

## Road Transport Fuel Price and Food Security in the South-East Nigeria

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### Abstract

The price of road transport fuel in Nigeria has very significant impact on transportation systems, business operations, and even production processes, including agricultural production. This study explored the impact of fluctuations in price of road transport fuel on food security in the South-east Nigeria. The study adopted a mixed method of data collection as it relied on documented evidences from secondary sources and information gotten from food products marketers, through interviews. Thematic analysis was adopted as the method of data analysis. The Rent-seeking Theory was employed as the theoretical framework of analysis. Findings from the study indicated that the regulation of fuel pump price by the government, manifested in the constant increase in fuel pump price, has undermined the availability of food products in South-east Nigeria. The study also found that industrial actions carried out by fuel suppliers in response to unfavorable government policies, negatively affects food affordability in the Southeast Nigeria. The study made recommendations for policy implementation by the federal government and state governments in South-east geo-political zone of Nigeria, to cushion the effect of increase in fuel price and constant strikes by petroleum distributors, in a bid to enhance food security in South-East Nigeria.

**Keywords:** Road Transport, Fuel Price, Food Security, South-East Nigeria

### Introduction

Road transport plays a vital role in Nigeria's economy, as it serves as the major means of transportation for both people and goods across the country (Tiza, et al, 2022). The price of fuel in Nigeria, particularly for road transport, receives much attention because of its impact on the business, living standards and the overall economy. Oladapo (2019) observed that the Nigerian road transport fuel price has undergone several changes over the years, reflecting shifts in global oil prices, domestic policies, and economic conditions. Historically, Nigeria has been highly dependent on crude oil exports, with petroleum accounting for a substantial portion of the country's revenue (Aboyomi et al, 2015). However, the volatility of global oil prices and Nigeria's limited refining capacity has contributed to creating fluctuations in domestic fuel price (Gylych, 2020).

Considering that Nigeria is a net importer of refined petroleum products, changes in global oil prices significantly affect fuel prices within the country (Bawa et al, 2020). Fluctuations in international crude oil markets, influenced by

geopolitical factors, supply and demand dynamics, and OPEC decisions, directly affect the cost of imported fuel (OPEC, 2022). Nigeria's fuel import is mainly measured in foreign currencies, primarily the United States dollar. Therefore, fluctuations in the exchange rate between the Nigerian Naira and the USD, impact the cost of importing fuel and subsequently influence domestic fuel prices (Ojebiyi & Wilson, 2011).

Over the years, the Nigerian government adopted fuel subsidies as a means of stabilizing fuel price, to minimize the chain effects on commodity and service delivery prices, which come with high fuel price (PWC, 2023). Note that subsidy removal or adjustment policies, driven by fiscal pressures or economic reforms, have led to significant price increases in the past. The cost of transporting and distributing fuel across Nigeria is another significant factor that contributes to road transport fuel prices. Faajir and Zidan (2016) stated that infrastructural challenges such as inadequate storage facilities, inefficient logistics, and the state of road networks in Nigeria, increase transportation. That could affect distribution

costs of vital products like fuel, which could also affect fuel pump price.

Food security is an issue that has gained international attention (Yusof et al, 2023). In South-east Nigeria, food security is a multifaceted issue, with implications for economic development, social well-being, and public health. Food security encompasses four dimensions that collectively reflect a population's ability to access sufficient, safe, and nutritious food. The dimensions of Food security includes food availability, which refers to the physical presence of adequate quantity and variety of food. It is influenced by factors such as agricultural productivity, food production, imports, and storage capacity. Food accessibility is also another dimension of food security. It focuses on the ability of individuals to obtain food economically and physically (FAO, 2006).

Several factors contribute to food insecurity in the South-east region of Nigeria. The factors include limited access to fertile land for agricultural production, low agricultural productivity, inadequate infrastructure, outdated farming techniques, and poor post-harvest management, which all affect food availability (FAO, 2023). South-east Nigeria is susceptible to climate change impacts, such as irregular rainfall patterns, increased frequency of extreme weather events, and land degradation (Adamaagashi et al, 2023). These factors disrupt agricultural activities, reduce crop yields, and negatively impact food production.

Although the road transport fuel price in Nigeria is influenced by various factors, the necessity of the supply and availability of road transport fuel is also vital in sustaining food security in the south-east of Nigeria. It is against the forgoing background that this study is conducted to ascertain how road transport fuel price in Nigeria, affects food security, using South-east Nigeria as a case study.

### **Literature Review**

In order to identify gaps in existing literature, works of scholars like Ocheni (2015), Omosimua (2017), Adagunodo (2013) and Ologbenla (2021) were reviewed. The forgoing scholars focused on the factors that contribute to the increase in price of fuel in Nigeria. Studies

conducted by Metemilola and Elegbede (2017), Eme et al (2014), Thomas and Turk (2023) and Nwozor et al (2019) focused on challenges affecting food availability, with emphasis on agricultural production, market access, and the impact of climate change on food availability.

The bulk of related extant literature or studies focused on identifying the factors that lead to industrial actions by fuel suppliers or distributors in Nigeria were also reviewed. The study conducted by Udo (2013) falls in that category. Scholars like Omotosho (2019) and Onyekwena et al (2017) studied how government fuel subsidies and market dynamics affect products affordability in Nigeria. Despite the useful insights provided by extant literature, how the constant fluctuations in the domestic price of fuel in Nigeria due to changes in government policy, as well as constant industrial actions embarked by fuel distributors, affects food availability and affordability in regions like South-east Nigeria, has not been subjected to serious empirical scrutiny.

Considering the heavy dependence of the region on food supply from other regions, the dependence on fuel for mechanized food production and the fact that road transport is the major means of conveying agricultural products to the South-east region, it is imperative to understand how the constant fluctuations in the availability and price of road transport fuel affect food security.

### **Research Method**

#### **Research Design**

This study employed the Ex-post-Facto research design, considering that the study is non-experimental and qualitative in nature. Cohen and Manion (1980) defined Ex-post-Facto research as those studies which investigate possible cause- and- effect relationships by observing an existing condition and searching back in time to seek explanations to a phenomena.

#### **heoretical Framework**

#### **Rent-seeking Theory**

The Rent-seeking theory, developed by proponents like Tullock (1980) and Buchanan,

is a well known theory in political science which emphasizes on the distribution of economic rents. Economic rents are the excess benefits that individuals or groups can get through non-productive activities, like seeking favorable government regulations (Hillman & Long, 2017). The theory highlights how individuals or groups engage in rent-seeking behavior in order to collect economic rents, which can have negative implications for the overall economic well being of a country. In the context of the impact of government-induced fuel price increases on food security in South-east Nigeria, the rent-seeking theory provides insights on how different actors engage in rent-seeking behavior and how that behavior affects food security in the region.

Government-induced increases in fuel prices have created avenues for rent-seeking behavior on the part of farmers, transporters and consequently, food products distributors in Nigeria. Increase in the costs of transportation, affects the prices of essential products, including food. The higher transportation cost makes it more expensive for farmers to convey their products to markets, which can result to an overall decrease in agricultural productivity. Also, the higher prices of major food products make it challenging for low-income households to afford an adequate and nutritious diet, which is an indicator of food insecurity.

To minimize the effect of fuel price on food security in South-east Nigeria, the State governments in the South-east have to channel more effort towards improving agricultural productivity in the region. There is need to provide adequate support for local farmers to increase production. There is also need to address infrastructural deficits in the region, such as bad road networks, that affect the transport of food products to market due to the associated high transport fare charged because of the bad road conditions, which also increases food prices (Ibezimako & Emenike, 2022).

#### **Methods of Data Collection and Analysis**

Data for this study was collected through a mixed-method approach, which encompass Key Informant Interviews and collection of data from Secondary Sources of information. 12 study study participants, which include members of the Drivers' Union in South-east

Nigeria, Farmers and Small-scale food products business men/women, purposively chosen, were interviewed. The data generated was analyzed through the Thematic Analysis method, which was applied to identify, analyze, and interpret patterns or themes in the information gathered.

#### **Fuel Price Regulation in Nigeria and the Impact of Deregulation**

The major mechanism through which the Nigerian government maintained control over the price of crude oil was through the introduction of subsidies. Fuel subsidy refers to government policies that provide financial support to reduce the cost of fuel for consumers. The fuel subsidies in Nigeria were aimed at stabilizing consumer fuel prices, promote social welfare, and shield citizens from volatile global oil prices (McCulloch, 2021). Price deregulation involves removing government-controlled pricing mechanisms from commodities, allowing market forces to determine prices. In the context of fuel, deregulation allows supply and demand dynamics to influence fuel costs, encouraging competition and potentially attracting private investments (Evans et al, 2023).

Fuel subsidies in Nigeria have had a long history dating back to the 1970s when the government introduced them to stabilize domestic fuel prices and ease the burden of rising global oil prices on citizens (Omosho, 2019). These subsidies aimed to provide affordable fuel to the population and were seen as a social welfare measure. However, over time, these subsidies grew into a significant fiscal burden due to inefficiencies, corruption and revenue losses for the government. The need to redirect funds towards other developmental sectors and address budgetary constraints prompted discussions on subsidy removal and price deregulation.

Fuel price deregulation significantly impact food commodity trade. Changes in fuel prices directly influence transportation costs in Nigeria; a critical factor in the production and distribution of food items (Izuaka et al, 2023). Higher fuel prices can increase transportation expenses, leading to higher food production costs and potentially raising food prices for consumers. This can particularly affect

perishable goods and products with long supply chains. Deregulation might incentivize efficiency improvements in the transportation sector, but the immediate cost implications can strain food commodity trade and affect food availability. Thus, the relationship between fuel price deregulation and food commodity trade underscores the need for holistic policies that balance economic and social concerns.

The impact of fuel prices on transportation costs in Nigeria is profound, as fuel constitutes a significant portion of operating expenses in the transportation sector. According to a trader interviewed at the Ogi Community Market in Nsukka, Enugu State, Nigeria, he said;

*The price of fuel is very important in all the goods that we sell. Whenever government increases price of fuel, the price of all our goods will increase. It is not as if we are the ones raising the prices because we are traders and we use to go and buy our goods too (Interview, August, 03, 2023).*

While sharing his thoughts on the impact of fuel price on prices of commodities in the market, a driver who conveys goods from the North to the South-east Nigeria aptly noted that the prices of things usually go up whenever the prices of fuel increase. This assertions syncs with the findings of Ocheni (2015) who noted that when fuel prices rise, transportation costs increase, affecting various industries, including agriculture and food distribution. High fuel prices directly influence freight rates, leading to elevated costs of moving goods across supply

chains. This impact is particularly pronounced for perishable and bulk commodities, where transportation costs represent a substantial portion of the product's total cost (Adeniran, 2018).

Consequently, fluctuations in fuel prices can lead to volatility in transportation costs, which may cascade through supply chains and affect the final prices of goods, potentially impacting food availability and affordability. This aligns with the insights provided by some of the participants in this study. A business man interviewed in the course of this study stated that:

*In the South-east region of Nigeria, the impact of fuel prices on transportation costs is particularly significant due to its geographical characteristics and economic activities. With a predominantly road-based transportation system, fluctuations in fuel prices directly affect the cost of moving goods within the region. This is especially relevant for the transportation of agricultural commodities, as a considerable portion of the region's economy relies on agriculture (Interview, August, 02, 2023).*

In the last few years, the price of fuel in Nigeria has been on the increase, due to various factors, especially the constant changes in government policy on fuel price (IMF, 2022). This is reflected by the information contained in the table below.

**Table 1: Fuel Price in Nigeria between 2015 and 2023**

| Year | Price in Naira (Per Litre) |
|------|----------------------------|
| 2015 | N 87                       |
| 2016 | N 145                      |
| 2017 | N 145                      |
| 2020 | N 170                      |
| 2021 | N 165                      |
| 2023 | N 552                      |

**Source:** Tunji (2022), Alo (2020), Owoyele (2023) & Mustard Insights (2023)

### **Supply of Food Commodities in South-East Nigeria**

In the South-east region of Nigeria, the import of food commodities plays a significant role in shaping the local food supply. While the region has notable agricultural production, it also relies on imports to meet diverse consumer demands and enhance dietary variety. The South-east serves as a major trading hub, facilitating the distribution of imported food commodities to other neighboring states. However, this reliance on imports is affected by factors such as fuel prices fluctuations and transportation costs. According to a food products Seller in the Ogige Community Market in Nsukka, Enugu State, Nigeria, she noted that:

*Most of the food commodities we sell here are brought in from other places. We buy things like yam, tomatoes, pepper, even rice that we normally get from Adani from Benue and far in the North. This is because what we farm here in Nsukka is not enough. When you factor in the cost of transportation too you will see why things are expensive now (Interview, August, 04 2023).*

Food commodity trade in the South-east of Nigeria is influenced by a combination of factors that shape the food supply chain. These factors include the region's agro-ecological conditions, production capabilities, consumer preferences, and market demand (Thomas & Turk, 2023). Exchange rates and international trade policies impact the cost of imports and exports, affecting trade flows (Ijirshar et al, 2022). Transportation infrastructure and costs also play a pivotal role in facilitating or constraining trade activities in Nigeria (Adeniran & Yusuf, 2016). Furthermore, such as income levels, as well as dietary shifts influence the demand for various food commodities.

### **Fuel Price and Livestock Trade in South-east Nigeria**

Livestock and poultry production in the South-east of Nigeria is a significant component of the region's agricultural sector. It encompasses the rearing of various animals such as cattle, goats,

pigs, and poultry, contributing to both subsistence and commercial farming (Anosike et al., 2018). The region's cultural heritage and local dietary preferences drive the demand for animal-sourced protein, emphasizing the importance of livestock or poultry production (Anyanwu et al., 2020). However, challenges such as inadequate infrastructure, disease outbreaks, and limited access to modern farming practices impact on productivity (Obidike, 2011). Traditional extensive farming practices are prevalent, reflecting a blend of cultural norms and economic realities (Onwuka et al., 2019).

While commenting on the economic benefits of engaging in the poultry sector, a local chicken trader at the Ikpa market in Nsukka noted that;

*We make small gains at times in this business. Sometimes the prices of foods and drugs go very high. Like last year we started buying feed at above 10,000 naira for a bag. We even sold the chickens, the big one around 7000 naira. So we make little profit (Interview, August, 5 2023).*

The livestock rearing & trading industry in Nigeria holds substantial economic and social significance. Economically, it provides a source of livelihood for a considerable portion of the population, generating income through meat and egg production, trade, and employment opportunities (Nigerian Federal Ministry of Agriculture and Rural Development, n.d). Additionally, it contributes to the region's Gross Domestic Product (GDP) and plays a pivotal role in poverty reduction and rural development (FAO, 2023). On a social level, livestock and poultry rearing are deeply ingrained in the cultural fabric, often serving as a form of social status, traditional ceremonies, and communal activities (Ajala et al, 2020). The industry also fosters food security by providing a steady supply of animal protein to meet dietary needs.

Overall, the economic and social significance of the livestock trading industry underscores its role in the region's sustenance and progress. Fluctuations in fuel prices which directly influence transportation costs, affects the overall cost of production and distribution of

products, including livestock and poultry products (Ocheni, 2015). Higher fuel prices lead to increased feed and animal transportation expenses in the South-east region of Nigeria, and affect the final price of meat and poultry (Bamaiyi, 2013).

Responses from study participants indicated that fuel price variations indirectly impact the sector by influencing the costs of veterinary services and equipment. These cost changes affect the final prices of meat and poultry products. That has implications for food affordability, especially with regards to the purchasing power of poor households. The forgoing is reflected in the statement made by one of the study participants in Abakaliki, who noted that;

*The price of fuel has always affected the cost of livestock, which affects the price fish and meat in the market. In the last five years, the increases in the price of fuel have resulted to an increase in the price of beef meat, goat meat, chicken meat and even fish, due to the hikes in road transportation cost. Many families now, including mine have found ways to minimize the consumption of livestock based proteins from their meal, while*

*others have eliminated it entirely, because it is very expensive (Interview, August, 5 2023).*

### Food-crop Production and Availability in South-east Nigeria

The production and availability of food products like cereals play a pivotal role in ensuring food security in Nigeria. Cereals are fundamental staples, contributing to diets globally (Erenstein et al, 2022). Their production is influenced by factors such as climate, technological advancements, and agricultural policies. Ensuring availability requires efficient distribution networks, market accessibility, and responsive policies. Adequate cereal production is critical to meeting the nutritional needs of growing populations and maintaining stable food systems.

Cereal production in South-east Nigeria faces challenges which include inadequate infrastructure, land constraints, and climate variability (Olumba et al, 2021). The region has relatively lower yields compared to other parts of Nigeria, which can be attributed to factors such as suboptimal agronomic practices and limited access to improved seeds and technology (Nwike et al, 2017). Regardless, a significant amount of the region's population consumes cereals as shown in the table below.

**Table 2: Most Consumed Cereals in Southeast Nigeria**

| Rank Based on Consumption Rate | Cereals consumed the Most |
|--------------------------------|---------------------------|
| 1                              | Rice                      |
| 2                              | Maize                     |
| 3                              | Wheat                     |
| 4                              | Millet                    |
| 5                              | Sorghum                   |

**Source:** Market Food Products Price Survey (2023)

A trader who deals in Cereals retail at the Ogbete market in Enugu, while responding to the availability and production of cereals in the south-east Nigeria made the statement below;

*You know that most of our people in the South-east are not that big into agriculture. It is not as if they don't farm, but compared to the North where we buy most of all these products. Most of us*

*here are traders while majority of them over there in the North are farmers. So I believe this also affects the production of cereals like maize, although we are trying also in rice cultivation (Interview, August 04, 2023).*

Cereal production in the South-east of Nigeria is affected by climatic conditions, which include

rainfall patterns and temperature fluctuations (Chikezie et al, 2019). Limited access to modern agricultural technologies and improved seeds also affects yields (Nwike et al, 2017). Land constraints and soil fertility issues pose challenges to expansion and productivity in the south-east region (Nkwopara et al, 2021). Additionally, inadequate infrastructure and post-harvest management contribute to post-production losses (Anyaocha et al, 2023).

Transportation cost significantly influences cereal distribution in the South-east of Nigeria. The region's challenging road infrastructure and sub-optimal transportation systems causes increases in transportation costs (Onokala, 2020). As cereals are bulky and perishable, high transportation costs contribute to elevated prices thereby affecting affordability for consumers. Also, inadequate transport infrastructure in the region leads to delays, resulting in post-harvest losses and reduced

food availability (Udeuhele, et al 2021). Efficient transportation networks, including road improvements and modern storage facilities, are crucial for ensuring that cereals reach consumers in a timely and cost-effective manner, supporting food security and price stability in the region.

Higher fuel prices lead to increased transport expenses which affects the final price of cereals for consumers. These cost changes also influence the ability of farmers to transport their produce to markets, affecting overall availability. Adequate transportation is crucial to prevent post-harvest losses and ensure timely delivery of cereals to consumers. Hence, fuel price variations indirectly impact cereal availability and affordability, as the price's of major food products in South-east Nigeria continue to increase, as fuel price increases. The price increases are captured in the table below.

**Table 3: Cost Price of Food Commodities in the South-east of Nigeria**

| Food ITeM     | Cost Price<br>in 2015 | Cost Price<br>in 2016 | Cost Price<br>in 2017 | Cost Price<br>in 2018 | Cost Price<br>in 2019 | Cost price<br>in 2020 | Cost Price<br>in 2021 | Cost Price<br>in 2022 |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Rice (100kg)  | 13,500                | 23,000                | 30,000                | 28,000                | 30,700                | 38,000                | 35,000                | 46,700                |
| Beans (100kg) | 12,800                | 23,000                | 34,450                | 35,000                | 36,800                | 21,000                | 36,000                | 45,000                |
| Maize 100kg   | 14,700                | 15,000                | 17,000                | 14500                 | 14,700                | 30,000                | 32,000                | 52,000                |
| Garri (100kg) | 12,000                | 13,500                | 20,000                | 25,000                | 16,000                | 34,000                | 28,000                | 31,000                |

Source: Market Food Products Price Survey (2023)

**Strikes by the Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN), Food Price and Food Affordability in the South-east Nigeria**

The Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN) is a prominent trade union representing senior employees in the Nigerian oil and gas sector. Formed in 1978, PENGASSAN advocates for the welfare and rights of its members, addressing issues such as labor conditions, compensation, and industry-related policies. The union has a history of engaging in strikes and negotiations to influence decisions in the oil and gas sector. PENGASSAN plays a significant role in shaping labor dynamics and policies within Nigeria's crucial petroleum industry (PENGASSAN, 2023).

Strikes by the Petroleum and Natural Gas Senior Staff Association of Nigeria

(PENGASSAN) significantly impact the economy, including the wage to food price ratio. PENGASSAN's strikes in Nigeria often disrupt petroleum supply chains, leading to fuel scarcity and price hikes (Ezigbo, 2023). This disrupts transportation, affecting the cost of food distribution, ultimately contributing to increased food prices. As a result, the wage to food price ratio, representing the balance between workers' incomes and food costs, decreases. Reduced purchasing power due to elevated food prices in Nigeria erodes the real value of wages, affecting workers' standards of living (Echebiri et al, 2022).

Addressing the cyclical relationship between strikes, fuel availability, and the wage to food price ratio requires coordinated efforts among labor unions, government bodies, and the private sector. According to Hayes (2023), the wage to food price ratio reflects the

relationship between workers' incomes and the cost of food, indicating their purchasing power. It signifies the affordability of essential commodities for the average earner. As food prices rise, the ratio decreases thereby potentially affecting households' ability to afford adequate as well as diverse diets. A lower ratio can lead to reduced nutritional quality, potentially increasing food insecurity. This ratio is vital for understanding the real impact of fuel supply on the ability to afford basic necessities, particularly food.

Experiences shared by food product

retailers in the markets indicate that strikes by PENGASSAN disrupt the wage to food price ratio due to their impact on both wages and food prices. The strikes disrupt food supply chains, leading to increased food prices, thereby, further straining the ratio. The cyclical relationship between labor disputes and food affordability underscores the vulnerability of households to the interplay between wages and food costs during times of industrial unrest. The table below provides information on some strikes embarked upon by PENGASSAN, **between 2015 and 2022.**

**Table 4: Strikes by PENGASSAN in Nigeria between 2015 and 2022**

| Month    | Year |
|----------|------|
| May      | 2015 |
| June     | 2016 |
| December | 2017 |
| August   | 2020 |
| November | 2022 |

Source: Ejoh (2015), Akintoye (2016) and Bala-Gbogbo (2017)

The link between petroleum industry strikes and rise in food prices highlights the delicate relationship between energy supply and overall economic stability, which can have far-reaching implications for food accessibility. The impact of the strikes on affordability of food, particularly for low-income households, compromises nutrition and increases vulnerability to food insecurity as indicated by the responses of study participants.

Strikes by PENGASSAN usually create a chain reaction, which results in strikes by other unions or organizations that try to benefit from the situation. One of such organizations whose actions are very relevant to this study is the National Association of Road Transport Owners. The National Association of Road

Transport Owners (NARTO) is a prominent trade association representing the interests of road transport workers in Nigeria.

NARTO was established to promote the welfare of transport owners and operators. The organization plays a significant role in shaping transportation policies and advocating for the rights of its members. It engages in negotiations with relevant authorities to address issues related to road infrastructure, regulations, and the overall improvement of the transport sector. NARTO's influence extends across Nigeria, impacting the efficiency and sustainability of road transport operations (Udo, 2017). It has also embarked on a number of strikes, in response to high fuel prices or fuel scarcity, as reflected in the table below.

**Table 5: Recent National Association of Road Transport Workers Strikes/Attempted Strikes in Nigeria**

| Month     | Year |
|-----------|------|
| September | 2020 |
| March     | 2021 |
| February  | 2022 |

Source: The Cable (2020), Odunsi (2021), Izuaka (2022)



According to a member of NARTO interviewed in Enugu State, he stated that:

*NARTO strikes are felt nationwide, not just here in Enugu State or in the South-east alone. We strictly forbid our members from plying the road, so definitely, this will have impact on supply of goods and services across the country. It has impact on the prices of goods in the North and also in the South-East region (Interview, August 02, 2023).*

In support of the above view on the impact of transportation strikes on the prices of food, a member of the Drivers Union interviewed in Imo State opined that:

*If NARTO were to go on strike, it could disrupt the transportation of goods, including food, leading to shortages and increased prices. However this union doesn't embark on strikes like that because it will also affect our livelihood. The road transport sector's importance in Nigeria's distribution system means that strikes could have significant ripple effects on various industries, affecting supply chains and consumer access to essential item (Interview, August 02, 2023).*

A food products vendor in the Ogige market, Enugu State, also highlighted the impact of strikes on price of commodities such as food products. He stated that:

*High cost of transport is a major cause of increase in food prices in the south-east. Last year when drivers were on strike we had to pay 5000 Naira to transport one bag of maize down here to the south-east. Also, when our vehicle carry food from the North and is coming, there are several places where the drivers are stopped by the task force to pay and at each stop, the driver is forced to pay 20,000 Naira before he would be allowed to go. Again,*

*when poverty and lack of money make it impossible for people to buy food, patronage in the market becomes very low (Interview, August 04, 2023).*

### **Conclusions and Recommendations**

This study examined the effect of road transport fuel price on food security in the South-east Nigeria. Road transport is the major means of transporting persons and goods from one location to another in Nigeria. It is also the major means through which farmers from different parts of the country convey their farm products to the markets where they are needed. The repeated adjustment of fuel price through various government regulatory frameworks and the industrial strike actions embarked upon by workers in the petroleum industry, in response to unfavourable government policies, have had significant impact on the availability and affordability of food products in south-east Nigeria. Findings of the study show that the increases in fuel pump price, arising from government fuel price regulations, affect food availability and affordability in the south-east of Nigeria, because the region depends heavily on other regions for their food products supply. Transporters and farmers take advantage of fuel price increases to enhance profit, through increases in commodity prices and increase in transport fares. Secondly, findings of the study show that industrial actions embarked on by petroleum workers, in response to unfavourable government policies, affect food availability and affordability of food products like cereals and even livestock, as it leads to limited supply of food products, and consequently, increase in the price of the products, which becomes expensive for poor households to afford.

Based on the forgoing, this study makes the following recommendations:

- i. The major reason for the profound effect which fuel price has on food security in South-east Nigeria is because of the low food production in the region. Hence, government at the federal and State levels have to take urgent and deliberate steps towards investing more in agriculture, in order to boost production. Public-private partnerships should be pursued in order to develop and improve

- ranching practices, irrigation systems, transportation systems or networks, and storage mechanisms aimed at enhancing food production and supply.
- ii. Government support in the form of subsidies or funding should be provided for farmers, in order to facilitate the adoption of efficient, effective and sustainable agricultural practices, which can help to increase production, and minimize production cost.
  - iii. There is need for government coordinated sensitization programmes in South-east Nigeria, aimed at encouraging individual food production, through private or community gardens/farms, in order to ensure constant food availability and affordability. This would help to minimize the effect of fuel price increases on food production and supply.

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