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IMPLICATIONS OF POOR ELECTRICITY SUPPLY ON NIGERIA'S NATIONAL DEVELOPMENT

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ABSTRACT

Since 2005, the Federal Government of Nigeria has undertaken a long-term structural reform of the power sector to improve the provision of electricity to its citizens. The government has developed the power sector from a single state-owned utility to an unbundled system with private participation and ownership of assets across generation and distribution. This study contributes to the existing literature that unravels the implications on Nigeria's National Development. This study is situated within the output-oriented approach. This study uses new estimation methodology with data obtained from various qualitative and quantitative secondary sources while content analysis and table and pie chat were used in its analysis. Furthermore, the findings show that poor electricity supply has resulted to decay and collapse infrastructure, closure of industries as well as a rapid decline in the availability of social amenities like potable drinking water, improved health care services, etc.

1. INTRODUCTION

West African states have suffered from chronic energy poverty over the years, a prevailing circumstance that is partly responsible for current low levels of economic and social development in the sub-region. The average per capita consumption of electricity in the 15 ECOWAS member states is roughly seven and a half times lower than that of OECD countries. However, despite the fact that ECOWAS member states consume very little electricity; when compared to other sub-region, they have significant energy potential (e.g., oil and gas reserves in Nigeria, Ghana, and Côte d'Ivoire; hydroelectric potential in Nigeria, Guinea, Ghana, Liberia, Côte d'Ivoire and Mali; and a year-round abundant solar resource throughout the region). It is under-exploitation of these rich resources combined with inadequate policies, mainly in the area of electricity supply and distribution have prevented the citizens access to electricity, especially the poor (GNESD, 2002).

Electricity production in Nigeria over the last 50 years has varied from gas-fired, oil-fired, and hydroelectric power stations, to coal-fired stations with hydroelectric power systems and gas-fired systems taking precedence. This precedence is predicated on the fact that the primary fuel sources (coal, oil, water, and gas) for these power stations are readily available. Nigeria is considered as one of the energy-rich country in the world.

Nigeria is rated among the top Oil Producer in Africa, second in natural gas reserve an estimated 2 billion metric tons of coal, especially the enormous coal reserves in Enugu area. In fact, Nigeria has the 10th largest reserves of oil and gas globally, consisting of 36.2 billion barrels of oil and 1.84 trillion cubic feet of natural gas. Besides, continuous power supply at the required quality remains a critical challenge for Nigeria despite her

abundant energy resources. Installed capacity is 8,000MW, but only 4,000MW is operable of which only about 1,500MW is available to generate electricity. At 125 kWh per capita, electricity consumption is one of the lowest in the world (Ajumogobia and Okeke, 2015).

Nevertheless, since 1999, the Federal Government of Nigeria has undertaken a long-term structural reform of the sector to improve the provision of power to its citizens. The Roadmap for Power Sector Reform launched in 2010 has provided the major impetus. The government has developed the power sector from a single state-owned utility to an unbundled system with private participation and ownership of assets across generation and distribution. Thus, improving Nigeria's power generation is vital factor to resolving the power shortage. Ongoing refurbishment of existing generation plants and construction of new gas-fired power plants will help. However, building more generation capacity alone is not enough; it needs to be supported upstream with improved gas availability and downstream with additional transmission capacity.

The Federal Government of Nigeria embarked on the liberalization and privatization of power sector due to the inability of past capital investment in the sector to yield the desired result that will enhance in improvement in electricity supply that will in turn galvanized economic development. Thus, the major transition from a vertically integrated, publicly-owned electricity network to a mostly privately-owned unbundled in the Nigerian power sector, with the separation of the different segments of electricity business through a process called 'unbundling'. The reforms have moved Nigerian power sector from a state monopoly to a competitive electricity market.

Since 2005, considerable successes have been achieved in the power sector, with the Nigerian Electricity Regulatory Commission (NERC) having licensed more than 20,000 MW of power that could potentially come to the grid in a few years. However, the licensees are yet to make real progress in executing their projects. The National Electricity Power Policy (NEPP) and the Electric Power Sector Reform Act 2005 (EPSR) provide for the development of Nigeria electricity market. A Market Reform Model that encourages wholesale competition in the Nigerian power sector was recommended to assist in monopoly control and cost insensitivity. Thus, the reforms broke NEPA's monopoly and paved the way for the entry of independent power producers (IPPs) (Ajumogobia and Okeke, 2015).

To redress the situation, the FGN enacted of the Electric Power Sector Reform Act (EPSRA) in May 2005 and launched the National Integrated Power Projects (NIPP) initiative in 2006. The goal of the NIPP is to bridge the immediate supply/demand gap and reduce the bottlenecks in the delivery system. The purpose of the reforms is to create an environment that would attract and retain much needed private sector finance and long-term participation (African Development Bank Group, 2009).

Before November 2013, there were 10 successor companies that sent power to the national grid, and the 11 companies that sell power to consumers, were all owned by the government. In Nigeria, today, these companies are privately owned, and the transmission company is now under the management of the private sector. The reform entailed NEPA being unbundled into seven generation companies (GenCos), one transmission company (TransysCo) and eleven distribution companies (DisCos), an arrangement expected to encourage private sector investment particularly in generation and distribution.

Today, Nigeria has the following Electricity Distribution Companies (DISCOs) to includes Port-Harcourt Electricity Distribution Co. Plc; Abuja Electricity Distribution Co. Plc, Benin Electricity Distribution Co. Plc, Ibadan Electricity Distribution Co. Plc, Ikeja Electricity Distribution Co. Plc, Eko Electricity Distribution Co. Plc, Yola Electricity Distribution Co. Plc, Jos Electricity Distribution Co. Plc, Kano Electricity Distribution Co. Plc, Kaduna Electricity Distribution Co. Plc, Enugu Electricity Distribution Co. Plc. Generating Companies (GENCOs)includes Geregu Power Plc, Afam Power Plc, Sapele Power Plc, Ughelli Power Plc, Shiroro Power Plc, Kainji Power Plc.

It is against this background that this study seeks to assess the implications of poor electricity supply in on Nigeria national development in recent time.

2. LITERATURE REVIEW

Scholars and researchers alike have conducted a number of researches to ascertain the relationship between electricity supply and a country's economic growth and development. For instance, Ologundudu (2015) in his study investigated the causal and long-run relationship between electricity supply, industrialization and economic development in Nigeria between 1972 and 2010. The study also revealed a unidirectional relationship without a feedback effect between labour and electricity supply. Similarly, Lionel (2013) in their study examined the relationship between electricity supply and economic development in Nigeria between 1970 and 2009. Their study shows that per capita GDP, lagged electricity supply, technology and capital are the significant variables that influence economic development in Nigeria.

Okafor (2008) in his study argued that despite huge funds the Nigerian government had invested in the power sector from 1999 to 2007. The country with the population of over 140 million was only able to generate less than 3,000 MW as against over 10,000 MW needed to transform the economy of the country. Okafor identified several causes of inadequate power supply in Nigeria and assert that the unpleasant situation has severe negative implications for the growth and development of the nation's industrial sector as most organizations spent the large sum of money on running their private generator. He added that this unpleasant situation has brought a major setback on the country's quest for industrial development.

Onakoya *et al.* (2013) in their study examining the relationship between energy consumption and Nigeria's economic growth between 1975 and 2010. Their study shows that in the long run, total energy consumption has a relationship with economic growth except for coal consumption. Also, their study shows that petroleum, electricity and the aggregate energy consumption have a positive relationship with economic growth in Nigeria. While Ado and Josiah (2015) in their study examined the impact of deficient electric power supply on the operations of small-scale businesses operating in the northeast of Nigeria. Their study shows that the severity of electricity supply outages and the costs imposed by power supply outages on the operation of this class of businesses in the region. They suggested that there is the need for policy attention be focused on revitalizing the electricity sector of Nigeria which will in turn improve the national economy.

Nwankwo and Njogo (2013) in her study examine the effect of electricity supply on economic development and likewise the effect of electricity supply on industrial development. The study shows that the electricity (ELEC), Gross fixed capital formation (GFCF), industrial production (INDU) variables and population have the positive relationship. George and Oseni (2012) examine the relationship between electricity power and unemployment rates in Nigeria. They used the ordinary least square regression model examined the influence of electricity power outputs, supply, and consumption in addressing the high rate of unemployment in Nigeria. Their study covers the time frame between 1970 and 2005. Their study shows that the power supply to the industrial sector in Nigeria was lower than the supply for residential consumption. In their study, they discovered that the major cause of unemployment in Nigeria can be traced to the inadequate and unstable power supply to the industrial sector.

Akpokerere and Ighoroje (2013) in their study examined the effect of government expenditure on economic growth in Nigeria using a disaggregated approach between1977 and 2009. Their study shows that Nigerian government total capital expenditure (TCAP), total recurrent expenditures (TREC), government expenditure on education (EDU) and power (POW) have the negative effect on economic growth. Uzochukwu and Nwogwugwu (2012) examined the federal government of Nigeria spending on the electricity sub-sector. The result of their study shows that despite the various reforms by past administrations and an increase in spending in the electricity sector, the electricity output is far from the realization of the reform objectives. Jesuovie *et al.* (2014) in their study find out whether the huge expenditure made yearly in the power sector has translated into greater electricity generation.

Their study shows that that recurrent expenditure has positive impact on electricity generation on one hand and on the other hand the reverse is the case between the later and capital expenditure in the power sector. They also discovered that a megawatt of electricity generation which is the variable of interest has the significant positive impact on real GDP and negatively impacted on the index of industrial production. On the whole, from the above literature reviewed, we discovered that significant numbers of studies have been conducted on the relationship between electricity supply and economic growth and development in Nigeria between 1975 and 2010. However, no recent study has been conducted on the impact of poor electricity supply on Nigeria's national development in contemporary times. It is against this background that this study seeks to make a contribution to existing literature on Nigeria power sector.

3. FEDERAL GOVERNMENT BUDGETARY INTERVENTIONS ON RURAL ELECTRIFICATION

Since 1989 the Federal Government of Nigeria has shown remarkable efforts aimed to improving electricity supply in rural areas in Nigeria where the challenges of electricity supply are endemic. Table 1 below captures the various budgetary allocations from 1989 to 2001 targeted at improving rural electrification in Nigeria.

Table-1. National Rural Electrification Programme Budgetary Allocations (1989-2001)

Year	Allocation Naira (Million)	Allocation Us Dollars (Million)
1989	8.6	1.16
1990	53.5	6.6
1991	37.3	3.77
1992	40.0	2.29
1993	75.0	3.41
1994	137.0	6.23
1995	740.0	9.65
1996	380.7	4.66
1997	520.0	6.34
1998	523.2	6.21
1999	6,400	6.9
2000	1,000	9.79
2001	13,500	118.21

Source: Federal Ministry of Information and National Orientation Report (2002).

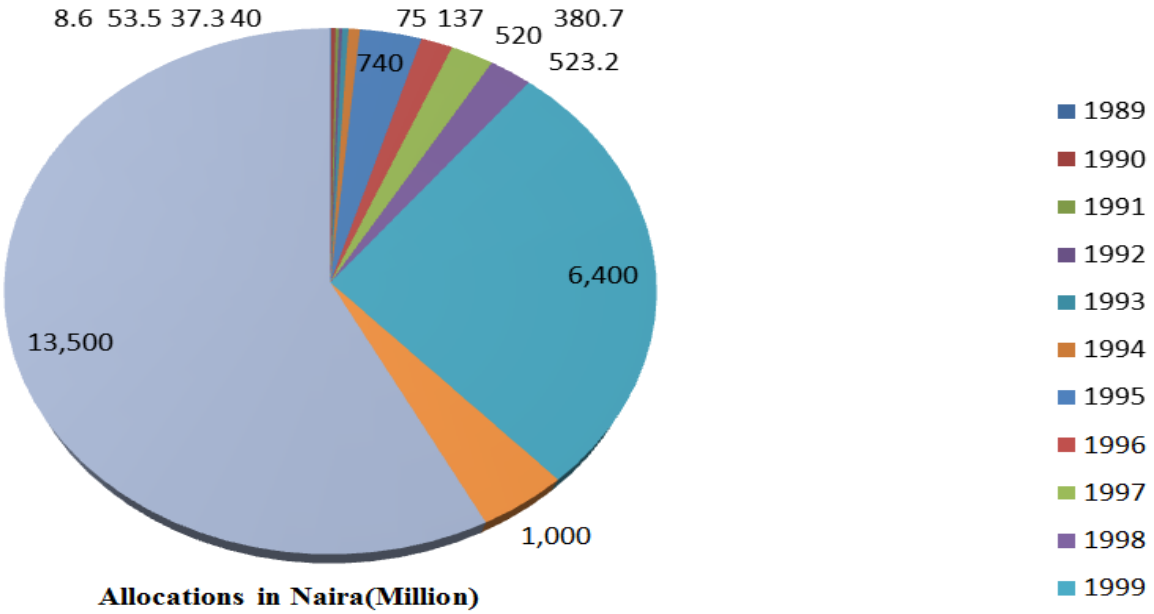

Figure-1. Showing National Rural Electrification Programme Budgetary Allocations (1989-2001)

Source: Compiled by the Authors from data obtained from the FMINOR (2002)

Table 1 and figure 1 above shows the flow of government subvention for rural electrification in Nigeria from 1989 to 2001. It shows the allocation of each year the naira as well as dollar equivalent. The highest subvention was in the year 1998 when NGN523, 200,000.00 equivalents of 6.21 million US dollars was allocated for rural electrification. While, 1989 witnessed the lowest budgetary allocation for rural electrification estimated at 8.6 million equivalents of 1.16 million US dollars

4. ELECTRICITY GENERATION CAPACITY IN NIGERIA (1999-2017)

On assuming office on May 29 1999, the President Olusegun Obasanjo's administration expanded the 19 transmission lines that were expected to generate at least 400 megawatts electricity which will be added to the existed 4,000 megawatts (FMINOR, 2002). In 2009, Installed capacity is 8,000MW, but only 4,000MW was operable of which only about 1,500MW was available to generate electricity. At 125 kWh per capita, electricity consumption is one of the lowest in the world. For instance, as at 2009 the figure takes into account the sabotage of the gas pipeline that feeds Egbin Power Station on 13 August 2009.

Moreover, significant efforts were made by the government to achieve by end-2009 a target of 6,000MW of operable power generation capacity, including the necessary transmission and distribution infrastructure. Notable progress has been made as of August 2009, as the operable generation capacity reached about 4,200MW. The Federal Government expects to achieve by end-2011 the target of 10,000MW of operable power generation capacity and the associated transportation infrastructure, through a combination of: (i) the continued rehabilitation and maintenance of existing power plants and transportation infrastructure; and, (ii) the commissioning of new power stations and the associated transportation infrastructure that were constructed under the NIPP program. The first power station expected to be commissioned in the first quarter of 2010 was the Alaoji phase 1 of 420MW (ADBG, 2009).

Nigeria was expected to achieve 52 percent from 4,612 megawatts (MW) to 7,033 MW by April 2011 and later on increases from 14,218MW by December 2013. Meanwhile, by 2014 Nigeria was nowhere found close to the set target, rather, by August 2012, the nation experienced the decline of 763 MW promised for December 2011 and 66 percent approximately 660MW of the promised annual increase for 2012. Moreover, as of March 27 2013, 3949.7 generating capacity was achieved (Ogunnaike, 2013 cited in Oluwashakin and Aleyomi (2014)). Ogunnaike, (2013) cited in Oluwashakin and Aleyomi (2014) rightly observe this output level was "inadequate to guarantee stable power supply in Lagos State alone, the commercial and industrial nerve Centre of the country, let alone in the entire nation" (Ogunnaike, 2013 cited in Oluwashakin and Aleyomi (2014). Worst still in 2015, 2000MW was lost from the national grid (Ochayi, 2015).

In addition, Oluwashakin and Aleyomi (2014) posit that Nigeria installed power capacity of 8,000MW and 4,000 MW for a population of 160 million people was grossly inadequate. When compared to South Africa. South Africa generates approximately 35,000MW for a population of 49 million, noting that at 12kwh/capita, Nigeria power generation capacity is far lower. South Africa's 488kwh/capita is the highest in Africa. Moreover, under generation of electricity supply estimated at 3,500 MW for an estimated 183.5 million populations as at 2015 (UNDP, 2014) was slightly the power consumption of the city of Bradford in England which has a population of 300,000. By comparison, South Africa has an electricity generation capacity of 45,000 MW for its population of 48 million people as at 2009 (DFID, 2009).

Today, Nigeria has 12,522MW of installed capacity, but due to maintenance, gas, water and transmission constraints, an average of only 3,879MW of capacity is operational. Besides, of the majority of Nigerians estimated at 85% of installed capacity is fuelled by gas. Availability of gas molecules is low due to insufficient production, economic disincentives, inadequate infrastructure and frequent vandalism. Also, Nigeria's transmission system has the capacity to transmit 5,300MW but is disrupted by system collapses and frequently forced outages. Presently, transmission capacity in Nigeria is higher than operational generation capacity, but the transmission will rapidly

become a constraint due to increasing operational capacity. Furthermore, Nigeria's distribution companies suffer significant losses, with 46% of energy lost due through technical, commercial and collection issues.

On the whole, Okafor (2017a) assert that as at 8th December, 2017 power generation capacity stood at 5,156mw, while on the 14th December, 2017 power generation capacity dropped to 5,077mw and increased slightly to 5,103mw as at 15th December, 2017 (This Day The Sunday December 17, 2017 Page:83).

5. IMPLICATIONS OF POOR ELECTRICITY SUPPLY NIGERIA'S NATIONAL DEVELOPMENT

Nigeria is Africa's most populous nation and the world's 7th. The country is currently experiencing its longest period of civilian rule since independence. The general election of April 2007 marked the first civilian-to-civilian transfer of power in the country's history and the elections of 2011 and 2015 were generally regarded as credible. In January 2014, Nigeria became a member of Security Council for the 2014-2015 term.

Nigeria has, since the oil boom of the 1970s, been heavily dependent on its oil and gas sector for growth but is slowly diversifying. Utilities, manufacturing, and construction were its fastest growing sectors over 2010–13, leading some commentator to suggest Nigeria is no longer just a petro-economy. Nigeria's economic potential is considerable because of the size of its domestic market, its geographical position and its human and natural resources (DFID, 2016).

Over the last decade, Nigeria has seen its economy grow by 5% or more each year. A rebasing of its GDP saw the figure reach £307.6 billion in 2013, making Nigeria the largest economy in Africa. In 2014, Nigeria's economy (GDP) becomes the largest in Africa, worth more than $500 billion in terms of purchasing power party (PPP). It overtook South Africa to become the world's economy in 2015. Nigeria's oil reserves have played a significant role in its growing political and economic influence. The country is considered to be an emerging market by the World Bank and has been identified as a regional power on the Africa continent[1].

Moreover, considering the enormous potential of the Nigeria state, it is assumed that it citizens should enjoy a better electricity supply, improved standard of living such as the availability of potable drinking water, easy access to health facilities, good road network, affordable shelters good and affordable schools, and other basic necessities of life. However the reality is that most Nigerians are leaving in abject poverty and inadequate and extreme cases lack of basic social amenities such as health facilities, motor able roads, and good shelters among others.

One area in which the impacts of low investment have been strongly felt is in the Nigerian power sector. Despite having the continent's largest economy, Nigeria also has the highest number of Africans (96 million) living without access to electricity (International Energy Agency, 2015). Increasing access is important in poverty reduction in Nigeria. This can improve the productivity and output of enterprises; create jobs and free people from the burden of self-generation (which is usually more expensive). Greater access can create a positive feedback loop by increasing incomes and allowing the poorest to invest in education and other productive resources that are central to sustainable development (Practical Action Consulting, 2015).

The FMINOR (2002) captures the implications of poor electricity supply on economic activities in Nigeria which states that:

> *"Technical losses in the system were more than 40%. When added to the poor payment patterns of customers in the system, collections have been less than 50% of power generated. This situation directly affected the nation's economy. Industrial capacity utilization declined significantly as industrialists resorted to the more expensive alternative power supply of running generators at a greater cost. This cost was eventually passed on to the end users of*

[1] (www.unjobs.org/vacancies/1435605882585).

> *the products. Companies that could not afford this alternative source simply closed down. This has resulted in the intractable high unemployment rates that now prevail in the country"* (FMINOR, 2002).

However, despite the huge annual budgetary allocations from the federal government the state of electricity supply in Nigeria is captured in the inaugural speech of President Muhammadu Buhari on May 29, 2015 captures the implications of poor electricity supply on Nigeria's economic development when he remarked that:

> *"… No single cause can be identified to explain Nigeria's poor economic performance over the years than power situation. It is a national shame that an economy of 180 million generate only 4,000 MW and distributes even less. Continuous tinkering with the structures of the power supply and distribution and close on 20 billion dollars expanded since 1999 have only brought darkness, frustration, misery, and resignation among Nigerians. We will not allow this to go on"* [2].

Moreover, the absence or limited supply of electricity will adversely affect a country's socio-economic activities like business activities. This will also lead to infrastructural decay and collapse, closure of industries as well as a rapid decline in the availability of social amenities such as potable drinking water, improved health care services among others. DFID Programme report 2009 also points to the fact that the inadequacy of power sector is a serious challenge to Nigeria's economic growth and to enhance the better standard of living for the vast population of the country. Besides, 60 percent of Nigerian populations have access to alternative power supply and consumption which is among the lowest in the world. It has been estimated that it would cost Nigeria $50 billion to ensure a reasonable electricity supply in Nigeria (DFID, 2009).

Similarly, the World Bank buttress the DFID assertion that *"the quality of the electricity services is the largest barrier to business in Nigeria"* (World Bank, 2009). Moreover, 90 percent of businesses in Nigeria have their own generators which provide 60 percent of the Nigerian population of their energy needs (Financial Time, 2009). In the same vein, a former Federal Permanent Secretary Chief Philip Asiodu remarked that: *"There is a direct relationship between total energy consumption and growth of GDP"* (Alike, 2017).

Another implication of poor power outage on Nigeria's economy is such that companies and small and medium scale businesses that could not afford an alternative source of power supply close down. This has resulted in the intractable high rate of unemployment that now prevails in all parts of the country. Besides, industrial capacity utilization has reduced drastically as Industrialists resort to the more expensive alternative power supply of running generators at a higher cost. Another option for companies that cannot endure the high cost of production due to poor power supply often leave Lagos, Kano and other commercial towns and cities in Nigeria to countries like Ghana where they can be guaranteed of a considerable stable power supply (FMINOR, 2002).

The UNDP Annual Report 2014 states that demand for energy in Nigeria has been raising at a rate more than the country can supply. As at 2014, more than 15 million households in Nigeria lack access to the national grid and most rural communities still depend on wood as a source of fuel for cooking and heating. Thus, energy plays an important role in ensuring that basic human needs and services like shelter, clean water, and sanitation, health services are provided. The report added that the increasing demand for wood fuel, especially within rural communities continue to contribute to high levels of deforestation, greenhouse gases emissions, and pollution. Though this may be perceived as a local problem, it ultimately contributes to global environmental challenges like climate change. Policies exist to address environmental and climate change challenges. However, a lot more remains to be done to translate them to action at all tiers of government.

The major power gaps seriously impede the growth of the non-oil sector and, as a result, job creation and poverty reduction. About 45% of the population has access to electricity, with only about 30% of their demand for

[2] (www.news24.com).

power being met. The power sector is plagued by recurrent outages to the extent that some 90% of industrial customers and a significant number of residential and other non-residential customers provide their own power at a huge cost to themselves and to the Nigerian economy. The total capacity of power self-generation units in Nigeria is estimated at about 2,500MW. In terms of financial losses, the Nigeria power sector lost an estimated NGN 1,337,000,000 as at April 5, 2017 while as at April 11, 2017 it losses NGN1, 274,000,000 due to shortage in gas supply and water management at various power stations in the country (This Day the Sunday Newspaper April 16, 2017). Again, Okafor (2017a) assert that operators in the Nigerian power sector are beginning to find it hard to work under severe difficult financial constraints that affect the sector. To this end the difficulty witnessed in the Nigerian power sector prompted the Central Bank of Nigeria (CBN) interventions by allocating NGN214 billion in 2014 to offset the sectors backload of gas and power debt (This Day The Sunday Newspaper March 22, 2017). Cumulatively, Nigeria power sector lost an estimated NGN940 million as at 15th December, 2017 (This Day The Sunday December 17, 2017). Furthermore, the pathetic situation of electricity supply in Nigeria is so evident that a 2009 survey conducted shows that over 97% of firms in the country experience over 196 hours of power outage per month. This shows that Nigerians firms witness eight full days of lack of productivity due to power outage (Biu, 2016). The implication of this outage is that firms in Nigeria that solely depend on electricity supply will have to spend one-third of a month using an alternative power supply which has its own hazard on the environment through the emission of carbon monoxide.

In addition, despite the establishment of the Electricity Management Service Limited (EMSL) which is one of the key actors in the electricity supply industry established in accordance with the provision of part 1 section 8 of the power sector reform Act 2005 and the supplementary regulations number 46/47 (B499-452) of the Federal government official gazette no 374 of 210 to ensure the safety of lives and property within the grid and off grid network and also ensure that electricity equipment used in the electricity distribution sub-sector are of the right quality, standard and specifications. There are high and frequent records of the use of sub-standard electricity equipment in the Nigerian power sector leading to constant damage of electricity insulations across the country.

6. CONCLUSION

The economic growth and living standard of any country are an indication of the size of its electricity industry. This is because the sustainable and stable power supply is germane in promoting the living standard as well as the economic activities of any nation. It also shows a reflection of the citizens' access to potable water, improved healthcare facilities, growth and development of the various segment of the national economy such as communication, industry among others. Since the return to the democratic regime on May 29, 1999, huge resources have been committed to improve electricity supply in the country. Ironically, the huge investments in the power sector have not yielded the desired output of electricity supply. Moreover, the absence or limited supply of electricity has adversely affected socio-economic activities in Nigeria like business activities. This will also lead to infrastructural decay and collapse, closure of industries as well as a rapid decline in the availability of social amenities such as potable drinking water, improved health care services among others. From the above assertion, electricity supply is key to national development in Nigeria.

7. RECOMMENDATIONS

Considering the forgoing implications of the failure of the rate of electricity supply on the Nigerian economy we recommend that:

Firstly, the Federal Ministry of Power, Works and Housing should intensify effort in ensuring that the desired skill manpower is employed in the Nigerian power sector so as to help address the issue of quackery. This can be achieved when the National Power Sector Apprenticeship Scheme (NAPSAS) whose mandate is to provide adequate

skill training for technical staff in the area of distribution sub-station operation, cable jointers, linesmen, pole climbers and electrical fitters is strengthening through funding and monitoring.

Similarly, firms operating in the Nigerian power sector should be encouraged to replace obsolete equipment and improve the quality of service delivery. Furthermore, the Nigerian Electricity Regulatory Commission (NERC), Nigerian Bulk Electricity Trading (NBET) and other relevant operators in the power sector should draft and implement a strategic framework that will help address the financial problem facing the power sector. This will in addition, regulate the actions of stakeholders of the Nigerian power sector from gross disrespect for the various financial and governance mechanisms that guild the market operation especially as regards to the tariff.

Finally, the federal government needs a strong political will to improve the generation capacity of power in Nigeria. Therefore, going by experts' projection, for Nigerian economy to grow at the rate of 10%, the nation's power output is expected to reach 30,000 megawatts by 2020 and by 2030 the expected projection should be 78,000 megawatts. Thus, the right time to put in place the right strategic frameworks and invest in the Nigerian power sector that will galvanize the desired growth in the Nigerian economy is now.

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