



## Occupy Development: Towards a Caring Environment in Nigerian Urban Cities

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#### **Abstract**

Occupy Development (OD) stems from the yearning to explore transition of social and human development as well as transformation strategies at both conceptual and practical levels in a democratic, inclusive and sustainable manner. Its main goal is to advance sustainable developmental paradigm entrenched by encouraging cautious utilization of human environment and its resources in the context of meeting people's imageries and visions of a better life. Unfortunately, previous research showed that the altitude for a caring environment in Nigeria is abysmally low particularly in urban areas and the repercussion is becoming evident in the harsh socio-economic challenges that the people now face. Based on this reality, this paper advocates for occupy development towards a caring environment in Nigerian urban cities. Pollution Control Model (PCM) was adopted as theoretical guide. Methodology employed includes explanatory survey design. Extensive desk work was conducted on secondary data retrieved from current and relevant academic publications, official bulletins and reports. Findings from the paper provided detailed knowledge on how to promote a free and just environment in Nigerian urban

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#### Introduction

Development is imbued with people's imageries and visions of a better life - a which is materially enriched, improved, institutionally ecologically well-organized and technologically more development as a advanced. Thus. concept goes beyond the lines of what poor nations should do to become richer, or simply asking for assistance (financial non-financial) from developed well-encompassed countries, to

direction towards ensuring simultaneous growth in social. economic and environmental conditions in the society (Solaja, Omobowale & Alliyu, 2015). However, avalanche of literature has established the fact that the process of attaining people's imageries and visions of a better life may be delayed or abysmally truncated if the environment that is supposed to serve as the resource foundation is fraught with problem of environmental pollution or degradation.

As a fact to be conceived, studies have revealed that the rapid demeaning of environmental quality has been the source of climate change, food insecurity, water shortage, heat wave, flood, disease outbreak and many other ecological challenges that stand as stumbling blocks on the road to accomplish the dreams and imageries of a better life for the populace in current dispensation (Bucheim, 2004; Kreis, 2006; Solaja, Omobowale & Kalejaiye, 2014).

One of the major potholes on Nigeria's developmental route is environmental degradation. In Nigeria, issues arising from environmental degradation have been a great concern for discerning individual, researchers, organizations and governments who have invested huge amount of resources (financial and nonfinancial) dealing in with environmental challenges facing them in their neighbourhoods, livelihoods and communities. Environmental matters are developmental serious hurdles hinders people's and nation's prospect for development. Therefore, it is imperative to make a radical shift towards a caring environment in Nigeria's developmental pursuit. To strengthen this position, scholars have identified that the issue of environmental mismanagement degradation in the course of performing social and economic activities in Nigeria is becoming evident in the harsh socioeconomic challenges that the people now face (Adelakun, 2003; Adesiyan, 2005; Adewole, 2009 & Adimekwe, 2013).

The above posture can also be buttressed with the way at which all kinds of waste (i.e. plastic, pure water sachet, paper, smoke, and gaseous-chemical) are discharged on major roads, open places and drainages particularly in urban centres where there is increasing population, business organizations and industries coexisting. Of great importance

is the immense efforts made by the government, civil society and Nongovernmental organizations (NGOs) in environmental the struggle for sustainability in Nigeria particularly in areas. However. instead recording improvement in the quality of environmental resources, current reports still read that majority of the socioeconomic activities conducted in urban areas still produces pollution such as noise, sewage wastes, industrial effluent and chemical discharges which contend with the quality and quantity of environmental resources (i.e. water, air and land) in Nigerian urban cities (Atolagbe & Tanimowo, 2006; Adewole, 2009; Adimekwe, 2013; Weli, 2014).

Trekking further on the issue, empirical studies have attested to the fact that the environmental degradation Nigerian urban centres concomitantly affects Nigeria's development agenda (Adesiyan, 2005, Adimekwe, 2013; Weli, 2014; Solaja, Omobowale & Kalejaiye, 2014). Sources of environmental degradation in Nigerian urban cities include prolong and extensive deforestation. illegal mining, poor sanitation. inadequate town/urban planning, uncontrolled industrial activities, oil spillage, gas flaring and many other environmental malpractices. are the major causes environmental degradation in Nigerian urban centres such as Port-Harcourt. Lagos, Abuja, Imo, Akure to mention but few (Atolagbe & Tanimowo, 2006; Adewole, 2009; Adimekwe, 2013; Weli, 2014). Based on this reality, this study examines occupy development towards a caring environment in Nigerian urban cities with the aim to:

 i. Examine the term occupy development and environment within the context of sustainable development

- ii. Highlight the relevance of environment in development process
- iii. Explain the need for a caring environment in Nigerian Urban Centres
- iv. Map out strategies for extenuating the menace of environmental pollution in Nigeria.

#### **Capturing Concepts**

To advance the understanding of this study, brief clarifications on the meanings conveyed by key concepts adopted are presented below.

#### What is Occupy Development?

In order to understand the term Occupy Development, it is important to first and foremost define the two words Occupy and Development separately. Occupy depicts a leaderless common movement, that is based on local development and iustice issues among communities affected by same injustices (Adewole, 2009; Adimekwe, 2013). On the other hand, the term Development is the process of raising peoples' standard of living from undesirable state to desirable state through application of relevant growth processes in generating favourable condition for the purpose of increasing peoples' self-esteem and freedom to lead quality life, and to overcome certain developmental barriers in order transcend into comfortable and desirable existence (Olutayo & Omobowale, 2002, Obono, 2010; Alliyu, 2013). With this background, the term Occupy Development (OD) was developed by Wichterich (2014) to mean a process of identifying the rationale of care and maintenance of a development path that is socially. economically environmentally compatible. can OD equally be construe as the desire to revitalize, rethink or reconfigure the

transition and transformation strategies deployed societal stakeholders to achieve development in a democratic, inclusive and sustainable manner. It is an effort to make a change out of a failing system and into a new system that is highly promising (Hayes & McNally, 2012). However, in this study, OD represents the movement of people towards promoting environmental impartiality through informative processes to empower and enable them to become agents of change to become active citizens in a change of uniust environmental mismanagement which is impeding socio-economic development in Nigeria. In other words, OD is a kind of intellectual movement forms of environmental against all mismanagement in order to enhance people's access to clean water, air, and sufficient supplies of renewable resources in needed quantity as at when due.

#### **Environment: Defined**

The term 'environment' has often been defined as the aggregate of geographical. physical, biological, socio-cultural and political settings that determine one's survival, development and the ability to meet existential developmental needs. In a simple expression, Einstein construes the environment to mean "everything that is not me" (Singh, 1995). This simply means that environment comprises of entire surrounding, space or condition that encircles an individual, organism, species or race; without which survival will be impossible (Aluko, 2001; Adesiyan, 2005). The growth, life and death of all individuals depend on the environment in which they exist. In the same vein, United Nations Development Programme (2006) emphasized that environment is the source of global economy thus it must be protected and sustainably managed. This is inherently efficacious in accomplishing the vision of a better life for present and future generations.

### **Environmental Resources and their Consumption Patterns**

Human environment is blessed with copious life supporting resources (Aluko, 2001; Adesiyan, 2005). Some of these resources have intrinsic value of their own and for long term utilization by humans while others do not. Awan (2013) identified four types of environmental and natural resources which are available for human utilization and survival.

- i Renewable Environmental Resources: These are resources which are capable of natural regeneration into useful products within specific period of time. As such, these kind of environmental resources are always available for consumption as long their capacity to regenerate is interrupted by human activities and natural disasters. E.g. soil, clean air and water.
- ii. Non-Renewable **Environmental** Resources: These are natural resources that lack the capacity to regenerate or the rate of renewable is slow thus they are relatively scarce for consumption or fixed quantities. E.g. ground water. minerals etc
- iii. Continuous Environmental Resources: These are resources that are constant and available with the immunity of solar energy. They are cannot be affected with gross management but they could be affected by atmospheric pollution. E.g. wind, gravity, tidal energy and solar energy

# iv. Extrinsic Environmental Resources: These are resources which can breakdown or deflate in quality and quantities however; there availability can be guarantee if effectively managed. E.g. human skill, institutions' management abilities.

From the foregoing, it is obvious that irrespective of the type or category of environmental resources, it is clear that environment and its resources demand total care from all and sundry. In effect, any form of misuse (including pollution) must be reduced, controlled, managed or completely eradicated for the sustenance of the society.

## **Exploring the Relationships between Environment and Development**

Environment plays vital roles in the pursuit of a better life. This is because human environment consists of and interrelated interdependent surroundings (natural, physical material) that influence the well-being of the people, organizations and institutions that made up the society (UNCTAD, 2013). For instance, it is the environment that supplies the resources (materials and non-material) and other conditions which people and organizations depend on; in terms of how to survive, produce and function optimally. Resources such as natural air, soils, minerals, plants and animals are tapped from the environment (Atolagbe & Tanimowo, 2006; Solaja, Omobowale & Alliyu, 2015). Thus, environment is the source of all resources for achieving desirable required development. It is impossible for any country that allows it industrial or domestic activities to operate at the expense of the environment to achieve

development. sustainable Sustainable can only be development achieved through sustainable management various environmental assets (UNCTAD. 2013). The underdevelopment challenges which Nigeria faced today can be partly attributed to lack of care for environment and unsustainable management of environmental assets in pace of changing social drivers, such as population growth, economic activities and consumption patterns in Nigeria (Aluko, 2001; Adesiyan, 2005).

#### Occupy Development towards a Caring Environment in Nigerian Urban Centres

The term "Caring Environment" connotes the act of mitigating environmental degradation (domestic and industrial pollution) and promoting afforestation, consumption patterns efficient sustainable environmental management in order to achieve quality environment with the possibility of achieving desirable development for the populace. Attempt to care for the environment is to move the environmental motion against mismanagement and pollution which have negative consequences on the people's access to clean water, air, safe drinking, and sufficient supplies of renewable energy in needed quantity as at when due. Therefore a change of paradigm is inevitable to break up the logic of unfettered consumption of environmental resources in people's mindsets. This change must not only be localized but also institutionalized in cross-regional and global dimensions as countries of the world continue to depend on environment for provision of basic needs, economic growth and socio-economic development though in differential quantities (Bucheim, 2004; Kreis, 2006).

More so, transition towards a caring environment demands iudicious utilization of resources to gain a balance short-term long-term between and developmental targets. In this regard, it is right to assert that the time for global collaboration and coordination toward addressing the issue of environmental degradation occasioned by excessive use of environmental resources, bad attitude toward environment. selfishness. corruption and mismanagement is now.

The extent to which environment sustains development can also be inferred from the words of Brundtland (1987), who noted for anv society that to develop sustainably, the three fundamental pillars (social, economic and environment) that development constitute must maintained simultaneously. It is also worthy to note that majority environmental resources are 'finite resources' which means they are limited and can be exhausted, if development is pursued at the expense of the environment (Livernash & Rodenburg 1998; Meadows et.al, 1972). Owing to this condition, one irresistibly reiterates neo-Malthusians environmentalist perspective of *Limit to* Growth (Meadows, Meadows, Randers, Behrens. According and 1972). Meadows. Meadows. Randers. and Behrens (1972) the pioneers of Limit to Growth thesis, the counties of the world are fast overwhelming the Earth's finite resources (i.e. supply of natural gas, water, oil and other energy sources are already dropping abruptly and will continue to drop) except there conservation policies among nations and effective control of production and use of resources in industrialized societies, there will be environmental deficit- a situation where environmental goods become debilitated and can no longer provide support for the populace to enjoy desirable development- in nearest future (Macionis, 2005). And, what shall it profit a nation who utilized all her endowed environmental resources in the sake of development and yet, the people in the country languish in poverty, diseases, insecurity, hunger and other environmental vulnerabilities. There is no gain but loss which comes inform of Environmental Deficit. For example, an environment that is polluted with toxic waste will experience depletion in its natural composition which possibly may cripple its utilization for industrial production, labour capacity and wellbeing of people at all ages, in which all efforts to achieve desirable development may be undermined.

Another important factor of caring environment is "culture". Culture is the total way of life of a group existing in a society. It is practically impossible to refer to a group of people validly except within the framework of culture because, culture is the people and the people are the culture. (Olutayo & Akanle, 2012). In this regard, Culture defines attitudes, values norms and goals which the people individuals and groups consciously and unconsciously through socialization and observation (Okechukwu, 2010). Evident upon the study conducted by some scholars regarding the issue of environmental pollution and degradation, it was inferred that the culture of some group of people contribute to the increasing depletion of environmental resources. Some social groups constantly engage in several activities that harm natural the composition of human environment in Nigeria. For instance, Okebukola (2001)

who observed that there is indiscriminate disposal of gaseous-chemical waste in areas among manufacturing industries and the result of this act had been the spread of gastrointestinal and parasitic diseases among residents of Port-Harcourt in Nigeria. In another study, Adewole (2009) exposed that about 10.000 M<sup>3</sup> of untreated industrial wastewater are being discharged into lagoon on daily basis by industries located in Lagos State, Nigeria which has result in high rate of water pollution. freshwater shortage and water-related diseases. More so, Akanni (2010), Weli (2014) submitted that the volume of noise pollution from places of worship with amplifiers. motorists, machines and frequent use of power generators in industries, worship places and households led to growing numbers of people (particularly those living and working around these noisy environs) with hearing difficulties, high blood pressure and other deadly diseases in Nigerian urban cities. In addition, the study conducted by Solaja, Omobowale and Kalejaiye (2014) revealed that there is unethically discharged of solid-metal waste on fallow land, around residential houses, public space and even under the overhead bridges in different locations of Lagos State, Nigeria. This phenomenon may not be unconnected from the growing numbers of urban slums and ghettos where urban poor or vulnerable people reside. Adimekwe (2013) also reported that human faeces are frequently passed into gutters, open places and dump sites in most of the urban slums and ghettos in Nigeria. All these unethical behaviours point to the fact that the altitude for a caring environment is still very low in Nigerian urban centres which is also an indication of lack of eco-friendly culture among Nigerian urban residents.

#### **Theoretical Elucidation**

Often time, theoretical attempts at interpreting the role of environmental resources in development process tend to rely more on System Theory and the ubiquitous Game Theory (Hug, 2001, Ordeshook, 2003; Macionis, 2005). For the present purpose, this paper will adopt Theory of Pollution Control (TPC) which was developed by Rudiger (1976) and expanded by Blowers (1997), Ostrom, Dietz and Stern, (2002) and Helfrand, Berck & Maull (2003) to provide theoretical explication.

Theory of Pollution Control (TPC) was developed based on the supposition that environmental resources are crucial inputs in developmental pursuit. Hence, it must be protected against any form of human and non-human degradation. Theory of Pollution Control sees environmental degradation as a social hazard that mostly occurs from poor attitude towards a caring environment. According to TPC, large proportion of man-made activities alters natural composition of human environment and its resources. Ĭt postulated that when environmental resources such as land, air, water, and raw materials are commonly shared by multiple users and they are freely extracted for economic and social purposes without any legal or state agency controlling it; it will leads to over exploitation and abuse of the resources which may result in environmental pollution and degradation (Ostrom, Dietz & Stern, 2002; Helfand, et. al., 2003).

TPC further emphasized that environmental degradation is unavoidable reality particularly when there is no clear

property right and/or access rationing of environmental resources for private benefits as against public benefits. In pursuit of the need for environmental resource control. TPC maintained that environmental resources exploited or used for private benefits more than for social benefits there will be increasing production of "negative externalities" in the society (Helfand, et. al..2003) Mankiwa (2008) define negative externalities as situations where polluters of environmental resources do not bear the cost of the injury done to the environment alone but with other people who do not involve in the pollution. This is so because; when pollution arises it atmosphere goes bevond the environment of its occurrence to become a community issue. This fact form part of the reasons why pollution is refers to as 'external cost', 'spill-over cost' 'neighbourhood cost' with concomitant economic, social and health implications on the people under its manifestation (Adewole 2009; Gutti, Aji & Magaji 2012).

Furthermore, TPC believes that the issue environmental degradation of and pollution environmental may continue to persist if environmental resources are left in hands of individual-private users to extract or use for private benefits rather than for the general benefits that would engendered the attainment of people's imageries and visions of a better life. Therefore, TPC affirmed that in order to reduce or revert negative externalities arising from environmental mismanagement, there must be efficient and proactive pollution control policy which regulatory can either be (command-and-control regulation, hybrid market-based policies and

instruments) or non-regulatory (voluntary initiatives). It is through this medium that environmental resources can be used to transform the wellbeing of the people, their livelihood and the development process of the society

The theoretical position of TPC can be understood within the context of this Nigerian study. urban centres suffering from multiple challenges: challenges hunger, of poverty, uncontrollable population increase, socioeconomic underdevelopment, well insecurity, pollution as environmental degradation. Majority of these challenges is caused by lack of sustainable management of environmental assets or resources. It has been reported that the population size of people and industries in urban cities in Nigeria is increasing. This is due to the economic and social benefits lying in urban centres however; the phenomenon brought a simultaneous increase in consumption and exploitation rate of environmental resources residents. The by urban exploitation and consumption rate of environmental resources like land, air, water etc. are often left in the hands of individual-private users rather government controlling the distribution of environmental resources among people. Such that there is little or no rationing of natural and mineral resources needed for accomplishing the visions and dreams of a better life for the populace.

The situation became so complex due to unplanned population explosion, insufficient waste management facilities and enormous transition of land from forest and poor sanitation attitude among urban residents both at household level and industrial level (Magbagbeola, 2001;

Adesiyan, 2005 & Adewole 2009). The inability to manage the waste generated in Nigerian urban centres also resulted in a phenomenon where tons of garbage and refuse (biological, organic and synthetic) consistently wait on roads, street corners, motor parks, markets and industrial outlets in urban cities for pick up, the odour from the garbage indicates that the waste has spent several days unattended to, which in effect causes serious pollution in the environment.

The epistemology behind such unethical act is that, economically it is more costly and expensive for industries, household and other waste producers to operate Likewise, it is physically impossible for these actors to carry out production and commercial activities that will not produce any waste. Particularly, in urban areas where majority of the industrial and domestic activities involve production of biodegradable and nonbiodegradable products such as rubber and tyre, cement and asbestos production there is bound to be waste. Furthermore, studies revealed that there is unethical discharge of unfiltered gases in the air in Port Harcourt (Atolagbe & Tanimowo, 2006: Tawari & Abowei, 2012) while in Imo state, it was reported that industrial plants and installations discharge of toxic gaseous substance which contaminate the air and the environment itself (Adimekwe, 2013). Such pollution may cause serious respiratory diseases or even damage the respiratory organ which can lead to untimely death or life-time usage of medication. Since, atmospheres in which harmful gases are discharged contains the air which every individual breath in and out to support life. Consequently, there is need for government to begin to enforce stringent environmental regulations that will limit how environmental resources or "public goods" are unethically consumed and treated in the context achieving social and economic development in Nigeria.

#### Methodology

Methodology adopted in the study is explanatory survey design. Explanatory design was directed toward collecting information from relevant literatures to understand the nexus between variables understudy and sought how to balance the interaction between them. Data were obtained from secondary which include academic sources publications, official bulletins, articles and reports.

#### **Way Forward**

In response to the call for a caring environment, efforts must therefore be made to balance the interaction between development and environmental sustainability in Nigeria. This fact can be also be seen in Basiago (1999) who reported that alternative models of cultural development in Curitiba, Brazil, Kerala, India, and Nayarit, Mexico embody the integration of economic, social, and environmental sustainability. According to him, Curitiba has become a more liveable city by building an efficient intra-urban bus system, expanding urban green space, and meeting the basic city by building an efficient intra-urban bus system, expanding urban green space, and meeting the basic needs of the urban poor. Similarly, Kerala reached social harmony emphasizing equitable resource distribution rather than unfettered consumption by restraining reproduction activities that can spark out tension or the destructive behaviours among divisions of race, caste, religion, and gender. In the same vein, Nayarit sought balance development with to

environment by framing a nature-friendly development plan that set to protect the natural ecosystems for urban development and that involves public participation in the development process. However, to achieve effective conservation and rationing of environmental resources in Nigerian urban centres the following strategic techniques must be adopted.

## **Proactive Urban Investment and Planning**

One of the major challenges facing developing countries is the features of unplanned cities and towns which also lead to environmentally unacceptable location of industries, lack of adequate drainage, sewage disposal system and other modern infrastructural facilities that can cushion the effect of increasing population, industries. growth in production, use of resources and new ecosystem (Adesiyan 2005; Magbagbeola 2001; Jegede 1977). Therefore, there is need for proactive urban investment and planning to mitigate the consequences of environmental pollution and degradation concurrently with operating economic development. Thus, Nigerian government need to embark on proactive renewal and removal projects. The renewal project includes provision of adequate sewage disposal system and drainage, pollution abatement equipment and usage of environmentally sound technologies in industries should gain utmost priority in development agenda. On the other hand, the removal process entails relocation and reallocation of polluting industries (particularly industries) that are close to residential areas must be moved to new industrial layout.

## **Urban mining, Recycling and Reuse Programmes**

Mining of waste resource involves processes of extracting useful material(s) from waste rather than discarding it (Hogland, completely Hogland Marques, 2015). While the recovery of resources involves the removal of selected materials from the solid waste and using technologies or method such as recycling, energy generation and compositing to obtain valuable resources from it (Abiti. 2013). The main objective of resource recovery is to engage in a selective and efficient removal of products that have useful benefits to the society from waste loads so as to reduce the volume of waste loads to its barest minimum. This process reduces societies' over reliance on virgin developmental resources pursuit (Wikipedia, 2013 cited in Abiti, 2013). Government must therefore promotes Utility Wastes Conversion Programmes (UWCP) such as the one introduced in Mexico, Indonesia, and Switzerland in order to encourage indecent wastes disposal and inculcate positive attitude of ensuring clean and safe environment in Nigeria. As well, government and private investors should see International Wastes Shipments (IWS) to countries like Switzerland, United Kingdom, China, US and Republic of Ireland as a way to promotes green entrepreneurship business opportunity that can contribute to national development.

## **Proactive Environmental Pollution Control**

Constant inspection and examination of environmental quality must be carried out by ministry of environment especially in industrial areas in urban areas in order to regulate the consequences of industrial within residential and industrial environments.

## **Provision of Sufficient Waste Collection** and Disposal Facilities

Adequate supply of municipal waste tanks and facilities must be made in areas lacking it. Also, government need to ensure that the charges of waste disposal are affordable in order to encourage the populace to avoid discharging waste indiscriminately utilized and to government approved waste collection agencies in disposing their wastes. Also, industrial organizations should support government at every level by financing public health care service, neighbourhood clean-up support, drilling of boreholes, and distribution of pollution coping materials for residents living within polluted industrial environment. This could serve corporate social as responsibilities and a way in which organization contribute to the development process of Nigeria.

#### Conclusion

The pollution level in Nigerian urban centres is high above what can be overlooked. It is the major constraint to the process of achieving desirable socioeconomic development and better life for citizens of Nigeria. Increasing pollution and environmental degradation in urban centres have resulted to hash conditions which socio-economic engendered the present call for Occupy Development towards environment in Nigeria. It is clear that a caring environment is a process or an act of giving preference to eco-friendly practices, culture and enforcement of rights over efficiency consumption and individual utility or maximization of environmental resources as the ultimate

of economic. social goal and environmental sustainability activities. In order to expand the sense of care for the environment against the logic of growth and unfettered consumption, a triple R (redefinition. redistribution revalidation) - process with regard to environmental sustainability and sustainable consumption pattern is

#### References

- Adelakun, K. (2003). Information and Communication Technology. Implication for Advancing Environmental Education in Nigeria. Environmental Watch. 1(1).
- Adewole, A.T. (2009). Waste management towards sustainable development in Nigeria: A case study of Lagos state. *International NGO Journal.* 4 (4), 173-179.
- Adesiyan, S.O. (2005). Man and his Biological Environment. Ibadan University Press, Nigeria.
- Adewolu, M. A., Akintola, S. L., Jimoh, A. A., Owodehinde, F. G., Whenu, O. O. and Fakoya, K. A. (2009) Environmental threats to the development of aquaculture in Lagos State, Nigeria. *European Journal of Scientific Research*. 34 (3), 337-347.
- Aina A. T. and Salau, A. T. (2002). The challenges of sustainable development in Nigeria. Nigerian Environmental Study/Action Team (NEST), Rio-De-Janeiro, 8-16, Brazil.
- Akanle, O. (2014). Virtue for Sustainable Development in Contemporary Nigeria: The Role of Women. Being a 2<sup>nd</sup> Gratia Associates Distinguished Public Lecture Delivered in Honour of Mrs. Afolashade M. Alliyu. Gratia Associate International, Ijebu-Ode, Nigeria.
- Alliyu, N. (2013). Governance Research and Development: The Ogun State Experience, Ibadan, Franco-Ola Publishers.

- necessary. Because, development paradigm that is compatible with the environment tends to promote peace and security, contribute to infrastructure growth, foster trade and investment, reduce vulnerability to external shocks, and enhance the quality of life of the populace.
- Aluko, O. (2001). Environmental Pollution and Waste Management (ed) Ola Aluko in Introductory Course in Environmental Science. Page 43-59. Ibadan. Odunprints
- Ayres, R.U. and Kneese, A.V. (1969).

  Production, Consumption &
  Externalities. *American Economic*Review LIX (3),282 296.
- Ayoola, P.B, Adekeye, E.A and Jakanola, O.O. (2012). Environmental Pollution and Control within Sabo Area of Ogbomoso in Oyo State of Nigeria. *IJRRAS* 10 (2),329-338.
- Awan, G., A. (2013). Relationship between Environment and Sustainable Economic Development: A Theoretical Approach to Environmental Problems, International Journal of Asian Social Science. 3 (3), 741-761.
- Basiago, A.D. (1998). Economic, Social, and Environmental Sustainability in Development Theory and Urban Planning Practice.

  Environmentalist. 19 (2), 145-161
- Blaikie, P., Cannon, T., Davis, I. and Wisner, B. (1994). *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. London: Routledge.
- Bronfenbrenner, U., & Crouter, A. C. (1983). The Evolution of Environmental Models in Developmental Research. In P. H. Mussen (Series Ed.) & W. Kessen (Vol. Ed.), Handbook of Child Psychology. 1: History, Theory, Methods (4th ed., pp. 357-414). New York: Wiley.
- Brundtland, D. (1987). Our Common Future. Report of the World Commission on

- Environment and Development: United Nations Document.
- Buchheim, C. (2004). Industrial Revolutions. Long-term Economic Development in Great Britain, Europe and Overseas Munchen, 11-104.
- Fereidoun, H., Nourddin, M. S., Rreza, N. A., Mohsen, A., Ahmad, R. & Pouria, H. (2007). The Effect of Long-Term Exposure to Particulate Pollution on the Lung Function of Teheranian and Zanjanian Students, *Pakistan Journal of Physiology*, 3(2). 1-5.
- Hayes, A and McNally, E (2012). Occupy Development Education. *Policy & Practice: A Development Education Review.*14, 100-109.
- Helfand L.E, Senthiselvan A, Zhang Y, Dosman JA, Barber EM, Kirrychuk SP, Cormier Y, Hurst TS, Rhodes C.S. (2003). Positive Human Health Effects of Dust Suppression with Canolaoil in Swine Barns. *American Journal of Respiratory and Critical Care Medicine* 156 (2 pt 1):410-417.
- Kates, W.R., Parris, M.T and Leiserowitz, A.A. (2005). What is Sustainable Development? Goals, Indicators, Values, and Practice. *Environment: Science and Policy for Sustainable Development*. 47(3), 8-21.
- Kreis, S. (2006). The Origins of the Industrial Revolution in England. Florida, The History Guide.
- Livernash, R., and E. Rodenburg. (1998).

  Population Change, Resources, and the Environment. *Population Bulletin*. 53(1), 2–4.
- Magbagbeola N.O, (2001). The Use of Economic Instruments for Industrial Pollution Abatement in Nigeria: Application to the Lagos Lagoon. In Natural Resources Use, the Environment and Sustainable Development. Nigeria Economic society, University of Ibadan, Ibadan, Nigeria. 535-556.
- Macionis, J. J. (2005). Sociology: Tenth Edition: Annotated Instructors Editing.

- Pearson Prentice Hall, Upper Saddle River, New Jersey.
- Meadows, D.H., Meadows, D.L., Randers, J. and Behrens W.W. (1972). The Limits to Growth, Universe Books, New York.
- Morelli, J. (2011). Environmental Sustainability: A Definition for Environmental Professionals. Journal of Environmental Sustainability, 1.1-9.
- Obono, O. 2010. "The Role of Civil Society in Nigerian National Development." *The Role of Civil Society in National Development.* Accra: West African Civil Society Institute.
- Okebukola, P.O. (2001). Perspective on Waste and Waste Management In P.O Okebukola and B.B Akpan (eds). Strategies for Teaching Waste Management. Ibadan: STAN.
- Schell, L. M., Gallo, M. V., Denham, M., & Ravenscroft, J. (2006). Effects of Pollution on Human Growth and Development: An Introduction, *Journal of Physiological Anthropology*, 25(1), 103-112.
- Singh, S.P. (1995). India's Population Problem, a Global Issue of Environment and Sustainability: An Appeal for Cooperation. *Bulletin of the Ecological Society of America* 76:55–59.
- Solaja, O.M; Omobowale, O.A. and Kalejaiye, P.O. (2014). Sociological Investigation of Industrialization and Environmental Pollution in Lagos Metropolis. *Ago-Iwoye Journal of Social and Behavioral Sciences*. 3 (1),220-255.
- Solaja, O.M, Omobowale, A.O and Alliyu, N. (2015). The Dimensions of Environmental Pollution in Lagos Metropolis, Nigeria. Journal of Sustainable Development in Africa. 17 (3A), 96-115.
- Tawari C.C, Abowei J.F.N. (2011). An Exposition of the Potentials and Utilization of Sustainable Culture for Fisheries in Africa. *Journal of Applied Sciences, Engineering and Technology* 3(4): 264-271.

- United Nations Development Programme, (2006). Making Progress on Environmental Sustainability: Lesson and Recommendations from a review of over 150 MDG country experience.
- Weli, E. V. (2014). Atmospheric Concentration of Particulate Pollutants and its Implications for Respiratory
- Health Hazard Management in Port Harcourt Metropolis, Nigeria. *Civil and Environmental Research*. 6(5), 11-17.
- Wichteich, C. (2014). Occupy Development-Towards a caring economy. *Development*. Society for International Development (SID). 56 (3), 346-349.