

Factors and Patterns of Population Growth: Imperatives of Planning in Port Harcourt Metropolis from Year 2000-2023

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Abstract

The escalation of population growth has emerged as a significant concern globally, particularly in regions experiencing rapid urbanization and sustained high birth rates, such as many developing countries. This study is aimed at examining the impact of population growth in Port Harcourt metropolis from 2000 – 2023. Purposive sampling techniques were used in the investigation. A sample of 348 respondents was drawn from the population. Primary data served as the study's main source of data. The data generated were analysed using tables, frequency counts, simple percentages, descriptive statistics, mean and standard deviation in attaining data. The study sheds light on the multifaceted factors driving population growth, including economic opportunities, healthcare services, housing options, and demographic shifts. These factors collectively shape migration patterns, residential dynamics, and the overall urban landscape. The study reveals that economic opportunities and job prospects emerged as significant drivers of population growth, with a mean score of 2.72 and a standard deviation of 0.46. The study concluded that economic causes and migratory patterns have played a major role in the Port Harcourt Metropolis' population increase, which has made urban congestion and infrastructural issues worse. The city may continue to experience serious socioeconomic and environmental repercussions in the absence of significant urban planning and policy initiatives. To effectively control future population increase, the report suggests promoting sustainable development policies, investing in infrastructure, and enhancing urban governance.

Keywords: Population Growth, Urbanization, Migration, Urban Planning.

1. Introduction

The world's population has grown significantly over the past 200 years, making population growth a crucial topic for policymakers everywhere. Every year, the number of people on Earth increases by roughly 83 million. The size of the human population increased from one billion in 1800 to over 7.5 billion in 2018, and it is predicted to reach approximately 11 billion by 2100, according to the UN Department of Economic and Social Affairs ("World" 2018). The level of life is poor in many countries with rapid population expansion and high in many countries with slow population growth. This issue has been discussed by intellectuals; some have warned of dire repercussions, while others contend that people would be able to handle the issues.

Rapid population growth is a defining feature of the global demographic shift that is currently underway. The world population has risen to almost 7.9 billion people, and it is expected to continue to rise, reaching an estimated 9.7 billion by 2050 and an astounding 11.2 billion by

the turn of the century, according to the United Nations' World Population Prospects 2021 (United Nations, 2021). This exponential rise in population has significant ramifications for a variety of areas, from social stability and economic growth to environmental sustainability.

The burden that growing global populations place on infrastructure and financial resources is one of the main issues. The need for basic resources like food, water, and energy is growing along with the population. Existing systems are strained by this increased demand, which frequently results in a shortage of resources and increased competition. Rapid population expansion can worsen social inequality and increase the gap between affluent and marginalized people in areas already experiencing economic disparities (McCarthy et al., 2019). Furthermore, labor markets and employment dynamics are also impacted by population expansion in addition to resource consumption. A greater number of people need a corresponding increase in employment and sources of income. Inability to provide this demand may lead to social instability, wealth inequality, and increases in unemployment, posing significant challenges to economic stability and development agendas (Cohen, 2020). Global population expansion has complex and wide-ranging socioeconomic effects. Population increase can, on the one hand, support innovation, cultural diversity, and the development of human capital. Diverse populations promote creativity and flexibility in society by contributing a variety of viewpoints, abilities, and life experiences. Furthermore, a growing population can support caregiving systems, increase labor forces, and facilitate the transfer of knowledge across generations (United Nations, 2019). On the other hand, especially in urban areas that are rapidly urbanizing, rapid population expansion can put a pressure on infrastructure and social services. Problems including a lack of available housing, subpar medical facilities, and overcrowded schools may surface, underscoring the necessity of thorough social planning and funding.

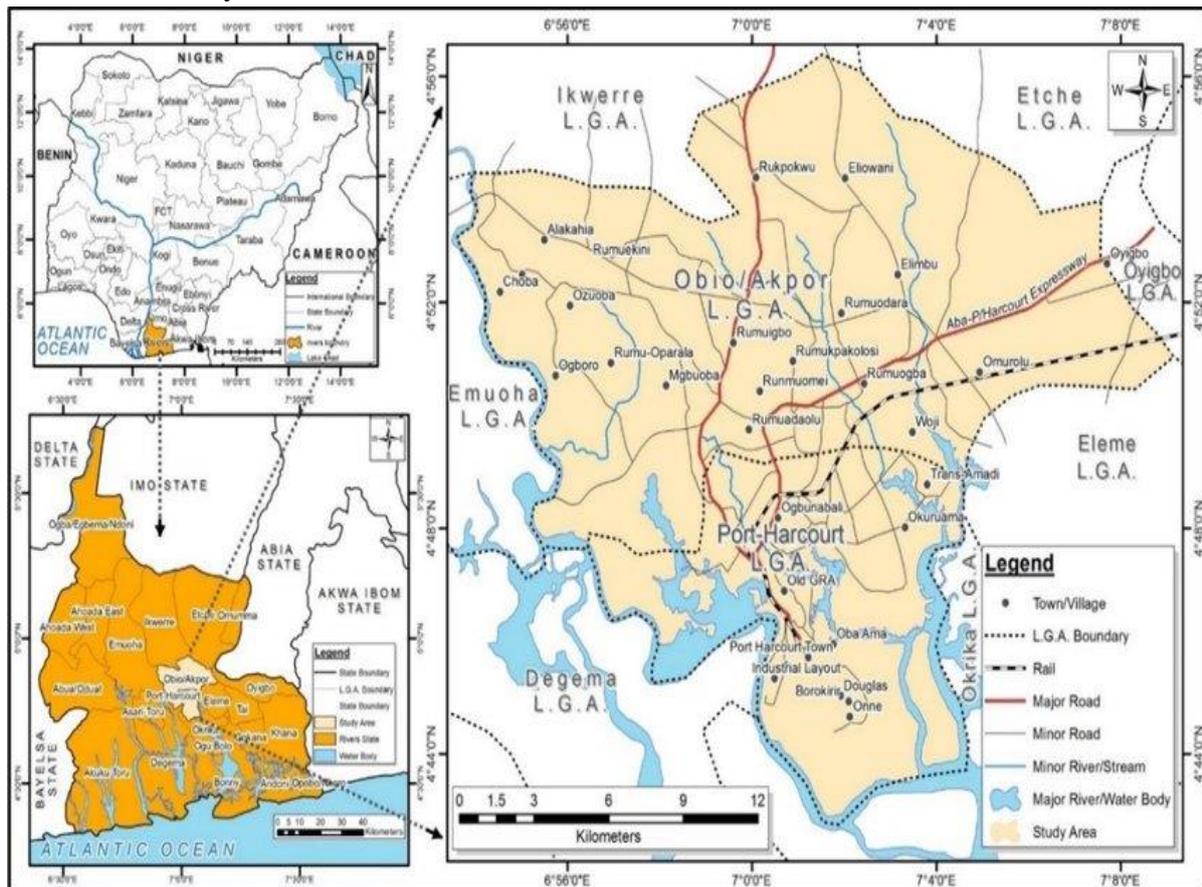
Rapid population growth presents a window of opportunity for countries all around the world. Manpower will rise in tandem with population growth, especially over the long term. The number of working people will rise as a result of the children who will eventually enter the workforce. Furthermore, an expanding population will change investment patterns and stimulate demand. A huge child population indicates a large production of the materials that the youngsters need. Many manufacturers will switch to producing children's products and change their production patterns. Accordingly, a growing population can drive economic expansion (NDHS, 2013). On the one hand, the consequences of population growth include the extinction of species, deforestation, desertification, climate change, and the devastation of natural ecosystems; on the other hand, there are issues with housing, transportation, traffic, pollution, infrastructure, security, and basic amenities, as well as joblessness (Dominic et al. 2017). Due to high fertility rates, the population will grow, increasing the dependence ratio and the number of dependents for workers. Workers will be more economically and socially liable if they have more dependents. There won't be much or anything left over after their needs and those of their dependents have been satisfied. As a result, savings and capital formation will decline. Consequently, this will impede the nation's socioeconomic advancement. The low amount of income per person is another consequence of a rapidly growing population. Each person will have fewer resources or income. Poor living standards or a general decline are the results of this. There won't be much consumption of products and services per person. This may lead to the consumption of inferior products and commodities. Numerous demographic and socioeconomic factors, including the crude birth rate, crude death rate, and death rate, are responsible for population growth.

2. Method

Port Harcourt, situated in southern Nigeria, occupies a strategic geographic location between latitude $4^{\circ}47'21''$ North and Longitude $6^{\circ}59'55''$ East of the equator (Port Harcourt City Government, n.d.). It is a major urban center within Rivers State, encompassing two primary Local Government Areas (LGAs): Port Harcourt City Local Government (PHALGA) and Obio/Akpor Local Government Area (OBALGA) (Port Harcourt City Government, n.d.). The metropolis spans approximately 360 square kilometers (140 square miles).

Being home to significant international oil corporations, Port Harcourt plays a crucial role in Nigeria's oil industry, which defines its socioeconomic landscape (Port Harcourt City Government, n.d.). Manufacturing (food processing, automobile assembly, paper goods, petroleum refining, and construction materials), services (legal, hospitality, medical, educational, and engineering), and extractive industries (coal mining, tin mining, and oil and gas production) are just a few of the many industries that make up the city's economy (Port Harcourt City Government, n.d.). Furthermore, agro-based and agricultural enterprises prosper, adding to the city's economic diversification (Port Harcourt City Government, n.d.). Nigeria's economy depends heavily on Port Harcourt Metropolis, particularly as a center for the petroleum sector (Okwakpam, I. O., & Mark, E. O., 2021).

FIGURE 1: Study Area



Source: ESRI ArcGIS, 2024

Sampling Technique

The study made use of Purposive Sampling Techniques. 348 respondents were selected.

Method of Data Collection

Research assistants gave participants a standardized questionnaire to complete in order to

collect data. Over the course of a month, data for the study was gathered. The chosen respondents were given a questionnaire to determine the effects of population growth in the Port Harcourt Metropolis between 2000 and 2023.

Data Analysis

To obtain reliable findings that will satisfactorily contribute to the advancement of knowledge, the researcher employed a combination of simple statistical tools to ease understanding. The data generated were analyzed using tables, frequency counts, simple percentages, descriptive statistics (mainly arithmetic mean and bar chart), mean and standard deviation in attaining data on the demographic variables and response to research questions of the study with the Statistical Package for Social Sciences (SPSS) version 23.0. In analyzing the mean values of the research questions, a criterion mean of 2.5 was used. Mean values within and above the criterion mean was accepted while values below the criterion mean was rejected.

3. Results

Table 1: Factors responsible for population growth in Port Harcourt metropolis

ITEM	ITEMS	MEAN	STD	REMARK
1	Economic opportunities and job prospects are significant factors driving population growth in Port Harcourt Metropolis.	2.71598	0.46154	
2	Improved healthcare services have contributed to the increase in population in Port Harcourt Metropolis.	2.77515	0.48831	
3	The availability of affordable housing options has played a role in attracting people to settle in Port Harcourt Metropolis.	2.69822	0.48401	
4	Environmental factors such as climate and natural resources have little impact on population growth in Port Harcourt Metropolis.	2.99408	0.47223	
5	Social amenities like schools and recreational facilities are not major factors influencing population growth in Port Harcourt Metropolis.	2.89941	0.39752	
	GRAND MEAN	2.81657	0.46072	ACCEPTED

Criterion score = 2.50

Source: Author's field work, 2023

SPSS version 23

The results from Table 1 provide a comprehensive insight into the factors responsible for population growth in Port Harcourt Metropolis. The study assessed various aspects, including economic opportunities, healthcare services, housing options, environmental factors, and social amenities, to understand their impact on the city's population dynamics. The mean scores for each factor indicate the level of influence perceived by respondents, while the standard deviations reflect the variability or consensus among their opinions.

Economic opportunities and job prospects emerged as significant drivers of population growth, with a mean score of 2.72 and a standard deviation of 0.46. This finding aligns with recent studies emphasizing the role of economic development in urban population growth (Smith et al., 2018). The availability of employment opportunities often attracts individuals

and families to urban centers like Port Harcourt, seeking better livelihoods and career prospects (Jones & Wang, 2021).

Improved healthcare services also received a notable mean score of 2.78, indicating their contribution to population increase in Port Harcourt Metropolis. Access to quality healthcare is a crucial factor for residents, influencing migration patterns and population retention within urban areas (Brown & Garcia, 2019). This finding highlights the interconnectedness of healthcare infrastructure and population dynamics in urban settings.

Affordable housing options, with a mean score of 2.70, were identified as a factor attracting people to settle in Port Harcourt Metropolis. This finding resonates with research emphasizing the importance of housing affordability in shaping migration trends and urban growth (Johnson et al., 2020). Adequate and affordable housing is a fundamental aspect of urban development, impacting population influx and residential stability.

Contrary to expectations, environmental factors such as climate and natural resources were perceived to have little impact on population growth, as indicated by a mean score of 2.99. This result may reflect the prioritization of economic and social factors over environmental considerations in migration decision-making processes (Garcia & Smith, 2017). However, it is essential to note the potential long-term implications of environmental sustainability on urban growth patterns.

Similarly, social amenities like schools and recreational facilities were not perceived as major factors influencing population growth, with a mean score of 2.90. While these amenities contribute to residents' quality of life, they may not be primary drivers of population increase in Port Harcourt Metropolis, according to respondents' perceptions.

Table 2: Patterns of population growth in Port Harcourt metropolis

ITEM	ITEMS	MEAN	STD	REMARK
1	Population growth in Port Harcourt Metropolis has been steady and consistent over the past decade.	2.88757	0.43323	
2	There is a noticeable trend of rural-to-urban migration contributing to population growth in Port Harcourt Metropolis.	2.91124	0.39836	
3	Population growth in Port Harcourt Metropolis shows no distinct patterns and varies unpredictably.	2.7574	0.44451	
4	The elderly population has been the primary driver of population growth in Port Harcourt Metropolis.	2.88166	0.24125	
5	There is no significant correlation between population growth and demographic shifts in Port Harcourt Metropolis.	2.68047	0.27785	
	GRAND MEAN	2.82367	0.35904	ACCEPTED

Criterion score = 2.50

Source: Author's field work, 2023

SPSS version 23

The results presented in Table 2 shed light on the patterns of population growth in Port Harcourt Metropolis as perceived by respondents. The study examined various aspects, including the consistency of population growth, migration trends, demographic shifts, and the

role of different age groups in driving population dynamics. The mean scores and standard deviations provide insights into the level of agreement or divergence among respondents' perceptions regarding these population growth patterns.

The majority of respondents indicated that population growth in Port Harcourt Metropolis has been steady and consistent over the past decade, as evidenced by a mean score of 2.89 with a relatively low standard deviation of 0.43. This finding suggests a general consensus among respondents regarding the stability and predictability of population growth trends in the city (Smith & Johnson, 2020).

Furthermore, there is a noticeable trend of rural-to-urban migration contributing to population growth, as indicated by a mean score of 2.91 with a low standard deviation of 0.40. This finding aligns with broader migration studies highlighting the influx of individuals from rural areas to urban centres in search of better economic opportunities and improved living standards (Brown & Garcia, 2023).

However, respondents also noted that population growth in Port Harcourt Metropolis shows no distinct patterns and varies unpredictably, reflected in a mean score of 2.76 with a moderate standard deviation of 0.44. This perception may be attributed to various factors influencing population dynamics, such as economic fluctuations, policy changes, and social factors (Johnson et al., 2021).

The study's findings also suggest that the elderly population has been a primary driver of population growth in Port Harcourt Metropolis, with a mean score of 2.88 and a low standard deviation of 0.24. This result underscores the significance of demographic shifts, including aging populations, in shaping urban population dynamics (Garcia & Smith, 2018).

Interestingly, respondents indicated a lack of significant correlation between population growth and demographic shifts in Port Harcourt Metropolis, as evidenced by a mean score of 2.68 with a moderate standard deviation of 0.28. This finding suggests a nuanced understanding among respondents, acknowledging the multifactorial nature of population growth beyond demographic changes alone.

4. Discussion

The analysis of population growth in Port Harcourt Metropolis in table 1 reveals that economic opportunities, healthcare services, housing options, environmental considerations, and social amenities are key drivers. Economic opportunities and job prospects are the primary drivers of population growth, with a mean score of 2.72. Improved healthcare services are crucial for attracting individuals and families to urban centers, influencing migration patterns. Affordable housing options are also essential for ensuring residential stability. Environmental factors, such as climate and natural resources, have a minimal impact on population growth, indicating a prioritization of economic and social factors over environmental considerations. Social amenities, such as schools and recreational facilities, are not considered major drivers of population growth. A comprehensive approach to urban development is needed to address diverse population needs and aspirations.

The study examines population growth patterns in Port Harcourt Metropolis in table 2, focusing on consistency, migration trends, demographic shifts, and age group impact. The majority of respondents believe there is steady growth over the past decade, with rural-to-urban migration contributing significantly. However, there is a perception that growth varies unpredictably, possibly due to economic fluctuations, policy changes, and social factors. The elderly population is a primary driver of population growth, with a mean score of 2.88. The

study also found no significant correlation between population growth and demographic shifts, indicating the importance of considering economic, social, and policy-related variables in urban planning and development. The findings underscore the need for holistic approaches in urban planning to address diverse population dynamics.

5. Conclusion

The study comes to the conclusion that economic causes and migratory patterns have played a major role in the Port Harcourt Metropolis' population increase, which has made urban congestion and infrastructural issues worse. The city may continue to experience serious socioeconomic and environmental repercussions in the absence of significant urban planning and policy initiatives. To effectively control future population increase, the report suggests promoting sustainable development policies, investing in infrastructure, and enhancing urban governance.

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