

**Sustainable Human Development Review**  
*(An international multidisciplinary academic research journal)*

Volume 8, Numbers 1-4, Dec., 2016



Welfare & Industrial Promotions (WIPRO)  
International  
P.O. Box 9060, Enugu.  
Website: [www.wiprointernational.org](http://www.wiprointernational.org)

**Published by**  
**Welfare & Industrial Promotions (WIPRO) International**  
The Eastern Nigeria Industrial Estate  
30 Zik Avenue, Uwani  
P.O. Box 9060, Enugu  
Phone: +234-803-338-7472  
*www.wiprointernational.org*

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**ISSN: 2006-8425**

**Cover, Design & Concept:** Rowland Egolum & Felix Ezech

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## EDITORIAL

Human development is a broad and comprehensive concept concerned with economic growth and its distribution, basic human needs and variety of human aspirations, and distress of the rich countries and the human deprivations of the poor. Going beyond economic development, which is concerned with income and growth, human development covers all human capabilities. It is “a process of enlarging people’s choices” created by expanding human capabilities.

Economic growth is essential for all human development because no society has been able to sustain the well being of its people without continuous economic growth. On the other hand, it is healthy and educated people that can contribute to economic growth through productive employment and increase in income. Thus, economic development is a means to human development. Hence, development theoreticians and practitioners must pay equal attention to economic development and human development.

Hitherto, emphasis has been on economic development – not on people’s adequate nutrition, access to safe drinking water, better medical facilities, better schooling for their children, affordable transport, shelter, secure livelihood and productive and satisfying jobs. It is to address this gap that the *Sustainable Human Development Review* (SHDR) was born January 2009 as an international multidisciplinary academic research journal. Its Volume 1 Number 1 of March 2009, Volume 1 Number 2 of June 2009, Volume 1 Number 3 of September 2009 and Volume 1 Number 4 of December 2009 kept to faith, courtesy of our esteemed contributors across the globe as well diligence and commitment of our dedicated reviewers and editors.

From *SHDR* Volume 2 Number 1 of March 2010, *Editorial*, which had been hitherto not considered necessary, was introduced, in conformity to the practice of globally acclaimed journals of academic research output. This Volume 5 Number 1&2 of June 2013 of *SHDR* presents another set of rich articles touching various topical human development issues.

In the first article, Joseph Chike Ajadike (PhD) of the Department of Geography and Meteorology, Enugu State University of Science and Technology (ESUT), Agbani-Enugu, submitted that change science, evidences, impacts, mitigation and adaptation have been unduly politicized because of the economic, developmental and strategic interests of nations (developed and developing) and multi-national oil companies who benefit from the fossil fuel-driven economy. United States of America, the largest emitter of greenhouse gases in the world failed to ratify the Kyoto Protocol - a global treaty of 1997 to reduce the global emissions of the four principal greenhouse gases (CO<sub>2</sub>, NH<sub>4</sub>, NO<sub>2</sub> and CFC<sub>s</sub>). China is currently the 2nd largest economy and projected to surpass USA as the highest global emitter of greenhouse gases in the next two decades. There are areas of discord that have stalled many climate change conferences and negotiations between the developed

and developing countries such as transfer of technology, intellectual property rights, payment of reparations, green funds, mitigation versus adaptation. The politics of climate change is a major distraction and it amounts to the proverbial fiddling while Rome burns. The global community should therefore jettison politics and face the reality of climate change headlong with a view to saving humanity and the environment from this “global time bomb”.

In the second paper titled “Local Government autonomy: An imperative for effective national development”, Orji, O.A. of the College of Management Sciences, Evangel University Akaeze, Ebonyi State, Nigeria made a critical analysis of the local government autonomy in Nigeria as an imperative for effective national development. It discovered that local government autonomy is still practically lacking in Nigerian local government system, but exists on paper. It also discovered that the State-Local Government joint account system was a negation of financial autonomy in the running of local governments in Nigeria. This needs to be revisited if the goals of the local government level system must be achieved for effective national development. The study recommended as follows:

- (i) The State-Local Government joint account system should be scrapped to ensure that local governments has adequate control of finances that accrue to it from the federation account;
- (ii) Also to be revisited are provisions in the 1999 Constitution which give the state government unlimited powers to meddle into the functions of local governments;
- (iii) Political and Financial Autonomy should be increased to the local governments to make them more result oriented in issues of development at the local level.

In the third paper titled “Challenges to urban potable water supply in Enugu metropolis in Southeast Nigeria”, Onyenekenwa C. Eneh (PhD) and Precious A. Nnaji of the Institute for Development Studies, Enugu Campus, University of Nigeria, Nsukka investigated the challenges faced by the Enugu State Water Board in supplying potable water to Enugu metropolis, as a pointer to irregular potable water supply in African urbans. Questionnaire was administered to 611 staff of the Enugu State Water Corporation to elicit information, which were analysed statistically for answers to the research questions. Findings showed the challenges to regular supply of pipe-borne water in Enugu metropolis were, among others, consumer unwillingness to pay water rates, operational constraints, inadequate funding, increasing population, political interference, irregular payment of staff salaries of Water Corporation, corrupt practice among staff of the Corporation, and lack of strategies for improving the supply of pipe-borne water in Enugu metropolis. Recommendations include, among others, adoption of Public Private Partnership (PPP) model.

## *Editorial*

In the fourth paper titled “Tourism challenges and prospects in Nigeria: case study of Benin City,” Olawale-Olajunke, Olajumoke Elizabeth of the Department of Hospitality Management Technology, Faculty of Applied Sciences, Rufus Giwa Polytechnic, Owo, Ondo State, Nigeria observed that tourism encounters many challenges which need to be identified and addressed. The study was carried out to identify the various challenges to tourism in Nigeria with Benin City as the case study. Questionnaire was used and data were statistically analysed. Findings showed that touristic activities in the area are at low level due to economic hardship and this is rubbing the city of its contribution to the national economy. Tourism in Benin City was grossly affected by factors such as lack of preferred destination, lack of consistency in policy, erratic power-supply, bad road networks, insecurity and perennial conflicts, investor and tourist unfavourable environment, among others. It is recommended that the government should create an enabling environment for both investors and tourists, as this will fasten the development of tourism in Nigeria.

In the fifth paper, Jack, Jackson T.C.B. of the Department of Sociology and Anthropology, Federal University Otuoke, Bayelsa State, Nigeria; Nkwocha, Ifeoma Better of the Department of Economics, University of Port Harcourt, Rivers State, Nigeria; and Odubo, Tonbra Robert of the Department of Sociology, University of Port Harcourt, Rivers State, Nigeria analysed secondary to show the extent to which the exploitation of natural resources has contributed to GGP of Nigeria from 1981 to 2015. Findings showed that aside crude oil and gas, the abundant natural resource potentials available in Nigeria, have been marginally exploited. The over-dependence on crude oil becomes a major challenge to natural resource development among other factors including poor technology and technical know-how, low investment in agriculture and the mining sub-sectors, environmental degradation and so on. It was recommended, among others, that the Nigerian government should diversify the economy by investing massively in the agricultural and mining sub-sectors to enhance sustainable natural resource development. value added sectorial complementarity and entrenchment of transparency and accountability in the public sector in relation to the management of wealth accruing from natural resources should be ensured for sustainable development and improved living standards of the citizenry.

We pray that all those whose papers could not make it in this issue would understand, and try to send better-quality papers in future for our globally competitive review process. We most sincerely congratulate those whose papers made it. We heartily thank all our esteemed contributors and enjoin them not to flag in their zeal for research and publishing, which are veritable tools for confronting abounding development challenges in developing countries to the development of the total man. We welcome contributions in all disciplines across the globe (see *Author's Guide*, p.103).

Contributors are also encouraged to take advantage of our high-quality and globally competitive sister journals, *Journal of Applied Sciences and Development* and *Technoscience Review* to stagger their academic outputs in our highly rated academic Journals, which are also published online (see [www.wiprointernational.org](http://www.wiprointernational.org)) for visibility and global ranking in line with modern practice.

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# POLITICS OF GLOBAL WARMING AND CLIMATE CHANGE

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## ***Abstract***

*The study examined some aspects of the politics of climate change. Climate change science, evidences, impacts, mitigation and adaptation have been unduly politicized because of the economic, developmental and strategic interests of nations (developed and developing) and multi-national oil companies who benefit from the fossil fuel-driven economy. United States of America, the largest emitter of greenhouse gases in the world failed to ratify the Kyoto Protocol - a global treaty of 1997 to reduce the global emissions of the four principal greenhouse gases (CO<sub>2</sub>, NH<sub>4</sub>, NO<sub>2</sub> and CFC<sub>s</sub>). Also highlighted is China which is currently the 2nd largest economy and projected to surpass USA as the highest global emitter of greenhouse gases in the next two decades. There are areas of discord that have stalled many climate change conferences and negotiations between the developed and developing countries such as transfer of technology, intellectual property rights, payment of reparations, green funds, mitigation versus adaptation. The politics of climate change is a major distraction and it amounts to the proverbial fiddling while Rome burns. The global community should therefore jettison politics and face the reality of climate change headlong with a view to saving humanity and the environment from this “global time bomb”.*

**Keywords:** *Climate change, Kyoto Protocol, Greenhouse gases*

## **Introduction**

Global warming and associated climate change is caused by the greenhouse effect, an effect related to the heat trapping character of some gases such as carbon dioxide, methane, nitrous oxide, water vapour and chloroflourocarbons. These gases are naturally present in the troposphere and tend to absorb some of the infra red radiation and reradiate it back to the surface of the earth. These roles are analogues to the glass in a greenhouse, hence the name greenhouse gases (Wright, 2005).

The science of greenhouse effect was first recognized in 1827 by a French Mathematician, Jean-Baptiste Fourier. John Tyndall, an Irish Scientist, later took on the idea for further investigation. Then, in 1898, Svante Arrhenius, a Swedish Scientist, actually coined the phrase “greenhouse effect” and went on to predict that if the concentrations of carbon dioxide in the atmosphere doubled, the global climate would warm by 4°C to 6°C (Bruges, 2007).

Though the global temperature has not warmed as Arrhenius had predicted about 114 years ago, observable warming of the global climate system has been established and recorded by individual scientists and corporate bodies such as the Intergovernmental Panel on Climate Change (IPCC). The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme (UNEP) as a network of the world’s leading climate change scientists and experts (IPCC, 2007).

In the 2<sup>nd</sup> Assessment Report of IPCC, the increasing concentration of three greenhouse gases - carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) - were reported. The three gases have significantly grown by about 30 percent, 145 percent and 15 percent respectively (IPCC, 1996). These increases, according to the IPCC (1996), can be attributed largely to human activities especially the burning of fossil fuels, land use changes and agriculture. One of the outstanding findings of the IPCC 4<sup>th</sup> Assessment Report (IPCC, 2007) was that the warming of the climate system is unequivocal, as it is now

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evident from observation of increase in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea levels. The report equally noted that eleven of the twelve years (1995-2006) rank among the 12 warmest years in the instrumental record of global surface temperature since 1850. Despite all the evidences, impacts and likely impacts of climate change on the global agriculture and food security, water resources, energy, human health, sustainable development and extreme weather events and vital ecosystems that sustain human economic base, the global communities individually and collectively are still playing dangerous politics with global warming and associated climate change issues. The truth is that adverse impacts of climate change are already manifesting in different parts of the world but more so in the developing countries where these impacts are hitting hardest because the people are very vulnerable. This paper attempts to highlight and analyse these political angles of climate change with a view to redirecting attention to achieving equitable, all inclusive and just climate change mitigation and adaptation programmes for the betterment of man and his environment.

**Historical Perceptive**

***The Non Acceptance of the Connection between Global Warming and Climate Change***

The economic and corporate interests of nations and organizations tend to becloud the basic science of global warming and climate change. For example, many developed countries have sponsored many studies to discredit the simple science of global warming and climate change by capitalizing on the complex nature and some uncertainties of the cycles and processes that drive the global climate systems. The climate change sceptics still argue that observed temperature increases and other signs of climate change have not been convincingly proven to be as a result of humanity's greenhouse gas emissions (Anthanasious and Baer, 2002). They also discredit all the 5 Assessment Reports so far issued by the IPCC. Their attitude is not helping climate change response. This is unlike ozone layer depletion regulation that had long started when there was only a laboratory demonstration that

halogenated compounds could destroy ozone layer and Roland and Molina then started to theorize that human-created CFCs could migrate to the stratosphere where the ozone shield is located (Desombre, 2002). That is, before any conclusive scientific evidence was arrived at in respect of the control of ozone layer depletion, the international community had already agreed to control all the substances identified as capable of depleting stratospheric ozone. In the same vein, the international community should recognize climate change as resulting partly from human-induced greenhouse gases.

***The non-binding nature of Kyoto Protocol***

The Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) was adopted on 11<sup>th</sup> December, 1997. It entered into force on February 16<sup>th</sup> 2005 following ratification by Russia (World Bank, 2003).

As of September, 2011, one hundred and eleven countries and regional economic integration organizations have ratified, accepted, approved or acceded to the Kyoto Protocol. In Article 3 paragraph (1) of the UNFCCC, the parties agreed that:

First, the United States of America and Australia two major Annex I emitters signed the protocol but refused to ratify it. Canada another Annex I country ratified the protocol but in December 2011 made a u-turn and announced their discontinuation with the protocol. Second, the protocol failed to specify any policy or strategy that each country should adopt to achieve agreed reduction targets. These strategies are left at the whims and caprices of the individual nations to determine. Thirdly, the non inclusion of developing countries in the protocol created the first point of weakness because some of the developing countries such as China, India, Brazil and South Africa are already surpassing some of the Annex 1 countries in their emission levels Table 1.1 shows that China and India emission combined contribute about 18.66 percent of world CO<sub>2</sub> emissions, whereas five major

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industrialized countries (Japan, Germany, UK, Canada and Italy) combined contribute about 15.15 percent of the world CO<sub>2</sub> emissions.

***Table 1.1:*** Top 10 countries of global CO<sub>2</sub> emission.

S/N	World ranking	Percentage Share of world population	Percentage share of world CO <sub>2</sub> emissions	Percentage cumulative share of CO <sub>2</sub> emission
1	USA	4.76	24.45	24.45
2	China	21.47	13.91	38.36
3	Russia	2.55	6.44	44.81
4	Japan	2.18	5.07	49.88
5	India	16.97	4.75	54.63
6	Germany	1.42	3.70	58.33
7	United kingdom	1.03	2.43	60.76
8	Canada	0.52	2.09	62.85
9	Italy	1.00	1.86	64.71
10	Mexico	1.62	1.68	66.39

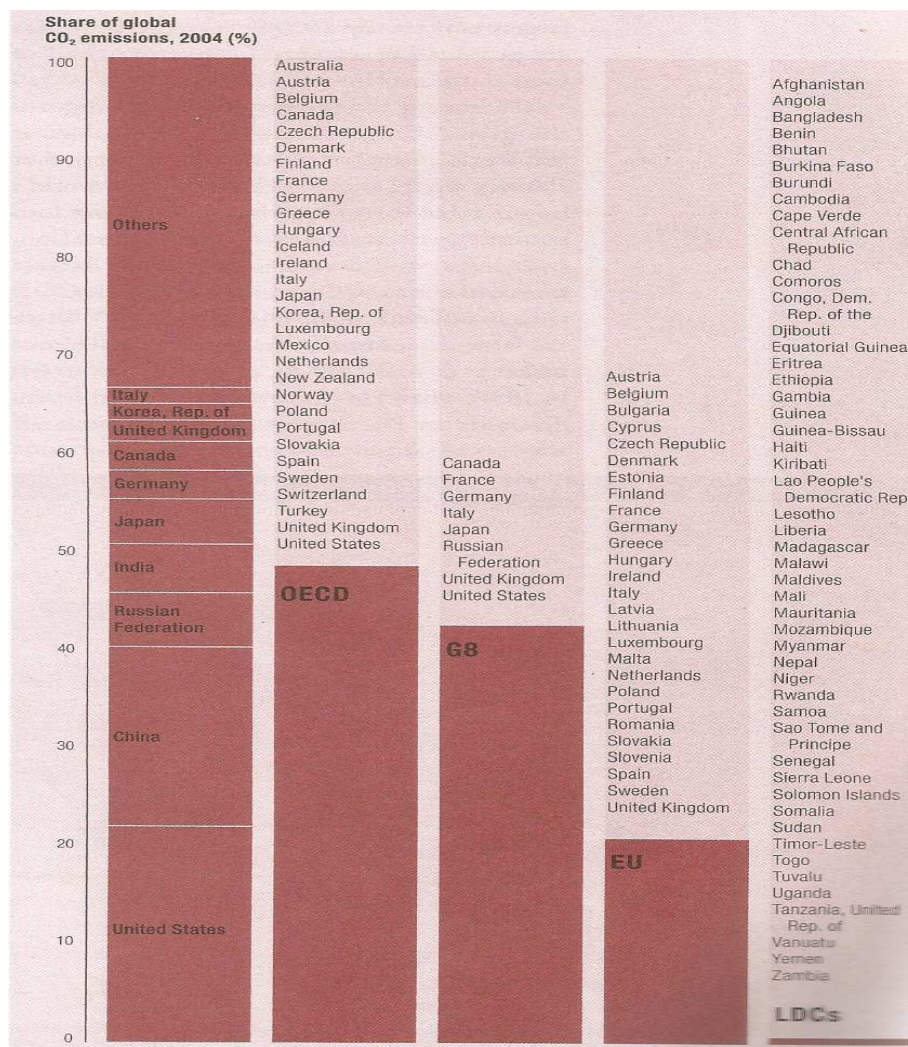
*Source:* The World Bank World Development Indicators (2003)

***Political and economic interests of oil producing countries and oil companies***

The importance of oil in global economy and global politics cannot be over emphasized. Bruges (2007) stresses the importance of oil by rightly observing that global economy would be determined by the amount of energy available and the economy of each country would depend on much energy it can command. Trade, manufacturing, services, exchange, everything would be limited not by money but by its energy use. In fact, oil has elevated many poor countries especially from the Middle East to both political and economic prominence. Before the era of petroleum economy, the Arab world was unknown except for the age lone territorial disputes with Israel. But the 1970s marked a watershed and oil started to be reckoned with both politically and economically. The Israeli-Arab War of 1973 led to the Arab World placing oil embargo on countries that supported Israel and price of oil sky rocketed. This factor affected the global economy very profoundly. The major oil producing nations of the world benefited immensely from this boom. The Arab World has never remained the same politically, economically and strategically. Instant millions of US Dollars were made, million of jobs were created and serious infrastructural transformation was achieved in all the oil producing

nations from Kuwait to United Arab Emirates and from Iraq to Qatar. With the possible exception of the United Arab Emirates, all the oil producing countries are monocultural economies that virtually depend on oil and gas. With fossil fuels as the life wire of the oil producing nations, any talk of alternative to oil or reduction in demand of oil have met with all manners of resistance such as discrediting the impacts of burning fossil fuels on global warming and climate change. What is said about oil producing countries is also true for oil producing companies whose businesses start and end with oil and gas. These companies employ millions of people and their combined assets and turnovers run into trillion of American dollars. To these oil firms, business as usual scenario is what they crave for. Consequently, some of the companies have sponsored counter researches and publicity to counter any link between fossil fuels burning and climate change. The oil companies are also not interested in investing in research and development of renewable energy as doing would amount to compromising their economic and business interests.

The greatest emitters of greenhouse gases are also the largest economic power of the world. These super emitters are the industrialized countries of the world who benefited from the power of mechanical power driven by fossil fuels since the Industrial Revolution of the 1750s to achieve high level of industrialization as well as high standard of living among others. These countries include the USA, the European Union, Australia, Japan and the Russian Federation. Rich countries dominate the carbon dioxide emission of the world. The United State is the largest emitter accounting for about One-fifth of the total emission. The five top emitters are China, India, Japan, the Russia Federation and the United State account for more than 50 percent of the emissions A (Human Development Report 2007). The top ten emitters (Figure 1.1) collectively account for more than 60 percent of the total emissions. The industrialized economies of the world also rank very high in historical emissions per capital. For example, USA and Britain



**Fig. 1.1:** The Top Ten Global Emitters of CO<sub>2</sub>

Source: Human Development Report (2007)

averaged 1,100 tonnes of CO<sub>2</sub> per capita compared to China's 66 tonnes per capita and India's 23 tonnes in respect of historical emissions



(Human Development Report 2007). The position of the top green house emitters is clear and understandable because reducing emissions to them would amount to compromising their economic interest and this is capable of slowing down their economic growth, economic competitiveness and lowering the standard of living of their people. The position of United States as forcefully represented by their president, George W. Bush in 2001 is unequivocal.

***The economic and development interest of the 2 largest economies – The United State of America and China***

United States of America and China are now the two largest economies in the world. China recently overtook Japan as the second largest economy. Table 2 shows the five largest economies in the world using their purchasing power parity (United States, China, Japan, India and Germany).

***Table 1.2:*** Biggest economies by purchasing power parity (PPP)

<b>Country</b>	<b>GDP using PPP in US billion Dollar</b>
United States	11,651.1
China	7,642.3
Japan	3,737.3
India	3,389.7
Germany	2,335.5

*Source:* Pocket World in Figures (2007)

The implication of China becoming an economic and industrial giant is that its carbon footprints would also be very high if not higher than those of the United States. The politics of historical emissions versus current emissions has raged between the United States and China plus the 77 Group of Developing nations. This debate has stalled all the major Conferences of Parties (COP) of the United Nations Framework Convention on Climate (UNFCCC). In 2009, COP 15 in Copenhagen, Denmark ended without any major outcome. The same with COP 16



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and 17 in Cancun (Mexico) and Durban (South Africa) respectively. Also politicized is the issue of who should pay reparations for causing global warming and climate change. The developing world who did not contribute much to global warming in the first instance asked the industrialized countries to pay reparations as they are most vulnerable to impacts and likely impacts of climate change. The developed world on the other hand asked some rich developing countries such as China, India and Brazil to contribute as their large economies and their poor pollution controls are projected to emit greenhouse gases into the atmosphere and possibly surpass whatever was emitted in the past by the industrialized countries of the world. The bickering between USA and China and their allies amount to the proverbial fiddling while Rome burns and this is very dangerous for the global human community as uncontrolled emission of greenhouse gases would overwhelm the earth's atmosphere and climb above the tipping point of 2°C. Scientists have warned that global warming of 2°C or more would happen in the business as usual scenario in the next 100 years and this portends serious danger to man and his planet.

**The politics of climate change mitigation versus adaptation**

Policy makers have two principal instruments for dealing with climate change. These are mitigation and adaptation. Mitigation involves limiting the amount of greenhouse gases emitted into the atmosphere. Adaptation on the other hand is all about easing the impact of a given change with appropriate protection measures such as development and deployment of heat - resistant crops, change in agricultural and forest management systems, building of dykes and sea walls, the construction of water storage and irrigation systems as well as adaptation of houses (Frankhouser, 1995). Since the climate change response debate started, more attention has been expended on mitigation to the detriment of adaptation. The focus has always been how to limit greenhouse gases but especially carbon dioxide (CO<sub>2</sub>) concentration from the highest safe level which is 445 to 490 parts per million which is also the same as limiting average global temperature to increase of between 2.0 to 2.4°C. All the climate change negotiations since Kyoto have

concentrated on mitigation costs, mitigation technologies, protection of intellectual property rights of developed countries, e.t.c. But mitigation is only targeting future emission without recognizing that past emissions especially from the developed economies are already wrecking incalculable havocs on people and their supporting means of livelihood especially in the developed countries of the world. If significant mitigation measures are taken, little action may be needed in respect of adaptation.

Conversely, if the consequences of global warming can easily and cheaply be adapted to, there may be little need for preventive carbon abatement. The two sets of policy measures should thus be carefully coordinated and vigorously pursued. Analytically, the optimal combination of prevention and adaptation can be found by minimizing the total costs of climate change consisting of the costs of emission abatements PC, the costs of adaptation AC and the costs of greenhouse damage D represented in equation I (Fankhouser, 1995).

$$\begin{aligned} \min_p, a \quad & AC(a) + PC(p) + D(T,a) \text{ ----- } 1 \\ \text{Subject to } & T = f(p) \end{aligned}$$

where: p denotes the level of prevention (emissions abatement)

A is the degree of adaptation

D is the greenhouse damage and depends positively on temperature level T, and negatively on the amount of adaptation.

AC is the cost of adaptation

PC is the cost of prevention.

From the above equation, climate change damage cost is minimized when both the increment costs of mitigation and adaptation are lower than the additional benefits. The equation representation underline the importance of both mitigation and adaptation measures. They are two sides of the same coin and efforts should therefore be geared toward

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ensuring that none is promoted at the detriment of the others. Moreover, the developed nations of the world should live up to the commitment which they freely made and signed during the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 when they agreed to help the developing countries that are particularly vulnerable to meet their costs of adaptation to climate change (Human Development Report 2007).

**Politicization of extreme weather events by not linking them to climate change**

Extreme weather events including heat waves, frosts, floods, droughts, severe storms such as hurricanes, cyclones, tornadoes have intensified in many parts of the world. The magnitude, frequency and character of these extreme weather-related events have significantly changed especially in the last three decades.

For example, in Africa and East Asia, drought has intensified and equally prolonged in duration, heat waves have not only intensified, but have come with more disastrous consequences. For example, in 1995, summer heat waves affected both US Mid- west and India. More than 700 people died in Chicago from heat exhaustion when temperatures exceeded 32°C (90°F) in July 1995 about 500 people died in Northern India when June temperatures soared to 50°C (122°F) (Enger and Smith, 2004).

Tornadoes have also been occurring more frequently and with more fury. In the United States alone, nearly 1000 tornadoes have ripped across the heartland killing more than 500 people and inflicting a billion US dollars in damage. The Midwest of the United States suffered the wettest April in 116 years, forcing the Mississippi to flood thousands of square miles. Texas suffered the driest month in a century (Begley, 2011). Hurricanes have also intensified and have come with more disaster especially in the North Atlantic Sea Board. During the Atlantic hurricane season of 2004, 15 named tropical storms developed (the average is around 10). Six were major hurricanes. One of the six was Hurricane Jeanne that killed more than 200 people in Haiti (World Climate News, 2005). Then came Katrina, a category 5 Hurricane that

devastated the ancient city of New Orleans. Katrina was the costliest hurricane in US history. In March, 28, 2004, the South Atlantic recorded her first hurricane off the Brazilian States of Catarina. Hurricane Catarina was a category one Hurricane with central winds of 121-129km/h. The amazement caused by the first recorded hurricane in the South Atlantic in recorded history made Climate Change Scientists at the United Kingdom Meteorological Office, Hadley Centre for Climate Prediction and Research to start to focus more on climate models that could possibly throw some light on the various links between climate change and the behavior of tropical storms (World Climate News, 2005). In spite of the available documented evidences linking climate change to recently observed extreme weather events, climate change sceptics especially in USA and Australia are still not convinced to link these extra ordinary events to global warming - induce climate change. The denial of climate change especially during the Bush Administration contributed negatively to the development of adaptation and mitigation structures and institutions in United States of America. In fact, climate change deniers argued that global warming was a hoax and as a result, there was no need to figure out any adaptation plans (Bagley, 2011).

### **The politics of technology transfer from developed to developing World**

The technological transfer debate between the rich North and the poor South has been on for a long time. The rich North are far ahead in cutting edge research and development in all the relevant fields of human development. Millions and Billions of dollars are expended on these researches and development processes annually. The politics of technological transfer between the industrialized countries and the poor developing countries of the world affected the early deployment of antiretroviral drugs on HIV/AIDS that were developed in the United States of America. The pharmaceutical firms that first developed the drugs imposed high patented - protected prices as the main incentive

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for the companies to engage in research and development in the first place. The patented - monopoly price for antiretroviral regimen was about \$10,000 per year compared with actual productions costs of less than \$1,500 per year. The difference is the patent incentive for the pharmaceuticals (Sachs, 2005). Just as in the transfer of patents in respect of HIV antiretroviral drugs from the North to the South was very problematic because of issues relating to protection of intellectual property rights, pricing incentives, etc. property rights, and pricing are already affecting the transfer of climate change mitigation and adaptation technologies developed in the laboratories and incubation centres of the developed world. For example, there are many renewable energy and energy efficient technologies, improved biotech seedlings etc. that are already in the market place but whose prices and deployment are very prohibitive and are therefore very unaccessible to the poor countries of the world who really need these technologies to reduce their vulnerabilities and to cope with some of the adverse impacts of climate change. The issue of technological transfer has been a knotty one between the developed and developing countries during climate change negotiation conferences. The developed countries have always pledged that climate change mitigation and adaptation technologies would be easily transferred to the developing countries but these pledges have most of the time been breached by the industrialized world. One of the ways of resolving this problem is that both the developed and developing countries of the world should enter into serious dialogues with patent holders of climate change mitigation and adaptation technologies to consider lower prices for products entering third world countries by charging only production costs and not the higher patent/monopolistic prices.

**The politics of climate change mitigation and adaptation instruments such as Green Funds, REDDS, Clean Development Mechanism (CDM), etc.**

The various instruments and mechanisms for mitigating and adapting to climate change such as the Green Fund, Reduced Emissions from Forest Deforestation and Forest Degradation (REDD), Clean

Development Mechanisms (DCM) etc. have been designed and structured to protect the interests of the developing countries of the world. For example, the CDM was one of the flexible instruments designed by the Kyoto Protocol. The CDM is a project - based mechanism structured to allow Annex 1 parties in meeting their emission limitation commitment by investing in emission reduction projects in non- Annex 1 countries. But CDM projects have been skewed to favour few countries especially China, Brazil and India. Few of the CDM projects that have been approved went to Africa. The truth is that CDM Board is dominated by the developed countries of the world and project screening procedures are not only rigorous but also entails very expensive and time consuming documentation and processes. CDM required high administrative and transacting costs plus very weak financial incentives and difficult reporting processes. Consequently, African countries that need CDM projects most because of their more vulnerability to impacts of climate change turn out to benefit least from this global warming mitigation mechanism. The developed countries of the world have also made pledges to raise green climate funds, first, to contribute at least 30 billion US dollar annually from 2010 to 2012 and thereafter 100 billions dollar from 2020 to developing countries to address the impact of climate. But the pledges are not legally binding and most of the countries have not honoured their pledge. Globally, about 4730 CDM projects have received approval for execution as of 2009. Pacific Asia has the lion share of 3700 projects. Latin America and the Caribbean had 820 and Africa had only 210. In Africa, South Africa, Kenya Egypt and Morocco dominate CDM projects in Africa.

Nigeria, the giant of Africa has officially registered only 5 projects (Table 1.3).

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**Table 1.3:** Official registered CDM projects in Nigeria as of Dec. 2010

Project	Sector	Location
Kwale Gas utilization project	Energy	Kwale, Delta State
Pan Ocean Gas utilization project	Energy	Ovade – Ogherefe Delta State
Asuokpu – Umutu Marginal Field Gas Recovery Facility	Energy	Asuokpu Umutu Delta State
Save 80 fuel efficient (wood stove)	Energy	Spread all over Nigeria
Municipal solid waste compostry	Environment/ Agriculture	Ikorodu, Lagos State

*Source:* Culled from Ajadike (2012)

## Discussion and Conclusion

Climate change a straight forward science that has been turned into something very complex even for the best trained minds in the atmospheric sciences. For example, the oil producing countries of the world that depend on oil earning from fossil fuels for their economic development are pretending that they do not know that burning of fossil fuels generate greenhouse gases that contribute to global warming. The same is true for major oil companies whose business of producing and distributing fossil fuels contribute to global warming and climate change.

There is also the politics of who should pay for the emission of greenhouse gases between the industrialized (developed) countries and poor developing countries of the world. The developing worlds are advancing the argument that the industrialized countries owe them some debt and reparations for polluting the atmosphere since the Industrial Revolution of the 1750s. The developed world accepted to pay something but they quickly came up with their own defence that some emerging developing countries with large economies such as China, India, Brazil and South Africa are equally guilty of pollution and that future emissions of greenhouse gases may be worst than whatever the developed countries have done because of not just the size of their economies, but also because of poor environmental controls and weak abatement institutions and processes of the emerging economies of the world. This paper is suggesting that all polluters should be made to pay appropriately to reflect the polluters must pay principle. Both historical and current emissions should be calculated and those responsible must

be made to pay to the last kobo for the sake of justice. There is also politics of mitigation and adaptation. It is the position of this paper that both mitigation and adaptation processes and institutions be strengthened to reduce greenhouse emissions and also to protect those vulnerable to identified adverse impacts of climate change. The politics of technical transfer including human capacity building should be implemented without any further delay as agreed in Kyoto. The industrialized world should share their knowledge with the developing countries as part of differentiated responsibilities as clearly agreed in Kyoto Protocol without attaching so much dehumanizing costs. The past climate change negotiations especially those of COPs 15, 16 and 17 failed because of selfish national and economic interests of the world leaders. Until now, there is no replacement to Kyoto Protocol whose life span terminated in December 2012. The world leaders should put aside all selfish and myopic interests and work together in the COP 21 in Paris, France so as to come out with a binding treaty that is not only effective and efficient but also just, fair and equitable to the entire human kind. With concerted efforts and political will among the world leaders, the fight against climate change would be stepped up and the beneficiaries are the global community and our planet - the only living planet for now.

## **References**

- Athanasiou, T. and Baer, P. (2002) *Dead Heat Global Justice and Global Warming*. An Open Media Book. New York: Seven Stories Press.
- Begley, S. (2011) In a World of Climate Change Freaks, Storms are the New Normal. *NewsWeek*.
- Brown, W. (2004) Global Warming and the Failure of Collective Action. In Bromley S. Mackintosh, M. Brown, W. and Wuyts, M. (eds.) *A World of Whose Making?\_MakingInternational: Economic, Independence and Political Order*. London: The Open University and Pluto Press.



**Ajadike, J.C. *The politics of global warming and climate change***

- Desombre E.R. (2002) *The Global Environment and World Politics*. New York: Continuum Books.
- Enger, E.D. and Smith, B.T. (2004) *Environmental Science - A Study of Interrelationships*. New York: McGraw Hills.
- Fankhouser, S. (1995) Greenhouse Politics and the costs of Mitigation. In: Parry, M. and Duncan R. (eds.) *The Economic Implication of Climate Change in Britain*. London: Earthscan Publications Ltd.
- Human Development Report (2007) *Fighting Climate Change: Human Solidarity in a Divided World*. A Publication of the United Nations Development Programme (UNDP) p. 9 grave. New York: Macmillan.
- IPPC 1996: Climate Change (1995) *The Science of Climate Change*. Contribution of Working Group 1 to the Second Assessment Report of the Intergovernmental Panel on Climate Change, J.T. Houghton, Y. Ding, D.J. Griggs M. Noguer, P.J. Vander Lindon X, Dai, K. Maskell and C.A. Johns (eds.) Cambridge: Cambridge University Press.
- IPPC, 2007: Summary for Policy Makers In: Climate Change (2007) *The Physical Science Basis*. Contribution of the Working Group 1 to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Solomon S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge: Cambridge University Press.
- Pocket World in Figures (2007) Annual Publication of the Economist Newspaper Ltd (Publishers of the Economist). London: Profile Books Ltd.
- Sachs, J. (2005) *The End of Poverty - How We Can Make It Happen in Our Lifetime*. London: Penguin Books Ltd.
- World Bank (2003) World Development Indicators 2003. Washington, D.C. Available at <http://www.worldbank.org>.
- World Climate News (2005) A Publication of the World Meteorological Organization (WMO) No. 26 pp. 1 -12.
- World Climate News (2005) A Publication of the World Meteorological Organization (WMO) No 27, pp 1-12.

Wright T.R. (2005) *Environmental Science Towards a Sustainable Future*. New Delhi: Prentice-Hall of India Private Ltd.

# LOCAL GOVERNMENT AUTONOMY: AN IMPERATIVE FOR EFFECTIVE NATIONAL DEVELOPMENT

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## ***Abstract***

*The review was motivated by the constant claim of marginalization by local government authorities in Nigeria by the higher tiers of government, as a nagging bane of their ineffectiveness. The study adopted descriptive research design, the theory of federalism for the theoretical framework and used secondary data. The study found out that the Local Government autonomy entrenched the 1976 Local Government Reforms is not practised in most Local Government Areas in Nigeria. The study, therefore, recommended a revisitation of the constitutional provisions which are violated by the higher tiers of government against the effective operations of the Local Government system in Nigeria with a view to ensuring practical full autonomy to local governments.*

**Keywords:** *Autonomy, Local Government, National development, Nigeria.*

## **Introduction**

Local government system all over the world is meant to be a government that is closest to the grass root where the impact of the government should be felt most in order to ensure effective national development as well as self-sustaining and even development at the local community level (Bello-Imam, 1996). It is the third tier of government deliberately created to bring

government to the grass root population, as well as give its members a sense of involvement in the political process that controls their daily lives. The essence of good local government system throughout the democratic world lies in putting up development programmes towards stable government (Ayoade, 1992).

Akpan (1964) cited in Ofoeze (2002) defined Local government as a grass root participatory democratic process of breaking down a country into smaller units or localities for the purpose of administration in which the inhabitants of the various localities concerned play a direct and full role through their elected representatives under authority of the national government. The essence of local government is primarily the provision of human, spiritual, material, social, educational and general welfare to the local people under her domain.

An analysis of the foregoing tallies with the hypothesis put forward by Okoli (2009: 2-8) that:

- (i) Any discussion of Local Government implies the existence of another higher level of government. The idea of “Local” presupposes the existence of a more encompassing or broader government super-intending the Local one;
- (ii) Local Government exists to fill a gap, which the national government is too remote to fill. This means that Local Government complements and extends the national government.
- (iii) Local government implements the ideals, objectives programmes and aspiration of the national government at the local level.
- (iv) The ideology of the national government will, to a large extent, determine the structure and functioning of Local government (i.e. the needs, objectives and aspirations of the national government constitute crucial determinants of the structure and functions of Local Government).

No wonder the United Nations Office for Public Administration, cited in Njoku (2009: 7), defines Local Government as “a political sub-division of a nation or (in a federal system) state, which is constituted by law and has substantial contract of Local affairs, including the powers to impose taxes or exert labour for prescribed purposes for which the governing body of such an entity is elected or otherwise locally selected”. Some of the salient attributes of a Local Government spelt out in the above definitions are as follows:

- (a) Local Government is a subordinate level of government in comparison with central (i.e. national) or State government;
- (b) Local Government is constituted by law to perform some specific functions;
- (c) Local Government is constituted through an elected or selected representatives;
- (d) It has authority (autonomy) in the performance of its functions and implementation of decisions in accordance with the needs of its locality; etc.

Therefore, in the discharge of its functions, a local government should to a large extent autonomous within its jurisdiction. It is the relative autonomy of Local Government system that enables it to administer social and other services to the local communities and towns by implementing decisions not only in accordance with the needs of its locality but also with the national interest for even development of the entire nation. Thisway, the objective of the Local Government system as the Federal Military Government (1976: 1) vividly encapsulated in the official handbook on the reformed system of Local government:

*Government at local level exercised through elected representative Council established by law to exercise power within defined areas. This power should give the Council substantial control over local*

*affairs as well as the staff, institutional and financial powers to initiate and direct the provision of services.*

According to Odenigwe (1971), Local government is a system of local administration under which local communities and towns are organized to maintain law and order, provide some limited range of social and public amenities and encourage the cooperation and participation of the inhabitants in joint endeavors towards the improvement of their conditions of living. He asserted further that it provides local communities with formal organizational framework which enables such a community to conduct its affairs effectively and regulate the actions of their members for the general good of the public.

But, experience over the years shows a lack of autonomy (i.e. authority and discretionary powers in the performance of the assigned functions) of the Local Government system in Nigeria. State Governments often interfere in the affairs of the Local Government in various areas, including control of their treasury, elections timing and conduct. While a few Local Government Councils may be given free hand to run their administration, a majority of Local Governments lack free hand to operate to ensure national administrative development and political efficacy designed in the concept and practice of local government. Local government ought to be essentially the path to and guarantor of national integration, administration and development. The importance of the Local Government system in a multi-ethnic culture such as Nigeria cannot be over emphasized. The system was created to ensure national consciousness, unity and relative uniformity as well as preservation of peculiar diversities. Central to the creation of Local Government is the ability to facilitate an avenue through which government and people intermix, relate and more quickly than any other means, resolve or dissolve issues that have heated the system. It ought to provide a panacea to the diverse problem of the diverse people with diverse culture. These

role have been amply impaired by the said lack of autonomy. This study sought to show that autonomy is imperative for functional Local Government system in Nigeria, using some selected Local Governments in Ebonyi State.

The broad objective of the study was to examine the effect of lack of local government autonomy on national development. The specific objectives were:

1. To assess the effect of lack of autonomy on citizens political participation in Nigerian local government system;
2. To find out the financial implication of lack of autonomy on the generation of income for rural development at the local areas;
3. To ascertain the extent to which lack of autonomy has affected the implementation of development programmes in local governments in Nigeria;
4. To assess the extent to which lack of local government autonomy has affected the structure and performance of local government staff (i.e. personnel);
5. To ascertain if lack of autonomy has a direct link with bribery and corruption in local government system.

The significance of the study has both theoretical and empirical dimensions. Theoretically, the study will help to increase or add to the existing body of knowledge on the concept of local government autonomy. It will serve as a useful starting point and guide to researchers who may want to conduct more study on the issue of local government autonomy. The study will shape the proper opinion of the political class, government and citizens on the value of local government as an agent of national development. It will help to direct the government on how power could be distributed for effective and efficient performance among the tiers of government. It will also increase citizen participation in the political

process at the local level. Further more, the study will enhance income generation at the local level for the purpose of tackling developmental projects. It will help to improve the performance of staff at the local government level, minimize bribery and corruption as well as the issue of ghost workers in the system. The study will also help to improve relations among the tiers of government. It will help in repositioning the Local Government system for more effectiveness in grass root democracy.

The time scope of the study is 1976 to date. Uniform local government system was adopted by the country in 1976 and runs till date. The target scope of the are selected local governments in Ebonyi State, which were available for the pilot study.

Literature was reviewed or appraised for the works of other scholars on the topic or its related field. The review covers relevant sub themes, with analytical, theoretical and empirical approaches. The section also presents the theoretical framework of analysis for the study.

### **Historical background of the development of Local Government system in Nigeria**

Okoli (2000: 33) stated that, "Local governments in Nigeria have followed very closely the pre-colonial, colonial and post or neo-colonial development in Nigeria." Ikejiani (1995:7) has the view that, "Local government administration in Nigeria is as old as colonial administration", and was vested on officers appointed by the colonial administrators, the crown office, its successors and the regional governors. It is these appointees that were referred to as District Officers (DOs). Both scholars agree that what is today referred as local governments in Nigeria is the result of transformation stages which the colonial administration has passed through both in the hands of the British colonial officers and Nigerian Nationalists. The transformation stages of local administration are classified by Okoli (2000) to include:



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- i. The period of contact
- ii. Period of subjugation and maintenance of law (1900-1949)
- iii. The period of accommodation and experimentation (1950-1965)
- iv. The period of National mobilization (1966-1975)
- v. Period of National integration (1976-1983)
- vi. Period of operationalization of autonomy for local governments (1984-1998) and
- vii. The current attempt of democratization and institutionalization of local government.

**Local government autonomy**

As the lowest tier of government, the Local Government system all over the world, which perform similar functions and are confronted with similar problems, should be granted a free hand in the running of their affairs. According to Njoku (2009: 372), "Local government system is considered as the lowest tier of government in many countries in the hierarchical order." This portrays that in many countries there may be the existence of two or more levels of government, each of which contributes to the process of governance. Ofoeze (2002:98) asserted that "Constitutionally, the Local Governments, as instituted by the 1976 Reform, were granted full autonomy both in terms of their structure, the way and manner they were expected to operate and their source of finance, as well as their functions." According to the reform guideline of 1976 Local Government Reforms, "Local Governments were recognized as a distinct tier of government." In line with the prescription of the guidelines, the 1979 Constitution, allotted to the local governments a list of clearly defined functions." The Constitution also specified sources of revenue for the local governments and set aside some percentage of the federation account for local governments. Ofoeze (2002) affirmed that the 1976 Local Government Reform was a good move towards ensuring the autonomy of local governments in Nigeria, asserting that for the first time Local

government was transformed to a constitutional matter and on which neither the state or the federal government alone take decision.

Local government autonomy his appears to theoretical than practical in the Nigerian situation, where some are not given free hand to operate. This denies them autonomy in the handling of local issues. Whether the autonomy of local government as required by the 1976 Local Government Reforms was sustained, Ofioye (2002) clearly stated as follows:

*It is important to note that such autonomy did/do not actually exist. This is because of the various stringent fiscal and administrative measures adopted to manipulate and gauge the local councils and their members by both the federal and state governments - the splitting of the local government areas, the unprovocative dissolution of duly elected councils by the state, etc.*

One could deduce that the 1976 Local Government Reform guidelines painted a picture of what it takes to say that a local government is autonomous, but in actual sense autonomy is still a mirage to local governments in Nigeria. According to Marshall and Humes (cited in Okoli, 2009: 11), the major characteristic of local government includes:

- a) Defined area;
- b) Population;
- c) Operate through local election or selection of its functionaries ;
- d) Enjoys a measure of autonomy in the performance of its activities including the power to tax
- e) The ability to sue and be sued and to enter into contracts.

These features show that local governments tally with the definitional elucidation given by Okoli (2009:11) that, "Local government can be seen

as a ‘mini’ government within a state.” Humes and Marshal (cited in Okoli, 2009: 11), unequivocally asserted that local government is Infra-sovereign or a quasi-sovereign province-state. Therefore, local government could be truly inferred as government that is restricted to specific area within a larger government. Okoli (2009) continued by saying that the very essence of local government is located in the concept of autonomy as indicated by:

- i. Devolution of wide powers
- ii. Adequate and elastic source of revenue and
- iii. Reasonable level of discretion.

Local government autonomy could be seen from the relative difference between local administration and local government. Local administration is the extension of the national government activities to all nooks and crannies of the state. The coverage of local administration is:

- i. Unit operation is national in scope;
- ii. The functionaries are national government employees;
- iii. The issues are not purely local in nature, but even when local in nature, are give national recognition and solution
- iv. Minimal discretion is allowed to the functionaries
- v. There is no independent source of revenue for local administration outside national revenue.

In line with the above view, Odenigwe (1971) stated that local government is a system of local administration under which local communities and towns are organized to maintain law and order, provide some limited range of some social services and public amenities and encourage the co-operation and participation of the inhabitants in joint endeavors towards the improvement of their living conditions.

Amucheazi (1980) opines that one basic concept in the 1976 Local Government Reform is that local government units should enjoy a measure of autonomy particularly from the state governments. Local governments had existed in the past at the discretion of the state governments who had the power to dissolve them as well dictate how local government affairs should be run. He said that the reform had incorporated local government into the 1979 Constitution, making it relatively impossible for state governments to increase or tamper with the number of local governments or their powers. He lamented that despite the incorporation of local governments into the constitution, the new structure is still under the state government, who still control and direct most fundamental activities of the local governments.

Some scholars and groups, including Dare and Oyewole (2002), have maintained that the direction and control of the local governments is a normal issue considering the superior and subordinate relationship existing between the two. They contend that in any system of government where they are superior and inferior ties, the higher level must exercise some level of control over the lower ones to ensure that issues are handled according to national policy directives. Adigwe (1979) state that fundamental powers in a state lie with the central government, maintaining that every local authority is subject to the control of the central government.

A research was conducted by Ebhon, Osemwota and Agbebaku on "Autonomy and local capacity: An analysis of the performance profile of Edo State Local Governments Council (1999-2006)." The study used descriptive and documentary analysis through survey method. It established through empirical evidence that local government councils growth even in the face of raising revenue is inhibited by the deployment of centrally and locally derived resources for bureaucratic ends like salaries, wages trainings, etc. The study concluded that for meaningful autonomy and development to take root, the gap between internally

generated revenue and statutory allocation as well as that between recurrent and capital expenditure must be reversed.

A paper by Orji (2011) on “Impact of local government in the eradication of poverty in Nigeria” established that a lack of autonomy was part of the challenges of local governments in fighting poverty at the grass root level among some local government areas in the south-east and south-south political zones of Nigeria. In line with Olugbemi (1980), the study recommended that local governments should be allowed to what the word government implies - governing at the grass root level.

Onyemenam (2013) reported on “Intergovernmental Relation in a Democratic Federalism”, which adopted descriptive and survey approach and arrived at conclusion through a system of both inductive and deductive reasoning. The study had the objective of identifying areas of interference between Ebonyi State Government and its local government councils using Ezza South Local Government Area as a case study. It study established that the state government was interfering politically and financially into the autonomy of its local government. It, therefore, recommended avoidance of the meddling of the state into areas of authority of local governments.

Ovaga (2009) conducted an empirical study on “The Factors Militating against Effective Local Government System in Nigeria.” The study was descriptive in nature and made use of both primary and secondary data in its analysis. The result showed that a lack of adequate autonomy and corruption were the two major factors militating against the effectiveness of local governments in service delivery in Nigeria. It noted, among other things, that the control of revenue accruing to the local governments by the federal and state governments was not indicative of a genuine desire to strengthen the local governments to meet the high expectations of the people. The study noted that of all tiers of government, the local government fund allocation was least and regretted the demand from state government made from the local government, thereby depleting

a chunk of the allocations stipulated for the provision of rural needs, citing the example of the directive given by Governor Oserhein Osubor of Edo state that all local governments should pay the sum of one million Naira (=N=1 million) each to the state government account in 2010 without any official document to that effect.

Obasi (2013) conducted study on “Local Government Financial reporting system procedures in Nigeria,” using documentary evidences. It observed that the available resources which cannot even meet up with the demands of the local people are most times mismanaged through the State-Local Government Joint Account. It, therefore, recommended the abolition of the State-Local Government joint account system.

Irrespective of their divergences of various works reviewed, the synthesis is that Local Government is the best unit of government to handle local issues, hence the need to be given some measure of authority and discretion in the handling of its affairs. Empirically review proved that the 1979 Constitution covers the autonomy of local government system, but in practice autonomy is still lacking among local government in Nigeria. Most scholars were in agreement that full autonomy should be given to local governments in order to make them more effective in the handling of local issues.

This study adopted federalism as its theoretical frame work of analysis. Federalism is a political arrangement in a country in which there are in existence two or more levels of government each of which have its own areas/spheres of governmental legislative jurisdiction. According to the founding father of this theory, Dicey (1939), Federal system of government is a “political contrivance intended to reconcile national unity and power with the maintenance of rights of individual member states.” The most classical and all time federalist theorist, Wheare (1963: 10), defined federalism as “The method of dividing governmental legislative powers so that national (Central) and regional (component) government are each within a sphere, Coordinate and independent.”

Therefore, clearly understood, unlike unitary system which is predicated on the philosophy of unitarism which emphasizes, “The habitual exercise of supreme legislative powers by one central authority”, federalism emphasizes the existence of multiple layers of government each of which exercises some governmental legislative powers allotted to them by a constitution which is supreme and the source of life of all the co-ordinate governments in that country. In a federal system, citizens are subject to the authority of both the central and component governments. The basic distinctive characteristics of federal system of government include the following: formal division of governmental powers between the center and the component units by the constitution, financial autonomy, the existence of written and rigid constitution, supremacy of the constitution, existence of an independent/non-political judiciary to interpret the constitution; existence of bi-cameral legislation, etc.

Since Nigeria adopted the federal system of government at independence till date, federalism clearly fits the analytical frame work this study. Therefore, the characteristics of federalism will be used to evaluate the relationships existing between all the levels of government in Nigeria in order to note areas of strength, weakness and make necessary recommendations that will lead to the practice of true federalism in Nigeria with its attendant fiscal relations. Various concepts useful to the study were discussed by scholars. These perceptions and ideas held by scholars helped to give the foundation or background of the present study.

The strategies for achieving stated objectives include using documentary method. Data collected through secondary sources were analyzed descriptively. Using content analysis, official documents relevant to the study were critically analyzed and decisions reached through inductive and deductive reasoning.

## **Conclusion**

The study made a critical analysis of the local government autonomy in Nigeria as an imperative for effective national development. It discovered that local government autonomy is still practically lacking in Nigerian local government system, but exists on paper. It also discovered that the State-Local Government joint account system was a negation of financial autonomy in the running of local governments in Nigeria. This needs to be revisited if the goals of the local government level system must be achieved for effective national development.

## **Recommendations**

- (i) The State-Local Government joint account system should be scrapped to ensure that local governments has adequate control of finances that accrue to it from the federation account;
- (ii) Also to be revisited are provisions in the 1999 Constitution which give the state government unlimited powers to meddle into the functions of local governments;
- (iii) Political and Financial Autonomy should be increased to the local governments to make them more result oriented in issues of development at the local level.

## **References**

- Adigwe, F. (1974). *Essentials of Government for West Africa*. Ibadan: University Press.
- Akpan, N.U. (1964). *Epitaph of Indirect Rule*. London: Fancase and Coy Ltd.
- Amucheazi, E.C. (1980). *Readings in Social Sciences*. Enugu: Fourth Dimension Publishers.



- Ayoade, J.A. (1992). *Grass Root Democracy and the New Local Government System in Nigeria*. Abuja: Center for Democratic Studies.
- Bello-Iman, I.B. (1983). *Local Government Finance in Nigeria*. Ibadan: Heinemann Educational Books.
- Dicey, A.V. (1939). *Introduction to the Syudy of Law of Constitution*. London: Macmillan.
- Ebohon, S.I., Osa Osemwola & Agbakoba, Philip (2011). "Autonomy and Local Government Capacity: An Analysis of Performance Profile of Edo State Local Government Council (1999-2006)." *International Journal of Advanced Legal Studies and Governance*, 1(1): 49-61.
- Hearts, G. A. Ofoeze (2002). *Local government in Nigeria: An Historical Discourse*. Enugu: John Jacobs Classic Publishers.
- Ikejiani-Clark, M. & Okoli, F.C. (1995). *Local Government Administration in Nigeria: Current Prolems and Future Challenges*. Lagos: Mangrove Publishers.
- Njoku, Davidson (2009). *Local Government Administration: Theories and practices*. Owerri: Bonchris Publishers.
- Obasi, Emmanuel (2013). "Local government Financial Reporting System system in Nigeria." Unpublished M.Sc. Project submitted to Ebonyi State University, Abakaliki.
- Odinigwe, A. G. (1977). *A New System of Local Government*. Enugu: Nwamife Publishers.
- Okoli, F.C. (2000). *Theory and Practice of Local Government: A Nigrian Perspective*. Enugu: Bismark Publications.
- Olugbemi, S. O. (1980)" Systems Approach to Intergovernmental Relations (IGR)" in Adeniran et al (eds.) *The Quarterly Journal of Administration*, 24 (2): 34-39.
- Onyemenam, Chibuzor T. (2013). *Inter Governmental Relations in Democratic Federalism*. Abakaliki: EBSU PG School.

- Orji, Orji Agha (2015). "Intergovernmental Relation and Fiscal Policies in Nigeria." Unpublished seminar paper. Abakaliki: EBSU.
- Ovaga, Okey H. (2015). "An Assessment of Militating Factors Against Effective Local Government System in Nigeria." *Journal of Liberal Studies*, 15(1): 15-23.

# CHALLENGES TO REGULAR URBAN POTABLE WATER SUPPLY IN AFRICA: A STUDY OF ENUGU METROPOLIS IN SOUTHEAST NIGERIA

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## **ABSTRACT**

*Efforts by the Enugu State Government of Nigeria to prioritize pipe-borne water supply to Enugu metropolis has not abated the irregularity of potable water supply therein. The study is, therefore, aimed at identifying the challenges that hinder the Enugu State Water Corporation from supplying potable water on a regular basis to residents in Enugu metropolis, with a view to proffering solutions. Questionnaire was administered to 611 staff of the Enugu State Water Corporation to elicit information, which were analysed statistically for answers to the research questions. Findings showed the challenges to regular supply of pipe-borne water in Enugu metropolis were, among others, consumer unwillingness to pay water rates, operational constraints, inadequate funding, increasing population, political interference, irregular payment of staff salaries of Water Corporation, corrupt practice among staff of the Corporation, and lack of strategies for improving the supply of pipe-borne*

*water in Enugu metropolis. Recommendations include, among others, adoption of Public Private Partnership (PPP) model.*

## **INTRODUCTION**

Water is intertwined with, and a primary building block of, human life. A resource without substitute, it is paramount to health, food security, energy, ecosystem and future (Transparency International, 2008).

No meaningful socio-economic development can occur without determined effort to improve the supply of water to citizens. Eneh and Eneh (2014) reported that 40% of Africans lack improved water supply and 20.7% of African countries had less than 50% of their population with access to potable water in 2004. Lack of access to potable water exacerbates poverty and dictates health and economic crises in Africa. The health issues are miscarriages, birth defects, and infantile health challenges, such as methaemoglobinemia and dehydration, among others. People suffering from illnesses related to poor sanitation occupy 50% of hospital beds in sub-Sahara Africa. These illnesses account for 12% of the health budget. Corruption and poor governance in water sector are contributory factors to poor access and management of potable water in African countries. Up to 50% water is wasted to leakages in pipes and canals and illegal connections.

Recognizing access to safe drinking water as extremely important, the Millennium Development Goals (MDGs) targetted, among others, to “halve by 2015 the proportion of people without sustainable access to safe drinking water and sanitation” (Akpore and Muchie, 2011). Nigerian National Water Supply Policy prescribes water for all with 120 liters per capita per day for urban and peri-urban and 60 liters for rural areas by 2020 (National Bureau of Statistics, 2005).

In Nigeria, the public water sector is responsible for the provision of safe drinking water (piped-borne water) to households, institutions, businesses and industries. This is obtained from treated water sources,

untreated groundwater sources, shallow boreholes, wells, ponds, springs, lakes, rivers, and streams (Nwankwoala, 2011).

Ojibo (2009) reported that only about 30% of the population of Enugu metropolis has access to potable water supply. Enugu State Water Corporation has been deterred from regular supply of potable water to Enugu metropolis by many impediments. In alternative, residents buy water from mobile water suppliers, paying fifty Naira (N50) for 25-litre gallon of safe drinking water, two thousand Naira (N2,000) for a tank of five hundred gallons and four thousand Naira (N4,000) for a tank of one thousand gallons. Households also complement their water needs with water from contaminated rivers, hand-dug wells and boreholes for bathing, washing and even cooking. This results in poor welfare of people, preventable water-related diseases and deaths, increased spending on mobile water supplies, poor quality of the environment and more (Khatri and Vairavamoorthy, 2007).

Enugu State Government has long considered the provision of pipe-borne water as a priority project and has made significant investments in recent years. But, the success of the efforts to provide sustainable access to potable water have been limited. The study is, therefore, aimed at identifying the challenges that hinder the Enugu State Water Corporation from supplying potable water on a regular basis to residents in Enugu metropolis, with a view to proffering solutions to the identified challenges.

Some research questions guided the study. Questionnaire and interview were the instruments for eliciting information. The data were analysed statistically and null hypotheses were tested at the end of the investigation to address the research questions.

## **METHODOLOGY**

The population of the study is made up of 611 staff of the Enugu State Water Corporation as distributed in Table 8.3.1.

*Table 8.3.1: Population of the study*

S/No	Name of Department	No. of staff
1	Administration	106
2	Engineering, P&D, O&M, Enugu Metropolis Zone, Oji & B/Stations & Ajalli work stations	245
3	Finance and Supplies	53
4	Commercial and PIU	72
5	Nsukka Zone	54
6	Udi zone	12
7	9 <sup>th</sup> Mile zone	16
8	Staff deployed to EN-RUWASSA	29
9	Staff on contract	23
	Total	611

*Source:* Administrative Department, Enugu State Water Corporation

The sample size for this study was determined using the Taro Yammane formula (Onodugo et al, 2010):

$$n = \frac{N}{1 + (Ne^2)}$$

Where n = sample

N = population size,

E = error at 5% (standard value of 0.05) and '1' is the constant value.

Substituting in the formula,

$$n = \frac{611}{1 + 611(0.05^2)}$$

$$n = 241.74 \text{ or approximately } 242.$$

A sampling interval was obtained as the quotient of the sample size (611) and n (242). This is  $611/242 = 2.5$  or 3. To determine the respondents, the first name was picked and then every 3<sup>rd</sup> person from an alphabetical list of the staff.

The questionnaire was prepared with answer options in a 4-point likert-scale of Strongly Agree (SA: 4 point), Agree (A: 3 point), Disagree (D: 2 point), and Strongly Disagree (SD: 1 point). It elicited information on social and demographic characteristics of respondents and the four (4) research questions. Detailed and guided interview was also be used to get necessary and basic information from key staff of the Enugu State Water Corporation involved in the supply of water.

Onwumere (2005: 69) defines validity as “the extent to which a measuring instrument on application performs the function for which it is designed”. To validate the instrument, a sample of the questionnaire was given to the supervisor of the study and the Head of Administration in Enugu State Water Corporation to scrutinize it in terms of content, format and its appropriateness in getting the desired results. Their views were accommodated in finalizing the instrument.

In analyzing the challenges of regular water supply by the Enugu State Water Corporation in Enugu Metropolis, the descriptive statistics were applied to achieve the objective of the study. Data were presented in frequency and percentage tables. The average mean score (AMS) technique was used to test the hypothesis. The decision value (DV) was obtained from the average of all the scale points (4, 3, 2, 1).

$$DV = \frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.5$$

Using the formular (Osuala, 2007),

$$\text{Calculated value (CV)} = \frac{\sum Fx}{\sum F}$$

Where, F is the frequency  
x is the scale point

The CV was later compared with the decision value (DV) of 2.5. If CV is greater than DV, then the answer was regarded as being in the positive, if it is less than DV then the answer was regarded as negative. Similarly, null hypotheses was rejected if CV was greater than DV, and accepted if CV was less than DV.

## **RESULTS AND DISCUSSION**

A total of 242 questionnaires were administered, out of which 228 copies were correctly completely and returned by respondents. The calculated questionnaires return rate is thus 94% (Table 8.3.2).

*Table 8.3.2: Questionnaire Return Rate*

Number of questionnaires distributed	242
Number of questionnaires returned	228
<b>Questionnaire return rate</b>	<b>94%</b>

*Source:* Fieldwork 2015

Information was obtained on the social and demographic characteristics of the respondents. They are summarized in Table 8.3.3. Findings show that out of 228 respondents, 177 were male (78%) while 51 (22%) respondents were female. It is evident that there was more male staff than their female counterparts.

Table 8.3.3 shows that the bulk of the respondents 134 (59%) were married. Eighty-two (82) were singles (36%), while the remaining 12 (5%) were widows. This implies that majority of staff of the Corporation were married. Respondents below 30 years of age were 49 (22%), those



aged 31-35 were 114 (50%), those between ages of 46 and 55 were 53 (23%) and those aged 56-65 were 12 (5%). Therefore the mode age bracket was 31-45, belonging to the youth and the productive age of the Corporation.

*Table 8.3.3: The social and demographic characteristics of respondents*

S/No	Subject		No. of Responses	% Score
1	Gender	Male	177	78%
		Female	51	22%
2	Marital Status	Married	134	59%
		Single	82	36%
		Widowed	12	5%
3	Age	Below 30 years	49	22%
		31- 45 years	114	50%
		46- 55 years	53	23%
		56- 65 years	12	5%
4	Religion	Christianity	226	99%
		Islam	0	0
		Traditional	1	0.5
		None	1	0.5
5	Level of Education	Primary	7	3%
		Junior Secondary	15	7%
		Senior Secondary	115	50%
		Tertiary	91	40%

*Source:* Fieldwork, 2015

Christians dominated the Corporation with 99% (226). None belongs to the Islam, only one person is a traditionalist and the other one is an atheist. The total number of respondents with primary education was 7(3%). Fifteen (15) or 7% ended in junior secondary, 115 (50%) ended in senior secondary and lastly, 91(40%) attended tertiary institution.

Table 8.3.4 shows information on the challenges to regular water supply.

***Table 8.3.4: Challenges to regular water supply***

Parameter	Likert scale (x)				ΣF	ΣFX	CV	Remark	Decision
Unaffordable bill	4	3	2	1	228	240	1.1	CV< DV Answer is neg.	Accept null hypotheses (1)
Frequency (f)	0	0	12	216					
Fx	0	0	24	216					
Unwillingness to pay water rates					228	391	1.7	CV< DV Answer is neg.	Accept null hypotheses (1)
Frequency	0	33	97	98					
Fx	0	99	194	98					
Lack of competition					228	489	2.1	CV< DV Answer is neg.	Accept null hypotheses (1)
Frequency	6	58	127	37					
Fx	24	174	254	37					
Operational constraints					228	890	3.9	CV> DV Answer is positive.	Reject null hypotheses (1)
Frequency	206	22	0	0					
Fx	824	66	0	0					
Consumer uncooperative attitudes					228	438	1.9	CV< DV Answer is neg.	Accept null hypotheses (1)
Frequency	13	26	119	70					
Fx	52	78	238	70					
Vandalism					228	677	2.9	CV> DV Answer is positive.	Reject null hypotheses (1)
Frequency	63	95	70	0					
Fx	252	285	140	0					
Inadequate funding/subsidy					228	856	3.7	CV>DV Answer is positive.	Reject null hypotheses (1)
Frequency	202	16	0	0					
Fx	808	48	0	0					
Corrupt practices by officials					228	620	2.7	CV>DV Answer is positive.	Reject null hypotheses (1)
Frequency	53	104	25	46					
Fx	212	312	50	46					
Inadequate payment of workers salary					228	894	3.9	CV> DV Answer is positive.	Reject null hypotheses (1)
Frequency	210	18	0	0					
Fx	840	54	0	0					

Inefficiency due to political interference					228	721	3.1	CV> DV Answer is positive.	Reject null hypotheses (1)
Frequency	70	125	33	0					
Fx	280	375	66	0					
Increasing population					228	776	3.4	CV>DV Answer is positive.	Reject null hypotheses (1)
Frequency	98	124	6	0					
Fx	392	372	12	0					

Source: Field work, 2015

Water rates were considerate and very much affordable. None of the respondents strongly agreed that unwillingness to pay water rate by the consumers was a challenge to regular water supply, 99 agreed, 194 disagreed and 98 strongly disagreed.

Six (6) respondents strongly agreed that lack of competition was a challenge to regular water supply, 58 agreed, 127 disagreed and 37 strongly disagreed. Thus lack of competition was not a challenge. This is expected from suppliers.

Two hundred and six (206) respondents strongly agreed that operational constraints were a big challenge to regular water supply, 22 agreed, none disagreed and none strongly disagreed. This implies that operational constraints are a challenge to regular water supply.

Thirteen (13) respondents strongly agreed that customers do not co-operate, 26 agreed, 119 disagreed and 70 strongly disagreed that customers unco-operative attitude was a challenge to regular supply of safe water. Thus, consumer unco-operative attitude was not a challenge.

Sixty (60) respondents strongly agreed that vandalism was a challenge and 95 agreed. Seventy 70 respondents disagreed, and none strongly disagreed that vandalism was a challenge. Therefore, vandalism was a challenge.

Two hundred and two (202) respondents strongly agreed that inadequate funding was a major challenge to regular supply of water. Sixteen (16) agreed, none disagreed and none strongly disagreed that

inadequate funding was a challenge to regular supply of water. Thus, all agreed that inadequate funding was a challenge.

Fifty three (53) strongly agreed that corrupt practices by staff members was a challenge, 104 agreed, 25 disagreed and 46 strongly disagreed. Inadequate payment of staff salary has 210 respondents strongly agreeing to it since they were being owed since February, 2015 till date. Eighteen (18) agreed, none disagree and none strongly disagreed. Unpaid salaries demotivated staff and affected performance.

Seventy (70) respondents strongly agreed that political interference was a challenge, 125 agreed, 33 disagreed and none strongly disagreed. Thus political interference was a challenge.

Ninety eight (98) respondents strongly disagreed that increasing population was a challenge to regular water supply, 124 agreed, 6 disagreed, and none strongly disagreed. Thus, increase in population was a challenge.

Table 8.3.5 shows the effects of the challenges of regular water supply on the performance of the Corporation. Fifty-six (56) respondents strongly agreed that low return from revenue collection was one of the effects the challenges had on the Corporation, 99 agreed, 61 disagreed and 12 strongly disagreed. Thus, low returns from revenue were an effect of the challenges.

Ninety eight (98) strongly agreed that one of the effects of the challenges on the Corporation was that they lose huge amount of money as bad debt, 117 agreed. Thirteen (13) disagreed and none strongly disagreed. This implies that the loss of revenue was the effect of the challenges.

Nine (9) strongly agreed that loss of professionals was one of the effects of the challenges on the Corporation, 85 agreed, 97 disagreed and 37 strongly disagreed. Thus, professional were not lost as a result of the challenge.

Ninety (90) strongly agreed that the challenges causes lack of motivation on the staff of the corporation, 99 agreed, 37 disagreed 2

respondents strongly disagreed. Thus, the staff are not motivated for improved performance.

*Table 8.3.5: Effects of challenges to regular water supply*

Parameter	Likert scale (x)				$\Sigma F$	$\Sigma FX$	CV	Remark	Decision
	4	3	2	1					
Low returns in revenue collection					228	655	2.8	CV>DV Answer is pos.	Reject null hypotheses (11)
Frequency	56	99	61	12					
Fx	224	297	122	12					
Loss of revenue (bad debt)					228	769	3.3	CV> DV Answer is positive.	Reject null hypotheses (11)
Frequency	98	117	13	0					
Fx	392	351	26	0					
Loss of professionals					228	522	2.2	CV<DV Answer is neg.	Accept null hypotheses (11)
Frequency	9	85	97	37					
Fx	36	255	194	37					
Lack motivation					228	733	3.2	CV>DV Answer is pos.	Reject null hypotheses (11)
Frequency	90	99	37	2					
Fx	360	297	74	2					
Encourages corrupt practices					228	633	2.7	CV> DV Answer is pos.	Reject null hypotheses (11)
Frequency	55	80	84	9					
Fx	220	240	164	9					
Pipe rusting and damaging					228	710	3.1	CV> DV Answer is pos.	Reject null hypotheses (11)
Frequency	75	104	49	0					
Fx	300	312	98	0					
Low labour productivity					228	796	3.4	CV> DV Answer is pos.	Reject null hypotheses (11)
Frequency	112	116	0	0					
Fx	448	348	0	0					

Source: Field work 2015

Fifty five (55) strongly agreed that the challenges encourages the staff to indulge in corrupt practices e.g bribery, 80 agreed, 84 disagreed and 9 strongly disagreed. Indulgence in corrupt practices was an effect of the challenges on workers performance.

Pipe rusting and damaging has 75 strongly agreeing to it, 104 agreed, 49 disagreed and none strongly disagreed. Thus, pipe rusting was an effect of the challenges.

Table 8.3.6 shows the efforts to ameliorate the challenges of regular water supply. None of the respondents strongly agreed that the

corporation embarks on staff training and retraining, 50 agreed; 94 disagreed and 84 strongly disagreed. Thus the Corporation does not train or retrain their staff members.

***Table 6: Measures taken to ameliorate the challenges***

Parameter	Likert scale (x)				ΣF	ΣFx	CV	Remark	Decision
Staff training/retraining	4	3	2	1	228	422	1.8	CV< DV Answer is neg.	Accept null hypotheses
Frequency (f)	0	50	94	84					
Fx	0	150	188	84					
High level of integrity					228	725	3.1	CV> DV Answer is neg.	Reject null hypotheses
Frequency	86	97	45	0					
Fx	344	291	90	0					
Orientation of employees					228	362	1.5	CV< DV Answer is neg.	Accept null hypotheses
Frequency	0	0	134	94					
Fx	0	0	268	94					
Specialist engagement					228	696	3.1	CV> DV Answer is pos.	Reject null hypotheses
Frequency	78	97	40	13					
Fx	312	291	80	13					
Proper management of fund					228	545	2.4	CV< DV Answer is neg.	Accept null hypotheses
Frequency	20	67	123	18					
Fx	80	201	246	18					
Adequate payment of salary					228	318	1.3	CV< DV Answer is neg.	Accept null hypotheses
Frequency	0	0	90	138					
Fx	0	0	180	138					
On the job training					228	405	1.7	CV< DV Answer is neg.	Accept null hypotheses
Frequency	0	40	97	91					
Fx	0	120	194	91					
Enforcement of water bills payment					228	749	3.2	CV> DV Answer is pos.	Reject null hypotheses
Frequency	97	99	32	0					
Fx	388	297	64	0					
Sanctioning defaulters					228	634	2.7	CV> DV Answer is pos.	Reject null hypotheses
Frequency	39	100	89	0					
Fx	156	300	178	0					

*Source:* Field work, 2015

Eighty six (86) strongly agreed that the Corporation's management has high level of integrity, 97 agreed, 45 disagreed and none disagreed. This indicates that the management of the Corporation are people of integrity.

None of the respondents strongly agreed that the management of the Corporation carries out orientation for new employees, none agreed, 134 disagreed and 94 strongly disagreed. This is negligence on the part of the management of the corporation because any new employee should be informed and educated on the work he/she is about to do together with the rules/regulations in the workplace.

Seventy eight (78) strongly agreed that the Corporation engages specialists, 97 agreed, 40 disagreed and 13 strongly disagreed. Thus the Corporation engages specialists.

Twenty (20) strongly agreed that the corporation manages their fund properly, 67 agreed, 123 disagreed and 18 strongly disagreed. Thus the management do not manage fund properly.

None strongly agreed on the adequacy of salary payment, none agreed, 90 disagreed and 138 strongly disagreed. The fact is that currently they have not been paid over six months.

None strongly agreed that there is on the job training for workers, 40 agreed, 97 disagreed and 91 strongly disagreed. The Corporation does not conduct on the job training for the staff.

On whether payment of bills was enforced on consumers, 97 strongly agreed, 99 agreed, 32 disagreed and none strongly disagreed. Thus the Corporation enforced the payment of water bills.

On whether the water rate payment defaulters were sanctioned the Corporation, 39 strongly agreed that the Corporation sanctions defaulters, 100 agreed, 89 disagreed and none strongly disagreed. Thus, there were no sanctions for defaulters.

Table 8.3.7 shows strategies that could be adopted by the Enugu State Water Corporation to ameliorate the challenges of regular water supply. Two hundred and twenty (220) respondents strongly agreed that there should be frequent maintenance of equipment, 8 agreed, none (0) disagreed and none strongly disagreed. Therefore, all the respondents

believe that if there are frequent maintenance on the equipments, the challenges will be minimized.

***Table 8.3.7: Strategies to ameliorate the challenges***

Parameter	Likert scale (x)				ΣF	ΣFx	CV	Remark	Decision
Frequent maintenance	4	3	2	1	228	904	3.9	CV> DV Answer is pos.	
Frequency (f)	220	8	0	0					
Fx	880	24	0	0					
Training and retraining of staff					228	912	4	CV> DV Answer is pos.	
Frequency	228	0	0	0					
Fx	912	0	0	0					
Adequate funding					228	912	4	CV> DV Answer is pos.	
Frequency	228	0	0	0					
Fx	912	0	0	0					
Proper security at equipment sites					228	751	3.2	CV> DV Answer is pos.	
Frequency	67	161	0	0					
Fx	268	483	0	0					
Adequate motivation of staff					228	782	3.4	CV> DV Answer is pos.	
Frequency	98	130	0	0					
Fx	392	390	0	0					
Proactive maintenance and preventive measures					228	774	3.3	CV> DV Answer is pos.	
Frequency	93	135	0	0					
Fx	372	405	0	0					
Engagement of effective distribution channels					228	703	3.0	CV> DV Answer is pos.	
Frequency	19	209	0	0					
Fx	76	627	0	0					
Service centre in each L.G.A.					228	695	3.0	CV> DV Answer is pos.	
Frequency	87	65	76	0					
Fx	348	195	152	0					
Improvement on the rate of revenue collection					228	747	3.2	CV> DV Answer is pos.	
Frequency	93	125	0	0					
Fx	372	375	0	0					
Engage PHCN Properly					228	899	3.9	CV> DV Answer is pos.	
Frequency	215	13	0	0					
Fx	860	39	0	0					
Privatization/commercialization	95	98	35	0	228	744	3.2	CV> DV Answer is pos.	
Frequency	380	294	70	0					
Fx									

***Source: Field work, 2015***



All the respondents, 228 strongly agreed that there should be training for staff members according to their areas of specialization. None agreed, none disagreed and none strongly agreed.

All the respondents, 228 strongly agreed that adequate funding of the corporation should be put in place. None agreed, none disagreed and none strongly disagreed. Thus, adequate funding was necessary for optimal performance of the Corporation.

Sixty seven (67) strongly agreed that proper security at the equipments site is necessary, 161 agreed, none disagreed and none strongly disagreed. Thus, proper security is highly needed to avert vandalism.

Ninety eight (98) strongly agreed that adequate motivation of staff should be put in place, 130 agreed, none disagreed and none (0) strongly disagreed. Thus, the workers should be motivated for optimal performance.

Ninety three (93) strongly agreed that there should be proactive maintenance and preventive measures, e.g., proper handling of machines, 135 agreed, none disagreed and none (0) strongly disagreed. Thus, proactive measures will prevent damages and failures of machines and equipments.

Nineteen (19) strongly agreed that effective distribution channels should be put in place, 209 agreed; none (0) disagreed and none strongly disagreed. Thus, effective distribution channels will enhance the performance of the Corporation.

Eighty seven (87) strongly agreed that service centers should be located at each Local Government Area (L.G.A.) to ensure immediate response and action to customer's complaints, 65 agreed, 76 disagreed and none strongly disagreed. Thus, the service centers will help the Corporation attend to complaints and emergencies in time.

Ninety three (93) strongly agreed that there should be improvement on the Corporation's effort in revenue collection to improve on the

funding of the corporation, 125 agreed; none (0) disagreed and none strongly disagreed.

Two hundred and fifteen (215) strongly agreed that PHCN should be properly engaged to ensure uninterrupted power supply. Thirteen agreed, none disagreed and none strongly disagreed. The Corporation cannot pump/distribute water effectively without an uninterrupted power supply; therefore, the PHCN must ensure an uninterrupted power supply.

On privatization and commercialization, 95 respondents strongly agreed that there should be privatization of the water sector, 98 agreed; 35, disagreed and none strongly disagreed. Thus, privatization was necessary for improved performance since the Government alone cannot maintain effective and efficient service delivery.

Research question 1 probed the factors that challenge the regular supply of water. From Table 8.3.1, the CV (2.8) was greater than DV (2.5).

*Table 8.3.1: Challenges to regular supply of water to Enugu metropolis*

Response	Scale, x	Frequency, F	Fx	Percentage
SA	4	84	336	36.9
A	3	57	171	24.8
D	2	45	90	19.6
SD	1	42	42	18.7
Total		228	639	100

$$\text{Calculated value (CV)} = \frac{\sum Fx}{\sum F} = \frac{639}{228} = 2.8$$

Therefore, the null hypothesis was rejected for the alternate hypothesis: About 61.7% of respondents agreed that there are significant challenges to regular supply of pipe-borne water in Enugu metropolis. Questions 2-12 of Section B of the questionnaire investigated 11 parameters of challenges to regular water supply.

Research question 2 probed the effects of the challenges on the workers performance. From Table 8.3.2, the CV (3.1) was greater than DV (2.5). Therefore, the null hypothesis was rejected for the alternate hypothesis: Challenges to regular supply of pipe-borne water in Enugu metropolis have significant effects on staff performance (74.92%). Questions 2-8 of Section C of the questionnaire investigated 7 parameters of challenges to regular water supply.

*Table 8.3.2: Effects of the challenges to regular water supply on workers performance*

Response	Scale, x	Frequency, F	Fx	Percentage
SA	4	71	284	31.02
A	3	100	300	43.9
D	2	49	98	21.3
SD	1	8	8	3.8
Total		228	700	100

$$\text{Calculated value (CV)} = \frac{\sum Fx}{\sum F} = \frac{689}{228} = 3.1$$

Research question 3 probed the measures taken by the ENSWC to ameliorate the inadequate supply of water. From Table 8.3.3, the CV (2.4) was less than DV (2.5).

*Table 8.3.3: Measures taken to against the challenges to regular supply*

Response	Scale, x	Frequency, F	Fx	Percentage
SA	4	36	144	15.6
A	3	61	183	26.8
D	2	83	166	36.3
SD	1	48	48	21.3
Total		228	541	100

$$\text{Calculated value (CV)} = \frac{\sum Fx}{\sum F} = \frac{541}{228} = 2.4$$

Therefore, the null hypothesis was accepted: ENSWC was taking no measures against the challenges to regular supply of pipe-borne water in Enugu metropolis (57.6%). Questions 2-9 of Section D of the questionnaire investigated 8 parameters of measures against to regular water supply.

Research question 4 probed the strategies to improve the supply of water. From Table 8.3.4, the CV (2.8) was greater than DV (2.5).

*Table 8.3.4: Strategies to improve water supply in Enugu metropolis*

Response	Scale, x	Frequency, F	Fx	Percentage
SA	4	69	276	30.26
A	3	84	252	36.84
D	2	34	68	14.91
SD	1	41	41	17.98
<b>Total</b>		<b>228</b>	<b>637</b>	<b>100</b>

$$\text{Calculated value (CV)} = \frac{\sum Fx}{\sum F} = \frac{637}{228} = 2.8$$

Therefore, the null hypothesis was rejected for the alternate hypothesis: There are strategies that can be adopted to improve the supply of pipe-borne water in Enugu metropolis (67.1%). Questions 2-12 of Section E of the questionnaire investigated 11 parameters of strategies to be adopted for regular water supply.

Table 8.3.5 shows a summary of data on research questions.

Table 8.3.5: Summary of data on research questions

Subject matter	Null hypotheses	CV	Decision	Answer to research question
Challenges of regular water supply	There are no significant challenges to regular supply of pipe-borne water in Enugu metropolis	2.8	Reject null hypotheses	There are significant challenges to regular supply (61.7%).
Effects of the challenges on the Corporation's performance	Challenges of regular water supply have no significant effects on the Water Corporation's performance	3.02	Reject null hypotheses	Challenges of regular water supply have significant effects on the Water Corporation's performance (74.92%).
Measures taken to ameliorate inadequate supply	There are no significant measures against the challenges to irregular safe water supply in Enugu metropolis	2.4	Accept null hypotheses	There are no significant measures against the challenges (57.6%)..
Strategies to be adopted for improved water supply	There are no strategies to be adopted to improve safe water supply in Enugu metropolis	2.8	Reject null hypothesis	There are strategies that can be adopted to improve safe water supply in Enugu metropolis (67.1%).

### Challenges to regular water supply

The major problems facing the corporation are operational constraints, ageing infrastructure, vandalism, inadequate funding, political interference, inadequate payment of salaries, corrupt practices and increasing population. In Enugu Water Corporation, the pumps in various plants had outlived the efficiency of their designs. This affected the distribution network, which consists mainly of old and weak asbestos cement pipeline that no longer sustained the hydraulic pressure in many sections of the system. This is evident from the frequent cases of pipe burst and leakage all over the city. Therefore the water board incurs huge maintenance costs to keep them functioning. The pump stations at the Water Corporation had a few working pumps, while a number of them were obsolete.

This finding agrees with the earlier report by Ajadi (2010) that obsolete equipment hindered regular potable water supply in Ilorin metropolis of Kwara State in North Central Nigeria. The finding also agrees with earlier report by Makwara and Tavuyango (2012) that ageing infrastructure was a big challenge to regular potable water supply in urban areas in Zimbabwe, despite effort to upgrade facilities, which were not keeping pace with the rate of urbanization. In Enugu metropolis and Zimbabwe, rapid sand filters/machines were not functional and many more equipment were either decommissioned due to old age or were in a bad state of disrepair.

Another serious challenge the Enugu State Water Corporation faced was the lack of water treatment chemicals (such as alum, HTO, TOH, etc.). This has hampered their performance since they cannot supply untreated water to avoid contamination of water borne diseases and other serious health problems to the consumers.

Loss of professionals was not a challenge to Enugu State Water Corporation. Adequate skilled and unskilled labour hands were available. This finding differs from the report by Makwara and Tavuyango (2012) on Zimbabwe which experienced a massive exodus of skilled and semi-skilled manpower for greener pasture. Enugu metropolis rather benefitted from internal brain-gain. Its population continually increased, as many rural dwellers relocate to the metropolis in search of greener pastures. The Water Annual Report of 2011-2012 asserts that Nigerians are increasingly choosing to live in urban communities. Rural-urban migration has increased from 30% in 1990 to 49% in 2008 and continues to increase. With rapid urbanization comes the attendant challenge of inadequate basic social infrastructure including safe drinking water and improved sanitation. This finding corroborates the report by World Bank Joint Monitoring Project (JMP) that access to water supply and sanitation, though better than the situation in rural areas, are on the decline in urban areas of Nigeria. Expansion of services in urban centres in Nigeria is not keeping pace with the rapid urban growth.

Power outages have been a great setback in rendering of service by the Corporation. Functional stand-by electric power generating set frequently lacked fuel and lubricants.

#### **Effects of the identified challenges on the performance of the state water corporation**

The effects of the challenges included loss of revenue, lack of motivation, aging and damaging pipes, and low labour productivity among others. A huge amount of revenue was tied down in the hands of consumers. Some

of it had become bad debts. In a similar study on Nairobi by Engel et al (2011), cost/revenue recovery for public water provision was a major problem in most cities. Incorporating infrastructure maintenance, provision and administrative costs into the water price would lead to better cost recovery, and thus generate needed resources for infrastructure improvements and other water management solutions.

The challenge also resulted to poor motivation. The finding was similar to the finding by Iliyas (2006) on Kano City Nigeria that challenges faced by public water supply institution led to, among others, poor attitude to work, poor motivation and irregular remuneration.

The challenges have also resulted to low productivity. The Water Corporation cannot meet the supply of water to the populace. They rationed water supply to areas. Many of the water schemes are not functioning. Inadequate maintenance fund has led to almost 50% of the water schemes reaching a state of malfunction and this resulted to low productivity.

#### **Measures taken by the Enugu state water corporation to ameliorate the situation**

The Enugu State Water Corporation has not taken proper measures to tackle the challenges. The 2012 project to improve water connection pipes to different households within the metropolis was yet to be completed owing to contractual issues and non-payment of the contractors. Yet, the Corporation raised water bills for private water vendors..

#### **Strategies to be adopted to ameliorate the water supply challenge in Enugu state water corporation**

Adopting certain strategies would improve potable water supply in Enugu metropolis. These include frequent maintenance of equipments, training and retraining of staff, adequate funding, proper security at equipment

sites, adequate motivation of staff, proactive maintenance and preventive measures, engagement of distribution channels among others.

### **CONCLUSION AND RECOMMENDATIONS**

The challenges to regular supply pipe-borne water in Enugu metropolis are, among others, consumer unwillingness to pay water rates, operational constraints, inadequate funding, increasing population, political interference, irregular payment of salary of Water Corporation, corrupt practice among staff of the Corporation. They have significant effects on staff performance and manifest in low revenue returns, lack of motivation, encouragement of corruption, loss of professionals, rusting of pipes, and low labour productivity.

The Enugu State Water Corporation (ENSWC) was taking no measures against the challenges to regular supply of pipe-borne water in Enugu metropolis. Measures against these challenges, such as orientation programme for new employees, training or on-the-job training for workers, regular payment of staff salaries, maintenance culture for infrastructure, prudent management of fund, sanction for erring employees or defaulters, and reward for performers were not taken.

The Corporation also lacks in strategies that could be adopted to improve the supply of pipe-borne water in Enugu metropolis. For instance, it does not carry out orientation for their new employees, no training or on-the-job training for staff, the staff salaries are not paid as and when due, bill payment defaulters and erring employees are not sanctioned. The Government on the other hand has not carried out its responsibilities efficiently towards the Corporation. This is evident in the abandoned pipe laying project by the State Government and several water schemes in the state that were also abandoned. All these have negatively affected the regular supply of portable water to Enugu metropolis.

Based on these findings, the following recommendations are made:



1. The model of Public Private Partnership (PPP) should be adopted to avoid monopoly and implemented immediately.
2. The Government should speed up the project to improve water connection to households.
3. The government should improve funding for proper management, automated network surveillance for rapid response to system failures, and personnel training to cope with changing demands and technologies.
4. The Government should pay all the outstanding staff salaries and ensure regular payment subsequently.
5. Employ the media for aggressive public awareness and mobilisation of water consumers for effective participation in water matters, such as source, supply capacity or availability, and necessary treatment and distributions costs. An effective public information programme creates a sense of responsibility towards safeguarding water supply infrastructure among individual water users and communities as well as a voluntary commitment to achieving reductions in water supply challenges.

## **REFERENCES**

- Abernathy, B. (2010), "Common Water Supply Problems." Retrieved on 9/17/ 2012 from <http://ezinearticles.com/?Common-Water-Supply--Problems&id=3961404>
- Akpor, O.B. and Muchie, M. (2011), "Challenges in meeting the MDGs: The Nigeria Drinking Water Supply and Distribution Sector." *Journal of Environmental Science and Technology*, 4(5): 480-489.
- Eneh, O.C. and Eneh, A.N. (2014), "Potable water access and management in Africa: Implications for poverty, hunger and health," *Technoscience Review*, 5(1-2): 3-15.
- Engel, et al (2011). "Big Cities. Big Water. Big Challenges." Retrieved from [http://www.Big20cities\\_Bigwater\\_Big.Challenges\\_2011.pdf](http://www.Big20cities_Bigwater_Big.Challenges_2011.pdf)

- Iliyas, M.H. (2006), "Strengthening the capacity of water utilities to deliver water and sanitation services, environmental health and hygiene to low income communities," *Water utilities project* No. 5. Ungogo Local Government, Kano town, Nigeria.
- Khatri, K.B. and Vairavamorthy, K. (2007), *Challenges for urban water supply and sanitation in the developing countries*, Delft, the Netherlands: UNESCO-IHE Institute for Water Education.
- Makwara, K. and Tavuyanago, E. (2012), "Water woes in Zimbabwe: Urban areas in the midst of plenty, 2000-present". *European Journal of Sustainable Development*, 1(2): 151-180.
- National Bureau of Statistics (2006), 'The Nigerian Statistical Fact Sheets on Economic & Social Development,' Abuja: NBS.
- Nwankwoala, H.O. (2011), "Localizing the strategy for achieving rural water supply and sanitation in Nigeria," *African Journal of Environmental Science and Technology*, 5(13): 1170-1176.
- Ojibo, S. (2009), "Problems of and strategies for water supply in urban areas in Nigeria." *The Nigerian Journal of Development Studies*, 7(1): 191-197.
- Onodugo, V.A., Ugwuonah, G.E. and Ebinne, E.S. (2010), *Social Science Research: Principle, Methods and Applications*, Enugu: EL'DEMARK.
- Onwumere, J.U.J. (2005), "Business and Economic Research Methods", Enugu Vougasen Limited.
- Osuala, E.C. (2007), *Introduction to Research Methodology*, Onitsha: Africana-First Publishing Ltd.
- Transparency International (2008), *Transparency International Global Corruption Report 2008*, Sweden: Transparency International.

# TOURISM CHALLENGES AND PROSPECTS IN NIGERIAN: A CASE STUDY OF BENIN CITY

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## **ABSTRACT**

*Tourism encounters many challenges which need to be identified and addressed. This study was carried out to identify the various challenges to tourism in Nigeria with Benin City as the case study. Questionnaire copies were designed and administered in the various locations of Benin city, addressing the study objectives and hypotheses. Data were subjected to statistical analysis. Results showed that touristic activities in the area are at low level due to economic hardship and this is rubbing the city of its contribution to the national economy. Tourism in Benin City is grossly affected by factors such as lack of preferred destination, lack of consistency in policy, erratic power-supply, bad road networks, insecurity and perennial conflicts, investor and tourist unfavourable environment, among others. It is recommended that the government should create an enabling environment for both investors and tourists, as this will fasten the development of tourism in Nigeria*

**Keywords:** *Tourism, Nigeria, Bencity City.*

## **INTRODUCTION**

Tourism in Nigeria is quite diverse due to rich culture, oil scenery, nature, lifestyle, religion, and IT and telecommunications. However, culture is the

strongest segment in the Nigerian tourism industry known to be a multi-cultural country with over 500 ethnic groups (Oladele and Koyi, 2002). Nigerians are also involved in out-bound tourism and tend to visit overseas countries like United Kingdom, United States of America, South Africa, Dubai and recently Ghana for reasons such as proximity, friends and relatives, leisure, social status, education and business. In-bound tourism in Nigeria could be traced back to early and mid-1900s during the time of missionaries followed by the discovery of oil, leading to the arrival of business tourists interested in our oil (Lanre, 2006).

Nigerian culture has recently received some acknowledgements from both the public and private sector resulting in events like Calabar Carnival, Abuja Carnival, Argungu Festival, among others. The industry is generally opening up to the global tourism trend and developments. Today, we see international brands like Nokia, Swatch, Tm Lewin, and Nandos evolving in cities like Lagos while already existing international hotel brands like the Hilton, Sheraton, Protea and Le Meridien are going all out to uphold their brand image and identity in the competitive industry (Giwa, 2010).

Top attraction in Nigeria for both domestic and international tourists include the Transcorp Hilton in Abuja, Obudu Cattle Ranch in Cross River State, Le Meridian in Uyo, Tinapa in Cross River State, and Silver Bird Galleria in Lagos. Shopping is fast becoming a thriving sector in Nigeria and poses an encouraging consumer psychology for the industry. It tends to be influenced by a certain desire to attain some form of social status and value for money (Wole, 2007).

Most countries in the world make millions of Dollars from tourism by developing and maintaining their natural and man-made sites. Despite the numerous advantages accruable to cities with tourism potentials, not much attention was paid to the development of tourism in Benin City. For tourism to flourish in developing cities, like Benin City, the government of the state must commit to ensuring the living standard of such a state

citizenry be improved upon. This will go a long way in creating motivation for leisure travel (Shaibu, 2004). Tourism potential needs to be harnessed, packaged and marketed to generate income for physical development and for the improvement of the welfare of the citizenry.

Benin City has a lot of tourist attractions but these tourist centers are faced with enormous challenges that have made them to be under-utilized, thereby, bringing little income to the city, state and country. The full potentials of these industries need to be fully employed. This study was aimed at identifying the various tourism centres in Benin City, examining their challenges, ascertaining the impact of tourism in developing the economy, examining the tourism challenges and establishing the prospect against the backdrop of the Nigeria's experience.

## **REVIEW OF RELATED LITERATURE**

### **Characteristics of tourism**

Four main characteristics of tourism may be identified conceptually:

- (i) Tourism arises from a movement of people to and their stay in various destinations.
- (ii) There are two elements in all tourism, the journey to the destinations; the journey and the stay taking place outside the normal place of residence and work.
- (iii) The movement to destinations is of temporary, short term character, with intention to return within a few days, weeks or months.
- (iv) Destinations are visited for purposes other than taking up permanent residence or employment.

### **Primary factors, nature and opportunities of tourism in Nigeria**

How important any geographical unit is as a tourist destination or how important it is potentially is determined by four primary factors: attraction, accessibility, amenity, and organization (Medlik, 2006). Nigeria offers a

wide variety of tourist attractions such as extended and roomy river, ocean beaches ideal for swimming and other water sports, unique wildlife, vast tracts of unspoiled nature ranging from tropical forest, magnificent waterfalls, some new rapidly growing cities and climatic conditions in some parts particularly conducive to holidaying (Ogilvie, 2005). The lack of required modern infrastructural facilities and in some parts of the country, acute conditions of underdevelopment and poverty can be seen which many potential Nigeria-bound tourists may not like to be confronted with (Shadare, 2007).

A tourism policy was produced in 1990 with the basic objective of making Nigeria the ultimate tourism destination in Africa. The main thrust of the government policy on tourism is to generate foreign exchange, encourage even development, promote tourism-based rural enterprises, generate employment and accelerate rural urban integration and cultural exchange (Bolade and Eghene, 2006).

#### **Problems associated with tourism in Benin City**

According to Ojo (2002),

- a) Tourism is the fastest growing economic sector in Benin City, but it is faced with factors or challenges that militate the growth.
- b) Tourism in the city is at low level, not only because of the economic hardship, but because of “all the ingredients like a national carrier, good hotels and others that make for a preferred destination are not there.
- c) Lack of consistency in policy has militated against the city becoming a preferred tourism destination.
- d) Benin City also has erratic power supply, bad road network, insecurity and perennial conflicts, magnificent slums, investor or tourist unfavourable environment, lack of enabling environment for the private sector involvement, lack of pipe borne water supply, issue of insecurity or poor safety reputation, economic hardship or no

adequate fund for tourism development, lack of consistency in policy, lack of development and packaging of tourist products, and shortage of trained manpower.

Some of the many tourist centers or centers of attraction in Benin City are Emotan Statue, Museum, the tomb of Aroso, Igun Street, EgbegeNokaro, the Benin Moat (Iya), Chief Ogiamien's house, and Holy Aruosa Cathedral.

### **METHODOLOGY**

Five hundred copies of questionnaire were distributed randomly among selected groups of people in Benin City. Four hundred and seventy five were returned and the respondents co-operated positively. Each number in the frequency as tabulated in the band and their percentage.

**Table 4.1: Distribution of respondents by sex**

<b>Sex</b>	<b>Frequency</b>	<b>Percentage</b>
Male	300	63.2
Female	175	36.8
<b>Total</b>	<b>475</b>	<b>100</b>

**Source: Field Survey, 2015.**

**Table 4.2: Distribution of respondents by age group**

<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
18-27	124	26.1
28-37	319	67.2
38-47	24	5.0
48 and above	8	1.7
<b>Total</b>	<b>475</b>	<b>100</b>

**Source: Field Survey, 2015.**

**Table 4.3: Distribution of respondents by marital status**

<b>Marital status</b>	<b>Frequency</b>	<b>Percentage</b>
Single	202	42.5
Married	164	34.5
Widowed	84	17.7
Divorced	25	5.3
<b>Total</b>	<b>475</b>	<b>100</b>

**Source:** *Field Survey, 2015.*

**Table 4.4: Distribution of respondents by occupation**

<b>Occupation</b>	<b>Frequency</b>	<b>Percentage</b>
Students	120	25.3
Self employed	110	23.1
Civil servant	245	51.6
Unemployed	-	-
<b>Total</b>	<b>475</b>	<b>100</b>

**Source:** *Field Survey, 2015.*

**Table 4.5: Do you think that tourism in Benin City is faced with enormous challenges?**

<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	305	64.2
No	170	35.8
<b>Total</b>	<b>475</b>	<b>100</b>

**Source:** *Field Survey, 2015*



**Table 4.6: Is the government of the city doing anything about it?**

<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	161	33.9
No	314	66.1
<b>Total</b>	<b>475</b>	<b>100</b>

*Source: Field Survey, 2015*

**Table 4.7: Are the tourist attraction in the city worth visiting?**

<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	95	20
No	380	80
<b>Total</b>	<b>475</b>	<b>100</b>

*Source: Field Survey, 2015*

**Table 4.8: Is tourism contributing to the development of the city?**

<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	74	15.6
No	401	84.4
<b>Total</b>	<b>475</b>	<b>100</b>

*Source: Field Survey, 2015*

**Table 4.9: Is there any plan to the Challenge of tourism in the city?**

<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	67	14.1
No	408	85.9
<b>Total</b>	<b>475</b>	<b>100</b>

*Source: Field Survey, 2015*

**Table 4.10: Are there investors who are ready to invest in tourism potentials of the city?**

Option	Frequency	Percentage
Yes	74	15.6
No	401	84.4
<b>Total</b>	<b>475</b>	<b>100</b>

**Source: Field Survey, 2015**

**Table 4.11: Can the tourist attractions in the city yield returns if they are developed?**

Option	Frequency	Percentage
High	380	80.0
Moderate	77	16.2
Low	18	3.8
<b>Total</b>	<b>475</b>	<b>100</b>

**Source: Field Survey, 2015**

**Table 4.12: Is Nigeria a preferred tourist destination?**

Option	Frequency	Percentage
Yes	113	23.8
No	362	76.2
<b>Total</b>	<b>475</b>	<b>100</b>

**Source: Field Survey, 2015**

**Table 4.13: Can tourism contribute to the national economy?**

Option	Frequency	Percentage
Yes	360	75.8
No	115	24.2
<b>Total</b>	<b>475</b>	<b>100</b>

Source: *Field Survey, 2015.*

### DISCUSSION OF FINDINGS

Table 4.1 showed that 300 respondents representing 63.2% are male and 175 representing 36.8% are female meaning that the work force is dominated by male. The implication of this is that there are more male in the work force of Tourist Centre in Benin-City.

Table 4.2 revealed the distribution of respondents by age group and its showed that the respondents are between 18-27 years are 124 and from 26.1%, 28-37 years are 319 in number and forms 67.2%, 38-47 years are only 24 in number and forms 5.0% and have the smallest percentage of the total population. This implies that the majority of the staff of tourist centre in Benin city are youth that have agility to work.

Table 4.3 showed that 202 respondents representing 42.5% are single, 164 respondents representing 34.5% are married and 25 respondents representing 5.3% of the divorces. The implication of this is that majority of the workers in Benin City Tourist centre are single.

In Table 4.4, the percentage of the respondents that are students are 120 which form 25.3% the self-employed, 110 which form 23.1% and the civil servant 245 which form 51.6% while the non-employed is zero percent. This implies that the percentage of the students and the civil servant was higher compared to the self employed.

From Table 4.5, it can be seen that 64.2% of the respondents identified that tourism in Benin City is faced with enormous challenges. The implication of this is that tourist centre in Benin City is facing a lot of challenges

Table 4.6 showed that 33.9% agreed that the government of the City is doing something about it while the other 66.1% disagreed that the government is doing something about it. This implies that the government of Benin City does is not doing anything about the problems the centre is facing.

In Table 4.7, it can be seen that 20% of the respondents identified that the tourist attractions in the City is worth visiting and the other 80% respondent identified that the tourist attraction is not worth visiting. Therefore tourist attractions in Benin City are not worth visiting.

Table 4.8 shows that 15.6% of the respondent agreed that tourism contribute to the development of the City, while 84.4% of the respondent disagreed that tourism contributes to the development of the City. The implication of this is that tourism does not contribute to the development of Benin-City.

Table 4.9 showed that 14.1% of the respondent identified that there is plan to proffer solutions to tourism in the City, while 85.9% of the respondent identified that there is no plan to proffer solutions to tourism in the City. This implies that there is no plan to proffer solutions to the challenges facing the Tourist Centre in Benin City.

From Table 4.10, it can be seen that 15.6% of the respondent identified that there are no investors who are ready to invest in tourism of the City, while 84.4% of the respondent agreed that there are investors who are ready to invest in tourism of the City. The implication of this is that there are investors who are ready to invest in the tourism of Benin City.

Table 4.11 showed that 80.0% of the respondents identified that tourism potential can only yield moderate returns if invested on, while 16.2% identified that tourism potential will yield high return if invested on, only 3.8% identified that tourism will yield low return if invested on. This implies that tourist potential in Benin city can yield moderate returns if invested on.

Table 4.12 showed that 23.8% of the respondents identified that Benin city is a preferred tourist destination while 76.2% of the respondent identified that Benin city is not a preferred tourist destination. This implies that Benin City is not a preferred tourist destination.

### **Summary of finding**

It was discovered that tourism is essentially the industry that provides tours and services to tourists, and for tourism to flourish in a developing economy of the any City, the government of such society must take it upon itself the responsibility of ensuring that the living standard of such citizenry is improved upon as this will go a long way for leisure travel.

### **CONCLUSION AND RECOMMENDATIONS**

This study revealed that, apart from the challenges such as poor road network which the present government is attended to, there are also low investment, low patronage and poor awareness of the existence of these destinations. Benin city is blessed with many tourists centres which if they are adequately harness and develop could lead to total transformation and development of the city. In light of this, I hereby conclude that the impact of tourism cannot be over emphasized on both the citizens and economy of the city.

Based on the findings of this study, the following are recommended for the growth and development of tourism in the City.

1. Government has to come in and create an enabling environment both for investors and tourism (which includes provision of infrastructural facilities, harnessing of the tourist attractions in terms of packaging and marketing) etc.
2. The people of Benin City should see tourism as a catalyst that fastens the economic growth of a City and embrace it.
3. Investors, both foreign and local should come invest in the abundant tourism potentials of the City.

## REFERENCES

- Akpan, E.I. (2012). Managing Tourism Sector in Nigeria through Privatization Strategy. *Journal of Business Management*, 1(2): 120-124.
- Arowolo, M.O. (2005). Major Hospitality Houses in Ondo State of Nigeria. A Term Paper on Nature of Environmental Science. Department of Urban and Regional Planning, Federal University of Technology, Akure.
- Ayodele, A. (2002). *Essentials of Tourism Management*, 2 ed. Ibadan: Elshaddai Publishers.
- Bankole, O.S., Gbadebo, O.O. (2006). Achieving the Millenium Development Goals: Issues and Options for Nigeria's Tourism Industry. *PASOS*, 4(3): 19-26.
- Bhatia, A.K. (2005). *Tourism Development Principles, and Practices*, 2 ed. London: William Heinemann Ltd.
- Bolade, I.V. and Eghene, B.T. (2006). *Urban Tourists Centres*. Ibadan: Nicholas Publishers.
- Burkart, A.J. and Medliks, S. (1974). *Tourism: Past, Present and Future*, 10 ed. London: William Heinemann Ltd.
- Cottman, M. (1987). *Tourism Marketing*. New York: The Dryden Press.
- Emmanuel, B. (2005). *Tourism Potentials for Employment Generation in Ondo State Planners Echo*, Akure: Ondo State Chapter of the Nigeria Institute of Town Planners, Akure, Ondo State.
- Giwa, O. (2010). The Role of Tourism in the Socio Economic Development in Nigeria, *Forum Series Lecture 1* (1) A Quarterly Lecture Series, Ondo State Polytechnic, Owo.
- Hunziker, G. and Krapt, K. (1942). *Economic Characteristics of the Tourism Sector*. New Jersey: Prentice Hall Inc.
- Ini, A. (2007). Hospitality Industry in Nigeria: Prospects and Challenges in Development Tourism. *Journal on African Tourism*, II:18.

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- International Association of Scientific Experts in Tourism (2003), THE Aiest its Character and Aim, *Journal of International Association of Scientific Experts in Tourism*, 1(1): 1-9.
- Kasali, M.A. (2002): Employment Provision Potential of Tourism Resources in Ondo State Rural Communities. Term Paper on Tourism and Recreational Planning. Department of Urban and Regional Planning, Federal University of Technology, Akure.
- Kotler Ph. Armstrong G. (2007). *Marketing*. New Jersey: Prentice Hall Inc.
- Kotler, Ph. Bowne J, Makens J. (1999). *Marketing for Hospitality and Tourism*. New Jersey: Prentice Hall Inc.
- Lanre, A. (2006). *Hospitality and Tourism Industry in National Development*. Lagos: Links Publishers Ltd.
- Medlik T. J. (2006). *Tourism Past and Present Future*, 2 ed, USA: C.V. Mosby Company.
- Ministry of Tourism and Culture (2013). *Tourism in Ondo State, Nigeria*, Akure: Department of Urban and Regional Planning, Ondo State Polytechnic, Owo, Nigeria.
- Modupe, O. (1985). *Planning for Tourism in Nigeria*. A Monograph of Department of Urban and Regional Planning, Ondo State Polytechnic, Owo, Nigeria.
- Nosakhare, O. (2008). *The History of Benin City*. Website: <http://www.EdoCityofNigeria.nct>.
- Ogilvie, F.W. (2005). *The Tourism Movement in Economic Study*, 4 ed. London: Heinemann Cosin Ltd.
- Ojo, G.J.A. (2002). The Need to Explore Tourism in Nigeria's Economic Development. *The Nigerian Trade Journal*, 29:15-18.
- Okunade, M. and Giwa, O. (2008). *Tourism Products in Nigeria*. Akure: Alabi Eyo and Co.
- Oladele, O. and Koyi, A. (2002). *Nigeria Hotel and Travel Guide - A Reference book for travel services*. 1 ed, London: Macmillan Publishing Co.

- Onwofonwan, G. (1998). Landscape Evaluation for Tourism in Department. A Seminar Paper on Environment and Tourism in Nigeria presented to Environment and Behaviour Association of Nigerian University, Lagos.
- Oyinloye, M.A. (2003). Socio-Economic Effects of Recreational Facilities on the Community: A Case Study of two centres in Akure. Nigeria Challenges of Environmental Sustainability in Democratic Government National Conference of the Environment and Behaviour Association of Nigeria (EBAN) Akure, Ondo State, Nigeria.
- Pocock, D.O.C. (1991). *Humanistic Geography and Literature Essays on the Experience of Place Beckenham Kent Groom Helm*. New Jersey: Prentice Hall Inc.
- Shadare, E. (2007). *Management Theory on Tourism and Culture*. 4 ed, Kog. Lawrence Publishers.
- Shaibu, A.H. (2004). Tourism and its Implication on Community Development. Auch: Success Publishers.
- Wole, S. (2007). Is Nigeria a Preferred Tourist Destination? <http://www.LagosCityofnigeria.net>.
- World Book Encyclopaedia* (1997). *Importance of Tourism*, Chicago: World-Book International World Book Inc.
- World Tourism and Travel Commission (WTTC) (1992). Tourist and Sustainable Community Development, *Proceeding of Travel and Tourism Research Association*, Canada.
- World Tourism Organisation (WTO) (1995). Planning Sustainable Tourism Destination, *Journal of Tourism and Recreation Research*, II: 67-72.



# NATURAL RESOURCE EXPLOITATION AND SOCIO- ECONOMIC DEVELOPMENT IN NIGERIA (1981-2015)

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## **ABSTRACT**

*Natural resources availability in any country contributes immensely to its wealth base and aids socio-economic development. This paper examined the natural resource potentials vis-à-vis challenges and prospects as well as the extent to which these resources have been harnessed to aid socio-economic development in Nigeria. The study adopted the library research method. Secondary data were analysed statistically. Findings showed that aside crude oil and gas, the abundant natural resource potentials available in Nigeria, have been marginally exploited. The over-dependence on crude oil becomes a major challenge to natural resource*

*development among other factors including poor technology and technical know-how, low investment in agriculture and the mining sub-sectors, environmental degradation and so on. It was recommended, among others, that the Nigerian government should diversify the economy by investing massively in the agricultural and mining sub-sectors to enhance sustainable natural resource development. value added sectorial complementarity and entrenchment of transparency and accountability in the public sector in relation to the management of wealth accruing from natural resources should be ensured for sustainable development and improved living standards of the citizenry.*

***Keywords:*** *Natural Resources, Exploitation, Socio-Economic Development.*

## **INTRODUCTION**

The evolution of human society has rested on the sustained interaction between man and his natural environment. This interaction largely depends on man's ability to create tools within a social organization to harness natural resources in the quest for meeting his survival and developmental needs. Adesopo and Asaju (2004) defined natural resources as those things available to man as "gifts of nature" which are either renewable or non-renewable, such as mineral, water, and agricultural, forest and atmospheric resources.

The pivotal role of natural resources in socio-economic development process has long been established by scholars. For example, Romer (1996) and Wright (1990) separately aver that the origins of rapid industrial and economic expansion in the United States of America (USA) over 1879-1940 were strongly linked to the exploitation of abundant non-reproducible natural resources, particularly energy and mineral resources. In supporting this, Barlowe (1978) described natural resources as productive assets which support economic development and sustain human populations. Also, Bradshaw (2005) argues that natural resource

mining and exploitation are viewed as key drivers of economic growth and the development process. In similar vein, Bridge (2008) averred that natural resource exploitation by the extractive industry is the lead sector that drives economic expansion which can lead to higher levels of social and economic well-being.

The United Nations Conference on Trade and Development (UNCTAD, 2007) suggests that the rising demand on developing countries for natural resource-based primary commodities in recent times from developed countries and the high prices of mineral resources in the international market have increasingly stimulated investments in natural resource exploration in developing countries (Mahtani, 2008; Okeke 2008). This has, in turn, opened economic opportunities and development prospects for resource-rich developing countries, including Nigeria, to harness its mineral resources.

Nigeria's situation appears to be a paradox because abundant natural resource exploitation seems to co-exist with sluggish rate of economic development. Eneh (2006) submits that Nigeria's GDP per capita crawls behind those of other developing countries over the years. Between 1965 and 1995 (30 years), Nigeria's GDP increased 3.6 folds from \$5.8 bn to \$26.8 bn, where Malaysia's increased 27 folds from \$3.1 bn to \$85 bn, Indonesia's increased 52 folds from \$3.8 bn to \$198 bn, and Venezuela's increased 20 folds from \$3.8 bn to \$75 bn. Yet, exploration of mineral resources took over from agriculture as the mainstay of Nigeria's economy within this period. It has been argued that the petro dollar based mono-cultural economy operated in Nigeria has been a major sustainable development challenge in the country as it is not only associated with environmental sustainability crises (Chijoke, 2009; Jack, 2014), but has also displaced the development of other natural resources such as solid minerals and agriculture (Murtala, 2011). Gyang, Nnanle and Chollom (2010) posit that over dependence on crude oil and gas leads to

rudimentary natural mineral development in Nigeria with severe consequences for environmental sustainability and human health.

The need to assess the extent natural resource exploitation has aided socio-economic development in Nigeria informs the current study. It sought to provide an overview of the natural resource potentials of Nigeria, as well as the extent to which their harnessing has aided socio-economic development in the country as measured by contributions to the Real Gross Domestic Product from 1981 to 2015. The study classified natural resources into solid minerals, agriculture/agro allied, and crude petroleum and natural gas categories.

## **REVIEW OF RELATED LITERATURE**

### **Natural resource prospects and challenges in Nigeria**

Nigeria is among the wealthiest countries in Africa in terms of natural resources potential. The country is blessed with diverse natural resources, ranging from crude oil, gas, iron ore, cocoa, timber, tin, columbite, tantalite, wolfram, gold, lead-zinc, limestone, kaolin, clay, shale, marble, radio-active minerals, barytes, cassiterite, coal, lignite, petroleum, natural gas and hydro-electric power (Adesopo and Asaju, 2004). These natural resources exist in multitude in different locations across Nigeria. If properly exploited, they can reasonably facilitate the growth and development of the economy. More so, it is estimated that over 3 billion metric tonnes of iron ore deposits exist in Enugu, Kogi, Niger, Lagos, as well as the Federal Capital Territory. Iron ore is being mined at Itakpe in Kogi State. There is rock salt domiciled in Benue State and salt springs at Abakaliki, Awe (Plateau State), and Uburu (Ebonyi State). In the same light, over 40 million tonnes deposits of talc is located in Osun, Niger, Ogun, Kaduna and Kogi States. The 3,000 tonnes per annum catalytic talc plant located in Niger State is the only talc plant in the country. More so, over 7.5 million tonnes of baryte is located in Taraba and Bauchi States. A

large amount of bentonite reserves of about 700 million tonnes are domiciled in several states of the federation which are yet to be exploited. In the same light, bitumen deposits are estimated at about 42 billion tonnes located in Nigeria.

There is no gainsaying that Nigeria is a resource-rich country. Table 1 shows that crude petroleum and natural gas are largely deposited in Delta, Akwa-Ibom, Bayelsa, Rivers, Edo, Imo and Abia States. Moreover, there is a huge deposit of iron ore in Ajaokuta (Kogi State), Aladja (Delta State), Agbaje (Kogi State), Anambra, Benue, and Kwara States. Similarly, large deposits of marbles are located in Igbeti (Oyo State), Abuja, and Benue State, while lead/zinc is domiciled in Ogoja (Cross River), Benue, Ebonyi, and Kano States. There are huge deposits of coal in Enugu and Ondo States, while salt is largely found in Cross River, Ebonyi, Akwa-Ibom and Abia States. Also, there are huge concentrations of limestone in Ewekoro (Ogun State), Sokoto, Bayelsa, Benue and Borno States, and gold in Oyo, Ebonyi, Kaduna, Edo, Sokoto and Zamfara States. Lignite is largely concentrated in Cross River, Delta and Bayelsa States, while tin is domiciled in Abuja and Plateau, Gombe, Kano, Nasarawa and Bauchi States, and bitumen in Edo, Ogun, Ondo, and Lagos States.

Furthermore, with regards to agriculture/agro-allied resources, cocoa is largely concentrated in Anambra, Oyo, Edo, Imo, Osun, Kwara, Ondo and Ogun States while oil palm is largely domiciled in Abia, Akwa-Ibom, Anambra, Imo and Oyo States. Groundnut is largely available in Ebonyi, Kano, Katisna, Niger and Sokoto States, while cotton is found in Kano, Katisna, Kwara, Niger and Sokoto States. Rubber grows well in Edo, Ogun, Delta, and Cross River States, while coffee is largely grown in Bauchi, Kwara and Osun States. Timber is hugely found in Delta, Edo and Ogun States, while kolanut is highly concentrated in Kwara, Ogun, Osun and Oyo States. Tobacco is highly concentrated in Kwara, Osun, Oyo and Sokoto States, while Carrot is highly available in Borno. Sugarcane is highly available in Gombe, Bauchi, Adamawa, Sokoto States with plantain

in Oyo, Ogun and Osun States. Fish is highly concentrated in Lagos, Bayelsa and Rivers States, while cassava is highly concentrated in Taraba, Oyo, Rivers, Kwara, Kogi, Jigawa, Imo, Enugu, Edo, Ebonyi, Delta, Cross River, Bayelsa, Anambra, Adamawa, Abuja and Abia States.

**Table 5.1:** *Distribution of natural resource potentials by sector and states in Nigeria*

S/N	STATE	SOLID MINERALS	AGRIC./AGRO ALLIED	CRUDE PETROLEUM&NAT. GAS	INDUSTRIAL POTENTIALS
1	Abia	Brine, Iron-ore, Lignite, Kaolin, Clay, Salt.	Cowpeas, Soya beans, Rice, Maize, Cassava, Oil Palm, Cocoa, Rubber, Fruits.	Petroleum & Gas	Ceramic, Cosmetic, Plastic, Petroleum & Gas Industries.
2	Abuja	Marble, Kaolin, Clay, tin, Lead, Zinc.	Yam, Cassava, Maize Beans and Fruits	-	Food Processing and manufacturing Industries
3	Adamawa	Barytes, Salt, Calcium laterites, Marble, Gypsum, Clay.	Guinea-Corn, Sugarcane, Yam Cassava, Maize, Millet, rice, Milk, Cheese, Cotton, Groundnuts	-	Agricultural processing industries
4	Akwalbom	Clay, Glass, Sand, salt,beutonite.	Coconut, Cocoa, Rubber, Raffia palm, Coffee, Oil Palm.	Crude oil and Natural gas	Agricultural processing, Oil & Gas industries.
5	Anambra	Kaolin, Limestone, marble, iron ore.	Rice, Yam, cassava, cocoa, oil palm.	Crude oil reserve	Oil and Gas industries
6	Bauchi	Limestone, Columbite, Iron ore, Tin, Kaolin.	Sugarcane, Maize, Groundnuts, Millet, Guinea corn, Cotton, coffee, Rice.	Crude oil (under survey)	Limestone, Ceramic industries.
7	Bayelsa	Limestone, Lignite.	Plantain, Banana, Cassava, Yam, Cocoyam	Crude oil and gas	Oil & Petrochemical
8	Benue	Tin, Columbite, Kaolin, lead/zinc, Gypsum, iron ore, marble, limestone.	Yam, Rice, Maize, Sorghum, Millet and Fruits	-	Food canning/cement
9	Borno	Gypsum, Iron ore, Feldspar, Limestone, clay	Millet, Carrot, Wheat, Arabic gum, Hides & Skins.	-	Soda ash, leather industries
10	Cross river	Limestone, Baryte, Uranium, Bentonite, lead/zinc, Lignite.	Rubber, Cocoa, Oil Palm, Cassava, rice, fruits.	-	Agric and fishing
11	Delta	Lignite, Gypsum, Tar	Palm oil, Kernel,	Crude oil and Gas	Petrochemical, Oil &

		Sand, Silica, iron ore.	Cassava, Rubber, and Timber.		Wood processing
12	Ebonyi	Salt, Limestone, Lead, Zinc, Gypsum, Gold.	Yam, Rice, Cassava, Maize, Soya beans, groundnut.	-	Mining, food processing
13	Edo	Gypsum, Tar sand, Lignite, Marble, Bitumen.	Cassava, Yam, Gari, Plantain, Rubber, cocoa, Timber.	Oil and Gas reserve	Oil and Gas, Industries, Cement, food and Rubber processing
14	Ekiti	Tantalite, Quarta, Kaolin, Sand, Clay, Gold, Feldspar	Cocoa, Timber, Palm produce.	-	Food & canning, wood processing
15	Enugu	Coal, Clay, Limestone, Silica, Iron ore, Lead	Oil Palm, Cassava, Rice, Maize, Yam.	-	Ceramic, Pottery, Mining
16	Gombe	Gypsum, Columbite, Lead, Zinc, tin, Iron ore, Clay.	Maize, Beans, Groundnuts, Millet, Cotton, Rice, sugarcane.	-	Cotton, cement work
17	Imo	Limestone, Lead, Zinc, Ore, Kaolin, Clay	Oil palm, Cassava, Cashew, cocoa.	Crude oil	Food processing, oil & Gas industry
18	Jigawa	Kaolin, Tourmaline, Copper, Iron ore, clay.	Groundnut, Cassava, Wheat, Millet.	-	Agro & Food based, Mining, Limestone work
19	Kaduna	Gold, Gemstone, Talc, Zinc, Clay, Iron ore	Wheat, Millet, Rice, Beans, Potatoes		Food processing, Fertilizer industries
20	Kanu	Tin, Zinc, Lead, Clay, Copper, Kaolin	Onions, Groundnut, Rice, Maize, cotton, Wheat	-	Food processing work
21	Katsina	Marble, Kaolin, Feldspar, Iron ore	Guinea Corn, Groundnut, Millet, Wheat, Maize, rice, Cotton.	-	Flourmill, meat processing
22	Kebbi	Kaolin, Salt, Clay, Limestone, Iron ore	Millet, Guinea corn, Maize, Ginger, Bears fruits	-	Groundnut mills, leather industries
23	Kogi	Limestone, Clay, Gold, Iron ore, Coal Marble	Yam, Cassava, Rice, Maize, Coffee, Cashew	-	Ore mining, Cement industries
24	Kwara	Iron ore, Marble, limestone, Clay, Feldspar	Yam, Cassava, maize, tobacco, cocoa, cotton.	-	Mining, Food processing
25	Lagos	Iron ore, Marble, Bitumen, Limestone, Clay, Feldspar	Fish, Coconut	Crude oil	Food processing, oil & Gas, papermill
26	Nasarawa	Iron ore, Marble, Coal, Lead, Zinc, Tin	Rice, Yam, Maize, Cotton	-	Agro Allied industries
27	Niger	Glass, Gold, Iron ore	Corn, Rice, Yam, groundnut, cotton.	-	Energy, Mining

28	Ogun	Limestone, Chalk, Clay, Kaolin, Phosphate, Bitumen, Tar Sand	Rice, Maize, Beans, plantain, palm produce, Cocoa, Rubber, Timber.	-	Food processing, Mining
29	Ondo	Bitumen, Limestone, Kaolin, Iron ore, coal.	Timber, Palm, produce Cocoa, Kolanut	-	Oil & Gas, Wood, Food processing
30	Osun	Gold, Clay, Limestone, Kaolin, Granite	Cocoa, Plantain, Tobacco, coffee, Kolanut, Rice, Maize	-	Food processing
31	Oyo	Dolomite, Kaolin, Marble, Iron ore, Clay, Gold, Gemstone.	Cocoa, Palm produce, Kolanut, Cashew, Tobacco, Plantain, Maize, Cassava	-	Mining, Food processing
32	Rivers	Silica, Sand, Clay	Palm oil, Fish, Cassava, Fruits	Crude oil & Natural Gas	Oil industries, petrochemicals, glass works
33	Sokoto	Kaolin, Gypsum, Salt, Marble, Limestone, Gold	Rice, Wheat, Millet, Groundnut, sugarcane, tobacco, cotton.	-	Food processing, Cement industry
34	Taraba	Baryte, Bauxite, Iron ore	Rice, Guinea Corn, Yam, Cassava, Fruits	-	Food processing, canning
35	Yobe	Arabic Gum, Gypsum, Limestone, Clay, Kaolin	Cotton, Groundnut, Millet, Maize.	-	Food processing
36	Zamfara	Gold, Mica	Rice, Maize, Guinea Corn.	-	Food processing.

**Source:** *The Week*, April 30, 2001 p.13

From the foregoing analysis, it is evident that the natural resource base of Nigeria is enormous. However, the extent to which the exploitation of these resources help to develop the economy and improve the well-being of the citizenry has been described as grossly low. Gyang et al (2010) identified the following challenges to natural resource development in Nigeria:

- i. Policy inconsistency and lack of adequate legislation,
- ii. High risk and health hazards,
- iii. Weak regulation,
- iv. Lack of well-equipped laboratories,



- v. Unwholesome practices of stakeholders and inadequate trained personnel
- vi. Lack of access to capital
- vii. Lack of appropriate technology and machinery, and
- viii. Environmental degradation and pollution.

### **METHODOLOGY**

The study adopted the library research method using secondary data sourced from several periodicals, journals, books and archives including the Central Bank of Nigeria Statistical Bulletins. It utilized the time series data on Agriculture/Agro Allied resources, Solid Minerals and Crude Petroleum and Natural Gas between 1981 and 2015. A content analysis of data gathered was presented and corroborated with descriptive tools such as tables and charts computed from the Microsoft Excel package 2010.

### **FINDINGS AND DISCUSSIONS**

The contribution of the diverse natural resources to economic development of Nigeria is predicated on the extent to which they have been harnessed for the development of the economy. Aside crude oil, a majority of the available natural resources are unexploited hence their limited contributions to the economy. This scenario is associated with the dependence on crude oil and the attendant non-diversification of the Nigerian economy. Historically, for instance, the contribution of the mining and quarrying sub-sector to the national economy only became significant after about five years of independence and by 1970 mining and quarrying had emerged to become the leading sector in terms of percentage share of GDP from 33.13% in 1971 compared to 36.0% for Agriculture and Allied sector. Its share increased from 39.3% in 1971/1972 to 43.4% in 1972/1973 and to 45.5% in 1974/1975. In 1975 to 1976 however, there was a drastic fall in the share of GDP to 21.9% compared to 26.9% by the agricultural sector. In 1976 to 1977, mining and quarrying resumed the lead in contribution to GDP and maintained that

status until the second decade of Nigeria's independence. Furthermore, the production of solid mineral in Nigeria has been increasing. For example, from 763,511 tonnes in 1970, it increased to 2,069,233 tonnes in 1973, representing a 171.1% increase (Anyanwu et al, 1997).

In the light of this and in a bid to ascertain the extent of natural resource exploitation in Nigeria, a sector by sector analysis of the contributions of Agriculture/Agro Allied, Solid Minerals and Crude Petroleum & Natural Gas to Real GDP (Gross Domestic Product) between 1981 and 2015 would be provided in Table 2. Exploitation of Agric/Agro-Allied resources has an increasing trend sequentially except in 2002 when it increased to ₦7,817.08 billion as against ₦5,024.54 billion in 2001. Exploitation of agricultural/agro allied resources has been on the steady increase during the period from ₦2,364.37 in 1981 to ₦3,174.57 in 1988 and ₦4,133.55 in 1996 to ₦5,024.54 in 2001 and ₦7,817.08, ₦8,364.83, and ₦9,516.99 in 2002, 2003 and 2005 respectively. It has, therefore, followed this trend throughout the period under review with the lowest level of exploitation being ₦2,303.51 billion in 1984 and a highest of ₦5,952.22 billion in 2015. Moreover, the exploitation of solid mineral in Nigeria has also been on the increase during the period being reviewed. However, its increase has not been significant, neither has it been steady. Exploitation of solid mineral as at 1981 was ₦67.14 billion, while that of 1982 was ₦54.84 billion, showing a decrease by ₦12.3 billion. It kept decreasing by ₦44.01 billion, ₦32.81 billion, ₦28.05 billion and ₦29.09 billion in 1983, 1987, 1988 and 1990 respectively. It later experienced an increase by ₦40.84 in 1991. This increase can be associated with the creation of the Federal Ministry of Solid Minerals to revamp the solid mineral sub-sector. In buttressing this, the CBN (1995) averred that the Federal Ministry of Solid Minerals was created to formulate appropriate policies and machinery for vast exploration and development of solid minerals in the country. The maximum level of solid mineral exploitation

was put in 2015 at ₦102.54 billion, while its lowest was in 1995 at ₦17.08 billion in 1995. Accordingly, the exploitation of crude petroleum and natural gas has been increasing during the period being reviewed.

Table 5.2 reveals that the exploitation of CPNG in 1981 was ₦4,977.42 billion. By 1989, it increased to ₦5,407.01 billion and later increased to ₦6,933.58 in 1997 and fell again to ₦6,552.69 in 1999 and increased a year after by ₦7,281.94. Moreso, it further increased by ₦8,952.62 and ₦9,294.05 in 2003 and 2005 respectively but declined to ₦7,947.72 and ₦7,983.63 in 2008 and 2009 respectively. It however increased in the year that followed by ₦8,402.68 and the increase remained steady before declining to ₦7,105.28 and ₦7,011.81 in 2013 and 2014, then further declined to ₦6,629.96 billion in 2015.

**Table 5.2: Showing Real GDP and Total Outputs of Agriculture/Agro Industry, Solid Minerals and Crude Petroleum & Natural Gas in Nigeria, and their Percentage Contribution to GDP, 1981-2015.**

YR	RGDP (₦'billions)	AGRIC/AGRO INDUSTRY (₦'billions)	SOLID MINERALS (₦'billions)	CRUDE PETROLEUM/ NATURAL GAS (₦'billions)	%AGRIC/AGRO - RGDP	%SOLIDM- RGDP	%CPNG- RGDP
1981	15,258.00	2,364.37	67.14	4,977.42	15.49595	0.44001	32.62168
1982	14,985.08	2,425.96	54.84	4,453.09	16.18918	0.365967	29.71685
1983	13,849.73	2,409.08	44.01	4,052.98	17.39444	0.317803	29.26396
1984	13,779.26	2,303.51	43.08	4,559.20	16.7172	0.312632	33.08739
1985	14,953.91	2,731.06	44.54	4,918.27	18.2632	0.297842	32.88954

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19 86	15,237. 99	2,986.84	35.25	4,825.50	19.60125	0.231315	31.66755
19 87	15,263. 93	2,891.67	32.81	4,704.42	18.94448	0.214925	30.82053
19 88	16,215. 37	3,174.57	28.05	4,828.68	19.57752	0.172968	29.77843
19 89	17,294. 68	3,325.95	28.66	5,407.01	19.23105	0.165709	31.26401
19 90	19,305. 63	3,464.72	29.09	6,831.77	17.94666	0.150657	35.38743
19 91	19,199. 06	3,590.84	40.84	6,224.45	18.70319	0.212738	32.42061
19 92	19,620. 19	3,674.79	30.60	6,381.26	18.72965	0.155984	32.52394
19 93	19,927. 99	3,743.67	20.78	6,394.60	18.78596	0.104278	32.08854
19 94	19,979. 12	3,839.68	17.21	6,229.46	19.21844	0.086158	31.17984
19 95	20,353. 20	3,977.38	17.08	6,375.97	19.5418	0.083931	31.32662
19 96	21,177. 92	4,133.55	17.54	6,832.84	19.5182	0.0828	32.26396
19 97	21,789. 10	4,305.68	18.50	6,933.58	19.76071	0.084926	31.82133
19 98	22,332. 87	4,475.24	19.40	7,083.99	20.03881	0.086855	31.72001
19 99	22,449. 41	4,703.64	20.21	6,552.69	20.95219	0.090005	29.18869
20 00	23,688. 28	4,840.97	21.04	7,281.94	20.43614	0.08884	30.7407
20 01	25,267. 54	5,024.54	22.39	7,662.98	19.88536	0.088621	30.32737

*Jack, J.T.C.B, Nkwocha, I.B. and Odubo, T.R.*

*Natural resource and development in Nigeria*

20 02	28,957. 71	7,817.08	22.18	7,225.68	26.99483	0.07659	24.95252
20 03	31,709. 45	8,364.83	23.20	8,952.62	26.37962	0.073155	28.23327
20 04	35,020. 55	8,888.57	27.09	9,248.05	25.38102	0.077363	26.4075
20 05	37,474. 95	9,516.99	29.70	9,294.05	25.39561	0.079251	24.8007
20 06	39,995. 50	10,222.47	32.77	8,874.70	25.55906	0.081931	22.18924
20 07	42,922. 41	10,958.47	36.87	8,471.95	25.53088	0.085907	19.73782
20 08	46,012. 52	11,645.37	41.47	7,947.72	25.30914	0.090126	17.27295
20 09	49,856. 10	12,330.33	46.38	7,983.63	24.73183	0.093032	16.01334
20 10	54,612. 26	13,048.89	51.88	8,402.68	23.8937	0.094993	15.38606
20 11	57,511. 04	13,429.38	59.42	8,598.64	23.35096	0.103316	14.95128
20 12	59,929. 89	14,329.71	71.13	8,173.26	23.91078	0.118689	13.63803
20 13	63,218. 72	14,750.52	82.87	7,105.28	23.33252	0.131082	11.23921
20 14	67,152. 79	15,380.39	95.21	7,011.81	22.90358	0.141788	10.44158
20 15	69,023. 93	15,952.22	102.54	6,629.96	23.11114	0.148563	9.605312

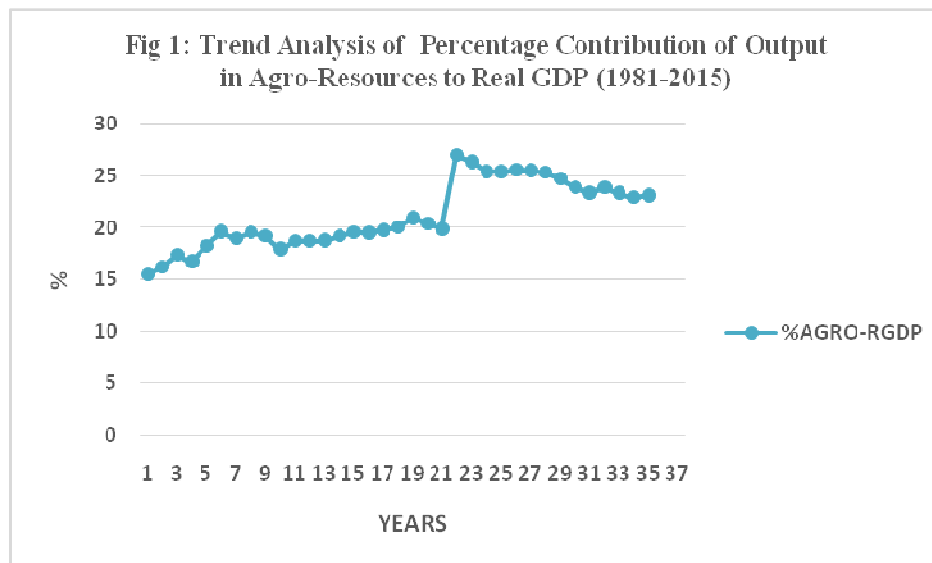
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**Source:** Computed by Authors from CBN Statistical Bulletin and Annual Report 2015

From Table 2, it is deducible that crude petroleum and natural gas exploitation has been fluctuating given its highest level of exploitation in

2005 with ₦9,294.05 billion and its minimum in 1983 with ₦4,052.98 billion. Comparatively, the exploitation of solid mineral in Nigeria has been lower than that of agriculture/agro allied resources and crude petroleum and natural gas during the period under review.

Furthermore, with respect to the percentage contribution of each natural resource sector to the Gross Domestic Product of Nigeria, Figure 1 below shows the percentage (%) contribution of Agriculture/Agro Allied products (resources) to Real Gross Domestic Product (RGDP) from 1981 to 2015.

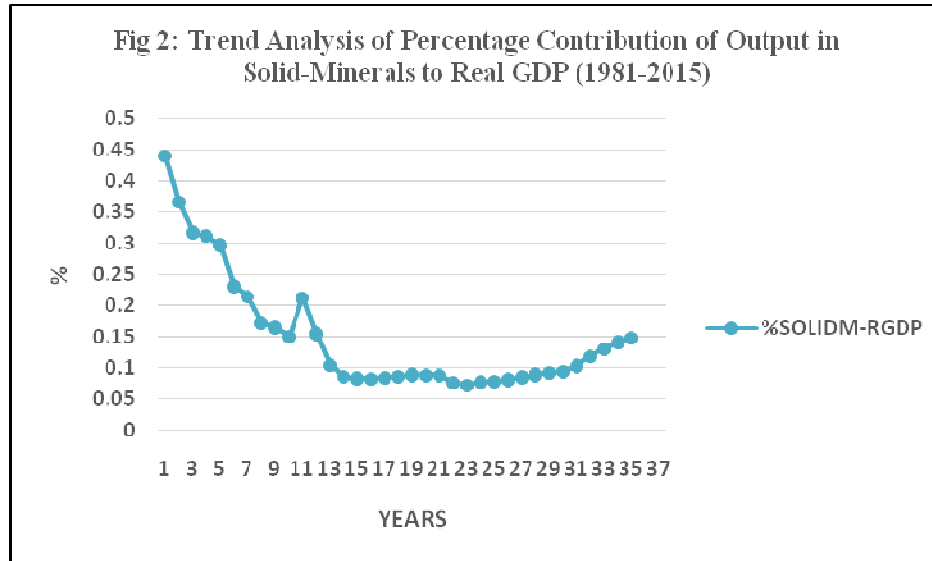


**Source:** Author's Computation using Microsoft Excel 2010

The figure shows that Agriculture/Agro-Allied sector has been on the increase in terms of its contribution to RGDP. From 1981 to 2005, the

contribution of Agric/Agro allied resources to Real GDP in Nigeria has been having a slow and insignificant increase. It however jumped to its highest level in 2002 at 26.99483%, which has been the highest recorded under the period under review. Since then the contribution from agro industries has recorded slow decrease. More so, the contribution of Agriculture/Agro-Allied resources to RGDP was at its lowest ebb in 1981 with 15.49595% followed by 16.18918% in 1982. By 2001 it has increased to 19.988536%. However, the increase has not been stable with 20.43614% in 2000, 19.88536% in 2001, 25.38102% in 2004, 23.8937% in 2010, and 23.11114% in 2015.

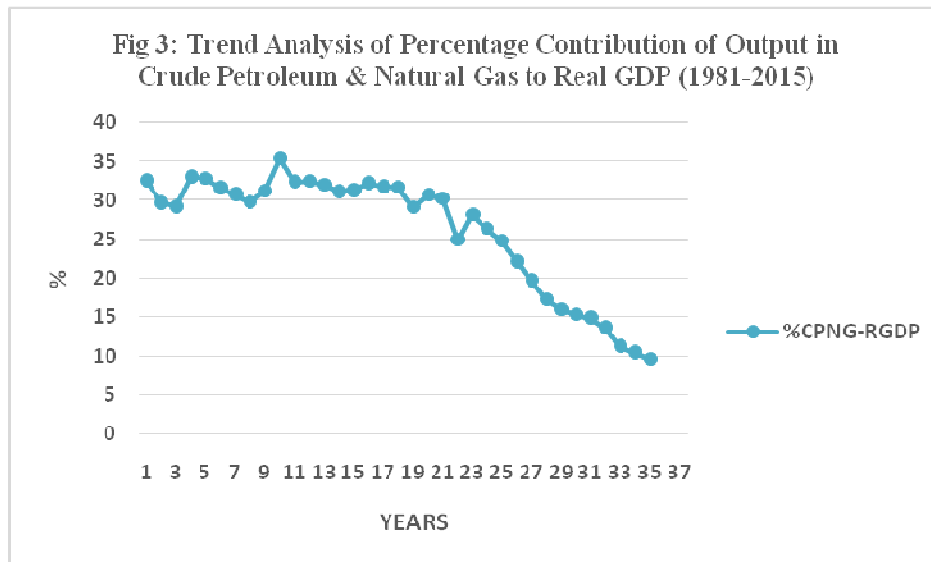
More so, Figure 2 below shows the percentage (%) contribution of Solid Mineral Resources to Real Gross Domestic Product (RGDP). The contribution of solid minerals to the economy has been low. In 1991, the contribution of solid mineral jumped to 0.212738% and thereafter has been decreasing steadily from 0.155984% to 0.104278% in 1992 and 1993 respectively, but maintained a steady rate of decrease from 1994 with 0.086158%, however in 2011 it increased to 0.103316%, to 0.118689% in 2012, 0.131082% in 2013, 0.141788% in 2014 and 0.148563% in 2015. Also, the table revealed that during the period under review, the extent of exploitation of Solid Mineral and its contribution to the RGDP has been minimal, given that its trend has been less than 1% from 2000 to 2015. The figure shows that the highest percentage contribution of the Solid Mineral to Real GDP was 0.44001% in 1981, with the lowest being 0.073155% in 2003.



**Source:** Author's Computation using Microsoft Excel 2010

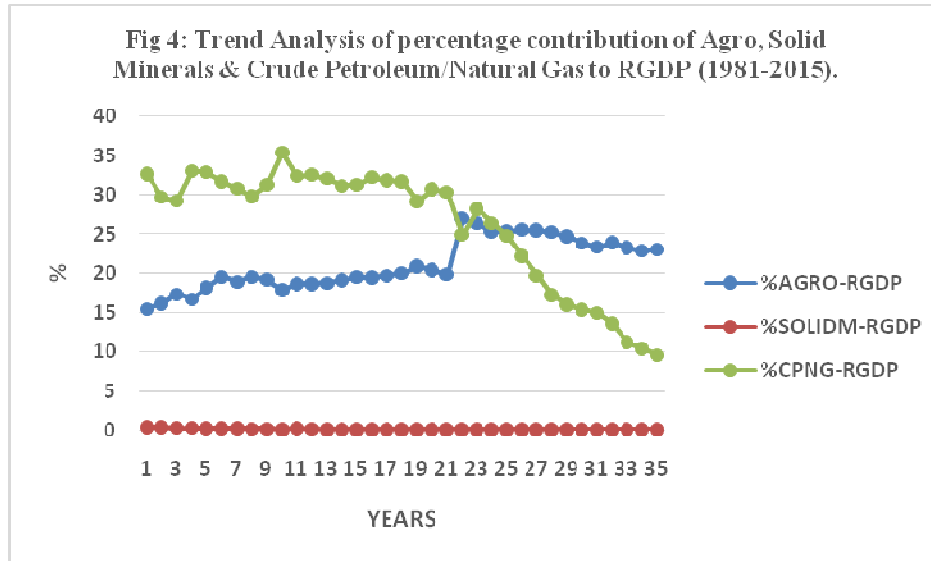
Furthermore, Figure 3 below shows the percentage contribution of Crude Petroleum & Natural Gas (CPNG) to Real GDP. It reveals that CPNG contribution to GDP has not been steady as it has been nose-diving with its highest contribution of 35.38743% in 1990 followed by 33.08739% and 32.88954% in 1984 and 1985 respectively and with a lowest percentage contribution of 9.605312% in 2015. This indicates a decreasing percentage contribution to the Real Gross Domestic Product.





**Source:** Author's Computation using Microsoft Excel, 2010

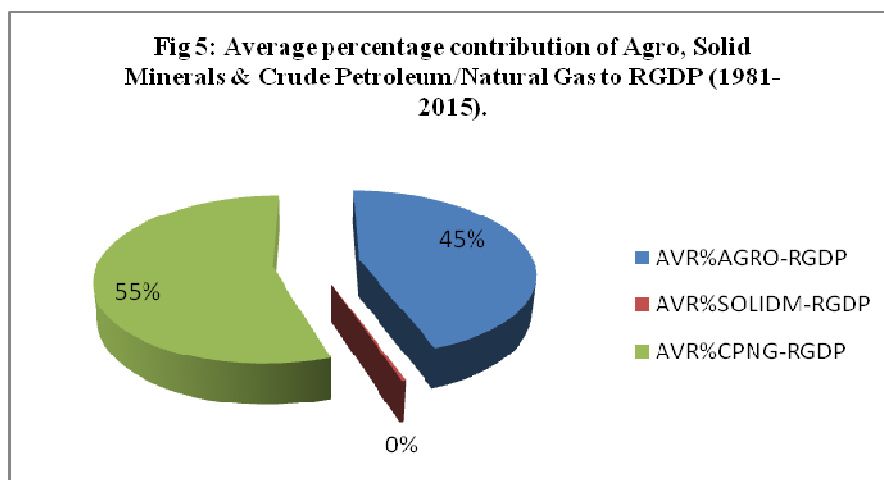
Figure 4 shows the comparative analysis of percentage contribution of Agro resources, Solid Minerals and Crude Petroleum and Natural Gas to the Real Gross Domestic Product of Nigeria. This was in a view to assess the trends and patterns associated with each of the resource sector contributions to the Real GDP. Accordingly, it shows that the percentage contribution of the Agricultural/Agro resources sector to the Real GDP is quite significant with a minimum of 15.49595% in 1981 and a maximum of 26.99483% in 2002.



**Source:** Author's Computation using Microsoft Excel, 2010

However, the solid minerals sector has always been low with a maximum contribution of 0.44001% in 1981 and a minimum of 0.073155% in 2003 within the period under review. This in turn has significantly hindered the sector's capacity in facilitating the enhancement of the Real GDP for socio-economic development. More so, the figure shows that the percentage share contribution of Crude Petroleum and Natural Gas to GDP is characterized by a decreasing trend although relatively higher than that of Agriculture/Agro resources sector. This is because the exploitation of CPNG over the period may not have had commensurate efficiency in its contribution to the Real GDP. This implies that even though the percentage of CPNG seems to be higher than that of Agro resources, with the trend it is evident that the percentage contribution of the CPNG portrays a decreasing rate with its maximum percentage contribution of

35.38743% in 1990 and a minimum of 9.605311889% in 2015, when its contribution to the national economy's RGDP is for a fact expected to be rising, while on the other hand, the percentage contribution of agro resources as shown records a slow but increasing trend.



**Source:** Author's Computation using Microsoft Excel 2010

Figure 5 shows the average percentage contribution of Agro, Solid Minerals and Crude Petroleum/Natural Gas to Real GDP within the period under review. The figure shows that whereas CPNG has contributed to the Real GDP by 55%, Agriculture has contributed 45% with solid minerals contributing only 0.14954%.

From the foregoing analysis, it becomes evident that the solid minerals contribution to the RGDP with less than 1% is significantly low as a result of negligence of the sub-sector. This finding is corroborated by David, Noah & Agbalajobi (2016) and Adesoji & Sotubo (2013). Also, the contribution of agricultural/agro allied resources to the RGDP of the country has been experiencing a gradual increasing but fluctuating trend

due to the dependence on crude oil and negligence of the agricultural sector. On the other hand, although CPNG is the largest contributor to RGDP, it has also been experiencing a decreasing trend in recent years. The decreasing contribution of CPNG in recent years may not be unconnected to: the fall in the price of crude oil at the international market; the disruption of oil production and economic sabotage by militants in the Niger Delta; the dependence on fuel imports in Nigeria due to the comatose state of local refineries which impedes the growth of petroleum and allied industries; and lastly the current drive towards alternative energy sources such as solar, wind and hydro. In buttressing this, the Nigeria Natural Resource Charter in its 2014 Benchmarking Report suggests that United States oil imports from Africa plunged to a 40-year low in 2014 by virtue of higher US domestic yields of oil. The June 2014, first quarter reports compared to that of the same period in 2013 showed that the drop in US oil imports from Nigeria alone were valued at \$2.7 billion (~~N~~476 billion naira). This precarious situation has severe implications on the capacity of the economy to sustain the contribution of crude oil to the Real Gross Domestic Product and over all socio-economic development of the country.

## **CONCLUSION**

The abundance of natural resources in Nigeria shows that the country has great potentials and prospects for economic prosperity. It however becomes paradoxical that in the midst of these abundant natural resources the country remains largely a mono-cultural economy, with infrastructural deficit, mass unemployment and pervasive poverty. This is largely associated with the challenges inherent in natural resource exploitation in the country; most prominent among others is the dependence on crude oil and gas exploration. This situation has become the bane of Nigeria's development challenges as solid minerals and agricultural resources are jettisoned thereby impeding the growth of the agricultural, mining and

manufacturing sectors of the economy. This corroborates the position of Echeme and Ubani (2010) that undiversified economy and reliance on crude oil has limited the growth of the agricultural and mining sub sectors in Nigeria. More so, the dependence on crude oil has culminated in severe sustainable development challenges for the country, especially with regards to the large scale environmental degradation in oil producing communities and associated social unrest, militancy, vandalism of oil assets and struggle for resource control in the Niger Delta region which further accounts for the decreasing trend in CPNG contribution to RGDP as corroborated by Adesopo & Asaju, (2004) and Chijoke (2009). It is worth noting here that the decreasing trend in the contribution of CPNG and increasing but fluctuating trend in the contribution of Agriculture/Agro-Allied to the RGDP does not indicate a deliberate drive towards diversification and revamping of the agricultural sector but on the contrary a direct offshoot of the declining price of crude oil at the international market and disruption of oil production by militants in the Niger Delta. The implications thereof on socio-economic development is far reaching, for instance the current recession in Nigeria and the challenges of implementing the 2016 budget is directly linked to the global fall in crude oil prices. To this end, a sudden rise in the price of crude oil and a sharp decline in disruption of crude oil production by Niger Delta militants would usher in arising trend in the contribution of CPNG to the RGDP.

Hence, the abundant solid minerals and agricultural potentials lying fallow in the country if fully harnessed would immensely contribute to the country's foreign exchange and Gross Domestic Product and salvage the country from the crude oil resource curse and economic stagnation. In the light of the following, to ensure sustainable socio-economic development, the Nigerian government needs to deliberately pursue diversification of the economy away from crude oil by venturing into the exploitation of the abundant reserves of mineral and agricultural

resources. As catalyst to socio-economic development, the growth of the mining, agriculture and manufacturing sectors, will ensure backward - forward linkages and complementarity in the economy. This in turn would create real socio-economic value in increased local production, promotion of local industrialization, reduction in importation of finished goods, employment creation, infrastructural development and increasing the standard of living of the citizenry.

### **RECCOMENDATIONS**

From the foregoing submissions, the study recommends that:

1. The federal government looks beyond crude oil and diversify the economy by increasing investments in the agricultural, mining, and tourism sectors while providing incentives and Social Overhead Capital (SOC) for private sector investors.
2. The government as a matter of necessity needs to encourage non crude oil exports while removing structural rigidities to enhance business climate reform.
3. There is urgent need for massive investment and expansion of the steel industry to aid local manufacturing capacity and industrialization.
4. Aside crude oil exploration, the government and private sector should invest in boosting domestic refining of crude as this would create value added goods and service provision in petroleum allied industries and in the process creates employment.
5. In a bid to stabilise the dwindling oil production capacity in the country the government needs to proffer lasting solution to the Niger Delta development crises.
6. Natural resource exploitation should be pursued within the context of sustainable development especially with regards to the crude oil industry. Environment friendly practices should be imbibed by Oil

Companies while government must strictly enforce environmental protection laws and policies guiding operations of the extractive industry.

7. There should be transparency and accountability with the management of wealth accrued from natural resource exploitation. This should encompass equitable distribution of societal wealth for sustainable socio-economic development and improved standard of living.

## REFERENCES

- Adesopo, A.A and Asaju, A. S. (2004). Natural Resource Distribution, Agitation for Resource Control Right and the Practice of Federalism in Nigeria. *Journal of Human Ecology*, 15(4): 277-289.
- Adesoji A.A and Sotubo O.D (2013). Non-Oil Exports in the Economic Growth of Nigeria: A Study of Agricultural and Mineral Resources. *Journal of Educational and Social Research*, 3 (2):403-418.
- Aluko, S. (1971): Industrialisation in Nigeria. *Quarterly Journal of Administration*, IX (2).
- Anyanwu J.C., Onyefusi A., Oaikhenan H., and Dimowo F.A. (1997). *The Structure of the Nigerian Economy*. Onitsha: Joanee Educational Publishers Ltd.
- Bradshaw. M.J. (2005). Population Resources, Development and the Environment, In: Daniels, P.E. et al (eds.) *An Introduction to Human Geography: Issues for the 21st Century*. Onitsha: Joanee Educational Publishers Ltd.
- Barlowe, R. (1978). *Land Resource Economics*, 3 ed. New Jersey: Prentice-Hall Inc, Englewood Cliffs.
- Bridge. G. (2008). Economic Geography Natural Resources, In: International Encyclopedia of Human Geography (eds). Kitchen and Thrift: Elsevier.
- Central Bank of Nigeria (2015). *Statistical Bulletin and Annual Report*.
- Central Bank of Nigeria (1995). *Statistical Bulletin and Annual Report*.

- ChijiokeEvoh J. (2009). Green Crimes, Petro-violence and the Tragedy of Oil: The Case of the Niger Delta in Nigeria. *In-Spire Journal of Law, Politics and Societies*, 4 (1): 12-19.
- David, O.O, Noah, O.A and Agbalajobi, S.A (2016). An Empirical Analysis of the Contribution of Mining Sector to Economic Development in Nigeria. *Khaza Journal of Humanities Social Sciences*, 19 (1): 88-106.
- Echeme, I.I and Ubani E.C. (2010). A Correlation of Natural Resource Management and Level of Development in Developing Countries: A Case of Nigeria. *Report and Opinion* 2010, 2 (7): 31-39.
- Eneh, O.C. (2006). Corruption and Dwindling Productivity in Nigeria – An Analytical and Introductory Overview, In Nwosu, I.E. and Eneh, O.C. (eds.) *Managing Job Ethics and Productivity in Nigerian Universities*, IDS Development Management and Practice Series, No.1: 1-34, Enugu: Institute for Development Studies, 2006.
- Gyang, J.D. Nanle, N. Chollom, S.G. (2010). An Overview of Mineral Resources Development in Nigeria: Problems and Prospects. *Continental Journal of Sustainable Development*, 1:23-31.
- Jack, Jackson T.C.B (2014). Indigenous Knowledge and Biodiversity Conservation in Kalabari Rural Communities: Implications for Environmental Conservation in the Niger Delta. Dept of Sociology, University of PortHarcourt, Unpublished MSc Thesis.
- Mahtani, D. (2008). The New Scramble for Africa's Resources. *Financial Times* Special Report, 28 January, pp. 1-6.
- Murtala, C. (2011): An Extensive Analysis of Mining in Nigeria Using a GIS. *Journal of Geography and Geology*, 3 (1): 20-31.
- Nigeria Natural Resource Charter (2014): *Summary of the 2014 Benchmarking Report*.
- Okeke, C.N. (2008). Geology and Mineral Resources: Blessing or Curse? *The International Lawyer*, 42 (1); 193-210.



- Romer, P.M. (1996). 'Why, Indeed, in America? Theory, History, and the Origins of Modern Economic Growth', *American Economic Review*, 86 (2): 202–212.
- The Week*, April 30, 2001, p. 13.
- UNCTAD (United Nations Conference on Trade and Development, 2007). World investment report 2007: transnational corporations, extractive industries and development. New York and Geneva: United Nations.
- Wright, G. 1990, 'The Origins of American Industrial Success, 1879–1940', *American Economic Review*, 80 (4): 651–668.

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