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THE PERCEIVED EFFECT OF FUEL SUBSIDY REMOVAL ON THE MARKETING OF CASSAVA PRODUCTS IN NDOKWA EAST LGA OF DELTA STATE, NIGERIA

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ABSTRACT: *This study examined the effects of fuel subsidy removal on the cost of cassava products and the socioeconomic characteristics of cassava product marketers in Ndokwa East Local Government Area, Delta State, Nigeria. Using a descriptive survey design, data were collected from 90 cassava product marketers across six major markets in three purposively selected communities. Findings reveal substantial increases in the prices of cassava products following fuel subsidy elimination, with garri and starch rising by 900%, and fufu and tapioca by 100% and 150%, respectively. Respondents also reported reductions in product volume, highlighting the transfer of increased transportation and processing costs to consumers. Socioeconomic analysis indicated that marketers were predominantly middle-aged and elderly, largely female, moderately educated, and experienced, factors which influence their ability to adapt to economic shocks. The study concludes that fuel subsidy removal has significantly affected both marketing operations and consumer affordability of cassava products. Policymakers are encouraged to implement supportive measures, such as targeted subsidies, infrastructure development, and market access improvements, to mitigate the adverse effects on vulnerable marketers and households. These findings contribute to understanding the economic and social implications of fuel policy changes on agricultural marketing in Nigeria.*

KEYWORDS: *Fuel subsidy removal, cassava products, marketing, Delta state*

Introduction

In Nigeria, the government has historically provided financial support to lower the cost of fuel for consumers. The practice of fuel subsidies began in the 1970s, introduced as a measure to counteract the impact of the 1973 oil price shocks. The intention was to break down the effect of rising cost of fuel on the general population/public particularly the poor (World Bank, 2021). It was also seen as a way to support economic growth and development by making transportation and other fuel dependent

activities more affordable. Fuel subsidy implies that the government pays a portion of the fuel price making it cheaper at the pump for consumers. For instance, if the market price of premium motor spirit (PMS) is ₦3,002 per liter, consumers will pay that at full price but with fuel subsidy, the government might contribute ₦750.50 per liter to the fuel price. This will bring down the cost of fuel to ₦2,251.50 per liter for consumers.

Fuel subsidy started in Nigeria in the 1970s after the oil boom. (World Bank, 2021). At that time, Nigerian authorities introduced policies aimed at controlling fuel prices to maintain affordability for the general population. This approach allowed the country's oil wealth to benefit the population directly. With Nigeria being one of the world's largest oil producers, the government aimed to ensure that Nigerians directly benefited from the country's oil resources (Adamu & Yusuf, 2022). As a result, policies were introduced to keep petroleum prices artificially low, making fuel affordable for transportation, production, and domestic use. However, as global oil prices changed, maintaining the subsidies became increasingly expensive (Ademola & Yusuf, 2023). By the early 2000s, Nigeria was spending billions of naira on fuel subsidy and contemplation to partially remove or restructure the subsidy system started. In 2012, President Goodluck Jonathan attempted a full removal of the fuel subsidy, but this led to nationwide protests referred to as the "Occupy Nigeria" movement (Ajayi et al.,2023). Many people feared that removing the subsidy would make life too difficult, as prices of goods and services would rise. During President Muhammadu Buhari's regime in 2015-2023, despite campaigning against subsidy removal, his administration gradually reduced subsidy payments while attempting to encourage private-sector investment in local refineries. The idea was to use the country's oil wealth to benefit its people. With Nigeria being one of the world's largest oil producers, the government sought to ensure that citizens benefited directly from the country's natural resources. In May 2023, President Bola Ahmed Tinubu declared the complete elimination of fuel subsidies. This led to a significant rise in fuel costs, affecting the movement of goods, food prices, as well as the general cost of living. However, the government justified the decision by arguing that subsidy payments were no longer sustainable and that the funds could be redirected toward infrastructure, healthcare, and education.

Fuel subsidy has, over the years, played an important role in reducing transportation and production expenses in Nigeria (Olaniyi, 2016; Alli et al., 2024). However, the elimination of fuel subsidies has resulted in widespread economic effects, particularly on the agricultural sector, which relies heavily

on fuel for production and marketing activities (Eke & Okonkwo, 2023; Obi, Nwabueze, & Chukwuma, 2023).

Cassava (*Manihot esculenta*) is a major staple crop in Nigeria and cassava serves as a major source of food and income for millions of households. Products made from cassava including garri, fufu, starch, and tapioca are widely consumed across the country are crucial in food security as well as rural livelihoods. Marketing these products involves several cost components, including transportation, processing, storage, and distribution, all of which are directly or indirectly influenced by fuel prices.

The elimination of fuel subsidies in Nigeria resulted in a significant increase in fuel costs, leading to higher transportation and processing costs. These increased costs are often transferred to consumers through higher product prices, thereby reducing purchasing power and demand. For cassava product marketers, this situation poses serious challenges, including reduced profit margins, loss of customers, and difficulties in accessing distant markets.

This study is anchored on the cost-push inflation theory, a key concept in macroeconomic analysis associated with the Keynesian school of thought, which explains how increases in production and distribution costs lead to higher market prices of goods. According to the theory, when the cost of key inputs such as energy and transportation rises, producers and marketers transfer the additional costs to buyers through increased product prices (Samuelson & Nordhaus, 2020). In Nigeria, the elimination of government fuel price support led to a significant rise in fuel costs, thereby increasing transportation and processing expenses associated with agricultural products (Eke & Okonkwo, 2023).

In addition, this study is further supported by the Diffusion of Innovation theory developed by Rogers (2003), which explains how new ideas and technologies are adopted within a social system. In the context of cassava marketing, the theory helps to explain how marketers adopt cost-saving and energy-efficient innovations, such as solar dryers, biogas technology, and digital marketing tools, to mitigate the effects of rising fuel costs (Adebayo & Nwachukwu, 2022). Extension services also play a critical role in facilitating adoption by providing training, demonstrations, and access to cooperative schemes.

Cassava product marketing is highly dependent on fuel for the movement of tubers from farms to processing centers and for the distribution of processed products, including garri and fufu, to markets. Empirical evidence by Eke and Okonkwo (2023) revealed that rising fuel prices significantly increase marketing and transportation costs in agricultural markets, thereby contributing to cost-push inflation. Their study further showed that increased fuel costs are often transferred to consumers through higher prices of agricultural commodities.

However, while existing studies have examined the general effects of rising fuel prices on agricultural marketing, there is limited empirical evidence on the specific impact of fuel subsidy removal on the pricing of cassava products and the socioeconomic characteristics of marketers at the local government level, particularly in Ndokwa East Local Government Area of Delta State. This gap underscores the need for the present study.

Therefore, the theory of cost-push inflation provides a relevant framework for interpreting the observed variations in cassava product prices following the removal of fuel subsidy in Nigeria.

The cost of cassava products and the socioeconomic characteristics of marketers are critical factors in understanding the effects of fuel subsidy removal on agricultural marketing. The removal of fuel subsidy, which led to increased fuel prices, has significantly raised transportation and processing costs, thereby increasing the prices of cassava products such as garri, fufu, and starch.

Previous studies have examined the effects of rising fuel prices on agricultural marketing in Nigeria. For instance, Eke and Okonkwo (2023) found that increased fuel costs significantly contributed to higher transportation and marketing expenses, leading to price increases in agricultural commodities. Similarly, Ademola and Yusuf (2023) reported that fuel subsidy removal negatively affected the profitability of agricultural produce marketers due to rising operational costs. Ajayi et al. (2023) further observed that marketers adopted various coping strategies, such as reducing product size and increasing prices, in response to higher fuel costs.

However, most of these studies focused largely on the general impact of fuel price increases or subsidy removal on agricultural marketing and profitability, with limited attention to specific commodities such as cassava products. In addition, there is insufficient empirical evidence linking

price changes in cassava products with the socioeconomic characteristics of marketers at the local government level, particularly in Ndokwa East Local Government Area of Delta State.

Furthermore, the extent to which marketers are affected by rising costs depends on their socioeconomic characteristics, including age, education, household size, and marketing experience. These factors influence their ability to adapt to economic shocks, access resources, and sustain their businesses.

Therefore, this study seeks to fill this gap by examining both the changes in the cost of cassava products following fuel subsidy removal and the socioeconomic characteristics of marketers in Ndokwa East LGA of Delta State.

Objectives of the Study

This study was therefore designed to:

i. describe the socioeconomic characteristics of cassava product marketers in Ndokwa East LGA of Delta State; and
ii. examine the price differences in cassava products prior to and following fuel subsidy elimination.

Methodology

The study employed a descriptive survey research design. This design is suitable for studies that seek to describe current conditions, perceptions, or effects without manipulating the study environment. It allows for systematic data collection from a sample population to provide insights into how fuel subsidy removal has impacted the marketing of cassava products in Delta State.

This study was carried out in Ndokwa East Local Government Area (LGA) of Delta State, Nigeria, which is located in the South-South geopolitical region of Nigeria. It covers approximately 18,050km^2 of land and is situated between latitudes 5°00'N and 6°35'N and longitudes 4°50'E and 6°45'E (Ndakara & Eyefia, 2024). Delta State is bordered by Edo State in the north, Anambra and Rivers States in the east, Bayelsa State in the southeast, and the Bight of Benin (Atlantic Ocean) to south.

Ndokwa East LGA, with headquarters at Aboh, lies in the western part of Delta State and is known for its lowland rainforest vegetation, fertile soil, and network of rivers and creeks. It is geographically located within the Niger Delta region, making it rich in agricultural and aquatic resources. The climate is tropical, with wet and dry seasons.

The communities selected for this study – Kwale, Obetim, and Ashaka – are noted for their active participation in cassava production and marketing, making them ideal for examining the impact of fuel subsidy removal on agricultural marketing.

The population for this study comprised all cassava product marketers in Ndokwa East LGA. A multi-stage sampling approach was employed. At the first stage, three communities; Kwale, Obetim, and Ashaka were purposively selected because they are the most active in cassava production and marketing, making them ideal for assessing the effects of fuel subsidy removal. At the second stage, two major markets were selected from each community, resulting in a total of six markets. Finally, fifteen cassava product marketers were randomly selected from each market, giving a total sample size of ninety (90) participants.

Data were gathered through a structured questionnaire that were organized into four sections. Each part was designed to address the study's objectives. The questionnaire consisted of both close-ended and open-ended items, with Likert-type scales for rating opinions.

Data for objective one were analyzed using frequency counts and percentages, while data for objective two were analyzed using frequency distributions and percentage increases. Data analysis was performed using SPSS (Version 22.0).

Results and Discussions

Socioeconomic Characteristics of Cassava Product Marketers

Variable	Category	Frequency	Percentage
Age	18-25	4	4.4
	26-35	14	15.6
	36-45	18	20.0
	46-55	22	24.4
	55 and above	32	35.6
Gender	Male	37	41.1
	Female	53	58.9
Marital Status	Single	20	22.2
	Married	58	64.4
	Divorced	7	7.8
	Widowed	5	5.6
Educational Level	Non-formal	8	8.9
	Primary	20	22.2
	Secondary	34	37.8
	Tertiary	28	31.1
Household Size	1-3	12	13.3
	4-6	45	50.0
	7-9	23	25.6
	10+	10	11.1
Years of experience	1-5	18	20.0
	6-10	30	33.3
	11-15	22	24.4
	16+	20	22.2
Main source of income	Cassava Product Marketing	56	62.2
	Farming	15	16.7
	Petty trade	13	14.4
	Salary Job	6	6.7

Source: Field data, 2025

The findings indicates that most product marketers were within the age group of 56 years and above (35.6%), indicating that the sector is dominated by older individuals. Females constituted a higher proportion (58.9%) of the respondents, suggesting that cassava product marketing is largely female-driven in the study area. Most respondents were married (64.4%), reflecting significant household responsibilities that may influence marketing decisions.

In terms of education, a substantial proportion of respondents had attained secondary (37.8%) and tertiary education (31.1%), indicating a moderately educated population capable of understanding market dynamics and adopting improved marketing strategies. Most respondents had between 6–10 years of marketing experience (33.3%), suggesting adequate familiarity with cassava product marketing. Cassava product marketing was the primary source of income for 62.2% of respondents, highlighting its economic importance to livelihoods in Ndokwa East LGA, Delta State, Nigeria (Ndakara & Eyefia, 2024).

Cost of Cassava Products Before and After Fuel Subsidy Removal

Product	Price (₦) before fuel subsidy removal	Price after Subsidy Removal (₦) (2023)	Percentage Increase	Additional Notes
Garri	300 (per custard bucket)	3000 (per custard bucket)	900%	
Fufu	50 (per wrap)	100(per wrap)	100%	Size reduced, effective increase > 100%
Starch	100(per wrap)	1000(per wrap)	900%	
Tapioca	200(per wrap)	500(per wrap)	150%	Volume reduced, effective increase > 150%

Source: Field data, 2025

The findings reveal a substantial rise in cassava product prices following the elimination of fuel subsidies. The price of garri increased from ₦300 per custard bucket to ₦3,000, representing a 900% increase, while starch rose from ₦100 to ₦1,000 per wrap, also reflecting a 900% increase. Fufu and tapioca recorded price increases of 100% and 150%, respectively. These sharp increases are consistent with findings by Eke and Okonkwo (2023), who reported that rising fuel costs in Nigeria significantly increased agricultural commodity prices, contributing to cost-push inflation. Similarly, Ademola and Yusuf (2023) observed that subsidy removal led to higher operational costs for agricultural produce marketers, which were passed on to consumers. The magnitude of these increases highlights the profound effect of fuel subsidy elimination on household food affordability, particularly for staple foods like cassava products.

In addition to the price increases, respondents reported reductions in product size and volume, particularly for fufu and tapioca, indicating smaller quantities being sold. These findings suggest that

the elimination of fuel subsidies significantly increased transportation and processing costs, which were passed on to consumers. This observation aligns with previous studies; for example, Eke and Okonkwo (2023) reported that rising fuel costs contributed to cost-push inflation in agricultural markets, while Ademola and Yusuf (2023) found that subsidy removal led to higher operational costs for agricultural produce marketers, often resulting in reduced product quantities and higher prices. Similarly, Ajayi, Bello, and Usman (2023) observed that marketers adopted coping strategies such as reducing product volume to manage increased marketing expenses.

Conclusion and Recommendations

The study concludes that cassava product marketers in Ndokwa East LGA are predominantly middle-aged and elderly individuals, with women playing a dominant role in the sector. The elimination of fuel subsidies produced a profound effects on the prices of cassava products, leading to sharp price increases and reduced affordability for consumers. These changes pose serious challenges to the sustainability of cassava product marketing and household livelihoods. In light of this study's findings, the following recommendations are proposed:

i. Policymakers are encouraged to establish a system to monitor and evaluate the impact of government policy adjustments, including fuel subsidy elimination, on vulnerable groups like cassava product marketers. This would enable them to identify areas where support is needed and make informed decisions about future policy interventions
ii. Policymakers should prioritize improving access to markets and infrastructure for cassava product marketers. This could include allocating resources to rural infrastructure development, including roads and storage systems, as well as encouraging market-oriented policies in order to enhance access to domestic and international markets
iii. Policymakers should consider implementing strategies aimed at reducing the adverse effects of fuel subsidy elimination on vulnerable groups, such as cassava product marketers. This could include providing subsidies or grants to help them cope with increased production and marketing costs.

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