IMPACT OF POPULATION GROWTH ON POVERTY PREVALENCE IN NORTH WESTERN NIGERIA

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ABSTRACT

High population growth is a growing challenged to the world in general and developing countries like Nigeria in particular. poverty is perhaps the most serious threat to world peace, even more dangerous than terrorism, religious fundamentalism, ethnic hatred, political rivalries or any other force that is obtain cited as promoting violence and war. This study investigates the empirical relationship between population growth and poverty prevalence in north western Nigeria. Relevant literatures were reviewed for the study. To guide the study, three hypotheses were developed to analyze the data, descriptive and inferential statistics were used for simple comprehension. The paper notes that high birth rate, low death rate are the attributing factors to high population growth in Nigeria. The findings revealed that, there is a significant positive relationship between population growth and the prevalence of poverty in the study area by complicating family access to portable water supply, good education, as well as good environment. The study concludes that unless population growth is checked all development achieved would be neutralized by increasing population .In order to address these challenges it is therefore recommended that economic incentives and disincentives should be introduced by the government to check early marriages and polygamy. Religious leaders should take up the responsibility of religious preaching and orientation to persuade people to have smallest families and also remind them on the effect of large family above the limited family resources.

Keywords: Population Growth, Poverty Prevalence, North Western Nigeria.

I. INTRODUCTION/ BACKGROUND TO THE STUDY

The issue of population growth is a global phenomenon which affect most if not all parts of the world. In 2007, the world population was estimated to be 6.6 billion people; projections by the United Nations placed the figure at more than 9.2 billion by the year 2050 before reaching a maximum of 11 billion people by the year 2200. The overwhelming majority of that population will inhabit the developing world. Every year more than 75 million people are being added to the world's population. Almost all of this net population increase is about 97% in developing world. However, Africa remains the second largest populated continent beside Asia. The Africa's population was 221 million in 1950, in 2005 the population of the continent was put at 888 million, and 1 billion people in 2009 (Martin, 2009).

Nigeria is the world's most populated black nation in the World and at the same time it is the most populated nation in Africa. Beside its high population, the country is also blessed with abundant deposit of natural resources. E.g. crude oil and other natural resources. This, however, placed the country on its prestigious position as the "Giant of Africa" and also becomes significant in the world history as it attract foreign investors from china, America, Europe and other nations of the world. Despite of all these vast oil wealth, natural and human resources the level of poverty in the country is increasing at an alarming rate due to its raising population. A lot of researches have been conducted on this issue but the present study was conducted to draw the relationship between population growth and poverty in North- Western Nigeria. Population is the total number of persons at a specified time living in a particular geographical area or country in a well delimited part of a country (United Nations, 2008). According to Thomas Frejka (1973), the population of an area is the total number of all individuals alive in a particular point in time. Therefore, population of a place can be seen as the total number of people living in a particular area at a particular time. Udabah (2002), emphasized that population is a central problem of economic development. If the population expand as fast as national income per capita income will not increase and poverty will be the result. While to Okafor, (2004), population is a critical factor in development plans of any civilized society. For effective planning for the development of developing countries, it is necessary to have an actual count of the population i.e in form of accurate census. This will enable government to know how many people to whom they should distribute amenities and social services. The rapid growth of population in schools has no doubt reduced the quality of education in poor and developing nations due to high demand of schools and facilities, which they cannot provide. It can also be viewed that high population growth led to shortage of teachers to man the increasing number of school age people in the society. Population growth is also mounting a high pressure on the limited number of schools, classrooms and other educational facilities. It also creates the problem of poor funding of education, schools needs funds to exist and people growth without economic growth may be difficult to fund schools. Rapidly increasing population is also found of causing changes in the attitudes of students due to lack of control on student because of their rising numbers. These changes can be found in drugs abuse, gang mentalities and lack of educational idealism. Education is very important, people believes that with better education, it is possible to have better job, foods, housing and a better standard of living .Therefore education is a passport to a better life, hence need to be taken care of NERDC, (1988) . Other effect of high population growth includes that of creating water scarcity, water is an independent commodity, therefore population seriously depends on it for its survival. Its scarcity is becoming a threat to both health and business growth in so many dimension Abdulrahman A. S. & Antipas G. R.,(2015). Population growth also impacted environment negatively by causing pollution, degradation of resources, erosion, contamination etc as a result of population growth.

The underlying theory to give credence and backbone to this study is the Malthus Theory of population. This is so considering the drive and aim which this study focuses. Rev. Malthus (1798), in his is writing "Essay on the principle of population" and the difficulties that may arise as a result of population growth drawing on the concept of diminishing returns. Malthus postulated that there is a universal tendency for the world population to increase at a faster rate than its food production. Whereas the population grows at a geometric rate i,e 2, 4, 6, 8, 10….doubling every 30 to 40 years. At the same time because of diminishing return to the fixed factor, land, food supplies could expand only at a roughly arithmetic rate i.e 1,2,3,4,5….. .In fact, as each member of the

population would have less land to work; his or her marginal contribution to food production would actually start to decline. Because the growth in food supplies could not keep pace with the burgeoning population, per capita income in food production would have a tendency to fall.

Therefore in the absence of consistent checks on population growth, Malthus predicted that within a short period of time, limited resources will have to be shared among an increasing number of individuals. When a nation or household does not limit the number of their progeny voluntarily, diseases, famine and wars will reduce the size of the population and establish a balance between the population and the available but limited resources. Malumfashi (2008) noted that, it is generally accepted that poverty means lack of basic needs and service such as food bedding, shelter, basic health care and education, which implies lack of minimum standard of living. The central bank of Nigerian (1999) view poverty as ' a state whereby an individual is not able to cater adequately for his basic needs of food, clothing and shelter is unable to meet social and economic obligation, lacks gainful employment, skill assets and self esteem, and has limited access to social and economic infrastructures such as education, health, portable water and environmental sanitation; and consequently, has limited chance of advancing his or her welfare to the limit of his or her capabilities. Several Studies conducted by some scholars have challenged the positive impacts of population growth and stress that population growth retards economic growth and development and hence therefore accelerate the spread of poverty in a country generally and on households in particular. For instance, peter (2011) subscribed to the believed that rapid population growth result to poor education, increasing cost of living, malnutrition, health complications, food insecurity, land tenure, poor water supply and environmental degradation. These studies has also found that economically, population growth will demand that government spend more on the provision of basic education, health, food, housing and shelter and other social amenities. However, the most disturbing issue is the fact that all these effort or achievement on the provision of the above mention facilities will gradually be wiped-off by increasing population. For example a study by Kerbo (2006) showed that for a country to have a high population and to be economically better-off, the national gross domestic product (GDP) must grow alongside the population, otherwise people will essentially become worse off and consequently, the dimension of poverty will be wider than before. By this, it show that population growth alone cannot or is not sufficient for economic growth but, population growth plus.

Similarly, (Mankiw, Roemer, and Wei, 1992) reported that growth in population effects the economy negatively, this is inform of low income per capita, poverty spread widely, famine and diseases among others. Therefore, rapid population growth complicates the task of providing and maintaining the infrastructures needed in modern economies which are provided either by the government, development partners or even individuals in some instances. Furthermore, Latimer and Kulkani (2003) in their study believe that migration as one of the attributes of rising population. Migration affects the economy negatively as areas quickly grow oftentimes without correspondent increase in necessary infrastructures, slums develop around the city, and crime, diseases, environmental pollution and other social ills becomes complications that prevent future growth in a country and poverty will continue to prevail. In view of the above, this study is set up to ascertain the impact of population growth on the prevalence of poverty in north-western Nigeria as to whether it increase or reduce the level of poverty.

However, 35 percent of the country's population still lived in extreme poverty while as much as 54% are poor in relative terms. Poverty incidence is significant and its depth deeper in rural areas. About 63percent of people living in rural areas are poor compared to 42 percent in urban areas (MDG report, 2005). Furthermore, poverty incidence is higher among households with large families and low level of education. The tragedy is widespread but unequally distributed. There is also a clear north-south difference with highest poverty incidence existing in the North – East zone (67.3%) followed by the North-West with(62.9%) poverty level, North - Central zone has a poverty incidence of about(62.3%) followed by the South-South zone with(57.1%) , South, West zone with(42%) and finally the South – East zone with (34.2%) (MDG report, 2006). However, in Nigeria, population growth have made a steady increase in the number of poor people from 39m in 1992 to 69m in 2004 (MDG report, 2006).

 The first census exercise in Nigeria took place in 1963 giving the total number of its population at 56 million people. This was followed by 1973, with 79.8m, 1991 88.5m, 1999 113.8m. The last population census exercise of 2006 puts the country's population figure at 140 million people, with 71,708,000 males and 68,293,683 females, (NPC, 2006) population increase of such magnitude is unprecedented. The problem of population growth is not simply a problem of numbers, but it is a problem of human welfare and development. Rapid population growth can have serious consequences on the well being of all humanity. In an attempt to check these problems, government in Nigeria at different times has formulated policies, these policies includes the "Nigerian policy on population for unity, progress and self reliance" established by the military government of Gen. Muhammadu Buhari in 1983. Furthermore another policy was introduced in 2003 by Olusegun Obasanjo's administration the policy was "Nigeria Policy on Population for Sustainable Development". Despite all these policies, the population problems in Nigeria continue to prevail, thus indicating a failure of the policies as they faced so many problems in their operations and therefore they did not produced any positive impact. Unless other policies and measures are brought in to check the spiraling and uncontrolled increase in population, any development achieved will be neutralized by increasing population. It is therefore pertinent at this juncture to undertake an assessment on the impact of population growth on the spread of poverty among families in north western Nigeria in terms of their access to portable water supply, good education, as well as good environment.

II. PURPOSE OF THE STUDY

This research is trying to know the relationship between population growth and poverty need to be studied, monitored and managed properly with conscious policies. If not, it can pose a challenge against all the efforts of government to fulfill its commitment to improve the quality of lives and living standard of people in a country.

III. RESEARCH OBJECTIVES

(i) To identify the impact of population growth on poverty prevalence in the North-Western Nigeria

(ii) To find out the effects of population growth on poverty prevalence towards access to social amenities in North-Western Nigeria.

(iii) To proffer solution on the impact of population growth in North-Western Nigeria.

IV. RESEARCH HYPOTHESES

Based on the nature of the research topic, the following null hypotheses were generated for testing probability level at 0.05 level of significance.

HO₁   There is no significant difference between population growth and Poverty prevalence in North-Western Nigeria.

HO₂   There is no significant effect between population growth and poverty Prevalence on accessing social amenities North-Western Nigeria

HO₃   There is no significant difference between population growth and poverty prevalence in North-Western Nigeria in terms of good environment.

V. METHEDOLOGY

Both secondary and primary source of data were employed in this study for generating information on the impact of population growth on poverty prevalence as expressed by the respondents in North-Western Nigeria. The instruments used in generating data from the respondents in the research were questionnaires. For effective coverage and lower cost random sampling technique was used to select a sample of 400 families/household of both rural and urban communities that constitute our sample size. Out of the 400 questionnaire administered 355 were properly filled and used for analysis.

VI. TEST OF HYPOTHESES AND DISCUSSION

Chi-square (X^2) is used in testing the three hypotheses of the study. According to E.C. Osuala (1982), Greek letter X^2 is frequently used in testing a hypothesis concerning the difference between set of observed frequencies of a sample and a corresponding set of expected or theoretical frequencies, chi-square is computed as follows.

Where, o = observed frequency

E= expected frequency

HYPOTHESIS ONE:

Ho₁: There is no significant relationship between population growth and poverty prevalence in north western Nigerian.

Options	There is a significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to portable water supply	There is no significant relationship between population growth and poverty prevalence on the access to Social amenities north western Nigeria	Total
Yes	206	149	355
No	149	206	355
Total	355	355	710

Table 1: Computation of Expected frequencies

Observed frequencies	Expected frequencies
206	355^{x}255/710=177.5
149	355^{x}255/710=177.5

Table 2: Expected Frequencies

Option	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Yes	206	177.5	28.5	812.25	4.58
No	149	177.5	-28.5	812.25	4.58
Total	355	355	0		9.16

Table 6: Computation of the value of x^2

Analysis from table 6: shows that calculated x^2 value is 9.16, while the critical or table value is 3.84 under 1 degree of freedom at 0.05 significant level. Since the table value is less than the calculated value, hence the null hypothesis is rejected and the alternative hypothesis is accepted that there is a significant relationship between population growth and poverty prevalence in terms of access to portable water supply.

HYPOTHESIS TWO:

Ho_2: There is no significant relationship between population growth and poverty prevalence in north western Nigerian in terms of access to good education

Options	There is a significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good education	There is no significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good education	Total
Yes	291	291	355
No	64	64	355
Total	355	355	710

Table 3: Computation of Expected Frequencies

Observed frequencies	Expected frequencies
291	$355^x255/710=177.5$
64	$355^x255/710=177.5$

Table 4: Expected Frequencies

Option	O	E	O-E	$(O-E)^2$	$(O-E)^2/E$
Yes	291	177.5	113.5	12882.25	72.58
No	64	177.5	-113.5	12882.25	72.58
Total	355	355	0		145.16

Table 9: Computation of the value of x^2.

The table above shows the chi-square computation of the value of x^2 for population growth and poverty prevalence. This table show that the calculated x^2 is 145.16, while the critical or table value is 3.84 under 1 degree of freedom at 0.05 significant level, hence we reject the null hypothesis, that there is no significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good education and accept the alternative hypothesis that there is a significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good education.

HYPOTHESIS THREE:

Ho$_3$: There is no significant relationship between population growth and poverty prevalence in north western Nigerian in terms of access to good environment

Options	There is a significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good environment	There is no significant relationship between population growth and poverty prevalence in north western Nigeria in terms of access to good environment	Total
Yes	213	142	355
No	142	213	355
Total	355	355	710

Table 5: Computation of expected frequencies

Observed frequencies	Expected frequencies
213	355^{x}255/710=177.5
142	355^{x}255/710=177.5

Tables 6: Expected Frequencies

Option	O	E	O-E	$(0-E)^2$	$(0-E)^2$/E
Yes	213	177.5	35.5	1260.25	7.1
No	142	177.5	-35.5	1260.25	7.1
Total	355	355	0		14.2

Table 6: Computation of the value of x

The table 6 above shows that the calculated x^2 value is 14.2 which is still greater than the critical value or table value 3.84, since the calculated value is greater than the table value, than the decision is to reject the null hypothesis that there is no significant relationship between population growth and poverty prevalence in terms of access to good environment and conclude that there is a significant relationship between population growth and poverty prevalence in terms of access to good environment in north western Nigeria.

VII. CONCLUSION

This study however, set up to establish a relationship between population growth and poverty prevalence in north-western Nigeria. After a theoretical and empirical exploration of relevant literatures, the paper found that there is a significant positive relationship between population growth and poverty prevalence in the study area. However, the findings from the research questionnaire of this study indicates the effect of population growth on the prevalence of poverty among families/household in the study area; poor educational standard for the children, increasing cost of living, shortage and complications in obtaining portable water supply as well as environmental degradation, increase in the rate of crime and other resultant social vices. Therefore, large families perpetuate poverty, and also exacerbate the vicious cycle of poverty.

The findings also provide a strong base for the hypothesis that rapid population growth if not matched with a resultant increase in economic growth it would be a driving force to poverty. If the increase in population is not checked the country will not be developed rather it will continue to be of the developing stage.

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