

## Effect of Urbanization on Provision of Public Amenities in Enugu Metropolis, Nigeria

<sup>1</sup>Nneka M. Okey Amadife

Email: [nneka.okey-amadife@esut.edu.ng](mailto:nneka.okey-amadife@esut.edu.ng)

<sup>2</sup>Prof Bar. Walter O. Ezeodili

Email: [walter.ezeodili@esut.edu.ng](mailto:walter.ezeodili@esut.edu.ng)

<sup>1,2</sup> Department of Public Administration

Enugu State University of Science and Technology, Enugu Nigeria

### Abstract

*This study investigates the effect of urbanization on the provision of public amenities in Enugu metropolis. The main objectives of the study is to determine the effects of population growth on provision of public amenities; to ascertain the effect of inadequate provision of public amenities and to suggest measures that could lead to robust provision of public amenities in Enugu metropolis. In order to achieve these objectives, three research questions were framed while three hypotheses were formulated. The study made use of survey research which relied on questionnaire as the instrument for data collection. The population of the study was 968,300 while Taro Yamane statistical formula was used in determining the sample size of 400 respondents in Enugu metropolis. The data generated were computed into tables and subjected to simple percentage computation and chi-square analysis. The result of the study shows that population growth has significant negative effect on public amenities. Also, the study found that inadequate provision of public amenities has significant negative effect on the inhabitants. Finally, the study revealed that proper and effective land use planning has significant positive effect on provision of more public amenities in Enugu metropolis. The study concluded that the determinants of urbanization have significant effect on provision of public amenities in Enugu metropolis. The study therefore recommends development and implementation of comprehensive population management strategies to slow down population growth, such as promoting family planning and education, as well as providing more and better the quality public amenities and finally, the need to maximize the positive effect of effect land use planning on the provision of public amenities.*

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## **1.Introduction**

### **1.1 Background of the Study**

Urbanization is one of the most significant trends shaping the modern world. Urbanization is not a new phenomenon. It is a worldwide phenomenon, a trans-generational process that never ends. The travelling of persons from one geographical location to another has been a regular phenomenon. Such movements are usually associated with a search for greener pasture. Oni-Jimoh & Champika (2018) argue that urbanization is a fundamental phenomenon of multidimensional change which rural societies go through in order to evolve into modernized societies from sporadically populated areas to densely concentrated urban cities Urbanization brings about opportunity possibilities of better-quality access to health facilities, housing, transportation, jobs, education, road networks, goods and services for poor people in developing countries and beyond as globalization connects cities in the whole world. Urban cities are the areas as center for civilizations and economic activities with their indisputable potential are expected to bring about employment, prosperity, security, shelter, stability, social inclusion and more free access to services. That explains why Eleje (2021) noted that “urbanization bring about good standard of living, make lives safer, healthier, sustainable and more convenient”.

Unfortunately, urbanization in emerging countries has trailed a different path from the above statement, leaving many flabbergasted urban occupants in frustration, despair and confusion. The physical signs of rapid urbanization in many developing countries like Nigeria are often hectic and brooding of the reflective and far-reaching demographic, social and economic changes occurring in these countries. Regrettably, the opportunities created by urbanization are risky thereby creating lack of adequate resources or rather misuse of available resources, resulting in insufficient basic amenities/infrastructure, bungling services, policy inconsistency and a comprehensive planning and implementation.

In the observation of Iyi (2014) on how urbanization came about in Nigeria, he postulates that,

in Nigeria, the foundation of urbanization began with the Township Ordinance No. 29 of 1917 which was enacted to classify urban settlements in Nigeria into different grades of cities and as well to establish broad physical layout of towns...Enugu was classified a second-class Township amongst other towns. The ordinance came into being within the period of discovery of coal in Enugu in 1907 and the consequent exploitation from 1915. Notably before the classification, Enugu had remained an important town east of the Niger based on several functions which it served and has continued to serve to the present day.

Aluko (2010) cited in Idoko & Ezeodili (2021) emphasized that urbanization involves economic, sociological, psychological, ethnic, racial, and numerical dimensions. The concentration of wealth, prestige, political power, and religious learning in the cities attracted large numbers of migrants, both from the neighboring countryside and from distant regions. This influx has effect on public amenities. Similarly, Aluko (2010) cited in Idoko & Ezeodili (2021) emphasized that urbanization involves economic, sociological, psychological, ethnic, racial, and numerical dimensions. The concentration of wealth, prestige, political power, and religious learning in the cities attracted large numbers of migrants, both from the neighboring countryside and from distant regions. The index of urbanization in Nigeria which is the

population increase is mainly caused by rural-urban migration and not by natural increase. Many researchers see rural-urban migration in urbanization process as the genesis of the resultant problems of urbanization in any part of the world (Idoko & Ezeodili (2021).

It is in light of the above that this study examines effect of urbanization on provision of public amenities in Enugu metropolis.

### **1.2 Statement of the problem**

In Enugu metropolis, the rapid urbanization of cities poses a major challenge to the provision of public amenities. The growing population, combined with inadequate planning, poor governance, and limited resources, creates a situation where the demand for public amenities far exceeds the available supply. This has led to a range of issues, including the rapid growth of cities which results in a shortage of affordable housing, leading to overcrowding and poor living conditions in informal settlements. Secondly, the high demand for water in cities can lead to water scarcity, contamination, and inadequate sanitation. Thirdly, the increased population density can strain existing healthcare infrastructure, leading to shortages of hospital beds, medicines, and medical personnel. Fourthly, the demand for education can outstrip the availability of schools, classrooms, and trained teachers. Other problems includes the increasing number of vehicles on the road which can lead to traffic congestion, pollution, and accidents; the unsanitary conditions and environmental degradation as a result of high volume of waste generated; increase risk of crime, violence, and terrorist attacks, social tensions and conflicts.

### **1.3 Objectives of the Study**

The main objective of this study is to examine the effect of urbanization on the provision of public amenities in Enugu metropolis. The specific objectives of this study are:

1. To determine the effects of population growth on provision of public amenities in Enugu metropolis
2. To ascertain the effect of inadequate provision of public amenities in Enugu metropolis.
3. To suggest measures that could lead to robust provision of public amenities in Enugu metropolis.

### **1.4 Research Questions**

In line with the objectives of the study, the following research questions were formulated to guide the study.

1. What are the effects of population growth on provision of public amenities in Enugu metropolis
2. What are the effects of inadequate provision of public amenities in Enugu metropolis.
3. What measures could lead to robust provision of public amenities in Enugu metropolis?

### **1.5 Hypotheses**

The working hypotheses that guide this study are as follows:

1. Population growth has no significant negative effect on public amenities in Enugu metropolis
2. Inadequate provision of public amenities has no significant negative effect on the inhabitants in Enugu metropolis.
3. Proper and effective land use planning has no significant positive effect on provision of more public amenities in Enugu metropolis

## **2. Review of Related Literature**

### **2.1 Conceptual Review**

#### **2.1.1 Urbanization**

Urbanization according to Miller & Marshall (2015) is a technological method that addresses the gradual redesign and alteration of land utilization as well as the constructional environment, encompassing the infrastructure that enters and leaves urban areas, like networks for delivery, communication, and mobility.

Similarly, Joel *et al* (2023) sees urbanization as that which enhance urban areas' physical, social-economic, and ecological features through diverse initiatives like upkeep, rehabilitation, and historical preservation. Urbanization is frequently depicted as a natural process that transforms the urban environment into a living thing. As a result, it serves as a benchmark for measuring the development and financial stability of a country.

In the same vein, Olarewaju & Oviasogie (2019) urbanization refers to the growth of urban areas, most times at expense of the rural environments as people move from rural areas to urban centres in search of job opportunities and improved livelihood

Furthermore Joseph (2019), urbanization is the process of moving from a rural to an urban society. It involves an increase in the population of urban regions over a specific time period. It has been referred to as an increase in the population's concentration in urban areas as opposed to areas that are rural. Also, Eleje (2021) sees urbanization as the result of socioeconomic, and political changes that cause major cities to grow and become more concentrated in the urban area, changes in how land is used, and a shift from a rural to an urban structure of administration and leadership.

Olarewaju & Oviasogie (2019) emphasizes that urbanization is the result of the allure of greater jobs, medical care, schooling, and culture is present in cities, which also make a disproportionate contribution to the economy as a whole. In emerging nations, urbanization has become one of the most significant demographic and economic trends, with significant ramifications for housing, good health, energy consumption, and economic growth. The main ways that urbanization manifests itself are through the outward growth of the constructed area and the transformation of fertile farmland into both residential and business space. This procedure typically takes place when a country is still in its formative years.

#### **2.1.2 Public Amenities**

Chen (2021) refers to the term amenity as a feature of a property that makes it more valuable to potential buyers or tenants. It can be seen as a feature of both residential and commercial properties. They can be featured by homeowners and commercial settings. Amenities can be part of a more sophisticated marketing strategy to attract tenants or other users of the property.

Hafezi & Ismail (2011b) looked at public amenities as those facilities that are provided to the citizens by the government. It is generally viewed as the responsibility of government, whether central, regional or local, and more often than not, they are provided by government institutions. They provide convenient and efficient services, a sense of identity, and define the visual character of the City. Public amenities contribute to the quality of life for both individuals and groups in the community. They are basic human needs, such as hospitals, police stations, education, safety, recreation, worship, resources, conveniences, facilities or benefits continually offered to the general public for their use and enjoyment, with or without charge (e.g., restrooms, information displays, public telephones, rain shelters, drinking fountains, etc.

## **Components of Urbanization**

There are numerous components of urbanization, few components will be discussed.

### **1. Population Pressure:**

According to Okorocha & Obienusi (2022) population pressure is a term used to express the stress brought about by an excessive population density and its effects. It refers to human overpopulation that suffers from too many individuals in a particular area. According to him, in the case of humans, entire numbers of individuals may lead to population pressure, but the same is true for overexploitation and overconsumption of available resources such as housing and ensuing high price and environmental degradation. Therefore, population pressure refer to the excessive upsurge in number of people looking for a particular resources within a population which bring down the ability of an environment to support the population and that therefore be likely to result to people not able to afford such resources

### **2. Urban Spatial Structure:**

Olaewaju & Oviasogie (2019) is of the view that urban spatial structure considers the location of different activities in central areas and the edge. A central area is a cluster of core and/or central activities and the most vital central area of a city are usually seen as the central business district. The main activities are those of the highest order in the urban spatial structure, such as tertiary and quaternary activities involved in management (head offices, finance, and insurance) and consumption (retailing). The urban areas commonly benefit from a high level of accessibility to the workforce and customers.

Schumacher et al (2017) highlighted the following as some of the components of urbanization. It includes economic activity which means that cities are centers of economic activity, with businesses, industries, and markets that attract people and investment; Infrastructure development which includes Roads, bridges, power grids, and other infrastructure are built to support the growing population and economic activity; Social and cultural changes, which shows that urbanization can bring about changes in social and cultural norms, such as increased education and literacy, new cultural expressions, and changing gender roles.

## **2.2 Theoretical framework**

The researcher anchored the study on Resource-based theory which was first used Barney's 1991 in his article "Societal Resources and Sustained Comparative Advantage". Interestingly, the theory postulates that a society's comparative advantage is based more on its own internal assets than on where it is in relation to its environment. Instead of only considering environmental opportunities and hazards when doing business, comparative advantage depends on special assets and capabilities that civilization has developed. (Barney, 1991 quoted in Monday, Akinola, Ologbenla, & Aladeraji 2015). The resource-based theory also postulates that societies are varied because they have heterogeneous resource mixes, which allows for the possibility of different strategies in different civilizations. The resource-based theory aims to discover those assets, capacities, and competencies with the potential to produce better advantages by focusing administrative attention on the societal internal resources.

This research which based on the effect of urbanisation on public amenities is a great fit for the resource-based theory. According to resource-based theory, some resources that society owns and controls can produce comparative advantage as well as superior growth opportunities. According to the resource-based theory, the attributes of their resources and competencies,

which are valued and challenging to imitate, are the main features and foundations of an exceptional advantage in management. (Peteraf & Bergen, 2013).

According to the resource-based theory, urbanization, boosts productivity by stimulating creativity, innovative thinking and or by fostering better economies of scale, specific expertise, or aggregation. To the theory urbanization, could have a detrimental effect on economic growth and stability if it is uncontrolled or chaotic. This is because population density increases with urban growth. Each member of the workforce will have fewer productive resources (particularly capital), both cumulative and non-cumulative, to work with as the population grows. As a consequence, output per person is likely to be lower even if overall output increases. However, greatly improved and modified, is based on the Malthusian heritage. For resource-based theory, explosive urbanization can only be advantageous if it is accompanied by significant capital development or other big stimulus, which will be sufficient to overcome the small-scale equilibrium loop that could be caused by a surge in population (Eleje, 2021). Therefore, effective public amenities provision in this premise required policy implementation among other critical stimuli that drive urbanization and thus very imperative in the enhancement of sustainable public amenities provision.

## **2.3 Empirical Review**

### **2.3.1 The effects of population growth on provision of public amenities in Enugu metropolis**

Different scholars have researched on the above subject matter. For instance, Joel, *et al* (2023) examines the effect of urbanization on tourism development in Enugu State, Nigeria. The Resource-Based Theory was adopted as the theoretical umbrella for this research work. The theory is a framework for management that helps identify the strategic resources that a society or organization might use to get better, more long-lasting results. The study embraced a cross-sectional survey design which helped to ascertain the opinions of the respondents through the administration of questionnaires across all the sections of Enugu Urban. The study revealed that urban planning has a significant positive effect on tourist attraction in Enugu State, Nigeria. Further findings revealed that urban infrastructure has not been developed to a large extent to facilitate accessibility to the location of tourism complexes in urban centres in Enugu State, Nigeria. From the results of this study, it was noted that urbanization did not sufficiently support the growth of tourism in Enugu State. Although urbanization has both negatively and positively affected tourism in urban centres in Enugu State, the negative effects seem to outweigh the positive effects. The study recommends that given the existence of a growing and increasingly dynamic tourism market, urban planners should collaborate with tourism authorities to plan for tourism development that considers future tourism expectations. It also suggests that some infrastructure needs to be set up for this.

Similarly, Nwalusi, Okeke, Anierobi & Nwosu (2022) carried a Study of the effect of Rural-Urban Migration and Urbanization on Public Housing Delivery in Enugu Metropolis, Nigeria. It utilized a qualitative research method of direct observation and review of literature in which primary and secondary data were collected. The research results highlight some of the effects of Urbanization in the study area to include; gross housing shortage, increase housing rent and high land value in the city resulting to the emergence and expansion of many squatter settlements at the periphery of the city, incidence of haphazard situation of developments, change in land uses, violation of planning guidelines, suboptimal amenities and inadequate infrastructure as well as slum conditions. The study recommends increase in the provision of affordable housing by implementing a mix of housing types and price points that cater to a

variety of income levels, and allocate land for public housing development in locations that are accessible to employment centers and public amenities.

In the same vein, Okorocha & Obienusi (2022) study is on Assessment of Population pressure on Urban Housing in Ngwa Road, Ohanku and Obohia Parts of Aba South, Abia State Nigeria. The research data was collected through household survey, Aba South Town Planning Authority, National Population Commission and the Aba South Street Naming and House Numbering Office. The Principle Component Analysis (PCA), Principle Component Regression (PCR), standard deviation, weighted mean, percentages/proportions to analyze the data collected. The result showed that ease of access to commercial activities and educational level of heads of households are major factors encouraging population growth in the study area. The research revealed a housing demand and supply cluster estimate of 60.11% which was not considered statistically high. The study recommend the

Also, Akinyemi, Hadiza & Salau (2020) carried a study titled Assessing the Causes of Urbanization and Its Impact on Housing Quality in City of Lagos. The research employed qualitative method, making use of secondary data due to the nature of information required and the time frame required to conduct the study, this is to say the researchers were of the post-positivist methodological philosophy of research. The data were sourced from journals, textbooks, online daily newspapers and publications and field survey. The result revealed that urbanization has negative effect on housing quality in the city of Lagos. The study recommends improvement of quality of housing in Lagos by implementing policies that support the construction of affordable and high-quality housing, such as providing incentives for developers to construct mixed-income housing, and strengthening the enforcement of building codes and standards.

### **The effect of inadequate provision of public amenities in Enugu metropolis.**

Also, Eleje (2021) carried a study on Rapid Urbanization and Urban Housing Policy Implementation in Enugu Metropolis: Issues, Challenges and Prospects for Sustainable Development. It was a qualitative study based on extensive literature review. The study identified salient features of the urbanization process in Enugu, Nigeria and the challenges they pose to adequate housing. These include rapid population growth and changing demographic structure; poverty and unemployment; difficulties in accessing housing delivery inputs; and lack of adequate capacity on the part of government. The study recommends strengthening land use planning and management policies to prevent urban sprawl and to ensure the provision of adequate infrastructure.

Idoko1 & Ezeodili (2021) carried investigation on Urbanization and Housing development in Enugu State Nigeria. The descriptive survey design was applied to the study, which was carried out in three local government areas within Enugu metropolis namely: Enugu South; Enugu East; and Enugu North. Through purposive and multi-stage random sampling technique, they study selected a total of 410 respondents out of an estimated population of 4, 101. The researcher used self-structured questionnaire instrument for data collection while mean score and standard deviation were used to analyze the research questions and t-test statistic used for hypotheses. The findings showed that, urbanization positively affects housing characteristics in Enugu state, urbanization affects house rents and choice of settlement in the state and urbanization had a significant effect on housing quality in Enugu state.

Walter, Ugwuagu & Chibuzo (2023) examines effect of urbanization on housing provision in urban centers in Enugu State Nigeria. The study adopted a descriptive survey design. The data collected were presented and analyzed using mean score and standard deviation, while the hypotheses were tested with t-test statistical analysis at 0.05 level of significance. The study revealed that urban spatial structure has a big impact on housing quality in urban centres in Enugu State (t-cal. of 4.672 > t-crit. of  $\pm 2.132$ ). It was also discovered that the population pressure has negative effect on housing affordability in urban centres in Enugu State (t-cal. of 5.834 > t-crit. of  $\pm 2.132$ ). It was concluded that in the urban areas of Enugu, there is a severe housing scarcity. The deficiencies are extensive, and there is a quantitative and qualitative shortfall, but not insurmountable. The study proposed prompt comprehensive response to tackle the housing deficit both qualitatively and quantitatively by adopting a pro-poor housing development strategy through public-private partnership in light of these findings and conclusion. The study also recommended that the development of further estates should henceforth emphasize on low-income housing to create more houses affordable by the low income earners in Enugu urban.

Egbara, Ofodu & Onuoha (2023) examine Urbanization and Housing Facility in Enugu Urban, Enugu State of Nigeria. The study adopted a descriptive survey design. The population of the study was 969,074, comprising 774 staff of Enugu State Housing Development Corporation and 968,300 residents of urban areas in Enugu State. The sample size of 400 was determined using Taro Yamane formula. The purposive sampling technique was used for the selection of the respondent. The data collected were presented and analyzed using mean score and standard deviation, while the hypotheses were tested with t-test statistical analysis at 0.05 level of significance. The study revealed that urban spatial structure has significant negative effect on housing quality in Enugu Urban ( $\chi^2$  cal. of 30.74 >  $\chi^2$  tab. of 9.49). It was also discovered that the population growth has significant negative effect on housing affordability in Enugu Urban, Enugu State of Nigeria ( $\chi^2$  cal. of 19.65 >  $\chi^2$  tab. of 9.49). It was concluded that the extent of the housing shortage in Enugu urban areas is enormous. The inadequacies are far-reaching and the deficit is both quantitative and qualitative, but not insurmountable. Based on these findings and conclusion, the study recommended for urgent multi-faceted intervention to address the housing deficit both qualitatively and quantitatively by adopting a pro-poor housing development strategy through public-private partnership. The study also recommended that the development of further estates should henceforth emphasize on low-income housing to create more houses affordable by the low income earners in Enugu urban.

### **Measures for public amenities provision in Enugu metropolis**

In a study carried out by Ajayi, Ajayi, Akinsiku & Osunsanmi (2016) on Strategies For Housing Affordability in Nigeria. Research design was used and the population of the study was Architects, Quantity Surveyors, Engineers, contractors and project managers. Random sampling technique was adopted for this study. A total of 70 questionnaires were distributed and 51 were returned. This represents a response rate of 73%. Statistical Package for Social Sciences (SPSS) was used for analysis via descriptive and inferential statistics. The study showed that problem of land inaccessibility, stunted financial and mortgage system were the factors affecting housing delivery. Challenges of housing delivery were high cost of acquiring land, social miscreants (“OmoOnile”) and affordability. Anti-corruption measures and a responsive judiciary, Cost – saving house design, Land reforms/reviews of land use act and review of fiscal and monetary policies to reduce inflation and interest rate were the strategies to be used to ensure affordable housing. In conclusion, the Government should create an enabling environment for private sector by reducing the interest rate, taxes collected and



creation of a viable housing mortgage sector to cater for the need of interested mortgage loan applicants. The use of the land should be constrained to affordable housing.

Iyi (2014) examines a Review of Enugu (Enugu State, Nigeria) Urban Growth and Development. Survey research design was adopted in the study. Multiple regression analysis was used in analyzing the data collected during the study. The use of the model was to ascertain the magnitude and significance of relationship among the identified development indicators. The test was performed at 5% level of significance. The analysis revealed that there is only a weak relationship among the identified indicators. The trend of development from the initial points to other areas was rapid initially but slowed down in the later years. The slow pace in development was identified to have resulted from inadequate attention to newer innovations to cater for ever increasing population of both people and vehicles. It is suggested that vigorous efforts be made to anticipate workable new innovations in urban design and management chief, of which is the Environmental Planning and Management (EPM) approach.

Dania, Nor Hasanah, & Ain (2020) examine Sustainable Affordable Housing Strategies for Solving Low-Income Earners Housing Challenges in Nigeria. The study relied on a systematic review of literature to arrive at its findings. Findings from the study revealed that sustainable affordable housing strategies through which Nigerian low-income earners housing challenges can be addressed can best be explored from the social, economic, environmental, institutional and technological components of sustainable affordable housing. The study calls on the government, stakeholders, policy makers as well as private developers to adopt sustainable affordable housing strategies for low-income housing provision in Nigeria. The study's outcome will contribute to existing body of knowledge in that it will provide useful information with respect to low-income housing provision and equally re-direct research interest on low-income housing in Nigeria and other developing nations.

#### 2.4 Summary of Empirical Review

S/N	Author	Year	Location of study	Topic	Methodology	Findings	Recommendation
1.	Joel, <i>et al</i>	2023	Enugu	Effect of urbanization on tourism development in Enugu State, Nigeria.	cross-sectional survey design	Urban planning has a significant positive effect on tourist attraction in Enugu State, Nigeria. Urban infrastructure has not been developed to a large extent to facilitate accessibility to the location of tourism complexes in urban centres in Enugu	Given the existence of a growing and increasingly dynamic tourism market, urban planners should collaborate with tourism authorities to plan for tourism development that considers future tourism expectations. It also suggests that some infrastructure needs to be set up for this.

2.	Nwalusi, Okeke, Anierobi & Nwosu	2022	Enugu	the Impact of Rural-Urban Migration and Urbanization on Public Housing Delivery in Enugu Metropolis	qualitative research method	gross housing shortage, increase housing rent, inadequate infrastructure and suboptimal amenities are the effects of urbanization	This is need to increase the provision of affordable housing by implementing a mix of housing types and price points that cater to a variety of income levels, and allocate land
3.	Okorochoa & Obienusi	2022	Abia state	Assessment of Population pressure on Urban Housing in Ngwa Road, Ohanku and Obohia Parts of Aba South, Abia State Nigeria	household survey	To ease of access to commercial activities and educational level of heads of households are major factors encouraging population growth in the study area	promote affordable housing, such as implementing rent control measures, and providing subsidies for low-income households to purchase or rent homes in high-demand areas
4.	Akinyemi, Hadiza & Salau	2020	Lagos	Assessing the Causes of Urbanization and Its Impact on Housing Quality in City of Lagos	qualitative method	Urbanization has negative effect on housing quality in the city of Lagos.	Implementing policies that support the construction of affordable and high-quality housing, such as providing incentives for developers to construct mixed-income housing, and strengthening the enforcement of building codes and standards.

5.	Danxuan & Yishao	2022	Shanghai	Influence Mechanism of Urban Spatial Structure on Urban Vitality Based on Geographic Big Data: A Case Study in Downtown Shanghai	qualitative study	rapid population growth and changing demographic structure; poverty and unemployment; difficulties in accessing housing delivery inputs; and lack of adequate capacity on the part of government are the challenges of population growth	Promote mixed-use development and higher density housing in order to maximize the use of available land and reduce the pressure on housing resources.
6.	Eleje	2021		Urbanization and Housing development in Enugu State Nigeria	descriptive survey design	urbanization positively affects housing characteristics in Enugu state, urbanization affects house rents and choice of settlement in the state and urbanization had a significant effect on housing quality in Enugu state	strengthening land use planning and management policies to prevent urban sprawl and to ensure the provision of adequate infrastructure.

7.	Idoko1& Ezeodili	2021		Urbanization and Housing development in Enugu State Nigeria	descriptive survey	Urbanization positively affects housing characteristics in Enugu state, urbanization affects house rents and choice of settlement in the state and urbanization had a significant effect on housing quality in Enugu state.	The study recommends that urgent multi-faceted intervention is needed to address the housing deficit in Enugu Metropolis, State government to increase salaries of the state public servants and also the development of rural-urban centre to an extent to reduce urban migration, the development of new estate should emphasis on low income housing to create more houses affordable by the low income earner in Enugu
8.	Ugwuagu &Chibuzo	2023	Enugu	Urbanization on housing provision in urban centers in Enugu State Nigeria.	descriptive survey	prompt comprehensive response to tackle the housing deficit both qualitatively and quantitatively by adopting a pro-poor housing development strategy through public-private partnership	the development of further estates should henceforth emphasize on low-income housing to create more houses affordable by the low income earners in Enugu urban

9.	Agu&Taiwo	2023	Enugu	The Effectiveness of Planning Agencies in Enugu Metropolis	Quantitative research	<p>the efficiencies of the methods used by planning agencies significantly influence their ability to fulfill their intended roles;</p> <p>that urban sustainability indicators offer a holistic view of an agency's effectiveness in promoting sustainability;</p> <p>Regulatory compliance rates assess the degree of adherence to planning policies, while citizen satisfaction surveys gauge the alignment of policies with community desires.</p> <p>effective planning varies between cities, and metrics like compliance rates and satisfaction surveys may not capture the full impact or the unintended consequences of planning efforts.</p>	Planning agencies should promote community engagement and participation by involving residents, community leaders, and stakeholders in decision-making processes to ensure that projects reflect local needs and aspirations in the urban planning process
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10.	Ogbonna, Ochie&Aniwada	2024	Enugu	Assessment of urban slum housing quality, and its public health implications in Nigeria: A case of residents of Urban slum in Enugu metropolis, South East, Nigeria	Descriptive household cross-sectional survey	Most prevailing health condition was malaria/fever	There is need for health campaign against the poor living conditions in the slum
11.	Egbara, Ofodu&Onuoha	2023	Enugu	examine Urbanization and Housing Facility in Enugu Urban, Enugu State of Nigeria	Descriptive survey design.	that urban spatial structure has significant negative effect on housing quality in Enugu Urban	The development of further estates should henceforth emphasize on low-income housing to create more houses affordable by the low income earners in Enugu urban.
12.	Ajayi, Ajayi, Akinsiku &Osunsanmi (2016)	2016	Nigeria	Strategies For Housing Affordability in Nigeria	Survey Research Design	That problem of land inaccessibility, stunted financial and mortgage system were the factors affecting housing delivery.	Government should create an enabling environment for private sector by reducing the interest rate, taxes collected and creation of a viable housing mortgage sector to cater for the need of interested mortgage loan

13.	Iyi	2014	Enugu	A Review of Enugu (Enugu State, Nigeria) Urban Growth and Development.	Survey research design	The slow pace in development was identified to have resulted from inadequate attention to newer innovations to cater for ever increasing population of both people and vehicles	Vigorous efforts be made to anticipate workable new innovations in urban design and management chief, of which is the Environmental Planning and Management (EPM) approach.
14.	Dania, Nor Hasanah, & Ain	2020	Nigeria	Sustainable Affordable Housing Strategies for Solving Low-Income Earners Housing Challenges in Nigeria.	Systematic review of literature	sustainable affordable housing strategies through which Nigerian low-income earners housing challenges can be addressed can best be explored from the social, economic, environmental, institutional and technological components of sustainable affordable housing	The government, stakeholders, policy makers as well as private developers to adopt sustainable affordable housing strategies for low-income housing provision in Nigeria.
15.	Obeta	2017	Enugu	evaluates the institutional arrangements for rural water supply in Enugu State, Nigeria	Survey Research Design	the strengths and weaknesses of the institutional arrangements currently in use in the area	Reform and strengthen the current institutional arrangements, adopt new management strategies, rehabilitate dysfunctional infrastructure, improve coverage and distribute water infrastructure equitably

## 2.5 Gap in Empirical Reviewed Literature

Many researchers have done so many write ups on the issue of urbanisation and public amenities which have been clearly and distinctly stated above. However, no work has been done to the best of the researcher's knowledge on the Effect of Urbanisation on Public Amenities in Enugu metropolis. And this is the gap this research work intends to fill.

## 3. Methodology

### 3.1 Research Design

The research design adopted for this study is the descriptive survey design which seeks to find out the opinion and perception of the respondents, through structured questionnaire.

### 3.2 Area of the Study

The area of the study is the city of Enugu, which is located in the southeastern region of Nigeria. Enugu is one of the major urban centers in Nigeria, and it is experiencing rapid population growth and urbanization. As a result, the demand for public amenities, such as health centers, schools, parks, and recreational facilities, is increasing.

### 3.3 Population of the Study

The population of this study comprised the total population of 968,300 people of the three local governments in Enugu metropolis (i.e. Enugu North 326,900 Enugu South 267,300 and Enugu East 374,100) (National Bureau of Statistics, 2016 Nigeria Projected Population).

### 3.4 Sample size and determination

The researcher used Taro Yamane's formula to determine the sample size from the population.

$$\text{As } n = \frac{N}{1 + N(e)^2}$$

Where N = population of study

n = sample size

e = level of significance

1 = constant

This substituting for the formula

$$\begin{aligned} n &= \frac{968300}{1 + 968300(0.0025)^2} \\ &= \frac{968300}{1 + 2420.75} \\ n &= \frac{968300}{2421.75} \\ N &= 399.834 \end{aligned}$$

Approximately 400, therefore, the total sample size that will guide the analysis is 400.

A sample of 400 respondents was selected from the population which was determined using the Taro Yamane formula. The researcher made use of simple random sampling technique in distributing the questionnaires to the respondents. It is designed on a five point likert type scale,



with responses ranging from strongly agree, agree, undecided, disagree and strongly disagree. The chi-square was applied to test the hypotheses formulated.

### 3.5 Sampling Technique

The researcher made use of stratified simple random sampling technique in distributing the questionnaires to each population.

### 3.6 Method of data collection

The questionnaire was the major research instrument for this study.

### 3.7 Method of Data Analysis

The data derived from the field study were analyzed using the simple percentage and chi-square.

## 4. Data Presentation and Analysis

### 4.1 Data Presentation

**Table 4.1: Population growth does not lead to overcrowding and scarce resources of public amenities in urban areas?**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	42	11.2
Agree	41	10.9
Undecided	4	1.1
Disagree	79	21.0
Strongly Disagree	209	55.7
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

Table 4.1 indicates that majority of the respondents representing 55.7% strongly disagreed that population growth does not lead to overcrowding and scarce resources of public amenities in urban areas, while 21.0% strongly disagreed, 1.1% of the respondents were undecided, 11.2% agreed and 10.9% strongly agreed.

**Table 4.2: The growing population does not put pressure on existing roads, transport systems, and other infrastructure, leading to congestion and delays**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	29	7.7
Agree	54	14.4
Undecided	4	1.1
Disagree	189	50.4
Strongly Disagree	99	26.4
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

From Table 4.2, it reveals that majority of the respondents representing 50.4% disagreed to the above statement. While 26.4% strongly disagreed, 1.0% of the respondents were

undecided, 14.4% agreed and 7.7% strongly agreed. This shows that majority of the population disagreed that the growing population does not put pressure on existing roads, transport systems, and other infrastructure, leading to congestion and delays.

**Table 4.3: Lack of adequate public amenities can hinder economic growth and development, reduced productivity and employment opportunities**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	68	18.1
Agree	218	58.1
Undecided	2	0.5
Disagree	47	12.5
Strongly Disagree	40	10.7
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

From the data in Table 4.3, it was discovered that 58.1% of the respondents agreed that lack of adequate public amenities can hinder economic growth and development, reduced productivity and employment opportunities, while 18.1% strongly agreed, 0.5% of the respondents were undecided, 12.5% disagreed and 10.7% of them strongly disagreed.

**Table 4.4: Inadequate public amenities can lead to social tensions and conflicts and increase the risk of crime, violence, and civil unrest.**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	70	18.6
Agree	217	57.9
Undecided	3	0.8
Disagree	39	10.4
Strongly Disagree	46	12.3
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

From the data in Table 4.4, it was revealed that 57.9% of the respondents agreed to the statement raised. While 18.6% strongly agreed. 0.8% was undecided, 10.4% disagreed and 12.3% strongly disagreed.

**Table 4.5: Developing a coordinated and strategic approach to urban planning that incorporates various stakeholders such as local government, community groups, and private sector actors will not improve public amenities provisioning.**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	47	12.5
Agree	46	12.3
Undecided	2	0.5

Disagree	90	24.0
Strongly Disagree	190	50.7
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

In the above Table, it was uncovered that 50.7% and 24.0% of the respondents disagreed and strongly disagreed to the above statement, 0.5% was undecided, 12.5% agreed and 12.3% strongly agreed.

**Table 4.6: Creating long-term plans that anticipate future needs and allocate resources accordingly, rather than reacting to problems after they arise will improve public amenities provisioning**

Response Options	Number of Respondents	Percentage (%)
Strongly Agree	85	22.7
Agree	200	53.3
Undecided	1	0.2
Disagree	45	12.0
Strongly Disagree	44	11.7
<b>Total</b>	<b>375</b>	<b>100</b>

Source: Survey Data, (2024).

## 4.2 Testing of Hypotheses

### Hypothesis one:

**Table 4.7: Population growth has no significant negative effect on public amenities in Enugu metropolis**

S/N	Responses	Observe Frequency	Expected Frequency	0-e	( o-e) <sup>2</sup>	$\frac{(o-e)^2}{e}$
1	Strongly Agree	86	75	11	121	0.3
2	Agree	195	75	120	14400	38.4
3	Undecided	4	75	-71	5041	-13.4
4	Disagree	50	75	-25	-625	-1.7
5	Strongly Disagree	40	75	-35	-1225	-3.3
	Total	375	375			20.3

Source: Field Study, (2024)

### Degree of Freedom

$$DF = (r-1) (c-1) = (5-1) (3-1) = (4) (2) = 6$$

### Research Decision

Critical value of 0.5% = 9.49

Calculated chi-square ( $X^2$ ) 20.3

$\alpha = .05$

Calculated chi-square ( $X^2$ ) is 20.3, which is greater than the critical value 9.49. Based on this, we therefore reject the null hypothesis and accept alternate hypothesis.

**Research Interpretation:** Population growth has significant negative effect on public amenities in Enugu metropolis

### Hypothesis Two:

**Table 4.8: Inadequate provision of public amenities has no significant negative effect on the inhabitants in Enugu metropolis**

S/N	Responses	Observe frequency	Expected Frequency	0-e	( o-e) <sup>2</sup>	$\frac{(o-e)^2}{e}$
1	Strongly Agree	80	75	5	25	0.7
2	Agree	190	75	115	13225	35.3
3	Undecided	5	75	-70	-4900	-13.1
4	Disagree	50	75	-25	-625	-1.7
5	Strongly Disagree	52	75	-23	525	-1.4
	<b>Total</b>	<b>375</b>	<b>375</b>			<b>19.2</b>

Source: Field Study (2023)

### Degree of Freedom

$$DF = (r-1) (c-1) = (5-1) (3-1) = (4) (2) = 6$$

### Research Decision

Critical value of 0.5% = 9.49

Calculated chi-square ( $X^2$ ) 19.2

$$\alpha = .05$$

Calculated chi-square ( $X^2$ ) is 19.2 which is greater than the critical value of 9.49. Based on this, we therefore reject the null hypothesis and accept alternate hypothesis.

**Research Interpretation:** Therefore, inadequate provision of public amenities has no significant negative effect on the inhabitants in Enugu metropolis

### Hypothesis Three

**Table 4.9: Proper and effective land use planning has no significant positive effect on provision of more public amenities in Enugu metropolis**

S/N	Responses	Observe Frequency	Expected Frequency	0-e	( o-e) <sup>2</sup>	$\frac{(o-e)^2}{e}$
1.	Strongly Agree	90	75	15	225	0.6
2.	Agree	170	75	95	9025	24.1
3.	Undecided	7	75	-68	-4624	-12.3
4.	Disagree	60	75	-15	-225	-0.6
5.	Strongly Disagree	48	75	-27	-729	1.9
	<b>Total</b>	<b>375</b>	<b>375</b>			<b>11.8</b>

Source: Field Study, (2024)

**Degree of Freedom:**  $DF = (r-1) (c-1) = (5-1) (3-1) = (4) (2) = 6$

### Research Decision

Critical value of 0.5% = 9.49

Calculated chi-square ( $X^2$ ) 11.8

$\alpha = .05$

Calculated chi-square ( $X^2$ ) is 11.8 which is greater than the critical value of 9.49. Based on this, we therefore reject the null hypothesis and accept alternate hypothesis

**Research Interpretation:** Proper and effective land use planning has no significant positive effect on provision of more public amenities in Enugu metropolis

### 4.3 Discussion of Findings

The results suggest a generally positive perception among the respondents regarding the effects of population growth on provision of public amenities in Enugu metropolis. It shows that majority of the respondents agreed strongly that population growth leads to overcrowding and scarce resources of public amenities in urban areas. Also, it shows that the growing population put so much pressure on existing roads, transport systems, and other infrastructure, leading to congestion and delays. These findings are consistent with existing literature that emphasizes the importance public amenities in urban areas.

There is a strong agreement among respondents regarding the effect of inadequate provision of public amenities in Enugu metropolis. The majority view shows that lack of adequate public amenities can hinder economic growth and development, reduced productivity and employment opportunities. The respondents also agreed that inadequate public amenities can lead to social tensions and conflicts and increase the risk of crime, violence, and civil unrest. Majority of the respondents are suggesting that that developing a coordinated and strategic approach to urban planning that incorporates various stakeholders such as local government, community groups, and private sector actors will improve public amenities provisioning. According to the majority of the respondents representing 53.3% are of the view that creating long-term plans that anticipate future needs and allocate resources accordingly, rather than reacting to problems after they arise will improve public amenities provisioning

### 5. Summary of findings

The following are the findings

1. Population growth has significant negative effect on public amenities in Enugu metropolis.
2. Inadequate provision of public amenities has significant negative effect on the inhabitants in Enugu metropolis.
3. Proper and effective land use planning has significant positive effect on provision of more public amenities in Enugu metropolis.

### 5.1 Conclusion

Conclusively, the effects of urbanization on public amenities in Enugu metropolis are complex and multifaceted. The growing population, inadequate planning, and limited resources have contributed to a shortage of public amenities, leading to poor health, economic costs, and social tensions. From the findings of the study, the researcher therefore concludes that population

growth has significant negative effect on public amenities in Enugu metropolis. Also, that inadequate provision of public amenities has significant negative effect on the inhabitants in Enugu metropolis and finally, that proper and effective land use planning has no significant positive effect on provision of more public amenities in Enugu metropolis.

## 5.2 Recommendations

To improve the provision of public amenities as a result of urbanization in Enugu metropolis, the following recommendations are suggested:

1. It is essential to develop and implement comprehensive population management strategies to slow down population growth, such as promoting family planning and education, as well as improving the quality of existing public amenities and infrastructure.
2. There is need for the government to invest in the provision of more and better quality amenities, such as health centers, schools, parks, and recreational facilities.
3. To maximize the positive effect of effective land use planning on the provision of public amenities, the government should develop and implement comprehensive land use plans that take into account the current and future needs of the population.

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