PETROLEUM RESOURCE GOVERNANCE CRISIS AND THE DECLINE OF EDUCATION SECTOR IN NIGERIA 2015-2023

Ajachukwu, Chinwendu Francis & Nwobashi, Humphrey Nwefuru, PhD

Department of Political Science Ebonyi State University Abakaliki Frankrozy4christ@gmail.com; nwobashih@gmail.com

Abstract

The extent to which a government can develop its country depends on factors such as good governance, competence, accountability, availability of funds and educated citizens. Thus, the developed countries are able to enjoy quality education, good health services, economic opportunities and modern infrastructure. Unlike their counterparts in the developing countries, most of the people in developing countries such as Africa, Asia, and Latin America are plagued with the effects of underdevelopment which manifest as poverty, poor education, dilapidated infrastructure etc. Nigeria is among the countries that are still struggling to develop. Therefore, this work sought to interrogate Petroleum resource governance crisis and the decline of education sector in Nigeria with focus on its effects on education in Nigeria from 2015 to 2023. The study adopted explanatory research design, secondary sources of data collection which were obtained from reliable sources and analyzed to explain the phenomenon under investigation. The study is anchored on the resource curse theory as the theoretical framework of analysis. The study concluded that the maladministration of petroleum in Nigeria constitute to the decline in the development of the education sector. The study recommended amongst others that the Nigerian state should curb the corruption, properly administer and harness her petroleum sector to engender development in the education sector. This can be done by building refineries and diversifying the economy from petroleum dependence., the Nigerian state should increasingly fund education by increasing the annual budgetary provisions meant for education and ensure that the funds earmarked for education are adequately appropriated.

Keywords: Petroleum, Resource Governance, Crisis, Education Sector

Introduction

Developing countries which experience major foreign investment and revenue flows from natural resource development have struggled long and mostly unsuccessfully to manage the economic, political and social impacts of this newfound wealth. This challenge, often called the "natural resource curse" or "paradox of plenty", have been extensively researched in recent decades, but avoiding the "curse" remains a challenge. While every nation that anticipates the income from a major discovery of oil, gas or minerals hopes to convert this wealth into sustainable development and long-term prosperity, most often the results are just the opposite. Public accountability declines, authoritarianism rises, currencies are distorted and non-extractive industries weaken. Borrowing rises in anticipation of income and monies are not spent wisely (Goldwyn & Clabough, 2020).

Nigeria is endowed with abundant mineral and natural resources which amounts to over 34 occurrences ranging from industrial materials, iron ore, tin-ore, limestone, coal, lead, zinc, columbite, marbles, bitumen and tar sand. Statistically, the exploitation of these minerals is very minimal in relation to the level of deposits found in the country. Nigeria was among the largest producers of columbite, 6th largest producer of Tin, 8th largest producer of crude oil and gas. About 31.3 percent of the total land area in the country is arable, of this, 3.0 percent of the total land is for permanent crop

cultivation, and 23.0 percent for meadows and pastures, 15.0 percent is the forest woodland region while 28.0 percent is for other uses with negligible percent for irrigation. Nigeria is also blessed with abundant maritime resources; water constitutes about 1.4 percent of the country's total area which provides an abundance of fish of large variety capable of producing about 600,000 metric tons of fish annually and producing less than 12 percent of their estimated fishery potential (Mordi et al. 2010).

The country's oil and gas accounts for about 21.9 percent of GDP, 56.4 percent of foreign exchange receipts and 88.6 percent of government revenues in 2015. Prior to the discovery of oil in the 1960s and the oil boom era, Nigeria depended largely on primary commodities and artisanal mining for export and revenue. During this period, agriculture and artisanal mining accounts for 60 percent of GDP and approximately 60.0 percent of the labour force. The oil boom of the early 1970s resulted to a neglect of agriculture and other sources of revenue generation. Hence, A major challenge for the Nigerian Economy is its macroeconomic volatility driven by external terms of trade shocks, the country's large reliance oil export earnings, misplaced priorities and perceived massive corruption which were transferred directly into the domestic economy. Volatility in public expenditure showed over reliance on oil earnings and weak fiscal discipline by successive governments (Falade & Babatunde, 2018). It has prolonged economic stagnation, rising poverty levels, decline Institutional qualities, low infrastructure, very low Human Development Index, income distribution declined sharply and the list funded educational system despite its importance. Therefore, Todaro and Smith (2009), assert that Education is a basic objective of development and an importance end in itself. An input and output of development, education is fundamental to the broader notion of expand human capabilities that is the fulcrum of development. At the same time, education plays a key role in the ability of a developing country to absorb modern technology and to develop the capacity for selfsustaining growth and development. In other words, education holds the master key that unlocks a country's potentials towards national transformation, and sustainable human national development.

Apparently, Education in Nigeria has a long and complex history that has evolved over time. Before the advent of Western education, traditional African education was the norm, which centered on the transfer of knowledge from one generation to the next. This was usually achieved through oral traditions, myths, and proverbs. However, the introduction of Western education in Nigeria changed the education landscape significantly. The first mission school was established in Badagry in 1843 by the Methodist Missionary Society, and the curriculum focused on teaching the English language and basic arithmetic.

In the late 1800s, the British colonial government began to establish schools in Nigeria, primarily to train civil servants who would work in the colonial administration. The curriculum in these schools included subjects such as English language, mathematics, and science.

The 1930s saw the establishment of the University of Ibadan, which was Nigeria's first university. The university initially offered courses in the arts, sciences, and medicine. In the following decades, several other universities were established in Nigeria, including the University of Lagos, Ahmadu Bello University, and the University of Nigeria.

During the post-independence era, Nigeria experienced a significant expansion in the education sector, with the government taking a more active role in education provision. Universal primary education was introduced in the 1970s, and this was followed by the establishment of new schools and universities across the country. The 1980s, however, saw a decline in the quality of education in Nigeria, with inadequate funding and poor management being the major challenges facing the sector. This decline continued into the 1990s, with many Nigerian students seeking education abroad due to

the poor state of the country's education system (https://www.linkedin.com/pulse/history-education-nigeria-presspayng).

Hence, Omebe and Omebe (2015) posit that from east to west, north to south of Nigeria, the evidence of the deplorable state of education system is very glaring. Just like other sectors, the nation's education system has been on a steady decline. Both the quality of teaching and infrastructure has been severely impacted by the comatose state of the education system. As we know, incessant school closures due to strike action have been the norm of the day. In fact, it will be considered unusual not to have schools shut down in any given academic year in the country. Also, most of the classrooms in Nigerian schools are dilapidated, sub-standard and unfit for human habitation. There have been cases of school buildings that have collapsed killing children in some parts of Nigeria. The crises we are experiencing now may well be more dramatic than any of the preceding ones, because the rate of change in our age is faster than ever before, because the crises are more extensive, involving the entire country, and because several major transitions are coinciding. The rhythmic recurrences and patterns of rise and decline in education standard have somehow conspired to reach their points of reversal at the same time. The current crisis, therefore, is not just a crisis of individuals, governments, or social institutions; it is a crisis of planetary dimensions. As individuals, as a society, as a civilization, and as a planetary ecosystem, we are reaching the turning point (Omebe and Omebe ,2015).

Therefore, Osarumwense (2023) observed that the state of education in Nigeria has been a major concern for decades. Nigeria as a third world country despite being the most populous country in Africa and having the largest economy, has one of the lowest literacy rates in the world, with only 59% of the adult population able to read and write. The educational sector in Nigeria has been fraught with numerous challenges, ranging from inadequate funding and infrastructure, low-quality teaching, insufficient teacher training, non-implementation of policies, corruption and the widening education gap between urban and rural areas. These challenges have causes past and present effects in the country.

Hence, in spites of the huge resources (renewable and non-renewable) Nigeria is endowed with, the economy still grapples with many difficulties including weak educational systems, high and rising unemployment rate, declining manufacturing production, high and rising level of poverty and poor infrastructural development (Solow, 1999; Akinlo, 2012).

Although both the scholars of protagonist and antagonist school have written much on petroleum resource governance crisis, none has satisfactorily linked petroleum resource governance crisis to the decline on education sector in Nigeria between 2015 to 2023. Against this background, the broad objective of this study is to examine Petroleum resource governance crisis to the decline on education sector in Nigeria.

Conceptual Clarifications

It is germane at this stage to define some basic concepts used in this article

The Concept of Petroleum

Petroleum (also called crude oil) is a naturally mixture of hydrocarbons, generally in the liquid state, that may also include compounds of sulfur, nitrogen, oxygen, and metals and other elements. Inorganic sediment and water may also be present. A petroleum product is any product that is manufactured during petroleum refining. Consequently, it is not surprising that petroleum can vary in

composition properties and produce wide variations in refining behavior as well as product properties (Speight, 1999b). To Thornton (1977) Petroleum means literally rock oil and refers to hydrocarbons that occur widely in the sedimentary rocks in the form of gases, liquids, semisolids, or solids. From a chemical standpoint, petroleum is an extremely complex mixture of hydrocarbon compounds, usually with minor amounts of nitrogen, oxygen, and sulfur-containing compounds as well as trace amounts of metal-containing compounds. In his view Chen (2023) assert that Petroleum, also called crude oil, is a naturally occurring liquid found beneath the earth's surface that can be refined into fuel. A fossil fuel, petroleum is created by the decomposition of organic matter over time and used as fuel to power vehicles, heating units, and machines, and can be converted into plastics. Petroleum is called a fossil fuel because it is formed from the bodies of ancient organisms primarily one celled plants and animals (Robinson,2019).Petroleum or "Rock oil" (derived from word Petra meaning rock and Oleum meaning oil) has been known to many for the past 5,000 years (Akpan 2011).

The Concept of Resource Governance

The concept of resource governance is relatively new concept that tries to elucidate why resource-rich countries are impotent to sustain the well-being of their people despite the availability of resources in their reach (Osawe and Uwa ,2023). However, Natural resource governance is arguably a critical component of contemporary development question in every developing country (Ibeanu, 2009; Ezirim, 2011). Being a development issue, it is factored with the existing framework of power, process and practice, and more importantly how these usually shape natural resource access, control and use. Accordingly, Hoba et al (2013), cited in Nwobashi&Itumo (2018, p. 54) defined natural resources governance as "rules and regulations that determine (or govern) natural resource use and the way these rules and regulations are developed and enforced. It is thus about relationship and who has the power and responsibility to make and implement decisions. Graham et al., (2003) assert that Natural resource governance is the norms, institutions and processes that determine how power and responsibilities over natural resources are exercised, how decisions are taken, and how citizens including women, men, youth, Indigenous peoples and local communities participate in and benefit from the management of natural resources.

The governance of natural resources has been the worries of many developing countries, Nigeria inclusive. Where natural resources are well managed through an effective governance regime, the outcome is economic vibrancy and affluence for the nation. But where the resources are mismanaged through abusive or unregulated exploitation, the result is the paradox of 'resource curse' or 'unfortunate fortune' (Okoli and Uhembe, 2015).

The Concept of Crisis

The concept of crisis is multidimensional, it indicates the presence of a difficult problem, that it is going through a period of anomaly and abnormal or they are in a critical phase. The term "crisis" usually refers to an unpredictable and uncertain situation, which is dominated by tension and insecurity and which may concern the individual, family, business, organization, society, institutions, or the international environment. The crisis often works as a test of the stability of a system (see Nteka ,2021). crisis is a large, sudden event that is likely to have negative effects. The event and its consequences can seriously damage an organization and its employees, its products, services, financial situation and reputation (Okumus and Karamustafa ,2005).Hence, Pearson and Clair (1998) state that crisis as an "event of small probability and great consequences, which imperils the life of an organization, being characterized by unclear causes, effects and means of solution, as well as a conviction that decisions must be made quickly.

The Concept of Education Sector

According to Mary (2016) Education sector refers to the industry or field devoted to the provision of education and the various institutions, organizations, and professionals involved in it. It encompasses both formal education, such as schools and universities, and informal education, including training programs, vocational schools, and adult learning centers. The education sector also involves the development of educational policies, curriculum design, teaching methodologies, assessment and evaluation methods, as well as the employment and professional development of educators and administrators. Its primary objective is to facilitate and promote learning, knowledge acquisition, skill development, and personal growth among individuals of all ages and backgrounds. It can as well be referring to all institutions, organizations, policies, and practices related to education. It includes schools (both public and private), colleges, universities, educational programs, curriculum development, and educational policies (https://library.fiveable.me/key-terms/apush/education-sector).

Theoretical Framework

The study adopted Resource Curse Theory. Resource Curse Theory also known as "The Paradox of Plenty was first coined by British economist Richard M. Auty in 1993 in his article titled: "Sustaining Development in the Mineral Economies: The Resource Curse Thesis". The theory describes the "failure of many natural resource-rich countries to benefit fully from their natural resource wealth and for governments in these countries to respond effectively to public welfare needs" (NRGI, 2015, p. 1).

Some of the first academics to explore the concept of the resource curse were Jeffrey Sachs and Andrew Warner with their paper Natural Abundance and Economic Growth in 1995; as well as Terry Lynn Karl and her work The Paradox of Plenty in 1997. The natural resource curse is an ongoing theme in the political, economic, international relations literature and policy making discourse. In resource curse literature, the theory covers several approaches and the first is the Dutch Disease, second theory is the rent-seeking and the third theory is the model of rentier states and the last approach is the effects of volatility which is the fluctuation in oil prices.

The Dutch Disease

The concept is referred to as the potential negative effects of natural resources windfall and exchange rate appreciation can have effects on the economy. The danger accustomed with oil boom can render other nontrade able sectors like agriculture and manufacturing less competitive leading into deindustrialization. In this case, the Dutch disease explains the relationship between natural resources exploitation and the deterioration of other economic sectors (Corden and Neary, 1982). This model therefore creates an avenue for non-traded sectors (services sector e.g. financial services transport etc.), and the second traded goods sector (booming and non-booming sectors). The booming sector is the natural resources (mining, oil and gas etc.), whereas the non-booming sector is the manufacturing and agricultural sectors. Therefore, the Dutch disease theory refers to the position whereby a boom in the export sector leads to deviation of production towards the booming sector while increasing the non-tradable goods and services. This in turn hurts the remaining tradable good sector (Bature, 2013).

This illustrates how one sector can deteriorate other economic sectors. Former President Olusegun Obasanjo explained; "Using Indonesia as an example of leveraging the oil revenue to finance it agricultural development, the effort invested by Malaysia in the 1960s with importing palm oil seedlings from Nigeria in an effort to boost it Palm oil industry, and Nigeria today become one of the major importer of Palm oil from Malaysia" (Obasanjo, 1992). The traditional goods which includes cotton, palm produce, textiles, coal, rubber, timber and several manufactured goods and non-tradable

goods being crowded out result into the country becoming a finished goods importer. Nigeria's oil dependency danger has been manifesting over the years glaringly as the single sector-based economy produces less than 1 million barrels of petroleum a day sold for about \$ 30 barrels against an earlier 2.5 million barrels a day in 1979 and at a tagged price of \$ 40 per barrel (FGN, 1983). Dutch disease due to its focus on one economic sector brings us to the rentier state as a result of the dependence of oil revenues.

Rent Seeking

Oil rentier states solely depend on oil revenues and oil prices whereas the Dutch disease distort the economy leading to debt, overspending, lack of transparency and fiscal crises as a result of consistent volatility in the international oil market. As a result of other crippled economy, the dependence is based solely on the fluctuating oil prices. This resource curse theory focuses on how rentier states relieve unstable income generated from the oil revenues, with an economy generally dependent on international market process and lack of back up for its economy. Due to this income flow the rentier states subsidies social services, education, health care neglecting taxation of the administration and its citizen. Economic sanctions on a rentier state can easily cripple the economy. The rentier character of Nigeria state is expressed in its dependence on petroleum produce as the main earning for the country and formulation of policies that are influenced and determined by the dynamics in the oil sector in negligence to the development of other productive sectors. Oil production started in 1958 after Shell-BP discovered oil in commercial quantities in 1958 at Oloibiri in 1956.

The continued exploration of massive oil resources in the Niger Delta area of Nigeria resulted in the abandonment of agriculture and other sectors which was a major revenue generator in the country and major source of economic development, also the inefficiency of the state to transfer resources to transform the agricultural sector. Thus, the oil industry remains the largest sector in terms of government revenue generation. Meanwhile, the downstream, upstream and service sectors are the three divisions of the oil industry. Characterized mainly by transmission/conveyance, refining, distribution and marketing is the upstream sector, while the oil service sector deals with various support services such as drilling, construction, maintenance etc. provided for smooth oil exploration. The upstream sector stands out as the most important sector due to the high earning generated by the government which is 80% in revenue; it is also the sector that accounts for 90% export of the country (KPMG Nigeria, 2014). Collection of rent over the years has been filled with non-transparency and high level of corruption among public office holder. Rent-seeking dissipate economic development is facilitated by corruption (Nwabuzor, 2006).

The Nigerian oil politics has created new dimensions of corruption. Quite expected, this had an adverse negative effect on the nation's development. The class struggle due to oil wealth created several state actors. Emerging mindset of a clientelist class was set to hoard wealth at the detriment of the state. National interest seemed to lack any strong will by several actors, this largely links the resource curse debate with corruption which Nigeria suffers (Shaxson, 2007). Corruption fuels the rent collection which leads to lack of development and continued focus on oil revenues neglecting all major sectors of the economy. The award of illegal oil rigs, oil contracts, licenses and the needless impediment in the petroleum industry filled with corrupt practices creates a decaying process of crude oil sales and import results in the lack of transparency in accounting oil revenue sales in Nigeria (Gillies, 2009). It is seen that Nigeria's oil politics resulted in decaying the country's infrastructure. Combining politics and oil resulted in the mentality of "smash and grab" adopted by the political elites (Henley et al, 2012). The Dutch disease coupled with rent collection leads to massive corruption

which are two of the three major theories of resource curse and they bring us to the final theory of volatility.

Effects of Volatility

The study of the impact of volatile oil prices is the third approach of resource curse theory. The volatile oil prices are a major significance in the macroeconomic actions of developed economy, it has however been established that oil prices are volatile (Ferderer, 1996; Guo and Kliesen, 2005). The constant fluctuation in the oil market is a frequent financial and budgetary problem since the economy and budget is mostly dependent on the revenue generated from crude oil. The neglect of other viable economic sector has led to the waiting game of world oil price. The International institution can indeed play a major role in formulating policies applicable to the domestic institution as a way of reducing dependency and improving the economy of the country while disseminating information and implementation of programs viable to help reduce Resource curse.

Application of the Theory

The relevance of this theory to understanding of thePetroleum resource governance crisis and the decline of educational sector in Nigeria (2015-2023) cannot be underestimated or overemphasized. The theory will help us to dispel the general belief and misguided application of theResource Curse in the handling the problem of natural resource to the underdevelopment of Nigeria's education. Having the resource curse theory as a theoretical lens would provide necessary thinking tools for understanding of Petroleum resource governance crisis and the decline of education sector in Nigeriaand the consequence on the educational development in Nigeria. Petroleum resource governance crisis and the decline of Education sector in Nigerian can be explained in the light of Resource curse theory; we noted that many countries that are naturally endowed especially in African countries and Nigeria in particular, are cursed instead of being blessed with their natural resource. These curse affects their development trajectories even in education sector. The basic contribution of this theory is that it directs attention to the failure of many natural resource-rich countries to benefit fully from their natural resource wealth, and for governments in these countries to respond effectively to public welfare needs like education and borrow a leave from developed countries that have natural resource without resource curse.

Finding and Analytical Discussion

Petroleum Resource Governance Crisis and The Decline of Education Sector in Nigeria

Studies show that education as a form of investment especially suffers in resource-rich countries. Also Schooling in this environment are more of a consumption good than an investment good and qualities agonizes. The labor market in a capital-intensive economy offers little benefit for moderate levels of education (Dholakid, 1974). It may be in line with inherent down play of education due to natural resource that Okecha (2009, p. 22) contend that: The entire educational system has been bedeviled by a myriad of problems, the situation worsening day by day. These man-made problems include poor funding; shortage of quality staff; dearth of infrastructure; inadequate classrooms and offices for teaching and research; shortage of books and journals; indiscipline; inconsistent and ill-conceived policies; corruption at high and low places; cultism; irregular payments of salaries; examination malpractices; embezzlement of fund; low staff-student ratios; poor record keeping; fraud and self-deception with regard to accreditation; infringements of institutional autonomy and freedom and disharmony among unions in appointment of headmasters; or headmistresses, principals, provosts, rectors and vice chancellors; failure to send staff regularly on short courses to improve and enhances

their competences; and the fact that government often reneges on the mutual agreements between it and the unions of educational institution.

To buttress the relationship between petroleum resource governance crisis and educational decline, Shuai& Yang (2014, p. 635) are of the view that in the countries whose economies are heavily dependent on natural resource extraction do not need high-skilled labor or education. Comparing with the manufacturing sector, resource-based sectors need poor technology and less qualified human capital. Furthermore, even though employees are less qualified, they are paid more than manufacturing industry workers since the natural resource sector has higher profit rates. Therefore, the demand for high-skilled labor and related educational investments will decrease. Moreover, in the boom term of natural resource revenues, both government and public care for natural capital. In this period, human capital accumulation is ignored. If households and youngsters can easily find jobs with higher wages in the natural resource sector, then they will give up having higher education as they get higher income with less effort. This lack of incentive for human capital gives room for the decline in high-quality human capital and technology development. The countries with natural resource wealth feel over-confident that they can survive without investing in their human resources and investing in education, and substantiate the negative effect of natural resource wealth via a lack of attention to education. The latter study tests the relationship between natural capital shares and the Gini indices of 74 countries and provides evidence for the negative effect via inequality. The implication of the above is that there is a direct relation between natural resource governance crisis and underdevelopments in education especially on countries that are suffering from the curse of natural resources (Gylfason ;2001, Gylfason and Zoega ,2002). In corroboration, Alexis (2004) is of the views that Large natural resource endowments often create distortions in the economy that result in low levels of human capital. If a developing country possesses a large natural resource endowment, this country will devote its efforts and resources to the exploitation of the natural resource, because it possesses a comparative advantage. Also, primary production appears particularly attractive, because it requires lower levels of initial investment. Primary production and natural-resource-based industries do not require high levels of human capital compared to the manufacturing sector. In addition, few positive externalities exist in natural resource-based industries. Thus, a resource-abundant economy develops a very limited sector of the economy the natural resource-based industry, and this sector does not require or promote the development of human capital. Alexis (2004) further opine that: If multinational companies, instead of the government or nationally-based companies control the natural resource sector, then the development of human capital may be nearly non-existent. Often, multinational companies import their own skilled employees instead of training members of the local population. As a result, the local economy does not experience human capital development. Alexis position above is stating the true situation of Nigerian where every exploration is down with foreign company with their foreign skill workers as major employees.

However, Hua-Ping, Wei-Feng, Yong, and Yu-Sheng, have a divergent view when they argued that Natural resource dependence could be borne out of the large-scale exploitation of natural resources or the rising prices of natural resource products. This induces the crowding-out effect on human capital and physical capital thereby restraining technological progress. As a result, the dependence on natural resources results in a lack of human capital and innovation and leads to deterioration in endowment, which is not conducive to economic growth. Since most of these natural resources are non-renewable, the use of unskilled human capital and primitive technology deteriorates them further and slows down economic growth. Thus, the resource curse phenomenon occurs (Hua-Ping, et.al,2018).

To buttress more on Educational decline as result of natural resources, Birdsall (1997) maintained that, "If a country centers its economy on a natural resource, this country will not develop an

extensive educational system, because the core of the economy the natural resource sector does not necessitate high levels of education. People do not pressure the government to provide better education, because the return rate of education is very low. The resource-based economy cannot utilize these new skills, and therefore, additional education does not increase income."

Hence, Van Der Ploeg, &Poelhekke (2009) equally toes the line of some of these scholars in his study when he aptly stated that: "Resource curse render income and government revenues in resource dependent countries highly volatile. This volatility may influence public spending on education, as it complicates long term planning and has been found to induce a certain degree of myopic behaviour which could give rise to a disregard for building human capital". In another publication, Gylfason (2001) further state that: Nations that are confident that their natural resources are their most important assets may inadvertently and perhaps even deliberately neglect the development of their other resources by devoting inadequate attention and expenditure to human capital through education. The reason is that, in resource abundant countries with enormous foreign exchange earnings, there is no incentive for the political elite to promote technologically creative skills so as to export the manufactured products needed to pay for imports. The political class instead of developing human capital through education will Rather, use the countries resources to invest in highly skilled labour, particularly for their own children (Stijns ,2006).

So, Barro (2001), Stijns (2006) and Li et al (2020) argue that it is adequate attention to human capital development especially at the secondary and tertiary levels that facilitates the absorption of superior technologies from leading countries. This technology-absorption effect is what brings about growth in the manufacturing sector and hence economic development. Skill development can assist in effective extraction and utilization of the natural resource which, in turn, can mitigate the adverse growth impacts accompanying natural resource consumption. Therefore, as a panacea education development or human capital development is all Nigeria need to translate resource curse to resource blessing. Besides, human capital development can also exert a technological impact to enhance the contribution of the natural resources to the growth of the economy. For instance, in Bangladesh, technological constraint has limited the rate of natural gas extraction; consequently, unreliable energy supplies have been acknowledged to depress the growth of the Bangladesh economy (Murshed, 2021; Murshed et al., 2021). In this regard, human capital development-induced technological advancement which are expected to amplify the contribution of the nation's natural resource supplies to its economic growth. Therefore, apart from directly contributing to economic growth, human capital development can also be expected to exert a joint indirect economic growth impact via the natural resource utilization channel.

Evidences of Natural Resource Misgovernance

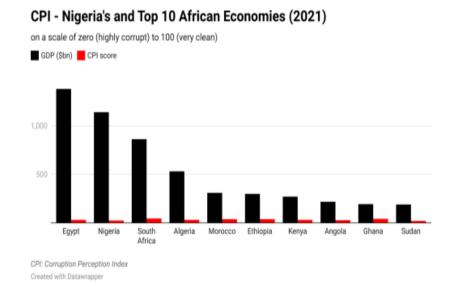
Governance in every country of the world, whether good or bad, has direct consequences on the general socio-cultural aspects of any people, including their education. Across Africa, about fifty of the fifty-five countries are either producing or exploring for one natural resource or another. Yet, as elsewhere, the potential of these natural resources has been largely squandered. Sadly, instead of delivering a better life for the poor, it has led to an elite capture with economic and social benefits associated that only a few elites enjoy (Chukwuma, 2015). Meanwhile, empirical evidence abounds demonstrating that exploration of natural resources does not improve economic growth or reduce poverty. Gelb (1988) in his study show how increases in oil prices in the 1970s failed to improve the social and economic conditions of oil rich countries. Sachs and Warner (1999) also demonstrate how countries rich in natural resource wealth struggle in other productive sectors of their economy like manufacturing. Bacon and Tordo (2006) and Mehlum et al (2006) attribute the resource curse to

factors like increase in real exchange rate that causes depression in other productive sectors of the economy, weak institutions, corruption and dependence on rents from the natural resource. Sadly, this narrative resonates in many resource rich countries in Africa and elsewhere.

Extending the conversation on the impact of natural resource governance on development, Ezirim (2011), submitted that the major problem of the African continent and West Africa in particular, can be succinctly stated to be that of misgovernance, either at the political, economic, social or cultural levels. And by misgovernance he referred specifically to "the accumulated issues of misappropriation of resource wealth by government or in some cases the inability of government to ensure that resources accrued for government and people are used appropriately for the good of the populace" (Ezirim, 2011). He further explained that misgovernance in Nigeria is epitomized by the crisis in the Niger Delta, which have since proved intractable. A plethora of literature on this region and its recurring crisis similarly point to the dialectics of resource governance as the incubator of internal conflicts in the entire Gulf of Guinea region comprising Nigeria, Gabon, Cameroon, Chad, Equatorial Guinea, Angola and Sao-Tome and Principe.

Corruption is another factor hindering the growth of the education sector and, in consequence, the development of a skilled labour force in Nigeria. Often, school funds meant for salaries, equipment and maintenance are diverted or mismanaged. This pushes teachers to strike in protest of low wages and late payments, which negatively affects their productivity and the quality of teaching they deliver. However, Nigeria hitting a historic low (24) on the 2021Corruption Perception Index (CPI), was influenced by secretive dealings among Nigeria's power holders reported in the Panama Papers and FinCEN Files investigations, a report by Transparency International revealed, as cited in Ijaseun (2022).

Figure 1: The Corruption Perception Index (CPI)



Source: The Corruption Perception Index (CPI) (2021), cited in Ijaseun (2022).

The Corruption Perception Index (CPI) score is the perception of the degree of corruption seen by business people and country analysts, and it ranges between 100 (highly clean) and 0 (highly corrupt). In 2020, the corruption perceptions index for Nigeria was 25. The corruption perceptions index of Nigeria increased from 10 in 2001 to 25 in 2020, growing at an average.

The principal issues of this problem included the fact that the continent has more than others in resource endowment, yet the outcomes and impact of development in these climes have never been impressive. Another structural issue was that, given the abundance of resources as espoused, there are enormous negative outcomes as presented in Figures 3 and 4 below indicating the out of school children against the total population. Similarly, Donwa et al (2015) observe that although there were direct foreign investments in the petroleum sector, they have had little or no effect on the economic growth of Nigeria because of the lack of accountability and transparency, and the prevalence of corruption in all sectors of the Nigerian economy. They further argued that corruption impairs economic development by diverting investment funds meant for infrastructural facilities, public goods and services to a few individuals. Nigeria, the largest oil producer in Africa, ranks among the world's poorest states and is also one of the most heavily indebted nations of the world (see Mbao and Ayodele, 2022).

Table 1: Nigeria's ranking in the Corruption Perception Index from 2006 to 2021

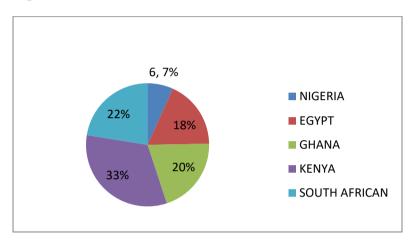
Year	Ranking	No. of countries surveyed
2006	42 nd	163
2007	1147 th	180
2008	121 st	180
2009	130 th	180
2010	134 th	178
2011	143 rd	183
2012	139 th	176
2013	144 th	177
2014	136 th	175
2015	136 th	168
2016	136th	176
2017	148 th	180
2018	144 th	180
2019	146 th	180
2020	149 th	183
2021	154 th	180

Source: Adapted from a compilation of Transparency International Corruption Perception Index Reports 2006-2021 (Mbao and Ayodele, 2022).

Due to its serious corruption, Nigeria was rated 149th out of 180 countries in the 2020 and 154th out of 180 in 2021 (Corruption Perception Index Reports, 2006-2021). Crude oil, the mainstay of Nigeria's economy, is tormented by inherent and pervasive corruption, which has hampered the economic development of Nigeria. Corruption has significantly decreased the revenue of the Federal Government of Nigeria that is derived from oil (Olusola, 2022). Hence, resource leakage as a result of corruption.

Resource Leakage as A Result of Petroleum Missgovernance

Figure 2: Revenue statistics in Africa as at 2020



Source: Authors Compilation

From the figure above Nigeria generated 7.6%, revenues, this is in comparison with Egypt 18%, Ghana 20%, Kenya 33% and South African 22%, the feeling of always getting revenues from the oil resources created a scenario that truncated the possibility of Nigerian government from providing educational infrastructures as result of revenues leakage.

To further demonstrate the relationship that exit betweenpetroleum resource governance crisis and educational decline, Ewubare & Obayori (2019) state that, sub-Saharan Africa has the highest number of out of school children as well as low literacy level. This is because most of the oil-producing countries in Africa countries particularly Nigeria did not invest up to 20% of their revenue from natural resources such as oil and other solid minerals in the education development of their countries. As a unit of measurement of this lacuna we have below graphics illustration that explain our observations.

Table 2: Nigeria's Budgetary Provisions from 2010 to 2020

Years	Education Budget	%	Naira
2010	N234.8billion	5.10	N4.6trillion
2011	N306.3billion	6.20	N4.972trillion
2012	N400.15billion	8.43	N4.749trillion
2013	N426.53billion	8.60	N4.987trillion
2014	N493billion	10.70	N4.69trillion
2015	N392.2billion	8.91	N4.4trillion
2016	N369.6billion	6.01	N6.1trillion
2017	N448.01billion	6.00	N7.3trillion
2018	N605.8billion	7.04	N8.3trillion
2019	N620.5bn	7.05	N8.83 trillion-
2020	N652.94bn	6.9	N10.50 trillion.

Sourced from (NPC, 2020).

From the table above we can see from 2010 to 2020 is a decade and Nigeria has never budgeted of to 15% or 20% for education as expected by UNESCO standard for educational provisions. Where by other developing country like Ghana; in the last 10 years, they have never budget less than 20 per cent for education. The implication of this is that majorities of agencies and commissions that depends on the ministry of education are also underfunded. All evaluating agencies and commissions operate directly under the ministry of education. The poor funding of all these institutions directly and indirectly affects the programme and activities of the agencies reducing the impact of evaluation in the country. Inadequate funding of evaluating agencies in the country is affecting the programmes and activities of the agencies as well have underdeveloped Nigerians educations system. The decline in the education sector is a necessitated by lowest budgetary provision with the highest since ever in a decade is just 10.70% in 2014 according to table able.

Another implication of resource governance crisis is expression of poor teachers' remuneration. According to Dare, et al (2014) who conclude that in term of poor salaries and conditions of service, lecturers are the most affected staff in Nigeria. Within the domestic labour force, academics constitute the least paid workers. Hence, the table below illustrate on sharp discrepancies between Nigerian lecturers, South Africa and Uganda's lecturers.

Table 3: Salary Comparison of Lecturers in Nigerian and other African Countries

Categories of Lectur	rers Nigeria	South Africa	Uganda
Assistant lecturer	N118,277- N237,334	N871,110-N1,452,305	N699503.28
Senior lecturer	N222,229-N314,159	N16,272,983-N27,891.819	N1,043,036.16
Associate Professor	N277,179-N350,169	N1,685,352-N2713,741	N1,668,772.08
Professor	N332,833-416,743	N1,860,487-N3,100,811	N1,738,679.52

Source: Akporehe (2022).

From the table above, it is observed that a salary of a university Professor in South Africa can be used to pay off to four Professors in Nigeria as result of reduced salary they receive in Nigeria. The same

applies to Uganda. Dare, et al (2014) is of the view that in term of poor salaries and conditions of service, lecturers are the most affected staff in Nigeria. Within the domestic labour force, academics constitute the least paid workers.

The pay package for a professor is about 1% of his colleague in South Africa, 7.32% in Ethiopia and 9.15% in Ghana (see Oni 2010). Hence, some faculty abandoned academia for other sectors of the economy, where professionals and scientists received higher salaries and greater social recognition (see Ogu, 2008). Thus, poor salary could be a major cause of brain drain in academia in the country.

In 2017, for instance, the University of Ibadan ranked at 801 and was the only Nigerian university listed among the top 1000 in international university rankings, while universities from other African countries such as South Africa, Ghana and Uganda were ranked much higher (Yeboua, et al, 2020). Nigeria's deteriorating tertiary education condition has pushed the teachers to adopting striking as a yearly activity to press home their demand to the government. The Nigerian university education system has undergone series of industrial action championed by ASUU. Below are the listed phases of ASUU strike witness in Nigeria from 1999 to 2022.



Figure 3. Academic Staff Union of University Strike from 1990 to 2022

Source: Eduplane Research, and modified by the Author, 2023)

From the figure above, from 1999 to 2022 no year has pass without ASUU strike in Nigeria. Though as a means of pressing home their demand to government, striking has had negative impact on the life of students, the futures leaders of tomorrow with the highest numbers of days been 270 days in 2020 and the list days been 3 days in 2006. Even with that strike action, the problem of ASUU and Nigerian Education is far from been decipher. As it is rightly said that an idle hand is the devil's workshop, due to lack of vision and mission, youth go around doing all forms of unlawful business, like gambling, yahoo and so on. The rate of unwanted pregnancy during a strike is also alarming as most students just wonder about with no direction.

Natural Resource Misgovernance and its Effect on Education

Hence, it has been noted that a large number of resource-rich countries appear to have human development indicators far below the levels that would be predicted on the basis of their income. Most resource-rich countries in Africa for example continue to have high levels of adult illiteracy and low levels of enrolment and school completion (Africa Progress Panel, 2013).

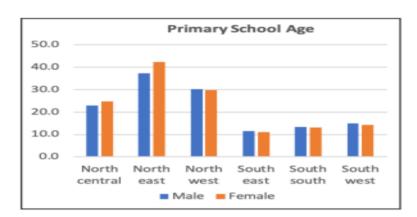


Figure 4: Percentage of Out-of-School Children (OOSC) in Nigeria Across Geopolitical Zones

Source: Nigeria Multiple Indicator Cluster Survey, (2016-2017) cited in Oyekan, Ayorinde, and Adenuga (2023).

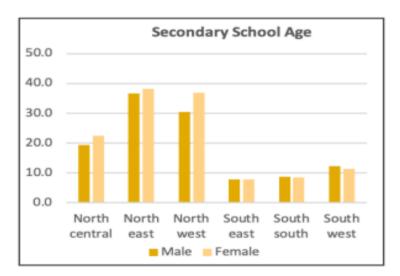


Figure 5: Percentage of Out-of-School Children (OOSC) in Nigeria Across Geopolitical Zones

Source: Nigeria Multiple Indicator Cluster Survey, (2016-2017) cited in Oyekan, Ayorinde, and Adenuga (2023).

In the overall outlook as shown in Figure 4 and 5, northern geo-political zones portray higher proportions of out-of-school children relative to the southern geopolitical zones in Nigeria. This result can be explained by a combination of factors including governance failure, higher rates of poverty; prevalence of child marriage primarily influenced by cultural and religious beliefs; and insecurity and terrorist attacks, especially the presence of Boko Haram in the northeast (Oladujoye and Omemu, 2013, Oyekan, et al 2023). Also, nomadic pastoralist families are predominant in the north whose continuous migration by the reason of their occupation keeps their children out of school (Oyekan, et al 2023).

Conclusion and Recommendation

The study focused on the Petroleum Resource Governance Crisis and The Decline of Educational Sector in Nigeria 2015-2023. Having carried out an analysis of the data collected for this research work, the study aligned with submission of scholars that country that centers its economy on a natural resource, will not develop an extensive educational system, because the core of the economy the

natural resource sector does not necessitate high levels of education. People do not pressure the government to provide better education, because the return rate of education is very low. The resource-based economy cannot utilize these new skills, and therefore, additional education does not increase income. The findings of this study provided the basis for empirical conclusion that Petroleum resource governance crisis is a factor to the decline of education in Nigeria. In light of these factors, the It becomes essential to offer some recommendations that will change the circumstances:

- 1. The Nigerian state should curb the corruption, properly administer and harness her petroleum sector to engender development in the education sector. This can be done by building refineries and diversifying the economy from petroleum depend ence.
- 2. To avoid or reduce brain drain in Nigeria's education sector, the Nigerian state should increasingly fund education by increasing the annual budgetary provisions meant for education and ensure that the funds earmarked for education are adequately appropriated.
- 3. Nigerian government should overhaul in entirety its natural resource governance regime that emphasizes totalitarianism on the ownership of all mineral resources by the federal government by allowing states and local government as the federating units to explore, exploit and use the mineral resources in their territories and pay royalties.
- 4 The Nigerian government should strive to increase transparency in the management of natural resources in order to effectively prevent misappropriation, they should compensate areas affected by mining in order to prevent social unrest,
- 5 The government should transform the economy from oil dependent economy to non-oil driven economy, that is, increase in proportion of non-oil sector export to total export as well as proportion of total non-oil sector revenue to GDP in the country, as demonstrated by United Arab Emirates (UAE), diversifying from oil abundant resources into tourism, agricultural and manufacturing sectoral development.
- 6 The cash inflow emanating from natural resource should be channeled to sustaining the improving policies and programs geared towards sustaining effective management of natural resources.

Reference

Adapted from the compilation of Transparency International Corruption Perception Index Reports 2006-2021 accessed 30 January 2022

Akpan, F.E. (2011). Fundamentals oil and gas accounting. Jos: Larigraphics printers.

Akporehe, Dorah A. (2022). From Drain to Gain: Managing Brain Drain in Nigerian Universities. Rivers *State University Journal of Education* (RSUJOE), ISSN:2735-9840, 2022, Volume 25 (2):212-224 www.rsujoe.com.ng

Alexis, M. (2004) "Human Capital as a Transmission Mechanism of the Resource Curse," The Park Place Economist: Vol. 12.Available at: https://digitalcommons.iwu.edu/parkplace/vol12/iss1/17

Barro, R.J. (1997) Determinants of Economic Growth: A Cross-country Empirical Study. Cambridge, MA, MIT.

Bature B. N. (2013), The Dutch Disease and the Diversification of an Economy: Some Case studies. Journal of Humanities and Social Science (IOSR-JHSS) Volume 15, Issue 5 (Sep. – Oct. 2014), PP 06-14

Birdall, N., D. Ross and R. Sabot. (1997) "Education, growth and inequality." Pathways to Growth: Comparing East Asia and Latin America,

Boin, A. T. and Hart, P. (2001) "Public Leadership in Times of Crisis: Mission Impossible", working paper at Leiden University,

Chen, J. (2023) https://www.investopedia.com/terms/p/petroleum.asp

- Corden, W., and Neary, J. (1982). Booming sector and de-industrialization in a small open Economy. *Economic Journal 92, December. 825-848*
- Dare, O. O., Obiajulu, A. U. N., and Jude, E. O. (2014) Understanding the Escalation of Brain Drain in Nigeria From Poor Leadership Point of View. *Mediterranean Journal of Social Sciences journal homepage: www.mcser.org*
- Dholakid, Bakul H. (1974): "The Sources of Economic Growth in India," Borada good Companion (1974): 246-67, accessed February 7, 2015, http://www.Jstor.org/stable/27765600
- Donwa, P, A et al 'Corruption in the Nigerian Oil and Gas Industry and Implication for Economic Growth' (2015) 11 International Journal of African and Asian Studies accessed 29 April 2024
- Ewubare, D.B. &Obayori, E. L.O. (2020). Natural Resource Rent and Education Development in Nigeria and Cameroon, 1995-2017. *Asian Journal of Sustainable Business Research*. 2 (1), 13-19. Retrieved from http://aiipub.com/asian-journal-of-sustainable-business-research-ajsbr/
- Ewubare, D.B. &Obayori, E.L. (2019). Comparative study of the impact of oil rent on healthcare in Nigeria and Cameroon: A three stage methodical approach. *International Journal of Science and Management Studies*, 2(1), 58-63
- Ezirim, G.E. (2011). Resource governance and conflict in the Nigeria Delta: Implications for the Gulf of Guinea Region. *African. Journal of Political Science and International Relations*. 5 (20), 61-71.
- Ezirim, G.E. (2011). Resource governance and conflict in the Nigeria Delta: Implications for the Gulf of Guinea Region. *African. Journal of Political Science and International Relations*. 5 (20), 61-71.
- Ezirim, G.E. (2011). Resource governance and conflict in the Nigeria Delta: Implications for the Gulf of Guinea Region. *African. Journal of Political Science and International Relations*. 5 (20), 61-71.
- F. G. N. (1983). *Oil Glut-Effects on the Nigerian Economy, what you should know*. Published by Federal Department of Information, public Enlightenment Division, Lagos.
- Falade, O. E. and Babatunde, D. (2018). Natural Resource Management Framework for Sustainable Development in Nigeria. *Sokoto Journal of the Social Sciences Volume 8: Number 3, December*, 1595-2738, Online 2384-7654.
- Ferderer, J.P. (1996). Oil Price Volatility and the Macroeconomy. *Journal of Macroeconomics*, 18 (1), 1-26
- Gelb, A.H. (1988) Oil Windfalls-Blessing or Curse? Oxford University Press World Bank Research Publication
- Goldwyn, D. and Clabough, A. (2020) The Role of Foreign Direct Investment in Resource-Rich Regions "Confronting the Resource Curse: Advice for Investors and Partners. Rice University's Baker Institute for Public Policy.
- Graham, J., Amos, B. and Plumtree, T. (2003). *Governance principles for protected areas in the 21st century*. Prepared for the Fifth World Parks Congress 2003 (Durban, South Africa). Ottawa: Institute on Governance, Parks Canada and CIDA.
- Guo, H., &Kliesen, K.L. (2005). Oil price volatility and US macroeconomic activity. Review, Federal Reserve Bank of St. Louis 57 (6): 669–683
- Gylfason, T. (2001). Natural resources, education, and economic development. European Economic Review, 45(4-6): 847–859. http://dx.doi.org/10.1016/S0014-2921(01)00127-1
- Gylfason, T., and Zoega. G. (2002). Inequality and Economic Growth: Do Natural Resources Matter? Casio Working Paper Series 712, Casio Group Munich.
- Hermann, C. F. (1972). "Some Issues in the Study of International Crisis," in C. F. Hermann (ed.), International Crises: Insights from Behavioral Research, New York, Free Press, pp. 3-17.

https://www.alsglobal.eu/media-general/pdf/library-of-petroleum-products-and-other-organic-compounds.pdf.

- https://www.linkedin.com/pulse/history-education-nigeria-presspayng.
- Hua-Ping, S., Wei-Feng, S., Yong, G., and Yu-Sheng. (2018). Kong Natural resource dependence, public education investment, and human capital accumulation. Petroleum Science (2018) 15:657–665https://doi.org/10.1007/s12182-018-0235-0(0123456789().,-volV)(0123456789().,-volV).
- Ibeanu, O. (2009). Oil, environment and conflict in coastal zone of West Africa. In O. Ibeanu and J. Ibrahim (Eds.). *Beyond resource violence*. *Abuja: Centre for Democracy and Development* (COD), pp. 1-34.

- Ijaseun, D. (2022). Nigeria Corruption Index Ranking in Charts. Business Day. Retrieved from https://businessday.ng/news/article/nigeria-corruption-index-ranking-in-charts/
- Li, Y., Naqvi, B., Caglar, E., Chu, C.C., (2020). N-11 countries: Are the new victims of resource-curse? Resource. Policy 67, 101697
- Mary C. (2016) https://www.definitions.net/definition/education+sector. Access 09/04/2024
- Mbao, M and Ayodele, O.A. (2022). Petrodollar Corruption in Nigeria and the Implications for Economic Development. 2(1) Turf Law Journal 1-24 | 2789-746X | 1
- Mordi, O. Charles, N., Abwaku E. and Adewusuyi, E. (2010). The Changing Structure of Nigerian Economy. Lagos, Nigeria. Aisele Vanessa Cards Co.
- Murshed, M., (2021). Modeling primary energy and electricity demands in Bangladesh: An autoregressive distributed lag approach. Sustain. Prod. Consum. 27 (C), 698–712. http://dx.doi.org/10.1016/j.spc.2021.01.035.
- Murshed, M., Alam, R., Ansarin, A., (2021). The Environmental Kuznets Curve Hypothesis for Bangladesh: The Importance of Natural Gas, Liquefied Petroleum Gas and Hydropower Consumption. Environmental Science and Pollution Research (Springer), http://dx.doi.org/10.1007/s11356-020-11976-6
- NRGI Resource Governance Index (2017) Available at: www.resourcegovernanceindex.org
- Nteka, N. (2021) CRISES ANALYSIS AND MANAGEMENT. Entrepreneurship ISSN: 2738-7402 Volume: IX, Issue: 1, Year: 2021, pp. 64-77
- Nwabuzor, Augustine, (2006), Corruption and Development: New Initiatives in Economic Openness and Strengthened Rule of Law, *Journal of Business Ethics*, 59, PP121-138.
- Nwobashi, H. N.andItumo, A. (2018). Nigerian State, Natural Governance and Resource Control Controversy: Interrogating the Implications of Mono-Economy. *IOSR Journal of Economics and Finance (IOSR-JEF)*. 9, (4), 52-60.
- Okecha, S. (2007), "Education", New swatch (Nigeria) Magazine, October 6, p. 21-24.
- Okoli, A. and Uhembe, C.A. (2015). Crises of Natural Resource Governance in Nigeria's Extractive Industry: Examining the Phenomenon of Artisanal Mining/Quarry. *Global Journal of Human Social Science Political Science*. 15 (7), 39-48.
- Oladujoye. P and Omemu, F. 2013. Effect of Boko Haram on school Attendance in Northern Nigerian.
- Olusola, JO 'Nigeria's Upstream Petroleum Industry Anti-corruption Legal Framework: The Necessity for Overhauling and Enrichment' accessed 24 January 2022
- Omebe, S.E. and Omebe, C. A. (2015) The Crisis of Education in Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE) Volume* 2, Issue 12, December 2015, PP 1-8 ISSN 2349-0373 (Print) & ISSN 2349-0381 (Online)
- Oni, B. (2010). Capacity Building effort and Brain drain in Nigerian Universities. *European Journal of social Research*, 36 (2): 1-1
- Osarumwense, E. F (2023). Educational Sector in Nigeria Today. Vanguard News Viewpoint
- Osawe, A. I and Uwa, O. G (2023). Natural Resource Governance and Conflict in Nigeria. *International Journal of Natural Resource Ecology and Management*. Vol. 8, No. 1, 2023, pp. 1-11. doi: 10.11648/j.ijnrem.20230801.11
- Oyekan, K., Ayorinde, A. and Adenuga, O. 2023. The Problem of Out-of-School Children in Nigeria. 2023/058. https://doi.org/10.35489/BSG-RISE-RI_2023/058
- Pearson, C.M. and Clair, J.A. (1998) "Reaffirming Crisis Management", Academy of Management Review 23,
- Robinson P.R (2019). Practical Advances in Petroleum Processing Volume 1 springeronline.com.
- Shaxson, N. (2007), Oil, Corruption and the Resource Curse, International Affairs, 83 (6), 1123-1140 (2005), New Approaches to Volatility: Dealing with the 'Resource Curse' in Sub-Saharan Africa, International Affairs, 81(2), 311-324
- Shuai, S., & Yang, L. (2014). Natural resource dependence, human capital accumulation, and economic growth: A combined explanation for the resource curse and resource blessing. Energy Policy, 74, 632-642.
- Speight, J.G. (1999b. The Desulfurization of Heavy Oils and Residua. 2nd Edition. Marcel Dekker, New York

- Stijns, J. P (2006). Natural resource abundance and human capital accumulation. World Development 34 (6), 1060-1083.1060–1083.CiteSeerX 10.1.1.197.1418. doi:10.1016/j.worlddev.2005.11.005
- Thornton, D. P. Jr (1977). In Energy Technology Handbook. Considine D. M., Ed. McGraw-Hill, New York,pp.3–12.
- Todaro, M. P. and Smith, S. C. (2009), Economic Development, Tenth Edition, Essex: Pearson Education Limited.
- van der Ploeg, F., Poelhekke, S., (2009). Volatility and the resource curse. Oxford Economic Papers 61(4), 727-760. http://dx.doi.org/10.1093/oep/gpp027
- van der Ploeg, F., Poelhekke, S., (2009). Volatility and the resource curse. Oxford Economic Papers 61(4), 727-760. http://dx.doi.org/10.1093/oep/gpp027
- Yeboua, k., Cilliers, j and le Roux .(2020).Nigeria in 2050 Major player in the global economy or poverty capital? Institute for Security Studies. West Africa Report 37 | February 2022.