

THE END TO FUEL SCARCITY IN NIGERIA IS NOT IN SIGHT THE WAY FORWARD

Hanafi Dele Ibrahim, Akintunde Patrick Adeniran & Lasabi Moses

Department Of Economics, Oduwa University, Ipetumodu, Ile-Ife, Osun State,
Department of Banking and Finance, Oduwa University, Ipetumodu, Ile-Ife, Osun
State, Nigeria

Email: bamidelehanafi@yahoo.com

Abstract: The focus of this paper is to critically look at the causes of fuel scarcity in Nigeria with a view to addressing them. Most of the fundamental causes of fuel scarcity in the country including the following: present refineries are not adequately enough to meet the local demand for fuel. The local production of fuel is not sufficient for local consumption, excessive government intervention in the business of oil, problem of crude oil theft in Nigeria, frequent crude oil pipe lines vandalization, lack of modular refinery, and lack of private interest in the business of oil in Nigeria. Series of boardroom politics in the management of oil business in Nigeria. High level of corruption in the NNPC, turnaround maintenance that did not improve the level of production of oil, diversion of fuel into the neighbouring West Africa Countries, Oil subsidy claims that did not translate to high level of fuel importation into the country, fluctuation in the world market price, OPEC decision that may not favor crude oil production is another factor, Using of wrong template to determine the price of PMS is also another serious factor. In view of these aforementioned problems, suggestions are thereby recommended. All the refineries should be privatized, total deregulation of downstream sector of oil and gas should be put in place, more refineries should be built, alternative sources to PMS should be introduced, licenses should be given to expertise who are ready to build refineries in Nigeria, NNPC account should be audited on daily basis, oil subsidy for genuine oil marketers, outstanding balances for oil marketers should be considered for payment with immediate effect. Modular refineries should be built across the

country, crude oil smugglers should be arrested and jailed for economic sabotage, modern and computerized refineries should be introduced into Nigeria, and fraudulent oil subsidy claims should be arrested and prosecuted

Keyword: *Crude oil, Premium Motor Spirit (PMS), Vandalization, Corruption, Modular Refinery, Refinery, Waver, Concession, Scarcity.*

Reference to this paper should be made as follows: Hanafi Dele Ibrahim et al., (2018), The End to Fuel Scarcity in Nigeria is Not in Sight the Way Forward. *J. of Social Sciences and Public Policy*, Vol. 10, Number 2, Pp. 71-107

INTRODUCTION

Nigeria has four refineries owned by the Nigerian National Petroleum Corporation (NNPC), located in Port-Harcourt, Warri and Kaduna but there are now three. The two refineries in Port-Harcourt built in 1965 and 1989 were merged into one in 1993, with a total refining of 10.500million metric tons per year. The Warri refinery was built in 1978 with a refining capacity of 5.5 million mt/yr. the Kaduna refinery was built in 1980 with a refining capacity of 5.5 million mt/yr. the three refineries have a combined refining capacity of 445000 barrels per day (b/d), which amounts to 70.75 million litres of petrol. The daily demand of petrol in Nigeria is about 60 million liters, meaning we ought to have an excess 10.75 million liters if the three refineries are working to full capacity. In fact, there would be more than enough petrol and an excess of 10.75 million barrels daily that could be exported. Unfortunately, the refineries are producing far below their installed capacity to the extent that they are not even meeting the meager 60million litres needed daily in Nigeria.

Following years of low performance and high turnaround maintenance (TAM) cost, the federal government, wrongly decided to hands off the building and running of new refineries and instead allow private investors to take over. As for the existing refineries, the

immediate past president of Nigeria Goodluck Jonathan administration offered an equity share of 51 percent to the oil industry unions to assuage them. The aim was to privatize the refineries which the unions vehemently opposed. That left the country in quandary. The refineries are not functional in government hands and at the same time not privatized for private sector and this is a self-inflicted pain that Nigerians are living with.

If the truth must be told, despite being a major oil producing and exporting country, Nigeria has not made appreciable investment on refineries. The two refineries built in Port Harcourt in 1965 and 1989 were merged into one in 1993. That of Kaduna was built in 1980. The technology used in building those refineries has changed. The refineries are therefore archaic. Imagine the cars that were used in Nigeria in 1980- Peugeot 504, Volkswagen Beetle, and Lada etc. today, those cars are outdated. Nobody is buying them anymore. Reason is that there are new computerized cars now in vogue. How do you compare a 1980 Peugeot 504 car with a 2017 Nissan Pathfinder or Toyota Land Cruiser? There is no basis of comparison. That is how Nigeria's 1980 refineries cannot compare with the latest computerized refineries in vogue in other countries. No amount of turnaround maintenance will change the obsolete technology of the 1980 refineries the same way no amount of refurbishment will change a 1980 Peugeot 504 car.

Secondly, the total refining capacity of all the three refineries in Nigeria at full capacity is a meagre 445,000 barrels per day. The world's largest refinery, Jamnagar refinery in Gujarat, India, produces 1,240,000 barrels per day. Paraguayan refinery complex in Falcon, Venezuela produces 940,000 barrels per day. South Africa has 6 refineries with combined installed capacity of 626,500 barrels per day. These examples show why fuel scarcity will not end in Nigeria until modern refineries are built by government or private concerns. Depending on importation amounts to punishing Nigerians and nourishing corruption. As it were, government should not hand off

the building of refineries. Private investors should also take up the challenge and let there be steady supply of petrol in Nigeria. Operators of modular refineries are equally welcome and should be supported.

LITERATURE REVIEW

Causes of Fuel Scarcity in Nigeria

The reason why an end to the fuel scarcity is not in sight is that Nigeria is not producing fuel that can service our domestic needs. Virtually everything is imported. The only three refineries in the country are obsolete and out dated. The only solution to the fuel scarcity syndrome is to build modern refineries to produce fuel locally and stop importation. NNPC's claim that there is enough fuel which is being hoarding is mere face-saving. If at all there is fuel, it is imported and not produced in Nigeria. Around the world, how do businessmen deal with a scarce commodity? Fuel is a scarce commodity in Nigeria and those that can bring it have the upper hand. As usual, desperate motorists and citizens who need fuel for their cars and generators are besieging the few filling stations selling the product. Greedy black marketers have capitalized on the situation to hike prices. A litre of petrol sold for N145 is being sold for as high as N250. The black marketers are reaping profit; their usual Christmas and New Year windfall. Unfortunately, Nigerians are used to queuing up to buy petrol under very chaotic situation. Some of the previous scarcities occurred during high price regime or as a result of industrial action by different oil-sector industrial unions. At other times, policy changes like deregulation induced scarcity.

The question is why fuel scarcity reoccurs in Nigeria, even, when there is oil glut in the world market? What could be done to stop the recurrent problem? The cause of the fuel scarcity is systemic dysfunction arising from years to years of mismanagement of the oil sector. The Buhari administration has inherited it and doesn't seem to be addressing it. The absence of functional refineries to satisfy local demand of petrol is the primary cause of fuel scarcity in the country.

Not until there are functional refineries that would put a stop to fuel importation, fuel scarcity will continue to occur, irrespective of who is in power. All hope is now placed on the Dangote Mega refinery at Lekki in Lagos under construction billed to start production in 2019. Nigerians will have a new lease of life once the Dangote refinery kicks off production.

Petroleum Pump Price

Consumer spending is one of the main engines of economic growth, and its trajectory in the months ahead will be an indicator of the Nigeria's economic health. If the current trend continues, average daily spending could break through the benchmark on a routine basis, and thus denote a return to levels that characterized high spending far beyond consumer earning. Growth in spending is a constant, especially in Nigeria with its high ostentatious life-style. Other attitudinal data shows that consumers are still more likely to spend more, while many continue to claim that spending less is the "new-normal" in their lives, consequent upon evident meagre resources. Additionally, Gallup's measure of job creation slipped slightly at the end of last year, suggesting some caution in concluding that the economy is on a straight linear upward trajectory. Owing from the above-painted scenario, but with particular focus on the reason for this article, we should particularly look at consumers' experience in line with petroleum pump price, focusing on the last month of 2017, and going forward. To consumers, generally, the indications from prevalent economic environment and especially with the ramblings about petroleum supply and retail-end pump price uncertainty, portends hopelessness; an experience that indicates disregard from among those trusted for public welfare-focused institutional system management. Panic level among consumers has been aggressively heightened to a dangerous level.

During the military era, petroleum pump price fluctuation was the norm, but that changed appreciate when constitutional government replaced military governance. That change in political leadership

brought hope of a better consumer-experience, based on petroleum products supply, distribution and pricing with all its over-riding influence on consumption pattern in general. Sadly, experience of the recent past is tampering with that level of comfort delicately; seemingly, our politico-economic system seems to disallow regulation, far from the grand rule of constitutionalism; there is no other logical way to explain the system disruption or better still, abuse, targeted at dehumanization its people. In an attempt to bring stability in the sector, the DPR team monitored petrol stations as they dispensed products at official pump-price to the delight of consumers in Akwa and its environs. However, there were reports of sealed stations around same axis, on account of pump-price manipulation. A petrol station around Nanka, Orumba north (same area) in Anambra state was allegedly sealed up by regulatory authorities for same reason. Those who lifted PMS from the NNPC were supposed to sell at N145, and any marketer that fails to comply with the directive are charged non-compliance fee and such stations are possibly sealed. Marketers who fail to show proof that they procured the product at above the depot price unless they did not have excuses to fleece their customers. Despite this entire attempt, reports are that some petrol stations in the country are still tempted to tamper with the statutory instruction of regulated pump-price of N145 per liter; a situation that has made life unbearable for consumers. Petty traders on their part, have also hiked prices on account of hike in petroleum pump price, further compounding consumers' woes. It is all a vicious circle playing out the MULTIPLIER CONCEPT.

Now that this is happening and consumers are at the receiving end, regulatory agencies must be challenged in their role as watch-dogs. They must reflect on their effectiveness, and position to help this country grow, by doing the bits and pieces they can put together individually and collectively. In all of these, the CONSUMER remains the king. Commerce or market is dependent upon consumer well-being; we have always noted the fact that we are all consumers, and

that which comes around, goes around as a rule. Whereas it is logically explainable that the retail trader will depend on the excuse of petroleum pump price increase to hike retail prices, it does not protect him/her from the consequence of that action.

However, consumers can exert their powers to correct market manipulations that constitute consumer rights violation. To begin with, the Consumer Protection Council (CPC) is always ready to act in defense of consumers. So the most-assured first-step for us consumers is to report any form of consumer rights violation to the CPC, without exemption of any market segment or category. Consumers must know they have a ready protection in the CPC, as a start point, if nothing else. And that is the reason of our being at the CONSUMERS' ASSEMBLY; we are positioned and empowered to advocate for consumers. All we need do is take advantage of these opportunities and help brands play according to established rules, and for the common good of us all. Our commercial space will be a better place for us all to progress if we observe the operative rules and regulations... those who take advantage of the slightest opportunity to tamper with petroleum pump-price, are being unkind to us all, including themselves.

Nigeria's refineries lose n4.54b in one month

The Nigerian National Petroleum Corporation (NNPC) has put the losses made by Nigeria's three refineries in the month of August at N4.54billion. NNPC's refineries are Port-Harcourt Refining Company (PHRC 1&2), Kaduna Refining & Petrochemical Company Limited (KRPC), and Warri Refining & Petrochemical Company Limited (WRPC). According to NNPC in its monthly financial report released on Monday, the combined value of output by the three refineries (at import parity price) for August 2017 amounted to 25.10billion while the associated crude plus freight costs, and operational expenses were 21.32billion and 8.41billion respectively. This, it noted, resulted in an operating deficit of 4.64billion by the refineries. NNPC said that during the period under review, the refineries combined capacity

utilization was 9.50 percent with PHRC recording the highest of 33.83 percent.

NNPC stated: "for the month of August 2017, the three refineries produced 95,548MT of finished petroleum products and intermediate product of 53,496MT out of 178,788MT of crude processed at a combined capacity utilization of 9.50% compared to 11.94 percent combined capacity utilization achieved in the month of July 2017. "The deprived operational performance is attributed to KRPC and PHRC downtime during the month under review. The ongoing revamping of the refineries will enhance capacity utilization once completed." It put the total crude processed by the three refineries (KRPC, PHRC & WRPC) in August at 178,788MT (1,310,873.62 bbls), which translates to a combined yield efficiency of 83.36 percent compared with the 224,584MT (1,646,649.89 bbls) processed in July, which translates to a combined yield efficiency of 89.11 percent. Group Managing Director of the Corporation, Maikanti Baru, assured that adequate measures were in place to ensure that motorists have unimpeded access to fuel ahead of the forthcoming end of year festivities. Baru said provision of adequate petroleum products would not only ease transportation, but would also make our roads safer for motorists, just as other consumers too would have no need to hoard highly inflammable products in jerry cans, among others, which may pose as safety challenge to them. "As we speak, NNPC has over two billion liters of petrol, and we want to sustain this level from now on till the end of the year and beyond. This volume would give the country product sufficiency of about 60 days, well above the standard 30 days sufficiency threshold." But despite this we had fuel scarcity in December 2017.

The Last Fuel Scarcity at December 2017

Once again, the nation has gone through another trauma of fuel scarcity at the peak of Christmas and New Year celebrations. It is an annual ritual deliberately visited on hopeless and suffering Nigerians. Fuel is usually available throughout the year but once it is December,

the product disappears as filling stations turn dry and shut down. A blame game then ensues between the NNPC and marketers over who is responsible for the scarcity. It is an irony of fate deliberately visited on hopeless and suffering Nigerians. Usually, the scarcity precedes the plan to hike the pump price of fuel. For example, before the fuel price was increased from N86.50 to N145 in May 2016, there was severe scarcity that lingered for months unending. Nigerians bore the burnt by buying from the black market at the exorbitant price of over N400 per liter. The question is how do we end this annual ritual of fuel scarcity? The simple answer is by producing petrol in the country and ending importation. Consequently, it is unto the government to take necessary action towards encouraging local investment in fuel production. Apart from the highly acclaimed Dangote refinery under construction in Lekki Lagos State government should encourage other small and medium producers. It is time for the much-talked about modular refineries to be encouraged to come on stream. An earlier disclosure by the Buhari administration to integrate the many "illegal" Refineries in the Niger Delta into a more structured modular refinery regime is slow in coming up, which explains why the former private refinery operators are uncomfortable and want something done quickly. This group feels that their source of livelihood is being threatened, as government doesn't seem to be in a hurry to fulfil its promise.

Not long ago, the former "illegal" oil refinery in Rivers State reportedly vowed to continue their activities in petroleum products until the federal government provides them with empowerment. The artisanal refiners, who are mainly from the Ogoni said they cannot leave their only source of survival until the Federal government provides them with an alternative. The group had disclosed their position in Port Harcourt to the minister of state for environment and chairman, governing council, hydrocarbon pollution remediation project (HYPREP), Ibrahim Jibrin, during a one-day consultative meeting organized by the office of the project coordinator. The ex-artisanal refiners said they can only stop refining petroleum products

“illegally” if the federal government empowers and include them in the remediation process in Ogoni. With nothing else to do after government took away the pipeline surveillance job from them, some of them who are graduates are still in the bush refining; hence, only empowerment would compel them to leave the bush. Nothing is illegal in the real sense. The people own the land, which constitutes the resources. Hence, it is not good to alienate them from what belongs to them, as that would create problems. It is because the people have been so alienated that brought us to this sorry path.

Scientists Reduce Corrosion in Oil Pipelines with Local Biocides

Scientists have effectively reduced corrosion in crude oil and petroleum pipelines using natural and non-toxic biocides to replace imported and toxic versions. A biocide is defined in the European legislation as a chemical substance or micro-organism intended to destroy, deter, render harmless, or exert a controlling effect on any harmful organism by chemical or biological means.

Until now, it is estimated that the Nigerian oil and gas industry loses up to \$765 million yearly to corrosion of oil pipelines. Professor of Petroleum Microbiology and Microbial Biotechnology, Federal University, Ndofu-Alike, Ikwo (FUNAI) Ebonyi state, Dr. Chuma Conlette Okoro, and his team of researchers published their latest work in the journal *Corrosion Science*. The other researchers include: Olusegun Samuel of the department of Marine Biology, University of Lagos; and Johnson of the school of Life Sciences, University of KwaZulu Natal Westville Campus, Durban, South Africa. The researchers led by Okoro investigated the effects of some biocides on Methanogens associated with pipeline corruptions. They wrote: “the crude oil transporting pipeline showed higher methane production (60 percent) and corrosion rate (42 percent) than the water transporting pipeline. Higher concentrations of biocide (0.7 percent tetrakis-hydroxymethyl phosphonium sulfate) and 40mM nitrite were required for both pipelines to sufficiently inhibit Methanogenesis and corrosion rates. A sudden increase in corrosion

rate happened only in samples that produced higher than 1.5 mmole of methane. Pyrosequencing surveys show dominance of acetotrophic, hydrogenotrophic and methylotrophic methanogens in the samples. The methane productions and corrosion rates were strongly correlated under all the conditions. Methanogenesis or biomethanation is the formation of methane by microbes known as methanogens. Pyrosequencing is a method of DNA sequencing (determining the order of nucleotides in DNA) based on the sequencing by synthesis principle in which the sequencing is performed by detecting the nucleotide incorporated by a DNA polymerase. Deoxy ribonucleic acid (DNA) is the genetic material. Nucleotides are the building blocks of nucleic acids. The researchers concluded: the results also show that SRBs did not play an active role in the bio-corrosion episode because their activity and population were low in both samples and pyrosequenced data also revealed near absence of SRBs in both samples. THPS at higher concentrations of about 700 mg/L and above was effective in drastically reducing methane production rate and corrosion rates of samples probably as a result of its weak penetrability into biofilms. It is however expected that combination treatments with either NaCl or nitrite and THPS may improve the efficiency of THPS at lower concentrations and make it cost effective.

Fuel Scarcity: Where Are the Refineries?

The Nigeria oil industry has been planned from birth without conscious efforts at meeting the basic petroleum needs of the people. Nigerian first refinery, Port Harcourt refinery located at Alesa Elame, was built by shell petroleum and British petroleum from 1963 to 1965. The company operates two oil refineries including an old plant per stream day and the new plant commissioned in 1989, which has a capacity of 150,000 bpd.

The Warri refinery was awarded by General Yakubu Gowon to snamprogetti spa Millan, an Italian company in 1975 at the cost of \$478million and commenced operation in 1978. It had the design

capacity of 100,000 b/d. The Kaduna Refinery was awarded by Muritala Mohammed in 1976 and was built by Chiyoda Engineering and Constructure Company a Japanese firm, at the cost of \$525 million and was completed by Obasanjo in 1979. It had two refining streams (50,000 b/d fuels units) and (50,000 b/d lubes, waxes Asphalt plants). The Port Harcourt II Refinery had an installed capacity of 150,000 b/d. both Warri and Kaduna refineries at 125,000b/d and 110,000b/d with the previous makes a total capacity of 445,000b/d as at 1989.

On August 27, 2015 President Buhari approved 65 licences for the establishment of private refineries. That is in addition to the 18 licences former President Goodluck Jonathan approved sometime in 2013. Till date, only Dangote's and Eko Petroleum and Refining Company limited owned by Captain Emmanuel Ihenacho have shown seriousness in building refineries in the nearest future. You may wish to ask, what with a country as the sixth largest crude oil deposit, yet unable to establish ordinary refineries to refine crude oil to meet the daily need of her people? How long shall we continue to export our crude oil to be refined abroad and import same back? What of the capital, job and technical flights and other associated benefit with the refining country? How does Buhari and his minded justify the facts that Premium Motor Spirit (PMS) is sold at N500 to Nigerians as the sixth largest producer of crude oil?

What Should Federal Government do about Nigeria's Ailing Refineries

We have asked the federal government to privatize these refineries. There is no shortcut to resolving this issue. They should privatize them and also deregulate the downstream sector of the oil and gas industry if we must make considerable progress in this sector. There are no shortcuts to solving this problem. With regards to labour concerns about privatization, you need to understand that there comes a time that the government must have to take a stand. When the federal government wanted to privatize NITEL or the

telecommunications sector in general, labour unions cried out against it, when they wanted to deregulate the power sector, labour cried out too. Labour will definitely kick against privatization or deregulation, but you have to consider their greater good and take a stand between pandering to the interest of labour unions and what would be in the country's best interest. Now, we know that these refineries are not working or when they work they do so far below installed capacity. This does not stop those working in these refineries from being paid and given promotion yet the country is suffering. This is a country that is the largest producer and exporter of crude oil in Africa and ironically it is the largest importer of refined products. In fact, it is a shameful thing. So, the government must take a firm stand on these refineries and have them privatized, because we cannot continue like this. We cannot continue to suffer in filling stations, forming long queues, all because we are importing refined products when we can refine these products in Nigeria if our refineries were functional.

The government has no business being in business of oil and it should just sell the refineries off at a good price because what people are simply doing is making money from the government for doing nothing. There are people working in these refineries that are producing less than 10 percent of their installed capacity and they are earning salaries. There are facilities there that are basically useless as they are not working. What we believe is that the government should go ahead and divest its interest from these refineries; sell them to willing buyers who will make them functional again. Usually, when the government does business, that business always fails because government's property is never considered as anybody's property. That is why the world over, everybody is going against the government being in business. Most governments are divesting. The United Kingdom started it and that same thing should happen to our refineries. Unless the government divest itself of the assets, they cannot work because people are using them to make money; they would do turnaround maintenance that never works. Let

businessmen purchase them. But there should be a caveat: the refineries should not be sold to an individual who may end up becoming more powerful than the nation. People could come together as a group or a consortium to buy the refineries and run them profitably. You will find that they will run better. The refineries can be sold to a consortium just like Transcorp Plc which went public. Government can also consider the option of selling them directly to the public. But the value will be very low if they are sold not because these refineries do not have much value. On the other hand, if they want to sell them to an individual, it should be included in the agreement for the sale that the refineries will go public. What the government should be doing is regulating business and not participating actively in business. You don't do something the same way several times and expect a different result. Successive governments have been spending money trying to revive the refineries and it didn't work. This means there is either a force within sabotaging their efforts or the government is just paying lip service to solving the problem. There is need to explore other options for a possible solution. The federal government should consider bringing in private investors to run these refineries. The role of government should be that of regulation and monitoring. The government should retain a percentage for control while the private investors would operate it.

The truth of the matter is that there is no way we can resuscitate the refineries because of the politics involved. A lot of vested interests have come to stay to ensure that the state of the refineries remains the same. The best way out is for the federal government to grant license for the up of functional modular refineries. There are so much entrenched interests controlled by a cabal in the operations of government-owned refineries, so, in that light, they can never work. As it is now, these refineries can just not work because so many people are benefitting from its current state. If you attempt to fix it today-maintenance, it will not work because of the diverse interests and the attendant politics involved. The federal government should

provide funds to the Niger delta states to establish modular refineries or if the funds are available, the federal government should make access to it less cumbersome. It should be devoid of constraints and all what not to enable those interested in setting up refineries to do so.

Government should privatize them and make sure that they give the refineries to tested professionals. They can be given to international oil companies which can be given tax reliefs in exchange for revamping the refineries. They should allow professionals handle the refineries and ensure that the government generates revenue out of it. They should make it attractive enough to attract serious bidders. It will become a win-win situation, they will make profit and the government will make profit rather than for the refineries to remain idle. We have done turnaround maintenance several times and we have seen that this has not worked. When you allow the professionals who are business oriented handle them, they know what they do and how to make their profit. The contract should be straightforward so that the responsibility of each of the parties is clearly defined. One of the thing the government is going to donate as its equity is the fine that the current refineries are not working. Another option is for that government to change the policy in such a way that all international oil companies operating in Nigeria should refine nothing less than 40 or 60 percent of their crude within the country. That will go a long way to improve our local capacity to refine without the government necessarily putting money into it. Last January, we were told that there was an improvement of about 16.7 percent in local refining. We are now doing about 37 percent at January this year according to the report from the spokesman of the Nigerian national petroleum corporation. That shows that we have about 15 or 17 percent improvement. But that is still nothing. How can you be refining 37 percent of your crude locally? If you had given the responsibility back to the international oil companies and the indigenous oil companies, it would have improved beyond this. The policy of ensuring local refining should start with the IOCs to ensure they make the product

available for the local market. That will help greatly. There are some illegal refineries around, government can make huge refineries from those illegal refineries if they are identified, registered and legalized. If they can legalize them, they will make a lot of money from them and the product will be more readily available. They are illegal at the moment because they do not have the necessary permit but the government can look out and fish them out and get them registered. Let them pay the necessary dues and taxes, they will not be earning illegitimate money while the government gets huge revenue from it. The government can allow small modular refineries to process crude. They can team up. Also on a regional basis, the government can put in each region, a refinery that will be managed by the state within that region to process. We are doing about 2 million barrels per day, they can allocate about 40 percent to each region and make sure that they are processed locally. Reports on the losses Nigeria suffered in 2015 through dubious oil swap deals remind us a new of just how much despicable things have remained the same under a government that promised, but has failed, to deliver change. Though an audit by a statutory watchdog exposing the loss of \$723 million pre-dated the Muhammadu Buhari administration, his failure to reform the Nigerian National Petroleum Corporation entrenches its ingrained corporate culture of impunity. He is doing Nigerian a great disservice by allowing the NNPC to carry on business as usual.

A report released recently by the Nigerian Extractive Industries Transparency Initiative was familiar and depressing fare. Though the controversial crude oil swap deals, the country, NEITI said, lost \$723 million (N221.5 billion) in opaque, fraud-prone arrangements to foreign and local firms. Specifically, the report said the losses occurred through the offshore Processing Arrangement that involved the allocation of crude oil to select oil firms and traders, under swap contract terms in exchange for local consumption. OPA was part of an infuriating template that has gone on for too long:

Respite for Nigeria as crude oil hits \$70 per barrel

Crude oil prices rose above \$70 a barrel, signaling that production cuts by the Organization of Petroleum Exporting Countries (OPEC) and non OPEC had helped in tightening supplies. International Benchmark Brent crude oil sold for \$70.13 per barrel during trading hours. Also, the Nigeria Bonny crude oil went for \$69.58 per barrel, far above the country's 2018 budget benchmark of N45 per barrel.

A production-cutting pact between OPEC and non OPEC had helped to boost the prices of crude in the last few months, hitting levels not achieved since 2014. With the new development, Nigeria is to make additional \$25 per barrel. Speaking on appropriate utilization of the country's oil revenue, the Director General of the Lagos chamber of Commerce and Industry (LCCI), Muda Yusuf, noted that there were need for the Federal Government to mobilize private sector capital into the infrastructure space. This, he said, should include a broad spectrum of policies—tax, monetary, trade policy and investment. He stated: "There is an urgent need to save the private sector and investors from the agony of persistent gridlock at the Apapa and Tin-Can ports, which account for over 70 per cent of import and export cargo into the country. The LCCI boss reminded President Muhammadu of his promises to the oil bearing communities of the Niger Delta, urging him to fulfil them. To the NEITE's Director of Communications, Dr, Orji Ogbonnaya Orji, the time for the country to embrace a robust savings culture."Our country's experience over the current and volatility in the oil market has made this decision quite imperative", he said. According to him, under the circumstance, and given the importance of healthy savings as one of the tools for tackling resource curse, NEITI strongly recommend that the federating units especially, the federal and the state governments should seek speedy resolution of all pending cases at the Supreme Court on the constitutionality remittance to the Excess Crude Account (ECA) and the Nigeria Sovereign Investment Authority (NSIA).He said NEITI is of the view that all the oil revenue savings in the ECA and Stabilization Fund should be moved to the Nigeria

Sovereign Wealth Fund. In making this recommendation, NEITI is persuaded by the recent ranking of NSIA by the global Sovereign Wealth Institute Transparency Index, the highest by an African Sovereign Wealth Fund.

NNPC moves to ensure N133.28 ex-depot price for PMS

The Nigeria National Petroleum Corporation (NNPC) has announced the deployment of more depots to enforce the 133.28 ex-depot price of premium motor spirit. The managing Director Petroleum Products' Marketing Company (PPMC), Umar Ajiya, disclosed this in Abuja. He said the deployment, which includes other throughput facilities, became necessary to resolve the price differentials between some of the stakeholders. Ajiya explained that the throughput facilities, along with some of its coastal depots, would go a long way ensuring that marketers access PMS at the approved government price. He said: "As at today, I want to confirm that the NNPC/PPMC has more than 20 days sufficiency both at marine and land depots.

We are still operating 24 hours depots and all NNPC retail outlets to wet the nation with PMS". He maintained that the corporation has adequate supply of petrol, and advised against panic buying. He said the corporation receives between one or two PMS-laden ships per day. According to him, queues were easing out across the country going by the feedback received from the field. He added that most of the filling stations were selling at the approved price of N145 per litre.

Nonetheless, at the public hearing the minister suggested that "non-performance of refineries" was due to factors, which are primarily fraud-related and a lack of holistic maintenance programme. Regrettably, however, the minister did not report what step should be taken to investigate and punish the perpetrators of fraud or to indeed, reduce the degree of fraud in these public refineries, which have, possibly, gulped up more money for serial "Turn around Maintenance" than would probably be required to build new, more

efficient facilities. Inexplicably, therefore, instead of celebrating increasing dollar income from much higher crude oil prices above \$60/barrel (especially when the budget 2018 benchmark is a modest \$45/barrel), with the compliment of steadily climbing reserves above \$40m, the reverse is actually the case, as increasingly higher crude prices have, unexpectedly, induced a landed cost (not pump fuel price) of N171/litre, even when N145/litre remains the regulated selling price. Sadly, subsidy payments in December 2015, have now probably returned big time to haunt him. However, the minister command at the latest public hearing in 2018 that the acute fuel scarcity suffered in December 2017 was primarily the result of major factors such as "diversion of products, low speed of clearing petrol imports from the ports and a lack of sufficient fuel reserve. The disparity between the present actual landing cost of N171/ litre and the current regulated price of N145/litre has resulted a daily loss on N800-900m to the NNPC since October 2016. Consequently, according to the minister, the Executives arm of government "is currently working on modalities to permanently resolve the petrol crisis"

FG lost N84bn to ailing refineries in 11months.

The nation's refineries made a total loss of 84bn from January to November last year, as they continue to operate far below their installed capacity, the refineries are the Warri Refining and Petrochemical Company, Port Harcourt Refining Company, with a total installed capacity of 445,000 barrels per day. Port Harcourt refinery recorded the biggest deficit of 35.58bn, followed by Kaduna (N28.21bn) and Warri (N20.4bn), according to the latest data obtained from the Nigeria National Petroleum Corporation. The KRPC did not process any crude oil from June to November last year; the WRPC was shut down in March, May, June and September, and the PHRC was idle in August and November. The three government owned refineries lost a total of N16.67bn in the third quarter of this year, the NNPC data showed. The NNPC recorded a trading deficit of N6.79bn in November, which is higher than October's deficit of

N410m. The corporation said the drop in the performance was attributable to the increased cost in upstream activities as well as the reduced revenue in the downstream value chain occasioned by high crude oil inventory in refineries due to unplanned operational shutdown of the KRPC and the PHRC, which led to increased loss from the refineries in November.

ARE WE NOW BACK TO FUEL SUBSIDY?

During the early days of the Muhammadu Buhari administration, Nigerians were told to endure the hardship arising from the removal of fuel subsidy so that petroleum products would be available at the pumps at no extra burden to the public treasury. This was also marketed as helping to reduce grand corruption which was prevalent in the oil subsidy scheme. The sum of N145 per litre, being the pump price of fuel, still left marketers with a reasonable margin after deduction of costs. Thus, it worked and everyone seemed to be happy as the Nigerian National Petroleum Corporation and Private Marketers imported and distributed fuel across the federation. This was at a time the naira exchanged to the dollar at about N200 to \$1. When the naira lost so much value against the dollar and moved from N200 to \$1 to the official exchange of N305, (there was even a time during the economic recession that the naira exchanged for almost N500 to the dollar), it became clear that the template used by the administration to phase out subsidy was no longer tenable. Also, with the rising price of crude oil in the international market, it was clear that refineries were buying their crude feedstock at a much higher price than before. As such, they were bound to pass on the higher production cost to the consumers. Yes, increase in the price of crude oil at the international market may be good for Nigeria's public revenue, but we also have to pay for the refined crude which we import and it will now come at a higher price.

Again, the Buhari administration promised during the elections to get the refineries working at full capacity so that we can reduce our import dependence. Three years down the line, the refineries are

either closed or working at less than 10 percent of their capacity. Beyond photo shows and official grandstanding, there has not been any step taken either at the public or private level to build a new refinery and we are still importing virtually all that we need. The only ongoing refinery construction is the Dangote refinery which did not start under this administration. According to the group managing director of the NNPC, Dr. Maikantoi Baru, when he appeared recently at the senate downstream petroleum committee, the sum of N5.122tn was approved as subsidy payments to the NNPC between January 2006 and December 2015, out of which N4.950tn has been received by the corporation leaving a balance of N170.6bn outstanding and due. From this statement, this excludes subsidies approved for private marketers who have been importing refined products during this period. The implication of this is that we have spent so much on subsidies and petroleum importation, more than needed to build refineries that would satisfy our local needs and position us as net exporters of refined products. Pray, what does it cost to build a medium-sized or even large refinery? We are spending a very huge part of our foreign exchange on petroleum imports which put undue pressure on our foreign currency reserves and the value of our naira. Again, we are exporting jobs to those countries that sell refined petroleum to us, as well as missing the companies' income tax that would have been due from local refining as well as the personal income tax from individuals the refineries would have employed. Furthermore, the nation makes itself vulnerable to being shut down through the activities of marketers or any disruption of the oil import system. Since the last quarter of 2017, fuel scarcity and queues have resurfaced across Nigeria. It got so bad that a few days to Christmas in 2017, the country was literally shut down as the fuel taps ran dry. The administrative capital city of Abuja and the economic capital city of Lagos had queues that were kilometers long residents of these cities and other cities quite close eventually bought fuel at the official price of N145. In other cities across the country, fuel was officially sold for between N200 and N250 per litre. The word "officially" is used for the sole reason that in the south-east cities for

example, the accelerated prices were displayed at the pump. They were not hidden; it was not a question of displaying N145 per litre and using calculators to calculate the real price at one had bought fuel. No one from the NNPC and the department of petroleum resources challenged any of these marketers in many cities outside Lagos and Abuja. Besides, the marketers in these cities insisted that they did not buy at the depot at the official price that would enable them sell at N145 per litre and break even.

Today, Nigerians are confronted by the ugly reality, as officially stated by the authorities that the landing cost of litre of fuel is N171.40 whilst it is being officially sold at N145, leaving an unaccounted balance of N26.4. This excludes the distribution margin of N14.3 approved by the Petroleum Product Pricing Regulatory Agency in its last template, which if added, brings the price to N1857, leaving the unaccounted sum further to N40.7. Currently, private marketers are no longer importing since they cannot sell at a loss as the importation is only left to the NNPC. Who is paying for the loss or subsidy? The Minister of Finance, Kemi Adeosun, and the Vice President Yemi Osinbanjo have told Nigerians that it is the NNPC. The minister of finance sees it as "under-recovery" as, according to her, it is not a subsidy. This is simply a play on words as buying a product and selling the same below the cost price means that someone is providing a subsidy.

There are challenges arising from this scenario. The first is that the NNPC is now an operator allowed by the administration to pay subsidies without legislative appropriation or the agreement of the three beneficiaries of the federation account, who is now shortchanges. This is wrong. The second is that the subsidy is to be calculated over the 35 million litres, (according to the demand for PMS is media reports to be 55millionlitres of the PMS)every day across the federation, at the time when fuel is sold for N145 only in Lagos and Abuja, to less than 25 percent of the population. The bulk of Nigerians outside these two cities who buy for more than N145-

are they still enjoying a subsidy payment on residents of other cities when they do not buy at the official price.

The third is that the purported jump in consumption from 35 million liters to 55 million liters is suspect. We are back to the days of providing opportunities for creative accounting which allows certain individuals to fleece the public treasury. Alternatively, the state is failing to police our borders to ensure that smuggling of Petroleum Product does not become a very lucrative trade. And Nigerians will pay the price for criminal entrepreneurs to enjoy.

The Buhari Administration is faced with a few options. It should stop this "under-recovery" story and proceed to calculate the actual subsidy and appropriate money for the same. The alternative is to increase the price of fuel to reflect the current realities- a notion the government may not dare take considering that 2019 is an election year. Also, the government should ensure uniformity of prices across the federation unless it is abolishing the uniform price policy. In the final analysis, there is really no alternative to building local refineries.

HOUSE OF REPRESENTATIVES IN NIGERIA DEMAND N800BN SUPPLEMENTARY BUDGET FOR FUEL MARKETERS

The house committee on petroleum resources (downstream) stated in Abuja on Sunday that if offsetting the debts would end scarcity, it was the right step to take by the federal government.

The chairman of the committee, MR. Joseph Akinlaja, said the house had come to the conclusion that the Nigerian national petroleum corporation could not handle the importation of petrol alone and successfully end the current scarcity.

Akinlaja noted that with the Country's four refineries producing little or nothing to argue the important by the NNPC to exploit loopholes in the distribution chain.

- He said reports at the disposal of the committee suggested that the independent petroleum marketers association and the major oil marketers association of Nigeria were collectively lived N800bn by the government for previous importation.
- He added that as a result of the mounting debts, IPMAN, DAPMAN AND MOMAN stopped importing products leaving the NNPC alone to handle the challenge.
- Akinlaja also stated that aimed the scarcity, the fixing of the pump price of N145 at a time the government itself had admitted that the landing cost of petrol was N171, did not help matters.
- He said, " this house had passed several resolutions on fuel scarcity we have said on countless occasions that our four refineries must work at full capacity, we have said that if it is N145 per liter, enforcement agencies must be able to enforce the price
- Now, IPMAN, DAPMAN and MOMAN they said government is owing them N800bn; they are no longer importing let the government bring N800bn supplementary budget, we will consider it for this problem to be over.

Are we going for full deregulation let the government come out fully to say they want to deregulated, the house is ready to oblige them on any of these issues to end the scarcity. Akinlaja also said another factor to be considered was the rising price of crude oil which must naturally affect the pump prices of petroleum products because Nigeria was an importer to fuel.

RECOMMENDATIONS

- ❖ We need modern refineries to be built by government or private individuals.
- ❖ There is need to increase local production of fuel into Nigeria market. We need to increase and expand the installed capacity of the present plants. Latest, modern and computerized refineries should be introduced into Nigeria market.
- ❖ No amount of turn around maintenance or the refurbishment can change the working system of present refineries 1.6 Billion dollars already spent did not have any appreciable impact.
- ❖ Marking of illegal bunkering hotspots in Nigeria should be done. Aerial surveillance should be put in place in all the oil producing areas in Nigeria. The need to use high technology to add, ess this problem is very imperative in order to detect any form of breach.
- ❖ Navy needs to be better equipped with modern gadgets to address the problem of oil bunkering, more engine boats should be deployed to riverine areas, and more helicopters are needed for aerial surveillance.
- ❖ All the oil marketers with dubious of oil subsidy claims should be arrested because they are international rogues therefore, their cases must be diligently prosecuted and sanctioned according to the law of the land.
- ❖ All the illegal refineries should be legalized and they must pass through appropriate and legitimate organs of the government they must properly registered, documented and officialized.
- ❖ The installation of pipeline wearing boards and markers in all the pipeline areas in order to detect the activities of the vandals should be put in place immediately. The need to deploy more security personnel in the pipeline areas in Nigeria throughout the day and night is equally important.
- ❖ Conducting of regular awareness campaigns in all the oil companies in Niger Delta region is urgently required.
- ❖ Information dissemination of the effect of oil bunkering should be intensified by the government.

- ❖ Educating the people and workers along the pipeline routes in Nigeria is another important policy that should be put in place by the Federal Government of Nigeria on the need to expose oil bunkers.
- ❖ Advanced technology and telecommunication system should be put in place to address pipeline leakages.
- ❖ Leak detective systems should be put in place along the pipeline routes in Nigeria.
- ❖ Serious monitoring of the pipeline routes is also needed in Nigeria, most of the pipelines are raptured therefore, there a lot of leakages.
- ❖ Israeli drones to survey our pipelines should be intensified with latest spare parts, cameras, and videos that can be sourced locally or internationally which should be affordable, accessible, available and durable and can stand the test of time. German manufactured frigate is also needed for sea patrols with latest technology and communication in order to put an end to oil bunkering and pipelines vanderalization.
- ❖ All the oil Barons that engage in crude oil theft should be exposed and their assets
- ❖ Must be ceased and confiscated by the federal government of Nigeria.
- ❖ Some of the water wells in the Niger Delta where activities are taken place are
- ❖ polluted with benecene, a cancer course agent, these should be addressed in order
- ❖ To protect the life of women and men in the Niger Delta areas against cancerous diseases.
- ❖ Total over hauling of the presence security arrangements in the Niger Delta region is highly needed.
- ❖ All the foreigners that participated in the illegal bunkering should be arrested immediately and prosecuted accordingly.
- ❖ The need to train more Nigerians naval commandos and installed coaster radar to track oil loaded ships on the high sea on daily basis is urgently required.

- ❖ New technology to provide advanced warnings of the events before any ugly incident happens should be deployed into Niger Delta areas.
- ❖ All the oil cabals, oil cartels, oil caucus, oil magus, oil barons and oil marketers that collected oil subsidy from government without importing fuel should be diligently identified, arrested, prosecuted and jailed for life imprisonment.
- ❖ Purchasing of vehicles that are using batteries, computers and gas only should be introduced into auto market, this will reduce consumption of PMS and directly or indirectly reduce fuel scarcity.
- ❖ Metering of the fuel stations, instead of petrol attendance are needed in our fuel stations, it will just work like ATM machine, this is being used in Russia. The used for credit cards to dispense fuel into our vehicles in Nigeria is also required.
- ❖ Each town in Nigeria should have big PMS reservoirs to service the need of the people from time to time.
- ❖ Building of more private refineries by government, individuals and foreigners should be encouraged by government.
- ❖ Tax waivers to importers for importing equipment needed to build refineries as well as access to land and tax holidays should be given to the importers by the government.
- ❖ More turkey, mini or small refineries should be encouraged by the government.
- ❖ Modular refineries should be set up much closed to crude oil production areas in order to have full benefits and advantages of long time economic of scale. This can be done along the seas, roads and railways to prevent unnecessary wasting of government resources.
- ❖ The turnaround maintenance of the refineries is required on every 18 months for each refinery plant.
- ❖ Regular maintenance culture of our refineries and petro-chemicals companies is essential this will reduce importation of PMS.

- ❖ Nigeria needs at least ten functional refineries because of our population.
- ❖ Total deregulation of downstream sector is not a pro-poor policy therefore, latest developments in the oil sector require full deregulation of Nigeria oil and gas sector because of oil scams, fraud and corruption among the oil marketers in Nigeria over one trillion Dollars was spend on fuel subsidy without anything to show for it.
- ❖ Frankly speaking, in Nigeria, oil sector is unofficially deregulated most of the fuel stations in Nigeria apart from the NNPC mega stations sell over above official price of N145 .00 per litre few of them were arrested but none was jailed for economic sabotage, we still have long queues of vehicles where official price is sold while vehicles are very few and seen where unofficial prices are sold because customers are adjusting to real economic reality O1 buying above official prices.
- ❖ There is need to speed up the implementation of the proposed open access common carrier regime for downstream logistic facilities, there is need for viable alternatives fuel to PMS, AGO, KPK, LPG, LPFO and HPFO.
- ❖ There is need to develop a pricing frame work to encourage local refineries and discourage high level of importation
- ❖ There is an urgent need to have sustainable and strategic fuel reserve policy for petroleum products as a security measure against the emergency of fuel scarcity in Nigeria.
- ❖ There is need for automation of PPRA and DPR operations for improved efficiency, transparency and reduction of hoarding and fuel diversion into neighboring countries.
- ❖ Total deregulation of downstream sector is required in order to provide a level playing ground for all operators in the oil sector as well as to promote investment which will lead to job creation and enhance local participation in the oil industry.
- ❖ NNPC should negotiate with Petro-chemical company at Eleme, in Port Harcourt Rivers State and Kaduna Nigeria not to export fraud catalytic cracking because it can be used to blend

petroleum in refinery which will in turn boost the volume of PMS, it can also be supplied to refinery in exchange for Propylene Rich Feed (PRF) From Fluid Catalytic Cracking unit which it is another source of income to the corporation.

- ❖ PPRA should encourage oil marketers to develop Single Buoy Mooring (SBN), government should eliminate unnecessary delays during the discharge operations at NNPC jetties across the country.
- ❖ According to oil expert, local production of PMS per liter is around #72.50 whereas the present landing cost of the PMS per liter is #171.40 NNPC is subsidizing PMS for around N26 per liter, there is need to develop local refineries on time so as to avoid high cost of production.
- ❖ Special exchange rate that is less than official exchange rate as well as tax incentives should be given to genuine, loyal, committed, transparent, trusted and tested oil marketers and oil tank farms owners in Nigeria for regular supply of oil and that should be transparency in the management and allocation of forex to avoid currency round tripping, fraud and in house abuses.
- ❖ NNPC should as matter of urgency should re-laid some pipeline that are not functioning any longer.
- ❖ Government should established new tariffs to make business of oil attractive to new operators.
- ❖ NNPC should partner investors on 51-49 percentage model just like NLNG model to increase transparency, efficiency, profitability and accountability. PPRA pricing template should involve the input of oil stakeholders in the oil industry because the present computation is full of flaws, errors, mistakes and manipulations that cannot be economically proved, justified, verified, confirmed, trusted and tested by oil the stakeholders in the oil business.
- ❖ The logistics for distribution is very porous and poor for each state, we should have oil tankers marked with the state

- identification logo to ensure regular delivery of petroleum products across the country.
- ❖ The need to reduce dependency on trucks for fuel distribution to fuel stations is very imperative, therefore, railways and pipelines for oil distribution to petrol stations should be encouraged by the government.
 - ❖ Pipelines wise, there is need to create alternative routes for our pipelines so that if one pipeline is vandalized such can be fixed in stock and product been evacuated can be re-routed into the newly pipelines already constructed.
 - ❖ There is need to put in place satellite imaginary and geographic information systems to monitor the oil pipelines across the country.
 - ❖ There is need to use integrated video, surveillance apparatus, just like Russia method.
 - ❖ Community policing is needed to address the problem of oil bunker across Niger Delta Region.
 - ❖ Excess crude oil account must be well managed and prudently kept for the raining day unlike what happened previously by the past government when the price of crude oil was as high as \$100 per barrel where 2.1 billion dollars arms scandal was taken away by the politicians for campaign during the 2015 presidential election that eventually emptied our foreign reserves. This is not good enough for the economy to grow and develop.
 - ❖ Serious and honest consultations and dialogues before a new price of pump price of PMS is announced by the government is highly necessary.
 - ❖ Our leaders should reduce their ostentatious, consumption and exhibition of prodigality life because Nigerians believe that their oil money goes into the hand of few individuals to buy all these items that have no bearing with the problems of people in Nigeria imagine, our 109 senators buying vehicle of N36,000,000.00 per one from the oil revenue whereas the remaining population are wallowing in penury and poverty.

- ❖ The salaries and allowances of our National Assembly members should be drastically reduced to reflect the present economic realities on ground. Nigeria legislators are the highest paid parliamentarians in the whole world. There is need to retain, sustain and maintain the present refineries since these are national asset, because of the countries security as well as to keep faith with OPEC principles that members countries should have good gripe of the commanding height of their securities.
- ❖ There is urgent need to resuscitate polyline and carbon black in Warri refinery and Petro-Chemical Company as well as the thin drop lube and asphalt plant in Kaduna refinery and petro-chemicals back to normal operations.
- ❖ The need to pass the Petroleum Industry Bill (PIB) into law is essential, crude 1, important, necessary and urgent in order to address the problem fuel scarcity in Nigeria.
- ❖ The various fuel depots in Nigeria needs be urgently repaired, expanded and refurbished in order to meet the need of the customers across the country. Excessive government intervention in the oil business should be minimally, drastically and totally reduced in the oil industry, government should only regulate the activities of the stakeholders in the industry.

CONCLUSION

It can concluded that Series of boardroom politics in the management of oil business in Nigeria. High level of corruption in the NNPC, turnaround maintenance that did not improve the level of production of oil, diversion of fuel into the neighbouring West Africa Countries, Oil subsidy claims that did not translate to high level of fuel importation into the country, fluctuation in the world market price, OPEC decision that may not favor crude oil production are the factors responsible for fuel scarcity in Nigeria, Using of wrong template to determine the price of PMS is also another serious factor. In view of these aforementioned problems, the following suggestions are recommended. All the refineries should be privatized, total deregulation of downstream sector of oil and gas should be put in

place, more refineries should be built, alternative sources to PMS should be introduced, licenses should be given to expertise who are ready to build refineries in Nigeria, NNPC account should be audited on daily basis, oil subsidy for genuine oil marketers, outstanding balances for oil marketers should be considered for payment with immediate effect. Modular refineries should be built across the country, crude oil smugglers should be arrested and jailed for economic sabotage, modern and computerized refineries should be introduced into Nigeria, and fraudulent oil subsidy claims should be arrested and prosecuted

14 OPEC COUNTRIES

	Countries	Crude Oil / Barrell Per Day	Number of Refineries	No. of Krehi Module	Price & of PMS	Population	Price Naira	Proven in Reserves
1.	Saudi Arabic	10 million	10	-	0.16	32.27	25.12	266 million
2.	Iraq	4.45 million	12	Gaiyarain 4000 bbd	0.43	37.20	59.66	143 million
3.	Iran	3.99 million	14	Kermanshi 25,000 bb/d	0.37	80.27	102.05	157 million
4.	U.A.E	3 million	4	-	0.47	9.267	78.18	97 million
5.	Kuwait	2.92 million	4	-	0.22	4.05	34.54	101 million
6.	Venezuela	2.27 million	5	Baj grade 16,000	0.015	31.568	3.61	299 million
7.	Nigeria	1.99 million	3	-	0.56	185.989	145.00	37 million
8.	Angola	1.76 million	2	Luanda Ref 16,000 bb/d	0.76	1.769	251.8	N/A
9.	Quarter	1.52 million	3	-	0.23	2.569	34.54	25 million
10	Carbon	120,820	1	Port gentil 45,000 bb/d	1.02	1.97	311.1	2 million
11	Algeria	1.34 million	5	Adler (1) 12,500 bb/d	N/A	40.60	63.55	12 million
12	Ecuador	548,421	2	Halibert 25,000	N/A		183.00	12 million
13	Equatorial Guinea	227,000	0	-	N/A	16.38	442.25	1 million
14	Libya	384,686	N/A	Samir 10,000 bb/d	N/A	1.22	23.81	48 million

REFERENCES

Gbayerola, T.O, and E.O. Uga (1999), "Sources and Structure of Government Revenue in Nigeria.

Ihimoḍu, LI. (1995), "Resource Mobilization 'under the Current Reform Programme in Nigeria", M.I. Obaḍan and G.O. Ogiogio (eds), Planning and Budgeting in Nigeria NCEMA, Ibaḍan.

Ikporukpo, ~C.O. (2600) "Petroleum Fiscal Federalism and Environmental Justice in Nigeria" Seminar paper, University of Ibaḍan.

Komolafe, H. Jalilian and M. Hiely (Eds), Fiscal Policy Planning and Management in Nigeria (DPPC), University of Bradford/NCEMA. Ibaḍan.

Niger Delta Regional Development Plan Commission by Retired General Obasanjo, Tuesday March 27, 2007

Oḍiviori, E. (1999), "Niger Delta in Search of Lasting Peace", Special Report, This Day Sunday, January 31, 2000

Okigbo, P.N,C. (1965), Nigerian Public Finance, Longman, London.

Hanafi Dele Ibrahim et al.,

Philips, A. (1991), "Managing Fiscal Federalism; Revenue Allocation issues", *Pablius, The Journal of Federalism* Vol, 24(4)

Taiwo, Bisi (1982): *Government and Politics in West Africa* Book Presentation Co. Ltd

Wheare, K. C. (1953). *Federal Government*, Oxford University Press, London.

Newspapers Publication:

The Guardian, Tuesday, July 11, 2017, Pg 18

The Guardian, Monday, July 3, 2017, Pg 8

The Punch, Tuesday, May 23, 2017, pg 17

Africa Development Indicators Factoids. (2011). *Ten Facts about Sub-Saharan Africa Compared with the World*.

Alege, P., & Ogundipe, A. (2013). *The Role of Services Trade in Economic Development*. University Library of Munich, Germany.

Andrés Aguayo-Rico, I. A.-T.-H. (2005). Empirical Evidence of the Impact of Health on Economic Growth. *Issues in Political Economy, Vol. 14, August 2005*.

Barbara Mcpake, L. K. (2002). *Health Economics: An International Perspective*. London: Routledge, Taylor and Francis Group.

Barro, R. (1996). Health and Economic Growth.

Barro, R. J. (2013). Health and Economic Growth. *Annals of Economics and Finance* 14-2, 329-366.

Barro, R., & Sala-i-Martin, X. (1995). *Economic growth*. New York: McGraw-Hill.

Berg, H. V. (2013). A Critique of the Solow Model: What a Difference Disaggregation Makes! 1-38.

- Bhargava, A., Jamison, D., Lau, L., & Murray, C. (2001b). Modeling The Effects of Health on Economic Growth. *Journal of Health Economics*, 20(3), 423–440.
- Bloom, D. E., & Williamson, J. G. (1998). Demographic Transitions and Economic Miracles in Emerging Asia. *World Bank Economic Review*, 12(3), 419–455.
- Bloom, D., & Malaney, P. (1998). Macroeconomic Consequences of the Russian Mortality Crisis. *World Development*, 26, 2073–208.
- Caselli, F., Esquivel, G., & Lefort, F. (1996). Reopening the convergence debate: a new look at cross country growth empirics. *Journal of Economic Growth*, 1, 363–389.
- Damodar N. Gujarati and Dawn C. Porter. (2009). *Basic Econometrics*. Singapore: McGraw-Hill.
- Daron Acemoglu and Simon Johnson. (2009). Disease and Development: The Effect of Life Expectancy on Economic Growth. *Commission on Growth and Development*, 77–129.
- David E. Bloom and David Canning. (2005). Health and Economic Growth: Reconciling the Micro and Macro Evidence. *Harvard School of Public Health*, 1–25.
- David E. Bloom and David Canning. (2008). Population Health and Economic Growth. *Commission on Growth and Development*, 1–36.
- David E. Bloom, D. C. (2004). The Effect of Health on Economic Growth: A Production Function Approach. *World Development Vol. 32, No. 1*, 1–13.
- David N. Weil. (2006). Accounting for the effect of health on economic growth. 1–59.

The Afro Central about African Health Care.htm. (N.D.). Retrieved September 3, 2013, from Afro Central Web site: <http://www.afrocentral.net>

THE World Bank. (2011). *African Development Indicators*. Washington, D.C: THE World Bank.

Weil, D. (2001). "Accounting for the Effect of Health on Economic Growth." *Brown University, Providence, RI. Processed*.

William Jack and Maureen Lewis. (2009). Health Investments and Economic Growth: Macroeconomic Evidence and Microeconomic Foundations. *Commission on Growth and Development*, 1-39.

Working Group 1 of the Commission on Macroeconomics and Health. (2002). *Health, Economic growth and Poverty reduction*. Geneva: World Health Organization.

World Development Indicators. (2013). *World View*.

World Health Organisation. (2011). *Health Situation Analysis in the African Region Atlas of Health Statistics*. Brazzaville: Replika Press Pvt. Ltd.

World Health Organisation. (2013).

Young, A. (2005). "The Gift of the Dying: The Tragedy of AIDS and the Welfare of Future African Generations." *Quarterly Journal of Economics*, 120: 243-66.

- 1. The Punch Tuesday, October 24, 2017. Page 44
- 2. Vanguard Monday, October 30, 2017. Page 33
- 3. Punch Monday August 7, 2017. page 18
- 4. The Guardian Thursday, September 28, 2017. Page 55
- 5. The Guardian Friday, September 29, 2017. Page 13
- 6. The Guardian Friday, September 29, 2017. Page 12
- 7. The Guardian Tuesday, October 3, 2017. Page 15
- 8. The Guardian Tuesday, October 3, 2017. Page 14
- 9. The Guardian Thursday, August 3, 2017. Page 18
- 10. The Guardian Wednesday, October 4, 2017. Page 15

- 11. The Guardian Thursday, September 28, 2017. Page 15
- 12. The Guardian Thursday, September 28, 2017. Page 20
- 13. The Guardian Tuesday, October 31, 2017. Page 60
- 14. The Guardian Tuesday, October 3, 2017. Page 61
- 15. The Guardian Tuesday, October 3, 2017. Page 60
- 16. The Guardian Thursday, September 28, 2017. Page 54
- 17. The Guardian Thursday, November 28, 2017. Page 20
- 18. Punch Thursday, August 3, 2017. page 18
- 19. The Guardian Friday, November 3, 2017. Page 36
- 20. Punch Tuesday, November 7, 2017. page 18
- 21. Olawale Oluwo: (2017) A case for political and Economic Restructuring in Nigeria.
- 22. Punch Thursday, February 1, 2018
- 23. Punch December 31, 2017
- 24. The Guardian, Monday, January 22, 2018
- 25. The Guardian, Thursday, December 28, 2017
- 26. Punch Thursday, January 11, 2018
- 27. The Guardian, Wednesday, January 17, 2018
- 28. The Guardian, Wednesday, January 17, 2018
- 29. The Guardian, Tuesday, January 16, 2018
- 30. Punch Monday, January 22, 2018
- 31. The guardian, Tuesday, January 16, 2018
- 32. The guardian Friday January 19 2018
- 33. The guardian Tuesday January 23, 2018
- 34. Punch Thursday, January 11, 2018
- 35. The guardian Tuesday, January 9, 2018
- 36. Punch December 31, 2017
- 37. The guardian Wednesday, January 10, 2018
- 38. Punch January 7, 2018
- 39. Punch Thursday, January 18, 2018
- 40. Punch Thursday, December 28, 2017
- 41. The guardian Tuesday, January 9, 2018
- 42. The guardian January 16, 2018
- 43. The guardian Wednesday, January 17 2018
- 44. The guardian, Wednesday, November 8, 2017
- 45. The guardian Tuesday, January 9, 2018
- 46. The guardian Tuesday December 19, 2017
- 47. Punch Wednesday, December 27, 2017