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SOME CONCEPTUAL ISSUES IN POPULATION, GROWTH AND POVERTY

By

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Introduction

The concepts of *population*, *economic growth* and *poverty* are interrelated with each other. It has been established that a large population has the tendency to lead to market expansion with in turns created room for a sustained growth in the country's gross domestic product (GDP) thereby providing opportunities for reduction in both absolute and relative poverty amongst the residents of that country.

This chapter seeks to help its readers achieve the following objectives:

- a. Understand the concept of population and identify the three major factors that influence the population of a country
- b. Appreciate the dynamic nature of every population
- c. Differentiate between the concepts of labour force and labour market.
- d. Recognize the importance of population census
- e. Understand the concept of overpopulation stressing it causes and the means of curbing it.
- f. Appreciate the Malthusian theory of population and its efficiency at interpreting the current trend in world population growth.
- g. Identify the link between population growth and the growth of an economy.
- h. Understand the concept of poverty and poverty reduction strategies in less developed countries.

1. The Concept of Population

The concept of population is a stock concept. It is a label for human aggregate because it refers to the total number of persons residing in a geographical location, area, country, region or sphere at a particular point in time. Three important factors heavily determine the population of a country: *birth rate*, *death rate* and *migration*.

i. Concept of Birth Rate

The birth rate is the average number of births during a year per 1,000 persons in the population at midyear. It is often referred to as the crude birth rate. The birth rate is usually the dominant factor in determining the rate of population growth as it depends on both the level of fertility and the age structure of the population. Birth rate could also be defined as the total number of live births per 1,000 of a population in a year. The rate of births in a population can be estimated

using several means: the number of live births from a universal registration system for births, deaths, and marriages; population counts from a census, and estimation through specialized demographic techniques.

ii. Concept of Death Rate

The death rate otherwise referred to as the mortality rate is usually expressed in units of deaths per 1,000 individuals per year; thus, a mortality rate of 9.5 (out of 1,000) in a population of 1,000 would mean 9.5 deaths per year in that entire population, or 0.95% out of the total. It shows the rate at which people died in a particular place or during a particular time. It also expresses the ratio of total deaths to total population in a specified community or area over a specified period of time and can be taken as a measure of the number of deaths (in general, or due to a specific cause) in a particular population, scaled to the size of that population, per unit of time.

iii. Concept of Migration

Migration refers to a situation where people move from their country and settle in another either as a temporary or permanent abode. A person who moves thus from his country is an emigrant in his country while he is an immigrant in the country in which he moves into. Therefore emigration is the movement of a national out of his country while immigration is the movement of a foreigner into a foreign country. The difference between the number of emigrants and that of immigrants is referred to as the net migration. Hence, while immigration increases the population of a country, emigration decreases a country's population.

Figure 1.1 shows the compositions of a country's population. The total population of a country is divided to accommodate two groups of persons: those who cannot actively participate in the current production of goods and services and those who are currently actively participating in the production of goods and services. The former constitutes the dependent population while the later constitute the active population which is often referred to as the country's *labour force*. The labour force is further categorized into two components: those in the *labour market* and those not in the labour market. The labour market thus comprises of two groups of people: those who are currently engaged in the production of goods and services and those who are still actively searching for jobs. By definition, those who are not in the labour market constitute of people who are not willing to work. This is explained in the self-explanation illustration in Figure 1.1.

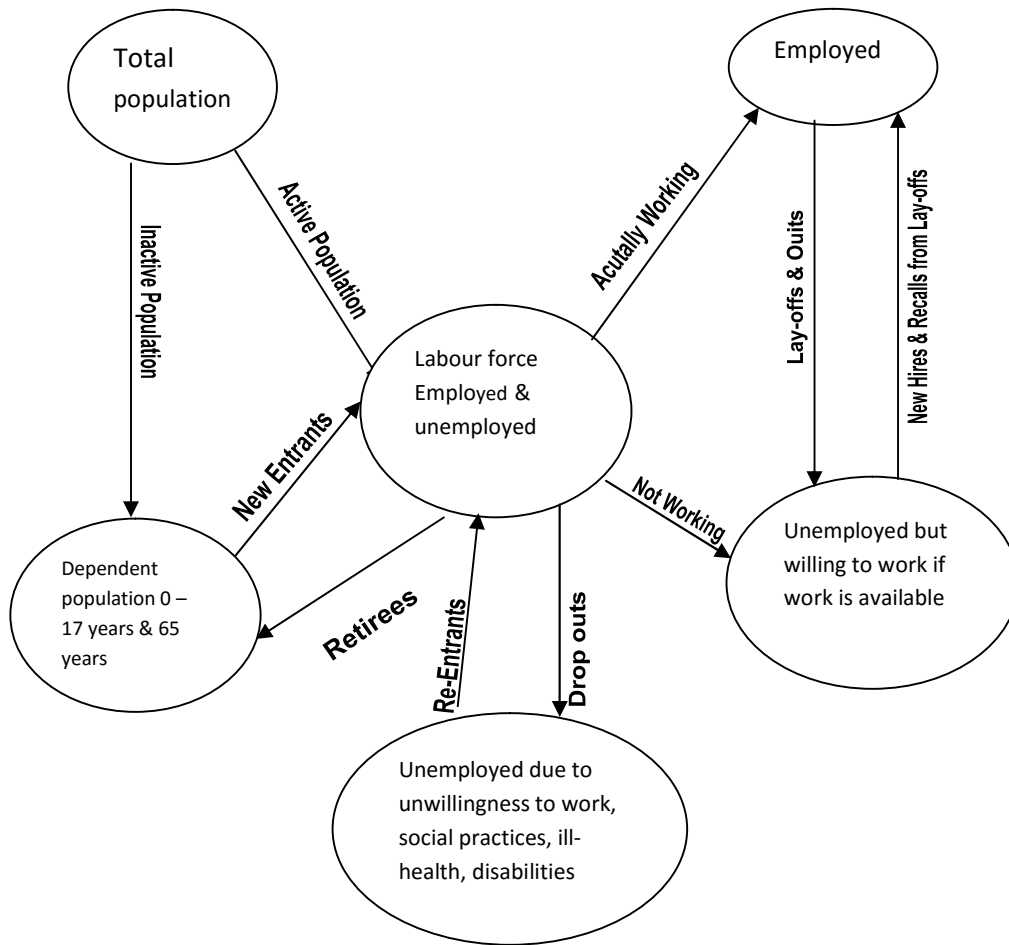


Figure 1.1 The composition of a country's population

Source: Nwabude (2008) cited in Nwokoye (2009)

A country's population is not a static concept; it is said to be dynamic because its constituents change in size and quality as frequently as possible. A look at Figure 1.1 shows the possible movement from the dependent group to the labour force (those who have come of working age and are able and willing to work) and a movement from the labour force to the dependent group (the retirees). Within the labour market, there are also movements from the employed status to the unemployed (due to retrenchment, quits) and movements from the unemployed status to the employed (due to recalls, new hires). Those who are unwilling to work can also change their perception and enter the labour market while those in the labour market can decide to quit the labour market due to cultural, social or health demands etc.

2. The Concept of Population Census

The population *census* is a vital aspect of economic management because it is the head-count of all the persons residing in an area. A population census is very vital for economic planning because it affords a people the opportunity of knowing the number of persons living in a

particular area. In conducting a population census, the head-counts are usually classified according to sex, age, occupation, religion, places of birth, residence and origin, religious-inclinations, and nationality, amongst others. Countries usually conduct population census at regular intervals. In Nigeria, the first population census was conducted in 1966. This was followed by those of 1976, 1986, and 1996 while the last was in 2006. According to the 2006 Nigerian population figure, Nigeria was about 141 million persons. The National Bureau of Statistics (2010) reported that Nigeria's population grows at an average rate of 2.33.

Why do Nations Conduct Population Census?

Population census is of utmost importance to every nation for the following reasons:

- a. It enables a country to determine the size and the rate at which its population is growing. This will help in determining whether the facilities available for use are enough to take care of the people's well-being and if not, the extent of infrastructural provisions that will be provided to take care of both the present and the future demands in order to meet world standards.
- b. It provides information that can be used for the distribution of a country's scarce resources. For instance the allocation of revenue amongst the central, federating states and the local council areas of Nigeria is done on the basis of the population census figure. Thus, areas with higher population are expected to receive larger shares of government revenues and expenditures.
- c. Knowledge of a country's population figure aids in the formulation of government policies especially when policies in relation with the growth of the population as well as both immigration into and emigration out of the country. For instance, in the event of a high population growth rate caused by high fertility rate, it is in the interest of the policy makers to make policies aimed at birth control. In like manner, if the pressure on a country's resources is as a result of its liberal immigration policy, policy makers can also make laws to curb this menace.
- d. A population census provides a country with the opportunity of either posing as *giants* (as in the case of Nigeria in the African continent) or as receptors of foreign donations in the form of aids and grants. A country with a very large population often attracts international aids in the events of environmental or economic misfortunes.
- e. The knowledge of a country's population size makes it easier for government to administer effective governance. For instance, it is the population size that assists in the division of a country or a geographical location into small units; the population figure also gives directives on how to divide the country into constituencies for electoral purposes.
- f. The population of a country determines the market potentials for goods and services. For instance, a large population provides a large market for goods and services and often makes room for both internal and external economies of scale; thus, a large population increases a firm's profitability.

3. The Concept of Overpopulation

A country is said to be overpopulated when the population of the country exceeds the resources (land, labour force, entrepreneurial capacity and physical capital) of the country. In other words, the population of the country exceeds the carrying capacity of that country.

Causes of Overpopulation

- a. Rapid rise in food production and distribution.
- b. Advancement in provision of portable water and good sanitation practices.
- c. Advancement in medical technology with breakthroughs in vaccines and antibiotics for erstwhile killer diseases.
- d. Improvements in the quality of education and standards of living within many developing nations.

Problems caused by Overpopulation

- a. **Rise in poverty level and resource depletion:** Increase in the incidence of poverty is one of the biggest features of overpopulation. In line with the Malthusian theory of population, over population puts a strain on existing resources of a country thereby leading to resource depletion without replenishment following the law of variable proportion.
- b. **Increased health problems:** Overpopulation usually leads to overcrowding and this may motivate the fast spread of contagious diseases and epidemics thereby causing health problems and challenges for the people. The death toll may increase as the number of health people in the workforce reduces.
- c. **Environmental pollution:** Overpopulation is often associated with increases in economic activities of production. This often increases the amount of waste generated in the course of these production activities and these wastes, often spilled into the environment, bring about environmental pollution which is not only harmful to the human body but is also harmful to all aquatic, atmospheric, and terrestrial lives as well as to the earth itself.
- d. **Conflicts and wars:** The strain put on the State resources (especially in the less developed countries) by overpopulation has often encouraged conflicts over resources like water, land, forests, etc. This has brought with it, a lot of tension between countries.
- e. **Rise in the unemployment and crime levels:** Overpopulation gives rise to increases in the unemployment rate as there are fewer jobs to support large number of people. A rise in unemployment further encourages higher crime level as people will steal various items to feed their family and provide themselves with basic amenities of life.
- f. **High Cost of Living:** As difference between demand and supply continues to expand due to overpopulation, it raises the prices of various commodities including food, shelter and healthcare. This means that people have to pay more to survive and feed their families.

Control of Overpopulation

Some of the ways through which *overpopulation* can be subdued includes the engagement of

- a. Family planning
- b. Government policy and legislations
- c. Improvements in educational services
- d. Improvements in medical and health services
- e. Massive enlightenment on sex education

4. The Malthusian Theory of Population

The *Malthusian theory* of population is credited to Thomas Malthus, a British reverend gentleman and a demographer whose work on population theory was published in ‘an easy on the principles of population’ and published in 1778. His major argument is that while the world population increased in geometric progression, while land, which was in a fixed quantity, produced food which increased only in arithmetic progression. He therefore theorized that a time would come when the human population gets up to the limit where the available food can be enough for sustenance and any further increase in population will have a reversal effect: there would be a forced population decrease through natural phenomena like famine, drought, diseases, etc, since the land has already been stretched up to and above its limit of production.

Malthus’ theory stood on the assumption that the power of population growth would be continually greater than the power of the earth to provide the basic substance of life: food. According to Malthus, passion between the man and women is an anticipated phenomena and when this goes on unchecked, population is bound to grow at an uncontrollable rate such that it would exceed food production. Famine, drought, and diseases are expected to set in because these are nature’s own way of returning itself to an equilibrium state.

Arguments against the Malthusian Theory

Much of Malthus’ predictions concerning woes to be faced by man-kind never came to pass irrespective of the evident growth in the present world population. People’s living standards have risen greatly and stand much above the minimum subsistence level. This could be as a result of the following evidences:

- a. **Rapid improvement in farming techniques:** Population has not increased as rapidly as predicted by Malthus. Conversely, food production has increased tremendously because of the rapid advances in technology. As a result, the people’s living standards all over the world have risen instead of falling as was predicted by Malthus.
- b. **Improvements in technology:** Malthus’ thesis maintained that food production would not keep pace with the growth in population owing to the operation of the law of diminishing returns in agriculture. But by making rapid advances in technology and

accumulating capital in larger quantity, advanced countries have been able to postpone the stage of diminishing returns.

- c. **Opening up of new lands:** the migration from Europe to the New World (the Americas) as well as to Africa and Australia made it possible for people to produce more food from more fertile land. This invalidated Malthus thesis that land was fixed.
- d. **Improvements in transportation facilities:** As at the time of his predictions, there was limited means of transportation but presently, improvements in the means of transportation (for instance, the invention of the railway, cargo aircrafts and cargo ships) have made food and raw materials more accessible leading to increase in world trade as well as improvements in consumption habit and inevitably, high living standards. .
- e. **Advances in medical sciences:** The improvements in the science of medicine ensured reduction in epidemics and diseases which would have lead to decline in the world population. It has also ensured that people have adequate medical attention in addition to having access to some medicine which is supplements to natural food.
- f. **Reduction in family size:** The Malthusian theory was not validated throughout the world and most especially in Europe and other advanced nations where family size control policies became popular and fashionable. This was rather intentional rather than as a result of the fear raised by the Malthusian theory.

It is an important reminder that the world is currently in that unenviable situation which Malthus had earlier predicted as the world is presently witnessing higher birth rates and higher death rates. Absolute poverty, ever-recurring epidemics, famine and communal fall outs, deficiency in food supply, and low living standards are some of the causes of the increase in the death rate. Malthus was truly a true prophet, if not for his country, at any rate for the Asiatic countries like India, Pakistan and China? This has given credence to the intense family planning drive in the present day India.

5. Factors that Influence Population Growth

The following factors determine the extent to which a population of a country can grow.

- a. **Birth control:** A country that encourages birth control measures is bound to have a manageable population than one in which its citizens are involved in uncontrollable life procreation.
- b. **Marriageable age:** In countries where the marriageable age is high, the number of offsprings is often fewer than in those where the marriageable age is as low as 10 years
- c. **Improved health standards:** Improved health standards helps to reduce the mortality rate as well as increase the birth rate thereby maintaining a high population level.
- d. **Age and sex distribution in the population:** A country characterized by large labour force (active population engaged in economic activities) is bound to experience

increasing population growth. In likewise manner, a country with large number of women is bound to experience large increase in its population.

- e. **Incidence of epidemics, wars, drought and natural disasters:** The Incidence of epidemics, wars, and other natural disasters such as drought, earthquakes, landslides and flooding usually cause massive reduction in the population of people. This is because of the harsh conditions upon which these humans may be subjected to.

6. The Role of Population Growth on Economic Growth

The science of economics distinguishes two categories of factor inputs in the production process: the material factor inputs and the human factor inputs. While the material factor inputs consist of land and capital, the human factor inputs are those economic resources which are supplied by human beings. It encompasses those who supply their labour skills (labour) and those who supply their entrepreneurial skills (entrepreneurs). These two groups make up the labour force of any country.

It is widely recognized that the material inputs cannot function efficiently in the absence of the labour force effectiveness. For instance, labour is needed to effectively utilize the material factor inputs effectively for efficiency in output production while the entrepreneur is needed to manage this effective combination for utmost efficiency. The role of human resources in the growth of any economy (be it capitalist-inclined or socialist-inclined) cannot be overemphasized. Any population whose dependent group outweighs its labour force is in danger because the implication is that they producers of national output is less in number than those who contribute nothing to economic growth. Such an economy is expected to retard in growth and in alternative, to import foreign human capital thereby lose huge foreign resources which could have been used in nation building – provision of basic infrastructures, national defense and security, pay workers salaries, etc (Nwokoye, 2009).

A healthy population is a positive determinant of economic growth because it propels an increase in size of the domestic market for goods and services; it makes for better division of labour, and increases the possibility of efficiency in productivity through improvements in the ratio of labour force to population. It further enhances the country's political as well as martial prowess. It encourages the diversification of demands for commodities and encourages increasing returns to scale and by so doing, raises the rate of economic activities in such a country.

In addition to its role as the suppliers of manpower and the producers of national output, the active population of a country, in addition to the dependent population, is also consumers of these goods and services so produced. The implication of this assertion is that a health population is ideal for any economy in pursuant of its growth policy because it ensures that the act of production is followed up by the act of consumption; this is very necessary in order to ensure the sustainable growth of the nation's gross output. However, when the growth rate of the population is rather explosive, the expected gains from population increases vanish. This is because

overpopulation results to increasing incidences of unemployment because the available job opportunities are fewer than the job seekers. Together with its attendant vices, unemployment limits the potentials of an economy because the number of consumers exceeds the number of producers. Hence large proportion of available scarce resources are consumed rather than invested for increment in the nation's capital stock. Hence, the encouragement for population control particularly in countries where their dependent population for outnumber their labour force. On the other hand, a large population makes room for a large market on the demand side of the economy.

Factors that Affect Economic growth

The major factors affecting economic growth are

- a. Quality and quantity of human resources
- b. Quality and quantity of natural resources
- c. Quality and quantity of capital accumulation in terms of capital goods
- d. Rate of technological progress
- e. Scale of production
- f. Conducive atmosphere
- g. Widening market on the demand side
- h. Etc

7. The Concept of Poverty and Poverty Reduction Strategies

Poverty is conceptualized as a condition in which a person does not have the ability to satisfy his basic needs of food, shelter, clothing and means of movement from one geographical location to another. It is measured in two categories: *absolute* poverty and *relative* poverty. Absolute poverty occurs in a situation when someone is unable to acquire adequate resources in a bid to attain a minimum level of basic needs for life sustenance while relative poverty relates with someone's inability to attain a specific level of living as specified by the government or any other policy. Relative poverty is comparative; it varies from one area to another and can be eradicated through effective income redistributive policies so as to ensure eradication of inequality of any kind.

The Incidence of Poverty

The incidence of poverty is reflected in a model of vicious cycle of poverty illustrated in Figure 1.2.

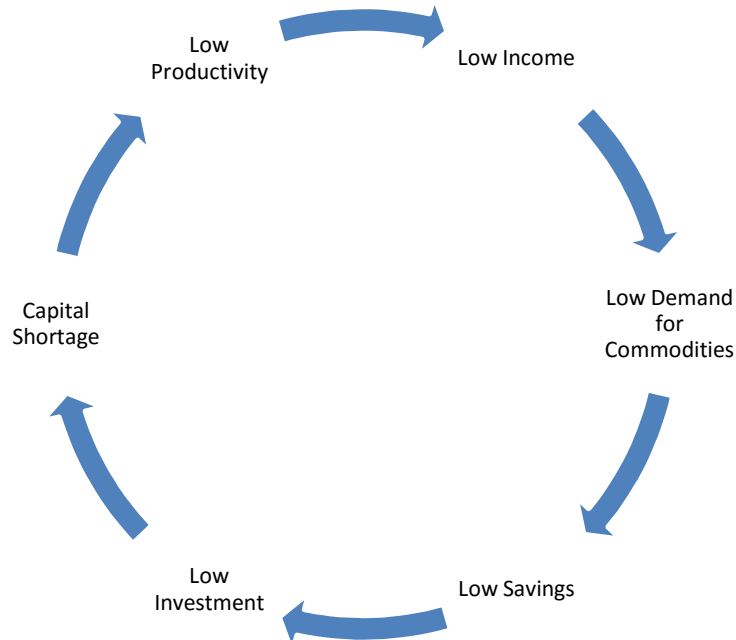


Figure 1.2 Vicious Cycle of Poverty

The occurrences of poverty can come in a number of ways. For instance:

- a. **Poor access to basic infrastructures:** When people do not have access to basic infrastructure like electricity, portable water, and good roads, their potentials are limited and this can bring on the inability to meet with their basic life requirements.
- b. **Overpopulation:** Overpopulation as well as population explosion increases the need for consumption thus making it less imperative to accumulate capital.
- c. **Unequal distribution of resources:** Inequality anywhere is inequality everywhere. When people are denied access to certain resources, it limits their productive abilities thereby restraining them to a life of poverty.
- d. **High cost of living:** A high cost of living erodes people's purchasing powers thereby restraining their production as well as spending powers.
- e. **Lack of means of sustenance:** Poor access to the basic needs of life: good food, portable water, good sanitation, good shelter, etc, are all evidences of poverty.
- f. **Poor access to educational and health services:** Human capital development is basically achieved through good education and health system. This is because these two variables contribute significantly towards equipping individuals with the right skills, knowledge and information as well as the right disposition, physical and mental attitudes

with which to approach life struggles and with which to contribute positively towards the development of his immediate community. The absence of good educational; and health facilities endangers human capital accumulation and makes both the individual and the nation at large, susceptible to deficiency and lack.

- g. **Low level of income and poor access credit facilities:** A low level of income and inaccessibility to credit facilities, just as in the case of poor access to other resources, limits a person's command for goods and services and leaves him quite susceptible to poverty.
- h. **Low level of savings and investment:** A person who consumes more than he saves will definitely have little or nothing left for investment without which there would be no capital formation. In the absence of capital formation, a people rather become *consumptionist* other than *productionist*. This rather swells the vicious cycle of poverty.
- i. **Low level of productivity:** A person who does not work hard enough will definitely not have enough resources with which to meet his basic needs and requirements for a healthy life.
- j. etc.

How do we move a country out of poverty?

A person is trapped in poverty if he subsists below two dollar per day which is the internationally accepted poverty line. Countries can move their citizens out of poverty trap by involving program designed to create and redistribute wealth so that the poor can have adequate command of goods and services available within the domestic economy and in the international market. Some of these programs are those designed to

- a. Generate employment through programs intended to boost entrepreneurship and make people more employable.
- b. Provide of basic amenities of life: good food, shelter, sanitation, electricity, etc.
- c. Attract foreign assistances in form of aids, grants, tangible commodities and services.
- d. Provide basic infrastructure by the government for instance good roads, transportation, electricity, etc, aimed at boosting people's ability to make a living
- e. Improvements in both the educational and health system with the aim of achieving human capital development.
- f. Re-orientate citizens towards self-reliance so as to reduce the incidence of corruption thereby ensuring equitable distribution of the nation's resources.

Revision Questions

- a. Define the word *population*. Identify the three major factors that influence the population of a country.

- b. With the aid of a well labeled illustration, elucidate on the insinuation that the population of any country is of a dynamic nature.
- c. What is the basic difference between the concepts of labour force and labour market?
- d. Of what importance are population census figures?
- e. What is overpopulation? Examine its causes and the solutions to population control.
- f. What are the basic tenets of the Malthusian theory of population? Of what use is it at interpreting the current trend in world population growth?
- g. Identify the link between population growth and the growth of an economy.
- h. Differentiate between absolute and relative poverty. What strategies can be engaged towards poverty reduction in less developed countries?

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