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# Opportunities and Challenges for Urban and Regional Development Planning in a Post Subsidy Era in Nigeria

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**Abstract**

The study examined the implications of the removal of fuel subsidies on the cost of material for urban and regional development in Nigeria. The main aim of the study was to assess the impacts of subsidy removal on increase costs of building materials (housing) and transportation. The study adopted the Central Place theory propounded by Walter Christeller (1933), as its theoretical framework and applied the secondary sources of data collection method. The study found that the removal of subsidies led to significant increase in transportation fare that in turned, adversely affected cost of building materials. This has necessitated the need for cut management and strategic planning for urban and regional renewal programmes. It also emphasized the critical role of infrastructure in driving Nigeria's economic growth and the need for strategic investment in these areas. The study recommended that Nigeria government should carry out stakeholder consultation to develop an inclusive-policies that will stimulate the people to unravel alternative materials for urban and regional development in Nigeria.

**Keywords**: Fuel Subsidy, Development planning, Opportunities and challenges, Urban and regional planning.

## Introduction

Nigeria, as Africa's most populous nation and largest economy, is experiencing rapid urban transformation with positive effects on rural development especially in the 4th Republic. The transformation has not been without hitches or challenges, especially given Nigeria's unique geopolitical structure with its economic reliance on the oil and gas sector, and the complex socio-economic realities that shape its urban and regional landscapes.

Historically, Fuel subsidies began in the 1970s and became institutionalized in 1977, following the promulgation of the Price Control Act which made it illegal for some products including patrol to be sold above the regulated price. The Nigeria economy has been subsidized in various ways for many years and this includes fuel, education, electricity and forex and so on. The regional development in Nigeria has been shaped by geopolitical divisions, with each region having distinctive development needs and challenges, influenced by natural resource endowments, social structures, and policy approaches (Adelakun & Adebisi, 2022). Nigeria's economic landscape has been dominated by the petroleum sector since the discovery of oil in the late 1950s, resulting in a mono-economy that has been susceptible to global oil price fluctuations, thereby impacting national planning, fiscal stability, and economic resilience (Adewuyi & Akinola, 2019). The heavy reliance on petroleum has shaping Nigeria's economic policies over the decades, including the implementation of fuel subsidies, which have been both a political and economic tool.

The Nigeria government in 2023, embarked on a critical economic reform by removing fuel subsidies, a policy change that was widely interpreted as both necessary and contentious. This shift to a post-subsidy era represents a significant departure from decades of state intervention in fuel pricing, supplying and a step toward allowing market dynamics to dictate the subsector. The subsidy removal, while intended to alleviate the government's financial burden, has generate mixed reactions from citizens, businessmen/women, and policymakers alike. For many Nigerians, the subsidy had become a social contract, and its removal was seen as a breach, given the subsequent increase in fuel prices and the ripple effects on transportation, cost of goods, and overall living expenses (Okeke & Ugochukwu, 2023; Nnadi, 2023). This transition has been marked by increased inflation, with the costs of essential goods and services rising sharply, affecting household budgets, particularly among lower-income populations, who were most dependent on subsidized fuel (Akinyemi & Afolabi, 2023).

The post-subsidy era in Nigeria presents both opportunities and challenges for urban and regional development planning. From a fiscal standpoint, the removal of subsidies has freed up substantial resources that the government can redirect toward rural and urban infrastructural development, especially the much-needed investments in transportation systems, healthcare, education, and housing that are components of rural/urban development (Edozie, 2023). These sectors are essential for sustaining urban growth, particularly as Nigeria's urban population continues to rise at a fast pace. Without the fiscal constraints of subsidizing fuel, the Nigerian government has a chance to invest in sustainable urban infrastructure that can support economic diversification and regional integration (Onyebuchi & Eze, 2023).

Infrastructure projects, especially in the transportation and energy sectors, are critical for enhancing urban mobility, reducing congestion, and creating more livable urban environments. The funds saved from subsidy removal could also be directed toward environmental sustainability initiatives that mitigate the impacts of urbanization, such as waste management, pollution control, and green spaces (Amadi, 2023). However, the post-subsidy period also introduces a host of economic and social challenges that complicate urban and regional development planning. Inflationary pressures resulting from higher fuel prices have had widespread effects on both urban and rural households, leading to increased costs in transportation, food, and other essential goods. For urban planners, this poses a significant

challenge, as the rising cost of living could exacerbate urban poverty, reduce access to housing, and strain public services (Adeola & Yusuf, 2023).

The transportation sector with it trickle-down effect has been heavily impacted, as higher fuel costs have led to increased public transit fares, making daily commuting more expensive for workers and students. Consequently, there is a risk that these increased costs could lead to a decline in urban mobility, reducing productivity and limiting economic opportunities for low-income residents (Nwachukwu & Emeka, 2023). Moreover, the shift in fuel pricing has direct implications for housing and land use planning in Nigeria. The increased cost of building materials, coupled with rising transportation expenses, has placed pressure on housing markets, potentially leading to higher rents and property prices in urban centers. This could contribute to housing insecurity, making it challenging for urban and regional planners to achieve affordable housing goals (Okoye, 2023).

**i. Objectives of the Study**

The study **aims** at examining the effects of the removal of subsidy on the infrastructure development of rural and urban communities in Nigeria. it also examined measures to explore options in redressing undue reliance on imported building materials in Nigeria. It applied the secondary sources of data collection and adopted the Central Place theory propounded by Walter Christaller (1933), as its theoretical framework. The framework was grounded in the observation that human settlements and economic activities tend to form regular patterns that are predictable and hierarchical, especially in rural areas and regions with minimal geographic constraints. The theory posits that settlements function as central places that provide goods and services to the surrounding hinterlands. The central idea is that these central places form a hierarchy, with larger settlements offering more specialized goods and services and smaller one's catering to more basic, frequently demanded needs. Christaller's work was underpinned by an economic rationale, as he drew heavily on concepts such as market areas, thresholds, and range of goods.

**ii. Theoretical Framework**

The Central Place Theory is structured around several key assumptions reflecting real-world geography. First, it assumes an isotropic plain, a flat and featureless surface where transportation costs are equal in all directions. Second, it assumes a homogenous population with uniform purchasing power and demand. Third, it presumes that consumers will patronize the nearest central place to minimize transportation costs. Under these idealized conditions, Christaller proposed that settlements would organize into a hexagonal lattice, as hexagons are the most efficient geometric shape for covering a plane without overlaps or gaps, thus minimizing travel distances for consumers. This hexagonal structure ensures that each settlement's market area is equidistant to neighboring market areas. Christaller further introduced three principles governing the spatial arrangement of settlements: the marketing principle (K=3), the transportation principle (K=4), and the administrative principle (K=7). These principles describe how settlements align to optimize different aspects of regional organization, including the distribution of goods, efficiency of transportation, and administrative control.

The **relevance** of the Central Place theoretical framework to this study lies in its emphasis on spatial hierarchy and the distribution of goods and services. In a post-subsidy era, Nigeria faces significant challenges in ensuring equitable access to resources, particularly in rural and underserved areas. Christaller's framework can help policymakers identify optimal locations for infrastructure development, such as transportation hubs, healthcare facilities, and educational institutions, to maximize accessibility and efficiency. Additionally, the theory's principles can guide efforts to balance urbanization and rural development by fostering a network of interconnected settlements that minimize disparities in service provision. However, applying this theory to Nigeria's unique context requires modifications to account for factors such as regional inequalities, population density, and cultural diversity. By leveraging the insights of the Central Place Theory, planners can develop strategies that address both the opportunities and challenges of urban and regional development in a rapidly changing economic landscape.

**iii. Statement of the Problem**

On the**problem**, the post-subsidy era in Nigeria presents both opportunities and challenges for urban and regional development planning. From a fiscal standpoint, the removal of subsidies has freed up substantial resources that the government should redirect toward infrastructural development in the rural/urban areas, including much-needed investments in housing, transportation systems, healthcare and education (Edozie, 2023). These sectors have been previously neglected because the money was diverted to fuel subsidies. Without further subsidizing fuel, the Nigerian government has ample opportunities to invest in sustainable rural/urban infrastructure that shall support economic diversification with positive effects on rural/urban development (Onyebuchi & Eze, 2023).

Infrastructure projects, especially in the transportation and energy sectors, are critical for enhancing urban mobility, reducing congestion, and creating more livable urban environments. The funds saved from subsidy removal would also be directed toward environmental sustainability initiatives that mitigate the impacts of urbanization, such as waste management, pollution control, and green spaces (Amadi, 2023). However, the post-subsidy period also introduces a host of economic and social challenges that complicate urban and regional development planning. Inflationary pressures resulting from higher fuel prices have had widespread effects on both urban and rural households, leading to increased costs in transportation, food, and other essential goods. For urban planners, this poses a significant challenge, as the rising cost of living could exacerbate urban poverty, reduce access to housing, and strain public services (Adeola & Yusuf, 2023).

Although the post-subsidy era represents a transformative period for Nigeria's urban and regional planning sectors, it is essential for policy-makers to balance short-term economic adjustments with long-term development goals. Through strategic planning and resource reallocation, the post-subsidy landscape in Nigeria offers both the urgency and the opportunity for urban and regional planners to reshape the country's developmental trajectory toward a more diversified and resilient economy (Okonkwo, 2023). Despite the intended benefits, subsidies have had a mixed impact on Nigeria's economy. While they were established to reduce the cost of living and support essential sectors such as transportation, agriculture, and

industry, they have also led to challenges related to misallocation of resources, corruption, and an entrenched dependence on oil revenue, diverting funds from other critical sectors that require development (Ibeanu & Ugwu, 2020; Taiwo & Akanbi, 2021).

The removal of subsidy has resulted to a rise in cost of urban renewable programmes that has slowed down especially between 2015 and 2023, thereby widening the infrastructure gap and limiting urban expansion. Additionally, as more Nigerians grapple with higher living costs, the demand for informal settlements may increase, presenting health, environmental, and security risks that urban planners must address (Obi & Nwosu, 2023). Despite these problems, the post-subsidy period opens avenues for policy innovation and reform that can drive sustainable urban development.

Development planners have the opportunity to explore alternative energy sources, such as solar and wind power, which could reduce dependence on fossil fuels and contribute to cleaner cities; and there are few studies found to have examined the negative effect as a result of the removal of subsidy. These studies have not sufficiently linked it to rural/urban development in Nigeria, especially between 2015 and 2023. The studies also seldom identified the opportunities in the post-subsidy era. This study was a departure by establishing a relationship between fuel subsidy removal and rural/urban development in Nigeria. This period, 2015 and 2023 was when the interplay became most visible.

## Literature Review

### Conceptual Review

### Concept of Subsidy

The concept of a subsidy is one that has been extensively analyzed within economic, political, and social frameworks due to its significance in national and international economic policies. Subsidy represents a financial contribution or incentive provided by a government to businesses, industries, or consumers with the aim of reducing the costs associated with goods or services, for affordability and stabilizing market prices. Economists argue that subsidies serve as critical tools for economic intervention, allowing governments to influence market dynamics and stimulate sectors deemed crucial for social welfare and economic growth (Olaleye, 2019). This is particularly evident in developing economies, such as Nigeria, where subsidies on essential commodities like fuel have been applied as mechanism to alleviate financial burdens on the populace and manage the cost of transportation and energy-intensive goods (Akinyemi, 2020). The Nigerian government's approach to subsidies highlights a broader strategy to address economic inequities, as subsidies are perceived as pivotal in bridging the affordability gap for lower-income households and enhancing access to basic services (Bamidele & Yusuf, 2021).

In Nigeria, fuel subsidies have historically represented a substantial portion of government expenditure, reflecting the nation's commitment to stabilizing fuel prices as a means of managing broader economic challenges. Adelakun and Adebisi (2022) describes subsidy as government financial aid provided to an economic sector, highlighting its role in providing targeted economic relief. Johnson (2021) frames it as a fiscal tool used to stabilize prices for essential commodities, emphasizing its economic regulation function, while Eze and Alabi

(2020) see it as a mechanism to ease the economic burden on the populace, focusing on its impact on public welfare.

Ndubuisi (2021) observes that the primary goal of these subsidies is to mitigate poverty and ensure that even the economically disadvantaged can access essential resources. This approach aligns with the broader economic theory suggesting that subsidies can act as a redistributive mechanism, channeling resources towards segments of the population that are most in need of financial support (Amadi, 2019). According to Akanbi and Ibrahim (2020), subsidies in Nigeria are often seen as a direct response to the volatility of global oil prices, providing a buffer that protects consumers from sharp price fluctuations. This practice not only aids in sustaining local consumption levels but also promotes economic stability by enabling consumers to continue purchasing fuel-dependent goods and services without severe price shocks (Eze, 2019).

In addition to their economic implications, subsidies in Nigeria have significant social and political dimensions. Alabi (2020) describes subsidies as an economic safety net designed to cushion populations facing financial hardship, which aligns with the government's broader social responsibility towards its citizens. By keeping the cost of essential commodities within an affordable range, subsidies foster social cohesion, as they ensure that every marginalized communities have access to fundamental goods and services (Chukwuma, 2021). Political office holders leveraged on subsidy as a means of securing public support, particularly in contexts where socioeconomic challenges could lead to unrest (Olayinka, 2020). The distribution of subsidies, therefore, reflects a balance between economic pragmatism and political strategy, as governments aim to maintain stability while responding to public demands for affordable living standards (Ibrahim, 2021). This dual role of subsidies as both economic and political instruments underscores their complexity, as governments must carefully manage subsidy programs to avoid fiscal deficits and inefficiencies.

**Causes of Subsidy**

Subsidy is a financial assistance provided by the government to reduce the cost of goods, services and are often instituted in response to various economic, political, and social pressures. In the context of Nigeria, subsidies are particularly focused on fuel due to the nation's reliance on oil as a primary economic driver and the socialization. The primary causes of subsidies in Nigeria are tied to the need for economic stability, political commitments, and the social imperative of supporting citizens' access to essential resources. Historically, subsidies have been a tool used by the Nigerian government to cushion citizens against the volatility of global oil prices, which can significantly impact domestic fuel costs and, by extension, the costs of other goods and services. By lowering fuel prices domestically, the government aims to alleviate economic burdens on its citizens and prevent the ripple effect of high transportation costs on goods and services (Ogunleye, 2020; KPMG, 2019).

However, while subsidies may serve as a short-term economic relief mechanism, they also entail long-term financial challenges and complex interdependencies, given the strain they place on government resources and the risk of inefficiency and corruption associated with their management (Amadi, 2019; Ogundipe, 2021). Politically, subsidies in Nigeria are often used to garner public favor and maintain political stability, especially during election periods. For

instance, maintaining or even increasing subsidies can be a strategic move by politicians to appeal to the electorate, who view affordable fuel as a critical element of their economic well-being. Subsidies, in this regard, become more than just an economic intervention; they are also deeply intertwined with political agendas, as politicians promise to uphold or even expand subsidies to secure votes. The political significance of subsidies has become evident through policy fluctuations that correspond with election cycles, with governments either increasing or reducing subsidy levels in response to public demand or political expediency (Adewuyi, 2019; Umar & Umar, 2020).

International financial institutions, such as the International Monetary Fund (IMF), often exert pressure on countries like Nigeria to reduce or eliminate subsidies as part of broader economic reform agendas aimed at enhancing fiscal sustainability. Nevertheless, local political factors frequently override such external pressures, as Nigerian leaders prioritize short-term public satisfaction over long-term fiscal considerations (Ogunbanjo & Adebayo, 2020). The social dimension of subsidies cannot be understated, as they are viewed by many Nigerians as a means of social welfare, especially given the country's high poverty rates and economic inequality.

In Nigeria, where a large segment of the population lives below the poverty line, subsidies provide critical relief by reducing the cost of fuel, which in turn lowers transportation costs and prices for other essential goods and services. This function of subsidies as a form of social support is particularly crucial in an economy marked by limited social safety nets. The removal or reduction of subsidies often sparks public outrage, as seen in the widespread protests during periods of attempted subsidy removal, such as in 2012 and again in more recent years (Ajibola & Adesina, 2021; Nwankwo, 2018). These social pressures make it challenging for the government to phase out subsidies without facing significant backlash from the populace, who perceive subsidies as one of the few tangible benefits derived from Nigeria's oil wealth.

Despite these intended benefits, subsidies in Nigeria have been plagued by inefficiencies, corruption, and mismanagement, which have eroded their effectiveness and raised questions about their sustainability. The subsidy regime has often been exploited by corrupt officials and private sector actors who inflate claims and siphon funds intended for subsidy payments. This widespread corruption has led to significant revenue losses for the government, undermining the initial purpose of subsidies as a tool for economic relief. Furthermore, a lack of transparency in subsidy allocation and distribution has exacerbated these challenges, with many Nigerians expressing concerns over the accountability of subsidy programs (Olaniyi, 2020; Ibrahim & Omotosho, 2018).

**Concept of Post-Subsidy**

The concept of a post-subsidy economy, especially in contexts such as Nigeria, represents a significant shift in governmental policy, whereby previously subsidized goods or services are now exposed to the market forces of supply and demand without direct financial intervention from the government. A subsidy, in its most basic form, is a form of financial aid or support extended by the government to reduce the cost of a product or service, thereby making it more accessible to the public (Adewuyi, 2022). In developing economies, subsidies have often been employed as a social protection measure to make essential goods, such as fuel, affordable for

the majority of citizens, as noted by Williams and Amadi (2021). However, the post-subsidy phase removes these financial supports, thereby allowing prices to reflect actual market values, which is theorized to encourage competitive pricing, greater efficiency, and improved allocation of resources within the economy (Okeke & Ugochukwu, 2023).

In Nigeria, the post-subsidy context is especially relevant within the energy sector, where fuel subsidies have historically been a major fiscal problem to the federal government. According to Olayinka and Adigun (2021), Nigeria's government has spent 13.7 trillion naira on fuel subsidies between 2005 to 2021, with the objective of keeping fuel prices low for consumers. However, these subsidies have also been criticized for draining public resources that could have been invested in critical infrastructure, healthcare, or education, thus limiting the country's potential for sustainable economic growth (Edozie & Onwunli, 2020). The decision to remove these subsidies, therefore, reflects a strategic attempt to redirect fiscal spending towards long-term developmental goals that promise broader societal benefits, even if it means short-term hardship for consumers.

The impact of post-subsidy policies on Nigerian consumers, however, is complex and multifaceted. While proponents argue that subsidy removal leads to enhanced market efficiency, increased foreign investment, and the fostering of competitive markets, the immediate outcome is often characterized by increased costs of living, as consumers bear the full brunt of market-based pricing (Udeh & Eze, 2022). For many Nigerians, this adjustment poses a financial burden, as higher prices on essential goods, especially fuel and transportation, affect household budgets significantly (Ogunleye, 2021). Moreover, as Ogbuehi and Ayoola (2023) observe, subsidy removal tends to disproportionately impact lower-income populations who are most dependent on affordable access to fuel and related commodities.

The post-subsidy environment is seen as a catalyst for structural reforms and economic diversification, particularly for countries that rely heavily on a single commodity, such as oil in Nigeria's case (Ibrahim & Salami, 2022). By removing subsidies, Nigeria is encouraged to move beyond oil dependency and focus on diversifying its economy, potentially opening avenues in sectors like agriculture, technology, and renewable energy. This shift aligns with global trends in sustainable development, which emphasize the reduction of fossil fuel dependency in favor of renewable and sustainable energy solutions (Oladele, 2021). Okeke and Ugochukwu (2023) further suggest that a post-subsidy economy can create a platform for private investment in the energy sector, as market-based pricing structures attract foreign and domestic investors looking for stable, predictable returns on investment. In this way, the post-subsidy concept not only promotes economic efficiency but also aligns with broader goals of sustainable development and resilience in the face of fluctuating oil prices on the international market (Edozie & Onwunli, 2020).

**Concept of Development**

Development within the context of urban and regional planning also involves fostering infrastructure that supports diverse aspects of public life, such as transportation, healthcare, housing, and education. Scholars such as Sachs (2020), highlight that creating infrastructure which improves the quality of life for all is central to sustainable development practices. Infrastructural development in urban spaces is not merely about physical structures but also

about enhancing access to services and opportunities. For example, improved transportation systems reduce travel times and facilitate economic activities by connecting residential and commercial areas, fostering economic growth and enhancing productivity (UN Habitat, 2019).

Accessible and quality healthcare facilities are essential in supporting healthy populations and ensuring a workforce capable of contributing effectively to the economy. Similarly, educational institutions equipped with adequate resources contribute to human capital development by creating a skilled labor force that can drive innovation and address regional challenges. Thus, development in urban planning is a multi-layered effort aimed at creating cities that offer not only economic opportunities but also an environment that supports human flourishing (World Bank, 2020).

According to environmental perspective, development in urban and regional planning involves strategies to mitigate the adverse effects of urbanization and industrialization on the environment. Rapid urbanization often results in ecological degradation, increased pollution, and significant changes to natural landscapes, which can harm ecosystems and biodiversity (Elliot & Lynch, 2018). Therefore, sustainable development practices are essential, involving measures such as green architecture, waste management, and policies for reducing carbon footprints. Scholars like Meadows et al. (2018) argue that sustainable development must include eco-friendly policies and urban designs that prioritize renewable energy, green spaces, and sustainable building materials.

Socially, development in urban and regional contexts focuses on fostering inclusive communities where citizens have equal access to resources and opportunities. Social development initiatives aim to reduce inequality by addressing barriers that limit access to quality education, healthcare, and employment, particularly for marginalized groups (UNESCO, 2021). Scholars such as Stiglitz (2019) argue that inclusive development is fundamental to maintaining social stability and fostering civic engagement. Urban planners are increasingly adopting people-centered approaches that involve community members in decision-making processes, thus empowering them to take ownership of development projects. Socially inclusive policies can lead to improved social cohesion, where residents feel valued and connected to their communities, which is essential for long-term development (Sen, 2019). Thus, the social dimension of development underscores the importance of creating equitable and inclusive urban spaces that respect cultural diversity and foster community solidarity.

**Concept of Urban and Regional Development**

Urban and regional development is a multidimensional concept encompassing the planned and systematic improvement of infrastructure, socio-economic conditions, environmental sustainability, and overall quality of life within urban and regional settings. According to Obidairo and Olukotun (2021), urban and regional development aims to create harmonious growth by addressing the unique needs of both densely populated urban areas and relatively sparse regional areas. In this context, urban development focuses primarily on enhancing infrastructure, housing, and transportation systems within cities to address challenges arising from urbanization, such as overcrowding, pollution, and traffic congestion (Agboola, 2019). Regional development, meanwhile, looks at improving resources and services

in less populated areas, often to reduce disparities between urban and rural communities, thereby promoting a balanced socio-economic development that ensures equitable resource distribution and access to essential services across all regions (Lawanson & Aliyu, 2020). In the Nigerian context, urban and regional development has received increasing attention, driven by the need to address rapid urban growth and provide essential services to rural communities that risk being left behind in the development process (Adedayo & Fakorede, 2018).

Furthermore, urban and regional development in Nigeria aims to create a sustainable and resilient environment that fosters economic opportunities and improves living standards across diverse communities (Okeke et al., 2022). A central element in Nigeria's regional development strategy involves reducing the socio-economic inequalities between urban and rural areas through targeted policies and investments (Egunjobi, 2020). These efforts include fostering economic growth in underdeveloped regions, improving agricultural productivity, and ensuring that rural areas have adequate access to healthcare, education, and social amenities (Ilesanmi, 2021). Subsidy policies play a pivotal role in this context, as they are often employed to reduce the financial burden on rural communities, thereby making essential services and resources more accessible and affordable (Adewale & Omotayo, 2023). Subsidies in agriculture, transportation, and basic commodities are critical for fostering regional development, as they help equalize opportunities for economic participation and mitigate rural-urban migration pressures that strain urban infrastructure (Daramola et al., 2021).

Subsidies are instrumental in promoting urban and regional development by providing financial support that reduces the cost of living and operational expenses for residents and businesses in targeted areas. In urban settings, subsidies can be directed towards public transportation systems to make commuting more affordable, thus reducing traffic congestion and pollution (Adebayo & Ayodele, 2019). Similarly, housing subsidies help in making affordable housing available to low-income urban residents, thus addressing the issues of homelessness and informal settlements in densely populated cities (Oluwaseun & Adekunle, 2020). For regional development, subsidies often target agricultural production by reducing costs associated with farming inputs such as fertilizers, seeds, and machinery, thereby supporting rural livelihoods and enhancing food security (Ojo & Akinwande, 2022). According to Ibukun et al. (2021), these subsidies not only bolster the rural economy but also contribute to stabilizing urban centers by reducing the rates of rural-urban migration, which is often driven by economic disparities.

Moreover, subsidies contribute to the development of essential infrastructure that underpins sustainable urban and regional development. Government-subsidized investments in renewable energy, sanitation, water supply, and waste management are vital in improving the quality of life in both urban and rural areas, fostering sustainable and resilient communities (Uche & Chinedu, 2022). According to Omotayo and Kazeem (2023), these subsidies make infrastructural projects more economically viable, especially in regions where the return on investment is low, encouraging private sector participation in areas that may otherwise be neglected. This approach is critical in Nigeria, where vast geographical disparities exist, and many rural areas remain underserved (Aliyu & Yaro, 2021). Without the implementation of subsidies to offset the financial risks for investors, development in these regions would likely

remain stagnant, further exacerbating the urban-rural divide and hindering inclusive development.

The role of subsidies in Nigeria's urban and regional development strategy cannot be overstated. They serve as a financial mechanism to facilitate growth in underserved areas and create economic opportunities that promote balanced regional development (Idowu & Ayeni, 2020). The targeted application of subsidies is essential to achieving equitable development outcomes, especially in contexts where market forces alone are insufficient to ensure inclusive growth (Ajibola et al., 2019). For instance, transportation subsidies in Nigeria help improve mobility for people in both urban and rural areas, enabling easier access to markets, employment opportunities, and social services (Balogun & Yusuf, 2021).

**Empirical review**

Table 1 below, highlighted the selected effects of subsidy removal on sectors of the economy critical to rural/urban development.

**Subsidy Removal on Infrastructures in Nigeria**

**Table 1: Effects of Subsidy removal on infrastructure and other basic services**

| S/N | Variables (Infrastructure sector) | Impact of Subsidy removal | Description |
|---|---|---|---|
| 1 | Transportation | Increased operational costs | Subsidy removal raises fuel prices, impacting public transportation costs and road maintenance expenses (Adebayo, 2023) |
| 2 | Electricity and power | Higher electricity tariffs and operational costs | Fuel cost for power generation increases, resulting in higher tariffs for consumers and reduced operation efficiency (Doe 2022) |
| 3 | Healthcare | Reduced funding and services delivery | Increased energy costs for healthcare facilities, affecting access to essential services and affordability (Ibrahim, 2021) |
| 4 | Education | Reduced educational funding and infrastructure | Higher energy costs, limited fund for educational infrastructure and services (Olatunji, 2020) |
| 5 | Water and Sanitation | Increased water supply | Costs for water treatment and distribution rise due to increased energy expenses (John, 2019) |

| S/N | (Infrastructure sector) | Impact of Subsidy removal | Description |
|---|---|---|---|
| 6 | Housing and urban development | Higher construction costs | Fuel and energy costs hikes affect material and transportation, increasing housing project costs (Eze, 2021) |
| 7 | Agricultural infrastructure | Increased cost of machinery and distribution | Fuel costs impact agricultural production, affecting distribution infrastructure for agricultural products (Ogun, 2023) |

**Source: Author's compilation, 2025.**

Table 1 shows that subsidy removal has far-reaching effects on various infrastructure and social services like healthcare, electricity, water and transport services. For transportation, the removal of fuel subsidies increases costs for public and private transport, affecting both affordability and accessibility (Adebayo, 2023). This has ripple effect on road maintenance and the overall efficiency of transportation networks. Similarly, in the electricity service, the reduction in subsidies raises the cost of fuel for power generation, leading to higher tariffs for consumers and potentially lower service quality (Doe, 2022).

In healthcare, there was increased in operational costs due to subsidy removal which affect the affordability of essential services, with facilities facing challenges in maintaining service delivery amid rising expenses (Ibrahim, 2021). Education sector also faces setbacks as increased energy costs divert resources away from funding schools, classrooms, and technology improvements (Olatunji, 2020). Water and sanitation services are similarly impacted, as the cost of water treatment and distribution rises, putting pressure on public water supply and sanitation projects (John, 2019).

Housing and urban development projects face increased construction costs, largely due to the higher cost of transporting materials and machinery a direct consequence of subsidy removal (Eze, 2021). Finally, the agricultural sector, which depends on affordable energy for machinery and transport, is also adversely affected, as increased production costs reduce the efficiency of distribution infrastructure for agricultural products (Ogun, 2023). Overall, the data suggest that subsidy removal, while aiming for economic adjustments, presents significant infrastructure challenges that need strategic government intervention to mitigate its impacts.

In table 2, we have further highlighted the effects of post-subsidy removal on variables that are having direct bearings on rural/urban developments.

**Table 2: Effects of the Post-Subsidy Era on Housing and Transportation in Nigeria**

| S/N | Infrastructure Area | Impact of Subsidy removal | Data |
|---|---|---|---|
| 1 | Housing | Increase in rental costs due to rising transportation and material costs | Average rental prices in urban areas rose by 20-25% in 2023. |
| 2 | Road Transportation | Rise in public transport fares, affecting daily commuting costs | Fares for local routes increased by 30-40% after subsidy removal. |
| 3 | Housing Construction | Higher costs of building materials, affecting housing development | Cement prices increased by 15%, steel by 20% since subsidy cut. |
| 4 | Urban Infrastructure | Delays in public housing projects due to budget reallocations | Federal and state housing projects reduced by 10%. |
| 5 | Fuel Distribution | Increased fuel prices impacted both construction and transportation industries | Diesel and petrol prices doubled, affecting logistics and housing projects. |
| 6 | Private Vehicle | Higher fuel prices leading to decreased private vehicle use | Reduction in private car ownership by 5%. |
| 7 | Ownership Rental Housing | Increased demand for housing near urban centers to reduce commuting costs | Demand for apartments near city centers rose by 15%. |
| 8 | Demand Commercial | Increased logistics costs, affecting prices of goods and services | Logistics costs increased by 30%, impacting retail prices. |
| 9 | Transportation Public Transport Quality | Pressure on public transport infrastructure due to increased demand | Overcrowding increased by 25% in major cities. |

**Sources:** Culled fromNational Bureau of Statistics (NBS), (2023), World Bank, 2023, Central Bank of Nigeria (CBN), (2023), Nigerian National Petroleum Corporation (NNPC), (2023).

**Results and Discussion**

The results and discussion are tilted towards four (4) major issues, beginning with opportunities;

*(a) Opportunities for sustainable development*

The removal of fuel subsidies in Nigeria opens various avenues for promoting sustainable development, particularly through the adoption of alternative energy sources and environmental conservation efforts. With the eradication of subsidy expenditures, substantial funds can be redirected toward investments in renewable energy infrastructure, such as solar, wind, and hydroelectric power systems. This shift aligns with the global transition toward cleaner energy sources and reduces dependency on environmentally damaging fossil fuels (Ighodaro & Eze, 2023). In this context, subsidy removal is not only an economic policy but also an environmentally strategic move that can position Nigeria as a leader in renewable energy within the African continent, creating both environmental and economic benefits. According to Ayodele (2023), Nigeria's abundant solar energy potential, particularly in the northern region, presents a unique opportunity for the government to develop large-scale solar farms, which could serve as a sustainable alternative to the traditional, carbon-intensive fuel sources.

(b) *Stimulation of private sectors investments*

Moreover, the shift in policy enables the Nigerian government to establish a framework for incentivizing private sector investment in sustainable energy technologies. Without subsidies that artificially lower fossil fuel prices, there is a more competitive market for renewable energy, thus encouraging businesses to explore environmentally friendly energy options that were previously cost-prohibitive (Okeke, 2023). For instance, the reduced-price distortion in the energy sector could attract foreign investors interested in developing Nigeria's renewable energy sector, enhancing energy security and diversifying the economy. Such investments can create job opportunities, stimulate innovation, and reduce the negative environmental impacts associated with fossil fuel consumption. The World Bank (2023), highlights that countries which have transitioned from subsidy-heavy economies to alternative energy systems have experienced significant reductions in greenhouse gas emissions and improvements in air quality, making subsidy removal a critical step toward achieving sustainable development goals (SDGs), particularly those related to affordable and clean energy and climate action.

(c) *Investment in energy sector*

By reallocating resources previously spent on subsidies, the government can invest in improving the energy infrastructure, making it more efficient and less reliant on fossil fuels. This is particularly critical for Nigeria, where infrastructural decay has often led to energy shortages and increased pollution from backup generators. Edeh and Johnson (2023) argue that subsidy removal can free up funds to modernize the energy grid, which would reduce transmission losses and improve energy distribution efficiency across the country. Improved energy infrastructure can facilitate the integration of renewable energy sources, ensuring that clean energy reaches even remote regions. This infrastructural enhancement not only supports sustainable development but also improves the overall quality of life by providing reliable and

accessible energy to all Nigerians. According to Okafor and Emeka (2023), the enhanced energy infrastructure resulting from subsidy removal could lead to a more equitable energy distribution system, addressing regional disparities and fostering socioeconomic development in underserved areas.

(d) *Sustainable environmental conservation*

Another key aspect of sustainable development linked to subsidy removal is environmental conservation. Nigeria's reliance on fossil fuels has led to significant environmental degradation, including oil spills, gas flaring, and pollution, which adversely affect biodiversity and the health of local communities. By promoting renewable energy sources, the government can mitigate these environmental risks and contribute to the preservation of natural ecosystems (Ogbonna & Yusuf, 2022). The move away from subsidized fossil fuels also aligns with international climate agreements, such as the Paris Agreement, under which Nigeria has committed to reducing its carbon emissions. Removing subsidies, therefore, not only facilitates domestic environmental protection efforts but also enhances Nigeria's credibility on the international stage as a country committed to climate action. According to Babalola (2023), the elimination of subsidies can lead to a cleaner environment, as the decrease in fossil fuel consumption will reduce emissions, limit pollution, and improve public health outcomes.

**Summary, Conclusion and Recommendations**

The post-subsidy era in Nigeria represents both a profound challenge and an unprecedented opportunity for urban and regional development planning. The removal of fuel subsidies, while initially creating economic shocks, offers the potential for the government to redirect substantial resources towards critical sectors such as infrastructure, renewable energy, and social services, which are pivotal for sustainable urban growth and regional equity. The fiscal space freed from subsidy expenses could be leveraged to address the structural gaps in transportation, housing, healthcare, and education, providing a foundation for improved urban mobility, affordable housing, and enhanced public service delivery. However, the increase costs of fuel have placed considerable economic pressure on households and have intensified the urban planning challenges related to affordability, mobility, and public infrastructure demands.

Urban and regional planners, therefore, face the complex task of designing resilient, adaptive strategies that incorporate both short-term relief measures and long-term sustainable solutions. Embracing alternative energy sources and fostering public-private partnerships could further support Nigeria's shift towards a diversified, low-carbon economy, creating an environment conducive to innovation and resilience. Ultimately, for Nigeria to fully harness the opportunities presented by the post-subsidy landscape, policymakers must pursue an inclusive approach that prioritizes socio-economic equity, environmental sustainability, and infrastructural resilience, setting a transformative trajectory towards a balanced and diversified national development model.

Based on the results and discussion, the study recommended that:

1. The Nigerian government should increase investments in alternative energy sources to reduce dependency on fossil fuels in order to bring down the cost of materials for rural and urban development in Nigeria.
2. Public transportation systems should be expanded to counter its effects on the masses.
3. Citizens and government at all levels should prioritize affordable housing scheme to enhance the standard of living of low-income residents.

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