

Cost of Fuel Subsidy to the Nation

Options for Policy Review



Executive Summary

In April 2022, the National Assembly passed the 2022 supplementary appropriation that increased the subsidy budget by 700% to N4 trillion. This is the largest budget and would be the highest expenditure on subsidy in any year in the history of fuel subsidy in Nigeria.

The allocation to subsidy in 2022 reflects the increasing and mounting cost of financing fuel subsidy in Nigeria. Between 2005 and 2021, Nigeria spent 13.7 trillion to finance fuel subsidy. This amount would have revolutionized Nigeria's energy (power and downstream petroleum) sector, making the country a net exporter of refined petroleum products. This would have had far-reaching impact on the economy beyond the downstream petroleum sector.

However, the effective cost of financing subsidy is significantly more than the cumulative subsidy budget or the opportunity cost of subsidy spending. Despite being the world's 8th largest producer of crude oil, subsidy has made private investment in the downstream sector largely unattractive. The combined effect of fuel subsidy and products importation is responsible for a large part of Nigeria's current economic challenges including low GDP growth in the petroleum sector, foreign exchange and balance of payments problems, and a worsening debt profile. Given this reality, neither government nor other stakeholders can continue to ignore the severe danger that fuel subsidy pose to the economy and the future of the country.

Even though subsidy was first designed as a short-term response to international oil price shock, repeated attempts to end or reform it has yielded limited and largely ineffectual results. This paper found that in the last four decades, government adjusted the price of petroleum products 32 times. However, these attempts have failed to reduce the subsidy burden. The cost of financing fuel subsidy continues to increase even after several upward price adjustments. This is because, due to high levels of product importation and fixed price of petrol, factors like inflation, exchange rate movements and oil price volatility increase the cost of subsidy to the economy.

PMS price increase has always been resisted because of potential hardship to the poor. Yet, the largest share of the benefits of fuel subsidy is enjoyed by high- and middle-income households. The low-income and poor population derive little benefit from subsidy. The richest 40% consume 90% of PMS while the poorest 40% consume just 4% of the fuel. Similarly, the impact of PMS subsidy on commercial transportation is limited, as less than half of mass transit rely on PMS for fuel. Hence the cost of subsidy to poor and low-income households significantly exceeds the benefits that they derive from it.

The study also noted that the cost of financing subsidy is growing because demand has increased significantly. Current PMS demand is 6 times the demand in 1980. Yet crude oil output, from which subsidy is financed, has declined. Given this trend, this paper concludes that subsidy on PMS has since become unsustainable. The paper further projects that given the same trend, the burden of subsidy will continue to increase with further unimaginable consequences for Nigeria. Hence the need for urgent action to review the subsidy policy.

Apart from regular price adjustments, government has deployed different policy instruments ranging from price stabilization, regulated market pricing, and price modulation. The reasons for the failure of these policies include strong opposition by labor and civil society fueled by traditional distrust of government intentions, inadequate impact mitigation plan by government, and public resistance based on fear of loss of subsidy benefits.

Summary of Findings

1. Fifty years of subsidy implementation may have generated significant economic costs for Nigeria.
2. While subsidy was introduced during the oil boom for a population that was less than one-third of the current population, rapid population growth and expansion in economic activities over several decades have caused the subsidy burden to become unwieldy.
3. Subsidy expenditure is increasingly diminishing revenue remittance to the Federation Account and undermining the capacity of the federal, state, and local governments to develop critical infrastructure and fund social services.
4. Subsidy on petroleum products has disincentivized private participation/investment in the downstream sector.
5. Subsidy on PMS benefits the rich more than the poor, as data show that the middle and upper classes derive greater material benefits from the government's subsidy policy.
6. Past unsuccessful attempts to end subsidy has focused on price increase rather than deregulation.
7. Passionate opposition to comprehensive subsidy reforms stems from a poor understanding of the cost and benefits/beneficiaries of the policy, as well as government's failure to effectively communicate the facts to the citizens.

In view of these findings and conclusion, the following options are recommended for review of the subsidy policy.

1. Initiate gradual but sustained adjustment of pump price to free up valuable resources for infrastructural and social development in areas of health, security, education, etc. The adjustment should be significant enough to influence the basic indices, but not too large as to create hardship for the poor.
2. Accelerate action on ongoing rehabilitation of government refineries to boost domestic supply of petroleum products.
3. Initiate deliberate policy incentives to encourage private investment in refineries.
4. Sustain policy initiatives on the implementation of the Petroleum Industry Act to build investors' confidence by demonstrating policy stability, reliable legal framework, and sustainability to make investment decisions.
5. Commission special report on Nigeria's daily consumption of PMS to ascertain the country's daily PMS needs.
6. Introduce and implement welfare and interventionist programs using parts of the proceeds from the gradual adjustment of the pump price.
7. Ensure that stringent sanctions are applied for crimes in the oil and gas sector like crude oil theft, pipeline vandalism and products diversion.

Section 1: Introduction

The motivation for introducing petroleum subsidy in Nigeria in the early years of the discovery of oil was to ensure that volatility of international oil prices does not negatively impact price stability of refined products. This was even made more feasible when it became clear that Nigeria has the potential and capacity for commercial production and export of crude oil. Petroleum subsidy was essentially intended to smoothen the price of refined products to ensure it was available to Nigerians at low and stable prices. The policy when it was introduced did not pose much of a problem, but as the population of Nigeria increased and domestic refining capacity became inadequate, the policy gradually became a major fiscal, structural and macroeconomic challenge to the Nigerian government and the economy. For instance, at the time it was introduced, international oil prices were low and stable. Subsequently, however, the operations of OPEC as a production cartel had obvious consequences on high global energy prices and by extension on the price of imported refined products. Therefore, for Nigeria, maintaining the subsidy regime in the face of increasing international oil prices, while dependent on imported refined products characterized by high price volatility, had become costly and unsustainable going forward.

Consequently, the implication of maintaining the subsidy regime against all odds, on Nigeria's fiscal sustainability and macroeconomic stability had become a major concern to policymakers. For instance, on April 14, 2022, the National Assembly approved N4 trillion to finance fuel subsidy for 2022. The amount represents more than 800% increase from the initial estimate of N442.7 billion, which was first submitted for approval. The increase in the subsidy budget pushed the total budget deficit up by more than 15% to N7.35 trillion. In order to accommodate the additional subsidy budget, the government not only had to consider borrowing to fill the gap but had to also slash the budgets for basic health, basic education, technology infrastructure, and allocations to Niger Delta and North-east development commissions.

The new proposal also cut funding for key investments in petroleum upstream projects. To finance the subsidy expenditure, government will also increase both local and foreign borrowing in 2022.¹

¹ "Nigeria will use Eurobond cash to fund 2022 petroleum Subsidy. Business Day, March 16, 2022.

Thus, the subsidy policy, and the numbers that define it, show clear signs of serious fiscal trouble for Nigeria's economy.

Notwithstanding, given its potential welfare effect on the poor, removal of petroleum subsidy had become topical and contentious over the years. Those who support its retention argue that subsidy on petroleum products has enabled Nigerians to enjoy some benefits directly from the country's oil and protected the vulnerable poor from price shocks associated with its removal. However, those who support its removal argue that it would bring about stability and fiscal sustainability for the economy.

But more than the legitimate economic arguments, the debate has become intractable because it has also become political and a critical mobilizing issue for opponents who continuously resist what they consider 'anti-people' policies of government. Therefore, efforts to remove petroleum subsidy had been met with stiff opposition more by the fear of the unknown of what might become its consequences on the people and less by the stark realities of its consequences on the economy.

Therefore, attempts over the years to remove petroleum subsidy had been at best sub-optimal. After decades of contention, subsidy on diesel and kerosene was removed in 2004 and 2016, and the supply of both products stabilized over market-determined prices. But the impact on the economy was minimal as both products account for only a fraction of the subsidy bill. The muted resistance to full deregulation of diesel and kerosene, even though their pricing has been shown to have a more proportionate impact on poor and low-income households, calls for a constructive review of the ideological positions that have been canvassed on fuel subsidy.

Beyond the obvious fiscal challenges of sustaining the subsidy policy, there are deeper structural problems that make the subsidy issue a vital one for Nigeria both in the present and in the future. However, this paper by NEITI takes the view that any decision on subsidy should not be taken lightly. Fifty years of subsidy implementation may have generated significant economic costs for Nigeria, but in that time also, fuel subsidy has become an integral part of our everyday experience. The paper sets out to use relevant data and insights to improve the quality of the discussion on petroleum subsidy in Nigeria and help stakeholders – state and non-state actors – move closer to a realistic, productive, and sustainable resolution.

Thus, the main objective of this paper is to explore other measures and policy options that could be considered in addressing the challenge of a review of petroleum subsidy policy. Other ancillary objectives are to ensure that policy considerations for subsidy reforms are made quite realistic and implementable within the ambit of appropriate reforms to drastically reduce the disruptive impact it may have on the stability of the energy market in Nigeria.

The rest of the paper is organized thus, Section 2 presents a contextual analysis of subsidy policy in Nigeria, while section 3 discusses the cost of financing petroleum subsidy in Nigeria; section 4 assesses the benefits and costs of petroleum subsidy policy while section 5 explains the failure of past subsidy reforms in Nigeria; Section 6 concludes with recommendations.

Section 2: Subsidy Policy and Administration in Nigeria

The scope of analyses of the policy and management of petroleum products subsidy covers its historical evolution, the structure of the downstream market created by the subsidy regime, and the administration of the subsidy programme. These dimensions of analysis provide the context for understanding the issues that have characterized the implementation of subsidy in Nigeria.

History of Fuel Subsidy Policy in Nigeria

A specific pronouncement by the government on petroleum subsidy was first made in 1973 in response to the sharp rise in global oil prices as a result of the middle east crisis that erupted that year.² But before this time, subsidy on petroleum products existed alongside subsidies on a wide array of goods and services including fertilizer, manufactured goods, and even air travel.

Following the spike in global oil prices government responded by pegging the price of crude oil supplied to the local refinery at 35.7% less than the international price of crude oil.³ This decision was premised on a policy to stabilize prices across the nation in order to foster industrialization, promote regional development, and control inflation.

In the early years, subsidy implementation continued to rely on the supply of crude oil to local refineries at a lower than international prices, thereby decreasing the subsidy ratio when prices rise, and increasing it when they fall. Later in 1977, the government enacted the Price Control Decree which applied to petroleum products among other items which include textiles, cement, flour, matches, pharmaceuticals, electronics, beer, stout, and soft drinks. During the austerity measures of 1983 and the Structural Adjustment Programme (SAP) of 1985, government ended price control on all other items except petroleum products.

² McCulloch, Moerenhout and Yang (2020). Fuel Subsidy Reform and the Social Contract in Nigeria: a Macroeconomic Analysis.

³ Soile and Mu (2015). Who benefit most from fuel subsidies? Evidence from Nigeria.

The government's control of the downstream market compounds the subsidy question

As government sought to control the prices of petroleum products, it also took steps to increase participation and strengthen its control in the downstream sector. In 1972, the government acquired a majority stake in the privately owned Shell-BP refinery⁴ which was built in 1965. By acquiring a majority stake in the refinery, Nigeria effectively established control of crude oil refining in the country. The introduction of price control the following year meant that the government now effectively controlled production, supply, and pricing.

Nigeria was able to sustain these policies because of (a) high oil revenues (b) high crude oil output (c) low demand for petroleum products and (d) significant domestic refining capacity from four functioning refineries. In time, demand for petroleum products grew above refinery output⁵ but there was no effort to close the supply gap.

While the shortfall in the domestic supply of refined products widened, government maintained control of the downstream market as the sole producer and sole supplier of refined products with fixed and subsidized market pump prices, simultaneously. This created deep market distortion that became difficult to resolve. With the control of prices, there was no incentive for private investment inflow into the petroleum sector as no investor would expect to make a profit where the production input prices were market-determined, while supply and consumption prices were fixed below equilibrium prices.

Government's response to a growing subsidy problem

The first significant attempt to try to eliminate fuel subsidy or at least minimize the cost happened in 1978. This happened when domestic demand had begun to outstrip local refinery output and the country was experiencing significant shortage in product supply. The government continued with its policy of supply of petroleum to domestic refineries at subsidized prices. However, this time, the difference in the price of crude oil supplied to local refineries and the international market price was only 2%,⁶ and the pump price of

⁴ Ann Genova (2010). Nigeria's Nationalisation of British Petroleum.

⁵ See Ogbuigwe (2028). Refining in Nigeria: History, Challenges and Prospects.

⁶ Nereus Nwosu (1996). The Politics of Oil Subsidy in Nigeria.

petrol increased by 74%. Subsidy increased again to more than 65% in 1980 as crude oil prices hit \$40 per barrel from less than \$14, an increase of 290% from two years previously. Even though the amount required for subsidy for this period was huge, the increase in domestic refining capacity, as the 125,000 BPD Warri refinery came on stream, helped the subsidy cause.

By the end of 1980, the traditional volatility of the crude oil market had begun to manifest its southward trend. Crude supply and prices stabilized, and prices even started to fall steadily. In 1982, the government increased the pump price by 30%, reducing subsidy from 35% to 17%. Between 1981 and 1986, crude oil prices fell to about one-third of their value.

Nigeria's economy was severely hit, drastically reducing Nigeria's earnings and worsening the country's balance of payment problems. By 1985, the economy had gone through two recessions in less than 5 years. As part of the measures introduced by the government to curb waste and stimulate recovery of the economy, the removal of subsidy became a major focus of the reform agenda. The austerity measures and structural adjustment programme that followed resulted in several upward adjustments in petrol prices in 1982, 1986 (100%), 1988-89 (50%), and 1991 (16.7%),

By the late-90s when the performance of the refineries had become a challenge to the government as capacity utilization continued to diminish. The president of Nigeria was quoted to have said in 2003: "Maybe those who get involved in the monopoly of [products] importation are also ensuring that the refineries are not working satisfactorily. Maybe if there is no monopoly it will be easier to get our refineries to work."⁷

In 2005, the government announced that importation of petroleum products will be open to other product marketing companies and the payment of subsidy will be managed through the Petroleum Support Fund (PSF) Scheme.

It is significant to note that even after the rapid increases in prices that defined the Structural Adjustment Programme of the 1980s, every administration since then has increased fuel price in an attempt to reduce the subsidy burden, or completely eliminate it. In all, twelve administrations have adjusted fuel prices 32 times. Some of the price adjustments have actually been price reductions as a result of popular opposition to price

⁷ Nwokeji, G. Ugo, **The Nigerian National Petroleum Corporation and the Development of the Nigerian Oil and Gas Industry: History, Strategies and Current Directions**, The Joint Baker Institute/Japan Petroleum Energy Center Policy Report, 2007

increases at the time. Such reductions happened six times in 1993, 1994, 1999, 2000, 2007, and 2012. Three other price reductions were made voluntarily by the government as a result of fall in global oil prices. These happened in 2015 and twice in 2020.

Section 3: Benefits of Fuel Subsidy in Nigeria

The immediate benefit of subsidy to Nigerians is the availability of cheap fuels for energy and transportation. Subsidy on PMS, which is the only product currently being subsidized, has enabled Nigerians to move between locations with greater ease and frequency. Cheaper petrol also helps to supplement primary power supply by providing fuel for power generators for households and small businesses.

Subsidy has also enhanced disposable income in two ways. First, Nigerians require less amount of money to pay for their transportation needs. Secondly, a lower proportion of income spent on fuel leaves a larger share for expenditure on other needs and even wants.

The above benefits of subsidy align with the universal objectives of subsidy for consumers. However, given that the most important consideration for, and the greatest justification of, subsidy lies in its utility as an economic safety net for poor and low-income beneficiaries, it is important to assess the impact on the target group, especially because of the significant resources being allocated to this objective.

Who is benefiting from Nigeria's subsidy of PMS?

This paper explores a large body of literature on this subject. One level of analysis assesses households' share of income spent on different petroleum products by income groups. Data provided by the National Bureau of Statistics show expenditure on petroleum products by the five income groups in Nigeria. The data shows that the richest 20% consume 75% of PMS in Nigeria while the poorest 20% consume just 1% of the product.⁸ Extending the analysis to cover more income groups, the NBS data shows that the richest 40% consume 90% of PMS while the poorest 40% consume 4% of the fuel. This has been attributed to vehicle ownership in the country. This conclusion is validated by data on PMS utilization – use of PMS by motor vehicles accounts for 96% of total PMS consumed in the country.⁹ This implies that 90% of PMS subsidy benefits go to the rich, and just 4% to the poor.

⁸ See Jun Rentschler and Morgan Bazilian (2016). Reforming Fossil Fuel Subsidies: Drivers, Barriers and the State of Progress.

⁹ See Badmus et al (2012). Energy and Exergy Analyses of the Nigerian Transportation Sector from 1980 to 2010.

An earlier study in 2015 measured the impact of subsidies on all fuels, including kerosine, and found that the rich enjoy twice as much benefit from fuel subsidies as the poor.¹⁰ The lower concentration of benefits in the second result shows that the benefit of subsidy on kerosine is more evenly distributed across income groups. This is confirmed by another NBS data that measures household expenditure across all fuels including petrol, kerosene, gas, and charcoal.

Impact on Public Transportation

Data from the National Bureau of Statistics classify vehicle ownership in Nigeria into private, commercial, government, and diplomatic. The data puts the population of commercial vehicles in Nigeria at 57.5%. Within this category is a disparate mix that also includes different kinds of commercial uses like vehicles that are branded for corporate purposes. The others are vehicles used for freight and passenger transport, which is the primary concern of this analysis for obvious reasons. Commercial passenger and freight vehicles are the channels through which the cost of subsidy removal is potentially transferable to poor and low-income households.

Yet, not even the commercial vehicle category is wholly impacted by PMS subsidy or its removal. Only about half (in fact less than half) of commercial vehicles are light vehicles that run on PMS. According to vehicle registration data, more than half of heavy vehicles are used for freight and mass transit. The other half of commercial vehicles in Nigeria are either run on PMS or diesel. Comprehensive data show that 100% of lorries, trucks, trailers, and tankers, 50% of buses, and 25% of vans and pick-ups in the country are also powered by diesel.¹¹ This implies that removing PMS subsidy would have minimal effect on the cost of moving goods and merchandise, and limited effect on mass transport means usually relied on by poor and low-income households.

¹⁰ Soile and Mu (2015). Who benefit Most from Subsidy? Evidence from Nigeria.

¹¹ See Maduekwe and Isihak (2020) on the Application of the LEAP Model to assess road transport energy consumption and vehicular emission.

Section 4: Cost and Consequence of Nigeria’s Subsidy Policy

Subsidy Expenditure

A review of the literature on subsidy shows that the Nigerian government had been subsidizing petroleum products at least since 1973. This paper presents data from NNPC and NEITI reports for the last 17 years from 2005 to 2021. The data covers a third of the entire fuel subsidy period in Nigeria. The data is presented in Table 1.

Table 1 – Fuel Subsidy Expenditure

<u>Year</u>	<u>Payments (billion naira)</u>	<u>Payments(\$bn)</u>
2021	1430	3.575
2020	864	2.4069
2019	508	1.6547
2018	1190	3.8889
2017	154	0.4739
2016	240	0.9449
2015	654	3.3367
2014	1220	7.3939
2013	1320	8.3019
2012	1360	8.5535
2011	2110	13.5256
2010	667	4.4172
2009	469	3.7823
2008	631	5.3025
2007	272	2.176
2006	257	1.9923
2005	351	2.66
TOTAL	13697	74.3862

Source: NNPC Financial Reports; NEITI Reports

Total subsidy expenditure for the period translates to an average spend of 805.7 billion annually; N67.1 billion monthly or 2.2 billion daily.

A graphic presentation of the subsidy expenditure for the covered period is shown in Figure 1.

Figure 1 – Subsidy Expenditure (₦)

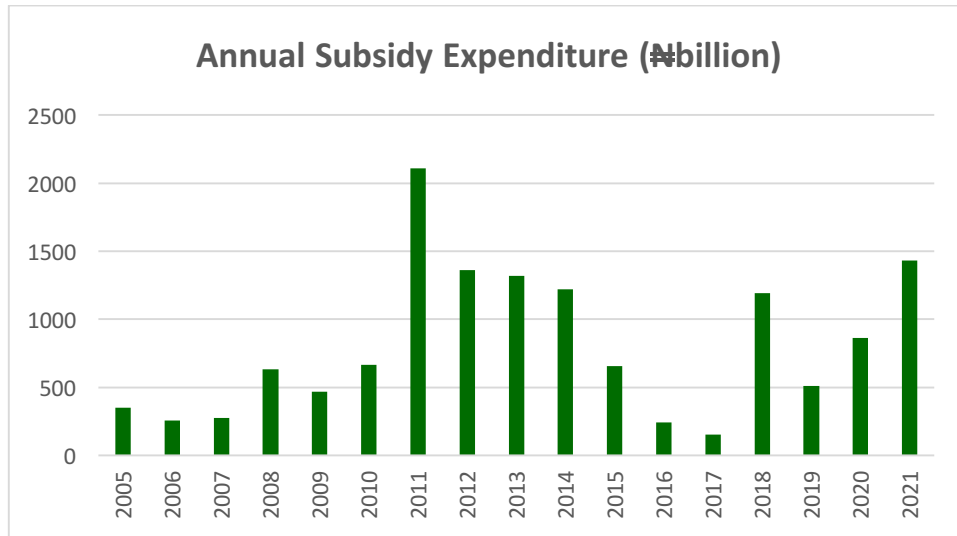
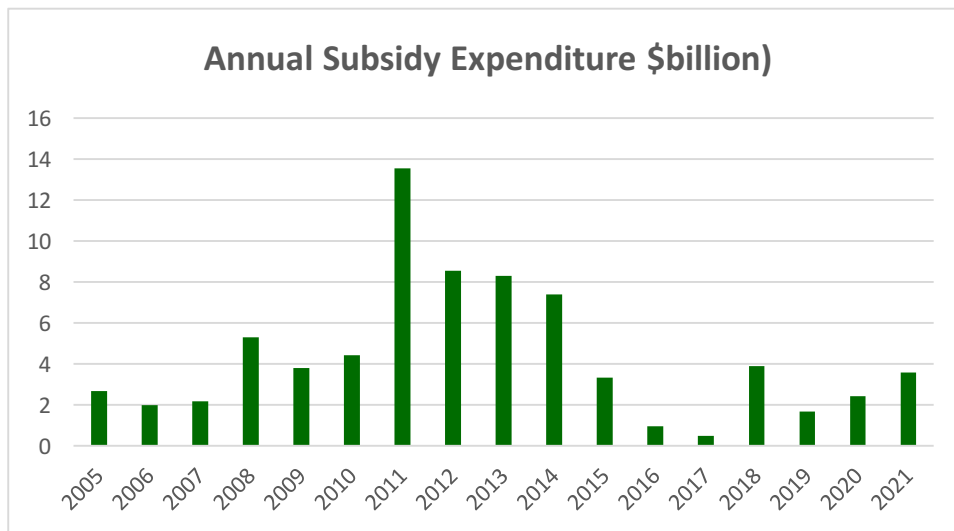


Figure 2 – Subsidy Expenditure (\$)



The data shows that subsidy payments occurred every year, even when oil prices were very low. In 2011 subsidy payment reached a peak, reflecting the impact of international price of crude oil on cost of subsidy.

Note that the low subsidy expenditure in 2016 and 2017 was due largely to the price modulation system put in place by the government during the period. Although the size

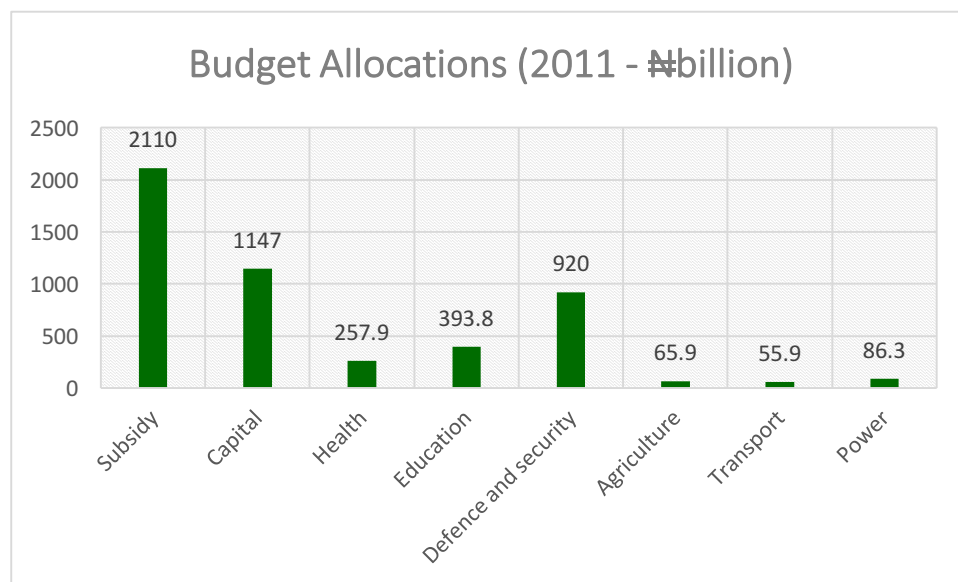
of subsidy payments generally reflects the level of crude oil prices, the application of the price modulation system meant that subsidy expenditure was higher in 2016, even though crude prices were higher in 2017. Price modulation was in place for a longer period in 2017 than in 2016.

Further analysis by NEITI would show that the amount that Nigeria spent on subsidy since 2005 (excluding 2022) is equivalent to the entire budget for health, education, agriculture, and defense in the last five years, and almost the capital expenditure for 10 years between 2011-2020. In 2011, the subsidy expenditure was almost two times the capital budget for the same year.

It was more than double the budget for **defense and security**, more than five times that for **education**, eight times the budget for **health**, twenty-four times that of **power**, thirty-two times the expenditure on **agriculture**, and thirty-eight times the allocation to the **transport** sector, including transport infrastructure. In fact, spending on subsidy for that year surpassed the budget for all six sectors put together. Therefore, Nigeria’s inability to make progress in these sectors, especially power, can be attributed to the subsidy burden.

At its peak in 2011, subsidy expenditure was double the total capital expenditure and dwarfed allocations to all critical areas of the economy. This is immediately visible in Figure 3 below.

Figure 3: Sectoral Budget Allocation - 2011



Source: Budget Office of the Federation

Method and process for determination of subsidy to be paid on petroleum products

In the beginning, government paid subsidy on petroleum products by selling crude oil to local refineries below market price. With imported fuel, increases in oil prices were met with a proportionate increase in the amount of subsidy paid by the government on the imports, while retaining domestic retail prices. Government would estimate the demand for petroleum products, compare it with output from the refineries, then import and pay subsidy for the difference. This process was managed by the Nigeria National Petroleum Corporation (NNPC)¹².

In 2005, the government announced that payment of subsidy would be managed through the Petroleum Support Fund (PSF) scheme. Subsidy on PMS¹³ was determined as the difference between the Expected Open Market Price (EOMP) and the retail price at the pump.

The two main drivers of these costs were global oil prices (as changes in imported products and freight costs often reflect underlying crude prices) and the US\$ to Naira exchange rate. The pricing template was denominated in Naira, while the cost of product and freight was financed in US\$. It was computed daily and published by PPPRA at the time¹⁴. (See box for cost elements of PSF pricing template).

During this regime, there were periods of under- or over-recovery of products cost. Under-recovery occurred when the landing cost of products was higher than the approved ex-depot price. During the period of under-recovery, marketers were paid the difference in the landing cost of products and the government-approved ex-depot price. Over-recovery on products occurred when the landing cost of products was lower than the approved ex-depot price, marketers would therefore pay back into the Fund. This process involved several agencies of Government – PPPRA, DMO, CBN, OAGF, and NNPC.

¹² NEITI

¹³ Note that AGO (diesel) and DPK (kerosene) had been fully deregulated by this time).

¹⁴ See Appendix 1 for sample pricing template for a day in 2016

Basis for computation of Expected Open Market Price of petroleum products under the Petroleum Support Fund.

1. Gasoline Price - on the basis of Platts (FOB) quote and FOB Rotterdam Barge as reference spot market.
2. Freight Rate - average cost of transporting 30kt cargo from North-West Europe to West Africa.
3. Lightering Expenses - transshipment of imported products from mother vessel to daughter vessel.
4. NPA statutory cargo dues and related expenses.
5. NIMASA statutory cargo dues.
6. Jetty Throughput Charge - tariff paid for use of facilities at Jetty.
7. Storage Charge - charges for product storage and related charges.
8. Financing - cost of funds utilized for the transaction.
9. Wholesalers Margin - allowable margin for suppliers of products into storage tanks.
10. Admin Charge - statutory collections for downstream commercial regulation.
11. Transporters Allowance (NTA) - Allowance for local transportation.
12. Retailers Margin - Allowable margin for retailing of petroleum products.
13. Bridging Fund - statutory provision for ensuring uniform pricing nationwide.
14. Marine Transport Average (MTA) - fund for transportation of PMS to floating mega stations in Riverine areas.
15. Naira/USD Exchange Rate.

Source: NEITI Annual Industry Reports

The Petroleum Support Fund regime ended in December 2015. No appropriation was made for subsidy in 2016 and a Price Modulation Mechanism (PMM) was introduced. The idea was to **adjust** the pump price of PMS in line with prevailing market fundamentals. Where there are **savings** during a low-price situation, the saved funds are used to mitigate shortfalls in periods of high market prices. The costs were still being computed by the PPPRA and debt notes were being issued by the DMO.

All this occurred at a time when the Nigerian economy was in dire straits, a sharp decline in global commodity prices beginning in 2014 impacted the Nigerian economy which is very reliant on revenues from the oil and gas sector. The spot price of Nigeria's reference crude fell from a peak of US\$114.17 per barrel in June 2014 to US\$63.19 in December 2014 to as low as US\$48.82 per barrel in 2016. By 2016, the economy was in a recession for the first time in decades.

By May 2016¹⁵, being the only importer of PMS, NNPC began to deduct from proceeds of the sale of domestic crude **without recourse to the PPPRA** during periods of under-recovery. This has continued to date.

Source and process of financing products subsidy in Nigeria

Over the course of subsidy administration, different systems have been adopted in terms of how subsidy payments are made, in what form they are made, and the institutions that received and administered the payments. Identifying these systems helps to understand how the burden of subsidy has been borne by the different tiers of government, and how this may have affected government fiscal regulations and ability to deliver key projects in terms of infrastructure.

(i) Federation funds

For the most part, the burden of financing subsidy on petroleum products has been borne by the three tiers of government – federal, state, and local governments. At first, subsidy was financed through the sale of crude oil to local refineries below market price. This had the effect of reducing revenue to the three tiers of government in the proportion of the subsidy ratio. Data shows that the subsidy on domestic crude volume was 35.7% in 1973, 2% in 1978, 65.5% in 1980, and 86.8% in 1988.

Data from NEITI's reports also show that there were deductions from crude oil proceeds by NNPC to offset subsidy payments during the years that the PSF operated.¹⁶ During the period also, deductions were also made from the Excess Crude Account (ECA), which funds belong to the three tiers of government. the ECA is originally meant to be a savings fund for the three tiers of government. Over time, government began to withdraw funds from the ECA when Nigeria cannot meet revenue targets set in the budget.

(ii) Federal government funds

Under the Petroleum Support Fund regime, subsidy payment was also made through the federal government budget.¹⁷ However, it is important to point out that there are

¹⁵ NEITI 2016

¹⁶ NEITI established for the first time in its 2005 audit report that subsidy bill of N315 billion was approved by the president and deducted from the sale of domestic crude proceeds.

¹⁷ See PPPRA Report (2008): Report of the Administration of the Petroleum Support Fund (PSF) January 2006-July 2008.

established cases when payment of subsidy from proceeds of the sale of crude oil was appropriated in the federal government’s budget.

(iii) Funds from subsidy over-recovery

Over-recovered funds are savings/payments made into the PSF account when pump prices exceed products cost plus retailers’ margin. However, the value of over-recovered funds is small compared to the total subsidy bill during the PSF regime, hence payments were still made by the three tiers of government into the PSF to finance the subsidy bill.

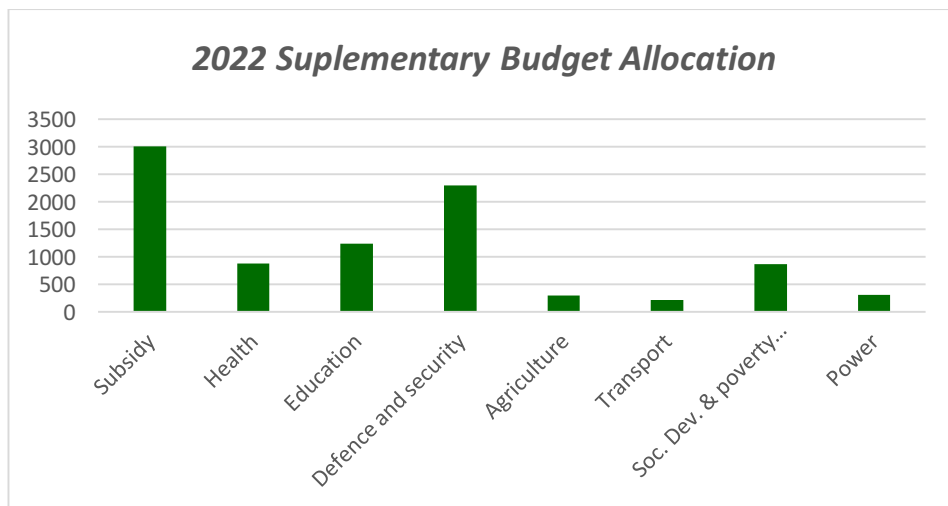
Costs beyond financing subsidy

It has been established in this paper that N13 trillion or \$74 billion has been expended on subsidy in the last 17 years. This covers one-third of the subsidy period for which systematic data is available. Also, the financing cost is only one component of the cost of subsidy. In Nigeria, the overall economic cost of implementing the subsidy policy is found within and outside the petroleum industry. Some of these costs are discussed briefly.

(i) Opportunity cost

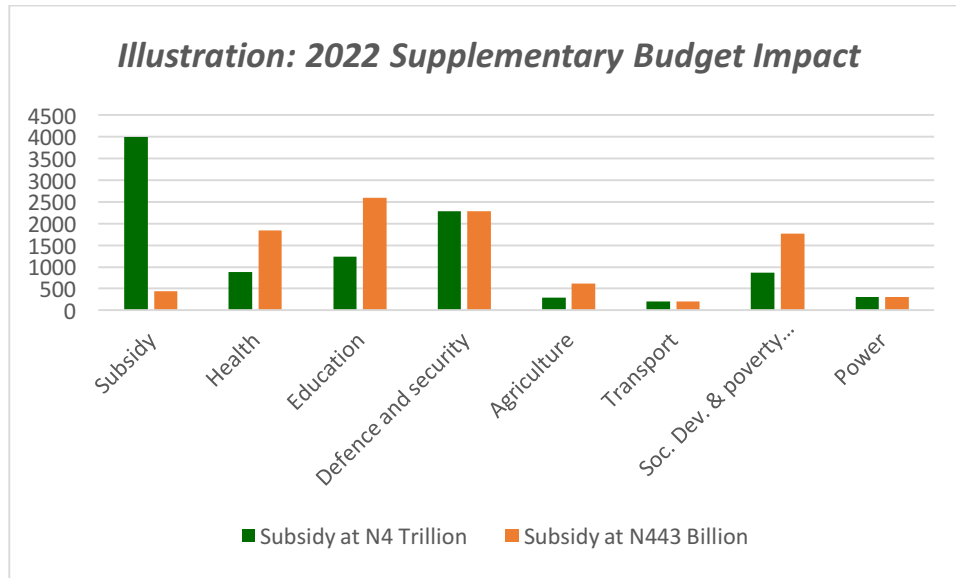
An appropriate place to begin the opportunity cost assessment is the related provisions of the 2022 budget. In order to accommodate the additional subsidy budget, government had to slash the allocations for basic health, basic education, and technology infrastructure among others. The impact is illustrated in these two charts.

Figure 4: Supplementary Budget Allocation to Key Sectors



Source: Budget Office of the Federation

Figure 5 – Illustration of the impact of increased allocation to subsidy in the 2022 budget



The first chart (Figure 4) compares the 2022 subsidy budget with budget allocation across key sectors of the economy. The second chart (Figure 5) shows (in red) how much more funds would have been allocated to health, education, agriculture, and social intervention if the Petroleum Industry Act had been implemented and the subsidy savings allocated proportionately to these sectors.

Translating this macroeconomic illustration to microeconomic impact, the money spent on subsidy since 2005 would construct three 450,000 BPD refineries, add more than 10,000 MW to Nigeria’s electricity capacity, build and equip 3,870 primary health centers with solar-powered boreholes and storage, procure and install 38,700 irrigation units, construct 70,000 blocks of classrooms, build and equip 200 units of 7,500 capacity lecture theatres, construct 23,000 solar powered boreholes with storage, construct and equip 1,548 dialysis centers, and fund 260 top academic research projects in different fields.¹⁸

Further distribution of these projects and facilities shows that each local government would get 5 primary health centers with solar-powered boreholes, 50 irrigation units 90 blocks of classrooms, 30 boreholes, and 2 fully equipped dialysis centers.

¹⁸ Analysis based on 2021 budget data for project costs.

(ii) Deterioration of the downstream sector

At their peak in 1990, Nigeria's state-owned refineries produced 253,000 BPD.¹⁹ However, after 30 years of declining performance, the refineries yielded zero output in 2020. The policy of controlled prices has largely disincentivized private sector investment in the downstream sector.²⁰

Since 2003, the defunct Department of Petroleum Resources has issued licenses for the construction of 45 refineries with a combined capacity of 2.15 million BPD.²¹ Only two of these refineries currently operate in the country. Both refineries have a combined capacity of only 10,000 bpd focusing on the production of diesel which is fully deregulated.

(iii) Declining contribution to GDP

With a share of 65% of government revenue and 90% of exports for most of the post-independence era, the oil sector should dominate, or at least contribute significantly to Nigeria's gross domestic product. Yet the industry contributes less than 10% to the country's GDP. This is because a lack of investment in the downstream sector adds little or no value to the productive sector.

(iv) Losses due to products supply arrangements

As a consequence of the subsidy policy, the country has continued to bear the sole responsibility for product supply. One of the ways that the government has tried to ensure product supply is through alternative production arrangements, namely Offshore Processing Agreements and crude for product exchange with private marketing firms. NEITI audit reports show that Nigeria lost \$2.55 billion between 2010 and 2015. These losses happened due to inefficiencies, mismanagement, and corruption associated with the process.

(v) Losses due to products smuggling

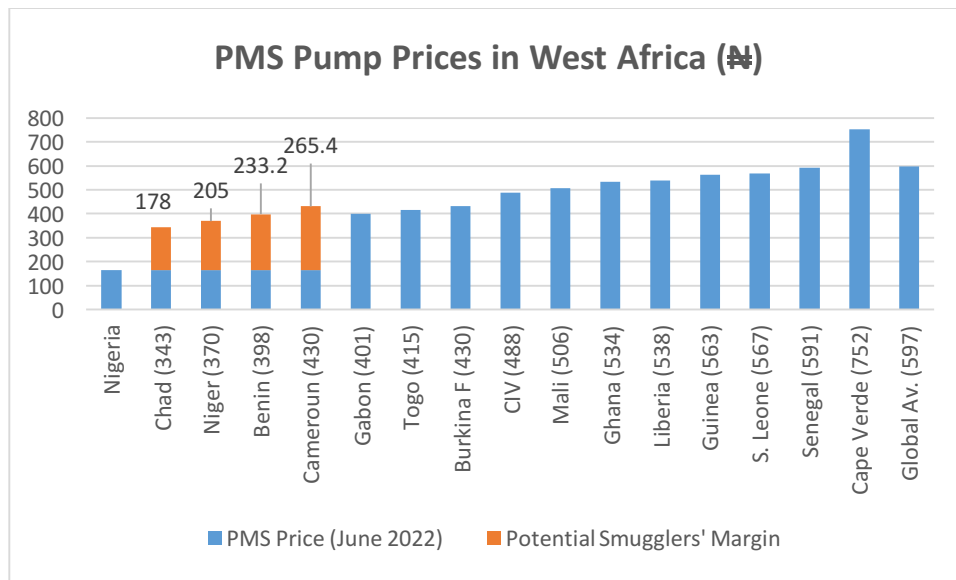
The huge gap between petrol pump prices in Nigeria and its border countries creates a huge opportunity and incentive for smuggling PMS to these countries. NEITI reviewed

¹⁹ See OPEC Statistical Bulletin various years (1960-2020).

²⁰ See section on reasons for failure of subsidy reforms for more detailed analysis.

²¹ See Business Day <https://businessday.ng/energy/oilandgas/article/licenses-for-private-refineries-expire-2020-only-a-handful-will-reach-commissioning/>

evidence from an extensive undercover investigation conducted by the Cable Newspaper Journalism Foundation (CNJF) and published in April 2022 which found large-scale and highly organized smuggling of PMS from Nigeria to Benin Republic, Chad, Niger Republic, and Cameroun²². The chart compares petrol prices across west Africa. Nigeria has the cheapest fuel in the region. Smuggled petrol from Nigeria generates more than 150% profits when sold across Nigeria’s borders.



Source: Global Petrol Prices (13 June 2022)

(vi) Low employment generation

The lack of significant downstream production due to regulated product prices means the sector generates little employment within the oil industry.

(vii) Declining BoP, Forex Pressures, and Naira Depreciation

Petroleum products importation continues to consume the lion’s share of Nigeria’s foreign exchange resources. This is eroding the country’s balance of payments position, as imports continue to outstrip exports and petroleum products continue to keep the import bill high. The ultimate effect is the continuous depreciation of the naira since the mid-1980s.

²² “Undercover: Bribes, Cartel and Conspiracy.... Inside Nigeria’s Booming Petrol Smuggling Trade”. Available online at: <https://www.thecable.ng/undercover-bribes-cartel-and-conspiracy-inside-nigerias-booming-petrol-smuggling-trade>.

(viii) Worsening National Debt

As Nigeria allocates a large share of its revenue to financing subsidy, it continues to borrow to finance projects and provide public goods and services for citizens. Now the country needs to borrow directly to fund subsidy. The Honorable Minister of Finance announced earlier this year that Nigeria will use Eurobond to finance subsidy in 2022.²³ Business Day reports that Nigeria is the only oil exporting nation to use the facility, as high commodity prices have benefited these other countries.

²³ Nigeria will use Eurobond cash to fund 2022 petroleum Subsidy. Business Day, March 16, 2022.

Section 5: Attempts at subsidy reforms

Past attempts by the Nigerian government to carry out subsidy reforms have produced mixed results in the short run but left the subsidy question largely unresolved in the long run. In this section, we x-ray the interventions and attempt to explain the reasons for their failure to achieve the intended outcomes. The interventions are discussed under broad strategies which represent the approaches that have defined government's attempt to solve the subsidy problem.

1. Introduction of regulated market pricing

In 2003, the federal government initiated moves to partially or gradually introduce a pricing system that largely reflects market fundamentals (cost plus margin principle) but is implemented through government oversight. The government established the Petroleum Products Pricing and Regulatory Agency (PPPRA). Its main objectives were to control product price volatility and prevent exploitative practices by private operators while ensuring that the operators earn reasonable profits from petroleum products business.

The agency was to also ensure product availability by ensuring adequate supply and distribution. The PPPRA was to set benchmark prices that would achieve these objectives.

Private operators were allowed to operate refining jetties while private marketers were allowed to import refined petroleum products to supplement government domestic supply and imports. This signaled a change from government as the sole operator to limited participation of private sector players.

Results

- Diesel price was fully deregulated during the implementation of regulated market pricing.
- On the other hand, successive increases in the price of PMS did not take off subsidy on PMS.
- In principle, the controlled deregulation/PPPRA model was intended as a strategy to stabilize product prices. In practice, there was little in the operational mechanism to achieve stabilization. Hence the establishment of the PSF.

Lessons Learnt

- (a) The policy of retaining subsidized prices for refined products and not incentivizing production distorted the market for petroleum products, similar to the practice where NNPC was the sole importer.
- (b) The consequences of the distortion in the market structure of retaining subsidies on refined products and still granting licenses to the private sector to build refining jetties created even more distortions in the industry.
- (c) The policy of allowing private sector imports of refined products and refunding them the difference between the landing cost of the products and government-subsidized rates introduced corruption into the downstream sector that had facilitated collusion among the importers and created artificial scarcity when there was no need for one.
- (d) The situation also created opportunities for grand corruption where politically exposed persons saw the loophole created by this defective system and moved in to seize the rent opportunity it created.
- (e) There was a lack of transparency in the records of imported refined products.
- (f) Supply claims and associated costs to the government were, more often than not, contrived. The government had lost billions of dollars through this opaque process.

2. Price Stabilization Mechanism

The Petroleum Support Fund was designed as a stabilization fund to accumulate savings during the periods when the pump price is higher than the ‘market’ price and then use the savings to offset the difference when the pump price fall below the ‘market’ price. For clarity, the market price in this regime is the price set by PPPRA that allows marketers to recover cost plus margin.

Hence the PSF was designed to supplement and help implement the PPPRA programme. At best, the system should manage prices without government funding or subsidy. At worst, federal and state governments would periodically contribute to the fund to bridge any funding gap.

The PSF was also designed to “entrench transparency and accountability” in the funding of the subsidy programmes.

Results

Between 2005 and 2015 when the PSF operated, prices of petroleum products were adjusted five times, taking the price from N65 to N87. The period recorded the lowest percentage increase in fuel prices. Three of these price adjustments were actually price reductions. Two out of the three price reductions were reversals of previous price increases forced by popular protests against government attempts to reduce or withdraw subsidy. The third instance of price reduction was effected as a voluntary action by the government following a fall in global prices.

- Prices were only partially stabilized.
- The instances of price increase during the period negate the principle of price stabilization.
- The fact that the government paid significant subsidy during this period shows that the PSF was not largely self-financing as intended. The system could not sustain the subsidy programme. Over-recovered funds were not sufficient to support price increases during periods of under-recovery.
- Instances of reversal of price increase are evidence that the PPPRA could not mitigate public resistance to subsidy reforms, in line with its objectives.
- The voluntary reduction of PMS price by the government from N97 to N87 in February 2012, without any pressure from the public negates the principle of stabilization, undermines the self-financing principle of the PSF, and generally questions the government's actual intentions.

Lessons Learnt

- (a) It is operationally impossible to maintain a stable domestic price for a highly volatile commodity, especially where the controlled price was already low.
- (b) There is a political element to the subsidy question which has to be dealt with.

3. Partial Subsidy Removal

Partial removal of subsidy through periodic price increases have predominated regimes' approaches to subsidy reforms. Most price increases/partial removal have occurred either as a first course of action by the government or as a compromise position with labor and civil society.

Results

PMS price increase has happened 28 times since government has been trying to address the subsidy problem.

- The fact that the subsidy bill remains high for the government shows that these repeated increases have done little to solve or manage the problem.
- The subsidy bill would reduce momentarily just following a price increase, then return to previous levels, or even worsen.
- Despite more than two dozen price increases, the gap between market and pump prices has not closed. In reality, for the most part, it has widened. For instance, between 2012 and 2022, the pump price of PMS increased by 70%, from N97 to N165. But in reality, Nigerians are actually paying 22 cents less for one liter of PMS than they paid in 2012, representing a 35% decline in actual pump price.

Lessons Learnt

- (a) Subsidy bill remains high despite several price increases because, over time, price increases may only be dealing with economic fundamentals, like currency depreciation, other than the price of fuel.
- (b) Partial subsidy withdrawal does not solve the problem; it compounds it in the long run. It also produces the same inflationary effects for which labor and civil society normally oppose subsidy removal. Yet, the economy does not reap the benefits that would have resulted as compensation for subsidy withdrawal.

4. Full subsidy removal

Three of the previous price increases were attempts by the government to fully remove subsidy – 1993, 2012, 2016, and 2020. The first two were unveiled in budget broadcast speeches by the heads of government. The third was through a Price Modulation Mechanism to ‘deregulate’ but allow prices to frequently change in line with market conditions but under the guidance of the government (PPPRA). The 2016 policy allowed independent marketers were allowed to import and fully recover their costs plus margin according to the PPPRA pricing template.

Results

- 1993 and 2012 failed to achieve full subsidy removal due to strong opposition from labour and civil society.
- Partial withdrawal was achieved as compromises forced the prices back down, but above the initial prices by 364% and 49% respectively.
- Both governments in 1993 and 2012 set up the Petroleum Trust Fund (PTF) and the Subsidy Reinvestment Programme respectively to spend the revenues from the increases on critical infrastructure and social safety net for citizens.
- 2016's price modulation briefly achieved complete subsidy removal when the price of PMS was increased in May 2016 by 67%.
- Other marketers failed to participate actively in the programme, and NNPC resumed its role as the sole importer of petroleum products.
- NNPC continued to deduct from crude oil sales to finance subsidy. Hence government did not follow through with subsidy removal.
- Price Modulation was reintroduced in 2020. Prices moved up and down (four times) within a single incremental band of 10-15%. Prices were reviewed monthly. Consecutive 2 months of price reviews brought the price down by 17%. The next four price reviews raised the price again by 33%.
- By the next review, the price would have gone up for the fifth consecutive month. The pricing template for that month published by PPPRA showed a proposed price of N212.6, crossing the N200 mark for the first time. But the policy was suspended at that point even though the percentage increase was no more than 29%.
- Again, for a brief (few months) period, complete subsidy removal was achieved.
- As a result, subsidy bills in 2016 and 2017 dropped significantly.

Lessons Learnt

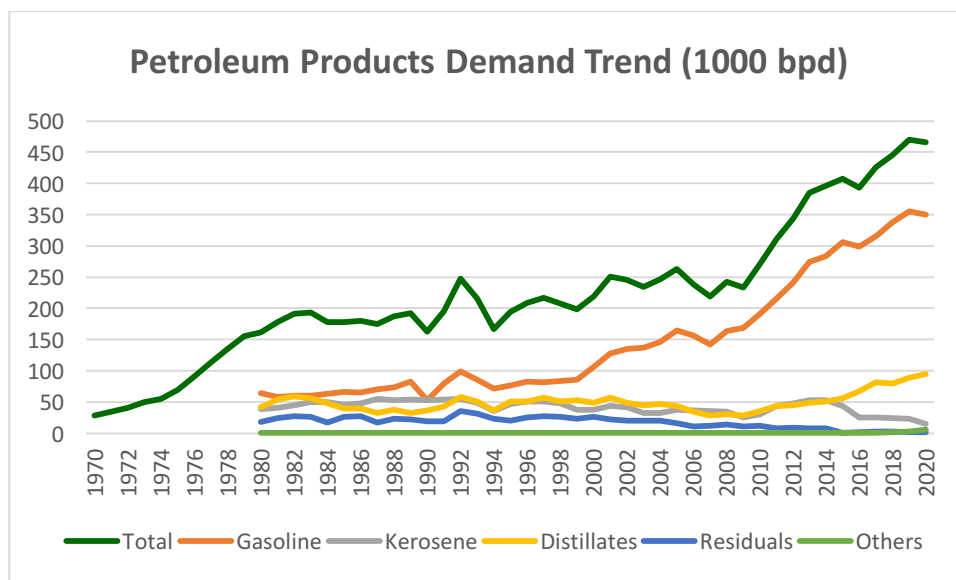
- (a) The establishment of SURE-P was both a social intervention as well as an incentive strategy for public support. It failed to assuage public concerns like all other attempts at comprehensive subsidy reforms. The general reasons for resistance to subsidy removal are discussed more extensively in the next section.
- (b) In the 2016 price modulation system, independent marketers faced significant challenges in sourcing foreign exchange to finance importation. This led to the NNPC assuming the role of sole importer of petroleum products.

Subsidy reforms in Nigeria: A general assessment

The past attempts by the government to reform the subsidy policy have yielded two notable, though limited, milestones. In 2004, the government successfully removed subsidy on diesel oil through a phased process carried out in line with oil sector reforms at the time. Twelve years later, Nigeria achieved another success with the complete removal of subsidy on kerosene oil in 2016. This time, removal of subsidy on kerosene was achieved at the same time that government introduced the price modulation regime.

However, these successes have not significantly reduced the subsidy burden as PMS demand account for the lion’s share (more than 75%)²⁴ of petroleum products consumption in the country.

Figure 6 – Petroleum Products Demand Trend



Source: OPEC – Annual Statistical Bulletin

The graph above shows a significant correlation between product subsidy and product demand. Subsidy has largely fueled PMS consumption which has risen exponentially in the past 20 years and further compounded the subsidy problem.

²⁴ Data extracted from OPEC Statistical Bulletin Various Years.

The failure of previous attempts to end PMS subsidy is traceable to reasons that are historical and psychological, just as they can be attributed to approach and strategy. Some of these reasons are discussed below.

i. The lingering boom mentality

Firstly, because subsidy policy was birthed in a period of unprecedented oil windfall, the practice has been sustained by a boom mentality that has doggedly refused to accept how reality and key indices have changed over the course of 50 years. In that time population has tripled and demand for subsidized products has multiplied seven-fold. Yet, crude oil production and export have declined both in absolute and relative terms. Yet proponents of subsidy have failed to accept the reality that subsidy is no longer sustainable.

ii. Perception of subsidy reforms as international development finance agenda

The national debate on subsidy removal first started with the austerity measures introduced in 1982 when crude oil prices fell sharply for the first time from their 1980 peak level. The austerity measures that followed, and the structural adjustment measures that came later in 1986, were largely prescriptions of development finance institutions led by the IMF. To the extent that subsidy removal became associated with a neo-liberal agenda and not a product of local/national consensus among stakeholders, social activists, organized labor, civil society, and the media became natural opponents of deregulation.

iii. Role of ideology

To the extent that the subsidy debate was dominated by opposing ideologies, the *fatal* consequence was that the subsidy removal became an object of ideological contestation rather than a subject of rational economic discourse. Hence there has been no meaningful resolution of the subsidy issue.

One clear evidence of this largely ideological motivation is the fact that labor and civil society have been happy to accept a 364% increase in price that still retained some subsidy on PMS while rejecting a smaller increase of 117% or more recently, a 33% increase that would have resulted in total subsidy removal. Similarly, opponents of subsidy removal seem to have no problem with the same inflationary impacts of price adjustments, as long as the inflationary impact does not result from complete removal of subsidy.

iv. Weak Impact Mitigation Strategy

Except in a minority of cases, past proposals by policymakers for subsidy removal have not been preceded by a rigorous assessment of impact, including the nature and size of the impact on citizens. The result has always been that the working class, being apprehensive of the impact of subsidy removal on their lives and livelihoods, have always mounted passionate opposition to these attempts by the government to remove subsidy. The protests and strikes that have followed usually caused government to reverse price increases.

v. Alternative propositions based on faulty premises/assumptions

From a reformist perspective, the starting point of the argument for subsidy removal is that the policy would address the problems of inefficiency and corruption typically associated with subsidy regimes, especially in developing countries. In truth and in Nigeria's context, the removal of subsidy is necessary but not sufficient to deal with the perennial problems in the downstream sector. Continually assuming that it has produced subsidy removal proposals that are not holistic.

This weakens the arguments of deregulation policy advocates. On the other hand opponents of subsidy removal have also argued that government should fix or build new refineries as a condition for ending subsidy. But the two variables are not positively correlated. First, much of the revenue from the sale of domestic crude goes into payment for subsidy. Less than 30% is available for maintenance of oil facilities. Hence what is spent on subsidy cannot be available for the kind of complete overhaul required to make the refineries work efficiently or to build new ones. And product subsidy does not encourage private investment in local refineries.

vi. Approach and strategy

Like every other deregulated market, prices of petroleum products can go up or down depending on the direction of change in input (crude oil) prices. It means that consumers can pay less than the controlled price when crude oil prices fall as happens regularly. However, subsidy removal is often associated with increase in product prices. This notion has been fueled largely by the fact that government has attempted to remove subsidy only during periods of high crude oil prices, which has inevitably translated to higher prices of petroleum products. Naturally, any announced intention of price increase has precipitated intense opposition to subsidy removal. In 2016, and later in 2020, attempts were made to remove subsidy without an express increase in the price of PMS. However,

the initiatives were short-lived both times largely because full deregulation did not take place. Because government was still wholly saddled with product import and supply meant that government was held responsible for the price increase that followed the fall in prices.

vii. Wrong notion about the distribution of burden and benefits of subsidy removal

Much of the debate around the subject shows that there is a general misconception about the distribution of the burden and benefits of subsidy and its removal. Subsidy on petroleum products is promoted as seen to benefit mostly the poor and that its removal serves only the interest of the government. This is largely untrue, or at least misleading. Evidence shows that on one level, subsidy especially on PMS benefits the wealthy more than the poor. On a larger level, the burden of subsidy is actually borne by citizens who are made to bear the burden of an expenditure for which they are not major beneficiaries.

Key Findings

Analysis of evidence and discussion of the salient issues of petroleum product subsidy in Nigeria leads to the following findings:

1. Petroleum subsidy was introduced 50 years ago as a temporary intervention to reduce the impact of the sharp rise in global prices due to the middle east crisis.
2. Subsidy on petroleum products and other consumer goods classified as “essential commodities” was sustained and financed by a huge oil windfall (boom) that occurred during the first ten years of the government’s subsidy programme.
3. Rapid population growth and expansion in economic activities over several decades have created an unwieldy subsidy burden for the economy. During the same period, Nigeria’s earning capacity from crude oil has declined in relative and absolute terms, further compounding the problem.
4. Subsidy expenditure is increasingly diminishing revenue remittance to the federation account. It is undermining the capacity of the federal, state, and local governments to allocate resources to critical social services sectors like health, education, agriculture, power, and infrastructure.
5. The operation of subsidised prices for petroleum products virtually killed the downstream sector because fixed prices have discouraged investments in refineries. Low productivity in the downstream sector weakens the petroleum sector’s contribution to Nigeria’s GDP. It also worsens the country’s foreign exchange problems as petroleum products imports account for the lion’s share of Nigeria’s forex needs.
6. Despite these huge costs, the evidence does not support the notion that the poor are the main beneficiaries of fuel subsidy. Rather, data show that the middle and upper classes derive greater material benefits from the government’s subsidy policy.
7. Opposition to subsidy removal has stemmed from a poor understanding of the underlying factors as well as public distrust of the intentions of governance institutions.
8. Past unsuccessful attempts to end subsidy has focused on price increase rather than deregulation.
9. Despite the huge cost incurred on subsidy by the government, subsidized fuel is still sold above the regulated price across Nigeria. A nationwide field survey

conducted by NEITI shows that petrol sells at the regulated price of N165 in only two of the thirty-six states in Nigeria. The product sells above N165 in 34 states except in state capitals, and only in retail outlets operated by major marketers, where supply is not always guaranteed. In at least half of the states, PMS sells for N200 or higher in most parts.

Conclusion

There is little doubt from the findings that subsidy on petroleum products needs to be reevaluated. For one, the parameters that existed half a century ago when it was designed and executed are almost unrecognizable today. It is obvious from the evidence that the policy has produced far more and greater effects beyond the financial cost of paying the difference between the market price and the regulated price of fuel. Most of these effects were not anticipated when subsidy was first introduced. This is because the circumstance of its design and execution did not suggest or foresee that it would be a long-term policy.

While Nigerians have benefitted substantially from paying lower prices for petroleum products over the years, the costs and consequences have been colossal, and can no longer justify momentary utility derived from the consumption of a fading resource. From the findings, Nigeria started facing problems with subsidy implementation after only one decade of implementation, when the base indices began to change. Since then, for the next four decades, every administration – military, civilian, interim, elected – has confronted the problem, some at their regime’s expense. This should convince ALL genuine stakeholders that the problem is real and serious. It has also refused to go away, and the costs are mounting.

As the evidence shows, the problems confronting the subsidy policy are deeply embedded within the concept and operation of the subsidy itself. Therefore, seeking solutions outside confronting the subsidy phenomenon directly would produce the same fruitless and costly outcomes that have dogged attempts to solve the problem for the past 40 years.

The options set out in the next session therefore reflect this reality. They are also open to alternative propositions that may offer opportunity, however slim, to Nigerians whose lives and livelihoods depend on PMS subsidy.

Recommended Options

Given the findings of this paper and the urgent need to address the subsidy burden on the economy, we strongly recommend the following seven policy options for government's consideration.

1. *Initiate gradual but sustained adjustment of petrol pump price*

Gradual but sustained adjustments of petrol pump price are highly recommended. Given that the increasing subsidy bill continues to diminish the amount of funds available to provide critical public social services, especially in the areas of social infrastructure like health, security, education, etc. to citizens, all stakeholders, including labour and civil society, should engage with government towards a marginal adjustment of the current pump price of PMS. This adjustment will reduce the subsidy burden, increase funding of the budget, cut the budget deficit and reduce borrowing to fund the budget. The gradual adjustments should be sustained until subsidy is eliminated over time.

In the implementation of this recommendation, two factors should be considered in determining the size of the price adjustment. One of these is that the adjustment should be significant enough to influence the basic indices, but not too large as to create hardship for the poor.

2. *Accelerate action on refineries' rehabilitation*

The Nigeria National Petroleum Company should fast-track the ongoing rehabilitation of the government refineries to boost domestic supply of petroleum products. Given the important role that product supply and availability issues have played in the subsidy debate, For the purpose of transparency, there should be regular public communication and updates on the status of ongoing refinery rehabilitation. On their part, other stakeholders particularly the media, labour, and civil society should be encouraged to embark on regular visits to the refineries to ascertain the level of progress to ascertain the feasibility of projected completion timelines. This would enable all parties to have a common understanding of the practical issues on product supply and collaborate with relevant institutions towards addressing the subsidy burden. Building public trust and ownership is key.

3. Initiate deliberate policy incentives to encourage private investment in refineries

Deliberate policy incentives should be given to two major refineries currently under construction in Nigeria. These are the Dangote refinery located in Lagos and the BUA Group refinery in Akwa Ibom State. This is without prejudice to previous support that the government may have given to the refineries. Completion of these projects has become a national priority to free Nigeria from the burden of product importation.

Government should therefore show more than a passing interest in the completion of the projects. The incentives should include concessionary granting of special loans, tax rebates, necessary waivers, and special attention to create access that allows little or no bureaucracy in matters concerning the completion of these projects. Generally, there is an urgent need to put in place clear incentives to incentivize private sector investment in the downstream sector. This may include streamlining of guidelines and permits for the establishment and operation of refineries, and amendment of relevant legislation by the legislature. NEITI believes that the outcome of these incentives will guarantee the long-term success of deregulation of the downstream sector.

4. Sustained policy initiatives on PIA implementation

Implementation of the PIA should be pursued with greater courage, sense of mission, and precision. The implementation committee should without further delay unveil a national timetable for full implementation. All the institutions created by the PIA should be encouraged to take off with the independence and responsibilities provided by the new regulations. Measures should be taken to ensure that provisions of the PIA are implemented without further disruption. Investors require policy stability, a reliable legal framework, and sustainability to make investment decisions. Frequent policy reversals whether in whole or in part should be avoided.

5. Commission special report on PMS consumption

Government should commission a special report on Nigeria's daily consumption of PMS to ascertain the country's daily PMS needs. The information on daily PMS

needs is key for purposes of planning and implementation of the recommendations in this brief. NEITI observes that there are discrepancies in current volumes recorded by different agencies in the petroleum sector.

6. Implementation of welfare and interventionist programs

Part of the proceeds should be deployed to increase transport allowance for workers on grade levels 1-7 and provide public transportation support to the vulnerable. In managing this situation, transparency and accountability built on effective communication are required to build public trust. The implementation of welfare and other interventionist programmes should be sustained. Within this period, government, through the ministries of Finance, Transportation, Investment, Trade and Industry, establish a functioning mass transit system in partnership with private sector operators with proven track records in public transport service delivery.

7. Stringent sanctions for criminal activities in the oil and gas sector

Government should administer strict sanctions for activities like pipeline vandalism, crude oil theft, product diversion, and any form of collusion between state and non-state actors in the oil and gas sector. Even when the country attains significant domestic refining capacity as recommended in this policy paper, actions like crude oil theft and pipeline vandalism undermine Nigeria's ability to produce enough crude to feed local refineries. In order to achieve sufficient domestic refining that would eliminate the need for fuel importation, therefore, government should take these measures to ensure Nigeria's self-sufficiency in production of crude and petroleum products. This will not only boost the downstream value chain but significantly strengthen the economy through adequate exports.

Appendix
PETROLEUM PUMP PRICE ACROSS NIGERIA (₦)

S/N	STATE	PRICE(STATE CAPITAL & MAJOR MARKETERS)	OTHER LOCATIONS (STATE AVERAGE)
1.	ABIA	180	N245
2.	ADAMAWA	190	N250
3.	AKWA-IBOM	180	N250
4.	ANAMBRA	180	N243
5.	BAUCHI	189	N230
6.	BAYELSA	180	N245
7.	BENUE	180	N285
8.	BORNO	180	N300
9.	CROSS-RIVER	180	N200
10.	DELTA	180	N235
11.	EBONYI	180	N218
12.	EDO	180	N245
13.	EKITI	180	N280
14.	ENUGU	180	N220
15.	GOMBE	180	N260
16.	IMO	180	N250
17.	JIGAWA	180	N285
18.	KADUNA	180	N260
19.	KANO	180	N270
20.	KATSINA	180	N265
21.	KEBBI	187	N270
22.	KOGI	180	N250
23.	KWARA	180	N270
24.	LAGOS	169.90	N240
25.	NASSARAWA	180	N265
26.	NIGER	180	N270
27.	OGUN	180	N220
28.	ONDO	180	N265
29.	OSUN	180	N250

30.	OYO	180	N250
31.	PLATEAU	180	N275
32.	RIVERS	180	N220
33.	SOKOTO	180	N270
34.	TARABA	180	N255
35.	YOBE	180	N300
36.	ZAMFARA	180	N270
37.	ABUJA	180	N260

Source: NEITI Field Survey

PUMP PRICES OF PETROL IN WEST AFRICA⁺

Country	PMS Price (N)	Potential Smuggler's Margin(₦)
Nigeria	180	
Chad	550	370
Niger	370	190
Benin	462.233	282.233
Cameroun	449.243	269.243
Gabon	431.416	251.416
Togo	497.789	317.789
Burkina F.	533.345	353.345
Cote d'Ivoire	551.123	371.123
Mali	630.134	450.134
Ghana	565.168	385.168
Liberia	533.455	353.455
Guinea	609.300	429.3
S. Leone	506.961	326.961
Senegal	635.919	455.919
Cape Verde	617.130	437.13
Global Average	597.4	

Source: NEITI Field Survey/Global Petrol Prices

the 1990s, the number of people in the world who are undernourished has increased from 600 million to 800 million (FAO 2001).

There are a number of reasons for this increase. One of the main reasons is the increase in the world population. The world population is expected to reach 8 billion by the year 2025 (UN 2001). This increase in population is expected to be concentrated in the developing countries, where the population is already growing rapidly.

Another reason for the increase in undernourishment is the increase in the number of people who are living in poverty. The number of people living on less than \$1 per day is expected to increase from 1.1 billion in 1990 to 1.5 billion in 2025 (UN 2001).

There are a number of factors that contribute to poverty and undernourishment. One of the main factors is the unequal distribution of income. The rich countries have a higher per capita income than the poor countries, and this leads to a higher standard of living and better access to food and other resources.

Another factor is the lack of access to land and other resources. Many people in the developing countries do not have access to land or other resources that they need to produce food for themselves and their families.

There are a number of ways in which we can reduce the number of people who are undernourished. One of the main ways is to increase the production of food. This can be done by increasing the use of fertilizers and pesticides, and by improving the efficiency of the agricultural sector.

Another way is to reduce the number of people who are living in poverty. This can be done by increasing the minimum wage, and by providing social services such as education and health care.

There are a number of other ways in which we can reduce the number of people who are undernourished. These include increasing the number of people who are employed, and increasing the number of people who are able to access food and other resources.

It is clear that there are a number of ways in which we can reduce the number of people who are undernourished. However, it is important to note that these ways are not mutually exclusive, and they all need to be implemented in order to make a significant impact.

There are a number of challenges that we face in implementing these ways. One of the main challenges is the lack of political will. Many governments in the developing countries are not willing to implement the reforms that are needed to reduce poverty and undernourishment.

Another challenge is the lack of resources. Many of the ways in which we can reduce the number of people who are undernourished require a significant amount of money and other resources. However, many of the developing countries do not have the resources that they need to implement these ways.

There are a number of other challenges that we face in implementing these ways. These include the lack of access to land and other resources, and the lack of access to education and health care.

It is clear that there are a number of challenges that we face in implementing these ways. However, it is important to note that these challenges are not insurmountable, and there are a number of ways in which we can overcome them. We need to have the political will to implement the reforms that are needed, and we need to have the resources that we need to implement these ways. We also need to have access to land and other resources, and we need to have access to education and health care. If we can overcome these challenges, we can reduce the number of people who are undernourished, and we can improve the standard of living of the people in the developing countries.