

Road Transport, Agricultural Pricing and Food Security in Cross River State.

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ABSTRACT

Food security remains a critical concern in many developing countries, particularly in Nigeria, where agricultural production and distribution are often constrained by infrastructural and economic challenges. In Cross River State, a region rich in agricultural resources, the effectiveness of road transport infrastructure and agricultural pricing mechanisms plays a significant role in determining the availability, accessibility and affordability of food. This study investigates the interplay between road transport, agricultural pricing and food security in Cross River State with focus on Odukpani and Akpabuyo Local Government Areas. The specific objectives were to examine the effect of road transport on agricultural pricing in Cross River State; and assess the effect of road transport on food security in Cross River State. The cross-sectional research design was adopted for the study and the study population comprised farming households in Odukpani and Akpabuyo LGAs from which a sample of 200 hundred (200) respondents was drawn using the probability sampling technique. While 200 copies of structured questionnaire were administered, 195 were appropriately filled out, retrieved and analyzed. Descriptive statistics and logistic regression were used to analyze the primary data. The findings from the logistic regression revealed that both road transport and agricultural pricing have significant effect on food security in Cross River State. Further findings showed that road transport has an significant effect on agricultural pricing in Cross River State. Based on the findings, it was recommended that government should invest more in rural road infrastructures, integrate road infrastructure with food supply systems, Cross River State can achieve better food distribution, among others are critical to stabilizing agricultural prices, ensuring fair returns for farmers, and enhancing the general food security in Cross River State.

Keywords: Road transport, agricultural pricing, food security, Logistic regression, Cross River State.

INTRODUCTION

Agriculture remains a cornerstone of Nigeria's economy, providing employment for a significant portion of the population and contributing to national food security. In Cross River State, agriculture is particularly vital, especially in the southern local government areas such as Odukpani and Akpabuyo, where it serves as the main source of income. However, the efficiency of agricultural production and distribution is heavily influenced by the state of transportation infrastructure, particularly road networks. Poor road conditions in Cross River State have been identified as a major impediment to the effective marketing of agricultural produce. Farmers in these regions face challenges in transporting their goods to urban markets due to deteriorated roads and numerous extortion checkpoints. These obstacles not only increase transportation costs but also lead to significant post-harvest losses, thereby affecting food availability and pricing,(Bassey,2021).

The broader Nigerian context reflects similar challenges, where inadequate transportation infrastructure contributes to increased food prices and food insecurity. High transportation costs, driven by factors such as fuel price hikes and vehicle maintenance due to poor road conditions, have been linked to the rising cost of food items across the country, (This Day Live, 2024). These issues underscore the critical need to examine the impact of road transport on agricultural pricing and food security, particularly in regions like Odukpani and Akpabuyo where agriculture is vital to livelihoods. Inadequate financing and poor infrastructural support remain major constraints to agricultural development and economic performance in Cross River State. Their study revealed that challenges such as insufficient government support, poor rural accessibility, and limited investment in

agricultural logistics negatively affect farmers' productivity, income generation, and market efficiency in the state (Ndem Bassey Enya 2023),

Despite the agricultural potential of Odukpani and Akpabuyo Local Government Areas, farmers and consumers alike are grappling with the adverse effects of inadequate road transportation infrastructure. The deplorable state of rural roads hampers the efficient movement of agricultural produce from farms to markets, leading to increased transportation costs, reduced profit margins for farmers, and higher food prices for consumers, (Yaro, Okon, & Bisong, 2014). The persistent electric power deficit in Cross River State has continued to undermine agricultural production, agro-processing, and rural economic activities. The study observed that inadequate electricity supply increases the cost of production and storage, limits value addition in agricultural commodities, and weakens food distribution systems, thereby contributing to food insecurity and rising agricultural prices in the state. The author further emphasized that improved rural electrification and stable power supply are essential for sustainable agricultural development and economic growth in Cross River State. Ndem Bassey Enya (2021),

Moreover, the presence of multiple extortion checkpoints exacerbates the situation, as farmers are compelled to pay unofficial fees, which further inflates the cost of transporting goods. These challenges contribute to significant post-harvest losses, as perishable goods often spoil before reaching their destinations, thereby reducing the overall food supply and threatening food security in the region, (Daily Post, 2024).

The cumulative effect of these transportation challenges is a disruption in the agricultural value chain, where increased costs and losses diminish the economic viability of farming and limit access to affordable food for the population, (Aboyeji & Aguda, 2024). Addressing these issues is imperative to enhance agricultural productivity, stabilize food prices, and ensure food security in Odukpani and Akpabuyo Local Government Areas. Entrepreneurship development plays a significant role in promoting economic growth, employment generation, and poverty reduction in Cross River State. The study revealed that entrepreneurial activities enhance income opportunities, stimulate local production, and improve the standard of living of the population. The author further noted that effective entrepreneurial development contributes to agricultural commercialization, rural development, and food security through innovation, investment, and increased participation in small and medium-scale enterprises. Ndem Bassey Enya (2022),

In the light of this, this study seeks answers to these questions: what is the impact of road transport on agricultural pricing in Cross River State? and what is the impact of road transport on food security in Cross River State ?. This mainly objective of this study is to examine the impact of road transport on agricultural pricing and food security in Cross River State, Nigeria. The paper is structured into five sections. After this introductory section, section two reviews related literature. The methodology is discussed in the third section. Section four comprises results and discussion of findings, and finally, section five draws conclusions based on the findings and recommends the way forward.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Conceptual review

Road transport

Road transport refers to the movement of people and goods using motor vehicles on roads. It is a critical component of a nation's infrastructure, influencing economic development and accessibility. According to Adebayo et al. (2023), road transport is the use of paved and unpaved road networks to facilitate the movement of commodities and individuals, playing a pivotal role in linking rural agricultural producers to urban markets and services. In support of this view, Ndem Bassey Enya and Ovat (2021) observed that poor rural road networks and high transportation costs hinder the efficient distribution of agricultural produce, thereby affecting market accessibility, agricultural productivity, and food supply in Cross River State.

Agricultural pricing

Agricultural pricing refers to the system of determining the value of agricultural commodities based on market forces, government interventions, or a combination of both. According to Okonkwo and Musa (2022),

agricultural pricing encompasses the methods and policies used to set the prices of farm produce, which in turn affect farmers' income, production incentives, and food availability in the market. Similarly, Ndem Bassey Enya et al. (2023) noted that inadequate infrastructural facilities and poor transportation systems increase the cost of moving farm produce from rural areas to urban markets, thereby contributing to rising agricultural prices and reduced market efficiency in Cross River State.

Food security

Food security is defined as the condition where all individuals have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. As noted by Food and Agriculture Organization (2023), and reiterated by Eze and Ibrahim (2024), food security exists when people consistently have access to adequate food in terms of quantity, quality, and cultural acceptability, without risking their health or livelihoods. Supporting this position, Ndem Bassey Enya (2021) emphasized that poor transportation infrastructure and inadequate electricity supply negatively affect agricultural production, storage, and distribution systems, thereby threatening food availability and food security in Cross River State.

Empirical review on road transport and agricultural pricing:

Ndem Bassey Enya, Ubi, P. S., and Essia, U. (2020) examined the effect of infrastructural development on agricultural productivity in Cross River State, Nigeria. The study revealed that poor road transportation networks, inadequate rural accessibility, and weak transport services negatively affected the movement of farm produce, increased transportation costs, and reduced farmers' income. The authors maintained that efficient transportation infrastructure is essential for agricultural commercialization, market integration, and food security in rural communities.

Ndem Bassey Enya and Ovat, O. O. (2021) investigated the relationship between rural transportation and agricultural marketing in Cross River State. Using survey and descriptive analytical techniques, the study found that bad road conditions and high transportation costs contributed to delays in the distribution of agricultural produce, post-harvest losses, and rising food prices across rural markets. The study concluded that improved road transport systems would enhance market access, reduce agricultural price instability, and strengthen food security in the state.

Ndem Bassey Enya and Effiong, E. L. (2019) examined the contribution of small and medium-scale enterprises (SMEs) to economic development in Cross River State, Nigeria, with emphasis on the role of infrastructure in entrepreneurial growth. The study found that poor transportation networks and inadequate rural infrastructure significantly increased the cost of moving agricultural produce from farms to markets, thereby reducing the profitability of agro-based enterprises and limiting market accessibility for farmers. The authors further observed that inefficient transport systems contributed to post-harvest losses, unstable agricultural prices, and reduced food availability. The study concluded that improving road transportation infrastructure would enhance agricultural marketing, stimulate entrepreneurial activities, and promote food security and economic development in Cross River State.

Adeneye and Abeebe (2025) examined the impact of transportation cost on price of agricultural commodities in Delta and Rivers States Nigeria. The study employed survey research design using a structured questionnaire and key informant interview to source and analyzed for both qualitative and quantitative data on the subject matter. The sampled population of this study was 348. The primary data collected was analyzed using multiple regression analysis. Findings of the study revealed that transportation cost has positive and statistically significant relationship with price of agricultural commodities. More so, that increases in government multiple tax, levies and unauthorized fee, bribery pay by drivers and cost of repairs and maintain vehicle have statistically significant impact on the price of agricultural commodities.

Aboyeji and Aguda (2024) assessed the transport services patronized by cashew farmers, examined the annual outputs and income from cashew; and assessed the impact of transport on both in Kwara South Senatorial District Kwara State, Nigeria. Data used were obtained from 1,373 farmers systematically selected from thirty-six rural

settlements in the study area. Responses were analysed using principal component analysis, regression analysis and correlation analysis. Results showed that tarred roads connected only about 44.4% of the settlements in the area. About 56.4% of respondents rated the transport services as good. Significant relationships were found between cashew output and; road condition ($b = -0.151$, $p = 0.000$) and; transport services ($b = -0.097$, $p = 0.000$), while, income from cashew was directly and significantly correlated with transport mode ($r = 0.059$, $p < 0.05$), road condition ($r = -0.153$, $p < 0.05$) and, transport services ($r = -0.096$, $p < 0.05$). The study concluded that variations in transport facilities only accounted for some level of spatial variations in both cashew's output and income in the study area and, recommended improvements of transport facilities to enhance increase in farmers' crop output and income to achieve improved rural livelihood.

Bassey (2021) carried out a study on the impact of road transportation on agricultural development in Yakurr Local Government Area (LGA), Cross River State, Nigeria. Data were collected through personal observations, oral interviews, and questionnaire administration. A total of 400 copies of questionnaires were administered and 380 copies were returned and used for analysis. The study employed a descriptive statistical approach. The study noted that the potentials of agriculture are not fully utilized in the study area due to the challenges of road transportation in the communities. These challenges are due to setbacks in government policies on transportation and agricultural development, lack of partnership and community-based organizations involvement in the maintenance of roads among others. These challenges result in high cost of transporting farm produce, inaccessibility to marketplaces, inaccessibility to farm inputs and general constraint of extension officers' operations. All these have negative effects on agricultural development.

Olutumise (2020) assessed the nexus between the transportation system and output market participation among yam producers in Southwest region of Nigeria using multinomial logit (MNL). The results of the MNL showed that farming experience, extension services, distance, household size and market participation were the factors influencing the preference for the mode of transportation used by the farmers. Therefore, the study concludes that there is a synergy between transportation system and output market participation which has significant impact on the production and availability of food (yam) in the market.

Barnabas (2017) examines the effect of transportation in the marketing of agricultural products in selected markets in Jos North LGA of Plateau State. Survey research method was employed. Findings of the study showed that transportation plays an important role in the distribution of agricultural products, helps in creating market for agricultural products and reduces spoilage and wastage of farm products. It also showed that improvement in transportation can encourage farmers to work hard in increasing production.

Yaro, Okon and Bisong (2014) assessed the impact of rural transportation on agricultural development in Boki LGA. The study adopted a questionnaire survey method for data collection as well as key informant interview and focus group discussion and analyzed the data collected with paired sample test. The result reveals that transportation system has positive effect on agricultural development in relation to income, and employment.

Empirical review on road transport and food security:

The link between transportation infrastructure and food security is well- established in academic literature, with numerous studies demonstrating how transportation systems directly impact food availability, accessibility, and affordability. Akinwale (2017) emphasizes that an efficient transportation network is crucial in minimizing post-harvest losses by ensuring the timely movement of agricultural produce from farms to markets.

Furthermore, the economic effects of poor transportation are profound. Fadeyi (2016) argues that inadequate infrastructure leads to inflated transportation costs, which ultimately increase food prices. When roads are impassable or roadsides become congested due to poor maintenance, the cost of transporting food from rural areas to urban centers escalates. As these costs are passed on to consumers, the affordability of food becomes a pressing issue, particularly for low-income households. The result is often reduced access to food, contributing to food insecurity.

Similarly, Adeniran, Gbadebo, and Ayantoyinbo (2025) assessed the impact of transportation infrastructure on food security in Ogo-Oluwa Local Government Area (LGA), Ogbomosho, Oyo State, Nigeria. The study

employed a mixed-methods approach, integrating both qualitative and quantitative data collection techniques. A total of 592 respondents were surveyed using structured questionnaires, with participants selected from different sectors, including farmers, transport operators, and market traders. The quantitative data were analyzed using descriptive and inferential statistical methods, such as frequencies, percentages, and multiple regression analysis, while in-depth qualitative interviews with local stakeholders were conducted to gain insights into the specific transportation challenges faced by the community. The findings of the study reveal that inadequate transportation infrastructure is a critical barrier to food security in the region. Specifically, poor road conditions, high transportation costs, and limited access to efficient transport systems result in elevated costs for moving agricultural goods to markets, which in turn affects food prices. This makes food less affordable, especially for low-income households, thus contributing to heightened food insecurity. Furthermore, poor road conditions lead to significant post-harvest losses, as farmers are unable to move perishable goods to markets promptly, leading to spoilage and waste. Another key finding of the study is that inefficient transportation networks limit farmers' access to larger, more profitable markets. This not only affects their ability to generate a fair income but also reduces the availability of food in rural areas, making it difficult for local residents to access a consistent supply of affordable, nutritious food.

Several studies have suggested that improving road networks and transportation systems can facilitate better market access for farmers, thereby improving food security outcomes. Olaniyan & Fola (2018) found that the availability of well-maintained roads allows farmers to easily transport their produce to urban markets where demand is higher, ultimately enhancing their income and reducing food scarcity in rural communities. Efficient transportation systems also enable farmers to access a wider variety of agricultural inputs, such as fertilizers, seeds, and pesticides, all of which are necessary for increasing farm productivity, (Adepoju & Salau, 2020).

Moreover, the research conducted by Ogunbiyi et al. (2019) highlights the role of strategic investment in rural infrastructure in enhancing food distribution channels. Their study revealed that areas with better transportation infrastructure experienced lower food prices, improved access to markets, and a reduction in post-harvest losses. These findings underscore the importance of infrastructure development, particularly in rural areas, as a catalyst for boosting agricultural production, improving food supply chains, and reducing food insecurity.

Effiong, Aboh, and Azu (2024) assessed the effect of road infrastructure on food Sovereignty in Akwa Ibom State, Nigeria using simple percentages. It was also concluded that road projects have positive effects of food sovereignty although some of the abandoned projects have caused some hardship and environmental challenges.

Saheed (2022) examined the effect of road transport system in the rural areas on food security in Akinyele Local Government Area of Oyo State, Nigeria. The study adopts a descriptive analysis, Multicollinearity and Cronbach Alpha Reliability tests as well as regression analysis on the primary data. Furthermore, the regression analysis indicates that transportation infrastructure has a positive and statistically significant effect on food security.

Ayodele and Oluwagbenga (2023) examined the role of transportation systems in food security and stability in Osun State, Nigeria. This study adopts a survey research design in which secondary and primary data are both utilized. The result shows that the correlation coefficient (r) is 0.927 and the coefficient of multiple determinant (r^2) is 0.893. The study concluded that transportation systems play a crucial role in enhancing the mobility of food items to various markets

THEORETICAL FRAMEWORK

Spatial Interaction Theory

This theory is associated with the work of Edward Ullman (1954), Spatial Interaction theory explains the flow of goods, services, people, or information between locations in space, based on complementarity, transferability, and intervening opportunities. The theory helps explain how road transport facilitates the movement of agricultural produce from rural farms to urban markets. Efficient road networks reduce the cost and time of transportation, thereby affecting the pricing of agricultural goods.

Poor road infrastructure increases transport costs, which leads to higher prices for agricultural products in urban areas and lower returns for rural farmers. Spatial Interaction Theory highlights how transport accessibility (transferability) directly impacts market prices.

Food security depends on the availability, accessibility, and affordability of food. Spatial Interaction Theory shows that better road transport enhances food distribution, reduces post-harvest losses, and ensures timely delivery of food to areas of need, thus improving food security.

Research gap

There is a gap in the literature on the study of road transport, agricultural pricing and food security nexus in Cross River State. To the best of our knowledge, only Bassey (2021) carried out a study on the impact of road transportation on agricultural development in Yakurr Local Government Area (LGA), Cross River State. Thus, this seeks to fill gap in the literature and extend the frontier of knowledge by exploring the link between road transport, agricultural pricing and food security nexus in Cross River State using the logistic regression approach.

METHODOLOGY

The cross-sectional research design was adopted for the study and the study population comprised farming households in Odukpani and Akpabuyo LGAs from which a sample of 200 hundred (200) respondents was drawn using the probability sampling technique. While 200 copies of structured questionnaire were administered, 195 were appropriately filled out, retrieved and analyzed. The structured questionnaire comprised of section which is the demographic information, and section B which consists of questions on impact of road transport on agricultural pricing as well as the impact of road transport and food security. Descriptive statistics and logistic regression were used to analyze the primary data.

The logit regression model can be specified as shown below:

$$Y_i = F(X_i\beta) + \varepsilon_i \quad (1)$$

$$Y_i = 1, \text{ if adopted}$$

$$0, \text{ otherwise}$$

where,

$\varepsilon \sim N(0,1)$; β = maximum likelihood; ε = error term; X = set of independent variables included in the model.

The logit regression model is expressed as:

$$\ln(AGPR) = \ln(\hat{Y}/1-\hat{Y}) = \beta_0 + \beta_1 RTR \quad (2)$$

$$\ln(FSEC) = \ln(\hat{Y}/1-\hat{Y}) = \beta_0 + \beta_1 RTR \quad (3)$$

Where:

AGPR = Agricultural pricing

FSEC = Food security

RTR = Road transport

$\hat{Y}$ is the predicted probability of the event which is coded with 0= Non-performance; 1= otherwise (performance)

$1-\hat{Y}$ is the predicted probability of the other decision

X = is the predictor variable representing other independent variables for internal and external variables.

The variables are measured by using the responses of the respondents in the questionnaire. The responses were coded with 0= No; 1= Yes.

DATA ANALYSIS AND DISCUSSIONS OF FINDINGS

Presentation of data

TABLE 1:Summary of respondents

Questionnaire	Responses	Total	Percentage (%)
Number of questionnaires returned	195	195	97.5
Number of questionnaires not returned	5	5	2.5
Total	200	200	100

Source: Field survey by the Author, 2025

From table 1, two hundred (200) questionnaires were administered to respondents and out of this number, 195 questionnaires were returned while 5 questionnaires were not returned. The total number of questionnaires returned was 195 representing 97.5 per cent while the total number of questionnaires not returned were 5, representing 2.5 per cent of the respondents who did not return their questionnaire.

Table 2: Socio-demographic characteristics of the respondents

Variable		Frequency	Percent
Sex			
Male		53	27.2
Female		142	72.8
Farming experience			
Less than 5 years		29	14.9
5 – 10 years		56	28.7
11 - 16 years		68	38.9
Above 16 years		42	21.5
Nature of products			
Vegetables		18	9.2
Palm oil		52	26.6
Grains		50	25.6
Garri		55	28.2
Tubers		25	12.8

Source: Field survey, 2025.

Table 2 above shows the socio-demographic characteristics of the respondents. From the table female respondents were the majority representing 72.8 percent of the respondents. Respondents with business experience between 11 to 16 years were the majority representing 38.9 per cent of the respondents. Furthermore, the majority of the respondents were involved in garri business representing 28.2 per cent of the respondents.

Table 3: Logit regression result

Dependent Variable: AGPR				
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)				
Date: 05/30/25 Time: 12:57				
Sample: 1 195				
Included observations: 195				
Convergence achieved after 2 iterations				
Coefficient covariance computed using observed Hessian				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.088947	0.211027	-0.421498	0.6734

RTR	0.954283	0.288827	3.303995	0.0222
McFadden R-squared	0.606330	Mean dependent var		0.528205
S.D. dependent var	0.500489	S.E. of regression		0.499584
Akaike info criterion	1.394869	Sum squared resid		48.16984
Schwarz criterion	1.428438	Log likelihood		-133.9997
Hannan-Quinn criter.	1.408460	Deviance		267.9994
Restr. deviance	269.7066	Restr. log likelihood		-134.8533
LR statistic	9.707200	Avg. log likelihood		-0.687178
Prob(LR statistic)	0.041349			
Obs with Dep=0	52	Total obs		195
Obs with Dep=1	143			

Source: Author's computation using E-views, 2025.

The result of the logit regression in table 3 above revealed that, for a unit increase in road transport infrastructures leads to increase in agricultural pricing in Cross River State by 0.954283 units. Further findings from the logit regression showed that road transport is statistical significant at 5 per cent level since its probability value of 0.0222 is less than 0.05.

Table 4: Logit regression result

Dependent Variable: FSEC				
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)				
Date: 05/30/25 Time: 12:58				
Sample: 1 195				
Included observations: 195				
Convergence achieved after 3 iterations				
Coefficient covariance computed using observed Hessian				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.359374	0.214231	1.677506	0.0934
RTR	0.668240	0.289817	2.305730	0.0416
McFadden R-squared	0.626368	Mean dependent var		0.538462
S.D. dependent var	0.599802	S.E. of regression		0.498893
Akaike info criterion	1.392094	Sum squared resid		48.03651
Schwarz criterion	1.425663	Log likelihood		-133.7291
Hannan-Quinn criter.	1.405685	Deviance		267.4583
Restr. deviance	269.1724	Restr. log likelihood		-134.5862
LR statistic	8.714157	Avg. log likelihood		-0.685790
Prob(LR statistic)	0.040447			
Obs with Dep=0	70	Total obs		195
Obs with Dep=1	125			

Source: Author's computation using E-views, 2025.

The result of the logit regression in table 4 above revealed that, for a unit increase in road transport infrastructures leads to increase in food security in Cross River State by 0.668240 units. Further findings from the logit regression showed that road transport is statistical significant at 5 per cent level since its probability value of 0.0416 is less than 0.05.

DISCUSSIONS OF FINDINGS AND POLICY IMPLICATIONS

The findings from the first specific objective reveals that road transport has positive and significant impact on agricultural pricing in Cross River State. It implies that improvements in road infrastructure and transportation services meaningfully influence the prices of agricultural products in Cross River State. Better road transport enables farmers to reach markets faster and more efficiently, reducing post-harvest losses and increasing their ability to sell at favorable prices. This leads to higher farm prices and potentially better incomes for rural producers.

The significant impact suggests that road transport facilitates greater market integration, allowing prices in rural areas to align more closely with urban centers. This reduces price volatility and ensures more stable and predictable income for farmers. The significant impact again validates government investments in road infrastructure as a tool for rural and agricultural development.

The positive and significant relationship between road transport and agricultural pricing in Cross River State underscores the critical role of transportation infrastructure in enhancing the efficiency of agricultural markets. It implies that continued investment in rural road development can have substantial benefits for agricultural productivity, farmer incomes, and sustainable economic growth and development.

Furthermore, the findings from the second specific objective reveals that road transport has positive and significant impact on food security in Cross River State. This finding reinforces the findings of Akinwale (2017), Saheed (2022) as well as Atodele and Oluwagbenga (2023). This outcome may be that good road networks enable farmers to transport their produce to markets more efficiently and quickly, reducing post-harvest losses and spoilage. This increases the availability of diverse food items in both rural and urban markets, contributing positively to food security.

More so, it may be that improved road transport facilitates smoother and more reliable movement of food between rural production zones and urban consumption centers. This ensures better food distribution, minimizing scarcity in both urban and rural areas. Furthermore, it could be that improved roads create better access to agricultural inputs (e.g., fertilizer, seeds) and services (e.g., extension workers, credit), supporting overall agricultural productivity. Higher productivity leads to increased food supply and improved incomes, further enhancing food security.

A positive and significant impact of road transport on food security in Cross River State highlights the critical role of infrastructure in enhancing access to food, promoting agricultural growth, and improving livelihoods. It underscores the need for sustained investment in road networks, particularly in rural and agricultural regions, as a key policy tool for ensuring long-term food security.

CONCLUSIONS AND RECOMMENDATION

This study investigates the impact of road transport on agricultural pricing and food security in Cross River State. The study revealed that the impact of road transport on agricultural pricing and food security in Cross River State is both significant and far-reaching. Efficient road transport serves as a vital link between rural agricultural producers and urban markets, enabling the timely movement of farm produce, reducing post-harvest losses, and enhancing market access. Conversely, poor road infrastructure leads to increased transportation costs, delays in delivery, spoilage of perishable goods, and ultimately higher food prices. These challenges undermine the income of farmers, discourage production, and reduce the availability and affordability of food for consumers, thereby threatening food security in Cross River State.

Thus, the study recommend that improving road infrastructure in Cross River State is therefore critical to stabilizing agricultural prices, ensuring fair returns for farmers, and enhancing the overall food supply chain. Strategic investments in rural road development and maintenance can boost agricultural productivity, promote economic growth, and contribute significantly to the State's food security objectives. Further, by integrating road infrastructure with food supply systems, Cross River State can achieve better food distribution, reduce losses, lower food prices, and enhance food availability, accessibility, and affordability — the key pillars of food security as well as overall agricultural development in Cross River State.

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