



Assessing the impact of petroleum subsidy removal on human security in Nasarawa State, Nigeria: A perspective from transportation costs and unemployment

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Abstract

The removal of petroleum subsidies in Nigeria, implemented in May 2023, represents one of the most consequential economic policy decisions in the nation's history, yet its human security implications at the sub-national level remain inadequately understood. This study examines the impact of fuel subsidy removal on transportation costs and unemployment as critical constructs of human security in Nasarawa State, Nigeria. The study engaged Human Security in this qualitative design relying on secondary data drawn from peer-reviewed journals, official reports, and documented materials specific to Nasarawa State. The findings reveal that subsidy removal triggered an exponential increase in petrol prices from approximately ₦184 to over ₦1,200 per litre, precipitating a more than 50 percent rise in transportation costs that has fundamentally restructured household expenditure patterns. Concurrently, the study establishes that subsidy removal has generated significant unemployment, with the informal sector employing approximately 93 percent of the state's workforce bearing disproportionate burdens as small and medium enterprises downsize or close entirely due to heightened operational costs, while transportation sector workers face diminished incomes as passenger volumes decline. The study concludes that transportation costs function as a critical transmission mechanism through which macroeconomic policy translates into household-level insecurity, while unemployment constitutes not merely an economic indicator but a fundamental assault on human dignity, social stability, and community cohesion. It recommends the urgent implementation of a comprehensive public transportation intervention programme with subsidised mass transit systems across all local government areas, alongside a targeted job creation and livelihood support strategy prioritising the informal sector through micro-credit schemes, skills acquisition programmes, and special welfare provisions for disproportionately affected transportation workers.

Keywords: Cost of Transportation, Human security, Petroleum subsidy, Unemployment

Introduction

The removal of fuel subsidies has been one of the most contentious economic policy decisions in Nigeria, with significant socio-economic implications across various states, including Nasarawa State. Fuel subsidies were introduced to keep the price of petrol affordable for the general population, particularly benefiting low- and middle-income households. However, successive governments have struggled to maintain the subsidy due to the growing fiscal burden it placed on the nation's economy (Ogunbiyi, 2023). The subsidy system, while intended to support the average Nigerian, has faced criticism for encouraging inefficiencies, fuel smuggling, and corruption (Adebayo & Olayinka, 2022).

Fuel subsidy is a government discount on the market price of fossil fuel to make consumers pay less than the prevailing market price of fuel (Ovaga & Okechukwu, 2022). When subsidies are in place, consumers would

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pay below the market price per litre of the petroleum product. Globally, there are debates about fuel subsidy because of its huge amount and its effect on citizens welfare and the fiscal health of a nation. The size of global fossil fuel subsidy is large and is estimated at \$1 trillion in 2022 from \$325 billion in 2018, according to the International Energy Agency. This amount is significantly higher than the value of global aid which was estimated at \$204 billion in 2022 and larger than the combined government revenue of developing countries. This has led to calls for the removal of global fossil fuel subsidy so that the saved funds can be channeled to assist the poor and vulnerable in need of humanitarian assistance in developing countries (Couharde & Mouhoud, 2020; Ozili & Ozen, 2021).

In Nigeria, fuel subsidies were first introduced in the 1970s as a response to the oil price shock in 1973. Fuel subsidies were partially removed in 1986. Since then, the fuel subsidies have been in place. In 2012, the government abruptly removed fuel subsidy. The removal led to massive protests which was intended for the government to reinstate the fuel subsidy it had removed. The government subsequently reinstated fuel subsidy in 2012 due to the massive protests. Since then, fuel subsidy payment in Nigeria has grown enormously. In 2022, fuel subsidy reached ₦4 trillion (US\$6.088 billion) which amounted to 23 percent of the national budget of ₦17.126 trillion (US\$25.87 billion) in 2022. As a result, Nigeria could no longer sustain fuel subsidy in 2023, and the government announced that fuel subsidy would be removed in June 2023. Recent evidence in the Nigerian literature shows mixed effect of fuel subsidy. Some studies identify some benefits of fuel subsidy and call for transparency in the administration of fuel subsidy while other studies highlight the negative consequences of fuel subsidy and advocate for its removal. For example, Omitogun et al (2021) show that the removal of fuel subsidy might reduce the amount of carbon emission in the Nigerian economy.

The removal of fuel subsidies in Nigeria, particularly the comprehensive deregulation policy implemented in May 2023, has precipitated profound economic transformations with direct implications for household welfare and human security. This study investigates two critical dimensions of this policy shift in Nasarawa State: its impact on transportation costs and its influence on unemployment patterns. The escalation of fuel prices following subsidy removal from approximately ₦184 to over ₦1,200 per litre has triggered cascading effects across economic sectors, with transportation representing the most immediate and visible transmission mechanism (Nkechi, 2025). Research conducted in similar contexts confirms that fuel subsidy removal exerts significant effects on transportation costs, as petroleum products serve as primary inputs for virtually all motorised transport systems (Luyi et al., 2025). In Nasarawa State, workers have reported that their entire monthly salaries are now consumed by transportation expenses to and from their workplaces, fundamentally altering household expenditure patterns and eroding disposable income (Odama, 2023). The inflationary pressure on transport fares extends beyond personal mobility to affect the distribution costs of goods and services, creating a multiplier effect that permeates local economies across the state's urban and rural

communities (Balogun, 2025). Understanding the magnitude and distributional consequences of these transportation cost increases is essential for assessing the human security implications of subsidy removal in Nasarawa State.

The relationship between fuel subsidy removal and unemployment in Nasarawa State constitutes the second critical dimension of this investigation. Empirical evidence indicates that subsidy removal has generated significant and negative impacts on employment outcomes, particularly within the informal sector that dominates the state's economy (Luyi et al., 2025). The contraction of economic activity resulting from heightened operational costs has forced many small and medium enterprises to downsize or close entirely, while transportation sector workers drivers, conductors, and mechanics face diminished incomes as passenger volumes decline in response to unaffordable fares (Isaac, 2025). Residents of Lafia Local Government Area have been compelled to diversify employment sources and modify livelihood strategies as traditional income streams prove inadequate, yet these coping mechanisms often prove insufficient to prevent financial stress and deterioration in quality of life (Abdul et al., 2025). The unemployment challenge is exacerbated by the broader economic slowdown that accompanies subsidy removal, as reduced purchasing power constrains demand for goods and services, thereby limiting employment generation across sectors (Niagwan & Nomsoor, 2025). This study therefore examines not only the direct job losses attributable to subsidy removal but also the secondary effects on underemployment, income instability, and the erosion of livelihood security that collectively shape the human security landscape of Nasarawa State.

In Nasarawa State, a region that shares borders with the Federal Capital Territory (FCT) and several other states, the removal of fuel subsidies has had profound effects on the local economy, social structure, and human security. Human security, as defined by the United Nations Development Programme (UNDP), includes economic, food, health, environmental, personal, community, and political security (UNDP, 2020). In the context of Nasarawa State, the economic strain caused by rising fuel prices has resulted in higher transportation costs, unemployment and reduced access to basic services, which in turn exacerbate the insecurity experienced by the state's residents (Alabi & Oduwole, 2023). This study contributes to the literature that examine the beneficial and harmful effects of fuel subsidy (Omitogun et al., 2021; Adekunle & Oseni, 2021; Asare et al., 2020; Umeji & Eleanya, 2021; Ovaga and Okechukwu, 2022; Omotosho, 2020; McCulloch et al, 2021). It is on this base that the study seeks to examine the impact of oil subsidy removal on human security in Nasarawa State.

Research Questions

The paper engaged the following questions to achieve the study's objective:

- i. What is the impact of fuel subsidy removal on cost of transportation in Nasarawa state, Nigeria?

- ii. How does fuel subsidy removal influence unemployment in Nasarawa state, Nigeria?

Objectives of the Study

The general objective of the paper examined the impact of oil subsidy removal on human security in Nasarawa state; cost of transportation and unemployment, Nigeria. The specific objectives:

- i. Examine the impact of fuel subsidy removal on cost of transportation in Nasarawa state, Nigeria.
- ii. Determine the impact of fuel subsidy removal on unemployment in Nasarawa state, Nigeria.

Conceptual Clarification

Fuel Subsidy

Fuel subsidy is a government discount on the market price of fossil fuel to make consumers pay less than the prevailing market price of fuel (Ovaga & Okechukwu, 2022). When subsidies are in place, consumers would pay below the market price per litre of the petroleum product. Globally, there are debates about fuel subsidy because of its huge amount and its effect on citizens welfare and the fiscal health of a nation. The size of global fossil fuel subsidy is large and is estimated at \$1 trillion in 2022 from \$325 billion in 2018, according to the International Energy Agency. This amount is significantly higher than the value of global aid which was estimated at \$204 billion in 2022 and larger than the combined government revenue of developing countries. This has led to calls for the removal of global fossil fuel subsidy so that the saved funds can be channeled to assist the poor and vulnerable in need of humanitarian assistance in developing countries (Couharde & Mouhoud, 2020; Ozili & Ozen, 2021).

However, the removal of fossil fuel subsidy is contentious because there is the argument that fossil fuel subsidy is a form of aid because it makes fuel more affordable for the poor. Despite this favourable argument, a large literature documents the negative consequences of fuel subsidy which include increasing air pollution and greenhouse gas emissions (Sweeney, 2020), road congestion (McCulloch, et. al., 2021), road accidents and premature deaths (Parry et al., 2021), foregone tax revenue (Sweeney, 2020) and it increases inequality between the poor and the rich (McCulloch et. al., 2021). However, policymakers in many countries are reluctant to remove fuel subsidy and to implement fuel subsidy reforms because such reforms may result in a significant increase in fuel or electricity prices which could lead to economic hardship for low-income and poor citizens, and might lead to massive protest and increase the risk of a revolution or the overthrow of the incumbent government. In Nigeria, fuel subsidies were first introduced in the 1970s as a response to the oil price shock in 1973. Fuel subsidies were partially removed in 1986. Since then, the fuel subsidies have been in place. In 2012, the government abruptly removed fuel subsidy. The removal led to massive protests which was intended for the government to reinstate the fuel subsidy it had removed.

The government subsequently reinstated fuel subsidy in 2012 due to the massive protests. Since then, fuel subsidy payment in Nigeria has grown enormously. In 2022, fuel subsidy reached ₦4 trillion (US\$6.088 billion) which amounted to 23 percent of the national budget of ₦17.126 trillion (US\$25.87 billion) in 2022. As a result, Nigeria could no longer sustain fuel subsidy in 2023, and the government announced that fuel subsidy would be removed in June 2023. Recent evidence in the Nigerian literature shows mixed effect of fuel subsidy. Some studies identify some benefits of fuel subsidy and call for transparency in the administration of fuel subsidy while other studies highlight the negative consequences of fuel subsidy and advocate for its removal. For example, (Omitogun et al. 2021) show that the removal of fuel subsidy might reduce the amount of carbon emission in the Nigerian economy. Similarly, Adekunle and Oseni (2021) argue that fuel subsidy removal could reduce the growth in carbon emissions through low energy consumption channels even though it could lead to higher energy prices. Asare et al. (2020) argue in support of fuel subsidy removal and that the revenue gained from removing fuel subsidy could provide additional resources for the government to respond with immediate interventions to address the COVID-19 crisis and enable the government to shift resources into more productive spending for long-run post-COVID recovery and resilience (Ozili & Arun, 2023).

Fuel Subsidy Removal in Nigeria: Challenges

In Nigeria, there is lack of ethical and moral imperative in governance. That virtually all sectors of the Nigerian society are in crisis is not an over statement. It is along this line of thought that Osborn and Gaebler (1993) argued that, we do not need more government, we need better government. To be more precise, we need better governance. The challenges are multifaceted and complex. Thus, the hydra-headed monster called corruption is a repugnant virus that should be cleared. It is a bug that has eaten deep into institutions of government at all levels. The National Assembly members, the NNPC, Security and Exchange Commission (SEC), the Nigeria Pension Board, among others are some of the state institutions at the federal level which have been entangled in the mucky waters of corruption in recent times. The judiciary is not left out of this pernicious phenomenon (Guardian, 2012). The level of corruption and its attendant poverty in Nigeria has made corruption an endemic phenomenon, the socio-economic and political scourge has eaten deep into the entire fabric of both the public and private sector. Corruption has arrested development in the country and made public interest a second priority. This is supported by Ake (in Akhakpe, 2007) when he contends that: Public administrators do not believe they are serving anybody else but themselves and exploit their position for personal gains. They generally arrive to work late and leave early. They take extra-long lunch recesses. They steal public property. They accept bribe for performance of duties that are contractually part of the responsibilities. When they work, they work slowly. They stymie the public by losing their files through

excessive review of the issues at hand, or by simply pretending that they have not heard of the matter before. For all these, they acknowledge no wrong doing for they do not believe that what they are doing is wrong. In Nigeria today, fiscal indiscipline appears to be the hallmark of government and all state institutions. Since the return to democratic rule in 1999, experience shows that government has not demonstrated enough discipline in its budgetary processes and implementation. Therefore, fuel subsidy cannot be blamed for non-effective implementation of its annual budgets which are supposed to be the instruments for jumpstarting and subsequently launch the country into the club of developed nations. Another impediment worthy of mentioning is the oil-development nexus and the volatility of the international oil market that fails to maintain oil prices over a long period of time. Oil speculators or what Turner and Badru (1983) called the commercial triangle involve foreign partners who join with allies in the Nigerian private sector and the state in the business of such commercial triangle(s) to organize the outflow of Nigerian oil money in foreign exchange to international banks, with local middlemen known as oil cabals and state compradors taking their cuts.

Human Security

Human security refers to freedom from occurrences that threaten the lives, safety, and property of the people. It is defined as safety from threats such as starvation, disease, and oppression as well as defense against unanticipated and damaging disturbances in routines of daily life (Johns, 2014). According to Frechette (2019.), human security encompasses the things that people value across the globe such as sufficient food, adequate housing, good health, education for the kids, protection from every form of violence, and a state where governance is devoid of oppression, but carried out with the consent of the people.

The concept of human security is broadly defined beyond the absence of violent conflict. It entails ensuring that everyone has the opportunities and possibilities necessary to realize their full potential, as well as effective governance, access to health care, education, and human rights. Actions taken in this regard is crucial in order to encourage economic growth, eradicate poverty, and deter violence. The interrelated components of human security and, as a result, national security are freedom from want, freedom from fear, and freedom to leave behind a healthy natural environment (Anna, nd.). The foregoing indicates that human security refers to safeguarding individuals against grave and widespread hazards and circumstances (United Nations, 2009). It entails employing procedures that capitalize on people's assets and goals. Human security ties together the human dimensions of progress, rights, and security. As a result, it is an inter-disciplinary concept that demonstrates the following characteristics: cross-cutting, comprehensive, all-inclusive, contextualized and focused on prevention. Being a people-centered concept, human security makes the individual the focus of analysis. As a result, it specifies the moment at which this is no longer practicable and considers a wide range of circumstances that put life, livelihood, and dignity in peril. Human security is

likewise built on a multi-sectoral view of vulnerability. Hence, ensuring human security necessitates a broader understanding of hazards and takes into consideration a variety of issues, including those that have an impact on one's personal, community, economic, food, health, and environmental security (Hussein et al., 2004).

When addressing these concerns, human security lays a major emphasis on how threats and solutions are connected. As a result, there are two distinct relationships between risks to human security, which reinforce one another. They are intimately linked together because of the cascading effect that one threat has on the others. For instance, violence during a conflict might result in malnutrition and poverty, which can then result in the depletion of resources, the spread of communicable diseases, the absence of educational opportunities, etc. Second, dangers that are present in a specific nation or area have the potential to spread and have detrimental externalities for both regional and global security. Its interconnectedness has important policy implications since it implies that isolated stand-alone solutions cannot adequately solve human insecurities. Instead, human security includes all-encompassing policies that emphasize the need for cross-sectoral cooperation to achieve the objectives of those concerned in development, security, and human rights. Nations and communities all around the world must act more audaciously and comprehensively when human security is the goal.

Unemployment as Constructs of Human Security

The conceptualization of transportation costs within the human security framework following petroleum subsidy removal requires understanding petroleum as a foundational input whose price perturbations cascade through every stratum of economic life. Transportation constitutes not merely a sector of the economy but the circulatory system through which goods, services, and labour mobility are enabled (Bambe et al., 2024). When subsidy removal triggers exponential increases in petroleum prices from approximately ₦184 to over ₦1,200 per litre following the May 2023 policy shift the resulting transportation cost inflation operates as a threat multiplier across multiple human security dimensions (The Associated Press, 2026). Empirically, the transportation sector experiences the most severe price shocks following subsidy removal, with studies documenting average cost increases of 20 percent in transportation relative to other sectors (Bambe et al., 2024). In the Nigerian context, this translates directly into household vulnerability, as workers report that their entire monthly salaries are consumed by transportation expenses to and from workplaces, fundamentally restructuring household expenditure patterns and eroding disposable income (Tukura & Tukura, 2025).

The conceptual linkage between transportation costs and human security operates through three mechanisms: first, the erosion of purchasing power as transport fares consume larger portions of household budgets; second, the inflation of food and essential commodity prices as distribution costs escalate; and third, the

constriction of mobility and access to essential services including healthcare, education, and livelihood opportunities (Isaac, 2025). Transportation thus emerges not as a discrete economic variable but as a determinant of whether citizens can access the basic capabilities that constitute human security the freedom to move, to trade, to work, and to participate in social and economic life (Sundiata Post, 2025). When transportation becomes unaffordable, geographical space transforms from opportunity into barrier, and communities become trapped in pockets of deprivation isolated from markets, services, and economic networks.

Unemployment as a construct of Human Security

Unemployment as a construct of human security in the post-subsidy removal context must be understood through the lens of economic citizenship and the right to dignified livelihood. The removal of petroleum subsidies fundamentally alters the cost structure of virtually all productive sectors, with direct implications for employment generation and sustenance (Bambe et al., 2024). Research demonstrates that subsidy removal generates significant and negative impacts on employment outcomes, particularly within Nigeria's dominant informal sector where approximately 93 percent of the workforce is engaged in low-income activities without formal protections (Ude, 2025). The contraction of economic activity resulting from heightened operational costs forces small and medium enterprises to downsize or close entirely, while transportation sector workers drivers, conductors, mechanics, and their extended value chains face diminished incomes as passenger volumes decline in response to unaffordable fares (Isaac, 2025). The unemployment challenge extends beyond job losses to encompass underemployment, income instability, and the erosion of livelihood security that collectively undermine human security (Tukura & Tukura, 2025).

Conceptually, unemployment in this framework represents not merely the absence of work but the denial of economic participation, the severing of social connections that employment provides, and the vulnerability to exploitation, criminality, and social exclusion that accompanies idle poverty (The Meteor, 2025). As former Minister Rotimi Amaechi has observed, insecurity is fundamentally about jobs, opportunities, and trust in government when young people feel abandoned by the economic system, they become susceptible to recruitment into violence and criminal networks (The Meteor, 2025). The human security paradigm thus conceptualizes unemployment as a structural violence that erodes human dignity, fractures community cohesion, and creates the conditions for conflict and instability (Udefuna et al., 2018). In Nasarawa State, where traditional livelihoods intersect with modern economic pressures, the unemployment triggered by subsidy removal compounds existing vulnerabilities, forcing residents to diversify employment sources through desperate strategies such as hawking at highways and security checkpoints, which themselves generate new security risks (Udefuna et al., 2018). The relationship between subsidy removal and

unemployment therefore constitutes a critical pathway through which economic policy translates into human insecurity, demanding analytical attention to both the direct job losses and the secondary effects on livelihood systems, household resilience, and community stability.

Empirical Review

Harring et al. (2023) analysed cross-country attitudes towards fossil fuel subsidy removal and found that the public would have positive attitudes towards subsidy removal if there were optimal use of the saved fiscal revenues. In Malaysia, Chatri (2014) assessed the economy-wide effect of gas subsidy removal in the power sector and found that gas subsidy reduction led to increase in the price of electricity followed by a decline in demand for electricity by other economic sectors and a decrease in gross domestic product. Antimiani et al. (2023) showed that fossil fuels are still highly subsidised in EU countries, and there are deliberations to remove fossil fuel subsidies and reuse the revenues to foster the technological transition to a sustainable and decarbonised EU economy. Sampedro et al. (2017) also argued that fossil fuel subsidy is a barrier to tackling climate change in the EU because it diverts investment away from clean energy sources, and fossil fuel subsidies amounted to US\$233 billion in 2014 which is four times the amount of subsidies allocated to promote renewable energy. However, they showed that fuel subsidy removal would give rise to only a small reduction in CO₂ because people would switch from fuel to coal and gas.

Nowag et al. (2021) suggest the use of state aid to phase out fossil fuel subsidies in the EU. Erickson et al. (2017) showed that the removal of tax incentives and other fossil fuel support policies could hasten the attainment of the G20 climate commitments. Lin and Li (2012) examined the case of China and showed that fuel subsidy removal would generate negative externalities in China but would generate positive externalities to other world regions without subsidy removal. In a related study, Ouyang and Lin (2014) showed that the economic benefits of renewable energy subsidies were lower than the economic benefits of fossil fuel subsidies in China.

Ibekwe et al. n (2017) credits a Nigerian Corruption Survey 2017 conducted by the National Bureau of Statistics Report with estimating the value of bribe paid to public officials by Nigerians in a year is N400 billion the equivalent of \$4.6bn in purchasing power parity. This sum is equivalent to 39 per cent of the combined federal and state education budgets in 2016. The average sum paid as a cash bribe in Nigeria is approximately N5, 300. This means that every time a Nigerian pays a cash bribe, he or she spends an average of 28.2 per cent of the average monthly salary of N18, 900. Even the Nigerian Police Force, the judiciary and the prosecutors which are meant to tackle corruption hence fighting poverty and threats to human security is adjudged respectively by the report as by far the most corrupt public institution.

Nwosa (2012) examined empirically a one-to-one nexus between domestic fuel price and various macroeconomic variables in Nigeria for the period 1986-2011. The research employed a vector autoregressive (VAR) and a vector error correction (VEC) model for appropriate analysis. The VAR model revealed that a unidirectional causation exists from domestic fuel price to short term interest rate for pairs of variables that are integrated of the same order but not co-integrated while VEC model revealed the existence of causality from domestic fuel price to inflation rate in the long run and in the short run for pair of variables that are integrated of the same order and are cointegrated. Caution should therefore be taken by government on the issue of fuel subsidy removal and the liberalization of the downstream sector of the petroleum industry with respect to increase in gasoline prices (Nwosa & Ajibola 2013).

Hui-Siang et al. (2011). examined the relationship between domestic petrol price and the 10 principal economic sectors in Malaysia, using quarterly data for the period 1990-2007. The research employed a vector error correction model. Out of the 10 sectors, only the agriculture sector, trade sector and services sectors had a co-movement with fuel prices. Secondly, the significant coefficient for error correction term (ECT) in the sectoral equations showed that beyond the short run, fuel price remained the principal variable for these three economic sectors. Thirdly, unidirectional causality running from mining sector to fuel price was discovered via the standard Granger causality test. Finally, employing the generalized variance decomposition (GVDCs) test, it was established that some of these sectors over a longer period are influenced by the fuel price.

Ehinomen and Adeleke (2012) assessed the distribution of petroleum products in Nigeria, between the periods 1960-2007. To them, the distribution of such products in the country is burdened with complex problems, which sometimes lead to petroleum products outages, hiked prices of products and conflicts on the pump price of products. To them, the downstream activities of the oil industry should be completely deregulated to allow private sector and entrepreneurs' full participation in the distribution of the products so as to drive effectiveness in the sector. As effectiveness is enhanced, operational cost will be cut down with a resultant reduction in the price of petroleum products that will be beneficial to all stakeholders in the industry.

Nwafor et al. (2006) employ a computable general equilibrium analysis. Their study digs into the question of whether subsidy removal disproportionately affects the economically vulnerable segments of the population. This research illuminates the intricate balance between fiscal policy, subsidy removal, and social equity, indicating that while subsidy removal can have fiscal implications, it is crucial to consider its distributive effects. Also, Osunmuyiwa and Kalfagianni (2017) delve into the broader energy context, examining whether Nigeria's fuel subsidy reforms can act as a catalyst for energy transitions. Their research underscores that subsidy removal can lead to shifts in energy consumption patterns, affecting government

revenue and expenditures through changes in the energy sector's dynamics. By exploring the complex relationship between subsidy removal, energy transitions, and fiscal dynamics, this study emphasizes the need for a comprehensive understanding of how policy changes reverberate throughout the economy. While these previous studies have shed light on the economic and environmental consequences of various subsidy removal efforts, there is limited exploration of the effects of the 2023 subsidy removal in Nigeria. Understanding these potential challenges, opportunities, and the need for holistic approaches is crucial for devising effective strategies that garner public support, mitigate potential social unrest, and ensure the long-term sustainability of the policy change.

Theoretical Framework

Human Security Theory

The Human Security Theory was primarily developed by the United Nations Development Programme (UNDP) in its 1994 Human Development Report. The Human Security Theory offers a valuable lens through which to understand the broad, interconnected impacts of the removal of fuel subsidies on human well-being in Nasarawa State. Unlike traditional notions of security that focus on state-centric defense, human security emphasizes the safety and well-being of individuals across a wide range of factors, including economic, food, health, environmental, personal, community, and political security (UNDP, 2020). The theory recognizes that threats to human security come from a variety of sources, and that the protection of individuals requires not just safeguarding them from physical violence but also from deprivation and insecurity in other aspects of life. In Nasarawa State, the policy shift to remove fuel subsidies, a long-standing form of economic protection for Nigerian citizens, has significantly altered the balance of human security. The economic security of individuals and households, particularly the poorest segments of the population, has been undermined by the dramatic rise in fuel prices, while food, health, and political security have been similarly affected.

The Human Security Theory provides the most appropriate analytical lens for understanding the multifaceted impacts of petroleum subsidy removal on transportation costs and unemployment in Nasarawa State. Originating from the United Nations Development Programme's landmark Human Development Report of 1994, this paradigm fundamentally reorients security discourse from a state-centric, military-focused conception to one centred on the safety and wellbeing of individuals (UNDP, 1994). The UNDP framework articulated four essential characteristics of human security: it is a universal concern, its components are interdependent, it is best ensured through early prevention rather than later intervention, and it is fundamentally people-centred (Sciences Po., 2018). The report famously defined human security as comprising two main dimensions: "safety from such chronic threats as hunger, disease and repression" and protection from sudden and hurtful disruptions in the patterns of daily life whether in homes, in jobs or in

communities (Sciences Po., 2018). This definition is particularly germane to the study of subsidy removal, as the policy constitutes precisely such a "sudden and hurtful disruption" to the daily economic patterns of ordinary Nigerians, with cascading effects across multiple dimensions of human wellbeing. The theory's emphasis on the interdependence of security components economic, food, health, environmental, personal, community, and political provides a holistic framework for tracing how a single policy intervention in the petroleum sector reverberates through transportation systems and employment structures to fundamentally alter the human security landscape of communities across Nasarawa State.

The application of Human Security Theory to petroleum subsidy removal reveals how transportation costs function as a critical transmission mechanism through which macroeconomic policy translates into household-level insecurity. Within the human security framework, economic security defined as "an assured basic income" from productive and remunerative work constitutes one of the seven core components (Sciences Po., 2018). Transportation represents not merely a sector of the economy but the circulatory infrastructure through which economic participation is enabled. When fuel subsidy removal triggers exponential increases in petroleum prices, the resulting transportation cost inflation operates as a threat multiplier that erodes economic security across multiple dimensions (Eric-Ogri & Odey, 2025). Research confirms that transportation experiences the most severe price shocks following subsidy removal, with documented average cost increases of 20 percent relative to other sectors (Sciences Po., 2018). In the Nigerian context, this translates directly into the erosion of purchasing power as transport fares consume larger portions of household budgets, the inflation of food and essential commodity prices as distribution costs escalate, and the constriction of mobility and access to essential services including healthcare and education. The human security framework thus conceptualises transportation not as a discrete economic variable but as a determinant of whether citizens can access the basic capabilities that constitute human security the freedom to move, to trade, to work, and to participate in social and economic life. When transportation becomes unaffordable, geographical space transforms from opportunity into barrier, and communities become trapped in pockets of deprivation isolated from markets, services, and economic networks.

The Human Security Theory equally illuminates how unemployment following subsidy removal constitutes not merely an economic indicator but a fundamental assault on human dignity and social stability. The framework explicitly identifies economic security as encompassing access to employment and income, recognising that work provides not only material sustenance but also social identity, community connection, and a sense of purpose (Sciences Po., 2018). When subsidy removal forces small and medium enterprises to downsize or close entirely due to heightened operational costs, and when transportation sector workers face

diminished incomes as passenger volumes decline, the resulting unemployment represents what the human security paradigm terms "structural violence" the systematic erosion of human capabilities through economic policies that fail to account for their social consequences (Eric-Ogri & Odey, 2025). The 1994 UNDP report emphasised that "freedom from want" and "freedom from fear" are inseparable objectives, and that chronic unemployment creates the conditions for both (UNDP, 1994). This theoretical insight is particularly salient in the Nigerian context, where approximately 93 percent of the workforce is engaged in informal sector activities without formal protections, making them exceptionally vulnerable to economic shocks. As one study notes, there exists a strong connection between citizens' welfare and national security, for as the saying goes: 'a hungry man is an angry man (Eric-Ogri & Odey, 2025). The human security framework thus reveals unemployment as a threat multiplier that erodes not only individual wellbeing but also community cohesion and ultimately national stability, as idle and desperate populations become susceptible to recruitment into violence and criminal networks.

Finally, Human Security Theory provides the analytical tools for understanding the interconnectedness between transportation costs, unemployment, and the broader human security architecture in ways that conventional economic analysis would miss. The theory's foundational principle of interdependence that threats to one dimension of security inevitably cascade into others is essential for comprehending the full impact of subsidy removal (Sciences Po., 2018). Increased transportation costs (economic security threat) directly impact food affordability (food security threat) as distribution expenses are passed to consumers, which in turn affects nutritional status and health outcomes (health security threat) (Eric-Ogri & Odey, 2025). Simultaneously, unemployment (economic security threat) erodes the financial capacity to access healthcare when needed (health security threat) and may force households into unsafe neighbourhoods (personal security threat) or precipitate displacement from communities (community security threat). As one Nigerian study examining subsidy removal concluded, the mismanagement of oil wealth has led to social decay and disempowerment of the masses, precisely because the human security implications of such policies extend far beyond the economic realm into every dimension of human flourishing (Chris & Ifedi, 2024). The theory's preventive orientation its emphasis that human security is easier to ensure through early prevention than later intervention carries profound implications for policy (Sciences Po. (2018). Rather than responding with emergency measures after the damage to livelihoods and social fabric has occurred, a human security approach would demand that subsidy removal be accompanied from the outset by robust social protection mechanisms, transportation alternatives, and employment programmes designed to absorb the inevitable shocks. This study, grounded in Human Security Theory, therefore investigates not merely the magnitude of transportation cost increases and unemployment rates following subsidy removal, but the cascading effects

of these phenomena on the comprehensive wellbeing of Nasarawa State's citizens, and the implications for sustainable human development in the region.

Research Methodology

The study adopts qualitative research design with reliance on publicly available archive documents employed for the analysis. Secondary data were generated via journals publication and other documented materials relevant to the study with reliance on secondary data. The research is conducted by examining literature concerning impact of petroleum subsidy removal on human security, subsidy removal cascading impact on unemployment and cost of transportation in Nasarawa in north central Nigeria. The literature was obtained through searches in publicly available material. Literature from non-serial publications, official reports, and conferences has been included particularly if they have been cited by other references.

Discussion Findings

The findings of this study reveal a profound and multidimensional impact of fuel subsidy removal on transportation costs in Nasarawa State, confirming that the policy has triggered an unprecedented escalation in transport fares with cascading effects on household welfare and human security. Consistent with the first research question, the evidence demonstrates that the removal of subsidies which precipitated an increase in petrol prices from approximately ₦184 to over ₦1,200 per litre has resulted in a more than 50% rise in operational costs for commercial transport operators across the state (Yusufu et al., 2024). This finding aligns with broader research indicating that the transportation sector experiences the most severe price shocks following subsidy removal, with documented average cost increases of 20 percent relative to other sectors (Mesagan et al., 2024). In Agwada, Nasarawa State, commercial drivers reported that these economic pressures have led to reduced disposable income, increased indebtedness, depleted savings, and restricted access to healthcare for drivers and their families (Yusufu et al., 2024). The inflationary pressure on transport fares extends beyond personal mobility to fundamentally restructure household expenditure patterns, with workers in Lafia Local Government Area reporting that their entire monthly salaries are now consumed by transportation expenses to and from their workplaces (Niagwan & Nomsoor, 2025). At the community level, the cascading effects include suppressed market activities, declining school enrolment, and reduced employment opportunities in vehicle maintenance, as the economic multiplier effects of increased transportation costs permeate every stratum of local economies across Nasarawa State's urban and rural communities (Yusufu et al., 2024). The disproportionate impact on rural dwellers is particularly pronounced, as they face compounded vulnerabilities due to limited access to palliative measures and greater reliance on transportation for access to markets, healthcare, and educational opportunities (Bemgba & Adadu, 2025)

The study's findings establish a significant relationship fuel subsidy removal and escalating unemployment in Nasarawa State, with the informal sector bearing the heaviest burden of job losses and livelihood disruption. The increased fuel prices have elevated operational costs for small and medium enterprises (SMEs), which serve as the primary source of employment in the state, forcing many businesses to downsize or shut down entirely, leading to substantial job losses particularly in the informal sector where approximately 93 percent of the workforce is engaged in low-income activities without formal protections (Bemgba, 2025). Transportation sector workers drivers, conductors, mechanics, and their extended value chains face diminished incomes as passenger volumes decline in response to unaffordable fares, while the broader economic disruptions caused by subsidy removal, including reduced mobility, limited access to livelihoods, and diminished consumer purchasing power, have created a vicious cycle of economic contraction that further constrains employment generation across sectors (Bemgba, 2025). Residents of Lafia Local Government Area have been compelled to diversify employment sources and modify livelihood strategies as traditional income streams prove inadequate, yet these coping mechanisms including changes in consumption patterns, diversification of employment and income sources, and lifestyle and behavioural changes have often proven insufficient to prevent financial stress and deterioration in quality of life (Niagwan & Nomsoor, 2025). The study's findings indicate that while residents have adopted various coping strategies, these have often proven inadequate, leading to increased financial stress and a deterioration in the overall quality of life, with the structural weaknesses in existing social safety nets failing to provide meaningful protection for the most vulnerable populations (Bemgba & Adadu, 2025; Niagwan & Nomsoor, 2025). These findings collectively demonstrate that the unemployment challenge extends beyond direct job losses to encompass underemployment, income instability, and the erosion of livelihood security that collectively undermine human security in Nasarawa State, highlighting the critical need for targeted interventions including comprehensive job creation programmes, skills development policies, and strategic investments in public transportation to mitigate the negative effects of this sweeping economic reform.

Conclusion

The first conclusion drawn from this study is that fuel subsidy removal has precipitated a fundamental and enduring transformation of transportation economics in Nasarawa State, with devastating consequences for household welfare and human security. The evidence conclusively demonstrates that the policy triggered an exponential increase in transportation costs exceeding 50 percent for commercial operators which has systematically eroded the purchasing power of ordinary citizens, restructured household expenditure patterns, and constrained access to essential services including healthcare, education, and livelihood opportunities. Workers in Lafia Local Government Area now report that transportation expenses consume their entire

monthly salaries, while rural communities face compounded vulnerabilities due to limited access to palliative measures and greater reliance on transportation for market access. The inflationary pressure extends beyond personal mobility to suppress market activities, reduce school enrolment, and diminish employment opportunities in vehicle maintenance and related sectors, creating a cascade of economic disruptions that permeates every stratum of local economies. This finding confirms that transportation costs function as a critical transmission mechanism through which macroeconomic policy translates into household-level insecurity, validating the Human Security Theory's emphasis on the interdependence of economic, food, health, and personal security dimensions.

The second conclusion establishes that fuel subsidy removal has generated significant and structurally embedded unemployment in Nasarawa State, with the informal sector bearing a disproportionate burden of job losses and livelihood disruption. The increased operational costs have forced small and medium enterprises the primary employment source in the state to downsize or close entirely, while transportation sector workers face diminished incomes as passenger volumes decline. Residents have been compelled to adopt coping strategies including employment diversification and consumption adjustments, yet these mechanisms have proven inadequate to prevent financial stress and deterioration in quality of life. The structural weaknesses in existing social safety nets have failed to provide meaningful protection for the most vulnerable populations, exposing the absence of the robust social protection mechanisms that a human security approach would demand. This finding underscores that unemployment following subsidy removal constitutes not merely an economic indicator but a fundamental assault on human dignity, social stability, and community cohesion. The study therefore concludes that sustainable policy reforms must integrate comprehensive job creation programmes, strategic investments in public transportation, and targeted social protection measures to absorb the inevitable shocks of economic transition and fulfill the human security imperative of protecting citizens from "sudden and hurtful disruptions in the patterns of daily life."

Recommendations

- i. That the Federal Government of Nigeria, the North Central Development Commission, in collaboration with the Nasarawa State Government, should implement a comprehensive and sustainable public transportation intervention programme to mitigate the crippling effects of fuel subsidy removal on mobility and household welfare. This intervention should include the immediate deployment of mass transit buses operating on subsidised fares across all local government areas of the state, with particular attention to rural communities where transportation costs have become prohibitively expensive and access to markets, healthcare, and educational facilities has been severely constrained. The programme should be structured as a public-private

partnership model, with government providing initial capital investment and fuel subsidies specifically for public transportation, while private operators manage day-to-day operations under strict regulatory oversight to ensure affordability and service quality. Additionally, the government should consider the introduction of transport vouchers or cash transfers targeted at vulnerable populations including students, healthcare workers, and low-income earners to cushion the impact of increased transportation costs on their mobility and access to essential services. This recommendation is grounded in the Human Security Theory's preventive orientation, which emphasises that early intervention through robust social protection mechanisms is essential to prevent the cascading effects of economic shocks from escalating into broader human security crises encompassing food insecurity, health deterioration, and social exclusion.

- ii. That the Nasarawa State Government, in partnership with the Federal Ministry of Labour and Employment, the National Directorate of Employment (NDE), and private sector stakeholders, must urgently design and implement a comprehensive job creation and livelihood support strategy specifically tailored to absorb the unemployment shocks generated by fuel subsidy removal. This strategy should prioritise the informal sector, which employs approximately 93 percent of the state's workforce and has borne the heaviest burden of job losses, through targeted interventions including micro-credit schemes with single-digit interest rates, skills acquisition programmes aligned with emerging economic opportunities, and direct support for small and medium enterprises (SMEs) to enable them to absorb operational cost increases without resorting to downsizing or closure.

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