

POPULATION EDUCATION: A STRATEGY FOR MEETING THE CHALLENGES OF RAPID POPULATION GROWTH ON RURAL DEVELOPMENT IN NIGERIA

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Abstract

The study focused on the meeting the challenges of rapid population growth through population education with special focus on the rural development in Nigeria. This study became imperative considering the fact that Nigeria as a nation can not be adequately developed if the greater proportion of the population living in the rural areas lives under abject poverty with high unemployment rate. Rural development which is the integrated approach to food production as well as physical, social and institutional infrastructural provisions with an ultimate goal of bringing about both quantitative and qualitative changes which result in improved living standard of the rural population cannot be effectively achieved with the present over-population problem plunging most the rural areas in the country. The rapid population growth has become a matter of concern for all. It also has implications for socio-economic development, environment and quality of life of the citizenry. Therefore, integrating population education in all sectors of education is an important initiative that can be taken to slow down population growth.

Rural development involves effecting improvement in the living standards of farmers and the rural populace in general. According to Umehau (2008), rural development is a process whereby concerted efforts are made in order to facilitate significant increases in resource productivity with the central objective of enhancing rural income and increasing employment opportunities in rural communities for rural dwellers to remain in the area. Also, Obinne in Ogidefa (2010) perceived rural development to involve creating and widening opportunities for (rural) individuals to realize full potentials through education and share in the decision and action which affects their lives. The main concern in rural development is to bring about the modernization of rural society through a transition from traditional isolation to integration with the nation. It constitutes a process of planned change for which the one approach or the other is adopted for improvement and/or transformation of the lot of the rural populace. It is concerned with the improvement of the living in the rural areas on a self-sustaining basis through transforming the socio-spatial structures of their productive actives.

Therefore, combining all the essential elements of development, rural development can be described as the integrated approach to food production as well as physical, social and institutional infrastructural provisions with an ultimate goal of bringing about both quantitative and qualitative changes which result in improved living standard of the rural population. It therefore infers that agricultural production (development) is a component of rural development as more than two-third of the Nigeria's 150 million citizens are farmers. They live in an estimated 97,000 rural communities. According to Olayide in Umehau (2008), most Nigerian rural areas have the following characteristics: low income, low savings (derived from low income), low investment (derived from low savings), low capital formation (derived from low investment), poor infrastructural facilities, high population

density, gross illiteracy, low social interaction, local politics, under-employment, informal groups, high rural-urban migration, and low technological base.

It is pertinent to note that in Nigeria, rural development scope encompasses agricultural set-up projects, rural water supply projects, rural electrification projects, rural feeder-road and maintenance projects, rural health and disease control projects, rural education and adult education campaign, rural telecommunication system and rural industrialization projects. Meeting with the scope of rural development depends on the interaction of many forces such as the objectives of the programme, the availability of resources for planning and implementation and the rate of population growth. Among the various forces, the population situation in Nigeria affects to a very great extent, the level of development. This is because there is a close relationship between population situation, resources, environment and development. There is an urgent need to have a balance between these factors. Unless the goal of population stabilization is attained and the consumption level is rationalized, the environment will continue to be adversely affected.

The rapid growth of population in Nigeria has become a matter of concern for one and all. Growing population is not an issue of numbers alone. It is an issue which is intimately related and has implications for socio-economic development, environment and quality of life of the citizens (Government of India, 2000). In order to slow down population growth and accelerate the process of improving the quality of life of our citizens, multi-pronged initiatives should be taken. Integration of population education in all sectors of education (i.e., formal, informal and non-formal) should be one such initiative. The purpose of this initiative is to educate the present generation about population, development and environment for a better quality of life of their own and of their future generations.

Concept of Population

The concept of population is discussed under the following sub-headings:

- i. The Meaning of Population
- ii. The Causes of Population Growth
- iii. The Theories of Population.

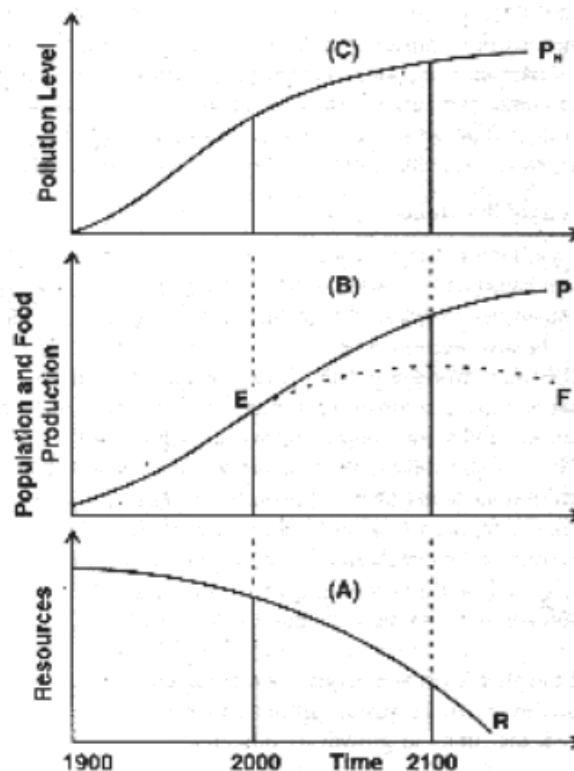
A. The Meaning of Population

Population refers to the number of people living in a given geographical area at a particular time. According to National Teachers' Institute, NTI (2000), population is the total number of persons living in a political or geographical area at a particular point in time. Nigeria, which is the most populous country in Africa, was said to be inhabited by 31.12 million people in 1953. The 1991 National Census puts the population at 88.9 million and the population was projected to rise to 115 million by 2010, with the increase rate put at 2.8 per cent per annum (Abiona, 2006). However, the 2006 census revealed that there are over 140 million persons therein. Bayles (2000) stated that there are significant difference in population change among continents and countries. For example, the 1980 – 1985 rates of growth were 1.73 per cent for Asia, 2.30 per cent for Latin America and 3.01 per cent for Africa. It is calculated that the African rate of growth will remain relatively constant to the end of the century. Generally, the poorer the country, the greater the growth rate becomes.

However, the concern of Adult educationists is not just the population figure, but also its relation to the available resources and the level of technology in the country. It then follows that if the present growth trends in world population, industrialization, pollution levels, food problems and resource depletion continue unchanged, the limits to growth on this planet will be reached within the next one hundred years. The most probable results will be a rather sudden and uncontrollable decline

in both population and industrial capacity sometime in near future (Jhingan, 2005). He stressed that since pollution, high population growth rate, and shortages of food and resources make the future prospects of the world bleak as shown on figure 1 below, people should change their attitude towards the use of resources, their reproduction and pollution levels so as to save the world from collapse.

Fig. 1: The Relationship Between Resources, Population and Food Production, and Pollution Levels.



Source: Adopted from Jhingan (2005: 210 xviii); The Economics of Development and Planning.

In panel (A), the resources such as oil, natural gas, copper, lead, etc., which are fixed are being continuously depleted over time from the year 1900 and beyond 2100. In panel (B), the growth of population and food supply are shown to increase up to point E at the same rate from 1900 to 2000. But beyond the year 2000, the population curve P continues to rise while the food production curve rises at a diminishing rate and then starts declining by 2100. Also, in panel (C), the curve P_n shows the pollution level which continues to rise beyond the year 2010, and if not checked in time, will lead to catastrophic results in the world.

B. Causes of Population Growth

According to Nwafor and Akpochofo (2005), a number of factors are responsible for the population growth. They include:

i. Birth Rate. It refers to the number of births per thousand member of the population. It is represented thus:

$$\text{Birth Rate} = \frac{\text{Number of live Births}}{\text{Total Population}} \times 1000$$

Birth rate leads to population growth if there is naturally excess of births over deaths. It is influenced by development and the use of improved scientific knowledge, marriage age in a country, cost of raising children, number of years spent in schools (including women participation in education), influence of customs, government policies and age distribution.

ii. Death Rate. It refers to the number of deaths per thousand members of the population. It can also be represented mathematically thus:

$$\text{Death Rate} = \frac{\text{Number of Deaths}}{\text{Total Population}} \times 1000$$

Natural population decrease occurs when the number of deaths in a country exceeds the number of births. The death rate is influenced by the development and application of medical services, existence of life-prolonging facilities such as better transportation system, level of standard of living and influence of modernization which removes superstition.

iii. Migration. It is the movement of people from one country to another. New Standard Encyclopedia (1985) stipulates that migration is the act of changing abode (i.e., one's living place or habitat). Migration leads to population growth or decline. Migration which can be in form of immigration (movement of people into an area) or emigration (movement of people out of an area) can be caused by economic reasons, natural disasters, wars and political instability in a country.

iv. Government Policy. Government of a country may initiate a population policy and pursue it vigorously in order to bring an increase or decline in the population of the country. For instance, the Nigerian Government under the regime of Gen. Ibrahim B. Babangida (now Rtd) postulated a population policy of a woman having a maximum of four (4) children. The policy was intended to reduce the birth rate, and hence, the population growth. Also, in Japan, there was a post-war "baby-boom" policy that came up as a result of population loss during the Second World War (1939 – 45). The policy lasted till 1950, and it brought a rapid growth in the population. Therefore, the role of government policy in bringing about population growth is a very important aspect of population education.

C. The Theories of Population

The theories of population are discussed under the following sub-headings:

- i. Malthusian Theory
- ii. Mill's Theory
- iii. Demographic Transition Theory

Malthusian Theory: According to Jhingan (2005), Thomas Robert Malthus is associated with the famous Malthusian theory of population. In his book *Principles of Political Economy*, published in 1820, Malthus was very realistic in his analysis of population growth in the context of economic development. According to him, population growth by itself is not sufficient to bring about economic development. Rather, it is the result of the development process. For him, poverty of the peasantry is not due to scarcity of fertile land. It is found because peasants do not have capital to make improvements on land. The relation which Malthus established between population growth and economic development is fully applicable to underdeveloped countries. Therefore, in countries where population alone increases, the increase in wealth is the slowest as is shown in Asian and African countries.

Also, according to Tawiah (1989), Rev. Thomas Robert Malthus stated that population was increasing at geometrical progression (i.e., 1, 2, 4, 8, 16, 32, 64, ...) and doubling at every 25 years, while food production was expanding roughly at arithmetic progression (i.e., 1, 2, 3, 4, 5, 6, 7, ...) due to lower marginal output. Rev. Malthus further stated that sex instinct in man was very strong and if not checked by moral restraints, shall lead to over-population of children. Also, if population was not controlled by positive checks, moral restraints, it was bound to be checked by preventive checks such as wars, pestilences, starvation, pollution, etc.

Mill's Theory: John Stuart Mill regarded economic development as a function of land, labour and capital (Jhingan, 2005). According to him, increase in wealth is possible only if land and capital help to increase production faster than the labour force. He further stated that the rate of capital accumulation is a function of the proportion of the labour force employed productively. Therefore, he was worried about the growth in number of productive labourers who worked for hire. He believed that population control was essential for improving the conditions of the working class so that they might enjoy the fruits of technological progress and capital accumulation. He propagated birth control as against moral restraints.

Demographic Transition Theory: The theory of demographic transition or population cycle is based on the actual population trends of the advanced countries of the world as propounded by C. P. Blacker (Jhingan, 2005). According to him, every country passes through five different stages/phases of population development. They are:

- i. The high stationary phase. This phase is marked by high birth and death rates resulting to low population growth rate. People mostly live in rural areas and the main occupation is agriculture which is in a state of backwardness.
- ii. The early expanding phase. This phase is marked by high birth and high but declining death rates. People do not have any inclination to reduce the birth of children because with economic growth, employment opportunities increase and children are able to add more to the family income. It leads to population explosion.

- iii. The late expanding phase. In this phase, birth rates accompanied by death rates begin to decline more rapidly.
- iv. The low stationary phase. This phase is characterized by decline fertility (birth) rate and it tends to equal the death rate so that the growth rate of population declines. The desire to have more children to supplement parental income declines as people readily adopt family planning devices.
- v. The declining phase. It is marked by low mortality, lower fertility and an excess of deaths over births.

The theory of demographic transition is the most acceptable theory of population growth as it is superior to all the theories of population because it is based on the actual population growth trends of the developed countries of Europe (Jhingan, 2005). The theory is equally applicable to the developing countries of the world. Very backward countries in some of the African states are still in the first phase whereas the other developing countries are either in the second or in the third phase.

Consequences of Rapid Population Growth

The rapid population growth has very serious consequences on national development vis-à-vis rural development. According to Jhingan (2005), the consequences (effects) of rapid population growth are prominent on the following areas:

- Economic Development
- Per Capita Income and Capital Formation
- Standard of Living
- Agricultural Development
- Employment and Labour Force
- Social Infrastructure
- Environment (pp. 377 – 382).

Economic Development: Rapid population growth hinders economic development. Bayles (2000) stated that if population grows at 2 per cent a year, supplies of housing, food and other goods must increase that much just to maintain the current standard of living. Proportionately, more children depend on workers for the provision of goods and services. As these children reach working age, employment opportunities must expand rapidly or the surplus labour becomes a major problem, as it is the case in many developing countries. This shows that economic development depends upon investment. In less developed countries, the resources available for investment are limited. Therefore, rapid population growth retards investment needed for higher future consumption.

Per Capital Income and Capital Formation: The effect of population growth on per capita income is unfavourable. The growth of population tends to retard the per capita income in three ways:

- i. It increases the pressure of population on land;
- ii. It leads to a rise in the costs of consumption goods because of the scarcity of the co-operant factors to increase their supplies, and
- iii. It leads to a decline in the accumulation of capital because with increase in family members, expenses increase.

People are required to feed more children with the same income. It means more expenditure on consumption and a further fall in the already low savings and consequently, in the level of investment. A rapidly growing population by lowering incomes, savings and investment compels the people to use a low level technology which further retards capital formation.

Standard of Living: One of the important determinants of the standard of living is the per capita income. Therefore, the factors affecting per capita income in relation to population growth equally apply to the standard of living. A rapidly increasing population leads to an increased demand for food products, clothes, houses, etc. But their supplies cannot be increased in the short run due to the lack of co-operant factors, like raw materials, skilled labour, capital, etc. Consequently, their costs and prices rise, which raise the cost of living to the masses. This brings down further the already low standard of living. As poverty breeds large number of children which increases poverty further and the vicious circle of poverty, more children and low standard of living continues.

Agricultural Development: The growth of population retards agricultural development in less developed countries where most people live in rural areas. The pressure of population on land increases because the supply of land is inelastic. As the number of landless workers increases, their wages fall. As a result, the use of improved techniques and other improvements on land are not possible. The problem of feeding the additional population becomes serious due to acute shortage of food products.

Employment and Labour Force: The labour force in an economy is the ratio of working population to total population (Jhingan, 2005). Therefore, as population increases, the proportion of workers to total population rises. Also, in rural areas, increase in the size of farming families, leads to the over-supply of farm labour. This implies that the young must look for alternative employment. One of the consequences has been massive migration from rural to urban areas.

Social Infrastructure: Rapidly growing population necessitates large investments in social infrastructure and diverts resources from directly productive assets. Due to scarcity of resources, it is not possible to provide educational, health, medical, transport and housing facilities to the entire population. For example, the rapid increase in school-age population and the expanding number of labour force entrants put ever-greater pressure on educational and training facilities and retard improvement in the quality of education.

Environment: Rapid population in developing countries can also significantly affect the environment causing environmental damage. Increased use of land for food production coupled with poor agricultural practices can lead to soil erosion, flooding and the spread of deserts, while the use of wood for cooking and heating contributes to deforestation (Bayles, 2000). Besides, rapid population growth leads to the migration of large numbers to urban areas with industrialization. This results in severe air, water and noise pollution in cities and towns.

Meeting the Challenges of Rapid Population Growth through Population Education

The standard of living of people in a society depends on the maximum utilization of available material and human resources for the benefit of the society at any given time. This is why the development of rural areas in Nigeria still remains a Herculean task. The United Nations' World Population Conference held in Bucharest in 1974 agreed that there is interrelatedness between demography and development (Abiona, 2006). Also, the recommendations of International Conference on Population and Development (ICPD) held at Cairo, Egypt in 1994 noted that for any meaningful development in any nation, the available resources would increase at the same or faster

rate than the population. The surest way of bringing the issue of rapid population growth to the knowledge of the populace, especially those in the rural areas, is through population education.

Therefore, population education is discussed under the following sub-headings:

- The Meaning of Population Education
- The Components of Population Education
- The Objectives of Population Education
- The Importance of Population Education (Government of India, 2000).

The Meaning of Population Education: Population education, according to Government of India (2000), is the process of developing awareness and understanding of population situations as well as national attitudes and behaviour towards those situations for the attainment of quality of life for the individual, the family, the community, the nation and the world. It is also regarded as an educational programme which helps learners to understand the interrelationship of population dynamics and other factors of quality of life and to make informed and rational decisions with regard to population-related behaviours with the purpose of improving the quality of life of himself, his family, community, nation and the world. Therefore, population education aims not only at the improvement of quality of life of the present generation as a whole but also at the provision of enough scope to that of future or coming generation (Prasad, 2004).

The Components of Population Education: The content of population education includes demography or population dynamics, sex education and family planning education. On a more elaborate note, Government of India (2000) stipulated that the main components of population education are:

- i. Population which can be described in terms of number of people (Size); rate of increase/decrease in their number (Growth Rate); number of children born (Birth Rate); number of people dead (Death Rate); number of infants dead (Infant Mortality Rate), average number of people living per unit area (Population Density), and number of people coming in and going out (Migration), etc.
- ii. Socio-Economic Development which can be described in terms of production/creation/development of food, shelter, clothing, health facilities, education facilities, jobs/employment and infrastructure.
- iii. Environment which can be described in terms of flora (plants), fauna (animals), air. Water, land and land resources (soil, stones, minerals, etc.).
- iv. Quality of life which can be described in terms of access to food, shelter, clothing, health, education, employment and entertainment as per the needs of the people, and access to safe drinking water, natural resource, sanitation and non-polluted air.

The Objectives of Population Education: Population education leads to the understanding of population issues and enhancing the life-skills for empowerment to improve the quality of life of self and others. Therefore, the objectives of population education are:

- i. To understanding the prevailing population situation, the dynamic forces that have shaped it and the effect it will have on the present and future welfare of the people, their families, the communities and the world.
- ii. To make conscious and informed decisions based on people's understanding and evaluation of situations in their interest and that of the others.

The Importance of Population Education: Population education is important in many ways. For instance;

- i. it develops awareness and understanding about population issues.
- ii. it helps to understand the physiological and emotional changes during the process of growing up.
- iii. it helps to acquire correct information about sexuality and reproductive health.
- iv. it helps to acquire information about marriage and responsible parenthood.
- v. it helps to form right attitudes about gender roles and family responsibilities.
- vi. it helps the individuals to adopt responsible reproductive behaviour.
- vii. it helps to develop rational attitudes, values and skills for taking responsible decisions and actions regarding population related issues and quality of life.

Conclusion

Nigeria has high rate of population growth leading to over supply of the country's workforce. The effect of the over-population is over-bearing even on other resources. Therefore, it requires urgent checks. From the period of independence through the Nigeria-Biafra Civil War till now, various governments have tried different policies and programmes targeted at the development of the rural areas by reducing unemployment and alleviating poverty. Most of the programmes were not comprehensive enough to address the diverse causes of poverty and unemployment. They failed because none of them addressed the problem of rapid population growth. They did not include population education as a component of their programmes.

Therefore, if the recommendations proffered are taken seriously, population education would go a long way curbing the menace of rapid population growth, especially in the rural areas. Also, Adult education facilitators should be at the fore-front of conscientizing the Nigerian populace, especially those residing in the rural areas on the need to check over-population, and as well appreciate the crusade on Population and Family-life Education.

Recommendations

Based on the urgent need for the introduction of population education as a means of arresting the challenges of rapid population growth on rural development, the following recommendations are proffered:

1. Local, State and Federal Governments should ensure the full participation of the entire community and the grassroots organizations in the design and implementation of population education policies and programmes. This will ensure that the programmes are relevant to local needs and in keeping with personal and social values. It will also promote social awareness of demographic problems.
2. The departments of Information and Social Welfare in all the local government councils should solicit for the community support so as to bring about the full integration and participation of women into all phases and functions of the development process. The improvement of the status of women and the enhancement of their role is an important goal in itself and will also influence family life and size in a positive way.
3. The National Educational Research and Development Centre (NERDC) should incorporate Population and Family-life Education in the school curriculum. It should be made distinct

from Social Studies. Also, the curriculum should be introduced and incorporated into Adult literacy programme.

4. The National Commission for Mass Literacy, Adult and Non-Formal Education (NMEC) through the State Agency for Mass Literacy, Adult and Non-Formal Education (SAME) should establish Community Education centres in the various rural communities. It would be a means of facilitating the adults on the relevant issues pertaining the effects of rapid population growth (over-population).
5. The Federal Government of Nigeria should produce a blue print on National Policy on Population Education and back it with necessary action. All the stakeholders such as Government, International Agencies, Non-Governmental Organizations and individuals, families and women should be fully involved in the implementation of the policy.
6. The Federal Ministry of Agricultural and Rural Development should pursue aggressively the rural transformation programmes with a view to improving the standard of living of the rural dwellers. Such rural transformation include political empowerment, restructuring of the power relations between the urban and the rural, adequate supply of social infrastructural facilities, provision of small and medium-scale industries, and formation of co-operative societies.

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