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IMPACT OF POPULATION GROWTH ON HOUSING DEMAND AND SUPPLY IN GOMBE LOCAL GOVERNMENT AREA (LGA), GOMBE STATE, NIGERIA

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Abstract

This research work examines the impact of rapid population growth on urban residential housing demand and supply in Gombe Local Government Area (LGA). Data used in this research include information obtained directly from people using structured questionnaires administered on randomly sampled 100 respondents (household heads). Secondary sources were also consulted. The Reconnaissance survey helped the researcher in identifying various households and observing the housing sizes, locations, the structure of the population, and people's main occupations etc. Descriptive statistical techniques were employed in the analysis and presentation of the data obtained from the field. The findings of the research show that 11.6% of the sampled population in study area were public/civil servants drawn from Government work force, private sectors and industries. It was also revealed that 32% of the respondents in the study area were educated, 20% lived in rented residential houses, and 36.8% owned their residential houses, 26.3% live in family houses and 5.3% were squatting. According to the analysis of this field survey, 26.3% of the respondents in the study area are comfortable with their accommodations, despite the fact that several of them do not own their residential houses. The study concluded that the rapid growth both in size and population of the study area occasioned by insecurity of the neighbouring states, is the bane of increasing demand in housing. Hence, the study recommended that Government should give equivalent importance to direct construction of residential units and the provision of basic infrastructures in various layouts to encourage people build their personal houses.

Key words: Housing Demand, Housing Supply, Household Head, Population growth

1. Introduction

The rate of increase of world population is alarming and so causes increased demand for food, shelter, clothing and other life-supporting needs. These needs are derived directly or indirectly from the natural environment (Animashaun, 2002). Housing is one of the basic needs of man which is ranked second after food. It constitutes the residential environment and the physical structure used for shelter including service facilities needed for physical health and social wellbeing of the family (Odeluyi, 1992; Awake, 2005). No doubt, housing has

an effect on health, welfare and productivity of individual. There is high magnitude of housing inadequacy in urban centres of Nigeria (Adedeji and Rowland, 1973). The increase in the rate of population growth occurring in most Nigerian cities has been resulting in rapid rise in the demand for urban land particularly for housing, roads, and other economic activities (Salau, 1978). Most of the population lives in the substandard and poor housing, and unsanitary residential environments due to rapid population growth (Onibokum, 1981). This rising demand for urban land tends to be reflected primarily in



the congestion of the central areas of cities, rise in land values and in the conversion of rural land at the peripheries of cities to urban use. One of the implications of uncontrolled population growth is its impact on residential land use, particularly, in the urban areas. Urbanization and high population density have caused land degradation especially in most parts of the developing countries. Willis (1980) refers “housing demand” to an economic demand for housing in the sense of people exercising both their preference and ability to pay for housing. The demand for housing is increasing due to the rapid rate of population growth which, could be as a result of certain factors, including rural urban migration, insecurity in some parts of the north-eastern geopolitical zone of Nigeria, and early marriage among others. Several studies such as Clara, 2006; Lewis, 1981; Alabi, 2009; Ago, 2001 have shown that, the relationship between housing and population is complex and is two-sided.

Thus, Population influences housing via housing demand. But also, housing influences the number of people and households via the attraction or deterrence of migrants, keeping in place or pushing away the resident population, and intricate links with leaving the parental home, separation, and having children. Population growth has brought many problems associated with difficulties of providing infrastructures such as water, power supply, and recreational facilities in most of Nigerian towns and cities. Thus, Housing demand in this phase of urban growth comes with attendant challenges which ranges from pressures on the existing facilities, services and utilities to the deterioration and degradation of the environment (Ibama, Eyenghe and Evangeline 2015).

The most outstanding of all the problems is that of provision of adequate housing facilities for the population and Gombe is not an exception. The rapid population growth mainly as a result of influx of people into Gombe town since the establishment of the state in the year 1996 seems not to be complemented by significant increase in dwelling units. With the land mass of only 53.4km², its population increased from 266,844 in 2006 to 551,222 and population density of 10,322.5 in 2020. As a result, the existing units are precariously overcrowded and this is becoming very serious. Hence, need for more housing units amidst the limited resources at the government's disposal. One of the major concerns and challenges for the policy makers is however, the determination of the optimal location, quality and quantity of the houses that are needed and can be afforded by the people, more especially under a rapidly growing population situation. A number of studies have been carried out about population growth and how it affects the quality of life of people especially in the developing countries like Nigeria. Very few studies such as Dodo (1999), Odeluyi (1992), Onokerhoraye (2008), Albert and Cousin (1979), Sayyman (2000) and Sule (2004) however, made attempt to look at the population issue in relation to housing demand and supply from general perspective and locally specific bases.

In view of diverse characteristics of different towns and cities of this country, generalization based on these studies alone is not adequate. Therefore, the particular task of finding details of a town and being local specific on the housing issue is worthy of undertaken. It is also significant to note that studies relating to housing and population growth are part of development. Thus, this

study therefore, produces findings which would lead to a better understanding on how the housing environment pattern correlates with population growth in such an urban setting. Policy and decision makers would find them useful. In analyzing the rapid population growth and increasing demand, the research assesses the impact of population growth on housing demand in

Gombe local government area (LGA) and the specific objectives are to: identify the causes of rapid population growth in the study area, assess the types and qualities of houses in the study area, determine the housing shortage in the study area and evaluate the ownership status of the houses in the study area.

2. The Study Area

Gombe metropolis is located approximately in about the centre of Gombe State. It lies between latitude $10^{\circ}00'$ and $10^{\circ}20'N$ and on longitude $11^{\circ}01'$ and $11^{\circ}19'E$ (Gombe Master Plan, 2003). Gombe metropolis is bounded by Kwami Local Government Area in the North and almost surrounded by Akko Local Government Area in the South east and south west (figures 1). Gombe metropolis is divided into different residential quarters which include, GRA, Federal Low Cost,

Arawa, State Low Cost, Kumbiya-kumbiya, Pantami, Jekadafari, Tudun Wada, Madaki, Dawaki, Bolari, Yalanguruza, Shamaki, Tumpure etc (fig. 1). The population of Gombe metropolis could be said to be diverse in terms of the different languages spoken (Abba and Abba, 1999). The projected population of Gombe metropolis as at 2020 was 551,222 people (National Population Commission, 2020). Gombe metropolis land use is predominantly commercial and it encompasses a wide range of activities.

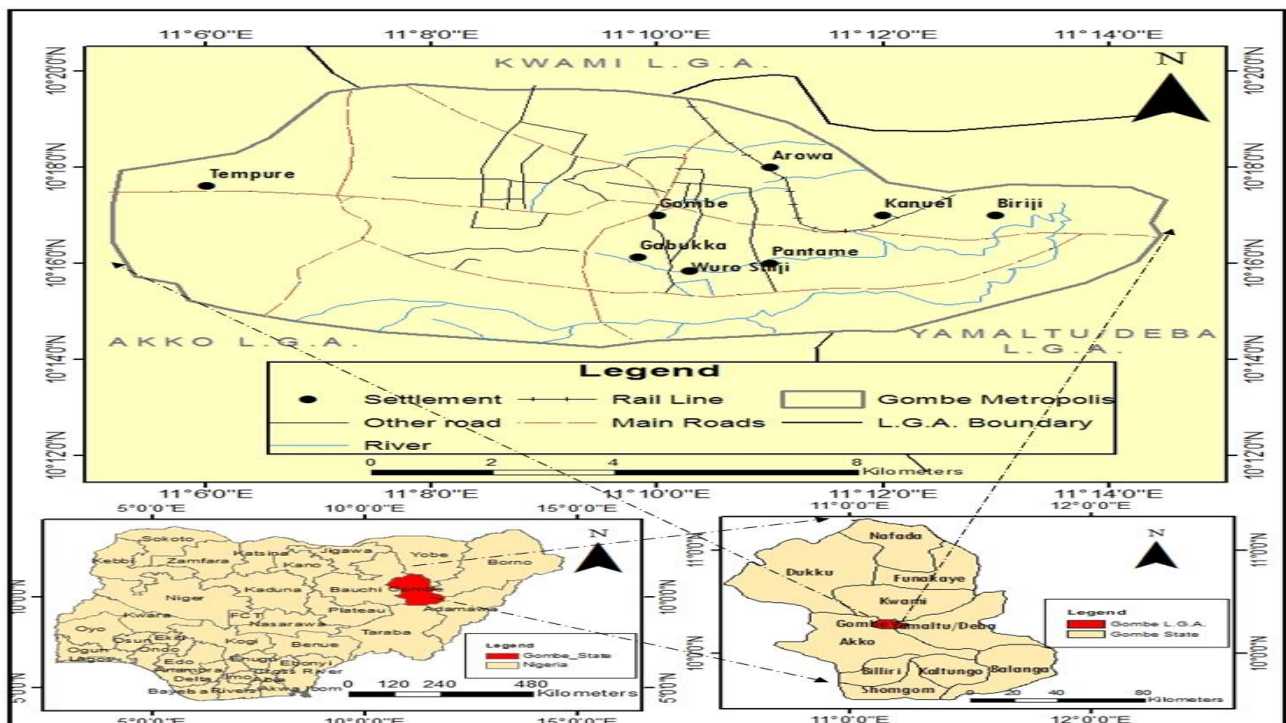


Fig. 1 Map of Gombe Town, Gombe State, Nigeria.
Source: GIS Lab Gombe State University



3. Data Sources and Methods

In order to arrive at a comprehensive outcome with respect to the scope of the subject matter, the study was based on both primary and secondary data. Some of the information were obtained directly from the respondents, using questionnaires and/or interview schedule after a reconnaissance survey. Different secondary data were also collected. Multi-stage sampling technique was used in selection of the political wards, streets, and respondents (household heads). It first involved the alphabetical arrangement of all the eleven (11) political wards in the study area and six (6) were purposively sampled (two each from low, medium and high density residential areas). This was followed by listing all the identified streets in each of the selected political wards. Subsequently, two streets each were randomly selected from the six (6) selected political wards. Seven (7) questionnaires were then randomly assigned and administered to each of twelve (12) streets, and eight (8) each for the two (2) largest political wards bringing the total to 100 questionnaires. Ninety five (95) questionnaires were however returned after they were duly filled. Descriptive statistics such as frequency distribution, percentages and tables were employed to show the visual presentation of the information obtained from the field.

4. Results and Discussion

4.1. Demographic and Socio - Economic Characteristics of the Respondents

Table 1, number 1 shows that the sex of the respondents in the study area is predominantly males who constitute more than three-quarters (83.2%) and this is

because majority of the heads of households owning houses are males, while females constitute one quarter (16.8%) since most of them are housewives and not the heads of their households. Table 1, number 2 reveals that five (5) respondents who are between the age of 20-24 have the least number of responses and this is because most of them are yet to get married while thirty (30) respondents which are between the age of 35-39 constitute the majority of the respondents and this is because most of them might have gotten married and even with children at that age group. Table 1, number 3 further reveals that almost half (42.1%) of the sampled population is married. while 16 (16.8%) were divorcees, 10 respondents representing 10.5% are widowed who are living without their spouses. This means that majority of the respondents are married and this is because most of them are staying with their wives and families. Table 1, number 4 shows that slightly over three-quarter of the respondents were muslims while only one-fourth were Christians. Thus, muslims predominated as the respondents. Table 4.1, Number 6 depicts that 31 (32.6%) of the respondents (heads of households have the highest qualification of primary certificate, while about the same number obtained tertiary level education. The latter could be working class or public service retirees. Just about half of this number has secondary level and only slightly less than 10% have no western education at all. Table 1, number 5 reveals that thirty-six (36) of the respondents representing (11.6%) are civil servants who also made majority of the sampled respondents while five (5) or 5.3% of them were farmers.



Table 1: Demographic and Social Characteristics of the Respondent

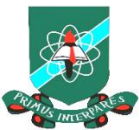
S/N	The Independent Variables	Frequency	Percentage (%)
1.	Sex		
	Male	79	83.2
	Female	16	16.8
	Total	95	100
2.	Age Group		
	15-19	20	21.1
	20-24	5	5.2
	25-29	20	21.1
	30-34	20	21.1
	35-39	30	31.5
	Total	95	100
	Marital Status		
	Single	29	30.5
	Married	40	42.2
	divorce	16	16.8
	Widowed	10	10.5
	Total	95	100
4.	Religion		
	Islam	75	79
	Christianity	20	21
	Traditional	00	00
	Total/Result	95	100
5.	Occupation		
	Casual labourers	18	18.9
	Civil servant	36	37.9
	Industrial operators	11	11.6
	Business/petty trader	22	23.2
	Farmer	8	8.4
	Total	95	100
6.	Educational Status/Level		
	Primary	31	32.6
	Secondary	15	15.8
	Tertiary	30	31.6
	Adult Education	10	10.5
	None	9	9.5
	Total	95	100

Source: Field Survey, 2019

4.2: Types and Quality of Houses and Demand.

Table 2, number 1 shows that about thirty nine (39) respondents i.e. 41% have very good housing quality, while only three (3) respondents (3.2%) have poor housing quality. This clearly reveals that majority of the sampled population are comfortable with

their residential housing quality in the study area. This conforms with Wang, Wang & Zhang (2015)'s assertion which states that, 'the age cohort of in-migrants is an important factor in residential location choices and that, in particular, the effect of natural amenity factors on population and housing growth varies by age. Although economic factors,



such as income and unemployment, have important influence on net population growth rate for all age groups, natural amenity factors also appear to play a role. Proximity to big cities also seems to positively influence location choices of young and middle age groups. In terms of housing types and qualities, Table 2, number 1 reveals that one third of the houses were mud buildings and

only about 21% were block. Table 2, number 2 reveals that, 38 respondents representing 40% live in mud houses while 15 respondents representing 23% live in houses covered with Aluminum zinc roofing. This means that majority of the sampled population lives in mud houses while minorities of the respondents live in houses covered with Aluminum zinc.

Table 2: Types and Quality of Housing and Demand

1.	Types and qualities of houses	Frequency	Percentage (%)
	Block Houses	20	21.0
	Mud Houses	38	40
	Houses covered with Ordinary Zinc	22	23
	Houses covered with Aluminum Zinc	15	15.7
	Total	95	100
2.	Types of Residential Houses –remark		
	Very good	39	41
	Good	25	26.3
	Moderate	28	29.5
	Poor	3	3.2
	Total	95	100
3.	Population Pressure		
	Immigration	13	13.7
	Location	42	44.2
	Early Marriage	17	17.9
	High cost of Rent	23	24.2
	Total	95	100
4.	Causes/Consequences of high demand		
	Problems of accessibility	5	5.2
	Lack of amenities	5	5.2
	High cost of building materials	11	11.6
	Competition between residence and business	5	5.2
	Influx of people to Gombe	20	21.0
	Insecurity in the north eastern Nigeria	36	37.9
	Rural-urban migration	13	13.9
	Total	95	100
5.	Ownership Status		
	Official	11	11.6
	Tenants	19	20
	Own	35	36.8
	Squatting	5	5.3
	Family house	20	21.1
	Rented	0	0
	Others	5	5.3
	Total	95	100
6.	Cost of Land/house		
	Grade A Loc.-N6-7M/N25-100M		
	Grade B Loc.-N3-6M/10-50M		
	Grade C Loc.-N2-5M/5-25M		
	Grade D Loc.-N1-3M/3-15M		

Source: Field survey,2019



4.3: Reasons for Shortage of Houses in the Study Area

Table 2, number 4 reveals that very low percentage of the respondents were of the opinion that unavailability of the residential houses in the study area is as a result of poor accessibility and five (5) respondents also representing 5.2% opined that is due to lack of amenities, five (5) respondents also representing 5.2% suggest that is due to competition between residential and business structures, while 36 respondents which are the majority representing 37.9% said that, 'the insecurity in most of the north eastern states in Nigeria prompted many people to migrate to the study area. This finding conforms to Eni and Ukpong (2014)'s notion, 'the more accessible parts of the city are more developed'. That was earlier posited by Alonso in the theory of urban land values, the more accessible land is more expensive and highly competed for.

4.4: Ownership Status of Houses in the Study Area

Table 2, number 5 reveals that, about one-third of the respondents owned the houses they were living in, while five (5) respondents representing 5.3% were squatting at their various houses as they could not afford owning houses due to inadequate funds. Table 2, number 5 reveals that close to half of the respondents were living in two persons per room which coincides with assertion of Adedeji and Roland (1976) that as a result of inadequate houses in urban area high percentage of the population are living in overcrowded conditions or in inadequate houses, while six (6) respondents representing 6.3%, are living in Four persons per room and this is because most of them gave birth to many children.

4.5 Factors Influencing Housing Quality

Table 3, number 2 reveals that thirty-four (34) respondents representing 35% paid average cost of rent and this is because the cost of the house rent is affordable to them financially while one (1) respondent representing 1% paid low cost of rent because he can't afford the cost of other house rent. There is a high cost urban land and high cost of housing which is often in short supply and out of the urban household (Awake, 2005). Table 3 number 3 reveals that about 50 respondents representing 52.6% said only Government can make the residence available to people, while five (5) respondents representing 5.3% have other views. This means majority of the respondents believe that only Government can make the residential housing available in the study area. According to the Table 3, Number 5 above, most of the respondents opined that location determines their choice of houses and settlements as 70 respondents constituting 73.6% preferred staying in a good terrain and environment while 25 respondents constituting 26.3% were of the opinion that location doesn't determine the choice of their houses.

Based on the research findings and responses, sixty (60) respondents constituting 63.1% are of the view that, good location determines ownership of houses, ten (10) respondents constituting 10.5% said government policies determines ownership of houses while 10 respondents respectively constituting 10.5% also said falling prices was the determinants of houses ownership. The high demand for housing in the study area is indicated by the high cost of land (Table 2, No. 6) and long waiting by intending Renters for others to vacate the houses before they pay the rents and check in as expressed by the respondents for the interview.



Table 3: Determining Factors of Housing Quality

1.	Average number of persons per room	Frequency	Percentage (%)
	One person per room	10	10.5
	Two person per room	40	42.1
	Three person per room	19	20
	Four person per room	6	6.3.0
	Above five	20	21.0
	Total	95	100
2.	Cost		
	Very high	31	32.6
	High	29	30.5
	Medium	34	35.8
	Low	1	1
	Total	95	100
3.	Source of residential house		
	Government	50	52.6
	Private individuals	19	20
	Company/corporate organization	21	22.1
	Others	-	-
	Total	95	100
4.	Location as Determinant		
	Yes	70	73.6
	No	25	26.3
	Total	95	100
5.	Owner's Opinion as Determinant		
	Good Location	60	63.1
	Income	15	15.7
	Government policies	10	10.5
	Falling Prices	10	10.5
	Total	95	100
6.	Marital Status as Determinant		
	Yes	10	10.5
	No	85	89.4
	Total	95	100

Source: Field Survey, 2016



Based on research findings and responses from the respondents, the implications of rapid increase in population growth in the study area have led to various social, economic, political and cultural problems in the study area. It has also brought many problems associated with difficulties in providing basic infrastructures such as

5. Conclusion

This research has found out that the study area is growing rapidly both in size and population. This rapid population growth is responsible for the increasing demand in housing. The major factors responsible for the rapid growth in the study area are insecurity in some of the neighboring states leading to influx of migrants, rural-urban migration, natural increase as well as immigration for other reasons due to its peaceful nature. Typically, findings of this research revealed that most of the dwellers owned their accommodations with the

6. Recommendations

Following from the findings outlined above, the study makes recommendations among which include but not limited to the following:

- i.** Government should give equal emphasis to direct construction of residential units and to the provision of basic infrastructures in various layouts on which individuals can rebuild their own houses.
- ii.** Government should subsidize the cost of building materials and improve the local

4.5: Implications of Population Growth on Housing Demand in the Study Area.

electricity, pipe borne water, problems of providing medical, education and recreational facilities. The rapid growth of population in the study area has also led to increase in crime rate and other social vices. Table 2, number 6 indicates the high cost of land and houses as a consequences of population growth and high demand.

average standard of living. The study has also clearly shown that the determinants of the cost and demand for housing are a reflection of environmental condition, family size, level of income, rent level, status of individuals, socio-cultural religious and economic activities of the dwellers and growing population. Since the trend of rapid population growth continuous to raise the gap between effective demand and supply of the residential housing in the study area, it widens with little measures to curb it

materials such as mud, blocks and burn bricks. It is necessary therefore, to re-examine the loan policy and improve it so that the low income people can benefit from it.

- iii.** Government should encourage researchers to further carry out urban-related studies with socio-economic effect in the study area for a more in-depth understanding of the dynamics of urbanization.



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