

Effect of Fuel Subsidy Removal on Socio-Economic Activities of Households in Fakai Local Government Area, Kebbi State, Nigeria

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Abstract

This study examined the effect of fuel subsidy removal on the socio-economic activities of households in Fakai Local Government Area (LGA) of Kebbi State, Nigeria. Fuel subsidy removal, pursued by successive Nigerian governments as part of broader fiscal reform, has generated considerable national debate, with rural households often bearing a disproportionate share of the resulting hardship because of weaker economic resilience and limited livelihood diversification. The study adopted a descriptive survey design and drew primary data from 384 household heads selected through a stratified random sampling technique, with the sample size determined from an estimated population of 230,652 using the Taro Yamane (1967) formula. Data were analysed using descriptive statistics (frequency counts and percentages) and the chi-square test of independence at the 5 percent significance level. The results show that fuel subsidy removal significantly raised transportation costs, food prices and the operating expenses of household-based enterprises, thereby eroding household income and purchasing power. In response, households reduced spending on non-essential goods, substituted cheaper alternatives for preferred goods, and adopted coping strategies such as reduced travel, bulk buying and engagement in supplementary income-generating activities. Chi-square results confirmed statistically significant relationships between fuel subsidy removal and household economic well-being ($\chi^2 = 42.78$, $df = 2$), consumption patterns ($\chi^2 = 37.46$, $df = 2$), and coping strategies ($\chi^2 = 29.85$, $df = 2$), all at $p < 0.05$. The study concludes that although fuel subsidy removal may support long-run fiscal sustainability, its short-run socio-economic costs are severe for rural, agrarian communities such as Fakai LGA. It recommends targeted cash transfers, investment in rural transportation infrastructure, support for small household enterprises, promotion of alternative energy sources, and a phased approach to future fuel price adjustments accompanied by adequate public sensitisation.

Keywords: Fuel subsidy removal; socio-economic activities; household welfare; rural households; Fakai; Kebbi State

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1. INTRODUCTION

Nigeria's economic structure has, for over five decades, been shaped overwhelmingly by the petroleum industry, which has historically accounted for the bulk of government revenue and a substantial share of gross domestic product (Adelabu, 2012). Despite this oil wealth, successive governments have struggled to translate petroleum earnings into measurable improvements in citizens' welfare, leaving poverty widespread even in an oil-rich economy (Ering & Akpan, 2012). One of the most enduring and contentious instruments of Nigeria's petroleum sector policy has been the fuel subsidy regime, under which the federal government absorbed part of the landing cost of petroleum products to keep pump prices below their market-reflective level (Alozie, 2009). The policy was originally intended to cushion citizens, particularly low-income households, from the volatility of international oil prices.

Over time, however, the subsidy regime became associated with escalating fiscal cost, opacity and rent-seeking by a small group of operators within the downstream petroleum sector (Balouga, 2012; Onyishi, 2012). These concerns informed a series of subsidy adjustments, from the steep pump-price increase under General Ibrahim Babangida in 1986 to further increases under successive civilian administrations. The most far-reaching attempt came on 1 January 2012, when the administration of President Goodluck

Jonathan announced the full removal of the subsidy following a recommendation by the National Economic Council, a decision that triggered nationwide strikes, protests and considerable economic disruption (Omoniji, 2012; Emeh, 2012; Onanuga, 2012). Subsequent administrations, including that of President Muhammadu Buhari, pursued further rounds of price adjustment and eventual full deregulation, reinforcing fuel pricing reform as a recurring feature of Nigeria's economic policy landscape.

At the national level, the socio-economic consequences of these reforms are well documented: rising transport fares, general price inflation, the closure of fuel-dependent small enterprises, and labour unrest (Omoniji, 2012; Akinwale, 2019). What remains comparatively under-researched is how these effects play out in predominantly rural, agrarian local government areas, where households have limited access to alternative energy sources, public transportation, and formal income-smoothing mechanisms. Fakai LGA in Kebbi State exemplifies this category of community: a largely rural and agrarian area where farming, petty trading and artisanal work constitute the principal sources of livelihood, and where fuel is a critical input for irrigation, the transportation of farm produce to markets, and small-scale commerce. This study investigates how fuel subsidy removal has affected the income, consumption patterns and coping behaviour of households in Fakai

LGA, contributing localized empirical evidence to a policy debate that has, until now, been dominated by urban and national-level analysis.

1.1 Statement of the Problem

Nigeria possesses substantial proven crude oil and natural gas reserves and ranks among the leading oil producers within the Organisation of Petroleum Exporting Countries (OPEC, 2020). Notwithstanding this endowment, decades of under-investment in domestic refining capacity have left the country reliant on the importation of refined petroleum products, a dependence that has repeatedly strained foreign exchange reserves and exposed the economy to exchange-rate volatility (Adelabu, 2012; Balouga, 2012). The fuel subsidy regime that emerged from this contradiction, an oil-producing nation importing the bulk of its fuel needs, became fiscally unsustainable and was increasingly viewed by economists and policymakers as inefficient, regressive in its ultimate distribution of benefits, and vulnerable to capture by a small cartel of importers and marketers (Badmus, 2009; Onyeizugbe & Onwuka, 2012; Onyishi, 2012).

While the macro-fiscal rationale for subsidy removal is widely acknowledged, the policy's removal has, in practice, imposed substantial short-run hardship on households, manifesting as higher transportation costs, food price inflation, and reduced real income, particularly for the poor (Emeh, 2012). Existing empirical studies on these effects have concentrated overwhelmingly on urban centres and national-level outcomes, for example Lagos (Adesina, 2020) and Kano (Okonkwo & Musa, 2018), with comparatively limited attention paid to rural, agrarian local government areas where the absence of public transport alternatives, electricity supply and formal safety nets magnifies vulnerability to fuel price shocks. Fakai LGA, where farming and fuel-dependent logistics dominate household livelihoods, represents precisely this understudied context. It is against this background that the present study sets out to generate empirical evidence on how fuel subsidy removal has affected household income, consumption patterns and coping strategies in Fakai LGA, with a view to informing more targeted and locally relevant policy responses.

1.2 Objectives of the Study

The broad objective of this study is to examine the effect of fuel subsidy removal on the socio-economic activities of households in Fakai Local Government Area of Kebbi State. The specific objectives are to:

1. Examine the effect of fuel subsidy removal on household income and economic well-being in Fakai LGA;
2. Assess the implications of fuel subsidy removal for household consumption patterns in Fakai LGA; and
3. Identify the coping strategies adopted by households in Fakai LGA in response to fuel subsidy removal.

1.3 Research Hypotheses

The following null hypotheses were formulated to guide the study:

1. H01: Fuel subsidy removal has no significant relationship with household economic well-being in Fakai LGA.
2. H02: Fuel subsidy removal has no significant effect on household consumption patterns in Fakai LGA.
3. H03: Fuel subsidy removal has no significant influence on the coping strategies adopted by households in Fakai LGA.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Fuel Subsidy

A fuel subsidy is any government measure that lowers the price consumers pay for fuel below its market-reflective cost, or that raises the returns accruing to fuel producers, through mechanisms such as direct budgetary transfers, tax exemptions, price controls, or preferential foreign-exchange allocation (International Energy Agency [IEA], 2023; Nwafor, 2021). The International Monetary Fund (2023) similarly characterises fuel subsidies as arising whenever consumer prices are held below the international benchmark price plus associated supply costs. Fuel subsidies are conventionally classified into two broad forms: consumer (downstream) subsidies, which lower the retail price paid by end users, and producer (upstream) subsidies, such as tax holidays or subsidised infrastructure, which reduce the cost of production (IEA, 2023). Coady et al. (2019) note that, notwithstanding their fiscal cost, fuel subsidies remain widespread across developing economies, largely because of their perceived role in protecting households from global oil price volatility.

2.1.2 Concept of Socio-Economic Activities

Socio-economic activities refer to the interaction of social and economic factors that shape the quality of life and material well-being of individuals and households, encompassing income generation, employment, consumption, education, healthcare access and transportation (Olayemi, 2021). Olayemi and Tijani (2021) argue that these activities serve as a critical barometer of household welfare and economic resilience, since shocks to any single component, such as a sudden increase in transportation or energy costs, tend to ripple across consumption, savings and livelihood decisions. Government policies that alter the relative price of a widely consumed input, such as fuel, are therefore capable of generating broad and sometimes disproportionate effects on the socio-economic activities of low-income and rural households.

2.2 Theoretical Framework

This study is anchored on two complementary theoretical perspectives: Social Impact Theory and Economic Welfare Theory.

2.2.1 Social Impact Theory

Social Impact Theory, developed by Latané (1981), explains how external forces shape individual and collective behaviour as a function of three factors: strength (the intensity of the force, such as the magnitude of a fuel price increase), immediacy (the proximity of the affected population to the source of the change), and number (the scope of the population affected). Applied to this study, fuel subsidy removal constitutes a significant external social force whose strength, immediacy and broad reach generate observable behavioural adjustments among households in Fakai LGA, including changes in consumption priorities, travel behaviour and income-generating effort.

2.2.2 Economic Welfare Theory

Economic Welfare Theory, originating from the work of Pigou (1920), evaluates public policy according to its net effect on societal well-being, weighing efficiency gains against distributive consequences. From this perspective, fuel subsidy removal can

improve economic efficiency by eliminating price distortions and freeing fiscal resources for productive investment, but it simultaneously carries redistributive costs that fall disproportionately on low-income households, who devote a larger share of their income to fuel-dependent goods and services. The theory underscores the importance of complementary measures, such as targeted transfers and social safety nets, in reconciling efficiency gains with distributive equity.

Taken together, the two theories offer a coherent framework for interpreting the findings of this study: Social Impact Theory accounts for the immediate, household-level behavioural responses to subsidy removal, while Economic Welfare Theory situates these responses within the broader efficiency-equity trade-off that underlies the policy at the national level. In an agrarian and infrastructure-constrained area such as Fakai LGA, both the strength of the social force and the distributive cost identified by the two theories are likely to be amplified relative to better-resourced urban settings.

2.3 Empirical Review

2.3.1 National Studies

Several Nigerian studies have examined the household-level consequences of subsidy removal. Adesina (2020) found that transportation costs in Lagos rose substantially following subsidy removal, compelling households, especially low-income earners, to cut back on non-essential spending including education and leisure. Akinwale (2019) documented similar ripple effects on small businesses, whose operating costs rose sharply due to increased expenditure on fuel for transportation and power generation, eroding their competitiveness. Okonkwo and Musa (2018) reported that small-scale enterprises in Kano State that relied on fuel-powered generators experienced higher operating costs and, in some cases, closure, with rural enterprises disproportionately affected due to limited access to alternative power sources. Musa and Abubakar (2021) further observed that the absence of robust public communication and social support measures during implementation amplified the inflationary and welfare costs of the reform.

2.3.2 Regional Studies (Northern Nigeria)

Studies focused on northern Nigeria provide useful context for the present study. Yusuf and Abdullahi (2022) examined the effect of fuel subsidy removal on agricultural households in Kebbi State and found that farmers, including those in Fakai LGA, faced markedly higher transportation costs for moving produce to market, alongside reduced farm productivity arising from increased costs of fuel for irrigation and equipment. Danjuma (2020) reported comparable findings for rural households in neighbouring Sokoto State, where limited public transport options forced reliance on costlier private alternatives, a burden borne disproportionately by women and children responsible for accessing markets and schools. Olalekan, Adebayo and Omotola (2020) compared urban and rural responses in southwest Nigeria and found that, while urban households could partially adjust by shifting to alternative energy sources, rural households experienced a marked decline in economic activity owing to more limited substitution options.

2.3.3 Global Studies

International experience offers useful lessons for Nigeria's reform trajectory. The World Bank (2018) documented Indonesia's phased

subsidy removal, which was accompanied by unconditional cash transfers and public awareness campaigns that reduced opposition and cushioned vulnerable households. Soliman (2019) similarly highlighted Egypt's use of food vouchers and transportation subsidies to offset the welfare cost of fuel price reform, enabling fiscal savings to be redirected toward health and education. Bawumia, Sowa and Owusu (2016) found that, although Ghana's subsidy removal generated short-term inflationary pressure, it ultimately contributed to improved fiscal stability and infrastructure investment over the longer term. At the macroeconomic level, Omotosho (2019) used a New-Keynesian dynamic stochastic general equilibrium model to show that oil price shocks and the associated subsidy regime accounted for a sizeable share, about 22 percent, of the variation in Nigeria's economic output over a four-year horizon, underscoring the macro-fiscal stakes attached to subsidy policy.

2.4 Gap in Literature

The reviewed literature demonstrates that fuel subsidy removal carries well-documented socio-economic costs, but the bulk of Nigerian evidence is drawn from urban centres (Lagos, Kano) or framed at the national macroeconomic level. Studies that directly address rural, agrarian local government areas, where fuel dependence for farming logistics and the absence of alternative livelihoods compound vulnerability, remain scarce. Although Yusuf and Abdullahi (2022) and Danjuma (2020) provide useful regional context for Kebbi and Sokoto States, neither offers a dedicated empirical assessment of Fakai LGA. This study addresses that gap by providing primary, household-level evidence on the income, consumption and coping effects of fuel subsidy removal specifically within Fakai LGA.

3. METHODOLOGY

3.1 Research Design

The study adopted a descriptive survey research design, which is appropriate for collecting quantitative data from a representative sample in order to describe, analyse and interpret existing conditions, opinions and perceptions without manipulating the variables under investigation.

3.2 Study Area

Fakai Local Government Area is located in the southern part of Kebbi State, Nigeria. It is a predominantly rural area in which agriculture, petty trading and artisanal work constitute the principal sources of livelihood for residents. Access to public infrastructure, formal employment opportunities and social safety nets within the area is limited, characteristics that make Fakai LGA a relevant setting for assessing the real-world household impact of national fuel pricing policy in a resource-constrained, agrarian context.

3.3 Population of the Study

The population of the study comprised all residents of Fakai LGA, estimated at 230,652 persons based on the National Population Commission's (2006) census figures and subsequent population projections (National Population Commission [NPC], 2006).

3.4 Sample Size and Sampling Technique

The sample size was determined using the Taro Yamane (1967) formula:

$$n = N / [1 + N(e)^2]$$

where n is the sample size, N is the population size (230,652) and e is the margin of error, set at 0.05 (5 percent). Substituting these values yields $n = 230,652 / [1 + 230,652(0.0025)] = 230,652 / 577.63 \approx 399.3$, which was rounded up to 400 respondents for ease of administration. A stratified random sampling technique was then employed, with the population first divided into strata based on gender, age group, occupation and ward of residence, after which respondents were selected proportionally from each stratum using simple random sampling. This approach was adopted to minimise sampling bias and ensure adequate representation of the diverse demographic and occupational groups within Fakai LGA.

3.5 Sources and Method of Data Collection

The study relied primarily on primary data collected through a structured questionnaire administered to household heads, comprising mainly closed-ended items designed to capture respondents' socio-demographic characteristics, perceptions of the effects of fuel subsidy removal, and the coping strategies adopted in response. Data collection was conducted through face-to-face administration by trained research assistants familiar with the study area and fluent in the local language, an approach intended to minimise literacy-related response bias and ensure that respondents fully understood each item before responding. Secondary data, drawn from journal articles, government reports and other credible published sources, were used to support the conceptual and empirical framing of the study. Out of 400 questionnaires administered, 384 were correctly completed and returned, representing a response rate of 96 percent.

3.6 Validity and Reliability of the Research Instrument

The content validity of the questionnaire was established through expert review by academic supervisors and experienced researchers in economics and development studies, whose feedback informed refinements to the wording, structure and content of the instrument. A pilot test was subsequently administered to a small sample of respondents in a neighbouring community within Kebbi State to identify and resolve any ambiguities. The reliability of the instrument was assessed using Cronbach's alpha, which yielded a coefficient of 0.80, an acceptable level of internal consistency for social science research.

3.7 Method of Data Analysis

Data collected from the field were checked for completeness and accuracy, coded, and analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, frequency counts and percentages, were used to summarise the socio-demographic characteristics of respondents and their perceptions of the effects of fuel subsidy removal. The chi-square (χ^2) test of independence was applied at the 5 percent significance level to test the three null hypotheses of the study, given its suitability for assessing the association between categorical variables of the type collected in this survey.

4. RESULTS AND DISCUSSION

This section presents the results of the survey and discusses them in relation to the study's objectives, hypotheses and the reviewed literature. Out of the 400 questionnaires administered, 384 were correctly completed and returned, yielding a response rate of 96 percent, on which the following analysis is based.

4.1 Socio-Demographic Characteristics of Respondents

Table 1: Socio-Demographic Characteristics of Respondents (N = 384)

Variable	Category	Frequency	Percentage (%)
Gender	Male	214	55.7
	Female	170	44.3
Age group (years)	18–27	112	29.2
	28–37	146	38.0
	38–47	86	22.4
	48 and above	40	10.4
Marital status	Single	142	37.0
	Married	208	54.2
	Divorced/Widowed	34	8.8
Educational level	No formal education	62	16.1
	Primary	104	27.1
	Secondary	138	35.9
	Tertiary	80	20.9
Occupation	Farming	146	38.0
	Trading	112	29.2
	Civil service	78	20.3
	Others	48	12.5

Source: Field Survey, 2025.

Table 1 shows that respondents were predominantly male (55.7%) and aged between 28 and 37 years (38.0%). Most respondents were married (54.2%) and had attained secondary education (35.9%). Farming was the dominant occupation (38.0%), followed by

trading (29.2%), consistent with the predominantly rural and agrarian character of Fakai LGA described in the study area profile.

4.2 Perceived Impact of Fuel Subsidy Removal on Household Economic Activities

Table 2: Perceived Impact of Fuel Subsidy Removal on Household Economic Activities

Statement	Agree (%)	Neutral (%)	Disagree (%)
Fuel subsidy removal has increased the cost of living	82.3	10.4	7.3
It has reduced household purchasing power	78.6	12.8	8.6
Transportation costs have increased significantly	85.2	8.6	6.2
Income is now insufficient to meet basic needs	74.5	15.4	10.1
Small businesses have been negatively affected	80.7	11.5	7.8

Source: Field Survey, 2025.

As shown in **Table 2**, a clear majority of respondents agreed that fuel subsidy removal raised transportation costs (85.2%) and the general cost of living (82.3%), reduced household purchasing power (78.6%), and adversely affected small businesses (80.7%). These results are consistent with Adesina's (2020) finding of substantially higher transportation costs in Lagos following

subsidy removal, and with Okonkwo and Musa's (2018) finding that small enterprises in Kano State faced rising operating costs after the reform.

4.3 Effect of Fuel Subsidy Removal on Household Consumption Patterns

Table 3: Changes in Household Consumption Patterns

Statement	Agree (%)	Neutral (%)	Disagree (%)
Reduced frequency of purchasing non-essential goods	76.5	14.3	9.2
Shift from preferred to cheaper brands	72.4	16.7	10.9
Reduction in protein-rich food consumption	68.2	18.8	13.0
Increased reliance on subsistence farming	64.1	20.1	15.8
Reduction in entertainment and leisure spending	81.3	9.4	9.3

Source: Field Survey, 2025.

Table 3 indicates that the most pronounced consumption adjustments were reduced spending on entertainment and leisure (81.3%) and reduced purchases of non-essential goods (76.5%), reflecting a reallocation of household budgets toward essential needs. A notable share of households also reported reduced consumption of protein-rich foods (68.2%) and greater reliance on subsistence farming (64.1%), patterns that echo Olalekan et al.'s

(2020) observation that rural households, lacking the substitution options available to urban counterparts, often respond to fuel price shocks by curtailing food quality and diversifying into subsistence activities.

4.4 Coping Strategies Adopted by Households

Table 4: Household Coping Strategies in Response to Fuel Subsidy Removal

Coping Strategy	Agree (%)	Neutral (%)	Disagree (%)
Reduced transportation frequency	83.6	8.3	8.1
Increased use of motorcycles and bicycles	69.8	16.1	14.1
Engagement in multiple income-generating activities	62.5	21.4	16.1
Dependence on extended family support	58.6	24.0	17.4
Bulk buying to reduce transport and fuel costs	74.0	15.1	10.9

Source: Field Survey, 2025.

Table 4 shows that the most widely adopted coping strategies were reducing the frequency of travel (83.6%) and bulk buying (74.0%), both of which are cost-minimisation responses consistent with the behavioural adjustments anticipated under Social Impact Theory. A smaller, though still substantial, share of households reported

engaging in additional income-generating activities (62.5%) and relying on extended family support (58.6%), suggesting that, beyond expenditure adjustments, households in Fakai LGA also actively diversified income sources and social support networks to absorb the shock of subsidy removal.

4.5 Test of Hypotheses

The three null hypotheses formulated for this study were tested using the chi-square (χ^2) test of independence at the 5 percent significance level. The results are summarised in Table 5.

Table 5: Summary of Chi-Square Test Results

Hypothesis	χ^2 (calculated)	df	p-value	Decision
H01: Subsidy removal and household economic well-being	42.78	2	< 0.05	Rejected
H02: Subsidy removal and household consumption patterns	37.46	2	< 0.05	Rejected
H03: Subsidy removal and household coping strategies	29.85	2	< 0.05	Rejected

Source: Field Survey, 2025 (SPSS output).

As shown in Table 5, all three null hypotheses were rejected at the 5 percent significance level. The results indicate a statistically significant relationship between fuel subsidy removal and household economic well-being ($\chi^2 = 42.78$, $df = 2$, $p < 0.05$), a significant effect on household consumption patterns ($\chi^2 = 37.46$, $df = 2$, $p < 0.05$), and a significant influence on the coping strategies adopted by households ($\chi^2 = 29.85$, $df = 2$, $p < 0.05$). These findings provide statistical confirmation of the descriptive patterns reported in Tables 2 to 4.

4.6 Discussion of Findings

The findings of this study confirm that fuel subsidy removal has had a substantial and statistically significant effect on the socio-economic activities of households in Fakai LGA, manifesting through higher transportation and living costs, reduced purchasing power, altered consumption patterns, and the adoption of a range of coping strategies. These results align closely with national-level evidence from Adesina (2020) and Akinwale (2019), both of which documented sharp increases in transportation costs and operating expenses for fuel-dependent businesses following subsidy removal in urban contexts. They also corroborate regional findings by Yusuf and Abdullahi (2022) and Danjuma (2020), who reported that rural households in Kebbi and Sokoto States, respectively, faced disproportionate hardship due to limited access to alternative transportation and energy sources, a vulnerability that the present study's findings suggest is equally pronounced in Fakai LGA.

Interpreted through Social Impact Theory (Latané, 1981), the strength and immediacy of the fuel price shock, combined with the large number of households affected in a predominantly agrarian local government area, help explain the breadth and intensity of the behavioural adjustments observed, ranging from reduced travel and bulk buying to diversification into additional income-generating activities. Viewed through Economic Welfare Theory (Pigou, 1920), the findings illustrate the classic efficiency-equity trade-off associated with subsidy reform: while removal may improve fiscal efficiency at the national level, its redistributive cost falls heavily on rural households with limited capacity to absorb the shock, a pattern consistent with the experience of Indonesia and Egypt prior to the introduction of compensatory social protection measures (World Bank, 2018; Soliman, 2019). The relatively high reliance on extended family support (58.6%) and subsistence farming (64.1%) observed in this study further suggests that, in the absence of formal safety nets, households in Fakai LGA have turned to informal social and livelihood mechanisms to absorb the shock, an adaptation strategy that, while functional in the short run, may not be sustainable if fuel prices continue to rise without complementary government support.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the effect of fuel subsidy removal on the socio-economic activities of households in Fakai Local Government Area, Kebbi State. The findings show that fuel subsidy removal significantly increased transportation costs and the general cost of living, reduced household purchasing power, and adversely affected household-based businesses. In response, households adjusted their consumption patterns by cutting non-essential spending and shifting to cheaper alternatives, while also adopting coping strategies such as reduced travel frequency, bulk buying, diversification into additional income-generating activities, and reliance on extended family support. Statistical tests confirmed significant relationships between fuel subsidy removal and household economic well-being, consumption patterns, and coping strategies. The study concludes that, while fuel subsidy removal may yield long-run fiscal and macroeconomic benefits for Nigeria, its short-run socio-economic costs are disproportionately severe for rural, agrarian communities such as Fakai LGA, where households have limited access to alternative livelihoods, transportation and formal social protection.

5.2 Recommendations

- Based on the findings, the following recommendations are made:
1. Targeted social support programmes: Government should design and implement conditional or unconditional cash transfers and other targeted support measures specifically for vulnerable rural households, to cushion the impact of rising transportation and living costs.
 2. Investment in rural transportation infrastructure: Federal and state governments should invest in affordable and reliable public transportation in rural local government areas such as Fakai, to reduce the disproportionate burden of fuel-driven transport cost increases on rural households.
 3. Promotion of alternative and renewable energy: Government and development partners should promote access to solar energy and other alternatives to petrol- and diesel-powered equipment, particularly for irrigation, milling and small-scale processing activities that underpin rural livelihoods.
 4. Support for household-based enterprises: Low-interest credit facilities, input support and business advisory services should be extended to small household enterprises to help them adapt to higher operating costs arising from fuel price increases.

5. Gradual and well-communicated implementation of future reforms: Future fuel price adjustments should be phased in gradually and accompanied by clear public communication and adequately resourced cushioning measures, to reduce the shock to household welfare and minimise public resistance.

5.3 Suggestions for Further Research

Future research could usefully extend this study in several directions, including: an assessment of the long-term effects of fuel subsidy removal on poverty levels in both rural and urban areas; comparative studies across multiple local government areas within Kebbi State to identify regional variation in impact; and an evaluation of the effectiveness of government palliative measures in cushioning the socio-economic effects of subsidy removal on rural households.

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