African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)
www.abjournals.org

# PERCEIVED EFFECT OF FUEL PRICE HIKE ON FARMING HOUSEHOLDS IN IMO STATE

**Okoroh Juochi P.**

Department of Agricultural Economics, Extension and Rural Development, Imo State University, Owerri.

Email: okorohjuochi@yahoo.com

**Cite this article:**

Okoroh Juochi P. (2024), Perceived Effect of Fuel Price Hike on Farming Households in Imo State. African Journal of Agriculture and Food Science 7(2), 231-242. DOI: 10.52589/AJAFS-ASYSIAYG

**Manuscript History**

Received: 13 Apr 2024

Accepted: 30 May 2024

Published: 01 Jul 2024



**ABSTRACT:** *The study assessed the perceived effect of fuel price hike among farming households in Imo State. The study described the socio-economic characteristics of farming households in Imo State; ascertained farming households' awareness of fuel price hike; identified the perceived causes of fuel price hike; ascertained the perceived effect of fuel price hike on farming activities among farming households in Imo State and identified the coping strategies used among farming households to cushion the effect of fuel price hike in Imo State. A multi-stage sampling was adopted in selecting 120 farming households for the study. Primary data were used for the study using a structured questionnaire. Data analysis employed percentages, means, frequencies and mean score analysis. The result on the awareness of the effect of fuel price hike among farming household showed that all the farmers were aware (100%). farming households perceived fuel subsidy removal ($\bar{x}$=3.7), instability in government policies ($\bar{x}$ =3.5), high cost of importation of refined fuel ($\bar{x}$ =3.4), Non-functional of local refineries ($\bar{x}$ =3.3) among others as the causes of fuel price hike. Farming households perceived increased cost of transportation for farm inputs ($\bar{x}$ =3.9), Increased cost of production/farming activities like ploughing, clearing etc($\bar{x}$=3.9) Increased price of farm produce ($\bar{x}$ =4.0), Increased food prices ($\bar{x}$=4.0), decreased agricultural productivity ($\bar{x}$=3.4), Limited access to agricultural machinery and equipment,( $\bar{x}$ =3.3), increased in transportation of farm produce to the market ($\bar{x}$ =3.4) as the effects of fuel price hike. The highest ranking coping strategies used by farming households were trekking some distances to reduce the cost of transportation (Ranked 1st), Minimising spending habits due to fuel price increase (2nd), Explored the use of alternative energy sources e.g solar panels for irrigation, charcoal, firewood (3rd). Explore the possibility of collective purchasing or bulk buying with others to reduce individual costs (4th) and skipping meals (5th). Educational level, household size and access to credit were the significant socioeconomic variables influencing farming households' perceived effect of fuel price hike. The study therefore recommends that Nigeria's crude oil should be refined domestically so that the importation of refined fuel can be banned which will reduce the cost of refining and pump price.*

**KEYWORDS**: Effects, fuel price hike, farming households, Imo.



Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)

www.abjournals.org

## INTRODUCTION

According to the Food and Agriculture Organization (FAO, 2022), agriculture used to be the foundation of Nigeria's economy provided livelihoods for most Nigerian farming households and guaranteed millions of jobs (Isaac, 2002). With the discovery of crude oil in commercial quantity in the early 70s, Nigeria's reliance on Agriculture shifted to a crude oil economy and brought radical changes in the economy of Nigeria masking other sectors especially agriculture which was relegated to second position (Odulara, 2008). Currently, Nigeria is the 8$^{th}$ World oil producing country and oil is the mainstay of Nigeria's economy (Ocheni, 2015). Thus making the country completely dependent on oil for her foreign exchange earnings and for domestic budgetary finances. Realizing the danger of this exclusive reliance on oil, futile efforts have been made to diversify the economy of the country and give it back to agriculture which is hoped to provide a turn-around improvement (Ocheni, 2015). It is the belief of policy makers that if the revenue realized from oil is combined with that of Agriculture, Nigeria will have stable national revenue earnings (Jukman, 2022).

According to Jukman (2022), Nigeria's agricultural sector has four sub-sectors namely- crop production, livestock production, forestry and fishery. With a total arable land of 34 million hectares out of 70.8 million hectares, 6.5 million hectares are used for permanent crops while 80.3 million hectares are available for pastures and meadows. The major crops cultivated in Nigeria are maize, millet, cowpea, yam, cassava, soybean, groundnut, potato etc (Trenbath, 2015). Over 70% of households are engaged in crop farming with 7.3% of the households practising fishing while 69.3% of households own or raise livestock in Northwest Nigeria (Feedifuture, 2021).

Petrol in Nigeria's economy has been known to serve as an intermediate input in agricultural production. Therefore changes in price, quality and quantity of oil affect agricultural productivity and profitability (Aderite, 2022). This is because most agricultural machinery and technology are powered using petroleum products especially premium Motor Spirit (PMS) also called Petrol. Any increase in the world market could lead to an increase in the cost of production of agricultural products, goods and services. Also, an increase in agricultural expenditure due to an increase in fuel price increases the transportation cost of conveying producers and their products which will subsequently increase products' price to cushion off the increased fuel price hike.

A fuel price hike is an increase in price per litre of petrol. It is said to be caused by a surge in the landing cost of petrol which has gone up by 37.4 per cent month-on-month to ₦632.17 per litre in July 2023, up from ₦460 per litre in June 2023. Nigeria is a major oil producer but doesn't refine its own oil. So even though it produces crude oil, it still has to import it which makes it expensive (https://www.npr.org.2023/07/12).

In Imo State, farming households also feel the microeconomic implications of higher oil prices especially petrol since petrol purchases are necessary for most households and farming operations. When petrol prices increase, a larger share of a household's budget is likely to be spent on it which leaves less to spend on other goods and services like farming operations.

The erratic petroleum pump price increment which dates back to the 1970s (Philip and Akintoye, 2006) has had a negative impact on both industrial and agricultural productivity in Nigeria. The multiple negative effects of this disruption on the entire national economy are


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)

www.abjournals.org

linked to the oil sector and any increase in the petrol pump price affects other sectors of the economy and by implication, the micro-economic policies of the country (Ogunbodade, Ilesanmi and Olurunkenese, 2010). The two ways in which fuel price increment affects the agricultural sector are in production and in the transportation of products to consumers. According to Bhuyveller and Kastenis, 2005) the agricultural sector is one of the economic sectors that are harmed by higher oil prices considering the fact that most agricultural machines and equipment are powered using either Automotive Gas Oil (AGO) diesel or Premium Motor Spirit (Petrol). Commercial agriculture relies on fossil fuel for several purposes – fertilizer production, water and irrigation provision, farm product preservation and processing, transportation of goods, personnel and maintenance of farm infrastructure, transportation of equipment and goods to the market, etc (Adepibe, 2004). As a result, fuel price variations affect the cost of production in the Agricultural sector. According to Ocheni (2015), there was a significant relationship between the increase in fuel price and agricultural growth in Nigeria.

The literature is few, especially on the perceived effect of petrol price hike on farming households in Imo State. This study is therefore aimed at bridging the literature gap. In view of this, the following research questions guided the study: 1 Are farming households aware of fuel price hike? 2 What do farming households perceive as the causes of fuel price hike? 3 What do they perceive as the effects of fuel prices on farming activities? 4 Are their strategies farming households have adopted to cope with the effects of fuel price hike?

**Objectives of the Study**

The main objective of the study was to ascertain the perceived effect of fuel price hike on farming households in Imo State and specifically, the study sought to:

i. ascertain farming households' awareness of fuel price hike.

ii. identify the perceived cause of fuel price hike among farming households in Imo State;

iii. ascertain the perceived effects of fuel price hike on farming households /farming activities in Imo State and

iv. identify the coping strategies used among farming households to cushion the effect of fuel price hike in Imo State.

## METHODOLOGY

The study was carried out in Imo State, Nigeria. The State has 27 Local Government Areas divided into three Agricultural zones Okigwe, Owerri and Orlu. It lies within latitude $4^{o}45^{I}$N and $7^{o}15^{I}$N and longitude $6^{o}50^{I}$E and $7^{o}25^{I}$E (Climate and Weather, 2018). The State has fertile and well-drained soil suitable for farming and a good proportion of the population are mainly farmers involved in both crop and livestock production.

The population for the study were farming households in Imo State. A multi-stage sampling was adopted in selecting the sample for the study. The first stage involved the censored selection of the three agricultural zones in Imo State, namely Owerri, Okigwe and Orlu, In the first stage, purposive sampling techniques were used for selecting four local Government Areas from each of the three (3) agricultural zones in Imo State making a total of


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

(12) local government areas for the study namely: Ohaji-Egbema, Isiala Mbano, Aboh Mbaise, Ezinihite Mbaise, Owerri North, Ehime Mbano, Obowo, Okigwe, Nkwere, Oru East, Nwagele and Owerri West. This was done to capture areas of high concentration of farming households

The second stage adopted random selection of one autonomous community each from the twelve L.G.A's selected. The last stage employed the collection of a list of farming households from the village heads of each of the 12 communities selected. Ten farming households were randomly selected from each of the twelve communities selected making a total sample size of one hundred and twenty farming households for the study

Farming households constituted the population for the study. The sources of data collection for this research work were from primary sources. The primary data were collected through the use of questionnaires to obtain information on the objectives of the study such as the socio-economic characteristics of farming households, the perceived cause and effect of the fuel price hike on farming households in the study, and the coping strategies used among farming households to cushion the effect of fuel price hike in Imo State.

Descriptive statistical tools were employed to analyse data to be collected for the study. This included frequency distribution, percentage and mean score and inferential statistics such as regression analysis will be used to test the hypothesis.

Objectives i, ii, iii, and v were realized using descriptive statistics such as frequency, percentage and mean while objective iv was realized using the mean score analysis through a four (4) point Likert-type scale of strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The value of this Likert-type scale rating was summed and then divided by the number of scales to obtain the discriminating index (4 + 3 + 2 +1 = 10/4 = 2.5). Thus, any statement with a mean score greater than or equal to 2.5 was regarded as the perceived effect of fuel prices hike on farming households in the study.

## RESULTS AND DISCUSSION

### Awareness of fuel price hike among farming households in Imo State

The result of the farming households distribution based on awareness of fuel price hike is presented in Table 1. It revealed that all the farming households sampled for the study (100%) were aware of the fuel price hike. The finding implies that farming households are aware of the fuel price hike and must have been adopting several coping strategies to mitigate the effect. The study is in line with the findings of Olumba and Rahji (2014) who opined that awareness of technology/strategy promotes demand and demand is a force for rapid adoption.


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)
www.abjournals.org

**Table 1: Distribution of farming Households 'awareness of fuel price hike**

| Awareness of fuel price hike among farming households | Frequency | Percentage |
|---|---|---|
| Not Aware | 0 | 0 |
| Aware | 120 | 100 |
| **Total** | **120** | **100** |

**Source:** *Field Survey Data, 2024*

**Perceived causes of fuel price hike among farming households in Imo State**

The distribution of farming households according to their perceived causes of fuel price hike is presented in Table 2. This result shows that farming households perceived fuel subsidy removal ($\bar{x}$=3.7), instability in government policies ($\bar{x}$ =3.5), high cost of importation of refined fuel ($\bar{x}$ =3.4), Non-functional of local refineries ($\bar{x}$ =3.3), lack of local production of fuel ($\bar{x}$=3.3), panic buying and selling ($\bar{x}$ =2.9) as the causes of fuel price hike. Nigeria has the capacity to refine its crude if the refineries are put into productive use but because this crude is being exported to other countries for refinery and later imported for domestic consumption adds to the production cost which leads to a high cost of pump price. The Nigerian government has been involved in deregulation policy in the downstream petroleum sector which requires withdrawal of petroleum subsidy. Withdrawal of petroleum subsidies often stimulates increases in the prices of petroleum products and hence, increases in transportation costs and prices of other commodities (Henry, Emmanuel, Eseosa, Abiola, 2020). This study is in agreement of Pirog (2004) who asserted that Other causes of price hike include political instability in the producing countries as well as panic buying and selling.

**Table 2: Distribution according to Perceived causes of fuel price hike among farming households in Imo State**

| | Perceived causes of fuel price hike | SA(4) | A(3) | D(2) | SD(1 | $\bar{x}$ | SD | RM |
|---|---|---|---|---|---|---|---|---|
| a) | Fuel subsidy removal | 90 | 30 | 0 | 0 | 3.7 | .61 | Acc |
| b) | Lack of local production of fuel | 40 | 78 | 1 | 1 | 3.3 | .49 | Acc |
| c) | High cost of importation of refined fuel | 71 | 39 | 7 | 3 | 3.4 | .45 | Acc |
| d) | Cost incurred as a result of crude exportation. | 8 | 2 | 99 | 20 | 3.9 | .72 | Acc |
| e) | High cost of refining. | 109 | 11 | 0 | 0 | 3.1 | .48 | Acc |
| f) | Instability in government policies. | 18 | 100 | 0 | 2 | 3.5 | .47 | Acc |
| g) | Non-functional of local refineries | 88 | 22 | 1 | 9 | 3.3 | .49 | Acc |
| h) | Panic buying and selling | 9 | 11 | 80 | 20 | 2.9 | .92 | Acc |
| | **Grand mean** | | | | | | | |

***Source;*** *field survey, 2024; Mean score ≥2.5; Acceptance (A); <2.5 Reject (R), Discriminating index 2.***5**


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)

www.abjournals.org

**Perceived effects of fuel price hike among farming households in Imo State**

The distribution of farming households' perceived effects of fuel price hike on farming activities is presented in table 3. This result shows that farming households perceived increased cost of transportation for farm inputs ($\bar{x}$ =3.9), Increased cost of production/farming activities like ploughing, clearing etc ($\bar{x}$=3.9), Increased price of farm produce ($\bar{x}$ =4.0), Increased food prices ($\bar{x}$=4.0) Decreased agricultural productivity ($\bar{x}$=3.4), Limited access to agricultural machinery and equipment,( $\bar{x}$ =3.3), increased in transportation of farm produce to the market ($\bar{x}$ =3.4) as the effects of fuel price hike Price. Increase in fuel has made transport operators all over Nigeria to increase the cost of transporting human being and goods in order to meet up with their operational and maintenance cost (Abimbola, 2022; Bolaji, 2022). This leads to poor distribution of food items all over the country, thus, compelling the food vendors that managed to obtain food items to increase the prices of available food items. Price fluctuations in Nigeria affect farmers' investment decisions that have serious ramifications for the growing farm debt, farm incomes and productivity (Udochukwu, Echebiri, Olohije Abode, Aigbe, Onaghise, Onyebuchi and Amolo, 2022). When the prices of food increase, definitely the number of goods that can be bought automatically reduces. Purchasing power affects every aspect of economics from consumers buying goods down to a country's economic growth. However, when a country's purchasing power decreases due to a persistent rise in food price, there are always significant consequences, such as high cost of living.

Changes in prices of domestic petroleum products in Nigeria affect economic activities that depend on petroleum products as sources of energy. The implication is that farmers have to spend more on transporting their farm produce to the markets. Not only this, but diesel and petrol are also the main sources of fuel for small-scale industries like bakeries, and corn and rice mills. The problem is exacerbated because Nigeria generates insufficient electricity to power these activities. This makes the energy costs of an average producer both in the formal and informal sectors one of the highest in the world (Olawepo-Hashim 2021). These excessive costs are consequently transferred to the cost of foodstuff which the final consumer bears. Thus, the increase in prices of diesel and petrol will automatically raise the prices of other commodities generally, especially food items. In addition, high natural gas prices have raised fertilizer prices, putting upward pressure on agricultural prices and food items. High energy prices are also driving up the cost of cooking gas in Nigeria thus affecting household consumption and the income of food vendors, thereby increasing the prices of overall food items in Nigeria ( Kyarem & Felix , Dodo 2023)

**Table 3: Distribution according to Perceived effects of fuel price hike among farming households in Imo State**

| | Perceived effects of fuel price hike on farming households | SA(4) | A(3) | D(2) | SD(1) | $\bar{x}$ | SD | RM |
|---|---|---|---|---|---|---|---|---|
| a) | Increased cost of transportation for farm inputs. | 111 | 9 | 0 | 0 | 3.9 | .72 | Acc |
| b) | Increased price of farm produce. | 120 | 0 | 0 | 0 | 4.0 | .23 | Acc |
| c) | Reduced profitability of farming. | 9 | 11 | 80 | 20 | 2.9 | .92 | Acc |
| d) | Limited access to agricultural machinery and equipment. | 59 | 41 | 18 | 2 | 3.3 | .49 | Acc |


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| e) | Decreased agricultural productivity. | 55 | 61 | 3 | 1 | 3.4 | .46 | Acc |
| f) | Increased food prices. | 120 | 0 | 0 | 0 | 4.0 | .10 | Acc |
| g) | Decreased income for farmers. | 0 | 89 | 11 | 20 | 2.4 | .74 | Acc |
| h) | Increased unemployment in the agricultural sector. | 0 | 0 | 108 | 12 | 1.9 | .99 | Rej |
| i) | Increased cost of transportation of produce to the market | 66 | 50 | 4 | 0 | 3.5 | .43 | Acc |
| j) | Increased cost of production/farming activities like ploughing, clearing, milling, storage etc. | 118 | 2 | 0 | 0 | 3.9 | .29 | Acc |
| | **Grand mean** | | | | | | | |

***Source; field survey, 2024; Mean score ≥2.5; Acceptance (A); <2.5 Reject (R), Discriminating index 2.5***

**Coping strategies used/adopted among farming households to cushion the effect of fuel price hike in Imo State**

The distribution of farming households based on coping strategies used to cushion the effect of fuel price hike is presented in Table 4. This result shows that the highest-ranking coping strategies used by farming households were trekking some distances to reduce the cost of transportation (Ranked 1st), Minimising spending habits due to fuel price increases (2nd), Explored the use of alternative energy sources e.g solar panels for irrigation, charcoal, firewood (3rd), Explore the possibility of collective purchasing or bulk buying with other to reduce individual's cost (4th) and skipping a meal (5th). This result is in line with the findings of Isaac and Alagbe (2015) who observed that the highest-ranked coping measures employed by households interviewed were trekking. Households tend to trek more not as a result of yielding to advise offered by medical practitioners that exercises are good for the body but because they are looking for ways to cut down costs and still maintain their happiness. The use of alternate energy sources ranked second, the commonest alternate energy sources used by respondents were firewood and charcoal, which are obtained from trees in the forest. The forest is very good at reducing the direct impact of the sun on man and animals, it covers the soil from excessive evaporation and releases oxygen needed by man into the atmosphere. If we continue to cut down trees, we are contributing hugely to global warming and temperature (Isaac and Alagbe, 2015)


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

African Journal of Agriculture and Food Science
ISSN: 2689-5331
Volume 7, Issue 2, 2024 (pp. 231-242)

www.abjournals.org

**Table 4 Distribution according to coping Strategies used among farming households to cushion the effects of fuel price hike**

| S/N | Coping Strategies used among farming households to cushion the effects of fuel price hike | Frequency | percentage | Rank |
|---|---|---|---|---|
| 1. | Sought assistance from local agricultural co-operatives to reduce costs. | 1 | 0.8 | 12th |
| 2. | Reduced the size of my farming operations to manage expenses related to fuel. | 70 | 58.3 | 7th |
| 3. | Explore the use of eco-friendly and low-cost farming practices to offset fuel price increases. | 101 | 84.1 | 5th |
| 4. | Explored the use of alternative energy sources e.g. solar panels for irrigation, charcoal, firewood. | 109 | 90.8 | 3rd |
| 5. | Collaborated with another farming household to share transportation costs. | 20 | 16.6 | 8th |
| 6. | Involve in governments or NGO programs aimed at supporting farming household during period of fuel price increases. | 1 | 0.8 | 10th |
| 7. | Skipping meal | 90 | 75 | 6th |
| 8. | Actively sought more fuel-efficient farming equipment's and practices. | 2 | 1.6 | 9th |
| 9. | Minimized spending habits due to fuel price increases. | 111 | 92.5 | 2nd |
| 10. | Explore the possibility of collective purchasing or bulk buying with other to reduce individuals cost affected by fuel price hike. | 108 | 90 | 4th |
| 11. | Trekking some distances to reduce the cost of transportation | 116 | 96.6 | 1st |

***Multiple responses were recorded; Source: Field Survey Data, 2024**

## CONCLUSION

The study concluded that farming households were very much aware of fuel price hike and perceived the causes as fuel subsidy removal), instability in government policies, high cost of importation of refined fuel, Non functional of local refineries, lack of local production of fuel and panic buying and selling. The farming households perceived the following as the effect of fuel price hike; high cost of transportation for farm inputs, increased cost of production/farming activities (like ploughing, clearing, etc..), increased price of farm produce, Increased food prices, Limited access to agricultural machinery and equipment, increased in transportation of farm produce to the market among others. The farming households adopted trekking some distances to reduce the cost of transportation, Minimized spending habits, Explored the use of alternative energy sources e.g solar panels for irrigation, charcoal, firewood, and sipping meals as the coping strategies used to cushion the effect of fuel price hike. Educational level, household size and access to credit were the significant socioeconomic variables influencing farming households' perceived effect of fuel price hike.


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

## RECOMMENDATIONS

Based on the major findings of the study, the following recommendations were made:

1 Fuel should be subsidized

2 Nigeria's crude should be refined domestically to prevent importation of refined oil which adds to the cost.

3 There should be stability in sound policies with respect to fuel.

4 The Federal government should encourage local production of premium motor spirit by rehabilitating our refineries

## REFERENCES

Adagunodo, M. (2013). 'Petroleum products pricing reform in Nigeria. Welfare analysis from household budget survey. *International Journal of Energy Economics and Policy,* vol 3, No. 4, 2013, pp. 459 – 472.

Adenikinja, F.A (2000): Analysis of Energy Pricing Policy in Nigeria: An application of a CGE Model. *Research for Development, NISER*.

Adeniyi, O. A., Oyinlola, A. and Omisakin, O. A. (2011). "Oil Price Shocks and Economic Growth in Nigeria: Are Thresholds Important?" OPEC Energy Review. Vol. 35. No. 4 pp. 308-333.

Adenokim, A., A. (2011): Macroeconomic implication of Higher energy prices in Nigeria. *Pacific and Asian Journal of Energy* 6(1): 13 – 24.

Aderite, Adedotun (2022): Agriculture in Nigeria'. 7 interesting facts and statistics. BabbanGona Retrieved, 2022 – 12 – 16.

Akinleye, S. O. and Ekpo, S. (2013). "Oil Price Shocks and Macroeconomic Performance in Nigeria." Mexican Economy New Era. Vol. 2. pp. 565-624

Akpan, E. O. (2009). "Oil Resource Management and Food Insecurity in Nigeria." Paper Presented at the European Report on Development (ERD) Conference in Accra, Ghana, 21st-23rd May

Akinyemi, O., Alege, P.O., Ajayi, O.O., Adediran, O.S., Urhie, E. (2017), A simulation of the removal of fuel subsidy and the performance of the agricultural sector in Nigeria using a dynamic computable general equilibrium approach. *Covenant Journal of Business and Social Sciences,* 8(1), 60-70.

Amaiquema, J.R.P., Amaiquema, A.R.P. (2017), Consequences of oil and food price shocks on the Ecuadorian economy. *International Journal of Energy Economics and Policy,* 7(3), 146-151

Alley, I., Asekomeh, A., Mobolaji, H. And Adeniran, Y. A. (2014). "Oil Price Shocks And Nigerian Economic Growth." *European Scientific Journal.* Vol.10. No.19 pp. 375-391.

Auka, D.O, Bosire, J.N and Matern, V. (2013): Perceived service quality and customer loyalty in Retail Banking in Kenya. *British Journal of Marketing Studies.* vol 1, No. 3, Pp. 32 – 61.

Blanchard, Olivier, and Jordi Gali. 2007. "The Macroeconomic Effects of Oil Shocks: Why Are the 2000s So Different from 1970s." *NBER Working Paper* No. 13368.


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

Brown, Stephen P.S. 2006. "Making Sense of High Oil Prices: A Conversation with Stephen P.A. Brown." FRB Dallas *Southern Economy*, Issue 4, July/August, pp. 8-9.

Campa, J. M. & Goldberg, L. S (2001). "Exchange Rate Pass-through into Import Prices: A Macro or Micro Phenomenon?" the National Bureau of Economic Research Working Paper No. 8934, www.nber.org/papers/w8934, Accessed on 4th February, 2024

.Asekunowo, V.O (2016). The causes of persistent inflation in Nigeria. CBN *Journal of Applied Statistics* 7(2):49-58

Clarida, Richard, Jordi Gali, and Mark Gertler. 2000. "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory." *Quarterly Journal of Economics*, pp. 147-180.

CSA and World Bank, Ethiopia Socioeconomic Survey (ESS) - 2013/14, Survey Report, Central Statistical Agency & Living Standards Measurement Study - World Bank, 2015.

Climate and Weather – Climate information and Current weather in Nigeria. www.wordtravels.com. Archived from the original on 23 October 2017. Retrieved 29 April 2018.

Coady, D., El-said, M., Gillingham, R., Kpodar, K., Medas, P., Newhouse, D. (2006): 'The magnitude and distribution of fuel subsidy, Evidence from Bolivia, Ghana; Jordan, Mali and Sri Lanka. IMF Working paper, 06(247) Washington D.C.

.Davis, B., Di Giuseppe, S., and Zezza, A., 'Are African households (not) leaving agriculture? Patterns of households' income sources in rural Sub-Saharan Africa', Food Policy, Vol. 67, 2017, pp. 153-74.

.Graeub, B.E., Chappell, M.J., Wittman, H., Ledermann, S., Kerr, R.B., and Gemmill-Herren, B., 'The State of Family Farms in the World', World Development, Vol. 87, 2016, pp. 1-15.

Feedifuture (2021): Integrated Agriculture Activity Newsletter. September 2021. *International Institute for Tropical Agriculture (IITA)* Ibadan Nigeria.

Feder, G.(1990). Adoption of interrelated Agricultural Innovations. *Journal of Agricultural Economics*, 15.

Food and Agriculture Organization (FAO, 2022): 'Nigeria at a Glance'. FAo in Nigeria. Food and Agriculture Organization of United. www.fao.org. Retrieved 2022 – 12 – 17.

Henry, E. I. Emmanuel, I., Eseosa O., Abiola, A. (2020) Petroleum Subsidy Withdrawal, Fuel Price Hikes and the Nigerian Economy, *International Journal of Energy Economics and Policy* DOI: https://doi.org/10.32479/ijeep.8307

Hope, E., Singh, E. (1995): Energy Price increases in Developing countries. Policy research paper in 1442. The World Bank Discussion: Washington DC.

Imo State Nigeria Britannica. www.britannica.com. Retrieved 12 March 2022.

Isaac Nkechi (2022): Nigeria Gross Domestic Product – Agriculture Contributed 23.3%.

Jukman, K. (2022): List 10 Importance of Agriculture in Nigeria. About Nigerians. Retrieved 2022 – 12 – 16.

Kyarem Richard N., & Felix Emmanuel Dodo (2023). Impact of Petroleum Products Price Changes on Prices of Food Items in the Nigerian Economy. *Journal of Development Economics and Finance*, Vol. 4, No. 1, pp. 79-95. https:// DOI: 10.47509/ JDEF.2023.v04i01.05

Krugman, Paul. 2008. "Fuels on the Hill." *New York Times*, June 27, 2008 Isaac B. Oluwatayo1* and Simon A. Alagbe2 (2015) Fuel Price Hike and Vulnerability of Households in Nigeria: Empirical Evidence from Ibadan Metropolis . *Journal of Social Sciences*, 43(3): 301-309 (2015)


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

Lingyu, Y. (2012), Analysing the International Oil Price Fluctuations and its Influencing Factors. Available from: http://www.scirp.org/journal/ paperinformation.aspx?

Lorussoa, M., Pieronib, L. (2018), Causes and consequences of oil price shocks on the UK economy. Economic Modelling, 72, 222-236.

Manzor, D. Shahmaradi, A., Hagigi, I. (2009): An analysis of energy reforms: A GCE Approach. ImansSadiq University and Ministry of Energy Iran.

Mabro, R. (2001), Does Oil Price Volatility Matter? Oxford: Oxford Institute Energy Studies, Energy Comment. Merino, A., Ortiz, A. (2005), Explaining the so-called "price premium" in oil markets. OPEC Review, 29 (2), 133-152.

Mankiw, Gregory. 2007. "Where Have All the Oil Shocks Gone?"

Mordi, C. N. and Adebiyi, M. A. 2010. "The Asymmetric Effects of Oil Price Shocks on Output and Prices in Nigeria using a Structural VAR Model." Central Bank of Nigeria Economic and Financial Review. Vol. 48. No. 1 pp. 1-32

Moshiri, S. and Banihashem, A. (2011) "Asymmetric Effects of Oil Price Shocks on Economic Growth in Oil-exporting Countries." Paper Presented at the 34th IAEE Conference, 19–23 Stockholm, June.

Nigeria Bureau of Statistics (NBC) 2019: Nigeria Gross Domestic Product Report Q3 2019. National Bureau of Statistics Report 2019. NBS (2015a) Nigerian Gross Domestic Product Report, Quarter Two, 2015. Abuja: National Bureau of Statistics (NBS)

NBS (2015b) Foreign Trade Statistics, Quarter Two, 2015. Abuja: National Bureau of Statistics (NBS) 12. NBS (2015c) CPI and Inflation Report, July, 2015. Abuja: National Bureau of Statistics (NBS)

Nkang, N. M., Omonona, B. T., Yusuf, S. A. and Oni, O. A. (2013). Simulating the Impact of Exogenous Food Price Shock on Agriculture and the Poor in Nigeria: Results from a Computable General Equilibrium Model. Economic Analysis and Policy, Vol. 43 No 1, pp. 79-94 28.

Nwafor, M., Ogunjijuba, K., Asogwa, R. (2006): Does subsidy removal Hurt the poor? *Journal of African Institute for Applied Economics (AIAE)*, February 2006. Obi, B., Awujola, A., Ogwuche, D. (2016), Oil price shock and macroeconomic performance in Nigeria. *Journal of Economics and Sustainable Development*, 7(24), 137-145.

Obo, U.B., Omenka, J.I., Agishi, T.V., Coker, M.A. (2017), Fuel subsidy removal and the ubiquity of hardship in Nigeria. Advances in Social Sciences Research Journal, 4(14), 113-126.

Olaniyi, A.A. (2016), Effects of fuel subsidy on transport costs and transport rates in Nigeria. *Journal of Energy Technologies and Policy*, 6(11), 1-9.

.OPEC (2015). Monthly Oil Market Report, July 2015. Vienna: Organization of the Petroleum Exporting Countries

Olawepo-Hashim, G. (2021). Increase in petroleum product prices: An unwelcome advisory from IMF, and World Bank. Nigerian Tribune, December 2nd, 2021.

Okeke, A.M., Mbanasor, J.A., and Nto, P.O. (2019). Effect of Anchor Borrowers' Programme Access among Rice Farmers in Benue State, Nigeria: Application of Endogenous Switching Regression Model. *International Journal of Agriculture and Earth Science,* 5(3): 31-47.

Oktavani, R., Hakim, D.B, Buregar, S. (2007): Impact of Lower subsidy on Indonesian Macroeconomics performance, Agricultural sector and Poverty. *Incidence Recursive Dynamic Computable General Equilibrium Analysis.* MPIA Working Paper 2007 – 2008.

Olivia, S., Gibson, J. (2008): Household Energy Demand and the Equity and the Efficiency Aspects of Subsidy Reform in Indonesia. *The Energy Journal*, 1, 21 – 40.


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG

Opiah, with 18 Recovered oil wells. Imo. Noov Fourth Highest Producing State. This Day live. www.thisdaylive.com. Retrieved 2 September 2022.

Pirog, R. (2004), Natural Gas Prices and Market Fundamentals CRS Report for Congress Congressional Research Service. United States: CRS

Trenbath, B.R (2015): "Plant interaction in mixed cropping communities" Multiple Cropping ASA Special publications pp, 129 – 169.

Udochukwu, V. E., Josephine, O. Abode, A. A., Isibor, A. O., Onyebuchi, B. A. (2022) Impact of persistent Rise in Food Prices on the Nigerian Economy, *International Journal of Business and Management Review*, Vol.10, No. 8, pp.21-29


Article DOI: 10.52589/AJAFS-ASYSIAYG
DOI URL: https://doi.org/10.52589/AJAFS-ASYSIAYG