POWER SECTOR REFORMS IN NIGERIA: IMPLICATIONS FOR AGRO-MANUFACTURING INDUSTRY

BY

Erunke Canice Esidene Ph.D

Department of Political Science Federal University, Lokoja Kogi State, Nigeria, West Africa Tel: 08065595472, Email: <u>erunke@gmail.com</u>

Being a paper for presentation at the Departmental Seminar, Department of Political Science, Federal University, Lokoja.

July, 2021

Abstract

The main objective of this paper is to examine the nexus between the reforms that have been carried out in Nigeria concerning the power sector, and the implications of the reforms on the transformation of agro-allied industries. The power sector, no doubt, can be said to have the potential that can propel national development considering the overall importance of energy to the survival of the nation in terms of job creation, industrial development and sustenance as well increase in revenue generation and Foreign Direct Investment opportunities, among others. The unfortunate situation, however, is that in spite of a number of policies enunciated by successive governments aimed at improving on the power sector, not much has been achieved. The multiplier effect of this kind of development has been seen in the widespread epileptic power shortages, downward spiral of efforts towards industrial development drive; unemployment, shortage of national revenue accruing to government coffers, bourgeoning and rising poverty levels, to mention but a few. All of these have further contributed to the growing army of problems currently being witnessed in the country at the moment. This study is a theoretical exposition of the existing works of scholars and experts in the broader field of power sector reforms. The paper is exploratory in structure and method of its investigation. The study concludes and recommends that in view of the prevailing socio-economic circumstances in Nigeria, genuine reforms in the energy sector devoid of political rhetorics will go a long way in mitigating some of the challenges of contemporary times in the power sector.

Keywords: Power Sector, Reforms, Agro-manufacturing Industries, Economic Development.

Introduction

One of the greatest challenges standing on the path to Nigeria's advancement economically, politically, technologically, or otherwise is the shortage of power supply or the lack of it. From inception of the Nigerian state at independence, the story of power supply has not been palatable. Unarguably, it can be said that from the early 1960s up to the 1980s, the availability of power has been appreciable. This circumstance is often attributed to the fact that previous structures or infrastructures handed over to Nigerians by the colonial masters were basically much more reliable and self-sustaining. However, the problem of epileptic power supply became more agonizing following the emergence of a new form of political leadership around the 1990s and beyond. For the avoidance of doubt, the rising tides of military incursion in politics and the personalized leadership style that followed thereafter, have all been seen as factors mitigating against availability of critical infrastructures, including power supply. It does appear that in spite of the change of leadership leading to a democratically elected government later in 1999 to the present, the hiccups in power generation and distribution have remained largely a huge albatross. This is in view of the fact that the survival and sustenance of the nation and its people rests squarely on the workability and availability of the power sector or electricity as it is generally called.

Corroborating the foregoing point of view on the importance of power supply, Idowu, Ibietan and Olukotu (2019) have argued that electricity supply is not just an indispensable element in nation-building, but also a gateway towards a nation's aspiration to greater socioeconomic development. What this means is that every other superstructure rests squarely on the electricity infrastructures, and that electricity drives national prestige, growth and sustainability. We can also say that the quantum or output of electricity produced in a system determines to a greater or lesser extent the optimal functioning of the industrial, agricultural, educational substructures and many other semi-industrial skill acquisition, small and medium scale businesses as well as expansion of non-formal sectors of the economy.

From extant literature, and particularly the classic works of Onagoruwa (2011), the Nigerian government's drive in line with major international agencies such as the United International Development Organization (UNIDO), has in 2005, enunciated what was known as Power Sector Reform Bill. The essence of the bill was, among other things, meant to ensure that the power sector was either democratized so as to incorporate private sector participation or both. The purpose of incorporation of the private sector, according to the authorities, was to guarantee flexibility in the generation, transmission and distribution of electricity in the country. As part of the overall goal of adequately reforming the energy sector in Nigeria, the federal government embarked on the establishment of two successive bodies such as the National Electricity Regulatory Commission (NERC) and the Power Holding Company of Nigeria (PHCN). While

the former takes the responsibility of regulating power supply and other bureaucratic responsibilities in the country, the latter succeeded the National Electricity Power Authority (NEPA), which was considered to be moribund and non-performing at the time. The process of the reform also saw to the decentralization of power sector outlets or companies, four (4) of which are from the Distributory Companies of Nigeria otherwise (DISCOS); Six (6) generating companies known as (GENCOs) and one Transmission Company Christened (TCN). All of these were the giant and ambitious steps carried out by the government to give an edge or new face-lift to the challenges of electricity supply in the country.

To Enoche, Egware and Eyakanor (2015) opined that the desire of government, especially the emerging democratic structure led by the then president of Nigeria, Chief Olusegun Obasanjo, was premised on the failure of previous attempts at revamping the sector. They argued further that the 1989 commercialization initiative of government as part of the Structural Adjustment Programme meant to enhance electricity generation and supply added little or nothing to efficient service delivery. Thus, with the privatization of both the distribution and generating sectors and the operation of the Transmission Company in form of management content agreement later in 2013, not much has been achieved in the nation's electricity supply. This is why Tinuoye (2019) lamented that though, Nigeria's attempt at reforming the power sector is one of the lofty moves by the government, the level of electricity supply in the country as it were, is abysmally low. For example, the volume of power supply for many decades have remained dangerously low, and hence, fluctuates between 3,500 and 6000 megawatts, considering the enormous resources that have been expended over the years by successive governments. In several occasions, power supply has even gravitated between zero mega watts, and this has resulted to the shutting down of the system in the country. The contention here is

that Nigeria with over 200 million people generates low power supply than say, African countries like South Africa, with a population far less than Nigeria, that is, 52,000,000; and a carrying capacity of over 40,000.000 mega watts of electricity. African countries are being used as yardstick because Nigeria is known to be the largest economy out of the over 53 African countries on the face of the earth. It is rather a contradiction to talk about a comatose electricity generation and supply in a nation so richly endowed with human and natural resources.

Conceptual Clarification

Reform

The concept of reforms has been given different meanings by different scholars. Taylor (n.d) averred that the concept lends itself to those strategies carried out by government and its agencies geared towards public good. What this means is that reforms connotes the unusual shift in paradigm away from statusquo to a more or less advanced stage of development, the essence of which is to bring about improvement on the former state of things. To Taylor, opined that reforms find expression in the way and manner certain changes are made and, ultimately, the outcome of goals and objectives achieved at the terminal end of such reforms.

According to Nwosu and Dike (2020) corroborating the earlier notion about what constitutes a reform, as popularized by Taylor, noted that reform, at whatever level of analysis, is a concept that is used to refer to those body of regulations and guiding principles that outlines what government intends to, not only formulate in its policy concerns; but essentially, those principles that set out specific time frame on how the reform objectives will be achieved. From the points of view of Nwosu and Dike, the drive for reform begins at the origin and ends at the terminus, after which government and its agencies can peer-review and evaluate itself to be able to determine the level of success or failure of the reforms.

What can be deduced from the standpoint of the views held by Nwosu and Dike is that the history of reforms in Nigeria's power sector has been around for several centuries. Thus the tendency to stimulate growth and development in the nation's power sector has gone through a number of experimentation by successive governments.

From the works of Abada, Okafor and Omeh (2019) wrote that the historical development of electricity in Nigeria can be traced to the twilight of the 19th century where the very first generating plant was installed in Lagos around 1898. The emergence of power stations in many other locations in Nigeria later took place after the amalgamation of the North and Southern Protectorates of the country orchestrated by the rising wave of colonization. It is on this premise that Adeyemi, Opeyemi and Oluwatomisin (2016) claimed that some of the power sector reforms have remained largely at infant levels and that, the development of the sector into its current stage was brought about through a relatively incremental processes in terms of the changes that have occurred over time.

Theoretical Framework

This paper adopts the theory of developmental state as theoretical underpinning. What has come to be known as developmental state or hard state theory is a term that has been in use by, for example, scholars with bias in the broader discipline of political economy and its affiliate disciplines. It describes the condition or phenomena where the state takes the center stage in micro-economic planning and development. In other words, developmental state theory exposes some of the ways and manner in which states intervene, regulate and plan the economic processes for the overall sustenance of the system. One of the foremost proponents of this theory, Chalmers Johnson (1982) has drawn inferences from the strategies for economic expansion obtainable in other countries such as North-East Asian states shortly after the tragedy of the World War II. To most critics such as Chang (1999), this theory is not new. Early scholars of development economics such as Gunner Myrdal, Paul Baran, Rosenstein-Rodan and Simon Kuznets have at various intellectual levels contributed greatly to the formation of developmental state theory at their respective endeavours. The theory, as earlier stated, according to Cumings (1999) was originally formulated to be able to explain industrialization and industrial development in North-East Asia. To Cumings, insists that developmental state is more or less a "short-hand" for the seamless web of political, bureaucratic and monetized economic system that influences and structures the economic life of capitalist North-East Asia. The argument here is that this theory has become relevant in the explanation of the socio-economic realities of development or the lack of it in countries with less capacity for development before the War II period. Countries like Japan is said to have achieve greater part of its 'economic miracle' using this theory as basis for analysis. However, the developmental state theory has been heavily criticized due to the fact that it has a capitalist coloration. The theory seem to suggest a rather uni-linear approach to development without taking into consideration the peculiarities of national economies, differences in human capital endowments and the environment under which most undeveloped nations of the world have found themselves. Thus while this theory can effectively apply elsewhere in resolving myriads of economic challenges, it remains a huge problem for the genuine transformation of Nigeria's socio-economic and political landscape, including the power sector.

Power Sector Reforms in Nigeria

For the benefit of hindsight, we have said that the Nigerian state is richly endowed with enormous energy resources within its 923,768square kilometers land mass. Some of the energy sources include wind, solar, crude oil deposits, Liquefied Natural Gas (LNG), bitumen and many others. Most experts and commentators such as Zubairu and Serkan (2014) have lamented that the absence of reliable power supply to the nation and its teeming populace has rendered the Nigerian system bankrupt characterized by low industrial output, food crises and food insecurity; bourgeoning unemployment, insecurity, galloping inflation, youth restiveness, kidnapping for pecuniary gains excessive government borrowing, economic uncertainties and all what nots. The contradiction here is that the nation has very huge energy reserve that have been hardly tapped. For example, extant literature from various sources has it that the energy reserve potentials of Nigeria, such as crude oil, is peaked at 40.0 billion barrels; natural gas, 5.2 trillion metric tonnes; coal and lignite has been estimated to be as high as 2.7 billion tones, while tar sands amounts to 31 billion barrels of oil equivalent. Similarly, the volume of Hydro power equals 10,000 mega watts, while wood fuel has been peaked at 43.1 billion tones per fiscal year. There are also other energy reserve potentials of Nigeria such as animal waste (61 million tonnes per year), crop residue (8.3 million tones); solar radiation (3.5 - 7.0 kilo watts per day); while wind energy amounts to 2 to meters at 10 meters height annually in terms of average).

Conversely, Nigeria is reputed to have the largest crude oil reserve in the African continent besides being the almost fourth in liquefied natural gas export to the international market place. Unfortunately, however, the nation depends largely on gas-dominated economy as major source of its electricity. Herein lies the problem of inadequate gas supply, outmoded equipments, policy inconsistencies and policy summasaults as well as frequent collapse of electricity grid that is supposed to sufficiently feed the generation, transmission and distribution of power supply across the country.

Citing examples from some of the power stations either established by the Federal Government of Nigeria, state governments or independent power producers, Aliyu, Ramli and Saleh (2013) had earlier expressed worries that of the total volume of power generated in Nigeria, over 28 per cent of it is lost. The reasons, among other things range from abject neglect, inadequate capacity enhancement and corrupt practices by the various actors in the power sector management. While it is clear that the issues of inadequate power supply bedeviling the Nigerian state are not limited to government-owned power stations, those within the purview of the state and privately-owned stations have not done any better. For instance, of the installed capacity of government-owned power plants namely, Kainji (760MW), Shiroro (600MW), Jeba (540MW), Egbin (1,320MW), Sapele (1,020MW), Afam (726MW), Ugbeli (900MW), Omotosho I and II (304 MW each) as well as Calabar (6.6MW) and Orji River (10MW). All of these power stations, though owned by the Federal government, generate an average of 6,490.60 mega watts of electricity only. Similarly, the plants built by state governments and the private sector such as Shell-Afam VI and Agip-Okpai have installed capacity of 224MW and 650MW, respectively. Again, the initiatives of the Akwa Ibom and Rivers state governments that gave rise to the Ibom power as well as the Trans-Amadi and Omoku stations only generate 155, 100 and 150 mega watts of electricity. In the same vein, those power stations funded through independent power producers such as the Calabar power station (generates 561MW, Ihovbor power station (450MW); Sapele (450MW), Egbema power station (338MW), Omoku, Gbarian and Alaoji power outlets produce only 250,225 and 1,074 mega watts. Again, those of Geregu II, Omotosho and Olorunsogo generates 434,500 and 750 mega watts. All these are outside the mainstream power plants earlier initiated by the Federal Ministry of Power such as the Zungeru Hydro-power project and the Mambila Hydro-electric power project with an average installed capacity of 2,600 mega watts. From the examples of the nation's power sector as presented above, it is clear that the chances of national development, sustenance of the industrial sector and the

consolidation of other critical sectors that supposedly drive the economy such as agriculture as well as small and medium scale businesses will suffer greatly.

POWER SECTOR REFORMS: IMPLICATIONS FOR AGRO-MANUFACTURING INDUSTRY

The survival and sustenance of a nation's industrial establishments, national assets and infrastructural development rest squarely on the availability of electricity. Power supply to a very greater extent is the major force for national socio-economic development. The reason being that all the other challenges that stare the nation in the face: unemployment, insecurity, youth restiveness, militia activities, trafficking in persons all forms of fraud and all what nots. Some of these atrocities would die a natural death if people have what they can do to earn a living or that, they are gainfully employed in functional industries. To be able to achieve sustainable industrial development, requires goodwill by the managers of state, especially those who are directly in charge of state policies, and particularly those directly in charge of reforms in the nation. What is worrisome and of immense concern to most critics (as in the case of Nigeria), is that a vast majority of reforms undertaken by successive administrations in Nigeria have either been greeted with less serious determination to deliver; or that the system has failed due largely to operational inadequacies (Udeme, Obasi & Ochayi, 2018).

Consequently, the virus of policy failures over time has manifested in several economic fronts with agro-manufacturing industries being the worse hit. This is why Olaoye (2014) has argued that in spite of the tremendous potentials inherent in the agricultural sector in Nigeria, very little has been achieved in terms of agricultural value chain. The reason, to Olaoye, finds expression in the lack of agro-processing techniques that can effectively convert crops into finished products, thereby generating the right kind of jobs for young graduates roaming the

streets. Even where there are processing facilities, the unavailability of power supply could be a major obstacle.

Buttressing the argument earlier pointed out by Olaoye, Orya (2015) went further to argue that unlocking the potentials vested in the agricultural sector can be made possible where agro-industries are made effective and up and running. The latter therefore becomes a pre-condition upon which successes in other sectors of the economy are realized.

Citing example from past developments as it relates to agricultural production in Nigeria, UNIDO (2013) has demonstrated with statistical evidence how the aggregate manufacturing sector in the broader field of agriculture has declined over time. Accordingly, evidence has shown that the total loss experienced in the quantity of grains peaked at over 15 per cent in the late 1990s, while post-harvest losses incurred, for example, on agricultural produce such as fruits and vegetables peaked at over 40 per cent. In the same token, reports has it that the overall value addition of the agricultural sector has spiraled from close to 40 per cent in the 1980s and nose-dived to about 26 per cent between the last two decades. Although recent evidence across the country shows a marginal upward movement electricity supply, but the fact remains that the general supply of power remains eratic, with the latest electricity supply of 4,000 mega watts across the country.

From recent developments on the ban of agricultural produce such as rice, flour, beef products, frozen chicken and many others, by the federal government of Nigeria, it became clear that outside food importation, Nigeria can hardly fend for its teaming population of a little over 200 million. The nation depends heavily on agro-imports, which is an obvious indication that Nigeria relies on foreign agricultural commodities for survival. It is also a fact that the rampaging food crisis as well as the skyrocketing inflation which has literary quadrupled in the

last 6 years owes its credit to the lack of capacity to produce so as to meet up with huge domestic demands of the nation and its people. For the benefit of hindsight, we can say that Nigeria is more of an agrarian state, with a vast majority of people actively engaged in major broad areas of the sector such as crop production, fish farming, livestock production an forestry. Out of these, the production of crops takes the largest share and accounts for over 87 percent of the nation's agricultural output (Taiwo, 2020). From the National Bureau of Statistics (NBS) Report (2020) and corroborating the position earlier outlined by Taiwo on the role of agricultural production to national development, the Report further noted that agriculture remains one of the leading sectors in its contribution to Gross Domestic Product (GDP) as at 2013-2020. Thus in 2013 for example, agriculture contributed a total of 23.3 per cent; 22.9 was total GP for 2014, while 2015 recorded 23.1. Again, the nation's GDP rose to 24.5 percent in 2016 and further increased to 25.1 and 25.1 on the average in 2017 and 2018. The sector then witnessed a marginal increase in 2019 (25.2 percent). Nonetheless, there was a sharp decline in 2020 (22.0 percent) due to the eruption and devastation of the Covid-19 virus across the world that year. What this portends is that agriculture holds the key for national sustenance and survival if the right policies and reforms are enunciated to adequately stimulate the sector.

To most critics, the electrification rate in the country since inception of the power sector reform has never gone beyond 45 percent, when equated with similar power supply in other Third world nations economies. Instances have been given about African countries such as South Africa and other North African entities with over 90% electricity supply.

Jacobs (2015), has explained that in Nigeria, an average agro-allied industries namely Hadiraf Cereals Ltd, Famifix Technical Company, Jofrank, Grand Cereals Nigeria Ltd, Royal Agro-food, Otiti Investment Ltd, among others engaged in the production of agricultural produce such as tomato pastes, poultry farming, incubation and egg production and/or hatchery; fingerling production, fish farming, starch production, piggery and many others.Some of these agro-allied companies suffer an average power supply outages of over five times per day. In several places, private company owners and farmers rely heavily on private generating plants, with its attendant consequences ranging from noise pollution to other environmental problems. In one of World Bank's studies rightly captured by Udaneme, Obasi and Ochayi (2018) (cited in Abada et al (2019), expressed worries to the effect that power outage is a much more serious challenge in Nigeria than other countries of the world. Instances have been cited about countries such as Ethiopia, Ghana, Ghana, China, Brazil and so on. Some of these countries, though less endowed in terms of natural resources like oil and gas, bitumen, coal, limestone, among other, have grown in an astronomical rates when compared with Nigeria.

Udeme et al have therefore, on the basis of the epileptic supply of electricity in Nigeria, claimed that an average agro-allied industry in Nigeria loses about 20 percent of its sales of agricultural produce due to frequent power failure or the lack of it. The argument here is that what is lost in production process in Nigeria cannot be compared with what is obtainable in say, for example, China, South Africa and Ethiopia. To be sure, China loses only about 1 percent of its power supply; Ethiopia and South Africa loses about 5 percent of its energy supply to industries.

From empiricalevidence, power generation in Nigeria once rose to about 4,500 megawatts in 2018, and suddenly crumbled to only 1,200 megawatts of electricity supply. This trend has continued unabated for quite some time to date. The multiplier effect is the rising cost of agricultural produce due to dramatic increase in production costs. The Manufacturers Association of Nigeria (MAN), an umbrella body responsible for production of raw materials

into finished goods, have queried the fact that well over $\mathbb{N}20.8$ billion have been spent by Nigerian manufacturers in power generation in major production lines by line managers across the country. No doubt, the rise in production costs have brought about corresponding rise in prices of staple food on daily basis for almost a decade now. As if that is not enough, most firms who could no longer cope with either high cost of production or cut in production, have considered another option of relocating to neighbouring countries such as Ghana, Benin Republic, Niger Republic or other smaller, but electricity stable African countries for ease of doing business.

Factors militating against Effective Power Sector Reforms in Nigeria

Several factors impede the reforms that have taken place in the nation's power sector. They range from leadership crisis, poor project modeling, corruption, lack of political will to carry out genuine reforms and lots more.

In Nigeria, the umbrella body responsible for the provision of guidelines for operation as well as ensuring compliance to extant principles governing the supply of power is the Nigerian Electricity Regulatory Commission (NERC). The leadership crisis at that level is a major setback to the efficient supply and delivery of adequate electricity in Nigeria. Corroborating the aforementioned assertion on the leadership crisis, Ogaji (2018) pointed out that the lack of responsibility on the part of those in charge of the helm of affairs of NERC has constituted itself into a pandoras box. To Ogaji, evidence has shown that contractors handling power projects do not deliver on their promises. Some of them still, do not mobilize workers to site where contracts have been awarded them. They simply pocket the monies running into billions, believing that the laws of the land can do little nothing to them.

The other most catastrophic issue bedeviling power supply in Nigeria is poor modeling and deficiency in power sector project management. According to Amadi (2020) the Nigerian government, rather than develop a home-grown strategy for power sector, embibed a neo-liberal approach to power sector reform. To Amadi, the quick fix initiative to the establishment of the nation's power sector through privatization, commercialization and liberalization runs foul of all accepted best practices of good governance. He went further to say that:

Yes, commercialization and liberalization are good policies, but the federal government should have been rather very careful considering the fact that corporate governance and regulatory stability are two most critical elements in a reform such as the one of power sector. What government has simply done is to over-estimate the ability of the private sector to deliver, and this is the wild goose chase that we have had to grapple with to this moment – the continuous power outage in the country (my emphasis added) (2020) (n.p.).

What the excepts above portends is that the rush to privatize power sector assets to individuals have brought us to where we are as a nation. Where Amadi's points of view became very relevant in the face of challenging times in the nation's power sector development imbroglio is the inability of government to discern the unknown. Privatization, though important, does not possess the wherewithal to entrench needed reforms. Effective governance system as well standard operating rules are instead, panacea, and hence constitutes effective driving force for national economic transformation and reforms.

Asides poor modeling and poor project management in the nation's power, corruption posses greater challenge. Empirical evidence from the report released by the Centre for Equity and Justice cited in Ojerinde (2019) has revealed that contracts in Nigeria's power sector running into billions of naira have been unscrupulously awarded by cronies of government. This position on the endemic corruption in Nigeria's power sector has been corroborated by Oke (2019) who alluded that corruption in the electricity sector has become common place, and hence, manifest in form of over-inflation of power project contracts, misapplication of funds, fraudulent practices, bribery and/or kick-backs, among others.

Highlighting some of the gray areas in his study titled, "Kept in Darkness: Holding Non-Performing Electricity Contractors Accountable", Oke went further to say that of all the power lines in the country, those of the second Benin-Onitsha with a carrying capacity of 330KV power lines awarded to a company known as ABB; the one of Gombe-Yola-Jalingo with a transmission capacity of 330KV Consortium awarded to Chrome; the Katampe-National Stadium with 132KV transmission line, and awarded to ABB Powerline Company; the Umuchia-Mbalano, with 132 transmission line awardedto Santo Energy as well as the Yola Power sector with a capacity of 330/132/33KV award to Siemens Nigeria Plc. These companies have undoubtedly gulped hundreds of billions of tax payer's monies with little or nothing tangible to show for it.

Not left out in the array of Nigeria's energy sector that have been marred by endemic corruption include those of Umuahia-Ohafia, Ohafia-Arochukwu, Akure-Ado Ekiti, among others. To Oke, these power projects have seen the worse forms of corruption in recent history.

Ejoh (2018) on his part wrote that electricity sector reforms have not only suffered setbacks from corruption. He claimed that problems of technical know-how have been at the fore front. Technical issues here can be used to encompass critical areas of concern such as equipment supplies, operations and the requisite skills in the power sector value chain. According to Ejoh, maintained that 13 years after the inception of the federal government power sector reforms, around $\mathbb{N}2.4$ trillion was required to fast track of kick-start the process of power revitalization, which never came. This scenario left the operators of GENCOs and DISCOs scavenging for monies with which to use to begin the process of power generation and transmission.

Nevertheless, there are other challenges with the power sector reforms in Nigeria. They include, but not limited to increasing rates of technical loss as earlier mentioned. Technical loss is glaring in the system due to shortage of gas supply to electric thermal stations (those stations that use gas materials to function basically). The other area of technical hiccup is the loss incurred during the process of conveying power to the injection stations and, then, those losses encountered through customer thefts and shoddy deals involving PHCN officials. The resultant effects of these losses are evidently clear when one considers the enormous percentage of about 50 percent, which is rather above the incidences of wastages that occur before the reform era (Tinuoye, 2017).

Then comes the issue of direct transmission of power from the National Grid down to final consumers, problems of over-emphasis on profit motives by electricity companies; lack of enabling environment for smooth operation of electricity companies, huge debt profile by the generation and distribution companies, among other socio-political challenges. These and many other challenges have constituted huge drudgeries on the path of sustainable reform and/or power sector development in Nigeria, with devastating adverse effects on agro-allied industries in the country in no small measure.

Conclusion

This paper has examined Nigeria's power sector reform and how the said reforms have impacted on agricultural value chain and industrialization in the country. The study identifies some of the perceived challenges confronting the nation's power sector reform, and observed that while the desire to achieve sustainable power sector has been quite ambitious in outlook, the actual motive is fraught with glaring uncertainties and ambiguities. Some of the raging and contentious bottlenecks to the realization of the age-long dream of electricity supply to the teeming population

have been identified and evaluated. Again, the study adopted appropriate theoretical basis to underscore government's bid to intervene in revamping ailing sectors of the Nigerian economy, namely the electricity sub-sector. It is however, a contradiction that in spite of all the resources the nation is endowed with, and in spite of the huge budgetary expenditures disbursed into the power sector since inception of democracy in Nigeria since 1999, the story of power sector development has failed to yield meaningful results. This state of affair is rather embarrassing to Nigeria's collective national and international reputations, and hence, calls for urgent prognosis so the sector can experience a new lease of life. On this premise, the following recommendations for the overall revitalization of the energy sub-sector will suffice.

Recommendations

In order to urgently remedy the Nigerian power sector out of the woods, the paper finds it expedient to recommend that:

First, the umbrella body that regulates the electricity supply in Nigeria, the Nigeria Electricity Regulatory Commission (NERC) should be allowed to take full responsibility in the power sector regulatory processes. When this happens, and devoid of any political interests, the commission will be liable to not just failed contracts, but also be liable to refund all monies awarded to non-performing contractors at electricity sites in the country.

Again, the Nigerian government should develop home-grown electricity generation strategies using available resources as take-off point. The availability of coal deposits in some parts of the country can be effectively tapped and harnessed to achieve this feat. Nigeria can take a queue from countries of the world who have adopted coal-fired generating techniques and succeeded. For example, China alone generates well over 4,631MW of power through coal; India, the United States of America, Japen and South-Korea are other critical examples.

Moreover, the problem of corruption, not just in the energy sector, but also in all sectors of the country, has been allowed to fester for too long. What we can do is to design a fresh template for punishing potential corrupt public servants who have converted public funds into private coffers. It will not be too much to suggest that such persons or culprits should be allowed to return the loots, and then, sentenced to prison for a number of years with hard labour. This will serve as deterrence to would-be corrupt officials.

Similarly, government should be able to decentralize all power generation, transmission and distribution companies in the country. The tendency where the national grid handles virtually every aspect of generation and transmission could become disastrous whenever there are hiccups.

Lastly, the loss in transmission of power through gas leakages, theft or outright negligence can be properly handled when there is provision for proper and adequate storage of gas, especially in government designated and reserved areas across strategic locations in the country. This involves effective and all-round policing and monitoring with high-technologyand surveillance equipments at every location where these stations are cited. This strategy can equally regulate the nefarious activities of potential criminals who may want to engage in shoddy practices in and around places where these critical infrastructures are kept.

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