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The Political Economy of Fuel Subsidy Removal: Governance and Sustainable Development in Nigeria

Ekonomi Politik Penghapusan Subsidi Bahan Bakar: Tata Kelola dan Pembangunan Berkelanjutan di Nigeria

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Abstract

The removal of fuel subsidies in Nigeria has generated considerable debate regarding its implications for governance, economic stability, and public welfare. This study explores the governance mechanisms underpinning subsidy removal and assesses its economic and social consequences, drawing on data collected from 385 respondents in Bida, Niger State. A binary logit regression model was utilized to analyze the economic, social, political, and external variables influencing policy outcomes. The results indicate that, although the subsidy removal policy is intended to relieve fiscal burdens and promote economic efficiency, it has contributed to rising inflation and disproportionately impacted low-income households, thereby exacerbating social inequality. On the social front, the policy has incited significant public dissatisfaction, particularly due to escalating transportation and living expenses, while government-provided palliatives are widely perceived as insufficient. Politically, entrenched weaknesses in governance, a lack of transparency, and ongoing corruption have undermined public trust and complicated the policy's legitimacy and acceptance. These findings highlight the centrality of governance in determining the effectiveness of economic reform policies. To mitigate adverse effects and enhance policy outcomes, the study recommends the implementation of targeted subsidies for vulnerable populations, increased investment in accessible public transportation infrastructure, and comprehensive institutional reforms to improve transparency and accountability in the allocation of subsidy savings. Ensuring that governance frameworks align with prevailing socio-economic realities is essential for achieving equitable and sustainable policy.

Keywords: Fuel subsidy; governance; sustainable development; Nigeria; economic policy.

Abstrak

Penghapusan subsidi bahan bakar di Nigeria telah memicu perdebatan luas terkait dampaknya terhadap tata kelola pemerintahan, stabilitas ekonomi, dan kesejahteraan masyarakat. Studi ini mengeksplorasi mekanisme tata kelola yang mendasari kebijakan penghapusan subsidi serta menilai konsekuensi ekonomi dan sosialnya, berdasarkan data yang dikumpulkan dari 385 responden di Bida, Negara Bagian Niger. Model

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regresi logit biner digunakan untuk menganalisis variabel ekonomi, sosial, politik, dan eksternal yang memengaruhi hasil kebijakan. Hasil penelitian menunjukkan bahwa meskipun kebijakan penghapusan subsidi bertujuan untuk mengurangi beban fiskal dan mendorong efisiensi ekonomi, kebijakan tersebut justru menyebabkan peningkatan inflasi dan berdampak secara tidak proporsional terhadap rumah tangga berpendapatan rendah, sehingga memperparah ketimpangan sosial. Dari sisi sosial, kebijakan ini memicu ketidakpuasan publik yang signifikan, terutama akibat meningkatnya biaya transportasi dan biaya hidup, sementara bantuan sosial dari pemerintah dipandang tidak memadai. Secara politik, kelemahan dalam struktur tata kelola, kurangnya transparansi, dan korupsi yang terus berlanjut telah merusak kepercayaan publik serta memperumit legitimasi dan penerimaan kebijakan ini. Temuan ini menegaskan pentingnya peran sentral tata kelola dalam menentukan efektivitas kebijakan reformasi ekonomi. Untuk mengurangi dampak negatif dan meningkatkan hasil kebijakan, studi ini merekomendasikan pemberian subsidi yang ditargetkan bagi kelompok rentan, peningkatan investasi dalam infrastruktur transportasi publik yang terjangkau, serta reformasi kelembagaan secara menyeluruh guna meningkatkan transparansi dan akuntabilitas dalam pengelolaan dana hasil penghematan subsidi. Penyesuaian praktik tata kelola dengan realitas sosial-ekonomi yang ada merupakan hal yang krusial untuk mencapai reformasi kebijakan yang adil dan berkelanjutan.

Kata kunci: Subsidi bahan bakar; tata kelola; pembangunan berkelanjutan; Nigeria; kebijakan ekonomi.

Introduction

Governments worldwide frequently implement subsidies to stabilize energy prices, particularly for fossil fuels. These subsidies are primarily intended to shield consumers—especially low-income households—from the volatility of oil markets. However, they continue to generate considerable debate concerning their broader implications for fiscal policy, rural development, environmental sustainability, and political stability (Coxhead & Grainger, 2018; Yusuf et al., 2017). While a substantial body of literature supports the reduction or elimination of such subsidies to enhance economic efficiency, others argue that these subsidies are politically entrenched and difficult to dismantle due to their socio-political symbolism and integration into public expectations (Skovgaard & van Asselt, 2019; Timperley, 2021).

Fluctuations in global oil prices have significantly shaped national energy policies. For instance, between September 2003 and June 2008, oil prices tripled before plummeting, only to surge again amid geopolitical tensions such as the Ukraine conflict. Prices peaked at $114 per barrel in July 2022, subsequently declining to an average of $80.5 in 2023 (Bao-We, Chadi, & Joaquin, 2024). These fluctuations complicate

policymaking, especially in petroleum-dependent economies such as Nigeria, where oil revenues have dominated the fiscal landscape for over five decades (Adelabu, 2023).

In Nigeria, fuel pricing remains an especially contentious issue due to the centrality of oil in national finances and daily life. Past attempts to reduce or remove fuel subsidies have typically resulted in inflation, diminished purchasing power, and heightened economic hardship, particularly for low- and middle-income populations dependent on affordable energy. Given the country's underdeveloped infrastructure in transportation, electricity, and communication, fuel price adjustments often amplify existing socio-economic vulnerabilities.

In response to escalating global oil prices since the early 2000s, numerous governments have implemented subsidy programs to protect vulnerable populations. Black et al. (2023) report that global fossil fuel subsidies increased from 5.4% of GDP in 2015 to 7.1% in 2022, with implicit subsidies—such as the failure to account for environmental externalities—comprising the majority. Although intended to provide economic relief, these subsidies raise significant concerns regarding fiscal sustainability and environmental degradation.

Nigeria’s fuel subsidy program, historically responsible for maintaining some of the lowest fuel prices globally, has increasingly placed considerable strain on the national budget. In 2019, the Nigerian government allocated NGN 532 billion (USD 1.7 billion) to fuel subsidies (IEA, 2020). By 2022, this figure had surged to NGN 4.39 trillion (USD 9.7 billion), exceeding the combined national budgets for health, education, and social protection (World Bank, 2023). Within the first five months of 2023 alone, NGN 1.8 trillion was expended on subsidies, marking a 55% increase compared to the same period in the previous year, prior to the official removal of the subsidy program (Okafor, 2023). This dramatic escalation highlights the fiscal unsustainability inherent in the existing subsidy regime.

Despite the macroeconomic justification for subsidy removal, the policy has been met with considerable resistance in Nigeria, particularly among low-income households who depend on subsidized fuel for basic subsistence. Although wealthier populations disproportionately benefit from fuel subsidies due to higher consumption levels, the removal of subsidies disproportionately impacts the poor through increased living expenses. Following the 2023 subsidy withdrawal, the country experienced

substantial spikes in fuel prices, food inflation, and transportation costs. Moreover, the naira depreciated by 70% following the lifting of the currency peg (Adeoye, 2024). The International Monetary Fund (IMF, 2024) has since reported a partial reintroduction of subsidies now categorized as "implicit," underscoring persistent challenges in policy implementation, governance transparency, and institutional credibility.

The repeated failure of successive Nigerian administrations to implement and sustain fuel subsidy reforms underscores a broader crisis of governance and public trust. Public protests and civil society resistance arise not solely from economic grievances, but also from profound skepticism regarding the management of savings generated from subsidy removal. Pervasive perceptions of corruption, policy inconsistency, and elite capture further undermine the legitimacy and efficacy of reform initiatives (Uko et al., 2024).

While the existing literature predominantly emphasizes the fiscal and economic inefficiencies associated with Nigeria's fuel subsidies (Adelabu, 2023; World Bank, 2023), insufficient attention has been given to the political economy and governance dimensions that critically shape public reception and implementation outcomes. There is a notable gap in studies that systematically examine how governance failures—such as lack of transparency, institutional weakness, and erosion of political trust—compromise the viability and credibility of subsidy reform in oil-dependent states like Nigeria.

This study aims to fill a critical gap by conducting a comprehensive analysis of Nigeria's fuel subsidy program, examining not only its economic effects but also its socio-political dimensions. It investigates the influence of governance quality, political trust, and public perception on the outcomes of subsidy reform, thereby situating the discourse within the broader framework of political accountability and national development planning. The study contributes to the global policy dialogue on subsidy reform in developing economies, offering insights that can aid policymakers in designing energy pricing policies that are economically sustainable, socially inclusive, and politically feasible. Specifically, the objectives of the study are to analyze the governance factors influencing fuel subsidy removal in Nigeria and to assess the impact of subsidy removal on the country's sustainable development.

Literature Review

Fuel Subsidy

A subsidy is defined as any method that keeps consumer product prices below market levels or producer prices above market levels. Subsidies come in several forms. Some subsidies have a direct price impact. Grants, tax breaks and exemptions, and price controls are some of them. Others have an indirect influence on price or expenditures, such as market laws that favor certain items, government-sponsored technology, or R&D (Adebiyi, 2011). Subsidies are frequently used by governments to assist certain businesses or achieve economic goals. They can be used to boost growth in new industries, foster innovation, or shield indigenous manufacturers from international competition. Furthermore, subsidies can be directed toward social welfare programs, with the goal of making vital commodities and services more inexpensive and accessible to low-income individuals or marginalized populations (Gana, Rabi, & Nura, 2024). In some cases, subsidies may also be utilized to address environmental concerns, such as promoting renewable energy sources or reducing carbon emissions. Overall, subsidies play a significant role in shaping economic policies and supporting various sectors of the economy.

Governance

Governance includes the state, but it goes beyond that by involving the corporate sector and civil society groups. What defines a state is hotly discussed. Here, the state is defined to comprise political and public sector entities. Governance also encompasses the decision-making processes and mechanisms that these entities use to manage resources and provide services to citizens. The state's role in governance is crucial as it sets the legal framework and policies that guide interactions between different actors in society.

Sustainable Development

Although several definitions of sustainability exist, the Brundtland Commission's definition is the most often used (Cerin, 2006; Dernbach, 2003; Stoddart, 2011). Sustainable development (SD) aims to achieve long-term economic and environmental stability. And this can only be accomplished by including and addressing

economic, environmental, and social concerns throughout the decision-making cycle. Sustainable development seeks to guarantee that development satisfies current demands without jeopardizing future generations' capacity to meet their own. It acknowledges that economic progress must be balanced with environmental conservation and social fairness to create a peaceful and sustainable society (Gana, Rabi, & Nura, 2024). Sustainable development also emphasizes the importance of intergenerational equity, ensuring that resources are managed in a way that benefits both present and future generations.

Empirical Review

Gana, Rabi, and Nura (2024) investigated the implications of fuel subsidy removal on Nigeria's sustainable development. The study used an exploratory research design and mostly collected data using qualitative methods. Secondary data were evaluated using qualitative content analysis. Human capital theory served as the study's theoretical underpinning. The study found that removing fuel subsidies has direct economic consequences, such as inflationary pressures, fiscal sustainability, debt reduction, increased poverty and vulnerability, as well as protest and social unrest, and it recommends that the government ensure transparency and accountability in the management of funds saved by subsidy removal. The research also suggests that the government prioritize addressing widespread hunger, rising unemployment, and a falling level of living.

Ikenga and Oluka (2023) (quoted in Abu Idris et al. 2024) evaluated the benefits and challenges of the fuel subsidy reduction on Nigeria's economy under the Fourth Republic. The study used descriptive analysis and a qualitative data-collecting approach. The study used neoliberalism theory as its theoretical foundation. The research stated that past governments' efforts to change the fuel subsidy program had a major detrimental impact on residents, resulting in higher costs for petroleum goods, food, and transportation. The report advised that the central government pay more attention to the policy's impact on the people, such as giving palliatives to ease their misery. It also proposed that the government provide a consistent electrical supply, vital facilities, and infrastructure to offset the negative impacts on individuals. Their study calls for palliative measures and improved infrastructure to mitigate the negative effects

on citizens, echoing Gana et al. (2024) in emphasizing social welfare concerns but diverging in its lack of focus on long-term economic strategies.

Antimiani (2023) examined the effects of eliminating fossil fuel subsidies for the EU's carbon neutrality goal. The data was analyzed using the computable general equilibrium (CGE) model. The report found that, while subsidy removal promotes carbon neutrality, it can have serious consequences for energy costs, industry competitiveness, and families.

Obasi et al. (2023) researched the political economy of fuel subsidy removal in Nigeria, with an emphasis on economic consequences and human well-being. Their research looked at both the benefits and drawbacks of subsidy withdrawal, revealing the prevalent corruption in Nigeria's oil sector and its detrimental impact on economic progress. While the report gives a complete political analysis, it does not go into depth into individual corruption incidents and their immediate economic consequences. It also argues for refinery revival and anti-corruption efforts but does not go into detail on the techniques and policies required to achieve these objectives.

Greve and Lay (2023) applied a dynamic general equilibrium model to analyze fossil fuel subsidy impacts in developing countries. They argue that subsidy removal shifts consumption patterns, influences GDP, and has differentiated effects on income groups. Although these findings provide a comparative perspective, they do not fully address the governance and policy implementation challenges unique to Nigeria. Unlike Gana et al. (2024), who emphasize poverty alleviation, Greve and Lay (2023) focus on macroeconomic dynamics without detailing mitigation strategies for vulnerable populations.

Similarly, Prabaw et al. (2022) investigated the effects of liquid petroleum gas subsidy removal in Indonesia using an econometric approach. Their study finds that subsidy elimination disproportionately affects low-income households and recommends strategic allocation of saved funds to cushion economic distress. While relevant, their policy recommendations assume strong government efficiency, a stark contrast to Nigeria’s political and economic landscape characterized by corruption and policy inconsistencies.

Omotosho (2019) undertook a thorough examination of the macroeconomic repercussions of oil price shocks and Nigeria's fuel subsidy scheme. The study used a

New-Keynesian DSGE model to evaluate the effects of worldwide oil price changes on the retail price of fuel. The findings showed that oil price shocks had a considerable influence on Nigeria's economic production, accounting for around 22% of output changes during a four-year period. In the benchmark model, which incorporated fuel subsidies, a negative oil price shock reduced aggregate GDP, boosted non-oil GDP, raised headline inflation, and depreciated the currency rate. However, when the model was run without fuel subsidies, the negative impact on GDP was mitigated while headline inflation fell. Notably, the exchange rate declined more sharply in the near run. Counterfactual models revealed that eliminating fuel subsidies caused increased macroeconomic volatility, posing significant hurdles for monetary policy responses to oil price shocks. The report stressed the importance of comprehensive fuel subsidy changes, which include the establishment of targeted safety nets and long-term adjustment procedures. This contrasts with studies like Ikenga and Oluka (2023), which emphasize short-term citizen welfare over broader economic stability.

A critical review of existing research reveals gaps in governance, policy transition, and sustainable development considerations regarding Nigeria’s fuel subsidy removal. While Gana et al. (2024) and Obasi et al. (2023) focus on social and economic repercussions, they lack detailed governance frameworks ensuring transparency in fund utilization. Ikenga and Oluka (2023), as reported in Abu Idris et al. (2024), discuss palliative measures but do not propose long-term structural adjustments. Greve and Lay (2023) and Omotosho (2019) explore macroeconomic implications but neglect the role of political institutions in shaping policy effectiveness.

Furthermore, international perspectives such as Antimiani (2023) and Prabaw et al. (2022) offer valuable insights but fail to capture Nigeria’s unique socio-political and economic challenges. These gaps underscore the need for an integrative study combining governance and policy reform with sustainable development objectives, addressing both immediate economic impacts and structural factors driving subsidy removal in Nigeria.

Political Economy of Fuel Subsidy Removal in Nigeria

The removal of fuel subsidy in Nigeria remains a critical issue in the country's political economy, having important implications for fiscal policy, public welfare, and

economic restructuring. Subsidies were historically implemented to help Nigerians cope with the high cost of petroleum products. However, their long-term survival has been called into doubt because of inefficiencies and cost difficulties. In 2024, President Bola Tinubu's administration proceeded to remove subsidies, resulting in fuel prices climbing to ₦998 in Lagos and ₦1,030 in Abuja (Reuters, 2024). This high increase exacerbated inflationary pressures, with both rural and urban residents facing rising living costs.

While the administration defended the program as a necessary budgetary reform to free up resources for essential industries, the immediate social consequences were severe. According to studies, 73% of Nigerians increased their spending when subsidies were removed, indicating the widespread economic burden on households (Statista, 2023). Furthermore, inflation rose, worsening poverty in a society already marked by substantial economic disparity. In response to public outrage, the government partially reinstated subsidies for specific uses in late 2024, raising concerns about fiscal discipline and sustainability. The International Monetary Fund (IMF) warned that resumed subsidies could consume up to 3% of GDP (S&P Global, 2024).

The administration has implemented novel policies, such as a $200 million Compressed Natural Gas (CNG) plan that aims to convert over one million automobiles to CNG within three years, lowering transportation costs by up to 50% (AP News, 2024). Despite its promise, the initiative encountered problems like poor infrastructure and public mistrust regarding the safety of CNG systems. Additionally, the start of operations at the Dangote Oil Refinery in September 2024 was a noteworthy milestone. Initially, the Nigerian National Petroleum Corporation (NNPC) was the sole purchaser of its fuel. By October, however, the government had withdrawn this exclusive relationship, enabling local traders to buy directly from the refinery in an effort to boost market competitiveness (Reuters, 2024).

Public opinion on the subsidy withdrawal policy remained mixed, with 55% supporting the plan and 45% opposing it (Statista, 2023). The split highlights the difficulty of reconciling budgetary measures with public welfare in a country where poverty and unemployment are widespread.

Governance Factors Shaping Fuel Subsidy Removal in Nigeria

The removal of fuel subsidies in Nigeria has been a complex and contentious issue influenced by various governance factors.

a. Government Leadership and Policy Direction: The government of President Bola Tinubu was a watershed moment in the fuel subsidy controversy, as it completely completed subsidy removal despite popular opposition and demonstrations. Previous governments, like those of Goodluck Jonathan and Muhammadu Buhari, met significant opposition, impeding similar changes (Uko, Etefia, & Ebong, 2024). Tinubu's government's political will demonstrates a move toward emphasizing economic sustainability over public enthusiasm.
b. Public Sentiment and Protests: Historical opposition to subsidy removal originates from general public belief that such acts disproportionately impact the poor. Protests have frequently erupted in reaction to subsidy announcements, demonstrating a fundamental skepticism in the government's intentions and ability to control the socioeconomic consequences (Victoria, Esther, Doris, & David, 2017). This public resistance hinders governance efforts, as leaders must strike a fine balance between vital reforms and preserving social order.
c. Influence of Political Elites and Interest Groups: The existence of significant interest groups, notably in the oil industry, has traditionally affected subsidy policy. These groups frequently campaign against removal since they have a vested interest in keeping subsidies, which can lead to political maneuvering that delays or complicates reform attempts (Aminu & Ramatu, 2022).
d. Fiscal Pressure and Resource Allocation: Fuel subsidies have imposed a significant financial burden on the Nigerian government, accounting for a substantial share of the national budget. According to the Nigeria Extractive Industries Transparency Initiative (2022), the federal government spent approximately $10 billion on fuel subsidies in 2021 alone. This level of expenditure has raised concerns about fiscal sustainability, prompting policy shifts toward reallocating resources to critical sectors such as healthcare, education, and infrastructure (International Monetary Fund, 2023).

The argument for subsidy withdrawal is primarily rooted in economic necessity. Nigeria, as a developing economy, faces pressing infrastructure deficits and social

welfare challenges that require adequate funding (World Bank, 2022). Fuel subsidies disproportionately benefit wealthier segments of society rather than the intended lower-income groups, thereby exacerbating income inequality (Adenikinju, 2021). Furthermore, studies have shown that subsidy regimes are prone to inefficiencies, corruption, and revenue leakages, making them unsustainable in the long run (BudgIT, 2023). However, public sentiment and governance considerations play a critical role in shaping the implementation of subsidy reforms. The removal of subsidies has historically led to social unrest, as seen in the Occupy Nigeria protests of 2012, where mass demonstrations erupted following an abrupt increase in fuel prices (Olawale & Okonkwo, 2020). The government must therefore engage in robust social dialogue and implement effective social protection measures to cushion the economic impact on vulnerable populations (Ajakaiye & Fakiyesi, 2019).

e. Market Inefficiencies and Corruption: The subsidy scheme has long been plagued by systemic market inefficiencies and entrenched corruption, which have severely undermined its intended economic and social benefits. For instance, corruption manifests through inflated subsidy claims, collusion between officials and fuel marketers to divert funds, and embezzlement of resources meant to stabilize consumer prices or bolster refining infrastructure (Evans et al., 2023). These practices distort subsidy allocation, redirecting public funds into private hands rather than supporting sectoral development or vulnerable populations. While the government's decision to eliminate subsidies aims to dismantle these corrupt networks and foster a competitive market conducive to indigenous refining growth, the reform process itself remains vulnerable to corruption. Without robust safeguards, savings from subsidy removal could be misallocated for example, redirected to politically motivated projects or captured by elites rather than reinvested in critical areas like renewable energy transition, social safety nets, or refinery modernization.

Research Methods

This study employs a quantitative economic analysis to investigate the impact of fuel subsidy removal in Nigeria, focusing on its economic, social, political, and external determinants. Data was collected using structured, pre-tested questionnaires administered to individuals directly affected by the policy change, including transport workers, small business owners, low-income earners, and civil servants in Bida, Niger State.

Study Area

Bida, a major commercial hub in Niger State with an estimated population of 400,000 (NPC, 2024), was purposively selected for this study owing to its demographic and economic heterogeneity. The town's economy mirrors the broader informal economic framework of Nigeria, encompassing key sectors such as agriculture, petty trading, transportation, and small-scale manufacturing. Its heavy reliance on fuel for both transportation and power supply positions Bida as an apt case study for examining the socioeconomic implications of fuel subsidy removal.

Moreover, the strategic location of Niger State in North-Central Nigeria offers a representative setting that captures the intersection of urban and peri-urban economic dynamics beyond the megacities of Lagos and Abuja. By focusing on Bida, the study captures the lived experiences of residents in semi-urban contexts, thereby enhancing the applicability and relevance of the findings across Nigeria’s diverse socio-economic landscape.

Sampling Method

The sample size of 385 respondents was determined using the SurveyMonkey sample size calculator, with a 95% confidence level and a 5% margin of error, ensuring statistical reliability and representativeness of the larger population. The sampling method combined stratified and convenience sampling techniques. Respondents were stratified by occupation and income level to capture different socioeconomic experiences, while convenience sampling facilitated engagement with willing participants in public transport hubs, markets, and residential areas.

The structured questionnaire was divided into five sections: Demographic profile; Economic impact of subsidy removal; Social consequences; Political perceptions and trust in government; Awareness of external factors (e.g., global oil prices, IMF recommendations) Each section included both closed-ended and Likert-scale questions. The questionnaire was piloted with 20 individuals in a neighboring community to test clarity and reliability. Feedback from the pilot was used to refine ambiguous questions and ensure cultural relevance.

Model Specification and Analytical Technique

To quantitatively assess the determinants of public response to subsidy removal and its impact on sustainable development (SD), the study employs a binary logit regression model. The model is defined as:

$$SD = \beta_0 + \beta_1 EF_i + \beta_2 SF_i + \beta_3 PF_i + \beta_4 EI_i + U_i \quad \ldots (1)$$

The binary logit regression technique will be employed to examine the likelihood of each parameter in terms of its influence on subsidy removal. Thus,

$$\text{Logit (SD)} = \ln\left[\frac{P}{1-P}\right] = \alpha + \beta_1 EF_i + \beta_2 SF_i + \beta_3 PF_i + \beta_4 EI_i + U_i \quad \ldots (2)$$

Where:

SD = Sustainable Development

EF = Economic Factors

SF = Social Factors

PF = Political Factors

EI = External Influence

$\beta_1 \ldots \beta_4$= Parameters

$\alpha =$ Intercept

$\ln[\frac{p}{1-p}]$ = Natural log of odds

Ethical Considerations

To minimize potential sampling bias, efforts were made to include respondents from different income levels, occupations, and age groups. Survey administrators were trained to maintain neutrality and avoid influencing responses. Respondent anonymity was preserved by avoiding the collection of personally identifiable information.

Informed consent was obtained from all participants, who were briefed on the study's purpose, their voluntary participation, and their right to withdraw at any time. The study adhered to ethical guidelines for human subject research and ensured data privacy and confidentiality throughout the research process.

Results And Discussion

This chapter presents and analyzes the data collected from 385 respondents who completed the questionnaire on the political economy of fuel subsidy removal in Bida, Nigeria. The data is categorized into demographic information, governance and policy reform perspectives, economic impact and sustainable development, and policy recommendations.

Table 1 Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Age Group	18–25	85	22.1
	26–35	140	36.4
	36–45	95	24.7
	46–55	45	11.7
	56 and above	20	5.2
Gender	Male	220	57.1
	Female	160	41.6
	Prefer not to disclose	5	1.3
Occupation	Public Sector	90	23.4
	Private Sector	120	31.2
	Self-employed	110	28.6
	Unemployed	65	16.9
Educational Level	Primary	30	7.8
	Secondary	80	20.8
	Tertiary	210	54.5
	Postgraduate	55	14.3
	None	10	2.6
Monthly Income (₦)	Less than ₦50,000	85	22.1
	₦50,000–₦100,000	125	32.5
	₦101,000–₦250,000	115	29.9
	Above ₦250,000	60	15.6

Source: Field Survey (2025)

The above presents the age distribution of respondents. The majority fall within the 26–35 age group (36.4%), followed by those aged 36–45 (24.7%). Respondents aged 18–25 make up 22.1%, while those in the 46–55 and 56 and above categories

account for 11.7% and 5.2%, respectively. This suggests that the sample predominantly comprises individuals in their economically active and working-age years. It also shows the gender distribution. A larger proportion of the respondents are male (57.1%), while females represent 41.6% of the sample. A small fraction (1.3%) preferred not to disclose their gender. This distribution is reflective of broader gender participation trends in public surveys within similar socio-economic settings.

The private sector accounts for the largest share of respondents by occupation, with 31.2%, followed closely by self-employed individuals at 28.6%. Public sector workers make up 23.4%, while the unemployed represent 16.9%. This occupational spread reflects the diversity of the local economy in Bida, where informal and private sector engagements are predominant. In terms of educational qualifications, a majority of respondents (54.5%) have tertiary education, while 20.8% possess secondary education. Those with postgraduate degrees make up 14.3%, and a smaller number reported primary education (7.8%) or no formal education (2.6%). The high level of tertiary education suggests a relatively informed respondent base, which is important for interpreting policy-related opinions.

It provides insights into the respondents' monthly income levels. The largest group earns between ₦50,000 and ₦100,000 (32.5%), followed by those earning ₦101,000–₦250,000 (29.9%). Respondents earning less than ₦50,000 comprise 22.1%, while those earning above ₦250,000 represent the smallest proportion at 15.6%. This distribution reflects a predominantly low-to-middle-income population, which is especially relevant in understanding the socio-economic effects of fuel subsidy removal.

Table 2 Awareness of Governance Factors Influencing Fuel Subsidy Removal

Response	Frequency	Percentage (%)
Yes	270	70.1
No	115	29.9
Total	385	100

Source: Survey (2025)

A majority of respondents (70.1%) are aware of the governance factors influencing the subsidy removal policy.

Table 3 Does Public Opinion and Social Movements Influence the Decision to Remove Fuel Subsidies?

Response	Frequency	Percentage (%)
Yes	120	31.2
No	190	49.4
Unsure	75	19.4
Total	385	100

Source: Survey (2025)

Nearly half (49.4%) believe the subsidy removal was not implemented transparently.

Table 4 Government Communication on Subsidy Removal Objectives

Response	Frequency	Percentage (%)
Excellent	50	13.0
Good	95	24.7
Fair	125	32.5
Poor	115	29.9
Total	385	100

Source: Survey (2025)

A large portion of respondents (32.5%) rated the government's communication as fair, with 29.9% finding it poor. This shows the reason behind the finding of Gana, Rabi and Bashar (2023) argued that effective communication and a high degree of trust between individuals and the government may also be crucial success elements in such an endeavor. This factor can affect the acceptance and implementation of new policies as well as the overall effectiveness of the reforms.

Table 5 Impact on Governance

Response	Frequency	Percentage (%)
Yes	120	31.2
No	190	49.4
Unsure	75	19.4
Total	385	100

Source: Survey (2025)

This implies that fuel subsidy removal has impact on the governance in Nigeria

Table 6 Household Impact on Monthly Expenses

Impact	Frequency	Percentage (%)
No Impact	30	7.8
Moderate Impact	140	36.4
Significant Impact	215	55.8
Total	385	100

Source: Survey (2025)

A majority (55.8%) report a significant impact on their monthly expenses following the subsidy removal.

Table 7 Contribution to Economic Efficiency

Response	Frequency	Percentage (%)
Yes	120	31.2
No	190	49.4
Unsure	75	19.4
Total	385	100

Source: Survey (2025)

More than half (49.4%) do not believe that subsidy removal has contributed to economic efficiency in Nigeria. This in line with the argument of Raji (2018) who said that the removal of fuel subsidies has a negative microeconomic impact in that it would raise poverty in the short term. Families will experience instant discomfort and hunger as a result. Individually, the removal of fuel subsidies, without any palliatives, might result in less disposable money, less food on the land, less medicine for ill people, and an inability to pay for basic schooling in certain sections of the country, particularly in Nigeria's northern region.

Table 8 Does the International Oil Prices and Global Economic Conditions Impact the Decision to Remove Fuel Subsidies?

Response	Frequency	Percentage (%)
Yes	85	22.1
No	210	54.5
Unsure	90	23.4
Total	385	100

Source: Survey (2025)

Over half of the respondents (54.5%) believe that international oil prices and global economic conditions does not have impact on the removal of fuel subsidies.

Table 9 Sectors for Investment Using Subsidy Savings

Sector	Frequency	Percentage (%)
Health	95	24.7
Education	110	28.6
Infrastructure	90	23.4
Renewable Energy	80	20.8
Other	10	2.6
Total	385	100

Source: Survey (2025)

The most recommended sectors for investment are education (28.6%), health (24.7%), and infrastructure (23.4%).

Table 10 Support for Alternative Energy Initiatives

Response	Frequency	Percentage (%)
Yes	250	64.9
No	90	23.4
Unsure	45	11.7
Total	385	100

Source: Survey (2025)

A substantial majority (64.9%) supports alternative energy initiatives, such as compressed natural gas or electric vehicles, to mitigate the impact of subsidy removal.

Logit Regression Analysis

To address the third objective of this study assessing the impact of fuel subsidy removal on Nigeria's sustainable development a binary logit regression model was employed. The model examined the likelihood that key dimensions economic, social, political, and external factors influence sustainable development outcomes following the removal of the fuel subsidy.

Dependent variable: Fuel Subsidy Removal
Sustainable Development = f (EF, SF, PF, EI)

Table 11 Binary Logit Regression Results

Variables	Odds Ratio	P-Value
Economic Factor	4.035	0.001
Social Factor	1.43	0.118
Political Factor	1.30	0.083
External Influence	1.33	0.336
Constant	0.456	0.352

- Pseudo $R^2 = 0.0679$
- Log Likelihood = -130.154

$$SD = 0.456453 + 4.035EF + 1.43SF + 1.30PF + 1.33EI$$

The results reveal that economic factors (OR = 4.035, p = 0.001) are a statistically significant and dominant predictor of sustainable development post-subsidy removal. Social and political factors, although positively related, do not reach conventional levels of significance ($p > 0.05$), while external influence is both statistically and practically insignificant ($p = 0.336$).

Discussion of Findings

The findings of this study provide nuanced insights into the complex interplay between economic, social, political, and external factors influencing sustainable development in Nigeria following the removal of fuel subsidies. Central to these findings is the dominance of economic factors as the primary driver of subsidy reforms, which aligns with existing literature (Ajakaiye & Fakiyesi, 2019; Obasi et al., 2023). These studies emphasize that in resource-dependent economies like Nigeria, fiscal considerations often take precedence over social imperatives. Similarly, Gana et al. (2024) assert that the Nigerian state prioritizes macroeconomic stabilization objectives such as reducing fiscal deficits and reallocating public expenditures over immediate social equity outcomes.

The logistic regression results revealed that economic factors had the most statistically significant influence on sustainable development post-subsidy removal, with an odds ratio (OR) of 4.035. This supports the policy narrative that subsidy removal is essential for rechanneling government spending towards capital investments in infrastructure and development. However, this economic rationale must be weighed against the real-world implications rising inflation, increased transportation costs, and

the erosion of household incomes all of which disproportionately affect the poor. This paradox reflects Obasi et al.'s (2023) conclusion that fiscal policies in Nigeria frequently lack integrated social protection mechanisms, thereby exacerbating inequality despite their macroeconomic intent.

In contrast, social factors, though showing a positive odds ratio (OR = 1.43), did not attain statistical significance (p = 0.118). At face value, this might seem surprising given the historical public resistance to subsidy reforms, such as the #OccupyNigeria movement of 2012. However, further analysis reveals several possible explanations. First, there appears to be a disconnect between public sentiment and actual policy outcomes, potentially stemming from Nigeria's centralized governance structure and elite dominance. Second, the way social factors were operationalized in the survey focusing on isolated protests rather than sustained civic engagement or institutional trust may have limited the model's sensitivity. Third, the underrepresentation of vulnerable and low-income populations in the survey sample (n ≈ 130) could have weakened the findings' reflection of grassroots realities. These concerns are echoed by Adebayo (2023) and Gana et al. (2024), who underscore the decline of social capital and institutional responsiveness in Nigeria's political system.

Political factors displayed a mild but statistically borderline association with sustainable development (p = 0.083), indicating that elite political decisions do have some influence on subsidy policies. Respondents frequently mentioned rent-seeking behaviors, the influence of oil marketers, and the lack of accountability in managing subsidy savings. These observations are consistent with Ajakaiye and Fakiyesi's (2019) assertion that governance failures especially in terms of transparency and public trust have undermined the effectiveness of past subsidy regimes. Moreover, without credible structures to monitor and transparently reinvest subsidy gains, public skepticism is likely to persist. The contrast with other countries such as Kenya and Indonesia is telling; there, subsidy reforms achieved more positive outcomes due to the incorporation of targeted social safety nets and stronger governance mechanisms (World Bank, 2020).

Interestingly, external influences including pressures from global oil markets and international financial institutions like the IMF and World Bank did not show a statistically meaningful effect in this study. This diverges from the experiences of

countries like Ghana and Egypt, where external donors played a significant role in shaping subsidy reforms (Bello & Osei, 2021). The lack of statistical significance in Nigeria's case may suggest that recent reforms were driven more by internal fiscal pressures and political will than by overt international mandates. Nonetheless, the subtle influence of global economic conditions cannot be entirely dismissed, even if not directly measured.

Despite the valuable insights yielded, the regression model employed in this study has several limitations. First, the low pseudo-R^2 value (0.0679) indicates that the model explains only a small portion of the variability in sustainable development outcomes, suggesting the presence of other unmeasured factors. Second, the lack of statistical significance for social and political variables could be attributed to measurement issues, sample biases, or the exclusion of nuanced qualitative indicators such as public trust and institutional legitimacy. Third, reliance solely on odds ratios may obscure the real-world relevance of statistically insignificant variables that remain socially and politically critical.

In summary, this study found that economic factors exert the most significant influence on sustainable development in the context of fuel subsidy removal in Nigeria. This supports the argument that macroeconomic stabilization is the primary policy driver. While social and political factors were positively associated with sustainable development, they did not achieve statistical significance, likely due to systemic governance challenges and limitations in variable measurement. External factors, contrary to expectations, appeared negligible, indicating a largely domestic reform agenda. However, despite the government's stated objective of reallocating subsidy savings toward developmental goals, the reforms have so far triggered inflationary pressures and public dissatisfaction, with minimal evidence of effective social cushioning.

Conclusion

The removal of fuel subsidies in Nigeria marks a critical turning point in the nation's political economy. Although the policy was designed to enhance economic efficiency, curtail fiscal leakages, and reallocate public resources to priority sectors such as education, healthcare, and infrastructure, it has engendered substantial socioeconomic disruption. Escalating fuel prices, inflationary pressures, and rising

poverty levels have exposed the inherent vulnerabilities in Nigeria's economic framework and its limited social safety nets. This study reveals that economic imperatives are the primary drivers of subsidy removal, reflecting the government's emphasis on fiscal stabilization. In contrast, social and political considerations, though positively correlated, did not demonstrate statistical significance—largely attributable to governance deficits, limited civic engagement, and a lack of policy transparency. These findings indicate that while the economic rationale for subsidy removal is sound, its effectiveness is fundamentally dependent on public trust in governance, institutional accountability, and inclusive policy execution.

A central insight emerging from this research is that governance deficits—not merely economic rationale—shape public perception and determine the long-term outcomes of such reforms. Public skepticism regarding the allocation of subsidy savings, the opacity of government actions, and the absence of compensatory mechanisms continue to erode the perceived legitimacy of the policy. These findings bear significant implications for policymakers: economic reforms implemented without strong governance frameworks are prone to unintended and counterproductive consequences. This study contributes to the broader policy discourse by identifying governance shortcomings that hinder the success of subsidy reforms in Nigeria. It underscores the necessity for fiscal reforms to be underpinned by transparent institutions, credible accountability structures, and participatory governance mechanisms. Moreover, effective communication strategies and well-designed social protection systems are essential to foster public trust and ensure the equity and sustainability of reform outcomes.

Recommendations, To ensure the effective utilization of subsidy savings and to foster public trust in economic reforms, it is recommended that the government institutionalize independent monitoring and evaluation mechanisms. These mechanisms should guarantee the transparent allocation of resources to critical sectors, including health, education, and infrastructure. In the short term, relief interventions—such as conditional cash transfers, subsidies for essential goods, and targeted assistance for low-income households—should be implemented to mitigate the socio-economic impacts of subsidy removal. Concurrently, strategic investments in alternative energy sources—such as compressed natural gas (CNG), solar power, and other renewable

technologies—should be promoted to diversify the national energy mix and support long-term energy sustainability. Moreover, the operational efficiency and regulatory capacity of domestic refineries, particularly the Dangote Refinery, should be accelerated to reduce dependency on imported fuel, stabilize domestic fuel prices, and enhance local value addition. Lastly, it is imperative to reinforce institutional frameworks that support public accountability, civic participation, and anti-corruption measures in subsidy-related expenditures. Strengthening these frameworks will be essential to ensuring transparency and building sustained public confidence in the outcomes of reform initiatives.

Suggestions for Further Study, Future research should investigate the governance mechanisms that mediate the relationship between economic reforms and social outcomes, particularly within the energy sector. Comparative analyses of successful subsidy reforms in other developing countries may provide valuable insights and best practices applicable to the Nigerian context. Furthermore, longitudinal studies examining the medium- to long-term impacts of subsidy removal on institutional trust, political engagement, and energy access in Nigeria are strongly recommended.

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Authors' Contributions

I have contributed to the final manuscript. The contribution of all authors: conceptualization, methodology, formal analysis, writing original draft preparation, writing review and editing. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

I have no conflict of interest related to this study.

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