest since 2000 (GHI, 2024). This shows the level of food insecurity in the country. This have cost the largest country in Africa in several ways, prominent among which are in the areas of availability of fund to get foods, and appropriate governmental policies to ensure food security. Different efforts have been put in place by past administrations some of these efforts includes the National Food Programme (NAFPP), the Operation Feed the Nation (OFN), Agricultural Development Project (ADP), the River Basin Development

Authorities (RBDA), National Seed Service (NSS). Furthermore, the National Seed Policy (NSP), Agricultural Credit Guarantee Scheme (ACGS), the Directorate of Food, and Rural Infrastructure (DFFRI), Green Revolution (GR), the Structural Adjustment Programme (SAP), Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB), National Agricultural Development Fund (NADF), the National Food Reserve Agency of Nigeria (NFRA) (Adegbola, Bamishaiye, & Daura, 2011). Since the inception of the Fourth Republic in 1999, successive administration had played different roles in mitigating food insecurity in the country. The average budget allocations to Agriculture from President Obasanjo to Buhari's regime is shown in the table below:

Table 1: Budget Allocations to Agriculture from President Obasanjo to Buhari's regime

S/n	Regimes	Average Allocations (%)
1	Olusegun Obasanjo	1.81
2	Musa Yar'Adua	5.39
3	Goodluck Jonathan	1.46
4	MohammaduBuhari	1.67

Source: Ntiedo (2020).

The administration of President Tinubu is currently making efforts to mitigate the suffering of the people. For instance, the Federal government shared over #570 billion to the thirty-six State governors to ensure food security, 150-Day Duty-Free Import Window for Food Commodities including maize, husked brown rice, wheat and cowpeas, creation of Ministry of Livestock Development, strengthen and accelerate dry season farming across the country, use of vacant land in the military barracks, introducing livestock transformation plan and the delivery of grains in trucks to States across the country (Izuaka, 2024). The Nigerian constitution under Second Schedule stipulates that both the Federal and State government can legislate on issues relating to Agriculture. Thus, Ogun State government through the ministry of Agriculture has over the years made different efforts to ensure food security, such as, empowerment of farmers, subsidising prices of farm inputs, creation of farm settlements and the Ogun State Economic Transformation Project (OGSTEP) among others.

One cardinal area for ensuring the movement of farm produce to the market is road. Most of the road networks from the rural areas (where most farms are located) to the urban areas (where most consumers are located) are not in good conditions, thus, causing problems of increase transportation, farm produce been damage on transit leading to food wastage, high-cost farm produce making the access to

food and ultimately leads to limited level of agricultural activities as most farmers find it difficult to transport their agricultural products to the urban areas where it will be needed (Olorunfemi & Adenigbo, 2017). Good road infrastructure remains pivotal to food access.

Objectives

This study intends to achieve the following objectives:

1. To examine government policy on road infrastructure in Ogun State
2. To analyse the effects of road infrastructure on food security in Ogun State.

Research Questions

1. What are the policies of government on road infrastructural development in Ogun State?
2. How does road infrastructure affects food security in Ogun State?

Research Hypothesis

The following null hypotheses were raised on the study.

Ho: There is no significant relationship between government policies and road infrastructure in **Obafemi-Owode Local government area of Ogun State.**

Ho: There is no significant relationship between road infrastructure and food security in **Obafemi-Owode Local government area of Ogun State.**

Review of Related Literature

Governance

The term governance is a buzzword that have been repeatedly used by academics and politicians with a common denominator on the running or functioning of government in a given state. As put by the Webster's Third New International Dictionary (1986), governance is the act or process of governing, via authoritative direction and control. The focus is on the effectiveness of the executive organ of government in the aspect of policy implementations. Fourie and Jordan (2017) was very succinct when they averred that governance is the exercise of authority, direction and control of an organization to ensure that its goals are achieved. It refers to who is in charge of what; who sets the direction and the parameters within which the direction is to be pursued; who makes decisions; who sets performance indicators, monitoring of progress and evaluates results; and, who is accountable to whom and for what.

Infrastructure and Road Infrastructure

As earlier pointed out, road infrastructure is crucial to the development and sustainability of rural environments, knowing fully that the rural areas are the hub for food production and centre for the production of raw material needed in the industries (Olorunfemi, 2018). Several authors have deliberated on numerous problems encountered by people living in rural areas, particularly in the area of mobility, which is very germane to the social and economic survival of any society. Ajiboye (1995) notes that inadequate road infrastructure in most of the rural areas in Nigeria is responsible for the high cost of food majorly experienced in the urban centres of the country. As a corollary, Gbadamosi and Olorunfemi (2016) stresses that road transport infrastructure appears to be an important concern for rural dwellers.

Food Security

Security is the not the absence of danger but the preparedness of overcome it (Zubairu,

2020). Food security as a concept has been modified to reflect the food problems being faced by different parts of the world. The United Nations (1974) during its World Food Summit views food security as adequate supplies of basic foodstuffs to sustain a steady growth of food consumption as well as to offset the fluctuations in food production and prices. In 1983, the Food and Agricultural Organisation (FAO), modifies the concept of food security to include securing access to food supplies by vulnerable people. To put it another way, the goal of food security is to guarantee that everyone always has physical and financial access to the staple foods they require. That is, there ought to be equilibrium between the supply and demand for food.

The understanding of food security was redefined again, as a condition that ensure all people have physical, social and economic access to sufficient, safe and nutritious food in line with their dietary needs and food preferences for an active and healthy life at all times (FAO, 2002). Going forward, the FAO in 2017, explains that food security involves food access, availability, use and sustainability. Thus, people can be said to be food secured when they are able to get it adequately (FAO, 2017). To achieve food security anywhere, road infrastructure plays pivotal role for access to food.

Food security is not solely about food, it also predicates on security (Bimbo, 2014; Simpa & Peter, 2015). It is a powerful instrument in State Policy formulation. It can be used as a punitive measure against unfriendly nations and enemies and employed to reward friendly States. It has a strong influence on the political and economic decisions of a country (Simpa, 2014; Simpa & Peter 2015). Food security has social, economic and political implications. A food insecure State becomes weak; therefore, a good government must be concerned with how to increase food availability and enhanced accessibility and stability. Food security is one of the precursors of a stable democracy; therefore, it should be made an indispensable element of good governance.

Despite the fact that food is essential to life and a significant tool of national power, food security is a crucial component of good governance. Food security ought to be the second most crucial component of effective government, after the security of human life, which is always maintained by food. Adequate food security is even linked to good healthcare delivery. A hungry people cannot be said to be well. It is impossible to discuss the qualities of stable democracy and effective government in a starving country. Children with kwashiorkor, for example, is incapable of considering attending school, much less receiving a high-quality education. Also, hungry populace cannot effectively fight for the supremacy of law or their rights in the country. Food insecurity has implications on development and social welfare, ability to work, resistance against diseases, social discontent and civil disorder. If less attention is paid to food security, the overall national development would be compromised. Thus, a good government should strive to equate supply and demand of food for her people.

Theoretical Framework

The study adopted Access Theory (AT). Ribot and Peluso popularized this theory in 2003, it makes the assumption that even while someone has the right to access certain resources, they might not be able to use them because of a lack of relational and structural processes like infrastructure, expertise, capital, and market systems (Ribot & Peluso, 2003 in Mutea, Rist, & Jacobi, 2020). In the context of food security, the farmers may have the capability to produce enough food for the people and the people may also have the right and capability to afford it, however, the ability to benefit from it depends on availability of transport infrastructure to convey the food from the farm in the rural area to the market or final consumer.

Empirically, Lefe, Njong and Edeme (2024) investigate the nexus between physical infrastructure and food security in Sub-Saharan Africa. The study uses the Panel Corrected Standard Errors (PCSEs)

estimation technique on data from 2000 to 2021 across a sample of 40 selected countries. The finding indicates that transport, electricity, information and telecommunication, water supply and sanitation have positive effects on food security in selected Sub-Saharan Africa countries.

Mohammed, et al (2021), in their study analyse the determinants of rural households' food security in the Kallu district of the Amhara region, Northern Ethiopia. Primary data were collected from 395 randomly in selected rural households. Result shows that 47.30% are food insecure. Additionally, the study shown that while age and market distance are negatively correlated with the likelihood of being food secure, the sex and educational attainment of the household head, livestock ownership, loan availability, and technology adoption had positive and significant effects on food security. The findings imply that expanding smallholders' access to marketing and financial services will help them achieve greater food security.

Ufua, Moses, Osabuohien and Osabohien (2020) in a study, explore the relationship between agricultural governance and food security in Nigeria. Descriptive and econometric approaches were employed. The econometric approach engages Autoregressive Distribution Lag (ARDL) in examining the long-run relationship between the indicators of food security and agricultural governance for the period 1985 to 2016. The results show that in the long-run, agricultural performance contribute to food security in Nigeria. The findings from the descriptive analysis unveil that Nigeria have the highest number of undernourished people, which increased by 22% between 2000 and 2001. Between 2000 and 2015, the population grew by 30.60% with the rate of violence increasing by 55%.

Bamidele (2020) explores the impact of governance on food security challenges in Nigeria in the era of economic recession in an emerging economy. It was discovered that factors such as growth in population, hunger

and hardship experienced by people are as a result of gloomy economy and the indirect effect which increase in taxation caused are strong pointer to the effectiveness and or ineffectiveness of governance in Nigeria. Helena (2019) examines food security in infrastructure and storage for Ghana's poverty reduction initiative. It finds out that post-harvest losses prevent almost 50% of food crops from reaching the end user. The results also show that effective storage plays a role in attaining food security and that integrated food production requires special consideration both during and after bumper harvest.

In their own study, Ogunleye, Ajibola, Enilolobo and Shogunle (2018) adopt Granger Causality and Ordinary Least Square approaches to investigate the road transport infrastructure's impact on agricultural sector development in Nigeria within the period of 1985 and 2014. The findings reveal a positive and statistically significant relationship. The results further confirmed a unidirectional causality relationship from agricultural sector development to transport infrastructure.

Gbam (2017), examines the effects of transportation on the selling of agricultural products in a few chosen markets in Plateau State's Jos North Local Government Area. The survey research method was used, and frequency tables were used to display the findings. The study highlights the significance of transportation in the distribution of agricultural goods, the development of agricultural product markets, and the reduction of farm product waste. The study also shows that increased productivity among farmers is a result of better transportation infrastructure.

By taking primary data from 300 randomly chosen respondents and analyzing it using a frequency table and percentage distribution of the research variables, Ajiboye (2016) investigates the impact of transportation networks on food marketing and security in Nigeria. The results show that food security in the research area was negatively impacted

by a lack of transportation infrastructure, high transportation costs, and waste from inadequate storage and processing facilities.

Additionally, Orakwue, Umeghalu and Ngini (2015) evaluate the impact of road transportation on agricultural output in Anambra State's Ayamelum Local Government Area. About twenty rural farmers in the study area were given structured questionnaires to complete, and the study used descriptive and graphical methods to analyze the main data. The findings show that road transportation affects agricultural development in both positive and bad ways.

In another study, Baek (2014) investigates how food security for American households is impacted by the availability of public transportation. The findings show a negative causal relationship between public transportation accessibility and food insecurity, based on data from the National Transit Database, the population survey, and the food security supplement for the years 2006–2009. Similarly, Selepe, Sabela, and Musuku, (2014), assess the implication of infrastructural inadequacy on food security in Ntambanana, KwaZulu-Natal, South Africa. The study adopted primary data subjected to econometric analysis to test for the reliability of information obtained from the respondents. The findings indicate that poor infrastructure, inadequate support and bad road network are hindering smooth access to market facilities. More so, inefficient and ineffective transportation system negatively affected the small-scale farmers productivity in the area.

Adepoju and Salman carry out a study on infrastructure access and its impact on agricultural productivity in different regions of Nigeria. The finding indicates that labour and farm size were positive and significantly affected farmers' productivity. Also, improvement in infrastructure elements, extension visits and soil practices positively affected productivity.

Methodology

A quantitative descriptive research design using a purposive sampling technique based on a non-probability method was used in the identification of the study populations. This procedure is chosen due to convenience and relevance of the respondents to the title of the study. The population estimate of the people living in Obafemi-Owode local government is 399,800 (National Population Commission, 2022). The sample for the study contains 200 commercial and subsistence farmers from Orile-Imo, Siun, Owode, Ofada and Kobape communities on the one hand, and officials of the ministry of Agriculture in

Ogun State. Farmers surveyed were above 20 years old, those who are capable of holding and controlling a least a plot of farmland.

Two hundred (200) copies of a close-ended questionnaire were administered to the selected farmers in the study area. The questionnaire consisted of twenty (20) questions. It was divided into two (2) sections. Statistical Packages for Social Sciences (SPSS) software was used to analyse data while Chi-square test of goodness-of-fit was used to analyse the hypotheses.

Results and Discussion of Findings

Take 2: Demographic Information

Items	Frequency	Percentage
Gender		
Male	119	60.7
Female	77	39.3
Total	196	100
Academic Qualifications		
FSLC	42	21.4
SSCE	24	12.2
NCEE/OND	31	15.8
HND/BSC	49	25.4
MASTERS	18	9.1
PHD	7	3.5
N.F.E.	25	12.7
Total	196	100
Communities		
Orile-Imo	30	15.3
Siun	50	25.5
Owode	45	23
Ofada	31	15.8
Kobape	40	20.4
Total	196	100

Field Survey, 2024.

From table 2 above, the gender distribution of respondents shows that 119 (60.7%) were male while 77 (39.3%) were female. This implies that more male farmers in Obafemi-Owode local government of Ogun State responded to the issues raised and further shows their willingness for change in the state of road infrastructure for good access to farm produce in the State. Going by the

academic qualifications of respondents, majority of the respondents 75 (87.3%) were educated at least to first school leaving certificate level. This indicates that the respondents were capable of responding to issues raised. It further shows that educated individuals are returning to the farm, thus, the imperative need to make enabling terrain such as good access road available.

Research Question 1: What are the policies of government on road infrastructural development in Ogun State?

Table 3: Policies of government on road infrastructural development in Ogun State.

S/N	Items	SA	A	D	SD	Total
1	Government provision of roads in Ogun State is adequate.	11	13	105	67	196
2	Government policy on road construction is focused more on urban areas in Ogun State.	87	58	36	15	196
3	Most rural area roads are not properly linked in Ogun State.	85	66	32	13	196
4	More funds are spent on urban roads than rural roads in Ogun State.	79	92	16	9	196
5	There are selective policies towards rural road development.	67	105	12	12	196

Field Survey, 2024.

Testing of research hypothesis using χ^2 -cal

Hypothesis 1: *There is no significant relationship between government policies and road infrastructure in Obafemi-Owode Local Government Area of Ogun State.*

Table 4: Statistical χ^2 -cal result for the above hypothesis

Mean	S.D	χ^2 -cal	χ^2 -tab	df	Level of sig	Remark
14.4694	2.29472	212.286	21.026	12	0.05	significant

From the table above, it shows that at $\alpha = 0.05$ (5%) with the degree of freedom of 12, the critical value is 21.026 while calculated value of Chi-Square (χ^2) is 212.286. Since the calculated value (212.286) is greater than the critical value (21.026), the null hypothesis (H_{01}) was rejected and it was concluded that there is significant difference on the policies of government on road infrastructural development in Obafemi-Owode Local government area of Ogun State.

Research Question 2: How has road infrastructure affects food security in Ogun State.

Table 5: Effects of road infrastructure on food security in Ogun State

S/N	Items	SA	A	D	SD	Total
6	Bad roads affect negatively the movement of inputs to the farms.	76	94	15	11	196
7	Bad roads affect negatively the movement of farm produce to the market.	78	101	14	3	196
8	There is high cost of transportation of farm produce from the rural areas to the market.	81	98	10	7	196
9	Prices of food increases as a result of high expenses from farm to the market.	78	97	14	7	196
10	Farmers are discouraged from farming leading to less food production in Ogun State.	84	98	9	5	196

Field Survey, 2024.

Hypothesis 2: Ho: *There is no significant relationship between road infrastructure and food security in Obafemi-Owode Local Government Area of Ogun State.*

Table 6
Statistical X^2 -cal result for the above hypothesis

Mean	S.D	X^2 cal	X^2 tab	df	Level of sig	Remark
16.3724	2.65234	233.663	21.026	12	0.000	significant

From table 4 above, it shows that at $\alpha = 0.05$ (5%) with the degree of freedom of 12, the critical value is 21.026 while calculated value of Chi-Square (x^2) is 233.663. Since the calculated value (233.663) is greater than the critical value (21.026), the null hypothesis (H_{o2}) was rejected, this implies that there is significance difference on how road infrastructure affects food security in Ogun State.

Discussion of Findings

From the analysis of the primary data obtained, the results reveal a variation between policies of government and road infrastructural development in Obafemi-Owode local government of Ogun State. The result was antithetical to expectation, in the

sense that road infrastructural development in the Obafemi-Owode area have been negatively affected by the policies of government. The effect of which, is seen on food security, as it makes it a herculean task for the farmers to convey farm inputs including labour and harvests from the farm to the local market for easy accessibility by consumers. More so, effective road infrastructure will reduce the cost of transportation, which will affect the prices of food items, and consequently increasing affordability among the consumers. The results disagree with the results obtained from the work of Mohammed et al (2021) that expanding smallholders' access to marketing and financial services will help them achieve greater food security. It however aligns with the submission of Helena (2019) that post-

harvest losses which is often caused by bad road network prevent about half of the food crops from reaching the end user.

Government at all levels plays critical roles in ensuring a better welfare service for the citizens, one of these roles include the availability of good road networks in the rural areas. This is to make it easy for farmers in these areas to produce crops (food and cash) and convey them easily to the markets. Policies of different government in Ogun State have not assisted in meeting this demand for food security in the State. This is so because there are ripple effects of bad road on the cost of production, transportation, wastage of perishable crops, cumulating to hike in prices of farm products available for consumers in the markets, making access to food difficult for an average citizen. The finding converges with the outcome of Ajiboye (2016) who observed that food security was negatively impacted by a lack of transportation infrastructure, high transportation costs, and waste from inadequate storage and processing facilities. The result further indicates that bad road network linking farm areas to busy roads and the markets where consumers are expected to get farm produce have in no small measures brought about food insecurity in Obafemi-Owode Local government area of Ogun State. Many farmers and middlemen who goes to buy these food items in larger quantities for the market, do finds it difficult navigating routes to these farms. The road linking Oba and Kobape, the road from Owode to Ofada, and that of Siun to Oba remain bad and making life unbearable for an average farmer and those who were willing to buy from the farms. Vehicular movements are often hampered due to these bad roads and where the government decides to cushion the effects of these bad road, the outcome at the end further compounds the condition of the road. This is mainly as a result of wrong policy decision by the government in attending to this crucial need for access to and from the farm for there to be continuous flow of transactions in order to ensure food

availability and sustenance for there to be security in the sector. These findings are in-line with Selepe, Sabela, and Musuku, (2014), where they submitted that poor infrastructure, inadequate support and bad road network are hindering smooth access to market facilities.

Conclusion and Recommendations

The paper investigated the relationships that exist among governance, road infrastructure and food insecurity, with specific objectives examine government policy on road infrastructure and the effects of road infrastructure on food security in Obafemi-Owode Local Government area of Ogun State, Nigeria. Based on the results obtained from analysis of the primary data collected from the study area, it was observed that all of the variables are statistically significant in explaining food insecurity. Hence, it can be concluded that government policy on road infrastructure especially in rural areas has a negative relationship on food security.

From the foregoing, the study therefore recommends as follows:

1. Knowing that good road network is germane in achieving food security in the country, it is imperative for policy actors to extend road infrastructure to the rural areas where farms are located, for easy access and movement of farm produce to the urban areas. With this, the rate of wastage due to bad road will be reduced drastically.
- 2.. Considering the importance of food in human existence, it is expedient on the government to ensure free flow of traffic in and from the farm areas, this can be made possible by deliberately making policies that will reduce or remove tax from transporters plying the route. This will further encourage more vehicular movement in the rural areas and at end make the movement of farm produce faster. With this food that are fresh and adequate will be available for the people.

3. To ensure food safety, farmers should be engaged in training and re-training on how to preserve their farm produce. This will make perishable goods to stand the test of time.
4. People in the rural areas should insist on government's fulfilment of promises during electioneering campaigns as this will make political actors to show more interest during policy making.
5. Ogun State government should collaborate in an intergovernmental relationship with local government administrators for the opening and better linkage of rural-urban routes.

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