

THE EFFECTS OF POPULATION GROWTH AND POVERTY IN ENVIRONMENTAL SUSTAINABILITY IN NIGERIA

Fabianmartins, Obungwah¹ and Osuagwu, Comfort Enyi²

¹PhD, Ignatius Ajuru University of Education, Faculty of Education, Department of Educational Psychology, Guidance and Counselling Port Harcourt, Nigeria

²Ph.D, Ignatius Ajuru University of Education, Faculty of Education, Department of Educational Psychology, Guidance and Counselling (Option Special Needs Education) Port Harcourt, Nigeria

<https://doi.org/10.54922/IJEHSS.2022.0379>

ABSTRACT

This study examines the effects of population growth and poverty in environmental sustainability in Nigeria. Environment sustainability covers the conservation, management and rational utilization of natural resources in such a way to maintain the integrity of each ecosystem, support all life, ensure the preservation of biodiversity and prevent environmental degradation. The pillars of environmental sustainability includes sustainability development, social sustainability and economic sustainability which is the thrust of this study. The study also discloses that rapid population growth has dents on environmental sustainability which reflects in deforestation, bush-burning, haunting, destruction of the environment through pollution which significantly impact on the total health of human beings. In conclusion, the complex and dynamic of effect of population and poverty towards environmental sustainability is seen to be mediated through a number of socio-economic, cultural, political, and developmental variables which have relative significance that vary from one context to another. Some economists, biologists, and environmentalists have observed that over-population have hands on poverty which vis-à-vis leads to denaturing of the environment in quest of daily survival. Therefore, degradation, erosion and earthquake can adversely affect environmental sustainability just as oil and gas activities in the Niger Delta does affect the natural environment of the South-South people of Nigeria. It is on this premise that recommendations are made that government should enact environmental laws and policies that will enhance afforestation safeguarding; government should create awareness on the effects of environmental sustainability; and government should establish an available mechanism to stabilize population so as to protect the environment.

Key Words: Population, growth, poverty, environment, sustainability, Nigeria.

1. INTRODUCTION

A sustainable environment is that which is appropriately arranged, monitored, modified as the case may be in such a way that it is non-threatening, and conducive for all persons, having the ability to continue over a long period of time. It is therefore man's responsible interaction with the environment to conserve natural resources and protect global ecosystems to support health and wellbeing now and in the future which can bring about environmental sustainability bearing into practice conservation of natural resources to help build thriving communities and secure future growth potential. The third-world countries have experienced serious challenges of poverty with rapidly growing population which results in accelerating environmental degradation in land, air

and water. High population growth rate with low per-capita income has worsened environmental condition during the past four decades that seem to erode the economic and social progress of some African countries like Nigeria in question.

A complex and dynamic relationship has been observed between population and poverty in relation to environmental sustainability. These two concepts are closely intertwined with each other because Population growth has led to increased farming which leads to greater greenhouse gas emission and deforestation. The relationship between population, poverty and environment is mediated by a number of socio-economic, cultural, political, and developmental variables which have relative significance varies from one context to another (Ogidi, 2018). Over the past three to four decades, economists, biologists, and environmentalists have been debating the role of population and poverty in environmental degradation (Hummel et.al, 2019).

Scholars like Larson and Halfon (2010) have argued that population is a vital source of progress and advancement, yet it is also a principal source of environmental degradation when it exceeds the threshold limits of what the system can contend. Population growth has an impact on the environment primarily through the consumption of natural resources and production of wastes. It is also associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on arable land (UNRISD, 1994). Main factors leading to environment degradation which include air quality as a result of extensive growing energy demand, swiftly growing transport sector, the rapid use of generating plan by industries, individuals, government and construction works on the road arising to air pollution through dust, etc. In urban cities, extensive usage of low fuel and gas products through generating plants and vehicles have significant impacted on air quality.

Marcoux (2009) indicated that there is a sharp variance between two main ideas, one, stabilizing population to protect the environment; and two, and slowing population growth to foster more rapid economic growth. The problem is that economic growth, even coupled with slower population growth or even population stabilization, brings about greater environmental damage, other things being equal. In this study population growth and population density are taken into account which is represented by population growth and population density.

United Nations International Strategy for Disaster Reduction (UN/ISDR, 2004) posits that environmental degradation is defined as the reduction of the capacity of the environment to meet social and ecological objectives, and needs. Potential effects are varied and may contribute to an increase in vulnerability and the frequency and intensity of natural hazards. Some examples are: land degradation, deforestation, desertification, wild land fires, and loss of biodiversity, land, water and air pollution, climate change, sea level rise and ozone depletion. Arable land and carbon dioxide emission is also taken into account which is represented by AL and CO₂. Unfortunately, the poverty situation in Nigeria is such that official figures from the National Bureau of Statistics (NBS) show that in 2014 alone, over 22.6 million Nigerians were unemployed. This represented a 20% increase in the unemployment figures of the previous years and, a 31% of the entire population (Vanguard, 2015). Such high unemployment figures imply high poverty levels among the population. Currently, according to Action Aid, poverty levels have so worsened since 2016 that from a range of 54-60% in 2016, about 82 million Nigerians now live below the poverty line of 1.9 dollars a day (PREMIUM TIMES, 9/6/2018). This also means that, with such basic survival

needs, a very substantial proportion of the Nigerian population can hardly be bordered with issues of the environment or, even the future.

Environment sustainability refers therefore to the conservation, management and rational utilization of natural resources in such a way to maintain the integrity of each ecosystem, support all life, ensure the preservation of biodiversity and prevent environmental degradation (Gbenda, 2012). Environmental sustainability forms one of the pillars of sustainability development, the others being social sustainability and economic sustainability. It is an aspect of the development process which emphasizes the harnessing of natural and social resources with major considerations for continuity and the future. Akintoka and Yusuf (2001) defined Poverty as a social condition characterized by inadequate access to basic human needs (food and non – food) to the sustenance of socially acceptable minimum standard of living in a given society. Some of these basic determinants of wellbeing include adequate food, shelter, portable water, Healthcare, education and employment opportunities.

In the crux of these expressed dangers of environmental depletion, the Nigerian state has responded through agencies, policies, and programmes aimed at the environment sustainability through environmental protection and management to ensure sustainable development which will vis-à-vis eradicate poverty and bring about birth control (population normality). Some of these intentions are clearly stated in a plethora of gazettes, laws and establishments which traverse the entire Nigerian administrative system. From the 1999 constitution which provided the act of environmental protection (Sections 20, 16(2), 17(2)). The National Policy on Environment of 1989, the Millennium Development Goals agenda stating the need the need for environmental sustainability geared to poverty alleviation and population control. There have been obvious attempts in the developmental grandiloquence of various Nigerian leaders in including environmental protection and sustainability in the development agenda. However, the thrust of the matter remains on how effectiveness will there policy meet the goals of environment sustainability.

To this end government and people in authority almost always strive to ensure that adequate structural programs are enshrined to see that poverty if not eradicated, is reduced to the barest minimum. Poverty alleviation strategies ranging from Operation Feed the Nation of 1978, the Green Revolution of 1982, the Directorate of Foods Roads and Rural Infrastructures DFFRI, the National Directorate for Employment NDE, Poverty Alleviation Program PAP, the National Poverty Eradication Program, NAPEP up to the Seven – Point Agenda were all attempts made by various governments in the country in order to curb the menace of poverty. Therefore, given this background analysis, the paper critically examines the problems and prospects of achieving a remarkable reduction in Nigeria's poverty profile through policy harmonization of all poverty alleviation programs in Nigeria for effective implementation.

To this end government and non-government bodies always strive to make sure that holistic structural programs in adjusted, reducing or elimination of poverty is attainable in Nigeria. Some poverty alleviation strategies of Nigeria government ranging from “Operation Feed the Nation of 1978”, “the Green Revolution of 1982”, the Directorate of Foods Roads and Rural Infrastructures DFFRI, the National Directorate for Employment NDE, Poverty Alleviation Program PAP, the National Poverty Eradication Program, NAPEP up to the Seven – Point

Agenda were all attempts made by various governments in the country one time or the other in order to curb the menace of poverty but all were unfruitful because of the increase birth rate which was not considered in all the poverty alleviation strategies. From this background analysis, the paper examines the effects of population growth and poverty in environment sustainability

Environmental sustainability

The environment refers to both the physical and social circumstances which surround people and have influence on them. It is both objective and subjective. This is because it includes water bodies and the life there in, land mass, forests, grasslands, deserts, animals and man himself and all the interactions that take place (Gana and Toba, 2015). It also refers to: all the natural endowment and those provided by man in his efforts to make life meaningful and comfortable. This means everything that affects man in anyway- land, water, air, trees, grasses and houses (Nwanne, 2013). The environment is basically, an aggregate of the physical and biological entities which support the existence of man in all ramifications (Adegoroye, 1997 cited in Nwanne, 2013). This encompassing importance of the environment is further underscored by the fact that it provides all life support systems with air, water and land as well as the materials for fulfilling all development aspirations of man (Lawanson, 2006). Relating it to sustainability is the recognition that the environment represents a wealth of resources which must be protected. This recognition as an aspect of current development agenda can be traced to the 1987 Bruntland Commission of the United Nations which ascribed sustainability to development and defined it as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Comprehensively therefore: Environment sustainability refers to the conservation, management and rational utilization of natural resources in such a way to maintain the integrity of each ecosystem, support all life, ensure the preservation of biodiversity and prevent environmental degradation (Gbenda, 2012). Environmental sustainability forms one of the pillars of sustainability development, the others being social sustainability and economic sustainability. It is an aspect of the development process which emphasizes the harnessing of natural and social resources with major considerations for continuity and the future.

The Concept of Poverty

Poverty is a state of being unable to provide for basic necessities of life. It therefore refers to the inability of an individual to attain the minimum standard of living. It can also be defined as a social condition characterized by inadequate access to basic human needs (food and non – food) to the sustenance of socially acceptable minimum standard of living in a given society. Some of these basic determinants of wellbeing include adequate food, shelter, portable water, Healthcare, education and employment opportunities (Akintola & Yusuf; 2001). Ajakaiye and Adeyeye (2011) conceptualize poverty as a function of education, health, child mortality and other demographic variables. Poverty to them is the availability or otherwise of the above parameters. In a nut shell poverty can be seen as a situation in which an individual is unable because of economic, social, political and psychological incapacitation, to provide himself and his family the barest basic necessities of life. There is no one cause or determinant of poverty. On the contrary, combination of several complex factors contributes to poverty. They include low or negative economic growth, inappropriate macroeconomic policies, deficiencies in the labour market resulting in limited job growth, low productivity and low wages in the informal sector, and a lag in human resource development. Obadan (1997) identified some factors as the

causes of poverty among which are; inadequate access to employment opportunities, inadequate physical assets, inadequate access to markets, destruction of natural resources, lack of power to participate in design of development programs and inadequate access to assistance for those living at the margin. On the consequences of poverty, Aku, Ibrahim, & Bulus, (2017) opined that there is general loss of confidence in a society stricken by poverty and this renders government policies ineffective. Poverty also results in increasing the fragility and vulnerability of members of society to external influences. Furthermore, poverty makes production remain largely subsistence due to lack of capital needed for expansion. Labor becomes intensive and marginal productivity remains low.

Poverty Alleviation Programs in Nigeria

In reaction to the horrendous poverty crisis in Nigeria, different intervention programs have been established by successive governments. Poverty alleviation strategies implemented so far in Nigeria have focused more on growth, basic needs and rural development approaches. However, Poverty alleviation programs in Nigeria are means through which the government aims to revamp and reconstruct the economy. The high incidence of poverty in the country has made poverty alleviation strategies important policy options over the years with varying results. Measures taken to combat poverty and promote development in the country actually started at the beginning of Nigeria's statehood (vanguard, 2015). This was achieved through the adoption of different development plans. However, literature on development in Nigeria have categorized government's efforts into two distinct time frames or eras of Structural Adjustment Programs (SAP). These include;

- Pre-SAP Era
- SAP Era

The Pre-SAP Era

During this pre Structural Adjustment Program era, poverty reduction was never direct, government only showed concern for poverty reduction indirectly. For example, the objectives of the first National Development Plan in Nigeria included the development of opportunities in health, employment and education as well as improvement of access to these opportunities. These objectives, if achieved could no doubt lead to poverty alleviation. Similarly, the Fourth National Development Plan, which appeared to be more precise in the specification of objectives that are associated with poverty reduction, emphasized increase in real income of the average citizen as well as reduction of income inequality, among other things (Ogwumike, 2001). During this era's national development plans, many of the programs which were put in place in Nigeria by the government (either wholly or in association with international agencies) had positive effects on poverty reduction although the target population for some of the programs was not specified explicitly as poor people or communities (Ogwumike, 2001). The policies of the Pre-SAP era, described as essentially ad hoc, included Operation Feed the Nation (OFN), Free and Compulsory Primary Education (FCPE), Green Revolution, Low Cost Housing, River Basin Development Authorities (RBDA), National Agricultural Land Development Authority (NALDA), Agricultural Development Program (ADP), Agricultural Credit Guarantee Scheme Strategic Grains Reserves Program (SGRP), Rural Electrification Scheme (RES) and Rural Banking Program (RBP) (Garba, 2006; Omotola,

2008:506; Chukwuemeka, 2009:406). Most of these programs were designed to take care of such objectives as employment generation, enhancing agricultural output and income, and stemming the tide of rural – urban migration, which no doubt affected poverty reduction. Despite some significant degree of success made by some of these programs, most of them could not be sustained. In fact, with time, many of them failed as a result of diversion from the original focus.

The SAP Era

Conscious policy effort by government towards poverty alleviation began in Nigeria during the era of the Structural Adjustment Program (SAP), the severe economic crisis in Nigeria in the early 1980s worsened the quality of life of most Nigerians. The government made a determined effort to check the crisis through the adoption of SAP. However, the implementation of SAP further worsened the living conditions of many Nigerians especially the poor who were the most vulnerable group. This made the government to design and implement many poverty alleviation programs between 1986 and 1993. Also, under the guided deregulation that spanned the period 1993 to 1998, more poverty reduction programs were put in place by government. These programs included the Directorate for Food, Roads and Rural Infrastructure (DFRRI), National Directorate of Employment (NDE), Better Life Program (BLP), People's Bank of Nigeria (PBN), Community Banks Program, Family Support programs (FSP) and Family Economic Advancement Program (FEAP) Garba, (2006), Eze (2009). Nonetheless, most of these poverty alleviation programs suffered the same fate as a recent government assessment showed. It found that they all failed due largely to the fact that: They were mostly not designed to alleviate poverty, they lacked a clearly defined policy framework with proper guidelines for poverty alleviation, they suffered from polity instability, political interference, policy and macroeconomic dislocations, they also lacked continuity, they are in most cases poorly implemented, they are characterized by corruption on the part of government officials and public servants.

Thus, despite these antipoverty measures, poverty has consistently been on the increase in Nigeria, showing the ineffectiveness of the strategies and programs. The policies of the pre-SAP and SAP eras obviously failed to eradicate poverty in Nigeria. During these periods, the poverty situation in Nigeria was steadily increasing. The failure of these measures has been attributed to lack of targeting mechanisms for the poor; political and policy instability; inadequate coordination of various programs; several budgetary, management and governance problems; lack of accountability and transparency; and lack of mechanisms for the sustainability of the programs Obadan (2001); Oshewolo (2010)

2. APRAISAL OF THE POVERTY ALLEVIATION PROGRAMS (1999 – 2010)

With the birth of democracy and inauguration of Nigeria's fourth republic in 1999, it was estimated that about 70% of Nigerians lived in poverty (Ogwumike, 2001). The Poverty Alleviation Program (PAP) came on board as an interim antipoverty measure (Nwaobi, 2013). As observed by Chukwuemeka (2009), the program was targeted at correcting the deficiencies of the past efforts of alleviating poverty through the objective of providing direct jobs to 200,000 unemployed people Obadan (2001). Despite the introduction of the Poverty Alleviation Program, poverty incidence in Nigeria remained perpetually high. Following the ineffectiveness

of the program, the government came up with the National Poverty Eradication Program (NAPEP) (TVC News, 2019).

The National Poverty Eradication Program (NAPEP)

As revealed in the approved blueprint for the establishment of National Poverty Eradication Program (NAPEP), the program serves as a central coordination point for all anti-poverty efforts from the local government level to the national level by which schemes would be executed with the sole purpose of eradicating absolute poverty. This is the only government embarking on eradication; a shift from the traditional concept of alleviation. According to Elumilade, Asaolu and Adereti (2016), NAPEP has been structured to integrate four sectorial schemes which include:

- Youth Empowerment Scheme (YES)
- Rural Infrastructure Development Scheme (RIDS)
- Social Welfare Service Scheme (SOWESS) and
- Natural Resources Development and Conservation Scheme (NRDCS).

On the whole, these schemes were designed to spearhead government's ambitious program of eradicating absolute poverty with a take-off grant of N6 billion approved for it in 2001. The difference between NAPEP and past poverty reduction agencies is that it is not a sector project implementation agency but a coordination facility that ensures that the core poverty eradication Ministries were effective. It would only intervene when necessary, under its secondary mandate which gives it the right to provide complementary assistance to the implementing ministries and par strata nationwide. Although NAPEP appears to be well crafted, but the prevalence of poverty in Nigeria and the various dimensions it has taken is on the increase

The National Economic Empowerment and Development Strategy (NEEDS)

Also worth mentioning is the National Economic Empowerment and Development Strategy (NEEDS) described as a medium term strategy. The implementation of NEEDS rests on four major strategies. First, it aims at reforming government and institutions by fighting corruption, ensuring transparency and promoting rule of law and strict enforcement of contracts. Another strategy is to grow the private sector as the engine of growth and wealth creation, employment generation and poverty reduction. Third, it seeks to implement a social charter with emphasis on people's welfare, health, education, employment, poverty reduction, empowerment, security, and participation. The fourth key strategy is value reorientation (Federal Government of Nigeria, 2004:4; Omotola, 2008; Chukwuemeka, 2009). NEEDS is a national framework of action, which has its equivalent at the state and local government levels as State Economic Empowerment and Development Strategies (SEEDS) and Local Economic Empowerment and Development Strategies (LEEDS) respectively (AFPODEV, 2006). The implementation also stresses collaboration and coordination between the federal and state governments, donor agencies, the private sector, civil society, NGOs and other

stakeholders (Action Aid Nigeria, 2009). As a home-grown strategy, NEEDS has been described as the Nigerian version of the Millennium Development Goals (MDGs).

3. THE SEVEN-POINT AGENDA

The civilian administration in Nigeria that started in 2007 under the leadership of late President Umar Musa Yar'Adua proposed a Seven-Point Agenda of development. The agenda later became the policy thrust of the administration. The main objectives and principles of the agenda includes improving the general well-being of Nigerians and making the country become one of the biggest economies in the world by the year 2020. The agenda has:

- Critical infrastructure as the first key area of focus. This includes power, transportation, national gas distribution and telecommunication.
- The second focus is to address the existing issues in the Niger Delta.
- Food Security constitutes the third priority area.
- The fourth area is human capital development.
- The land tenure reform is the fifth key area.
- The sixth key area is national security
- While the seventh area focuses on poverty alleviation and wealth creation.

Although the Seven-Point Agenda appears to have a broad coverage to address the various development challenges facing the country, it has been widely criticized by development experts.

The wide ambit of the program may not allow for proper monitoring and effective implementation. Again resource constraints may hamper the capacity of the government to productively address the wide areas covered by the program (Oshewolo, 2010). Nevertheless, as laudable as these programs appear, poverty still remains endemic and pervasive in Nigeria. What then are the challenges? According to Garba (2016), “all the poverty alleviation initiatives in Nigeria since independence have yielded very little fruit”. He added that the programs were mostly not designed to alleviate poverty; they lacked clearly defined policy framework with proper guidelines for poverty alleviation; they suffer from political instability, interference, policy and macroeconomic dislocations; and are riddled with corruption, political deception, outright kleptomania and distasteful looting. It must also be stated that lack of continuity and shift in approach trailed poverty alleviation programs in Nigeria. Each subsequent administration came with a different idea or no idea at all. Poverty reduction programs became more ‘regime specific’ because there was hardly any continuity with those initiated by previous governments. The challenges above have made government’s policies to be largely unproductive

Population Growth in Nigeria

Nigeria is one of the most densely populated countries in Africa, with approximately 200 million people in an area of 923,768 km² (356,669 sq mi), and is also the country with the largest population in Africa and the seventh largest population in the world (Hartl, 2017). Most of the population is a young population, with 42.54% between the ages of 0–14 (Fisher, 1999). There is also a very high dependency ratio of the country at 88.2 dependents per 100 non-dependents.

Nigeria's population has been increasing rapidly for at least the last 5 decades due to very high birth rates, quadrupling its population during this time. Growth was fastest in the 1980s, after child mortality had dropped rapidly, and has slowed slightly since then as the birth rate has declined slightly. According to the 2017 revision of the World Population Prospects the total population was 185,989,640 in 2016, compared to only 37,860,000 in 1950. The proportion of children under the age of 15 in 2010 was 44.0%, 53.2% was between 15 and 65 years of age, while 2.7% was 65 years or older (Hartl, 2017). There is a large population momentum, with 3.2 percent growth rate leading to the projected population. Abuja has not successfully implemented family planning programs to reduce and space births because of a lack of political will, government financing, and the availability and affordability of services and products, as well as a cultural preference for large families. Increased educational attainment, especially among women, and improvements in health care are needed to encourage and to better enable parents to opt for smaller families (Hartl, 2017).

DATE	VALUE	CHANGE, %
2019	200,964,000	2.60 %
2018	195,874,740	2.62 %
2017	190,873,311	2.64 %
2016	185,960,289	2.66 %
2015	181,137,448	2.68 %
2014	176,404,902	2.70 %
2013	171,765,769	2.71 %
2012	167,228,767	2.72 %
2011	162,805,071	2.71 %
2010	158,503,197	2.71 %
2009	154,324,933	2.70 %

2008	150,269,623	2.62%
------	-------------	-------

Source: Nigeria Population Estimates and Projection (TVC News, 2019)

Analysis of Population growth and poverty in environmental Sustainability

In 2019, population for Nigeria was 200 million persons. Over the last 50 years, population of Nigeria grew substantially from 56 million to 200 million persons rising at an increasing annual rate that reached a maximum of 3.08% in 1978 and then decreased to 2.60% in 2019.

The total population in sub-Saharan Africa is projected to increase to almost one billion people, making it the most populated region outside of South-Central Asia (gsociology.icaap.org. (2019). According to the United Nations, the population of Nigeria will reach 411 million by 2050. Nigeria might then be the 3rd most populous country in the world. In 2100, the population of Nigeria may reach 794 million. While the overall population is expected to increase, the growth rate is estimated to decrease from 1.2 percent per year in 2010 to 0.4 percent per year in 2050 (gsociology.icaap.org. (2019). The birth rate is also projected to decrease from 20.7 to 13.7, while the death rate is projected to increase from 8.5 in 2010 to 9.8 in 2050. Life expectancy is all expected to increase from 67.0 years in 2010 to 75.2 years in 2050. By 2050, 69.6% of the population is estimated to be living in urban areas compared to 50.6% in 2010 (Abdulahi, 2019).

Overpopulation precipitates socio-economic and environmental problems which reinforce each other. Continued application of technology to meet the needs of growing populations may create major problems of environmental pollution and soil and water degradation. Increased use of pesticides and chemical fertilizer, large scale irrigation schemes, the reclamation of marginal lands, clearing of forests, and unsustainable overexploitation of natural resources in an effort to meet the growing needs of teeming populations may have serious ecological consequences that might threaten the stability of natural ecosystems and the environment. Relentless increase in population may accentuate the pressure of rural-urban migration. In the cities, the inability to invest in gainful employment due to the capital-intensive bias of industrial technology, coupled with the natural increase of urban populations themselves, may lead to massive unemployment, squalor, crime and social unrest. Since ecotourism depends on the environment, environmental degradation occasioned by overpopulation can impact negatively on its potential to contribute meaningfully to sustainable development (Paulinus, 2013).

4. CONCLUSION

The complex and dynamic effect of population and poverty towards environmental sustainability in Nigeria is mediated by a number of socio-economic, cultural, political, and developmental variables which have relative significance that varies from one context to another. Community population density is high in relation to natural threshold of resources like air, water and land. As such, there is constant interruption with the ecosystem in the name of farming, exploration of oil and gas, introduction of non-degradable materials into the environment by way of plastics and other industrial quests for survival which denatures and degrades the environment. Instead of imposing restrictions and limits, government should find ways of balancing population growth rate

in line with the available resources as well as offer financial support and incentives to innovators who are solving the problems of plastics and poor environmental health hazards to enhance environmental sustainability.

5.RECOMMENDATIONS

From the study, it is recommended that;

- (i) Government should enact environmental laws and policies that will enhance afforestation safeguarding.
- (ii) Requirements for recovery and recycling should apply only to one-use, disposable plastics such as plastic packaging. In other words, Biodegradable plastics should be exempted from the regulations to sustain environmental sustainability, as these plastics are environment friendly and will not persist any threat to the environment
- (iii) The government should offer financial incentives for producers engaged in the improvement of recycling infrastructure and in the expanding markets for materials made of recycled plastics
- (iv) Government should create awareness on the effects of environmental sustainability through doing what will not destroy the environment.
- (v) Government should establish an available mechanism to stabilize population so as to protect the environment.

REFERENCES

- Abdullahi, M. S. (2019). Three things Nigeria must do to end extreme poverty. *We Forum*. <https://www.weforum.org>.
- Action aid Nigeria (2009) ,*Country Strategy Paper 2009-2013. Fighting Poverty in the Midst of Plenty II.* <http://www.Actionaidnigeria.org/index.php?plange=1>
- Ajakaiye D Olu & V.A Adeyeye (2001) “The Nature of Poverty in Nigeria. *Technical Report, NISER*, Ibadan.
- Akintola, J. O. & Yusuff, J. M. (2001). Socio – economic analysis of poverty levels among rural dwellers in Kwara State, Nigeria” *International Journal of Environment and Development*, 5(2): 42-48.
- Aku, P.S, Ibrahim, M.J. & Bulus, Y.D (2017). Perspective on Poverty Alleviation Strategies in Nigeria. *In Proceedings of the Nigeria Economic Society Annual Conference on Poverty Alleviation in Nigeria 1997*. Ibadan: NES: 41-54
- Chukwuemeka, E. E. O. (2009). ‘Poverty and the Millennium Development Goals in Nigeria: The Nexus’, *Educational Research and Review* 4 (9): 405-410.
- Cleaver, S. & Schreiber H, (1994) Reversing the Spiral; the Population, Agricultural, and Environmental Nexus in Sub-Saharan Africa. Washington, D. C.: World Bank.
- Cropper, M., and C. Griffiths (1994) The Interaction between Population Growth and Environmental Quality. *American Economics Review* 84, 250–254.
- Dasgupta, P., S. Levin, & J. Lubchenco (2000). Economic Pathways to Ecological Sustainability, *Bioscience*, 50 (4):339-45.
- Ehrlich, P. R., and J. P. Holdren (2016) The Impact of Population Growth. *Science* 171, 1212–1217.

- Elumilade, D.O, Asaolu, T.O., & Adereti, S.A. (2006). Appraising the Institutional Framework for Poverty Alleviation Programmes in Nigeria, *International Research Journal of Finance and Economic*, 3: 66-77
- Eze, C. M. (2009). The Privatized State and Mass poverty in Nigeria. The Factor of Economic Development Programme since 1980s, *African Journal of Political Science and International Relations*, 3(10): 443-450.
- Federal Government of Nigeria. (2004). Nigeria: National Economic Empowerment Development Strategy (NEEDS). NEEDS Secretariat and National Orientation Agency. Abuja, Nigeria.
- Fisher, R. A. (1999). *The Genetical Theory of Natural Selection*. Oxford University Press
- Gana, J. & Toba, P. (2015). Environmental pollution and sustainability. *Journal of Research in Environmental Science and Toxicology*. 4(1): 1-9.
- Garba, A. (2006). Alleviating Poverty in Northern Nigeria. A paper presented at the annual convention of Zumunta Association, Minneapolis, MN, USA. July 28-29.
- Gbenda, J. (2012). A keligo-cultural respective on ecological sustainability in Nigeria. *African Dynamics of Social Science Research*. 2 2(2): 1-8.
- gsociology.icaap.org. (2019). *World demographic trends*. Retrieved 18 July.
- Hartl, D. (2017). *Principles of Population Genetics*. Sinauer Associates. p. 45.
- Hummel, D., Lux, A., Sherbinin, A. and Adamo, S.B. (2019). Theoretical and Methodological Issues in the Analysis of Population Dynamics and Supply Systems, *PERN Background Paper on PE Theory & Methods*. Online available at: http://www.populationenvironmentresearch.org/papers/PERN_P-E_theory-methods_paper_final.pdf
- Knudsen, L. (2006). *Reproductive Rights in a Global Context*. Vanderbilt University Press. 2.
- Larson, K. & Halfon, T. (2010). Family income gradients in the health and health care access of US children. *Maternal Child Health Journal*, 14(3), 332–342.
- Lawanson, T. (2006). Challenges of sustainability and urban development in Nigeria: Reviewing the Millennium Development Goals. *African Insight*. Retrieved from <https://scholr.google.com/citations>.
- Marcoux, A. (2009). Population and environmental change: from linkages to policy issues. *Sustainable Development Department, Food and Agricultural Organization of the United Nations (FAO)*. Online available at: <http://www.fao.org/sd/WPdirect/WPre0089.htm>.
- Meadows, D. L., Behrens III, W. W., Meadows, D. H., Naill, R. F., Randers, J. & Zahn, E. K. O. (1974). *Dynamics of Growth in a Finite World*, Wright-Allen Press, Massachusetts, US.
- Meadows, D. L., Behrens III, W. W., Meadows, D. H., Naill, R. F., Randers, J. & Zahn, E. K. O. (1974,). *Dynamics of Growth in a Finite World*, Wright-Allen Press, Massachusetts, US.
- Nwaobi, B. (2013). Media, environmental sustainability and national development in Nigeria. *New Media and Mass Communication* 18: 14-30.
- Ogidi, R. C. (2018). *Inferential statistics for psychology, education, and other behavioural sciences*. Pearl Publishers International LTD.
- TVC Breakfastnews (2019). World poverty clock. www.youtube.com/TVCnews.TV.
- Vanguard (April, 2015), *Vanguard Nigeria News*, www.Vanguardng.com/2015/05/22.6mNigerian-unemployed