

# ENVIRONMENTAL IMPLICATION OF OVER POPULATION AND RURAL-URBAN MIGRATION ON DEVELOPMENT IN NIGERIA

Eneyo Okon Eyo<sup>1</sup>, Uffia Inyang Ogo<sup>2\*</sup>

Department of Curriculum and Teaching, University of Calabar,  
NIGERIA.

<sup>1</sup> [eneyoeyo@yahoo.com](mailto:eneyoeyo@yahoo.com), <sup>2</sup> [uffiaogosburg@yahoo.com](mailto:uffiaogosburg@yahoo.com)

## ABSTRACT

*The purpose of this paper was to examine the environmental implication of over population and rural-urban migration on development in Nigeria. Due to poverty and under development in rural areas, very many persons have migrated to urban centres in search of greener pasture thereby putting pressure on exiting environmental resources. The present excessively un-even population distribution between cities and town with only a negligible proportion of people living in villages in an index of economic backwardness of Nigeria as a poor nation. The paper pointed out the various indicators of underdevelopment to include food shortage, water shortage and health problem. Today it is very common to hear medical doctors embark on industrial action against poor welfare and ill equipped medical facilities thereby leading to crisis in the country while the rich and government officials seek medical attention outside the country. The paper highlighted the various environmental implications of overpopulation and rural-urban migration on development to include: Inadequate fresh water for drinking as well as sewage treatment and effluent discharge, depletion of natural resources especially fossil fuels, increased levels of air pollution, water pollution, solid contamination and noise pollution. Deforestation and loss of ecosystems that sustain global atmospheric oxygen and carbon dioxide balance is also another implication. The paper all called on government to promulgated appropriate laws to check overpopulation and migration. The media should create the needed awareness on environmental consequences and the same time educates the public on the need of limited family size. Nongovernmental organizations are called upon to carry out adequate sensitization and advocacy within urban and rural areas on the effects of environmental resource pressure.*

**Keywords:** Environment, population, migration, development

## INTRODUCTION

It is very important to know or at least attempt to know the exact number of people resident in a nation or a country from time to time. This enables the government to be able to distribute amenities to the different sections of the country, plan and execute developmental programmes for the people. In Nigeria to be specific, it has become the policy of the federal government to try to ascertain the actual or rough estimate or the population projection of the country periodically. Usually, in Nigeria, the population head count is carried out after every ten (10) years, this is called population census. The last population head count was conducted in 2006. The population census estimate of Nigeria according to the National Population Commission (NPC) (2006) stood at one hundred and forty-three million, one hundred thousand people. Isangedighi (2010) opines that population is aggregate of the inhabitants of a specified area. This study defines population as the total number of people – men, women and children resident in a particular geographical location, region or area. Over population according to World Population Prospect (2009), is a generally undesirable condition where an organism numbers exceed the current carrying capacity of its habitat. Bellamy (2007)

Academic's Dictionary of Environmental states that over population means the presence of too many members of a specie or several species in an ecosystem. The writer of this paper believes that over population is an undesirable increase in the number of people in Nigeria. Under-employment is the main feature of the rural settlement in Nigeria; the unemployment predominance is the most common characteristic of under development. The economic structure of Nigeria and its development are closely affected by the way the population is distributed over towns and rural or villages. The present excessively un-even population distribution between cities and town with only a negligible proportion of people living in villages in an index of economic backwardness of Nigeria as a poor nation (World Population Prospects, 2009). On the economic perspective, Baran (2007) states that development is a process with the help of which a country increases its real national income over a long period of time. He further states that it is a process consisting of a long chain of interconnected changes in fundamental factors suppliers and in the structure of demand for products, finally leading to a rise in real national income over a long period. Webster's (2010) describes development as a gradual evolution or completion, while Bellamy (2007) Dictionary of Environment simply describes development as the process of progress. While I think that development in the context of this paper is distribution of wealth and resources of the country to all social class of the economy. Development simply means improving people's lives.

## MIGRATION

According to International Organization for Migration Report (2010), there is however, no universally accepted definition for the word migration. The term migration was usually understood to cover all cases where the decision to migrate was taken freely by the individual concerned for reasons of "personal convenience" and without intervention of external compelling factor, this therefore applied to persons, family members moving to another area of region to better their material or social conditions and improve the prospect for themselves or their family. Under such definitions, those travelling for shorter periods as tourist and business persons would not be considered as migrants.

However, the term, migration derives from the Latin-migrare, simply meaning to change one's residence. But today migration means much more than that, since a person who moves from one home to another in the same neighbourhood and thus retains the same social framework may not be deemed a migrants. The term 'migration' is generally defined as a spatial interaction of people, involving a relatively permanent movement of persons over significant distance from one geographic place to another (Ebong and Animashaun, 2006). To distinguish migration from other types of spatial interaction, it is common to conceptualize migration as mobility involving a sustained or permanent sojourn in the place of destination. In this sense, according to Ebong and Animashaun (2006), a removal for one or more years might be considered as a 'permanent'. Sojourn and thus as migration, while a stay for a shorter period is classified as a visit.

However, this broad specification of duration of stay may not suit all purposes. This is so because the period of time implied by the term permanence cannot be generalized in all instances of migration, duration of stay has to be considered individually in each specific case (Gould, 1993). To clarify this problem of using specific time to define migration, Gould (1993) have resorted to a classification system that considers not just the temporal but the spatial dimension of the migration process. According to the authors the fundamental point in the dimension of time is to distinguish between mobility, circulation and migration. Mobility is a sufficient broad term and includes all movements, ranging from those which are repeated several times each day to intercontinental movements which span several thousand kilometers. Movements which do not involve permanent change in residence are usually

designated as circulation. The principal difference between immigration and circulation lies in the relative permanence of the migration and non-permanence of circulation (Mangalam and Schwarzeller 1998)

Rural-urban migration involves migration from the rural communities to the urban cities or centres. Early humans migrated due to factors such as changing climate and landscape and inadequate food supply (International Organization for Migration, 2010). World Migration Report (2010) opines that migration occurs because individuals search for food, sex and security outside their usual habitation. In Nigeria a number of reasons make people migrate from the rural settlement to the urban centres – social amenities like electricity, hospitals, good roads, and better sources of drinking water. Certain persons migrate from the rural areas to the urban or city centres because of superstitious beliefs. According to Obot (2008) most people believe that evil forces like witchcraft exist only in rural areas so that makes them move to urban areas. Other people migrate from the rural communities to urban centres for white collar jobs, some move to cities for educational facilities such as tertiary institutions which are lacking in the rural areas in Nigeria

## **DEVELOPMENTAL PERSPECTIVE**

Bellamy (2007) simply describes development as process of progress. The concept of development involves growth. Anything that lives grows and growth refers to a change in dimensions especially change of quantitative nature. Development is a gradual process of change to more advanced or highly organized condition (Onasanya, 2012). Development means distribution of resources to all parts of the economic section and ensuring that the people benefit from the resources. Development therefore could be seen as creation of opportunities and materials and resources with the appropriate strategies which fits the challenging conditions of a specific environment with the view to transforming the area and the lifestyle of the inhabitants of area. Economic Development according to United Nations Population Report (UNPR) (2011) refers to a spontaneous and discontinuous change in the stationary state which displaces the equilibrium state previously existing.

### **Under Development**

Nigeria is classified as an under developed nation, or a developing economy. United Nations economic Report (2010) asserts that under developed countries like Nigeria are those nations which have not be industrialized but their natural resources are being exploited at faster rate with the interference of the developed countries. This assertion is collaborated by Bellamy (2007). Development means improving people's lives or living standard. Under development therefore would mean inadequate supply and distribution of essential facilities like health, food, shelter, lack of security of lives and properties, political instability, lack of basic infrastructure (e.g. road), poor quality of lives and living standards, etc (World Commission on Environment and Development, 2008). Under development is when resources are not used to their full socio-economic potential with result that local or regional development is slower in most cases than it should be.

An important feature of under developed economy such as Nigeria is the existence of vast amount of un-utilized and mis-utilized natural resources. A country may be poor in natural resources, but it cannot be so in an absolute sense. For the usefulness of resources depends on technical knowledge, demand conditions and new discoveries. Although Nigeria may be said to be poor it is potentially not so in natural resources. The problem may depend on the policy of government, that of depending on the petroleum as the main stay of the economy and lack of technical capability to harness other resources, particularly the solid minerals which are bound in many parts of the country. It is entirely possible that in the near future Nigeria may

become rich in natural resources as a result of the discovery of some known and unknown resources and thereby join the league of developed nations of the world (Obot, 2008).

However, instead of saying that Nigeria is poor and inexorably deficient in natural resources, it is more reasonable to say that Nigeria is poor so to speak because it has not succeeded in overcoming the scarcity of natural resources by appropriate changes in technology and social and economic organization. Generally speaking, Nigeria is not deficient in land, water, mineral, forest, etc, they are rather un-tapped.

### **Some Indicators of Under Development in Nigeria**

#### ***Food Shortage***

According to the United Nations Report (2011), the more people there are, the greater amount of food is needed. The report asserts that if there is not enough food to feed people in a specific place, then there is food shortage in the area as it is in Nigeria. In Nigeria we can notice that some essential food items like rice, beans, etc are not sufficient to cater for the populace. This is why we have noticeable food shortage related diseases. We can see malnourished children and pregnant women in our hospitals, those who cannot afford hospital bills are dying.

#### ***Water Shortage***

As our population in Nigeria increases, the demand for water also increases. For instance farmers need more water to irrigate their farms so that they can produce more crops. Industries and factories need more water in manufacturing more goods and re-cycling their products. More population brings about more households who need more water for drinking, cooking, washing, for personal hygiene and many other activities (Bisong, 2004).

#### ***Health Problems***

Food shortage, overcrowding, poor water supply and environmental pollution affect the health of our citizens in Nigeria, particularly the children. Longree (2009) postulates that poor environmental sanitation which is as a result of crowded space is a major cause of diseases such as diarrhea, typhoid, and cholera. Longree further asserts that dirty insects such as flies and cockroaches contaminate food with disease causing germs. In Nigeria, many of our children play barefoot in dirty areas and sometimes do not wash their hands before eating and get infected with worms. Under developed economy does not allow for siting of hospitals at strategic areas to cater for the health of the citizenry. Lack of well equipped hospitals make die indiscriminately e.g. respiratory diseases such as tuberculosis, pneumonia and bronchitis.

### **ENVIRONMENTAL IMPLICATION OF OVER POPULATION**

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 (923,768km<sup>2</sup>), 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. United Nations Report (2011) which includes Nigeria, asserts that some environmental problems associated with or exacerbated by human over population which result to over consumption are:

1. Inadequate fresh water for drinking as well as sewage treatment and effluent discharge.
2. Depletion of natural resources especially fossil fuels.
3. Increased levels of air pollution, water pollution, solid contamination and noise pollution. However once a country has industrialized and become wealthy, a combination of government regulation and technological innovations cause pollution to decline substantially, even as the population continues to grow (United Nations Report, 2011)
4. Deforestation and loss of ecosystems that sustain global atmospheric oxygen and carbon dioxide balance.
5. Changes in atmospheric composition and consequent global warming.
6. Irreversible loss of arable land and increase in desertification.
7. Mass species extinctions: These experiences are being witnessed in our tropical forests remaining in some part of the country e.g. Cross River, Edo and Ondo States.
8. High infant and child mortality: The high rates of infant mortality are associated with poverty, epidemics, and pandemics. Many environmental and social resources, including overcrowded living conditions, malnutrition and inadequate, inaccessible or non-existent health care, the poor are more likely to be exposed to infectious diseases (World Population Challenges, 2010).
9. Poverty amounts to starvation and malnutrition or poor diet which results to ill health and of course diet deficiency result to diseases e.g ricket (Guardian.co.uk 2007).

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:

- I. the tool-making revolution
- II. the agricultural revolution and
- III. the industrial revolution

All of which 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 (e.g animal meat). 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 well 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) opines 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. What could be described as forest in Nigeria is found in Cross River State, Edo and Ondo States (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 get 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**

According to Obot (2008), 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.

Generally, there exists a marked inequality in the income distribution in Nigeria. This should have resulted in a greater volume of savings available for capital formation. But most often the sector in which the greatest concentration of income lies the one which derives its income primarily from one-entrepreneurial sources,; such as the unearned rent and subsidy interest e.g. petroleum down-stream sector. The attitudes and social values of this sector are often such that it is prone to use its income for conspicuous consumption; speculative transactions, etc.

### **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 teeming 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 over 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. War also sometimes occurs over annexation of some communities lands which usually result to destruction of lives and properties. This situation is a common feature in our populated area of Nigeria. The environment is static while population continues to rise or 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.

### **Some Mitigation Measures To Over Population in Nigeria**

It is obvious that reducing fertility rates in Nigeria would be to everyone's advantage (Obot, 2008). However, it is not everyone in the country that believes that way. It is clear that the economically developed countries of the world have low fertility rates and low rates of population growth while that of less developed nations like Nigeria have high fertility rates and high population growth rates

- I. According to Agence France- Presse (2009), government should formulate policies to regulate the number of children allowed to a couple.
- II. Massive education of the public on over population effects.
- III. Religious organizations should embark on crusade and enlightenment campaigns to disabuse the minds of the people about the injection of "Go and multiply" quoted in the Bible.

Obot (2008) opines that:

- I. Family planning should be encouraged more than ever;
- II. There should be family intensive counselling. There should be counselling on the illiterate adults to enlighten them on the consequences of having too many numbers of children.
- III. Compulsory education and schooling for all citizens. According to Obot (2008), when people attend schools and get educated, they will appreciate the reasons for low fertility rates and therefore low procreation rate in Nigeria. Health education in particular is capable of enlightening the populace on the use of some medical measures like: the use of contraceptives and the use of condom during sexual intercourse.

Access to Mass Media is also one key area for mitigating overpopulation. In Nigeria, the mass media are believed to play a significant role in promoting social change with respect to attitudes about fertility and reproductive behaviours, especially given the country's linguistic homogeneity. Family planning is almost universally known, and is no longer a taboo topic in the mass media. In a recent analysis of DHS data, access to the media was found to be the most important predictor of fertility among younger adult women (those aged 20-30 years) especially urban centres. Among adolescent females, contraceptive knowledge reaches 99% and 100% of sexually experienced teenagers are aware of at least one modern method (Thapa, 1989). While there is no evidence of explicit messages that encourage women to limit childbearing, television programs, particularly Nigerian soap operas, disseminate images that might be interpreted to be supportive of lower fertility. In Nigeria, nearly 85% of teenage girls watched television on a weekly basis in 1996, up 17 percentage points from 10 years earlier.

Age at marriage is a significant factor in women's lives, not only because of its association with overall completed fertility and with the meaning and consequences of adolescent fertility, but also due to its relation with the status of women. Early marriages are usually performed without the informed consent of the girl and often involve important age differences with the spouse, one element of unequal power relations between the spouses and of difficulty for empowerment.



Cultures also define who is entitled to access reproductive health services, sometimes by social control and sometimes by laws, policy restrictions or other measures. In many African societies such as Nigeria, only married women have access to family planning and other health services, and unmarried pregnant adolescents are particularly affected (Bledsoe and Cohen, 1993). In Gambia, provision of contraceptives is legally restricted to married couples and unmarried women with at least one child (Jean, 1985). Some cultures in Nigeria for instance permits men to marry more than one wife, there is currently no legislation prohibiting polygamy thereby allowing large household. To mitigate the problem of overpopulation there is therefore need for a legislation to be put in place prohibiting marrying more than one wife; this in a way will limit and check excessive procreation. Poverty is at alarming rate in Nigeria, if reasonable financial incentives in proposed by government to families with one or two children, this will discourage intended couples to limit the number of children they intend to have. They will prefer the monetary reward to increase number of children, after all the money spend by government to cater for increased population is more than that which the government would give to families as reward for having little family size.

## CONCLUSION

The use of technology to control disease and famine has greatly reduced the death rate of human population. Technological developments can also be used to control the birth rate. A variety of contraceptive methods are available to help people regulate their fertility. Research is continuing to develop more effective, more acceptable, and less expensive methods of controlling conception. Because of cultural and religious differences, some forms of contraception may be more acceptable to one segment of the world's population than another (Human Population Issue, 2010). Nigeria under development has been much studied and debated since Nigeria gained self government many decades ago. Nigeria is said to have abundant resources, yet often suffers from high levels of political corruption, which distorts policy making and government resource allocation. Inter-communal violence and competition has damaged economies of Nigeria, and human capital levels such as education remains low thereby negatively affecting productivity (Obot, 2008). Rural-urban migration is causing population increase in urban centres, thereby making our urban areas to be over populated. The panacea to this noticeable rural-urban migration is Nigeria is even distribution of social, economical and political amenities to all sections and communities in the country. Conflict, civil unrest, natural disasters like flood displace people from their settlements, create uncertainty thereby causing people to move from one place to another e.g. the refugees move from their rural settlement to the urban area. This causes population increase in urban areas. Consequently, the available resources, social amenities, etc gets inadequate to carter for the influx in the urban settlement. People from other countries whose economy is dwindling resort to migrate to settle in our cities thereby causing over population in Nigeria city centres.

Government and other stakeholders such as community based organizations, non-governmental organizations, international development agencies (bilateral and multi-lateral agencies) working in the nation need to pool resources (time, human, capital and other materials) together to improve the quality of education in the state. Specifically, female children in the state need to have universal access to qualitative education. This singular developmental intervention will invariably have multiplier effects on female folks in the study location by empowering them to make decisive decision about issues that boarder on their lives most especially their reproductive health system. Furthermore, there is a need to reduce to barest minimum marital disharmony as indicated by separation and divorce among couples. Dissemination of these cultural values and heritage can be through all available information, education and communication materials in the state. Finally, the ministries of

youth and social development in Nigeria needs to develop necessary and appropriate empowerment programmes that will keep adolescents both male and female busy across the state. When adolescent are fully engage in social and economically activities, they are less likely to be available for illicit sexual behaviour either with their peers or adults partners.

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