
IMPACT OF POPULATION GROWTH ON SOCIO-ECONOMIC DEVELOPMENT: THE NIGERIAN EXPERIENCE

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Abstract

Scholars argue that high population growth creates pressures on inadequate natural resources, mitigate private and public capital formation, and redirect additions to capital resources to preserving rather than increasing the stock of capital per worker. Others point to positive effects such as economies of scale and specialization, the possible spur to favorable motivation caused by increased dependency, and the more favorable attitudes, capacities, and motivations of younger populations compared with older ones. Recent United Nation projection put Nigerians population at 216 million people. It is against this backdrop that this study examines the prospect of population as a potent instrument for Nigerian's development. The paper utilizes secondary source of data, whereas analytical method of data analysis was utilized. Inductive analysis from this paper indicate that population growth is a potential resource for socio-economic development provided that the population is optimally utilize. China with its population of 1.2 billion was able to lift use its productive population to left over 200 million out of poverty in 20 years, and become one of the leading economies in the world. This study recommends that Nigeria should see population as a blessing that should be utilize for national development. Nigeria should convert its population from a consumption population to a productive population as this is the only means by which Nigeria can utilize its population for national development.

Keywords: Population, Impact, Growth, Soio-economic, Development.

Introduction

Population growth is a topical issue that draws international attention due to its perceived consequences. Recent report from the United Nation indicated that the world population will reach eight (8) billion people by November 2022 with People's Republic of China becoming second to India as recent report has placed India as the most populous country in the world. The annual report which was prepared by the Population Division of the United Nations Department of Economic and Social Affairs

predicted that, the continental population stands as these, Europe 747,636,026 which account for 9.6 percent, Latin America and the Caribbean 653,962,331 account for 8.4 percent, Asia 4,641,054,775 account for 59.5 percent, Oceania 42,677,813 account for 0.4 percent, Northern America 368,869,647 account for 4.7 percent, and Africa 1,340,598,147 account for 17.2 percent. The Nigerian population would hit 216 million by November 2022 making the country the sixth most populous country in the world. Going by the implication of population growth, scholars have caution on the attendant problems associated with raise in population such as, poverty, food scarcity, fewer jobs, insecurity, hunger and poor health indices.

Despite the perceived attendant problems associated with the raise in population as articulated by some scholars such as Malthus (1993) and (Neal, (2017), high population can only be a problem if the country concern does not utilize the population wisely by making it a productive population rather than a consuming population. China with its population of 1.2 billion was able to transform its population into a productive population by creating a conducive atmosphere for businesses to thrive is a good example to indicate that, population is a wealth if its utilize wisely for optimal production. Another example, was the USA, during the colonial period America didn't participate in the partition of Africa, because its market was not saturated as was the with the most European countries where their market was saturated due to mass production of product which compel them to look for market elsewhere for their product. But, because of the relative population of America at time, America was able to utilized its local market for its mass product. Based, on this backdrop, this paper examines the impact of population on socio-economic development of Nigeria focusing on education, healthcare, transportation, power. The paper uses secondary source of data, and analytical method was utilized as the tool for data analysis.

Literature Review

Population

Population from a narrow perspective is the total number of people or animals residing in a particular location or area. Similarly, populations denote the total number or inhabitant constituting a particular race, class, or group in a specified area. Population is also conceived as a group of individuals of the same species occupying a particular geographical area. Population may be relatively small or large, it could also be closed or open as in on an island or valley and may be diffuse without a clear boundary between them and the neighboring of the same species.

A recent report from the United Nation indicated that Nigeria has moved up from the previous 10th most populous country in 1990 with 94 million people to become the 6th

most populous nation in 2020 with 216million people. Furthermore, the reported assert that, the country was projected to become the 4th most populous country with a 375 million populations by 2050. Also, the report shows that Nigeria, the Democratic Republic of Congo, Egypt, Ethiopia, India, Pakistan, the Philippines and the United Republic of Tanzania will account for more than half of the global population in 2050. While acknowledging that its latest projections suggest that the world's population could grow to around 8.5 billion in 2030 and 9.7 billion in 2050, it said countries of Sub-Saharan Africa were expected to contribute more than half of the figure to become the world's most populated sub region. It added that, the world population projection would reach its peak of around 10.4 billion people during the 2080s and to remain at that level until 2100 (UN, 2022).

Being an important factor for human development, there has been a lot of empirical studies on the relationship between population and development with contradictory findings. While some findings found positive and significant relationship between population and socio-economic development, other findings found negative relationship between population and socio-economic development.

From the empirical studies, over the past centuries three schools of thought have contradictory findings on the relationship between population and socio-economic development. For example, the pessimists school of thought scholars such as Coale and Hoover, (1958), Ehrlich, (1968), and Malthus, (1992) have found that fixed resources especially land, physical capital, knowledge and population growth hampers economic growth. While the optimists scholars such as Boserup, (1981), Jones, (1995), Kremer, (1993), Kuznets, (1967), Romer, (1990), and Simon, (1981), instead, believe that once technological progress is allowed to be endogenously determined within a given model, the impact of population growth on economic development is definitely positive, because larger populations stimulate the advancement of technical change which could lead to greater economies of scale, and are likely to have a greater number of geniuses.

The Population Neutralism which is the third school of thought, recognizes that, population growth has no effect on a country's economic growth prospects. Similarly, from the neoclassical growth theory, Bucci (2017) was the first to show that in a steady state, the growth rate of real per-capita income is eventually determined just by the rate of technical change, an exogenous variable. In the same vein, Williamson (2003) using a world sample of 78 countries covering the period from 1965 to 1990, shows that, there is no significant relationship between the two variables.

In a similar study by Herzer et al., (2012), and Li and Zhang, (2007) they found a negative effect of population growth on economic growth. In another study by

Saccone et al. (2011), using a cross-country sample of 93 countries over the period 1980–2010 found an inverted-U shaped relation between population growth and per-capita GDP. In a related study, Baker, DeLong, & Krugman, (2005), revealed that economic growth in high-income countries is likely to be relatively slow in coming years in part because population growth in these countries is predicted to slow considerably.

On the contrary, some scholars argued that population growth has negative effect on economic growth, for example Linden (2017), argue that population growth has been and will continue to be problematic as more people inevitably use more of the finite resources available on earth, thereby reducing long-term potential growth. Moreover, population growth affects many phenomena such as the age structure of a country's population, international migration, economic inequality, and the size of a country's work force. These factors both affect and are affected by overall economic growth.

In a similar study by the World Bank (2017), it was revealed that, the world as a whole, over the period 1990 to 2015, the correlation between population growth and real per capita GDP growth was -0.1849 suggesting that, these two variables were uncorrelated during that period.

In another similar study by Thomas Malthus (1993) who developed one of the earliest and Best known theories showing that population growth has a negative effect on well-being. Thomas Malthus (1993), further argue that, population has a tendency to grow more rapidly than food supplies so that population reductions through various types of misery are always required to keep the number of people at a level consistent with the amount of food available. Similarly, from 1000 to 1820, average annual population growth in England was about 0.29% while per capita GDP growth averaged 0.12%, for an overall average annual economic growth rate of 0.41% according to data from World Economics (2016). From the extant literature, its proven that, the relationship between population growth and socio-economic development is contradictory, while some studies found positive and significant relationship between the two variables, other studies found negative relationship.

Development

The concept of development is a multi-dimensional concept which can be view from different perspective. For Salisu (2016), development is seen as basically an economic concept that has positive connotations, which it involves the application of certain economic and technical measures to utilize available resources to instigate economic growth and improve people's quality of life. In contrast to Salisu (2016) perception of development, Rostow (1960), sees development in terms of modernizing a basically traditional society or a subsistence sustained growth.

Similarly, Rodney (1972), perceived development as a many-sided process that. at the individual level, it implies increased skill and capacity, greater freedom, creativity, self-discipline, responsibility, and material well-being. At the level of social groups, development implies an increasing capacity to regulate both internal and external relationships.

In the same vein, Rogers (1969), defines development as a type of social change in which new ideas are introduced into a social system in order to produce a higher per capita income, and level of living through more modern production methods and improved social organization. Development is both a physical reality and a state of mind in which society has some combination of social, economic, and institutional processes for securing a better life.

Accordingly, development means “improvement in the country's economic and social conditions”. More specially, it refers to improvements in way of managing an area's natural and human resources. Similarly, most economist perceived development in terms of economic growth which is measure in relation to GDP. Within this context, development is referred to as an increase in the gross national product or in per capita income, it is equated with growth and it is envisioned that, a quantum increase in the production of goods and services would bring development.

High Gross National Product (GNP) growth of the fast-growing developing countries which has failed to reduce the socio-economic deprivation of substantial sections of their population does not constitute development, because mere increase in GNP and GDP without corresponding increase in people's income and well-being cannot be perceived as development. Similarly, the high income for the industrialized countries has not been able to provide protection against the rapid spread of social concerns like drug addiction and alcoholism, AIDs, homelessness, violence, and the breakdown of family relations, this also cannot be term as development. Against this backdrop, this study perceived development as the ability to reduce deprivation of any kind to a reasonable level and be able to increase people's income through equitable distribution of the country's resources.

Socio-economic development

The process of social and economic development in a society is known as socio-economic development. Indicators used to gauge socioeconomic progress include GDP, life expectancy, literacy rates, and employment rates. Changes in less tangible criteria are also taken into account, such as the degree of civil society engagement, personal safety, associational freedom, and safety from physical danger. According to Tatum (2023), socioeconomic development is a process that seeks to identify both the social and the economic needs within a community and seek to create strategies

that will address those needs in ways that are practical and in the best interests of the community over the long run. The general idea is to, find ways to improve the standard of living within the area while also making sure the local economy is healthy and capable of sustaining the population present in the area. Similarly, socio-economic development denotes the ability to create more jobs, stable employment for more households, and more money flowing through the local economy for the overall well-being of the population (Ahmed, 2021).

In this vein, socio-economic development involves making changes in current laws and regulations in order to attract new growth and enhance the standard of living for local residents. Changes in laws can make it easier for new industries to move into the area and offer employment at equitable wages. This in turn can aid in motivating the creation of more services that citizens can enjoy, allowing the area to prosper.

Healthcare

Due to the large population of Nigeria, it has been estimated that about 5,000 patients seek for treatment outside the countries for different types of illness which could have been taken care of in Nigeria. It has been estimated that about 1.2 billion dollars is lost by Nigeria yearly to countries such as India, Malaysia, USA, UK, and Germany for medical treatment, whereas this amount of money is enough to build a hospital with all the necessary modern equipment that is needed for treating most of the illness that people go abroad to seek their treatment (Joda,2011 ; Abubakar, et al 2018).

For example, the cost of establishing a cancer treatment facility is about \$957,203 US dollars for both the capital and running cost (Neal, 2017). By implication what Nigeria losses to health tourism is enough to establish standard and comprehensive healthcare centers in at least 15 States of the federation treating such illness as chemotherapy, heart surgery, kidney transplant, oncology, orthopedics, nephrology and cardiology (Abubakar, et al 2018). Having 5,000 patients seeking for treatment outside the countries which amount to 1.2 billion dollars, if its added to roughly 20,000 patient that are locally treated , the money that will be realized is huge. With the increase in population if adequate and standard healthcare are provided, it would serve as source of means of income for the country, and the money realized can be reinvested to develop the healthcare sector that can compete globally.

Education

The education sector particularly, the university is endowed with a lot of potential for development and revenue generation if proper and adequate attention is given to the sector. Currently there are 287 universities in the country both public and privately owned, and a breakdown of the 287 universities as approved by NUC shows that, 49

are federal, 54 are state-owned and 184 are privately owned institutions (Adamu, 2022, May, 12). According to Rasheed, more than 2.1 million population of students are currently studying in Nigerian Universities. The figure is a higher than what it was in the previous year's 2017, where the number was put at 1.7 million undergraduate students and 234 thousand postgraduate students (Rasheed, 2022).

JAMB's admission statistics released on September 8, 2019 showed that 443,624 candidates were admitted into universities; 81,791 candidates were taken by the polytechnics; 59,498 were offered admission by colleges of education while 585 opted for Innovation Enterprise Institutions. The total number of candidates who applied for JAMB from 2018-2020 were 4,720,739, while the number of candidates admitted from 2018-2019 was 1,198,055, leaving about 3.5 million candidate out of the system (Suleiman, 2022).

Apart from the number of the candidate that couldn't be admitted into the Nigerian universities due to lack of capacity. A substantial number of Nigerian, are studying abroad, for example analysis of data by the Central Bank of Nigeria (CBN) showed that, **about 100,000 Nigerian students were enrolled abroad in 2020, of these number 4,379 Nigerian students were in Ukraine**, US hosted a total of 13,762 students for the 2019/20 academic year, Malaysia with roughly 13,000 in 2019, Canada, with 11,985 in 2019, the UK, with 10,540 in 2017/18. Other destination for Nigerian student include Turkey, Ukraine, Hungary, Finland, Cyprus, Italy, Romania, France, Ireland, Poland, Estonia, Greece, Sweden, the Netherlands and Norway.

Accordingly, the Central Bank stated that Nigerians, spend N1.6trn every year to pay school fees outside. A breakdown shows that, Nigeria spent about US\$221 million on foreign education between December 2021 and February 2022. The CBN data, according to a **report** by local newspaper *Punch*, showed that, in December 2021, Nigerians spent US\$90.67 million on foreign education. In January 2022, a total of US\$60,202,730.84 was spent on foreign education, while US\$69.9 million was spent in February 2022 (**The ABUSITE (2022)**). Providing adequate funding to the universities to accommodate the teeming number of potential candidate seeking admission into Nigerian university and attracting those seeking admission outside the country to remain at home will invariably help in developing the Nigerian universities and by extension will allow huge revenue generation.

Power

The power sector is another sector, where there is potentials for revenue generation due to the increase of population of Nigeria of 216 people. Currently, the sector lack the capacity to provide Nigerians with electricity for house hold consumption which undermine the amount of revenue that could be generated if optimally utilized. Out

of the 216 people Nigerian population, if 70 percent of the population could be connected to the national grid that could be a good market. A World Bank-sponsored report in 2021 showed that, 85 million Nigerians are not connected to the national grid, and that Nigeria loses about \$29 billion annually due to erratic power supply. This is a significant sum of money which could be used to improve the economy and enhance living conditions. The power sector reform of 2005 which was designed to provide the enabling environment for the private sector to fully participate in the provision and distribution of power to Nigerians has woefully failed to achieve the desire objective.

For example, the current generating capacity stands at 7000 Mega Watts with potentialities of generating 12,522 megawatts (MW) of electric power from the existing plants (Fashola, 2018). If the money is collected back and is used properly 20,000MW can be generated and that will somehow have stabilized the power situation in Nigeria even though Nigeria needs about 180,000 of MW to overcome the power challenges (Oduntan, 2018). For Nigeria to sustainably develop its economy, the power challenge, particularly the frequent collapse of the national grid, must be resolved. The government has an important role to play in solving this problem by improving the business environment for investment. The Accugas success story needs to be replicated by creating a conducive environment which attracts investors and guarantees a reasonable rate of return on investments.

Transport

Transportation is defined as the movement of people, goods and commodities from one place to another either by land, water or by air. Over the years, the Nigeria's transport network has expanded to accommodate a growing population. The transport sector was valued at N2.6trn (\$6.9bn) in current basic prices in 2020, down from N3trn (\$8bn) in 2019, according to the National Bureau of Statistics (NBS). In terms of consumption, the transport sector consumes over 77% of the total oil supplied which placed the transport sector as the largest consumer of petroleum products and transportation as the main means of transportation in the country (Gujba et al., 2013; Oyedepo, 2014).

Air transport recorded an unprecedented rise in 2020, the number of air passengers carried in Nigeria was 3.4 million (Knoema, 2022). At the end of 2021, 15.23 million passengers travelled through Nigeria's domestic and international airports. This is according to the latest Air Transportation Data released by the National Bureau of Statistics (NBS). As for rail transportation, in the second quarter of 2021, around 565.4 thousand people travelled by rail in Nigeria. According to the latest data from the NBS, the rail system carried 2.6m passengers in 2017, 3m in 2018 and 723,995 in

the first quarter of 2019. Revenue generated from passenger tickets amounted to N1.2bn (\$3.2m) and N1.9bn (\$5.1m) for 2017 and 2018, respectively, and N520.8m (\$1.4m) for the first three months of 2019. In terms of cargo, 141,186 tonnes were moved in 2017 for a revenue of N374m (\$999,000) figures that grew by 132% and 32%, respectively, in 2018. Some 54,100 tonnes were moved by the rail system in the first quarter of 2019, generating revenue of N102.6m (\$274,000).

Similarly, completing the construction of the 387-km line linking Kazaure, Daura, Katsina and Jibiya, Dutse and Kano to Maradi, in neighbouring Niger and subsequently connecting Lagos-Kano line with the new Kano-Maradi artery will eventually create an uninterrupted network across Nigeria and this will allow Nigeria generate revenue equal to what is accruing from oil.

Water transportation is another area with potentials if properly managed, for years, the growth of water transport and other ancillary businesses have been impeded by numerous obstacles. The country is blessed with a coastline of about 870km and about 3000 kilometer of inland waterways. Such waterways is a blessing for Nigeria as it is an infrastructural advantage that regularly needed to be maintained and upgraded for the effective utilization of the waterways for the development of the sector and for national development in general.

Recently, the Lagos State Waterways Authority (LASWA) confirmed that, about two million people shuttle the Lagos waterways on a monthly basis. If two million people was estimated to have shuttle the Lagos waterways on a monthly basis, how many million people will shuttle the 3000 kilometer of inland waterways from the Southern-Eastern part of the country to the Northern part of the country, how many jobs opportunities will this create, and how much revenue will be realized on daily basis.

Communication

Nigeria is Africa's largest ICT market, accounting for 82% of the continent's telecoms subscribers and 29 % of internet usage. Globally, Nigeria ranks 11th in the absolute number of internet users and 7th in the absolute number of mobile phones. The National Bureau of Statistics (NBS), has established that, the telecommunications sector is the largest segment of the information communication technology. The Nigerian Telecommunication sector has evolved over the years to an oligopolistic market structure (a small number of firms have the majority of market share). It had in August, celebrated 20 years of its revolution, increasing the number of telephone lines from NITEL's 400,000 to GSM connected users of over 290 million. It currently commanded an investment put at \$75 billion over the years, the sector has contributed immensely to Nigeria's economy and the lives of Nigerians. The advancement of mobile phone usage from basic telephony to new enhanced services and the

introduction of new technology within diverse sectors of the country have seen the sector grown massively.

The current projected population of Nigeria which was put at 216 million people is a potential market for the communication sector if properly utilized. The current financial predicament of revenue short fall faced by the Nigerian government will have been Lessing had it been the government didn't sell out the NITEL to the South African company MTN, as it was estimated that, what the MTN generates annually is more than what the 19 Northern states of Nigeria generate put together. In essence, billions of naira is lost to the foreign company whereas such amount is enough to fill the revenue gab created by the non-remittance of the NNPC.

Conclusion

A number of previous literatures proves that, population growth has a negative effect on country's development because a rise in population will exert pressure on the existing infrastructure thereby leading to the deterioration of such infrastructure. Scholars alleges that, Nigeria's economy was largely consuming and wasn't productive enough to be viable with 216 million people. Inductive analysis from this paper indicate that, population growth is a potential resource for socio-economic development provided that, the population is optimally productive. China with its population of 1.2 billion was able to lift over 200 million out of poverty in 20 years, and become one of the leading economies in the world despite its high population. Hence, if Nigeria can optimize its population like that of China, there is every possibility that Nigeria can become one of the leading economies in the world especially, having been blessed with all kind of natural resources which are in commercial quantity.

Limitation and direction for future study

Despite the insightful findings of this study, the study cannot be free from some limitations such as, scanty study on population using other variables such as demographic variable. Other limitation of this study was the approach which was cross-cultural. This present research work, focused on the impact of population on socio-economic development, upcoming study might focus on the impact of population on infrastructural development.

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