An Analysis of The Factors Responsible for Residential Segregation in Gombe City, Nigeria

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ABSTRACT: *Residential segregation continuous to draw attention as one of the crucial issues of global urban change in the 21st century affecting the physical and social dimensions of cities particularly in developing countries of the world. The study examines the nature and effects of residential segregation in Gombe city. To achieve the objectives of the research, Geographic Information System (GIS) technique was employed in order to map out and show the pattern of segregation in the residential areas of the city. Non inferential statistical technique was also used to analyse the data collected through questionnaire survey on the nature and causes of the residential segregation in the study area. Results obtained showed that the nature of the segregation was socio-economic but with a pocket of ethno-religious in some parts of the city due to the fear of political or religious crises. Likewise the main causes of the segregation in the area were found to be socio-economic characteristics in form of income, ethnicity and religious concern. Consequences of residential segregation were also identified to be socio-spatial division of residential areas by income (high, medium and low classes), inaccessibility of the poor to affordable housing, inadequate provision of infrastructure in the slum or high density residential areas of the city and possibly the reason that may cause ethno-religious conflict in the study area. It is therefore recommended that enlightenment programmes should be organized to educate the people on how to be tolerate one another despite the ethno-religious differences in the state.*

KEYWORDS: *City, Residential, Segregation, Slum, Urban.*

I.   INTRODUCTION

Residential segregation continuous to be a crucial urban phenomenon that has been widely studied both in developed and developing countries of the world. Residential segregation is a form of segregation that sorts population groups into various neighbourhood contexts and shapes the living environment and social space at the neighbourhood level. The residential neighbourhoods are often classified and segregated based on a variety of peculiarities. These are based on race/ethnicity, religion and economic/social status of individuals and groups within the population (Ifesanya and Nwokoro, nd). Kemper (1998) has conceived residential segregation as the spatial separation of population sub-groups within a given geographical area such as a large city. Such sub-groups can be formally defined in terms of age, occupation, income, place of birth, ethnic group or some other measures like race or religion (Friedrichs, 1977). Such sub-groups can also be social minorities which are distinguished from dominant groups by power differentials (Saltman, 1991).

Although the degree of segregation varies from one society to another, spatial separation or residential differentiation is normally affected by social stratification in each case (Kemper, 1998). Berry and Horton (1970) had earlier advanced reasons for residential segregation. They opined that people choose to live apart from those unlike themselves in an attempt to minimize the possible conflicts that could emanate from "class, generational, racial and religious or national differences" and that this is done within the limits of the technology and resources at their disposal. Berry and Horton came to this conclusion after analyzing the census data on Chicago. A similar observation had earlier been made by Burgess (1967) who noted that owing to economic competition for scarce urban land, middle class residents were located in an area further removed from the centre of the city than the working class. However, the middle-class residents were closer to the centre than the affluent who could afford new homes and transportation costs of the commuter's zone which was much farther away from the city centre. Abumere (1994) suggested that it is evident from literature that, three major factors: socio-economic status, family status and ethnic status are the causes of residential segregation in most part of the world. Burgess (1967) had earlier emphasized socio-economic status, stating that there is a significant relationship between socio-economic status and the distance from the centre of the city.

Residential segregation on the basis of race and socio-economic status is a highly visible phenomenon in the United States and is perceived to have important social implications. Where segregation is extreme, as in the case of urban ghettos, there is a sense that the combination of poverty, adverse neighbourhood spill overs and isolation from mainstream society all make it difficult for an individual from such settlements to perform well in the school, the labour market and in other noncriminal activities (Patrick, 2001).It is also important to note that classical and neo-classical explanations have identified rent as a crucial factor that is responsible for the segregation. It is argued that persons who could not afford the rent of a given area are forced to move to such areas which have prevailing rent that fall within their financial capability. Over time, this develops into a system in which different residential areas emerge consisting of persons who can afford given rent. The socio-economic status factor sometimes has two dimensions: an income dominated pattern, and one based on education or occupation (Abumere, 1994) and further noted that some studies have attempted to explain residential differentiation and segregation in terms of the stages of economic development. It is argued that at the lowest level of economic development, populations in cities tend to be segregated on the basis of ethnic origin. At the next stage, they are segregated by socio-economic status and finally, at a later stage of development, by family status. The pattern of ethnic composition in Nigerian urban areas shows a pre-existing level of segregation, where people tend to cluster in designated areas because of tribal and social reasons. While language has long been a factor in residential concentrations in Nigeria, religion now plays a crucial role in the emerging pattern of residential concentration (Dodo, 2000). Thus, the question that commonly arises is: what is the nature, extent and causes as well as effects of residential segregation in the study area been multi ethnic and religious society? It is against this backdrop that the study examine the factors responsible for residential segregation in Gombe city.

II. STUDY AREA

Gombe city is located between Latitude 10°15′02″N to 10°20′00″N and longitude 11°05′00″E to 11°15′05″E. Gombe shares common boundary with Akko Local Government Area in south and west, Yamaltu-Deba L.G.A. to the east and Kwami L.G.A. to the north (see fig. 1.0). The city also occupies a total land area of 52Km². It is the capital of Gombe state with a population of 266,844 (NPC, 2006). Today the population is projected to be 399,531 persons using 3.2% growth rate (NPC, 2009). Gombe is well linked to other regional centres by trunk A roads. A single gauge railway line on the Bauchi to Maiduguri route further link the town, in addition to an international airport. The studyis made to cover different residential quarters in the city which include: Government Reserve Areas (GRA),Federal Low Cost,State Low Cost, Investment Quarters, Labour Quarters, Hashidu Housing Estate, Igbo Quarters,Arawa, Kumbiya-kumbiya, Pantami, Jekadafari, Tudun Wada, Madaki,Dawaki, Bolari, Yalanguruza,NayiNawa, Bypass Area,HerwaGana and Tunfure among others.

Fig. 1. Study Area (Gombe City)
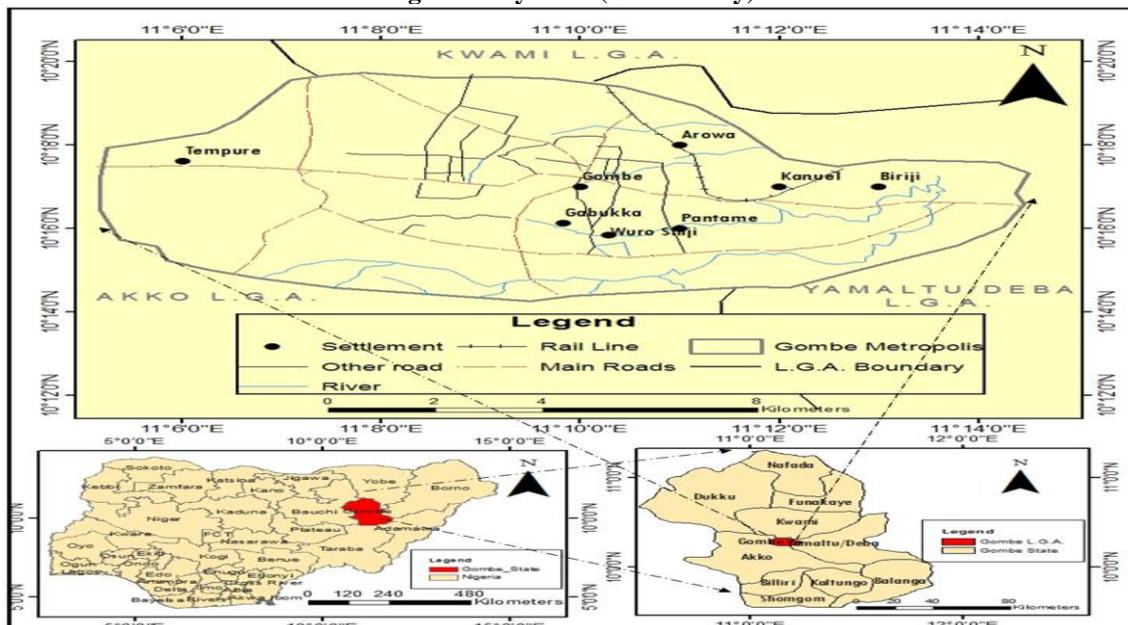
Source: Author's Work, 2019.

III. MATERIALS AND METHODS

Two sources of data were used in the course of carrying out this research work. These include: Primary sources; information acquired through reconnaissance survey, questionnaire, personal interviews, and the researcher's observations. Secondary sources; information acquired through the use of textbooks, thesis, projects materials, publications, journals and internet. A total of three hundred and five (305) respondents were statistically drawn from the sampling frame that covers the area under study (see table 1). Systematic sampling technique was employed to select the residential houses. The first house in each of the neighbourhood identified was selected, followed by the 5th, 10th, 15th etc. where by a house was not residential, the next house automatically becomes the sample point to be considered. The heads of the households were targeted for the response. The information generated from the respondents was presented in tabular form, interpreted using statistical tool of simple percentage and analysed qualitatively.

Table 1: Sample Size of the Respondents

Residential Areas	Sample Size	Percentage (%)
Arawa	25	8.2
Bagadaza	15	4.9
Bypass Area	35	11.5
Federal Low Cost	22	7.2
GRA	28	9.2
Hashidu Housing Estate	20	6.6
Igbo Quarters	18	5.9
Kumbiya-Kumbiya	15	4.9
Nayi Nawa Quarters	25	8.2
Pantami	35	11.5
Tudun Wada	25	8.2
Tumfure	30	9.8
Yalanguruza	12	3.9
Total	**305**	**100**

Source: Author's Work, 2019

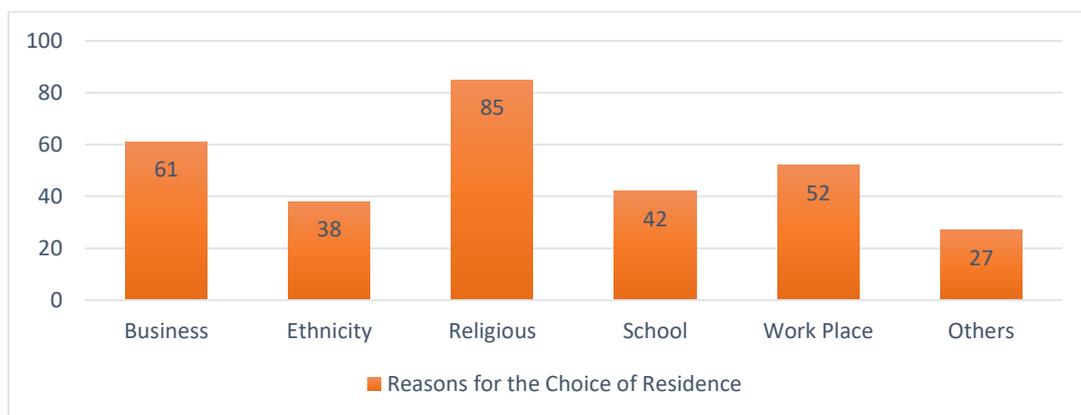# IV. PRESENTATION AND DISCUSSION OF RESULTS

Figure 1: Reasons for the Choice of Residence
Source: Author's Work, 2019.

Figure 1 above presents the position of the respondents when it comes to the choice of an area of residence to live. From the results, religious reason accounts for 27.9% (85), Distance from place of doing Business account for 20.0% (61), distance from place of work account for 17.0% (52), ethnic reason account for 12.5% (38), proximity to schools account for 13.8% (42)

while other reasons that have not been specified account for only 8.6% of the respondents.It is obvious that majority of the respondents indicate religious reason as the most important factor to consider when choosing an area to live. This cannot be unconnected with the nature of the area under study which is a multi-religious society. Thus, it is not surprising since, Berry and Horton (1970) had earlier opined that people choose to live apart from those unlike themselves in an attempt to minimize the possible conflicts that could emanate from "class, generational, racial and religious or national differences. Dodo (2000) also reported that religion now plays a crucial role in the emerging pattern of residential concentration.

Table 2: Factors Responsible for Residential Segregation in the Study Area

Factor	Frequency	Percentage (%)
Conflict	25	8.2
Ethnicity	44	14.4
Family Status	22	7.2
Indigene	21	6.9
Non-indigene	30	9.8
Race	22	7.2
Religion	58	19.0
Socio-economic Status	83	27.2
Total	**305**	**100**

Source: Author's Work, 2019.

Table 2 above depicts the distribution of the factors that were responsible for the segregation in the study area. From the results, ethnicity accounts for 14.4% (44), Conflict accounts for 8.2% (25), Indigene and non-indigene account for 6.9% (21) and 9.8% of the respondents. Religion constitutes about 19.0% (58), Socio-economic status accounts for 27.2% (83) and family status only accounts for 7.2% (22) of the respondents. The information from the results revealed that socio-economic status is the most influential factor of residential segregation in Gombe city. Although, other factors such as ethnicity, family status and religion remained glaring as they continued to play a vital role in spatial separation in the area. This finding conforms with Abumere(1994) where it was stated that socio-economic, family and ethnic status are some of the causes of residential segregation in most part of the world. This was further reaffirmed by Burgess (1967) who opined that there is significant relationship between socio-economic status and the distance from the centre of the city.

It is imperative to note that income is viewed as the most crucial factor in this case. Abumere(1994) had earlier noted that socio-economic factor in most cases has two dimensions: an income dominated pattern, and one based on education or occupation and further noted that some studies have attempted to explain residential differentiation in terms of the stages of economic development. It is argued that at the lowest level of economic development, people in cities tend to be segregated on the basis of ethnic origin. At the next stage, they are segregated by socio-economic status and finally, at a later stage of development, by family status. The case of segregation in Gombe city is with no doubt is in the second phase where income pattern of the respondents dictate their area of residence in the city. Of course, this is coming from the ability or otherwise of the people that engaged in different socio-economic activities to pay rent in some areas. Thus, this has given rise to the classes of residential areas in the city and these include: the high class (GRA, federal low cost, and Hashidu Housing Estate among others), the middle class (Investment quarters, labour quarters, Ligi, Tumfure, Yalanguruza, State low cost etc.) and the lower class (Bypass area, Arawa, Nayi-nawa, Jeka da fari, Bolari,Dawaki, Tudun Wada,Kumbiy-kumbiya etc.).
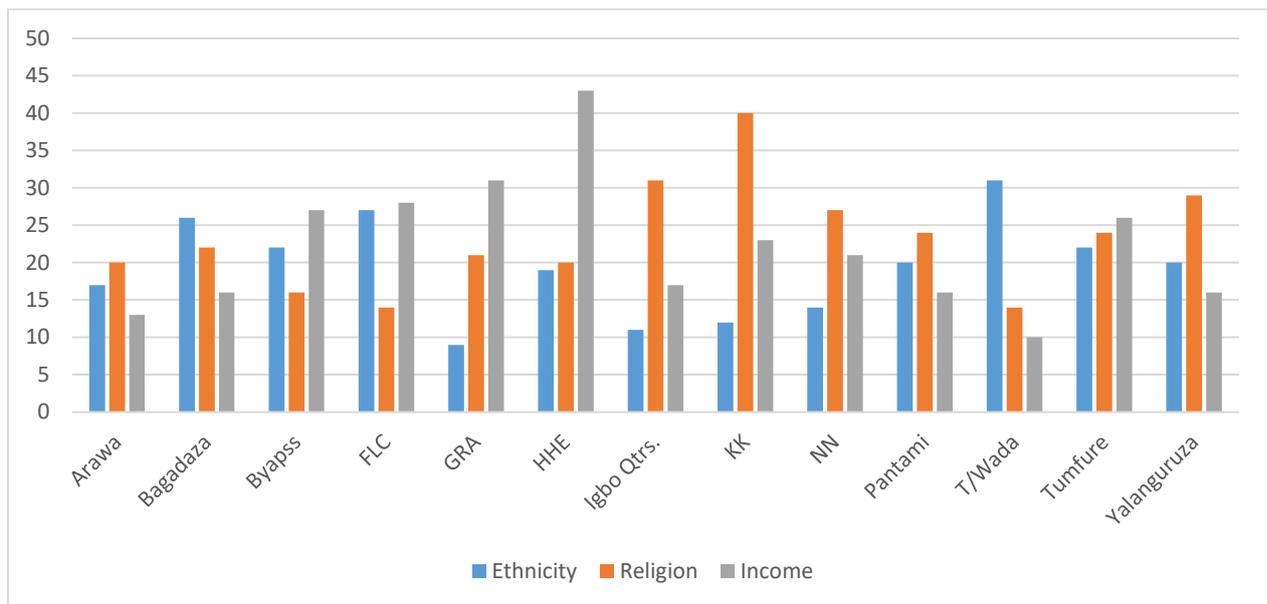
Figure 2: Segregation in Gombe City by Residential Areas
Source: Author's Work, 2019.

Figure 2 above shows the segregation in Gombe cityby the area of residence based on the three major factors that were identified to be among the major causes of spatial separation in the study area (ethnicity, income and religion). In most of the high class residential areas income is the most dominant factor that is responsible for their choice of the area since they can be able to purchase a land and build or they can afford to pay for rent in those area. For instance, in GRA, Hashidu Housing Estate (HHE), Federal Low Cost (FLC) and Tumfure areas about 60% of the residents are among the high-income earners in the city. In Tudunwada, Bypass area and Bagadaza areas of Gombe majority of the people living in those areas are clustering along ethnic groups. With Tudun Wada area dominated by the indigenous Fulani ethnic group accounting for about 70%, in Bagadaza area about 45% to 55% of the people living in that area are dominated by the local Tangale and Waja ethnic groups. About 70% of the people in Bypass area of Gombe are Hausa/Fulani ethnic groups.

The results further revealed that in Arawa, Nayi-nawa (NN), Kumbiya-Kumbiya (KK), Pantami and Yalanguruza areas about 65% to 70% of the people are clustering along religious lines (Christians and Muslims). With Muslims clearly dominating places like Kumbiya-Kumbiya (KK), Pantami and Arawa quarters of the city mostly from the local indigenous tribes of the state. Christians however, are the majority in Nayi-nawa (NN), Igbo quarters, Tumfure and Yalanguruza.Largely from the southern part of the country as Igbo ethnic group dominate the Igbo quarters and Yalanguruza axis. The local non-muslims ethnic groups are the majority in Nayi-nawa and Tumfure areas. This results are in line with the findings of Kemper (1998) where residential segregation was viewed as the spatial separation of population sub-groups within a given geographical area. Friedrichs (1977)further related residential segregation to be resulted from income, place of birth, ethnic group or some other measures like race or religion. Such sub-groups can also be social minorities which are distinguished from dominant groups by power differentials as reaffirmed by Saltman(1991). Figure 3 above shows the relationship between income and religion as the most dominant factors of residential segregation in the area. It can be observed from the presentation that majority of the High-income earners care for the high-class residential areas without any religious or ethnic considerations. Both business men and civil servants with higher monthly incomes dominate the areas. (See figure 4). While most of the areas are dominated by the middle- and lower-income earners as the results showed religion as the favourable factor. Those are areas of middle- and lower-class residential areas. This has however resulted into increase in population density mostly in low income earners residential areas. Overcrowding and poor state of infrastructure are the common features of the areas.
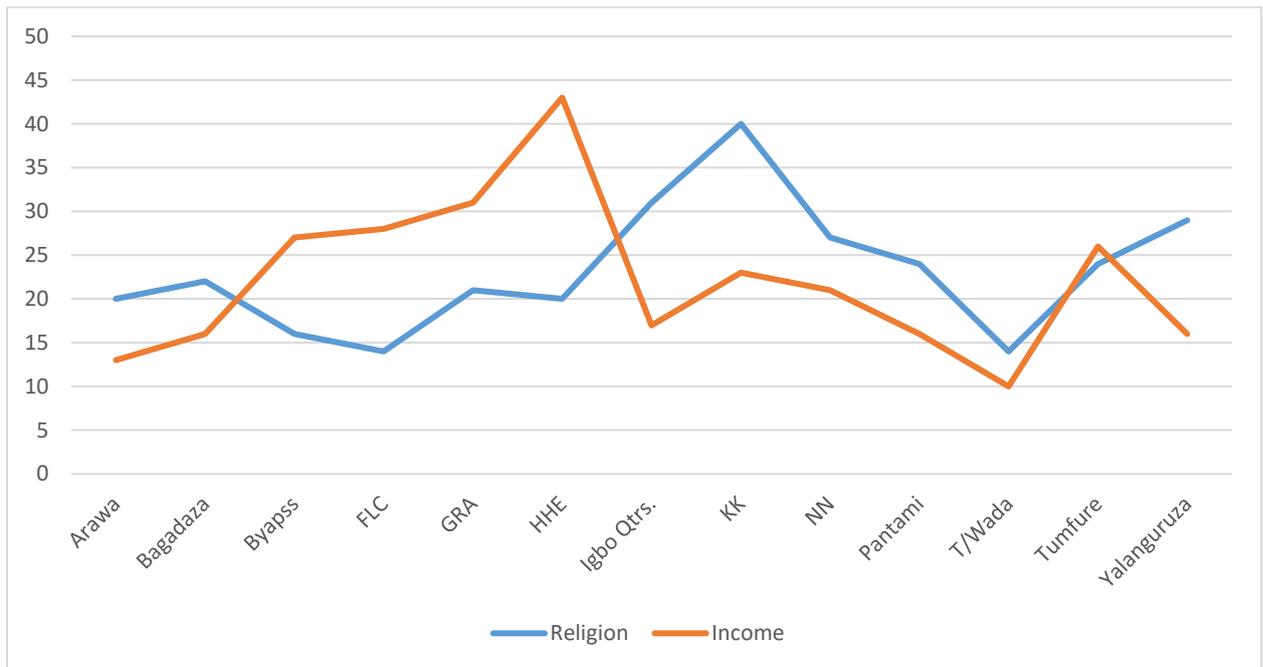
Figure 3: Relationship between Income and Religion
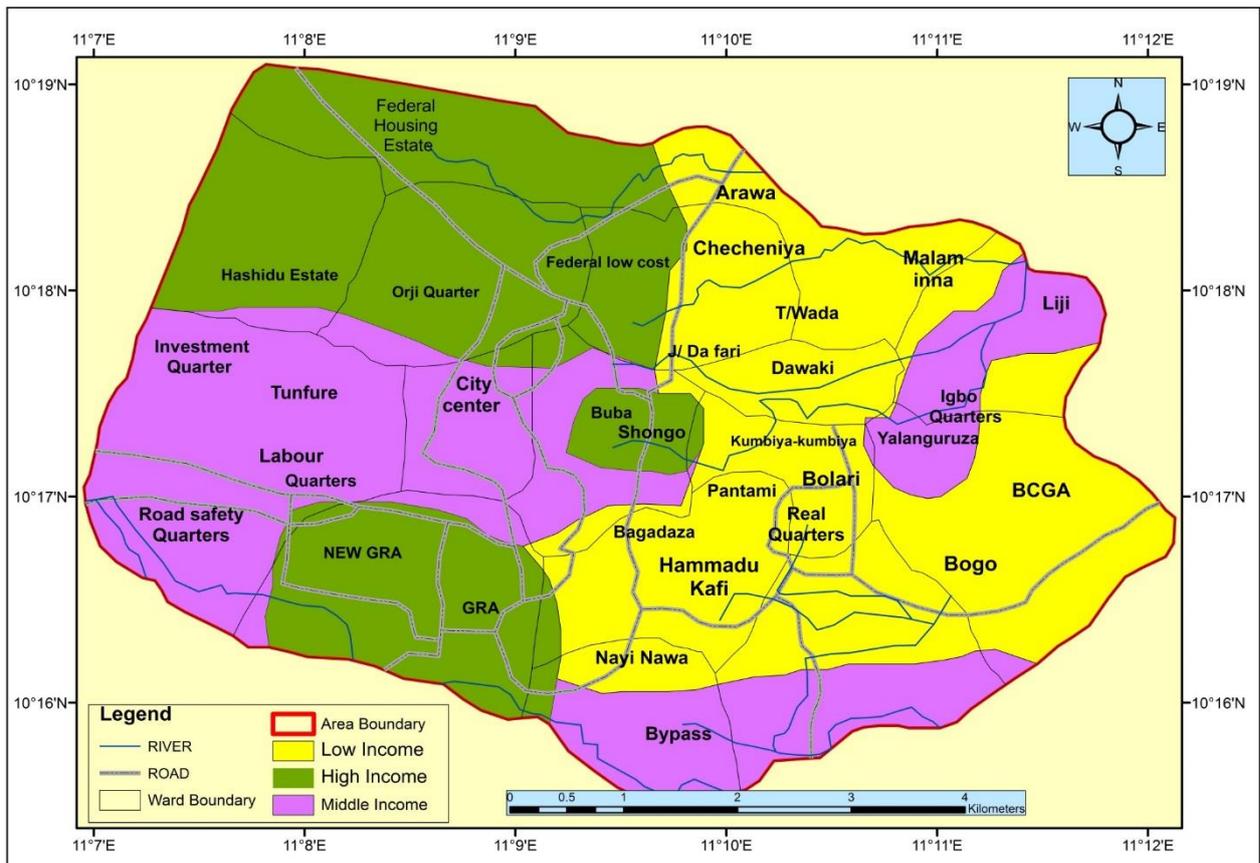Source: Author's Work, 2019.

Figure 4: Residential Segregation Based on Class (High Class, Middle Class and Lower Class)
Source: Author's Work, 2019.

Table 3: Reasons for the Change of Residence in the Study Area

Change of Area of Residence	Frequency	Percentage (%)
Yes	187	61.3
No	118	38.7
Total	**305**	**100**
Reasons for the Change	**Frequency**	**Percentage**
Cases of Robbery	18	9.6
High Cost of Rent	57	30.5
Increase in Income	29	15.5
Political Thuggery	40	21.4
Religious Reason	17	9.1
Proximity to Work Place/Business	26	13.9
Total	**187**	**100**

Source: Author's Work, 2019.

Table 3 above present the information on the reasons for the change of residential areas in Gombe city. The results shows that about 61.3% (187) of the respondents revealed that they have in one way or the other change their area of residence. Only 38.7% (118) indicated that they have not change their place of initial residence in the city. As for the reasons for the change of residence, cases of robbery account for 9.6%, high cost of rent account for 30.5%, increase in income of the respondents account for 15.5%, political thuggery account for 21.4%, and proximity to place of work, business or school account for 13.9%. Religious reason only account for 9.1% of the responses.The results so far revealed that bulk of the respondents changed their place of residence over time. Where high cost of renting in the study area led as the major reason that influence people to changed their place of residence. It was also realized that a lot of people are targeting areas of high class residential settlements especially when they are getting married for the first time. But at long run failed to continue to be able to pay for house rent. This eventually compelled them to relocate to middle class or low class residential areas depending on their income status. Other reasons for the change of residential areas include political thuggery with 21.4%, increase in income 15.5% and distance to place of work, business and school was 13.9% of the respondents. While religious and cases of robbery indicated 9.1% and 9.6% respectively. However, this results contradicts the initial reason for the choice of residence as shown on table 1. Where majority of the people indicated religious concern as their prime reason for the choice of their area of residence. This finally shows clearly that socio-economic status and political crises as the major determinants for the change of place of residence.

V.   CONCLUSION

The study allows the following conclusions to be drawn, that socio-economic status, ethnicity and religious consideration are the major drivers of residential segregation in the study area. It is therefore important to note that income is viewed as the most crucial factor in this case. The results revealed that socio-economic status is the most influential factor of residential segregation in Gombe city. Although, other factors such as ethnicity, family status and religion remained glaring as they continue to play a vital role in spatial separation in the area. The situation in Gombe city is with no doubt is in the second phase of development where income pattern of the people dictate their area of residence in the city. Thus this cannot be unconnected with the ability or otherwise of the people that engaged in different socio-economic activities to pay for house rent in some areas.In most of the high class residential areas income is the most dominant factor that is responsible for their choice of the area since they can be able to purchase a land and build or they can afford to pay for rent in those area. Where by in other areas of middle and lower classes of Gombe majority of the people are clustering along ethnic groups, religious lines and proximity to place of work, businesses and schools. Some of the consequences identified include: increase in population density mostly in low income earners residential areas. Overcrowding and poor state of infrastructure are the common features of the areas. Political thuggery popularly known as Kalare activities, exorbitant rent and increase in income are the major reasons for the change of residence in Gombe city.

VI.   RECOMMENDATIONS

a.   The thriving force for development in any area is peace and unity. Government, religious leaders, people and relevant stakeholders must ensure that peace continue to rein in Gombe city in other to take away the fear of possible ethno-religious tensions for efficient and effective growth of the city and the state at large.

b.   Enlightenment programs should be organized and also be sponsored in media outlets to reiterate the importance of living together with one another for effective and reasonable society.

c. High cost of house renting should be checked in order to make it more affordable to people with average income. This will go a long way in decongesting the high density residential areas and possible crime reduction in the society.

d. Infrastructures especially roads should be provided in the low income residential areas for effective operation of commercial activities and subsequent economic growth.

REFERENCES

1. Abumere, S.I. (1994). Residential Differentiation in Ibadan: Some Sketches of an Explanation. In: M.O.filani; F.O. Akintola and C.O.Ikporukpo (eds.) *Ibadan Region.* lbadan: Rex Charles. 85-97.

2. Adedibu, A.A. (1980). Spatial Pattern of Housing Modernization in Traditional Residential Areas of Ilorin, Nigeria. *Nigeria Geographical journal.* 23 (1 & 2): 147-161.

3. Albert, I. O. (1996). Ethnic Residential Segregation in Kano, Nigeria and its Antecedents: *African Study Monographs*, *17(2):85-100*.

4. Berry, J.L. and FE. Horton *(1970). Geographic Perspectives* on U*rban Systems.* Englewood Cliffs: Prentice Hall.

5. Brimicombe, A.J. (2007). Ethnicity, Religion and Residential Segregation in London: Evidence from a Computation Typology of Minority Communities. *Environment and Planning B: Planning and Design*, Vol. 34 (5): 884-904.

6. Bouma, G. and Hughes, P. (2000). Religious Residential Segregation in Australia. People and Place Vol. 8 (3): 18-27.

7. Brama, A. (2006). Studies in the Dynamics of Residential Segregation. *Geografiska Region Studier.* NR 67: 16.

8. Burgess, E.W. (1967). The Growth of the City: An Introduction to a Research Report. In: R.E. Park, E.W. Burgess and R.D. Mckenzie (eds.) *1he City* (Heritageof Sociology Series). Chicago: University of Chicago Press: 437-462.

9. Dodo, S.B. (2000). *Residential Mobility in Kaduna Metropolis and Its Implication on Urban Management*. Unpublished M.Sc. Thesis, Department of Urban and Regional Planning. Ahmadu Bello University, Zaria, Kaduna State, Nigeria.

10. Friedrichs, J. (1977). S*tadtanalyse, Sozialeand Raumliche Organization der Gesellshaft.*Rowohlt: Reinbek.

11. Ifesanya, K, and Nwokoro, I. (n.d.). Transforming social exclusion to benefit in the slum areas of the Global South through neighbourhood identity: lessons from Ajegunle slum in Lagos, Nigeria.*socialspacejournal.eu*,http://socialspacejournal.euCzwarty%20numerIfesanya,%20Nwonkoro %20%20Transforming%20social%20exclousion.pdf.

12. Kemper, F. J. (1998). Residential Segregation and Housing in Berlin: Changes since Unification. *Geojournal 46: 17-28,1998.*

13. Laah, J.G. and Mamman, M. (2011). Religious Residential Segregation and Urban Mobility in Kaduna Metropolis. *The Nigerian Geographical Journal.* New Series, Vol. 7, N0. 2, December, 2011.

14. Mabogunje, A.L. (1968). The Growth of Residential Districts in Ibadan.*Geographical Review*52 (1): 56-77.

15. Patrick, J. B., et-al., (2011). Separate When Equal? Racial Inequality and Residential Segregation. *Economic Research Initiative at Duke (ERID).* No. 100. 19 June, 2011.

16. Saltman, J. (1991). Theoretical Orientation: Residential Segregation. In: E.D. Huttman (ed.) *Urban Housing Segregation of Minorities in Western Europe and the United States.* London: Duke University Press. 1-17.