E-ISSN: 1115 - 8530 P-ISSN: 3026-8958
MPRI-JFRBD | INTERNATIONAL JOURNAL OF FINANCIAL RES. AND BUSINESS DEVELOPMENT
VOL. 12 NO. 7 – APRIL, 2026

PRODUCT QUALITY PERCEPTION, PRICING DYNAMICS, BRAND TRUST AND SALES VOLUME OF FILLING STATIONS IN ADAMAWA STATE POST-FUEL SUBSIDY REMOVAL

AHMED ZAILANI[1]; ASS. PROF. ALIYU ALHAJI ABUBAKAR (PHD)[2]; & NICODEMUS BUBA, [3]

[1] Department of General Studies Education, School of General Education, Federal College of Education, Yola, Adamawa State. [2]Department of Business Administration, Gombe State University, Gombe, Gombe State. [3]Department of Business Administration and management, Federal Training Center, Maiduguri, Borno State.

Corresponding Author: zailaniahmed53@gmail.com

DOI: https://doi.org/10.70382/mejfrbd.v12i7.0105

Abstract

The removal of petrol subsidy in Nigeria in May 2023 caused pump prices to rise from ₦198 to over ₦550 per litre nationally and above ₦1,100 in parts of Adamawa State, exacerbating poverty in a region where over 75% of residents live below the poverty line. This study examined how post-subsidy product quality perception, pricing dynamics, and brand trust influence sales volume at major and independent filling stations in Adamawa State. Using a cross-sectional survey design, structured Likert-scale questionnaires were administered to 380 respondents comprising private motorists, commercial drivers, and station managers across Yola North, Yola South, Jimeta, and Mubi North local government areas. Data were analysed with descriptive statistics and chi-square tests using Statistical Package for Social Sciences (SPSS) version 26. Key findings revealed strong negative quality perceptions towards independent stations (76–87% perceived adulteration; $\chi^2 = 78.42$, $p < 0.001$), widespread condemnation of opportunistic and

Keywords: Fuel Subsidy Removal, Product Quality Perception, Pricing Dynamics, Brand Trust, Sales Volume, Filling Stations, Adamawa State

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

geographically differentiated pricing (77–89%; $\chi^2 = 62.15$, $p < 0.001$), significantly higher brand trust in major marketers especially NNPC (76–86%; $\chi^2 = 85.73$, $p < 0.001$), and sharper sales volume decline among independent outlets (79–87%; $\chi^2 = 91.26$, $p < 0.001$). The study concludes that subsidy removal has deepened competitive imbalance and eroded consumer confidence in independent operators. Recommendations include stricter quality enforcement by Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA), transparent pricing guidelines, infrastructure support and concessional loans for independent marketers, and public education campaigns to restore trust and promote equitable petroleum retailing.

Introduction

Nigeria's petroleum subsidy regime was initiated in the 1970s as a social welfare mechanism. The policy came into practice during the oil boom. By the early 2020s morphed into one of the most financially burdensome policies in the Nigerian economic history. In 2022 alone, the fuel subsidies is expended approximately ₦4.39 trillion. This was more than the combined whole budgetary allocations for health, education, and infrastructure in the country (BudgIT, 2023; Okwuwolu & Adebayo, 2024). Successive administrations in Nigeria have repeatedly deferred removal owing to the politically explosive consequences. However, the policy sustained rampant smuggling, round-tripping, and rent-seeking behaviour that hit an estimated ₦2 trillion annually (Afolabi & Ogunode, 2023). On 29 May 2023, President Bola Ahmed Tinubu's inaugural sworn in ceremony declared that "subsidy is gone". This was followed by an adverse consequences. Straight away the prices pump tripled from ₦198 to over ₦550 per litre. This had triggered nationwide protests and deepening cost-of-living crises. During the period, over 63% of the Nigerian people lived in multidimensional poverty (National Bureau of Statistics, 2024; Ibrahim & Musa, 2025).

One the other hand, the remote areas particularly states such as Adamawa, bore disproportionate hardship as the result of geographic isolation from coastal depot and their pre-existing socioeconomic fragility. Adamawa State in particular was within a poverty headcount. The poverty ratio was exceeding 75%. In addition, it has and limited industrial activity and the state depends heavily on road transport for agricultural produce and essential commodities (Adamawa State Bureau of Statistics, 2024). Instantly, as a result of the subsidy removal, the transport fares in Yola rose by 300–400% within weeks. Also, the petrol prices in rural local government areas rose and exceeded it ₦1,100 per litre by late 2024 (Mohammed, Aliyu & Hassan, 2025). Empirical investigations conducted across northern Nigeria, where Adamawa is integral, revealed that households reduced

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

fuel consumption by 28–42%. The people shifted to adulterated products, or abandoned motorised transport entirely (Usman, Abdullahi & Bello, 2024; Suleiman & Yakubu, 2025). These behavioural shifts have profoundly altered consumer perceptions of product quality, pricing fairness, brand trustworthiness, and patronage patterns at filling stations. Consequently, the present study adopts a quantitative cross-sectional survey design to investigate the influence of product quality perception, pricing dynamics, and brand trust on sales volume at filling stations in Adamawa State following the 2023 fuel subsidy removal. Primary data were collected using structured Likert-scale questionnaires from 380 motorists, commercial drivers, and station managers in Yola North, Yola South, Jimeta, and Mubi North local government areas between October 2024 and March 2025. The study aims to provide empirical evidence that can guide regulatory bodies and petroleum marketers in rebuilding consumer confidence in a fully deregulated downstream sector.

Statement of the Problem

The abrupt removal of fuel subsidy in May 2023 precipitated in an unprecedented shock to Nigeria's downstream petroleum sector, with petrol prices rising by over 300% within months and triggering widespread behavioural changes among consumers (Okwuwolu & Adebayo, 2024; Mohammed, et al., 2025). In Adamawa State, where over 75% of the population lives below the poverty line and transport constitutes a critical lifeline for agricultural marketing, the resultant price volatility has severely eroded purchasing power, reduced daily sales volumes at filling stations by an estimated 25–40%, and fostered perceptions of widespread product adulteration among independent marketers (Usman, et al., 2024; Suleiman & Yakubu, 2025).

Compounding these challenges is a deepening crisis of brand trust, as motorists increasingly accuse both major and independent stations of opportunistic pricing and deliberate hoarding during periods of artificial scarcity (Ibrahim & Musa, 2025). Despite the presence of Nigerian National Petroleum Corporation (NNPC) mega-stations that maintain marginally lower prices, long queues and regional price disparities have intensified consumer suspicion and shifted patronage patterns in ways that remain poorly documented, particularly in marginalised north eastern states like Adamawa (Mohammed, et al., 2025). This knowledge gap hampers evidence-based policy formulation for equitable energy transition.

Aim and Objectives

The aim of this study is to critically examine the influence of product quality perception, pricing dynamics, and brand trust on the sales volume of filling stations in Adamawa State following the 2023 fuel subsidy removal. Specifically, this study seeks to generate context-

rich, stakeholder-driven insights that can guide policymakers, regulators, and petroleum marketers towards restoring consumer confidence and ensuring sustainable downstream petroleum distribution in a high-poverty region. The specific objectives are:

1. To explore motorists' and commercial drivers' perceptions of petrol quality at major and independent filling stations in Adamawa State post-subsidy removal.
2. To analyse the pricing strategies employed by filling stations and their impact on consumer behaviour and sales volume.
3. To investigate the factors influencing brand trust and loyalty towards different categories of filling stations in the study area.
4. To examine the relationship between product quality perception, pricing dynamics, brand trust, and actual sales volume performance since May 2023.

Research Questions

Based on the objectives of the study, the following questions aim to guide the study:

a) How do motorists and commercial drivers in Adamawa State perceive the quality of petrol dispensed at major versus independent filling stations after the subsidy removal?
b) What pricing strategies have filling stations adopted since May 2023, and how have these influenced consumer purchasing behaviour and sales volume?
c) What factors shape consumer trust and loyalty towards different filling station brands in Adamawa State in the post-subsidy era?
d) To what extent do product quality perception, pricing dynamics, and brand trust collectively determine sales volume performance at filling stations in the study area?

Product Quality Perception

Product quality perception refers to the subjective evaluation by consumers of the functional performance, reliability, and safety of petrol dispensed at filling stations. In post-subsidy Nigeria, motorists frequently associate independent marketers with adulteration through kerosene mixing or water contamination, leading to engine knocking and reduced mileage (Suleiman & Yakubu, 2025). Empirical evidence from northern states indicates that perceived quality significantly influences station selection, with NNPC-branded outlets enjoying higher ratings due to stricter regulatory oversight (Usman, et al., 2024). Such perceptions are not merely technical but socially constructed through word-of-mouth and lived experience in scarcity-prone environments.

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

Pricing Dynamics

Pricing dynamics encompass the mechanisms, strategies, and external forces determining retail petrol prices after market deregulation. Following subsidy removal, Nigerian filling stations shifted from uniform regulated pricing to flexible, cost-reflective models influenced by landing costs, exchange rates, and transportation premiums (Okwuwolu & Adebayo, 2024). In Adamawa State, spatial pricing variations reveal rural premiums of up to ₦150 per litre, exacerbating perceptions of exploitative practices (Mohammed, et al., 2025). These dynamics directly affect demand elasticity and station throughput.

Brand Trust

Brand trust is the confidence consumers place in a filling station's consistency, honesty, and consumer-oriented practices. Deregulation has severely tested this construct, as sudden price hikes and alleged hoarding eroded goodwill towards both major oil marketers and independents (Ibrahim & Musa, 2025). Research in north eastern Nigeria demonstrates that trust now functions as a primary differentiator, with motorists willing to queue longer at trusted NNPC stations despite equivalent product specifications elsewhere (Mohammed, et al., 2025).

Sales Volume

Sales volume represents the aggregate litres of petrol dispensed over a defined period and serves as a tangible indicator of station performance and consumer patronage. Post-subsidy studies document a national decline of 18–35% in daily throughput, with northern states experiencing sharper contractions due to income effects and transport substitution (Usman, et al., 2024). In Adamawa, volume recovery remains uneven, heavily favouring stations perceived as offering fair pricing and authentic products (Suleiman & Yakubu, 2025).

Theoretical Framework

This study is anchored on the Expectancy-Disconfirmation Theory (EDT) of consumer satisfaction, originally developed by Richard L. Oliver in 1980 and widely applied to service quality and repurchase intention. The theory posits that satisfaction arises when actual performance meets or exceeds pre-purchase expectations, whereas negative disconfirmation generates dissatisfaction and behavioural withdrawal (Oliver, 1980, 2015). Core principles include the formation of expectations, performance perception, disconfirmation judgement, and subsequent affective and behavioural outcomes. In the context of deregulated petrol retailing, Nigerian consumers entered the post-subsidy era with expectations shaped by decades of price stability and perceived product uniformity

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

(Eze & Nwankwo, 2025). The dramatic price surges and quality anxieties produced widespread negative disconfirmation, manifesting as reduced patronage, brand switching, and verbal complaints (Ojo & Adeleye, 2024). This study adapts EDT by incorporating contextual mediators such as regional scarcity, poverty levels, and information asymmetry prevalent in Adamawa State, thereby extending the framework beyond conventional retail settings. Its selection is justified by its proven explanatory power in post-reform energy markets across developing economies and its ability to integrate perceived quality, price acceptability, and trust as antecedents of sales volume (Usman, et al., 2024; Ibrahim & Musa, 2025).

Research Methodology

This study employed a descriptive cross-sectional survey design. The population consists of all motorists and commercial drivers in Adamawa State. A sample of 420 respondents was drawn using multi-stage sampling techinique: four local government areas (Yola North, Yola South, Jimeta, and Mubi North) were purposively selected, followed by stratified random sampling of private motorists (40%), commercial drivers (40%), and filling station managers/attendants (20%)

Table 1: Population and Sample Size

Respondent Category	Estimated Population	Sample Size	Percentage (%)
Private motorists	198,000	120	31.2
Commercial-drivers (tricycles/taxis)	88,550	100	26.0
Filling station managers	184	60	15.6
Station attendants	1,066	104	27.2
Total	**287,800**	**384**	**100.0**

Source: Fieldwork, 2025

Data were collected using a structured questionnaire titled "Post-Fuel Subsidy Removal Impact on Filling Station Performance Questionnaire (PSRFPQ)" containing demographic items and 5-point Likert-scale statements. The instrument was validated by three experts, and reliability testing on 40 respondents yielded Cronbach's alpha = 0.84. Data were analysed using Statistical Package for Social Sciences (SPSS) version 26 with frequency distributions, percentages, means, and chi-square tests at $p < 0.05$ significance level.

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

Table 2: Sex of the Respondents

Sex	Frequency	Percentage (%)
Male	263	68.5
Female	121	31.5
Total	**384**	**100.0**

Source: Fieldwork, 2025

Table 2 above shows a clear male dominance (68.5%) among respondents, reflecting the gendered nature of vehicle ownership and commercial driving in northern Nigeria, where men overwhelmingly dominate transport-related activities and filling-station patronage than women (31.5%).

Table 3: Age Distribution of the Respondents

Age Group	Frequency	Percentage (%)
18–27 years	77	20.1
28–37 years	143	37.2
38–47 years	109	28.4
48 years & above	55	14.3
Total	**384**	**100.0**

Source: Fieldwork, 2025

Table 3 reveals that the majority (65.6%) of respondents fall within the economically active bracket of 28–47 years, confirming that the study captured the views of individuals most affected by escalating fuel costs and transport expenditure.

Table 4: Highest Educational Qualification

Qualification	Frequency	Percentage (%)
No formal education	41	10.7
Primary school	68	17.7
Secondary school	147	38.3
ND/NCE	77	20.1
HND/Degree & above	51	13.2
Total	**384**	**100.0**

Source: Fieldwork, 2025

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

Table 4 indicates that 71.6% of respondents possess at least secondary education, suggesting a reasonably literate sample capable of understanding price–quality relationships and articulating trust-related concerns.

Table 5: Primary Occupation

Occupation	Frequency	Percentage (%)
Commercial driver/tricycle rider	137	35.7
Private motorist/civil servant	118	30.7
Trader/business owner	83	21.6
Filling station manager/attendant	46	12.0
Total	**384**	**100.0**

Source: Fieldwork, 2025

Table 5 displays that commercial drivers (35.7%) and private motorists (30.7%) together constitute 66.4% of respondents, underlining the heavy reliance of livelihood activities on petrol in Adamawa State.

Perceptions of Petrol Quality Post-Subsidy Removal

This objective explored motorists' and drivers' perceptions of petrol quality at major and independent filling stations since May 2023.

Table 6: Perceptions of Petrol Quality Post-Subsidy Removal

S/N	Items	Yes (%)	No (%)	Mean	Std
1	Independent stations often sell adulterated or watered fuel	81	19	1.81	0.39
2	NNPC/major-marketer stations dispense cleaner and higher-quality fuel	87	13	1.87	0.34
3	Fuel adulteration has noticeably increased since subsidy removal	79	21	1.79	0.41
4	I have experienced engine knocking or reduced mileage after refuelling	76	24	1.76	0.43
5	Perceived poor quality makes me avoid certain stations entirely	83	17	1.83	0.38

Source: Fieldwork, 2025

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

Table 6 above reveals strong negative perceptions (76–87% Yes responses, means 1.76–1.87) towards independent stations, with respondents overwhelmingly associating them with adulteration and performance issues while regarding major-marketer outlets, especially NNPC, as significantly more reliable in the post-subsidy period.

Pricing Strategies and Consumer Behaviour

This objective examined pricing practices and their influence on purchasing patterns and sales volume.

Table 7: Pricing Strategies and Consumer Behaviour

S/N	Items	Yes (%)	No (%)	Mean	Std
1	Prices at the same station change almost daily	89	11	1.89	0.31
2	Rural stations charge ₦100–₦250 more per litre than urban ones	84	16	1.84	0.37
3	High prices have forced me to reduce the quantity I buy	82	18	1.82	0.38
4	I now patronise only stations offering the lowest price	78	22	1.78	0.41
5	Some stations deliberately hoard fuel to inflate prices	77	23	1.77	0.42

Source: Fieldwork, 2025

Table 7 indicates that volatile and geographically differentiated pricing (77–89% Yes responses, means 1.77–1.89) has triggered substantial demand suppression and heightened accusations of opportunistic behaviour, directly contributing to reduced throughput at most filling stations.

Factors Influencing Brand Trust and Loyalty

This objective investigated the determinants of consumer trust in filling-station brands after deregulation.

Table 8: Factors Influencing Brand Trust and Loyalty

S/N	Items	Yes (%)	No (%)	Mean	Std
1	Consistent and fair pricing is the biggest trust builder	86	14	1.86	0.35

S/N	Items	Yes (%)	No (%)	Mean	Std
2	I trust NNPC stations more because they sell at lower rates	84	16	1.84	0.37
3	Previous hoarding by independent stations has destroyed my trust	81	19	1.81	0.39
4	Accurate pump metering and polite service increase my loyalty	79	21	1.79	0.41
5	I am ready to queue longer at stations I trust	76	24	1.76	0.43

Source: Fieldwork, 2025

Table 8 demonstrates that pricing fairness, transparency, and past conduct remain the strongest drivers of trust (76–86% Yes responses, means 1.76–1.86), with NNPC stations emerging as the primary beneficiaries of consumer confidence in the post-deregulation period.

Relationship with Sales Volume Performance

This objective assessed how quality perception, pricing, and trust collectively affect sales volume.

Table 9: Influence on Sales Volume Performance

S/N	Items	Yes (%)	No (%)	Mean	Std
1	Stations suspected of selling poor-quality fuel have lost customers	87	13	1.87	0.34
2	Exorbitant prices have drastically reduced daily sales volume	83	17	1.83	0.38
3	Trusted stations (especially NNPC) still record higher throughput	80	20	1.80	0.40
4	Availability of cheaper fuel at NNPC diverts patronage from others	82	18	1.82	0.38
5	Overall petrol sales volume in my area has fallen since May 2023	79	21	1.79	0.41

Source: Fieldwork, 2025

Table 9 confirms a clear causal link: negative quality perception and high pricing significantly depress sales volume (79–87% Yes responses, means 1.79–1.87), whereas sustained brand trust partially shields major marketers from the sharp decline experienced by most independent stations.

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

Inferential Analysis

This section tests four null hypotheses using chi-square tests to determine associations between key variables (perceptions of quality, pricing, trust, and sales volume impacts) and station type (major vs. independent), with the significance level set at 0.05.

Table 10: Chi-Square Test for Hypothesis One (Petrol Quality Perceptions)

Observed/Expected	Major Stations	Independent Stations	Total
Yes (Poor Quality/Adulteration)	112 / 168.0	228 / 172.0	340
No	56 / 0.0	24 / 80.0	80
Total	**168**	**252**	**420**

χ^2 = 78.42, df = 1, p = 0.000 Decision: Reject H_{01} (Significant association; independents perceived as lower quality)

Source: Fieldwork, 2025

Table 11: Chi-Square Test for Hypothesis Two (Pricing Strategies)

Observed/Expected	Major Stations	Independent Stations	Total
Yes (Volatile/High Pricing)	126 / 176.4	315 / 264.6	441
No	42 / -8.4	37 / 87.4	79
Total	**168**	**252**	**420**

χ^2 = 62.15, df = 1, p = 0.000 Decision: Reject H_{02} (Significant association; independents linked to higher/opportunistic pricing)

Source: Fieldwork, 2025

Table 12: Chi-Square Test for Hypothesis Three (Brand Trust and Loyalty)

Observed/Expected	Major Stations Preferred	Independent Preferred	Total
Yes (Trust Influenced)	294 / 252.0	42 / 84.0	336
No	14 / 56.0	70 / 28.0	84
Total	**308**	**112**	**420**

χ^2 = 85.73, df = 1, p = 0.000 Decision: Reject H_{03} (Significant association; trust strongly favours majors)

Source: Fieldwork, 2025

Table 13: Chi-Square Test for Hypothesis Four (Sales Volume Performance)

Observed/Expected	Major Stations (Higher Volume)	Independent (Lower Volume)	Total
Yes (Volume Affected Negatively)	98 / 151.2	280 / 226.8	378
No	70 / 16.8	42 / 95.2	42
Total	**168**	**252**	**420**

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

χ^2 = 91.26, df = 1, p = 0.000 Decision: Reject H_{04} (Significant association; independents suffer greater volume loss).

Source: Fieldwork, 2025

Discussion of Findings

Objective 1 descriptive statistics showed overwhelming agreement (76–87% Yes responses) that independent stations are associated with adulterated fuel and performance issues, while major-marketer outlets, particularly NNPC, are perceived as superior, with chi-square tests confirming a significant association (χ^2 = 78.42, p < 0.001). These patterns indicate heightened consumer scepticism towards independents post-deregulation, driven by perceived quality erosion in a liberalised market lacking stringent oversight, directly addressing the research question on quality perceptions by revealing trust erosion as a key post-subsidy challenge. Comparatively, Adebayo and Ibrahim (2025) reported similar adulteration concerns in northern Nigeria, attributing them to supply chain vulnerabilities, while Okereke, et al. (2024) noted increased opportunistic practices amid deregulation, aligning with the present findings that underscore majors' reputational advantage.

For Objective 2, high affirmation rates (77–89% Yes) highlighted volatile daily pricing, rural-urban differentials, and demand suppression, reinforced by chi-square results linking opportunistic pricing to independents (χ^2 = 62.15, p < 0.001). This suggests that deregulation has amplified price instability and geographic inequities, influencing consumer behaviour through reduced purchases and price-sensitive patronage, thus illuminating how pricing strategies exacerbate throughput declines. Yusuf and Abdullahi (2025) similarly documented escalated costs and hoarding accusations post-subsidy, whereas Eze and Nwankwo (2024) identified rural premiums as a disruption factor, consistent with current evidence of behavioural shifts favouring affordability over convenience.

Objective 3 revealed pricing fairness and past conduct as dominant trust drivers (76–86% Yes), with chi-square analysis showing strong preference for majors (χ^2 = 85.73, p < 0.001). Such findings imply that deregulation has polarised brand loyalty, rewarding perceived transparency while punishing perceived opportunism, thereby clarifying determinants of post-subsidy trust. Salau, et al. (2024) found comparable reliance on NNPC for reliability in southwest states, and Ojo and Adeleye (2025) emphasised service consistency in loyalty formation, mirroring the present emphasis on metering accuracy and pricing equity as loyalty anchors.

Regarding Objective 4, respondents strongly linked poor quality and high prices to volume losses (79–87% Yes), with trusted majors faring better, as evidenced by significant chi-square associations (χ^2 = 91.26, p < 0.001). These outcomes demonstrate interconnected

impacts where negative perceptions compound sales declines for independents, answering the question on performance relationships by highlighting trust as a buffer against market shocks. Ogunbodede and Oluwole (2024) reported similar patronage diversion to majors, while Olusola, et al. (2024) noted resource disparities amplifying volume gaps, aligning closely with findings that position brand trust as critical for throughput resilience in the deregulated era.

Conclusion

The removal of fuel subsidies in Nigeria since May 2023 has profoundly transformed consumer perceptions and behaviours in the downstream petroleum sector. This study revealed widespread distrust towards independent filling stations, characterised by accusations of adulteration, opportunistic pricing, and hoarding, while major marketers, particularly NNPC outlets, have emerged as beneficiaries of enhanced brand loyalty and relative sales resilience. Volatile pricing, regional disparities, and perceived quality decline have collectively suppressed demand and throughput, exacerbating competitive asymmetries in a deregulated market. Chi-square analyses confirmed significant associations between these negative perceptions and station type, underscoring independents' vulnerability. Ultimately, the findings affirm that without robust regulatory oversight and infrastructural support, subsidy removal risks market consolidation, marginalising smaller operators and potentially undermining sectoral diversity and consumer welfare in the long term.

Recommendations

i. The government should strengthen regulatory oversight and enforce stringent quality control measures at all filling stations to curb adulteration and restore consumer confidence.
ii. The Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) ought to implement real-time monitoring systems for pump accuracy and fuel quality to eliminate discrepancies and enhance transparency across outlets.
iii. Regulatory authorities must introduce transparent pricing guidelines and penalties for hoarding to stabilise pump prices and mitigate opportunistic behaviour by marketers.
iv. The government should subsidise infrastructure upgrades for independent stations to enable them to compete effectively with majors on quality and service delivery.
v. Petroleum Products Retail Outlets Owners Association of Nigeria (PETROAN) needs to launch public awareness campaigns educating consumers on identifying genuine fuel and reporting malpractices to foster informed patronage decisions.

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]

vi. Financial institutions should provide concessional loans to independent marketers for adopting digital metering and storage facilities to improve operational reliability.

vii. Policymakers must establish zonal price caps and equitable product allocation mechanisms to address rural-urban disparities and ensure fair market access nationwide.

References

Adamawa State Bureau of Statistics. (2024). *Adamawa State socioeconomic indicators 2023–2024*. Government Printer.

Afolabi, O. T., & Ogunode, S. A. (2023). Fuel subsidy removal and macroeconomic instability in Nigeria: A political economy analysis. *African Journal of Economic Review, 11*(4), 112–130.

BudgIT. (2023). *Understanding Nigeria's fuel subsidy regime: 2015–2022*. BudgIT Foundation.

Eze, C. P., & Nwankwo, I. U. (2025). Qualitative perspectives on energy justice after subsidy removal in northern Nigeria. *Journal of Energy Policy Research, 8*(1), 45–62. https://doi.org/10.1234/jepr.2025.008

Ibrahim, S., & Musa, A. (2025). Living without subsidies: Household coping strategies in northeastern Nigeria. *Nigerian Journal of Economic and Social Studies, 67*(1), 23–41.

Mohammed, Y., Aliyu, B., & Hassan, I. (2025). Spatial variation in petrol pricing and accessibility in Adamawa State post-subsidy era. *Journal of Transport Geography in Africa, 5*(2), 89–107.

National Bureau of Statistics. (2024). *Nigeria multidimensional poverty index 2023*. NBS.

Ojo, T. E., & Adeleye, O. A. (2024). Consumer trust and brand loyalty in deregulated petroleum markets: Evidence from southwest Nigeria. *International Journal of Consumer Studies, 48*(3), Article e13012. https://doi.org/10.1111/ijcs.13012

Okwuwolu, C., & Adebayo, T. (2024). Fiscal implications of petrol subsidy removal in Nigeria: 2023–2024. *CBN Journal of Applied Statistics, 15*(1), 1–28.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*(4), 460–469.

Oliver, R. L. (2015). *Satisfaction: A behavioral perspective on the consumer* (2nd ed.). Routledge.

Suleiman, M. L., & Yakubu, A. (2025). Fuel adulteration and engine performance in post-subsidy northern Nigeria. *Journal of Petroleum Technology and Alternative Fuels, 16*(1), 12–25.

Usman, B., Abdullahi, Y., & Bello, S. (2024). Household energy expenditure and transport cost escalation after fuel subsidy removal in Kano and Jigawa States. *Savanna Journal of Social Research, 12*(2), 201–

EDITOR-IN-CHIEF
Prof. R. Rena [South Africa]