

OVERPOPULATION: THE IMPETUS OF ENVIRONMENTAL DEGRADATION IN NIGERIA

John, Wajim

Department of Sociology, Federal University, Wukari,
200 Katsina-Ala Road, P.M.B 1020 Wukari, Nigeria

ABSTRACT

This study on overpopulation: the impetus of environmental degradation in Nigeria is aimed at establishing the extent overpopulation has impacted on the environment and biodiversity. Human overpopulation occurs if the number of people in a group exceeds the carrying capacity of the region occupied by the group. The term often refers to the relationship between the entire human population and its environment. Population impacts on the environment primarily via the use of natural resources and production of wastes and is associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on arable land. Environmental degradation is the deterioration of the environment through human activities resulting in the depletion of resources, contamination of air, water, and soil, the destruction of the ecosystems and the extinction of flora and fauna (plants and animals) components. This could also be any disturbance capable of producing harmful effects on the environment which could be social, economic, technological and institutional, and consequently producing results that are undesirable for present and future generations. Qualitative secondary data sources and qualitative analysis were used for the purpose of this paper. Amongst other recommendations, the paper recommends that government should make policy in respect to the expected number of children per couple. In addition to this, population education should be carried out to educate couples on the need for small family size and consequences of large family size.

Keywords: Biodiversity, environment, environmental degradation, overpopulation and Nigeria

INTRODUCTION

Nigeria as a multinational state with the total land area of 923,768 square kilometres has an estimated population of 190.9 million people in the year 2017, while in the year 1960 the country's population was estimated at 45.1 million people (World Bank, 2017). The aforesaid estimates indicate that there is an exponential growth in the country's population. Rapid population growth is one of the major causes of environmental degradation in the world

especially developing countries where poverty and unemployment are the order of the day. The increasing population and the environmental corrosion face the challenge of sustainable development. The existence or the absence of favourable natural resources can facilitate or retard the process of socio-economic development. The three basic demographic factors of births, deaths and human migration produce changes in population size, composition, distribution and these changes give rise to cause and effect (Sarbapriya R. *et al*, 2011). Population growth is contributing to many serious environmental calamities such as pressure on land, land degradation, forests, habitat destruction and loss of biodiversity. The final outcomes of this are air pollution, global warming, climate change, water scarcity and water pollution. The United Nations has expressed concern on continued excessive population growth in sub-Saharan Africa. As of June 18, 2014 the world's human population is estimated to be 7.17 billion by the United States Census Bureau, and over 7 billion by the United Nations (Zinkina and Korotayev, 2014). Human population is expected to reach between 8 and 10.5 billion between the year 2040 and 2050 (World Population Prospects, 2010). With this growth comes an increase in demand for land, food, water, energy and other resources. As human numbers grow species and their habitat diminish. Fred, (2009) asserts that waste and over-consumption, especially by wealthy nations, is putting more strain on the environment than overpopulation. Changing consumption pattern has led to rising demand for energy. High rates of extinction are quickly reducing biodiversity (the variety of all forms of life throughout an ecosystem) especially in areas of the world with high human population density and growth. If the world population continues to multiply, the impact on environment could be devastating. Poverty is amongst the consequences of population growth and its life style play major role in depleting the environment either its fuel demands for cooking or for earning livelihood for their survival.

CONCEPTUAL EXPLANATIONS:

Overpopulation, Environment and Environmental Degradation

It is undisputable truism that we live in the environment and are wholly dependent on it for survival. Our environment also forms an integral part of the universe that subsists as the main component of the earth capital. Human engage in various exploitative activities in the attempt to harness the available scarce resources to their advantage. Unfortunately, the earth exists as a whole system that is self-sufficient in itself and maintains the biodiversity which is a fragile equilibrium or balance among all its constituent elements which include the troposphere (atmosphere), hydrosphere (water or aquatic) and lithosphere (soil, rocks and ocean sediments). However, human exploitative activities especially with regard to the use of renewable and non-renewable resources adversely affect the earth (Ezeh, 2012).

Human overpopulation occurs when the number of people in a group exceeds the carrying capacity of the region or ecological niche occupied by the group. Overpopulation can result from an increase in births, a decline in mortality rates, and an increase in immigration. It also occurs when population exceeds its sustainable size within a particular environment. The term often refers to the relationship between the entire human population and its environment, the Earth or to smaller geographical areas such as countries. Leadley, (2010) unveils that overpopulation can result from an increase in births, a decline in mortality rates, an increase in immigration, or an unsustainable biome and depletion of resources. It is possible for very sparsely populated areas to be overpopulated if the area has a meagre or non-existent capability to sustain life. According to the World Bank (1991) the environment is the natural and social conditions surrounding all mankind including future generations. Bayode, Emmanuel and Sogbon (2011) articulated that environment is made up of biophysical components and processes of natural environment of land, water and air. Expanding the above definition environment would also include all layers in the atmosphere, inorganic and organic matters, socio-economic components and processes of human endeavours. The elements mentioned here have a symbiotic relationship and any distortion of their natural state could affect economic activities. Emmanuel and Alakinde (2006) asserted that land and associated resources, structures, sites, human health, nutrition and safety are also inclusive. The environment can justifiably be said to be the natural habitat of man with several components within which various kinds of activities and processes occur. Environment was further described by the National Conservation and Environment Protection Act (1987) to include the physical factors of the surrounding of human beings, land, soil, water, atmosphere, climate, sound, odour, taste and the biological factors of animals and plants. The Federal Environmental Protection Agency Act (1992) sees environment to include water, air, land, and all plants and human beings, or animals living there in and the interrelationships which exists among these or any of them.

In other word, environmental degradation is the corrosion or deterioration of the environment via human activities resulting in the depletion of resources, contamination of air, water, and soil, the destruction of the ecosystems and the extinction of flora and fauna. This could also be any disturbance capable of producing harmful effects on the environment that is social, economic, technological and institutional activities, and consequently producing results that are undesirable for present and future generations. It occurs when earth's natural resources (water, air, soil) are depleted. Some factors that could affect the environment are urbanisation, population growth, economic growth and activities, intensification of agricultural activities, increase in the use of energy and transportation.

Causes of Overpopulation in Nigeria

Overpopulation in Nigeria is caused by the following:

- Traditional beliefs
- Religious beliefs
- Cultural norms
- Illiteracy

Causes of Environmental Degradation in Nigeria

Environmental disturbances are based on the following causes:

- Population growth
- Poverty
- Unemployment
- Urbanization
- Economic growth
- Increase in transportation system
- Increase in agricultural activities
- Increase in energy use (charcoal, fuel wood, pole)

THEORETICAL BASE

Neo-Malthusianism and New Ecological Paradigm (NEP)

Neo-Malthusianism

Hardin (1968) reformulated Malthusian theory and he was an American ecologist who warned on the dangers of human overpopulation. He called attention to the damage that innocent actions by individuals can inflict on the environment. He asserts that abstract population increase and individual selfishness or self-interest causes famine and at a larger scales causing degradation of common pool resources such as the air, water, forest, the oceans, or general environmental conditions. Hardin offered privatization of resources or government regulation as solutions to environmental degradation caused by tragedy of the commons conditions. The application of Neo-Malthusian theory as it relates to environmental degradation today derives from later Malthusian scholars rather than directly from the works of Malthus himself. This shows that the environmental resources in the society are mostly accessed and exploited by those in the lower class who constituted the major group in most societies, and are ever willing to work for the few rich so as to earn livelihood. With the view of Hardin, increase in human's population is one among the major causes of environmental degradation due to the fact that poverty is a resultant effect of population growth. Because as human's population tends to grow exponentially, the

need for more environmental resources will also be demanded in order to satisfy humans needs which are insatiable.

The Neo-Malthusian theory has been criticized particularly by political scientist Elinor Ostrom, and economists Amartya Sen and Ester Boserup. Even though much of mainstream journalism considers Malthusianism the only view of environmentalism, most sociologists disagreed with Malthusianism since social organizational issues of environmental degradation are more demonstrated to cause environmental problems than abstract population or selfishness per se. For examples of this critique, Ostrom in her book governing the Commons: The Evolution of Institutions for Collective Action (1990) argued that instead of self-interest always causing degradation, it can sometimes motivate people to take care of their common property resources. To do this they must change the basic organizational rules for resources use. Amartya Sen argues in his book Poverty and Famines: An Essay on Entitlement and Deprivation (1980) that population expansion fails to cause famines or degradation as Malthusians and Neo-Malthusians argue. He argues that famines and environmental degradation would only occur in non-functioning democracies or unrepresentative states.

New Ecological Paradigm

In the 1970s, The New Ecological Paradigm (NEP) conception critiqued the claimed lack of human- environmental focus in the classical sociologists and the Sociological priorities their followers created. This was critiqued as the Human Exceptionalism Paradigm (HEP). The HEP viewpoint claims that human-environmental relationships were unimportant sociologically because humans are 'exempt' from environmental forces via cultural change. This view was shaped by the leading Western worldview of the time and the desire for Sociology to establish itself as an independent discipline against the then popular racist-biological environmental determinism where environment was all. In this HEP view, human dominance was felt to be justified by the uniqueness of culture, argued to be more adaptable than biological traits. Furthermore, culture also has the capacity to accumulate and innovate, making it capable of solving all natural problems. Therefore, as humans were not conceived of as governed by natural conditions, they were felt to have complete control of their own destiny. Any potential limitation posed by the natural world was felt to be surpassed using human ingenuity. Research proceeded accordingly without environmental analysis. In the 1970s, sociological scholars Riley Dunlap and William R. Catton, Jr. began recognizing the limits of what would be termed the Human Exemptionalism Paradigm. Catton and Dunlap (1978) suggested a new perspective that took environmental variables into full account. They coined a new theoretical outlook for Sociology, the New Ecological Paradigm, with assumptions contrary to HEP. The NEP recognizes the innovative capacity of humans, but says that humans are still ecologically interdependent as with

other species. The NEP notes the power of social and cultural forces but does not profess social determinism.

Instead, humans are impacted by the cause, effect, and feedback loops of ecosystems. The Earth has a finite level of natural resources and waste repositories. Thus, the biophysical environment can impose constraints on human activity.

POPULATION GROWTH AND ENVIRONMENTAL DEGRADATION

Apart from Population being a germane cause of development, it is also a major impetus of environmental degradation when it exceeds the threshold limits of the support systems. Except the relationship between the multiplying population and the life support system can be stabilized, development programs, howsoever, innovative are not likely to yield desired results. Population impacts on the environment primarily through the use of natural resources and production of wastes and is associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on arable land. Human population issues are extremely significant when it comes to our way of life and our future on this planet. In view of Sarbapriya R. *et al*, (2011) Poverty is said to be both cause and effect of environmental degradation. The circular nexus between poverty and environment is an extremely complex phenomenon. Inequality may foster unsustainability because the poor, who rely on natural resources more than the rich, deplete natural resources faster as they have no real prospects of gaining access to other varieties of resources. Moreover, degraded environment can accelerate the process of impoverishment, again because the poor depend directly on natural assets. Lack of opportunities for gainful employment in villages and the ecological stresses is leading to an ever-increasing movement of poor families to towns. Mega cities are emerging, suburbia and urban slums are expanding. Such rapid and unplanned expansion of cities has resulted in degradation of urban environment. It has widened the gap between demand and supply of infrastructural services such as energy, housing, transport, communication, education, water supply and sewerage and recreational amenities, thus depleting the precious environmental resource base of the cities. The result is the growing trend in deterioration of air and water quality, generation of wastes, the proliferation of slums and undesirable land use changes, all of which contribute to urban poverty.

Direct impacts of agricultural development on the environment arise from farming activities which contribute to soil erosion, land Stalinization and loss of nutrients. The spread of green revolution has been accompanied by over exploitation of land and water resources, and use of fertilizers and pesticides have increased many fold. Shifting cultivation has also been an important cause of land degradation. Leaching from extensive use of pesticides and fertilizers is an important source of contamination of water bodies. Intensive agriculture and irrigation contribute to land degradation particularly Stalinization, alkalization and water logging.

Environmental degradation is a result of the dynamic inter-play of socio-economic, institutional and technological activities. Environmental changes may be driven by many factors including economic growth, population growth, urbanization, intensification of agriculture, rising energy use and transportation. Poverty still remains a problem at the root of several environmental problems (Sarbapriya R. *et al*, 2011).

CONSEQUENCES OF OVER POPULATION ON ENVIRONMENT

With the growing population, degradation increases. Expanding of urban areas, race for food and water resources, and lack of housing and employment opportunities arise as consequences of overpopulation. Burning of fossil fuels and unsustainable use of other natural resources provided developed countries with a “cheap ride to growth” (Goldin, 2014), but left undeveloped nations with an excessive demand for that resources which are taken. Since over population involves undesirable increase in the number of people in Nigeria, therefore its effect on the economy, resources and our environment is also undesirable. Generally speaking, the recent rapid increase in human population over the past three centuries has raised concerns that the planet may not be able to sustain present or larger number of inhabitants. United Nations (Inter Academy Panel Statement on Population Growth, 2013). Nigeria is said to have a land mass of nine hundred and twenty three thousand, seven hundred and sixty-eight square kilometres (923,768km²), this is from the report from Federal Ministry of Lands (2013). However, the population of Nigeria according to National Population Census (2006) stood at one hundred and forty three million, one hundred thousand people (143,100,000) (NPC, 2006). The projected estimate of Nigeria is about one hundred and sixty million people (160,000,000) according to United Nation report (2011). What this paper is trying to establish here is that the landmass of the country remains static while the population continues to increase astronomically. As the land mass of Nigeria does not increase nor grow in size while the population continues to grow in number, then there is justification to say that Nigeria is over populated.

Many other assertions abound to indicate Nigeria’s over population. For instance the Inter Academy Panel Statement on Population Growth (2013) stated that many environmental problems such as rising levels of atmospheric carbon dioxide, global warming, and pollution are aggravated by the population expansion. We are experiencing these weather conditions in Nigeria which justifies the statement of over population in the country. Other problems associated with over population, the world over which, Nigeria is inclusive are increased demand for resources such as fresh water and food, starvation and malnutrition, faster consumption of natural resources that the rate of regeneration (e.g. fossil fuels) and a deterioration in living conditions. Human over population equals over consumption.

Over population in Nigeria can be attributed to so many causal factors. It is said that when human population grows rapidly beyond the level of available resources, it means that the country is over populated. According to the World Population Prospects (2009), the root causes of over population are multifaceted and complex. From a historical perspective, technological revolutions have caused population explosions. United Nations World Population Report (2010) states that there have been three major technological revolutions:

- The tool-making revolution
- The agricultural revolution and
- The industrial revolution

The aforementioned technological revolutions all allowed humans more access to food, resulting in subsequent population explosions. For example, the use of tools, such as bow and arrow, allowed primitive hunters greater access to high energy foods. Similarly, the transition to farming many years ago greatly increased the overall food supply, which was used to support people. Thirdly, food production further increased with the industrial revolution as machinery, fertilizers, herbicides, and pesticides were used to increase land under cultivation as crop yields. Like bacteria that multiply in response to increase food supply, human beings have increased their population as soon as food became more abundant as a result of technological innovations. Environmental consequences of over population in Nigeria include;

Inadequate Fresh Water

According to the United Nations Food and Population Agency (UNFPA, 2010), Inadequate fresh water for drinking is an indication of too many in the economy as it is in Nigeria today. Available sources of drinking water e.g. pipe born water, springs and streams in rural communities are no more there or are no longer good for drinking due to the activities of too many people living in and around the area. People have now resorted to bore-hole water for drinking and other purposes which is not good enough as a source of drinking water (World Health Organization Report on Sources of Drinking Water 2011).

Depletion of Natural Resources

Inyang-Abia (2008) articulates that where the population of people is growing rapidly in a given area without a corresponding principle of environmental sustainability, the tendency is for the people to resort to indiscriminate exploitation of the environmental resources to sustain their livelihood.

Deforestation of Natural Resources

Deforestation and the consequent loss of ecosystem is a common feature in an over populated region or country like Nigeria (Bisong, 2004).

Pollution

Where there is noticeable rapid increase in population growth, there is the tendency for pollution of all sorts including land, air and water pollution (Bisong, 2004). The activities of the inhabitants of the area or region e.g. Nigeria for instance, crazing of animal for human consumption noticeably in the northern part of the country encourages pollution and desertification. Excavation of the earth for solid mineral e.g. coal in the eastern states of Nigeria, pollutes the land and also deplete the soil. Sources of water and the underground

Water gets contaminated through human exploration for resources to meet the demands for technological development in Nigeria. Petroleum exploration and use of chemical for fishing pollute the waters (Bisong, 2004).

Poverty

Obot (2008) asserted that poverty can be viewed as a major enemy to environmental conservation "It forces man to fall back on nature". This leads to all forms of resources exploitation and environmental degradation. Obot (2008) opines that wherever and whenever the population of human is greater than the resources available to the inhabitants of that environment, man tends to be blind and hardened against any principle of conservation and preservation. It is apparent that poverty also exerts its effects on poor adults in terms of such conditions as inferior and crowded living quarters reduced occupational opportunities and limited access to other social services. According to Inter Academy Panel Statement (IAPS) (2013), the low level capital formation in an under-developed economy such as Nigeria is due to both the weakness of the inducement (incentive) to invest and to low propensity and capacity to save. For instance in Nigeria economy, the low level of per capita income limits the size of the market demand for manufacturing output with weakness of the inducement to invest. The low level of investment also arises as a result of the lack of dynamic entrepreneurship.

Starvation

It is obvious that in economy where over population or population growth is rapid, the tendency is that the individual families shall run short of the capacity to feed the teaming population of their families. The means of production e.g. land, etc will be limited and the country shall be seen to be lacking in basic food items as it is presently the case in Nigeria. In Nigeria prices of commodities like rice, beans, millet, etc have gone up beyond the reach of "common man" (Birdstal, 2007).

Low life Expectancy

It is true that where the population growth rate is higher than the resources, the life expectancy of the people is bound to be low or drop (Obot, 2008). It is said that good and better condition of life is dependent on availability of money. In an economy of a very high density of population, without the corresponding equitable resources, life expectancy shall be low. For instances, health facilities may be inadequate to cater for the health needs of the populace. The consequences are that the people will die indiscriminately as a result of diseases, malnutrition, etc. Crump (2006) asserts that in a prevalent over population economy, the long term survival of human existence stands threatened.

Conflict as a Result of Scarce Resources

In Nigeria today, we are facing series of inter and intra communal conflicts. The reason may be that the resources are not enough to equate with the growth rate of our population. People clash with each other over farm land, forest resources, watershed, etc. This situation is a common feature in our populated area in Nigeria. The environment is static while population continues to increase. As people are unable to get what they desire because these things are scarce, they resort to fighting in order to get these things by all means (Birdstal, 2007). In Nigeria, significant increases in human population occur as a result of birth rate exceeding the death rate for a long time now. Traditionally, the fertility rate is strongly influenced by cultural and social norms that are rather stable and therefore slow to adapt to changes in the social, technological, or environmental conditions. According to United Nations (2010) report on the population growth in Nigeria, improved sanitation, child immunizations, and other advances in medicine have allowed more newborns to survive. Prior to these changes, seven out of ten children died before reaching reproductive age, while today about 95% of newborns in Nigeria reach the age of adulthood (United Nations Report, 2010). According to Obot (2008), traditional beliefs, cultural norms, religious beliefs and illiteracy are the causes of over population in Nigeria.

EFFECT OF OVERPOPULATION ON BIODIVERSITY

Population is recognized as an indirect driver of biodiversity loss, as human demands for resources like food and fuel play a key role in driving biodiversity degradation. This happens primarily through the conversion of ecosystems to food production. Household demographic factors, such as household size, have important implications for resource consumption, degradation of ecosystems when wilderness is converted to agricultural land to meet the needs of increasing human population (Ridley, 1999). Agricultural land expansion is the most dominant driver for habitat loss, which, combined with unsustainable forest management, contributes to the greatest cause of species moving closer towards extinction. According to Roberts, (2012)

Urbanization is also associated with species loss. With more than half of the world's population now living in urban areas, urban sprawl has led to the disappearance of many habitats. Urbanization spurs consumption, increasing the demand for food and energy and thereby increasing pressures on ecosystems. With the majority of population growth expected to take place in urban areas, there are indications that this pressure on biodiversity will be sustained, if not compounded. Other activities associated with urbanization, such as infrastructure and industrial developments, are also important contributors to habitat loss. Conversion of habitats, over-exploitation of resources, pollution, and climate-change are four drivers which directly lead to biodiversity loss. However, intermediate factors such as population growth can exacerbate the pressure caused by the direct drivers. Continued Population growth will interact with the direct drivers to create multiple pressures on biodiversity and ecosystems. Population size, growth and density are often regarded as important factors in explaining the loss of species (Gregory, 2002). Cormac (2009) view that Over-exploitation and habitat loss as a result of population and other pressures is likely to contribute to a high risk of extinction of plants and animals. This is especially true in parts of the world where people are heavily dependent on them for livelihoods.

Areas of rapid population growth overlay those with high numbers of threatened and vulnerable plant species. Hays (1998) maintain that human population size, growth, density and migration are underlying causes of biodiversity loss. Global population is projected to grow to anywhere between 8 billion and 11 billion by the middle of the century, with much of the growth expected to take place in the humid tropics whose ecosystems harbour the planet's richest forms of biodiversity. Increased demand for goods and services to meet the needs of a growing population will undoubtedly exert more pressure on the components of biodiversity - ecosystems, genes and species. Slowing population growth will not only ease off pressure on biodiversity, but will also empower women and their families (Widjojo, 2006). As observed by Cincotta and Engelman (2000) Biodiversity worldwide continues to deteriorate, despite an increase in conservation efforts. Biodiversity loss varies among regions, and affects genes, species and ecosystems. Trends in the average size of species vary greatly between regions, according to the Living Planet Index, which monitors abundance of the world's vertebrates and offers insights into which habitats or ecosystems have species that are declining rapidly. Some species of birds and mammals used for food and medicine are facing a greater extinction risk. Lewis (2007) said that terrestrial ecosystems, which contain the majority of the world's known plant and animal species, are being rapidly destroyed. The same holds for inland water ecosystems, including wetlands, which have long been declining.

Highly valuable marine and coastal ecosystems, including mangroves, sea grass beds, salt marshes and shellfish reefs, continue to be threatening by degradation. Eighty percent of the world's fish stocks have either been fully exploited or overexploited. Population is recognized as

an indirect driver of biodiversity loss, as human demands for resources like food and fuel play a key role in driving biodiversity degradation. This happens primarily through the conversion of ecosystems to food production (Whitehouse, 2005). Household demographic factors, such as household size, have important implications for resource consumption, with rapid increases in household numbers associated with loss in biodiversity. Habitat loss is generally greatest where population density is highest, and regions rich in endemic species have higher-than-average population densities and population growth rates. This is true in many parts of Asia and Africa where people and threatened species are often concentrated within the same localities (Rosenthal, 2012). The number of threatened species is likely to rapidly increase in regions where human population growth rates are high, as the demands for resources of a growing population are predicted to increase in these regions. Habitat loss appears to be the most significant threat to biodiversity, and current trends and projections show that land use is and will remain the most prominent driver of biodiversity and ecosystem deterioration.

According to the Millennium Ecosystem Assessment, major habitats including forests, grasslands and coastal zones have been heavily impacted by human activities leading to degradation. Agriculture has had a significant effect on biodiversity because of its prevalence over the landscape, particularly in the central regions of Cross River State. Effects include habitat alteration (conversion to farmland for crops and grazing), exotic pest introductions and pollution from pesticides and fertilizers. There is the potential for agriculture to play a beneficial role in the conservation of certain plant species, mainly by protecting habitats from urbanization. This could be achieved by cultivation processes that integrate wild species into agricultural landscapes (Sam, 2007). Agriculture has the greatest impact on the environment of any human activity both because of the degree of habitat alteration that occurs and because of the widespread geographical scale of this alteration. Some of the impacts include: global changes in atmospheric carbon dioxide concentrations, changes in natural genetic plant stocks, changes in established ecosystems, the introduction of exotic species and large-scale drainage modifications which disrupt natural flood regimes and increase topsoil erosion (Statistics Canada, 1994). Ryerson, (2010) in McKibben, (2004), the population explosion affects us humans in many ways in terms of sharing natural resources such as land, water, food, energy and so on. However, we often forget that we share these resources not just with fellow human beings, but also with the countless creatures that form an equally important part of our ecosystem. Thus, it goes without saying that the population explosion affects them as much as it affects us, if not more. Increase in population leads to an increase in the demand of land for residence, an increase in the demand of food, and hence, an increase in cultivation. Increasing productivity and cultivation requires more land under cultivation; more water for irrigation, and more chemical fertilizers, pesticides etc. that lead to pollution of the environment. Increase in land under cultivation is causing a loss of habitat for many species. Also, sinking water levels affect both humans and animals alike. All

these factors will eventually lead to a decrease in the population of other species, thus distorting the natural balance of the ecosystem Diamond, (2008).

CONCLUSION

Overpopulation which occurs when a population of a species exceeds the carrying capacity of its ecological niche is one among the major causes of environmental degradation in the world especially developing countries where poverty and unemployment that are termed as twin evils are the order of the day. The increasing population and the environmental corrosion or deterioration faces the challenge of sustainable development. The existence or the absence of favourable natural resources can facilitate or retard the process of socio-economic development. The three basic demographic factors of births, deaths and human migration produce changes in population size, composition, and distribution. Population is recognized as an indirect driving force of biodiversity loss, as human demands for more resources such as food, timber, charcoal, fuel wood, water, and wild animals etcetera it play a major role in instigating environmental degradation. Household demographic factors, such as household size, also have dire consequences on the environment.

RECOMMENDATIONS

- Government should make policy in respect to the expected number of children per couple
- Population education should be carried out by governments and non-governmental organizations at the tripartite levels of government (Federal, State and Local) in tandem with various media platform in order to categorically point out the benefits of small family size and the consequences of large family size to the public
- Entrepreneurship training should be accorded to the unemployed youths and women in order to curtail their dependency on the natural resources as their major source of livelihood
- Forestry policy should be properly implemented so as to reduce the indiscriminate exploitation of flora and fauna components.

REFERENCES

Bayode, O. J., Emmanuel, A. A. & Sogbon O. (2011). Environmental Implications of Oil Xploration and Exploitation in the Coastal Region of Ondo state Nigeria: A Regional Planning Appraisal. *Journal of Geography and Regional Planning*. Vol. 4 (3) pp 110 - 121.

BBC News, (2013). Population Seven Billion: UN Sets Out Challenges. BBC. 2013-05-22.

- Birdstal, M. (2007). "Population Growth and Poverty in the Developing world". *Population Reference Bureau*, Washington D. C.
- Bisong, F. (2004). *Natural Resources use and Conservation System for Sustainable Development*. Calabar: BAAJ International Publishers.
- Cincotta, R P and Engelman, R. (2000). *Nature's Place: Human Population and the Future of Biological Diversity*. Washington DC: Population Action International.
- Coleman, J. (2011). "World's 'Seven Billionth Baby' is Born". *The Guardian* (London).
- Cormac, Ó. (2009). *A Short History, "The World is not Overpopulated"*. Princeton University Press 2009, ISBN 978-0-691-12237-3.
- Diamond, L. R. (2008). *The Population Bomb*, (1968) *The Population Explosion*, (1990) *The Population Bomb*, (1995) reprint.
- Dunlap, Riley E., and William Michelson (eds.) (2002). *Handbook of Environmental Sociology*. Greenwood Press, ISBN 0-313-26808-8.
- Emmanuel A. A & Alakinde M. K (2006) *Nature of Environmental Science. Monograph of department of Urban and Regional Planning*.
- Ezeh, P-Z. (2012). *Weathering Global Warming Through Relevant Knowledge*. Great AP Express Publishers Ltd. 3 Obollo Road, Nsukka, Nigeria.
- Federal Environmental Agency Act (1992) Cap. F. 10. *Laws of the federation of Nigeria*.
- Federal Ministry of Lands and Housing (2013). *Survey Department Abuja, Nigeria Report*.
- Fred, P. (2009). *When the Rivers Run Dry: Water—The Defining Crisis of the Twenty-first Century*. Beacon Press. ISBN 978-0-8070-8573-8.
- Goldin, I. (2014). *Is the Planet Full?*. Oxford University Press. Oxford, United Kingdom
- Gregory, C. (2002): *The "Survival of the Fittest" and the Origins of Social Darwinism*, in: *Journal of the History of Ideas*, Vol. 61, No. 2, 2002.
- Guardian* (2007). "Global Food Crises looms as Climate Change and Population Growth Strips Fertile land". *Guardian.co.uk* (2007-8-31).
- Hardin, G. (1968). *The Tragedy of the Commons*. *Science*. 162 (3859): 1243-1248.

- Hays, J. N. (1998). "The Burdens of Disease: Epidemics and Human Response in Western History. Macgregor press. UK.
- Inter Academy Panel Statement (IAPS) (2013). "World Population Clock – Worldometer". *Worldometer.info*.
- Inyang-Abia (2008). *Foundations of Environmental Education*. Lagos: Macmillan Pub. Ltd.
- Leadley, P. H. M. (2010). "Biodiversity Scenarios: Projections of 21st Century Change in Biodiversity and Associated Ecosystem Services." Montreal. Convention on Biological Diversity Technical Series No. 50. Montreal: CBD.; Pereira.
- Lewis, M. (2007). "Megacities of the Future". Forbes. Nigeria: Lagos, the Mega-City of Slums. Energy Publisher.com.
- Malthus, T. R. (1998) *An Essay on the Principle of Population*.
- Miller, P.K. (1992). "Global warming: The Complete Briefing". Cambridge University Press. ISBN 0-521- 52874-7
- National conservation and Environmental Protection. *Act No 5 of 1987*.
- National Population Census (2006). *National Population Commission*. Calabar, Nigeria.
- Obot, A. E. (2008). *Environmental education practice in community life*. Lagos: Irepo Printing Press.
- Ridley, M.B. (1999): *A Minimal Model for Human and Nature Interaction*. University of Maryland, (2012).
- Roberts, R.E. (2012). *The Theology of Tertullian*, Tertullian org (2001-07-14).
- Rosenthal, E. (2012). "Nigeria Tested by Rapid Rise in Population". New York: New York Times.
- Ryerson, W. F. (2010). "Population, the Multiplier of Everything Else". In McKibben, D. *The Post Carbon Reader: Managing the 21st Century Sustainability Crisis*. Watershed Media. ISBN 978-0-9709500-6-2.
- Sam, B. A. (2007). "Population, Geopolitics, and International Organizations in the Mid Twentieth Century." *Journal of World History Humanities Source Database*.

Sarbapriya R. Et al (2011). Impact of Population Growth on Environmental Degradation: Case of India. *Journal of Economics and Sustainable Development* (2) 2.

Statistics Canada (1994): The Environmental Politics of Population and Overpopulation in a University of California, Berkeley summary of historical, contemporary and environmental concerns involving overpopulation.

United Nations (2010). *Report on the possible consequences of over population*. India.

United Nations Report (2011). *Inter Academy Panel Statement on world population growth*. New Delhi, India.

Whitehouse, B. K. (2005). The Environmental Politics of Population and Overpopulation: A University of California, Berkeley summary of historical, contemporary and environmental concerns involving overpopulation.

Widjojo, N. (2006). "*Population Trends in Indonesia*". Equinox Publishing. ISBN 979-3780-43-6.

World Bank (1991). "Environmental Assessment sourcebook" Washington D. C *World bank Technical Paper*.

World Bank (2017). Nigeria Population.

World Health Organization (2011). *Report on Sources of Drinking Water*. Retrieved on September 10, 2013, from www.who.int

World Population Challenges (2011). *International Data Base (IDB)*. Census.gov. Retrieved 23rd April, 2013.

World Population Prospects (2010): The 2010 Revision Press Release". Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. May 2011.

Zinkina J., and Korotayev A. (2014). Explosive Population Growth in Tropical Africa: Crucial Omission in Development Forecasts (Emerging Risks and Way Out). *World Futures* 70/2 (2014): 120–13.