Infrastructural Development, a Panacea to Poverty Alleviation

LAWAL, Yekini Olawaiye, (PhD.)¹, JEMILOHUN, Vincent G. (MSc.)², UDOUSORO, Inemesit Inyang, (MSc.)³

¹Lead/Corresponding author, Professor of Business administration/Director of Academic Planning, Afe Babalola University, Ado Ekiti. Nigeria.

²Lecturer I, College of Sciences Afe Babalola University, Ado Ekiti. Nigeria. ³College of Social and Management Sciences, Afe Babalola University, Ado Ekiti. Nigeria. Corresponding Author: Lawal, Yekini Olawaiye

Abstract: Infrastructural development is a key driver for economic development and progress in a country and a critical enabler for productivity and sustainable economic growth. The paper identified infrastructure as a major factor that determines the people's wellbeing and by extension their level of prosperity or poverty. It also identified the following; education, transportation, health, clean water and sanitation, social service and electricity supply as critical components of infrastructure. This paper reviewed the status of these critical infrastructure in Nigeria and the level of the effectiveness of past poverty alleviation programmes in Nigeria. A survey method was used. It was found that the past poverty alleviation programmes of government had been unsuccessful because of many factors, among these were, the lack of continuity of programmes and the low level of infrastructure addition and the deterioration of the existing ones. It was found that Nigeria suffers high degree of infrastructural deficit caused by poor funding, mismanagement of available funds, poor infrastructural maintenance management and corruption. All these continued to perpetuate poverty. Recommendations to use infrastructure as a panacea to alleviate poverty were listed.

Keywords: Poverty, Infrastructure, Poverty alleviation, Panacea, Development

Date of Submission: 19-09-2019 Date of Acceptance: 07-10-2019

I. Introduction

We started by defining the relevant terms used in the work.

- 1.1 Infrastructure: The business dictionary describes infrastructure as investment of a country, firm or project that underlies and makes possible all its economic activities which include; administrative, telecommunications, transportation, utilities, and waste removal and processing facilities, education, training facilities, health care, research and development (Anon, 2019). Parsons, (2010) also described infrastructure as assets, services and markets which have different attributes such as: transport to include; road, rail, ports and airports, drinking water and sanitation, power, telecommunications, health and education. Infrastructure can therefore be summarized as the basic systems and services that an organization, body, community or state uses to provide social services and support all productive activities in an effective and efficient manner. Infrastructure can be identified by some characteristics.
- 1.2. Characteristics of Infrastructure: Some characteristics of infrastructure include its relatively permanent nature, durability, foundational capital investment and large capital investment outlay which require funding from government or organization or philanthropic rich individuals. Infrastructure usually provides specific purpose, requires planned maintenance and cost for effective and efficient delivery of services, yields future income or benefits, has extensive complex networks with multiple interfaces, has positive and negative externalities with consequences on third party and has monopolistic profiles and geographies (Parsons, 2010 and Anon. 2019).

Infrastructure development is driven by; globalization, population growth, production specialization, and increasing standard of living. Political stability, security, public policies on tax, budgets, institutional capacity, return on investment and legislations are motivating factors for investment in infrastructure (Parsons, 2010).

1.3 Poverty: Poverty has been described by authors variously based on their personal perceptions such as; level of income, living conditions, social inclusion and some others. Deleck et al., (1992) argued that poverty is not restricted to one dimension of income but manifests itself in all domains of life which includes; housing,

DOI: 10.9790/487X-2110013946 www.iosrjournals.org 39 | Page

education, health, amongst others. TheUnited Nations (1995:5) described poverty comprehensively to include: "...a condition characterized by severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education and informational access to services". In another work, the United Nations (1998) added social exclusion, insecurity, powerlessness and violation of human dignity as evidence of poverty which makes the poor susceptibility to violence. They added that, poverty is the lack of basic capacity to participate effectively in society, a denial of access to education and health services, a denial of choices and opportunities and a violation of human dignity. In their study, the European Union (E.U., 2004: 8) stated that, "...people live in poverty if their income and resources are so inadequate as to preclude them from having a standard of living considered acceptable in the society in which they live and because of their poverty, they experience multiple disadvantage through unemployment, low income, poor housing and social exclusion".

- **1.4. Poverty Alleviation:** Poverty Alleviation refers to efforts made to improve the quality of life of someone currently living in poverty.
- **1.5. Poverty in Nigeria:** At independence in 1960, Nigeria was a prosperous nation with only about 15% of its population living below poverty. Nigeria gradually lost its prosperity and the proportion of poor people of its population rose steadily from 28.1% in 1980 to 70% in 2010 which made the World Bank to categorize it as a poor nation (See table 1).

	Table 1: Nigeria's Trend in Poverty Level, 1980-2010						
Year	1980	1985	1992	1996	2010		
Poverty level	28.1%	46.3%	42.7%	65.6%	70%		
Estimated Total Population	65m	75m	91.5m	102.3	150m		
Population Poverty 17.7m 34.7m 39.2m 67.1m 105m							
Source: World Bank Report, 2010 as in Lawal, (2010).							

In 2014, Nigeria was ranked as the 6th poorest country in the world and the 5th among the African countries behind;Chad, Liberia, Democratic Republic of Congo and Sierra Leone (Table 2).

Table 2: Population Below Poverty Level in Some African Countries.

		Nigeria Poverty World
Nigeria Population below Poverty Level	Nigeria Poverty Africa Ranking	Ranking
70%	5	6

Source: Extracted by the Author from CIA World Factbook, 2014

There has not been any significant improvement since then. In 2015, Nigeria was reported to be one of the five countries that made up fifty percent of World's poor (World Bank, 2015). Yet, Nigeria's population continues to grow rapidly, increasing the population of the poor. It grew from 45,137,810 in 1960 to 185,989,600 in 2016 (United Nations, 2016). As at 2017, only 33.4% of its labour force was in full employment. (Table 3).

Table 3:Job Creation Survey of Nigeria Labour Force Statistics,

Labour Force	Full Time Employed	Total Unemployed Persons		
Population	1 2	1 3		
85,088,055	51,060,936	34,027,119		

Source: Extracted from Central Bank of Nigeria (CBN) Statistics, 2017.

- 1.6 Problem: From the various definitions, the level of accessibility to the following infrastructure; education, transportation, health, clean water and sanitation, social services and electricity supply were considered as major indexes to the determination of the level of the people's welfare and by extension their level of poverty. Nigeria has continued to record high deficit in infrastructure. Worse still, it had not enjoyed the full benefits of its past investments on infrastructure. In Nigeria, soon after the facilities were completed and handed over to the beneficiaries after commissioning, the infrastructure broke down because of improper management and absence of built in maintenance (Lawal, 2000 and Lawal and Onahaebi, 2010). In its effort to improve infrastructure, the Nigeria government established the Infrastructure Concession Regulatory Commission (ICRC) with the mandate to provide adequate social infrastructures that would create employment for its citizens (ICRC, 2015). Regrettably, the Commission has been ineffective due to acute shortage of funds to carry out its activities.
- 1.7. Past Poverty Alleviation Programmes of Nigeria: In its efforts to alleviate poverty, the Nigerian government had evolved and implemented many strategies which we classified as:

- 1.7.1. Agriculture directed such as: Operation Feed the Nation (OFN), Green Revolution, Directorate For Food and Rural Infrastructure (DFFRI), National Land Development Agency (NALDA), National Accelerated Food Production Project (NAFPP), Natural Resources Development and Conservation Scheme (NRDCS).
- 1.7.2. Job creation and social welfare directed: They included; War Against Indiscipline and Corruption (WAIC), Peoples Bank, National Directorate of Employment (NDE), Family Support Programme (FSP), National Poverty Eradication Programme (NAPEP), Rural Infrastructural Development Scheme (RIDS), Social Welfare Services Scheme (SOWESS), Youth Employment Scheme (YES), Vision 2010 and Vision 20:20:20.
- 1.7.3. Subsidy and recovered funds directed: These were; Petroleum Trust Fund (PTF), Petroleum Trust Development Fund (PTDF) and Subsidy Reinvestment and Empowerment Programme (SURE-P).
- 1.7.4. Evaluation of past poverty alleviation programmes: In his evaluation of the poverty alleviation programmes, Lawal (2010) reported that, the programmes failed. All the poverty alleviation programmes had failed to achieve the goals of government. The causes of failure reported by Lawal (2010) which have continued with the recent projects included:
- Failure of the Federal government to collaborate with the state and local governments
- Lack of continuity by successive governments to continue outstanding projects. Succeeding administration have been found to abandon inherited poverty alleviation programmes of past government and introduced theirs soon after they took over office.
- Absence of efficient and effective infrastructure.
- Improper management and poor maintenance management.
- 1. 8. Objective of this study: This work examined the following components of infrastructure; education and training facilities, transportation, health care facilities, potable water, electricity power and social services, their current status and effects on poverty and make recommendations on how they can be used to alleviate poverty.

II. Method

These components of infrastructure were listed, surveyed and examined individually. Questionnaires were drawn and distributed to 450 respondents comprising persons in various sectors of the Nigerian economy which included: artisans, entrepreneurs, production managers, business owners, educationist and transport managers.

III. Findings and Discussion of Findings

3.1. Education and training facilities: This study found that Nigerians are being impoverished by their denial to access education. A large population of children of primary and secondary school ages was found roaming the streets. The study confirmed the findings of Lawal and Adejuwon, (2014) that the population of qualified people requiring education at the primary, secondary and tertiary has continued to increase. Yet, the physical infrastructure of the public universities has not increased in the same direction. The joint annual admission capacity of all the public universities has been less than 20%. The capacity of the emerging private universities has not had significant improvement because of the high school fees which are beyond the reach of the low-income households. Most of those who are excluded from access to education at all levels ended up entering the labour market uneducated, unprepared, unskilled and unemployed. They join the population of Nigerians living below poverty level.

In their desire to source for means of livelihood, the poorly educated youth have taken to all vices including but not limited to; internet fraud, robbery, and kidnapping. Many of them have become ready recruits as political thugs and foot soldiers for insurgencies because such activities have provided them quick sources of sustenance and even wealth acquisition. The insurgency in the Northern regions of Nigeria has been fueled and sustained through mass recruitment of poorly educated enthusiasts who sincerely held the view that education was evil. They were motivated by the assurance of a source of livelihood by their leaders which had served as a sure way of getting out of poverty. As reported by Lawal and Azeez, (2013), many of the few well trained Nigerians have become impoverished for lack of full employment. They have left the local institutions for overseas institutions where they are exposed to better infrastructure and conditions of service. Their exit has resulted in brain drain and depletion of the Nations Human resource capacity.

3.2. Transportation: Transportation infrastructure which includes: Road, Rail, Waterways, Airways and Communication is an important sector of the economy for growth and development. It involves the movement of men, materials and machines from one place to another, provides people with access to production, education facilities, shops, social networks, recreational, community and medical facilities. Effective and efficient

transportation systems are vital to the prosperity of the people and in effect the prosperity of the nation. Transport infrastructure has shown to influence both economic growth and social cohesion of a nation. Regrettably, this study revealed that the transport infrastructure has suffered very serious neglect in the past years.

3.2.1. Road: This study confirmed the assertion of Izuwah, (2017) that, the roadways in Nigeria were grossly inadequate and generally poor. This situation has further deteriorated. Less than 60,000 of the 195,000 kilometres of road network are tarred. Even then, a substantial portion of the tarred roads have become dilapidated and inaccessible. They are dotted with potholes which have continued to cause damage to vehicles and the repairs taking a large proportion of the owners' income. The government has continued to impoverish its citizens by depriving them access to safe and affordable transportation. Except in Lagos State, the burden of provision of commercial transportation had been left to the citizens (See table 4).

Table 4: Population of vehicles on Nigeria Roads as at September 2017

Operators	Vehicle Population	% Share
Private	4,656,725	40.33
Commercial	6,749,461	58.45
Diplomatic	135,216	1.17
Total	11,547,235	0.05
Estimated National Population	193,392,517	1000.00
% Vehicle to National Population	6%	

Source: Extracted by the Author from the Records of the National Bureau of Statistics, (2017).

3.2.2. Rail: The rail transportation which is generally considered a vehicle for mass transportation has not fared better. Compared to the 20,192km rail line of standard gauge in South Africa, Nigeria has a total of 3,500km of obsolete narrow gauge rail lines, the same length with Niger which ranks Nigeria 8th in Africa (CIA World Factbook, 2014). The poor development of the rail system in Nigeria has denied the farmers easy access to mass movement of their agricultural products to market, causing them loss of revenue from product spoilage and perpetuating their poverty level (Table 6).

Table 5: Nigeria Rail Transportation Statistics

Train	Quarter1	Quarter2	Quarter3	Quarter4	Quarter1	Quarter2
Services	2016	2016	2016	2016	2017	2017
Total Pass	666,771	742,826	787,337	961,851	768,093	596,792

Source: Extracted from the Records of the National Bureau of Statistics, (2017).

3.2.3. Air transport: Air transport system in Nigeria has been poorly managed which led to the collapse of her national carrier, the Nigerian Airways. Two attempts to start another national carrier had failed because of poor project management. The airports facilities have gone to serious stages of disrepair to the level that the stakeholders described the Nigerian airports as "a national embarrassment" (Tochukwu, 2016). The poor conditions of the facilities had rendered air transport in Nigeria accident prone. It was found that, air transportation is not accessible to the majority of Nigerian Citizens because of its exorbitant fare. The cheapest being twenty-five thousand naira (N25,000.00) for the shortest distance which by road costs N1,000.00.

3.2.4. *Information and Communication Technology:* Global System of Mobile communication (GSM)which was introduced to the Nigeria communication system had contributed significantly to reducing pressure on the transportation infrastructure. Its acceptance has been tremendous (Table 7).

Table 6: GSM Subscription in Nigeria as at June 2017

				I	,			
Total Active	Total Inactive	MTN	GLO	Airtel	9Mobile	Others	Total Active	% Growth b/w
lines	lines						Internet	2006/17
139,907,213	139,486,833	50,307,169	37,349,979	34,625,745	17,203,940	420,380	143,064,490	-8.73

Source: Extracted by the Author from the Records of the National Bureau of Statistics (NBS, 2017)

In spite of the general acceptance, about 40 million Nigerians in the rural areas who had shown interest to be included in the network have been unable to access the services because of the failure of the service providers to take their services to them. During this survey, this finding was confirmed by the Executive Vice Chairman of the Nigerian Communications Commission (NCC) who in his address at the *Emerging Technologies Consultative and Information and Communication Technology (ICT) Innovation Forum* offered to

improve access to the rural communities through the deployment of more base stations to the rural areas in the short term and promised to address the infrastructural deficit in the long term.

The introduction of ICT has reduced the cost of doing business. Many businesses have been transacted either by telephone or online through the internet. The Federal government had effectively used it to enhance the rural farmers' access to agricultural inputs some years back. Regrettably, the programme had been jettisoned by the succeeding administration soon after the exit of the administration that introduced it.

- 3.2.5. Water Transport: We confirmed the report of Opeifa, (2014) which stated that, water transport in Nigeria had been unsuccessful because of its long neglect by both the government and private sector. Power tussle and conflicts between the agencies of the Federal and State Governments involved in the management of water transport had been the major problems of the sector. The people in the riverine community lacked access to comfortable water transport. They depended on canoes and boats which were few, overcrowded, slow and susceptible to frequent accidents with their attendant negative consequences of loss of;investment on boats, property and lives which had further increased their poverty level.
- 3.3. Health Care Facilities: Health Care Facilities in Nigeria had been grossly inadequate making it difficult for the poor and the lowly placed to have access to proper medical care. We found that, the rural poor, households and firms continued to shoulder more than 70% of Nigeria's total health expenditure. We agree with Onwujekweet al., (2012) that, the rural poor were the greatest sufferer. They experienced the highest burden of health expenditure. We also found that, both the doctor and the hospital density were very low compared with other African countries with about one hospital bed to 2000 citizens and two physicians to 5000 Nigerians respectively (World Factbook, 2014). These must have contributed to the significant increases in sickness, loss of lives and its attendant loss of productive man hours with consequent increase in the prevalent level of poverty and low life expectancy in Nigeria which the World Bank put at 52.62years.
- 3.4. Drinking Water: The rural poor lacked access to good drinking water. In the riverine communities, where they lived on water, borrowing from Coleridge (1798), the people were surrounded by salty water but none to drink. We agree with the World Bank report (2017), that less than 30% of households in the rural communities had access to improved water supply and that access to pipe borne water in urban areas was less than 10%. The people spent substantial part of their disposable income on construction of water wells and boreholes, thus depleting their consumption and increasing their poverty level. Poor access to good drinking water had continued to expose the people to various types of water borne diseases. Coupled with poor access to adequate health care services and good drinking water, the lots of the poor had been further worsened.
- 3.5. Electricity Generation and Distribution: Electricity power generation and supply continued to be grossly inadequate, epileptic and erratic with frequent power grid collapses. The grid recorded thirteen collapse times in 2014, four partial and ten total collapse times in 2015, four partial and twenty nine total collapse times in 2016 and fourteen total and nine partial times in the third quarter of 2017 (Asu, 2017). A peak power generation of 4,043MW or 27.15% was obtained from a generation capacity of 14,894MW in February 2017 (TCN, 2017). Splitting of the authority into autonomous companies for effective management and the introduction of prepaid meters (EPSR Act, 2005) has not improved the company's operation and the revenue recovery because of poor management and inefficiencies. Since the introduction of meters, out of the 7,476,856 customers that applied, only 3,451,611 (46.16%) had received meters (Table 11).

Table 7: Metering Position for all Discos as at December 31, 2017

Number Customers Who Paid for Meters	Total Number of Meters Installed	Percentage of Customers who got Meters
7,476,856	3,451,611	46.16%

Source: Extracted by the Author from the Records of the National Bureau of Statistics (NBS, 2017)

Similar to the failed poverty alleviation programmes of the Nigeria government caused by mainly by policy inconsistency, electricity power production and distribution of government had also failed because of the inconsistent policies, strategies and plans in the energy sector. Some of these were: the National Electric Power Policy (NEP) of 2001, government National Energy Policy (NEP) of 2003, the Renewable Energy Master Plan (REMP) of 2006, the Renewable Electricity Policy Guidelines of 2006, the Renewable Electricity Action Programme (REAP) of 2006, the Solar Energy Master Plan in 2007, the National Bio-fuel in 2007, the National Energy Master Plan (NEMP) in 2007, the Electricity Master Plan (EMP) in 2008, the Rural Electrification Policy Paper (REPP) in 2009, Electric Power Sector Reform Act (EPSRA) in 2009, the Roadmap for Power Sector Reform in 2010 and the National Renewable Energy and Energy Efficiency Policy (NREEEP) in 2015.

The effect of all these was that, entrepreneurs, production agents, academic institutions and even telecommunication services facilities were denied sustained power supply with serious negative consequences leading to loss of jobs, unnecessarily high cost of running business, loss of gainful employment and loss of revenue which perpetuates poverty.

3.6. The Fallacy of Economic Growth and Economic Development on Poverty Alleviation: Before the emergence of petroleum, agriculture remained the mainstay of the Nigerian economy (Lawal, 1988). It provided the means of livelihood for over 70% of its population. Inadequate infrastructure had caused the rural farmers to migrate to the urban areas which had no suitable resources for cultivation of agricultural products, leaving behind the feeble, freak and old men and women in the villages. These migrants were exposed to harsh environment of unemployment and hunger, lack of respectable shelter which increased their level of poverty. This study revealed that economic growth would not as a rule alleviates poverty in a country such as Nigeria where economic development does not accompany economic growth. With the annual mean production of 1.94 million barrels per day (bpd) of crude petroleum oil between from 2015 to 2018 (CBN, 2019) andthe highest Nominal GDP in Africa of 493.831 billion dollars (IMF, 2017) Nigeria cannot be described as a poor nation. Regretfully, using GDP as a measure of the wealth of Nigeria is misleading because it does not take into consideration the inequitable distribution of the nation's wealth where about 70% of its citizens lived below poverty. Another paradox is shown by the recent release of Forbes, (2019) which listed four of the twenty richest Africans as Nigerians with net worth of \$10.3, \$9.2, \$1.6 and \$1.1 billion dollars respectively. This sum totals \$22.2 billion dollars which amounts to 32.31% of the 20 richest Africans. It is another contradiction to note is the large number of Nigerian private jet owners where Nigerians top the list of private jet owners in Africa (Anon, 2019).

IV. Conclusion

Transportation provides linkages with factors of production. Electricity facilitates efficient utilization of all infrastructures. Nigeria is in high deficit of all these facilities and the currently available have suffered from; high level corruption, inadequate funding and general mismanagement of resources. No nation can progress in the absence of good transportation system, electricity, power supply, inadequate clean drinking water supply, insecurity conditions involving but not limited to kidnapping, armed robbery and unprovoked terrorist attacks. Nigeria is in high deficit of all these facilities and the currently available few have suffered from; high level corruption, inadequate funding and general mismanagement of resources.

Poverty is a complex problem. It is not restricted to one dimension of income but manifests itself in all domains of human life. Poverty renders the poor susceptibility to manipulate into social vices. Poor service delivery on infrastructure has elevated poverty in the Nigerian society through leakages in the disposable income of the citizens for the payment of personal security provision, personal generation of electricity, individual production of potable water, payment of high school fees in private institutions among others.

V. Recommendations

No nation can progress in the absence of good transportation system, electricity, power supply, inadequate clean drinking water supply, insecurity conditions involving. Improved infrastructure will lift people out of poverty when government takes these burdens off the budget of the citizens.

In the past, the proceeds of agriculture sustained the country's economy. The present dependence on subsistence and primitive agricultural practice cannot improve the quality of life of the people. The country must introduce modern mechanized system of agriculture that would engage the youth in productive activities which would improve their revenue generation and remove them from poverty.

For Infrastructure to be used as a panacea to lift Nigerians out of poverty, the poor must be empowered economically through access to education and vocational programmes.

The dependence on boreholes and generators has frustrated production and income generation. To improve the income generation of the poor, access to electricity, good drinking water and sanitation must be improved.

Improve the production man hours of the people through the provision of efficient transportation, medical services and good health facilities.

To sustain these, governments must as a matter of urgency provide efficient public service delivery, premised on the following; that,

• Education must be made accessible to all Nigerians of all ages since education is the key to infrastructure development. It is the most important and fastest means of breaking the chain of poverty. It empowers the society, improves the social wellbeing of the people, removes ignorance, opens people's access to health education amongst others.

- the beneficiaries of the Nation's education system must be trained and retrained to acquire basic knowledge and skills that would make them productive and employable in the labour market or for self-employment or employment in mechanized and community oriented agricultural settlements to produce agricultural products that are indigenous to their respective region for which they have comparative advantage both in soil, climate and local intelligence. Full employment would keep people out of societal ills such as: stealing, robbery, cybercrime, kidnapping and other vices. This would reduce insecurity and remove people from poverty chain.
- clean water and water sanitation must be made accessible to all communities to reduce productive man hour losses in search of clean water and reduce the increasing incidence of water borne diseases, illnesses and sicknesses.
- access to health facilities must be improved to reduce the number of sick people and the consequent loss of labour-hour. People who are afflicted with illnesses and sicknesses are often trapped in poverty and unable to make a full contribution to the social and economic development of their households and communities.
- transportation infrastructure must be improved to be efficient and effective to stimulate economic growth, competitiveness, linkage with factorsof production and productive opportunities and link the rural communities with urban communities and access to healthcare and other services.
- access to electricity power which is a major infrastructural service to the generality of all activities is imperative and must be considered as the most critical component of infrastructure which has the greatest effect on poverty alleviation. It must be given priority improvement as access to electricity power to the large population particularly in the rural communities would reduce the increasing migration of rural people to the urban areas and away from their natural habitat where they can be gainfully employed in boosting agricultural production and local trades to a hostile city environment where they would be faced with the challenges of accommodation and joblessness which hitherto would have perpetuated the cycle of poverty.
- access to electricity power would also improve the well-being of the people and lifting them out of poverty since electricity would improve their capacity to study, become entrepreneurs, work and connect with the outside world and reduce the use of solid fuels for cooking with its attendant negative effects and health implications.
- all the arms of government (local, state and federal) must invest in efficient and sustainable communication network nationwide guarantee easy access to active participation of all in the economic global village and open access to evolving opportunities, technological developments, increasing human mobility, trade and capital.
- the federal government must without delay declare a state of emergency on infrastructure, convoke an infrastructural development summit of all stakeholders to chart a course for infrastructure development and management and appropriate special funds from the excess crude oil account to fund the project.
- to prevent duplication and waste of resources by providers of infrastructure, government enact a law that would make it mandatory for infrastructure providers to register and report all infrastructure addition and failures to a data bank for planning purposes.
- government must decentralize the national electricity grid into zonal circuits to allow zones to generate and distribute their output and sell the surplus to other interested zones. That way, the general negative effects of the perennial national grid failures would be eliminated.
- provide substantial funds for research for the utilization of alternative sources of energy that abound substantially in our local communities.

References

- [1]. Anon, (2019), Business Dictionary
- [2]. Anon, (2019b) Nigeria tops the list of the number of private jet owners of private jets in Africa. http://www.legit.ng/1105314-private-jet-owners-nigeria.htm
- [3]. CBN, (2019), Crude Oil Price (US\$/Barrel), Production (mbd) and Export (mbd). Central Bank of Nigeria Statistics. http://www.cbn.gov.ng/rates/crudeoil.asp.
- [4]. Central Bank of Nigeria (CBN), (2017), Job Creation Survey, Labour Force Statistics, Central Bank of Nigeria (CBN), 2017. http://www.nigerianstat.gov.ng/#unemp
- [5]. CIA World Factbook, 2014
- [6]. Coleridge, Samuel Taylor (1798), The Rime of the Ancient Mariner, "Water, water everywhere, Nor any drop to drink".
- [7]. Deleeck, H., Vanden Bosch, K. and DeLathouwer, L. (1992), Poverty and the Adequacy of Social Security. Inec. Aldershot Avebury.
- [8]. EPSR Act, (2005), Electric Power Sector Reform Act, No. 6 of 2005.
- [9]. European Commission (2004), Joint Report on Combating Poverty and Social Exclusion. The Council of the European Union. Brussels, 5 March 2004:8.No. 7101/04 Soc 115 Ecofin 80 Educ 46 San 49.ec.europa.eu/employment_social/soc-prot/.../final_joint_inclusion_report_2003_en.pd...
- [10]. Forbes, (2019), Forbes Africa's Billionaire's List, 2019. https://www.cnbcafrica.com/.../2019/.../the-forbes-billionaires-list...
- [11]. ICRC Infrastructure Concession Regulatory Commission (ICRC) Strengthening Infrastructure Commission For Improved Performance / September 10, 2015 Http://Www.Icrc.Gov.Ng/Strengthening-InfrastructureInfrastructure Concession Regulatory-Commission Posted By ICRC.

- [12]. The International Monetary Fund (2017), List of Some African Countries by GDP. 2015-2016
- [13]. Izuwah Chidi (2017), Poor infrastructure costs Nigerian 2.03 trillion yearly due to inadequate infrastructure. July 21, 2017, Agency Report.
- [14]. Lawal Yekini Olawaiye and Ademola Azeez (2013), "Governance and human capacity development: harnessing the capacity of Nigerians in the diaspora". Global Advanced Research Journal of Arts and Humanities (GARJAH) Vol. 2(5) pp. 96-102, October 2013 Available online http://garj.org/garjah/index.htm.
- [15]. Lawal, Y. O, (1988), Oil Palm Production in Nigeria, Problems and Prospects. . Masters Theses. University of Benin.
- [16]. Lawal, Y. O. (2000), Maintenance Culture: The Nigerian Situation. Nigerian Journal of Engineering Management. Vol.1 No. 4. Pp 38-43.
- [17]. Lawal, Y. O. (2004), National Electric Power Authority (NEPA) and Electricity Consumers: The Two Sides of a Coin. An invited paper delivered at the Maiden Management Retreat, Organized by the Management of NEPA, Benin Distribution Zone, 4th & 5th November 2004.
- [18]. Lawal, Y. O. (2013), Education as an Instrument For Effective National Development: Which Way Nigeria. Business and Entrepreneurship Journal, vol.2, no.2, 2013, Pp27-38. ISSN: 2241-3022 (print version), 2241-312X (online) Scienpress Ltd, United Kingdom. 2013
- [19]. Lawal, Y.O. (2010). Poverty Alleviation and the Use of Appropriate Technology. *International journal of Academic Research. Vol. No. 6 November, Part I Pp.155-160*. Baku.Azerbaijan. Http://www.ijar.lit.az.
- [20]. Lawal, Yekini Olawaiye and Samuel Oluwaseun Adejuwon (2014), Evaluation of The Admission Characteristics that Predict Students' Final Year Academic Performance: ABUAD Experience.
- [21]. The National Bureau of Statistics (NBS, 2017), Vehicle Population Statistics, 2017.
- [22]. Onwujekwe, O, Hanson K, UzochukwuB (2012), Examining Inequities in Incidence of Catastrophic Health Expenditures on Different Healthcare Services and Health Facilities in Nigeria. PLoS ONE 7: https://doi.org/10.1371/journal.pone.0040811
- [23]. Opeifa Kayode, (2017), There should not be any rift between the Inland Waterways Authority (NIWA) and the Lagos State Waterways Authority (LASWA).
- [24]. TCN (2017), Nigeria generation capacity was 1,320MW in January, 2017. (https://www.thisdaylive.com/index.php/2017/02/16/power-generation-increases-to-4043mw-as-gas-supply-improves/)
- [25]. TochukwuAnyichie (2016), NANTA wants state of emergency in aviation. Dailytrust.com. Publish Date: Sep 14 2016
- [26]. United Nations, (1998), Teaching Tolerance. Handout 1. www.teachingtolerance.org
- [27]. World Bank Report, (2017) on the Nigeria Water Supply, Sanitation, and Hygiene Poverty Diagnostic noted
- [28]. Worley Parsons (2010), Infrastructure Planning and Delivery Theory & Practice; Characteristics of Infrastructure June 2010.

 Brookings institution2010.Https://www.brookings.edu/wp.../04/20100610_global_infrastructure_lyneham.pdf.Downloaded April, 24 2018.