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AN EMPIRICAL ASSESSMENT OF THE SOCIO-ECONOMIC IMPACT OF FUEL SUBSIDY REMOVAL IN KEBBI STATE

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ABSTRACT
This study empirically assessed the socio-economic impact of fuel subsidy removal in Kebbi State, Nigeria. Following the Federal Government's removal of the fuel subsidy in May 2023, concerns emerged regarding its effects on household welfare, transportation, business operations, and agricultural activities. The main objective was to assess the socio-economic impact of fuel subsidy removal in Kebbi State, with specific focus on its effect on household cost of living. The study adopted a descriptive survey design. Data were collected from 400 respondents across the Central Senatorial District using a structured questionnaire. Respondents comprised household heads, traders, commercial drivers, and small-scale farmers selected through multi-stage sampling. A four-point Likert scale was used to measure respondents' perceptions. The reliability of the instrument was established through a pilot test, yielding a Cronbach's alpha coefficient of 0.72 indicating acceptable internal consistency. Data were analyzed using frequency, percentage, mean, and standard deviation, with a criterion mean of 2.50. Findings revealed that fuel subsidy removal increased food prices, transportation fares, and the cost of agricultural inputs, thereby placing additional financial pressure on households. It also reduced household disposable income and business profitability and negatively affected daily meals, farming activities, and social cohesion. Although respondents acknowledged potential long-term benefits, particularly increased government revenue, the immediate socio-economic effects were largely negative. The study concludes that subsidy removal has imposed considerable short-term hardship. It recommends targeted and transparent palliative measures, including subsidized transportation, agricultural support, and social protection programmes to improve household welfare.

Keywords: Fuel subsidy removal, socio-economic impact, Kebbi State, cost of living, Nigeria.

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Introduction

Fuel subsidy has remained one of Nigeria's most debated economic policies since the country became heavily dependent on crude oil. The policy was introduced in the 1970s following the global oil crisis, with the objectives of making petroleum products affordable, stabilizing fuel prices, controlling inflation, and improving citizens' welfare. Despite being a major crude oil producer in Africa, Nigeria continued the subsidy regime for several decades while relying heavily on imported refined petroleum products due to inadequate domestic refining capacity. This resulted in substantial government expenditure to cover the difference between international market prices and the regulated price of Premium Motor Spirit (PMS) (Ahmed et al., 2025). The increasing financial burden of the subsidy eventually became a major concern for the government, contributing to fiscal pressures and debates over its sustainability. Its removal in May 2023 led to a sharp increase in petrol prices, with significant implications for transportation costs, food prices, agricultural production, household expenditure, and business activities. These effects may be particularly pronounced in states such as Kebbi, where agriculture, informal economic activities, and road transportation are important sources of livelihood.

Over time, the sustainability of subsidy was questioned because of its heavy fiscal burden, rising public debt, inefficiencies in the downstream sector, and cases of corruption (Houeland, 2020). Because of this, successive governments tried to reduce or remove it, but faced public resistance due to fear of higher living costs. The removal of fuel subsidy has generated widespread socio-economic consequences across different sectors of the Nigerian economy. Transportation, agriculture, manufacturing, commerce, and household consumption have experienced substantial cost increases due to their heavy dependence on petroleum products. On a different point of view assumed subsidy removal may encourage private investment in domestic refining, improve fiscal sustainability, and reduce market distortions in the long run, the immediate consequences include increased transportation costs, higher commodity prices, inflationary pressures, and worsening living standards for low-income households (Omitogun et al., 2021).

Similarly, Ude (2023) the removal of subsidy places considerable financial pressure on households and small businesses, particularly in developing economies where alternative energy sources remain inadequate. While Transportation remains one of the sectors most affected by fuel subsidy removal because petroleum products constitute a major component of transport operating costs. Since transportation serves as the backbone of economic activities by facilitating the movement of people, goods, and services, increases in fuel prices are transmitted throughout the economy through higher distribution costs, thereby contributing to inflation and reducing consumers' real incomes (Ahmed et al., 2025).

Therefore, socio-economic implications of fuel subsidy removal are particularly significant in States such as Kebbi, where a large proportion of the population depends on agriculture, petty trading, transportation services, and other informal economic activities for their livelihoods. Kebbi Central Senatorial District, comprising Birnin Kebbi, Bunza, Kalgo, Jega, Aliero, Koko/Besse, Maiyamma and Gwandu Local Government Areas, has experienced rising transportation fares, increasing food prices, declining purchasing power, and growing economic hardship following the removal of fuel subsidy. These developments have seriously affected household welfare, business operations, employment opportunities, and overall abject poverty and standards of living within the district. Therefore, this remains an issues of concern as to what are the solutions out of these problems. Calls a study of this nature in providing evidence-based recommendations for policymakers, stakeholders and filling in the existing gaps. The study

objective is to examines the effect of fuel subsidy removal on the cost of living among households in Kebbi Central Senatorial District.

Literature Review

Conceptual Review

Fuel Subsidy is that government payment to cover the gap between market costs of imported fuel and pump price, making fuel cheaper for citizens, especially low-income groups. In Nigeria, it refers to financial support on PMS to sell at reduced rates. Fuel subsidy specifically refers to the financial support provided by the Nigerian government to citizens who use Premium Motor Spirit (PMS), enabling them to buy the product at a reasonably reduced price.

Fuel Subsidy Removal it simply means that the government no longer pays the difference between the regulated pump price and the actual cost of importing fuel. It effectively involves the deregulation of the downstream petroleum sector to encourage competition and allow other interested investors to participate in the market. Under this policy, fuel is expected to be sold at the prevailing market price, which reflects the actual cost of importation and other associated market factors (Abdul et al., 2025).

Socio-Economic Impact refers to that effects arising from a policy or programme that will have impact on the economic and social well-being of individuals, households, businesses, and communities. These effects include changes in income, employment, transportation, poverty, prices, health, education, and living standards

Theoretical Review

Social Stress Theory is commonly associated with Leonard and colleagues, particularly Pearlin, Menaghan, Lieberman, & Mullan (1981). The theory explains how social and economic conditions create stressors that can negatively affect individuals' well-being. The theory proposes that stressful experiences often arise from people's social circumstances, such as poverty, unemployment, financial hardship, increased living costs, and difficult working or family conditions. These stressors can create psychological and social strain, especially when individuals lack adequate resources to cope with them.

For your study on fuel subsidy removal in Kebbi State, the study adopt it as its relevant because the removal of the subsidy increased transportation and living costs, creating economic pressure on households, farmers, traders, and other residents. These economic pressures may subsequently contribute to household tension, reduced social interaction, and weakened community relationships.

Empirical Evidence

Related literatures are reviewed in relation to the objective of the study

Yahaya (2026) examined the impact of fuel subsidy removal on household welfare and transportation costs in Nigeria using a cross-sectional survey of 1,200 households and regression analysis. The study found that subsidy removal significantly increased transportation expenditure and reduced household welfare, with stronger effects among rural and low-income households. The study is similar to the present study because both examine the welfare and transportation consequences of fuel subsidy removal. However, the present study is limited to Kebbi State and also considers farming, social cohesion, and government palliatives. Where in contrarily, Muhammad, Adamu, and Ya'u (2025) examined the relationship between fuel price shocks and Nigeria's Consumer Price Index using a Structural Vector Autoregressive (SVAR) approach. The study found that increases in fuel prices significantly contributed to higher consumer prices, particularly through increased transportation and production costs. The study concluded that fuel price shocks have adverse implications for household purchasing power and welfare. The study is

similar to the present study in examining the socio-economic consequences of fuel price increases but differs in methodology and geographical scope, as the present study focuses specifically on Kebbi State using a descriptive survey design.

Out, James, Okomisor, and Bassey (2024) examined the effect of fuel subsidy removal on household socio-economic welfare in Cross River State using a survey design, structured questionnaires, multistage sampling, and descriptive and regression analyses. The findings showed that subsidy removal increased transportation, food, healthcare, and education costs, thereby reducing household welfare and living standards. The study recommended targeted social interventions and improved public transportation. It is similar to the present study in examining the socio-economic effects of fuel subsidy removal but differs in geographical scope and study location. In contrary Out, James, Okomisor, & Bassey (2024) assessed the impact of fuel subsidy removal on household welfare in Cross River State. The study used a survey design, questionnaires, and multistage sampling to obtain data from households. Findings showed that subsidy removal increased transportation, food, healthcare, and education costs. These increases negatively affected household welfare and living standards. The study is similar to the present study but differs in geographical scope and location.

Methodology

The study adopted a survey research design and collected data through structured questionnaires in likert 4 rating points scale was administered to selected households. A convenience sampling technique was employed to select 400 respondents for the study. The technique was considered appropriate because it enabled the researcher to obtain information from respondents who were readily accessible and willing to participate in the study. Respondents were drawn from the eight Local Government Areas comprising the Central Senatorial District of Kebbi State, namely Birnin Kebbi, Bunza, Kalgo, Jega, Aliero, Koko/Besse, Maiyama, and Gwandu. The respondents included household heads, farmers, traders, and commercial transport operators who had experienced the effects of fuel subsidy removal. Questionnaires were administered to eligible respondents who were available at the time of data collection until the required sample size of 400 was attained. The validity for content was on face validity by three lecturers from the Department of Economics NAUB, who observed clarity of expression, suitability of items, accuracy of answers and content coverage. The validator make suggestions and amendments-where necessary. While reliability of the instrument was established through a pilot test, yielding a Cronbach's alpha coefficient of 0.72 indicating acceptable internal consistency which is near similar to Santos, (2025).

Results and Discussions

This section of the study present results and discusses them as follows

Socio-Economic Bio Data of the Respondent

Variables		Frequency	Percentage
Gender	Male	256	64
	Female	144	36
Age	18-25	25	6.25
	26-35	45	11.25
	36-45	114	28.5
	46-55	155	38.75
	56 and above	61	15.25
Marital Status	Married	286	71.5
	Single	114	28.5
Educational Qualification	Primary	136	34
	Secondary	176	44
	Tertiary	24	6
	Informal	64	16

Source: Field Survey, 2026.

The table presents the socio-economic characteristics of the 400 respondents who participated in the study. The variables considered include gender, age, marital status, and educational qualification. The distribution is interpreted as follows:

Gender: The results indicate that 256 respondents (64%) were male, while 144 respondents (36%) were female. This shows that males constituted the majority of respondents. The distribution nevertheless indicates that both male and female perspectives were represented in the study. While Age of the respondent's shows that 25 respondents (6.25%) were between 18–25 years, 45 respondents (11.25%) were between 26–35 years, 114 respondents (28.5%) were between 36–45 years, 155 respondents (38.75%) were between 46–55 years, but 61 respondents (15.25%) were aged 56 years and above. Thus, respondents aged 46–55 years constituted the largest age group (38.75%), followed by those aged 36–45 years (28.5%). This suggests that a substantial proportion of respondents were within economically active age groups and were likely to have experienced changes in transportation, farming, household expenditure, and business activities following fuel subsidy removal. Marital Status: The table shows that 286 respondents (71.5%) were married, while 114 respondents (28.5%) were single. Married respondents therefore constituted the majority. This is relevant to the study because married respondents, particularly household heads, may have experienced the effects of increased fuel and transportation costs across several household expenditure areas, including food, education, healthcare, and transportation. Educational Qualification: The results indicate that 136 respondents (34%) had primary education, 176 respondents (44%) had secondary education, and 24 respondents (6%) had tertiary education, while 64 respondents (16%) had informal education. Respondents with secondary education constituted the largest group at 44%, followed by those with primary education at 34%. The relatively small proportion with tertiary education (6%) suggests that the study captured substantial views from respondents with basic and secondary educational backgrounds.

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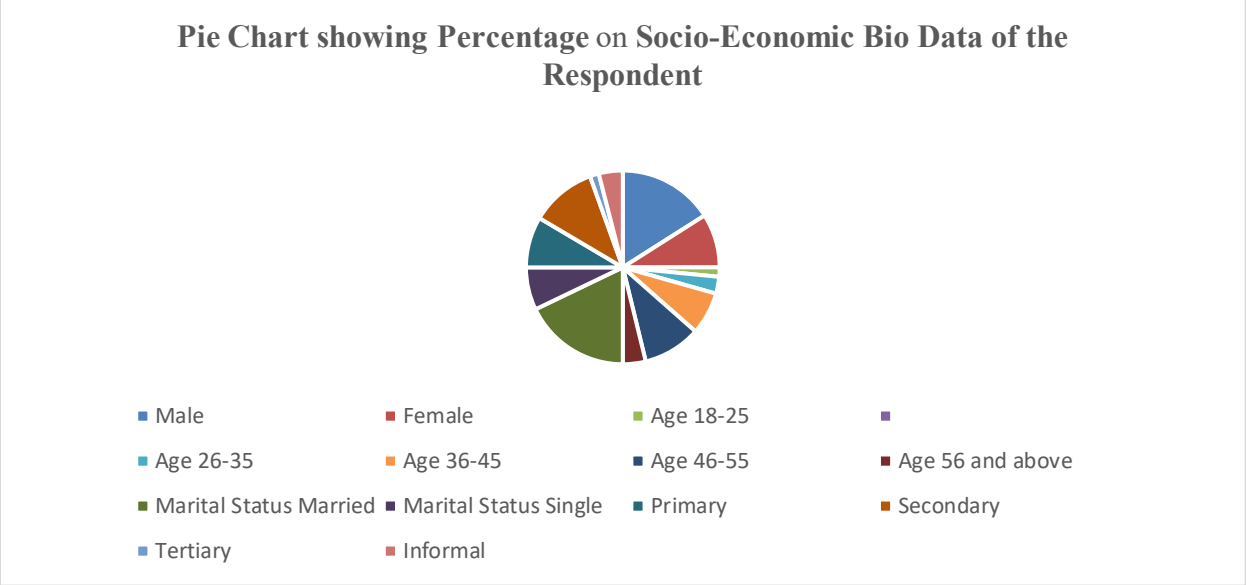


Fig 1. Socio-Economic Bio Data of the Respondent

An Assessment on the Socio-Economic Impact of Fuel Subsidy Removal in Kebbi State

S/N	Socio-Economic Impact of Fuel Subsidy Removal in Kebbi State	SA	A	D	SD	TOTAL	MEAN	DECISION
1.	**Transport**							
	The removal of fuel subsidy has significantly increased transportation fares in my area.	**151**	**149**	**55**	**45**	**1206**	**3.02**	**3.02**
2.	Increased transportation costs have reduced my ability to travel to market, schools, workplaces, and other essential services	**142**	**158**	**46**	**54**	**1188**	**2.97**	**Agreed**
3.	**Farming**							
	The removal of fuel subsidy has increased the cost of agricultural inputs and farm operations.	**123**	**177**	**38**	**62**	**1161**	**2.90**	**Agreed**
4.	Higher transportation and fuel costs have reduced the profitability of agricultural activities in my area	**125**	**175**	**71**	**29**	**1196**	**2.99**	**Agreed**
5.	**Social Cohesion**							
	The economic difficulties caused by fuel subsidy removal have weakened cooperation among members of our community.	**136**	**164**	**82**	**18**	**1218**	**3.05**	**Agreed**
6.	Removal of fuel subsidy has contributed to tension, reduced visitation to far worship center, marriages, disagreement among households and community members	**125**	**175**	**66**	**34**	**1191**	**2.98**	**Agreed**
7.	**Government Palliatives**							
	Government palliatives provided after the removal of fuel subsidy have reached the people who need them most	**21**	**36**	**102**	**241**	**637**	**1.59**	**Disagreed**

8.	Government palliatives have helped households cope with the increased cost of transportation and food	**37**	**41**	**212**	**110**	**805**	**2.02**	**Disagreed**
9.	The distribution of government palliatives in my area has been transparent and fairly implemented	**132**	**168**	**47**	**53**	638	**1.59**	**Disagreed**
10.	More sustainable government support programmes are needed to reduce the effects of fuel subsidy removal on households and businesses	**121**	**179**	**53**	**47**	**1174**	2.94	**Agreed**

Note.SA=Strongly Agree, A=Agree, D=Disagree, SD= Strongly Disagree.
Criterion mean =2.50. N=400. **Source: Field Survey, 2026.**

Based on Table 1.1 the respondents' assessment of the socio-economic impact of fuel subsidy removal in Kebbi State across transportation, farming, social cohesion, and government palliatives. A criterion mean of 2.50 was used for decision-making. Therefore, any item with a mean of 2.50 or above is regarded as "Agreed," while an item with a mean below 2.50 is regarded as "Disagreed." The analysis is based on 400 respondents. Response on Transportation shows Item 1 reveals that respondents agreed that the removal of fuel subsidy significantly increased transportation fares in their area, with a reported mean of 3.06. This indicates that the increase in petrol prices following subsidy removal translated directly into higher transport fares. Similarly, Item 2 recorded a mean of 2.97, indicating that increased transportation costs have reduced respondents' ability to travel to markets, schools, workplaces, and other essential services. These findings suggest that transportation represents one of the major channels through which fuel subsidy removal has affected the socio-economic well-being of residents in Kebbi State.

Farming activities perception indicate considerable effects on agricultural activities. Item 3 recorded a mean of 2.90**,** showing that respondents agreed that subsidy removal increased the cost of agricultural inputs and farm operations. Likewise, Item 4 recorded a mean of 2.99**,** indicating agreement that higher transportation and fuel costs have reduced the profitability of agricultural activities. This implies that farmers are experiencing increased production and transportation expenses, which may reduce their profit margins and potentially increase the prices of agricultural products.

In the case of Social Cohesion their results further demonstrate that fuel subsidy removal has social implications. Item 5 recorded a mean of 3.05**,** indicating that respondents agreed that the economic difficulties resulting from subsidy removal have weakened cooperation among community members. Item 6 also recorded a mean of 2.98**,** showing agreement that subsidy removal has contributed to tension, reduced visitation to places of worship, marriages, and disagreements among households and community members. These results suggest that increasing economic hardship may extend beyond financial difficulties to affect interpersonal and community relationships. While, government palliatives present a mixed picture. Item 7 recorded a mean of 1.59**,** which is substantially below the criterion mean of 2.50. Respondents therefore disagreed that government palliatives provided after subsidy removal reached the people who needed them most. This suggests that the coverage or targeting of government intervention was perceived as inadequate.

Similarly, Item 8 recorded a mean of approximately 2.01**,** indicating that respondents disagreed that government palliatives had adequately helped households cope with increased transportation and food costs. This finding suggests that the assistance provided was insufficient to offset the economic burden created by subsidy removal. However, Item 9 reported mean is 1.59**,** which is below the criterion mean of 2.50. Therefore, based on the stated decision rule, they

responded to disagreed. This means respondents generally disagreed that the distribution of government palliatives in their area was transparent and fairly implemented, despite their perception that the palliatives did not reach enough people or provide sufficient relief. Item 10 recorded a mean of 2.94**,** indicating that respondents agreed that more sustainable government support programmes are needed to reduce the effects of fuel subsidy removal on households and businesses. This highlights the respondents' preference for longer-term interventions rather than temporary relief measures. From the aforementioned,

Conclusion

Overall, the results indicate that fuel subsidy removal had substantial socio-economic consequences for residents of Kebbi State. The strongest effects are evident in transportation, agricultural activities, and social cohesion. Respondents reported increased transportation fares, reduced mobility, higher agricultural production costs, reduced farming profitability, weakened community cooperation, and increased household and community tensions. The results also indicate that although government palliatives were introduced to cushion the effects of subsidy removal, respondents generally perceived them as insufficient in reaching those most in need and in adequately reducing the increased cost of living. The strong agreement on the need for sustainable government support programmes further reinforces this finding.

Recommendations

The study forwarded the following recommendation

1. Affordable Transport: Introduce subsidized mass transit to reduce commuter costs through investing in CNG and solar to reduce fuel dependence which will foster positive social cohesion.
2. Agricultural Support: Subsidize farm inputs, irrigation fuel, and seedlings to protect food production.
3. Targeted Palliatives: Government should provide cash transfers and food support to vulnerable households in Kebbi. Government should also, channel subsidy savings into health, education, and rural roads.

References

Abdul, S., Musa, K., & Ibrahim, L. (2025). Fuel Subsidy Deregulation and its Implications for Nigerian Economy. *Journal of Energy Policy and Development. 12*(2), 45–62.

Ahmed, B., Suleiman, M., & Danladi, Y. (2025). Macroeconomic Effects of Fuel Subsidy Removal in Nigeria: Evidence from Post-2023 Reforms. *African Journal of Economic and Public Policy, 18*(1), 23–41.

Houeland, C. (2020). Contesting the Politics of Fuel Subsidy Removal in Nigeria. *Review of African Political Economy. 47*(163), 84–10 https://doi.org/10.1080/03056244.2020.1713101

Muhammad, I., Adamu, T., & Ya'u, S. (2025). Fuel Price Shocks and Consumer Price Index in Nigeria: A Structural VAR Approach. *Nigerian Journal of Applied Economics, 9*(3), 112–130.

Omang, O. D., Ogbo, A., & Ogbaji, I. P. (2025). Fuel Subsidy Removal and Food Inflation in Nigeria: An Econometric Analysis. *International Journal of Agricultural Economics and Rural Development, 14*(2), 78–95.

Omitogun, O., Ogunleye, T., & Adebayo, R. (2021). Petroleum Subsidy and Household Welfare in Nigeria. *Journal of Sustainable Development in Africa, 23*(4), 201–218.

Out, I., James, E., Okomisor, D., & Bassey, U. (2024). Socio-Economic Welfare Effects of Fuel Subsidy Removal on Households in Cross River State, Nigeria. *Journal of Social Science and Public Policy, 16*(1), 55–73.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22*(4), 337–356. https://doi.org/10.2307/2136676

Santos D., & Gambo, H. B. (2025). Impact of Technology-Integrated Curriculum Resource on Student Academic Achievement in Tertiary Institution in Taraba State, Nigeria. Being a 36th Annual Conference of Curriculum Organization (CON) of Nigeria. 17th – 20th September 2025. @ Aliko Dangota University of Science and Technology, Wudil Kano State.

Ude, E. (2023). Fuel Subsidy Removal and the Burden on Low-Income Households in Developing Economies. *Global Journal of Social Sciences, 22*(2), 134–149.

Yahaya, O. A. (2026). The Impact of Fuel Subsidy Removal on Household Welfare and Transportation Costs in Nigeria: A Cross-sectional Analysis. *Journal of Economics and Applied Research, 26*(2), 114–147. https://doi.org/10.10153/jear.2026.v26i2.114