

Drivers of Residential Location in Suburban Areas of Lokoja, Nigeria

J. E. Ukoje and U. W. Ibor

Department of Geography, Faculty of Social Sciences,
Federal University Lokoja, Kogi State, Nigeria.
Correspondence: joyukoje@yahoo.com

Abstract

This paper examined the motivation for residential location in the suburbs of Lokoja, Nigeria. Three major suburban settlements of Ganaja, Felele and Zango were selected for this study. An inventory of residential development within the last ten years was made through a questionnaire survey of one hundred and forty-five households in the three sampled suburbs. Data were obtained on the socio-economic status of the residents, driving forces for location in the suburbs, and the characteristics of facilities. The study used both descriptive and inferential statistics, which revealed that a significant number of those who lived in the suburbs were of mixed social and economic status, constituting 49% and 51% for low - and middle -income groups respectively. The majority of the residents in the suburbs (79%) once lived in the adjacent urban area, and moved to the suburbs within the last ten years. Results of the Relative Importance Indices (RII) indicated that home ownership was the most important reason given for location in the area. Furthermore, insufficient infrastructure and their performance constituted sources of dissatisfaction in the area. The ANOVA test revealed that the level of satisfaction with the performance of the facilities do not significantly vary across the suburbs of Lokoja. the study recommends that the government should implement the housing policy that will stimulate the easy house ownership for the residents of urban areas.

Keywords: residential location, owner-occupancy, housing characteristics, infrastructural performance, Lokoja

Conducteurs de l'emplacement résidentiel dans les zones suburbaines de Lokoja, Nigeria

Resume

Cet article a examiné la motivation de l'emplacement résidentiel dans la banlieue de Lokoja, au Nigeria. Trois grandes localités de banlieue de Ganaja, Felele et Zango ont été sélectionnées pour cette étude. Un inventaire du développement résidentiel au cours des dix dernières années a été réalisé au moyen d'une enquête par questionnaire auprès de cent quarante-cinq ménages dans les trois banlieues échantillonnées. Des données ont été obtenues sur le statut socio-économique des résidents, les forces motrices de l'emplacement dans les banlieues et les caractéristiques des installations. L'étude a utilisé à la fois des statistiques descriptives et inférentielles, qui ont révélé qu'un nombre important de ceux qui vivaient dans les banlieues avaient un statut social et économique mixte, constituant respectivement 49% et 51% pour les groupes à revenu faible et moyen. La majorité des résidents des banlieues (79 %) vivaient autrefois dans la zone urbaine adjacente et ont déménagé dans les banlieues au cours des dix dernières années. Les résultats des indices d'importance relative (IIR) ont indiqué que l'accession à la propriété était la raison la plus importante invoquée pour l'emplacement dans la région. En outre, l'insuffisance des infrastructures et de leurs performances constituaient des sources d'insatisfaction dans la région. Le test ANOVA a révélé que le niveau de satisfaction à l'égard de la performance des installations ne varie pas de manière significative dans la banlieue de Lokoja. l'étude recommande que le gouvernement mette en œuvre la politique du logement qui stimulera la facilité d'accession à la propriété pour les résidents des zones urbaines.

Mots-clés: emplacement résidentiel, propriétaire-occupation, caractéristiques du logement, performance infrastructurelle, Lokoja

Introduction

Until the late 20th century, the level of urbanisation in African countries was relatively low in comparison with the developed countries of the world. In 1980, only 28% of African population lived in cities. However, in the early 2000, annual urban growth rate in Africa was 4.87%, twice that of Latin America and Asia. Cities and towns in Africa were also growing at twice the 2.5% growth rate of the rural population in Africa (Tibaijuka 2006). Most of this urban growth is propelled by expectation of opportunities due to what Lipton referred to as urban bias (Lipton, 1977), fuelling rural-urban drift. It has been predicted by the United Nations Population Fund that the majority of the population in Africa will be living in cities by 2030 (UNDPF, 2011). Already, the urban transition; the shifts of humans from being predominantly rural to being urban has advanced in the more developed nations where nearly every one lives very close to an urban environment and the suburbanisation process has far gone underway.

In recent times, however, significant urban expansion in the African nations cities is creating extensive growth in peripheral suburban communities. In Nigeria, rapid urbanisation and transformation of human habitation is forecast to continue to grow in the foreseeable future (Avis, 2019). Projections suggest that Nigeria's urban population will likely double within the next 30 years (UNDESA, 2019). The high population growth rate has seen the proportion of urban dwellers rising from 10.6% of total population in 1953 to 19.1% in 1963, 35.7% in 1991 and 48.2% in 2006. The 2006 National Population Census had projected the urban population in Nigeria at 50% of total population by 2015, and is expected to rise to 60% in 2025 (FGN, 2007). The growth of Nigeria's urban population has also been accompanied by the expansion of

existing built-up areas and the emergence of new and identifiably 'urban' settlements (Bloch, Fox, Monroy & Ojo, 2015; UNDESA, 2019). This large urban population is distributed among several fast-growing cities in Nigeria, with Lokoja being one of them.

The rapid urban development is increasing the demand for more living space as cities continue to expand their borders. This has been found to generate urban sprawl, as the middle class and even poor households seek more comfortable accommodations in outlying area where changes in land use take place without control and planning. Nevertheless, urban dwellers in Nigeria are increasingly choosing their residential environment in the suburbs. A recent research by Bloch *et al.*, (2015), confirms the increasing trend of suburban development within the Nigerian context. Population shifts from the central urban areas into the suburbs result into suburbanisation, a process by which many residents of metropolitan regions work within the central area, and choose to live in satellite communities. These processes have been ongoing in more economically developed countries, especially in the United States and Europe, in which the majority of population lives in the suburbs, rather than in the cities or in rural areas (Gainsborough, 2002).

In the United States, suburbanisation started during the Post World War II, when America had a prosperous economy, and there was more leisure time available. The suburbs were seen as safe places to live and raise a family in low density area with ample lot size for relaxation (Benson, 2009). Timely planning of the urban fringe, availability of infrastructure facilities as well as affordability of housing recorded in the suburbanisation process of western Europe and North America presents suburbs as fashionable area inhabited mainly by the middle and upper classes.

In Nigeria, researches on the growth of the suburbs of Ilorin by Adedibu (1998), and Ibadan by Adesina (2007) focused on the importance of the informal sector to the economy of the fringe areas. In other studies, Olabode, Elegbede & Babatunde (2010) and Ukoje (2016), examined the environment of the fringe areas and emphasised that the environmental problems arise because of poor planning and management of the urban fringes of Abuja and Lokoja respectively. In the foregoing, it is clear that there has been an increasing interest on urban fringe areas. However, there is little information on the characteristics of housing in suburban areas and the driving forces and motivations for suburban residential location in Lokoja. Therefore, the aim of the research is to establish the driving forces of the growth and development at the suburb of Lokoja, and to assess the performance and satisfaction with suburban environment in the study area.

The Study Area

Lokoja, the capital of Kogi State is located on latitude 7°45'N-7°51'N and longitude 6°41'E-6°45'E and lies at an altitude of 45-125metres above sea level. It is situated on the western bank of the River Niger close to its confluence with River Benue and, sandwiched between the River and the Mount Patti (Fig.1). The town straddles strategic roads and serves as a gateway to five geopolitical zones out of the six such zones in the country. The study area is the urban fringe of Lokoja, the capital of Kogi State in Nigeria. It accommodates Lokoja Township and parts of Adavi and Ajaokuta Local Government Areas (LGAs).

At the time Kogi state was created in 1991, Lokoja had a population of 77,519. By the 2006 population census, Lokoja's population was 195, 261 (FGN, 2007). At a growth rate of about 2.6%, the population of Lokoja in 2020 was about 303,481. In addition, Lokoja is a

multi-ethnic city, chief among which are the indigenous Oworo, and other tribes including; Igala, Bassa Nge, Igbira, Okun, Igbo, Yoruba, Tiv, Hausa and Nupe.

Lokoja settlement has a fragmented spatial structure due to the restriction posed by the rocky and difficult terrain. Several settlements like Zango, Ganaja, Felele and Otokiti were attached to the city during its period of development. The fragmented structure (Figure 1) results to extensive urban area and even more complex social structure when compared with its population. Lokoja accommodates localities with varied characteristics. The core area accommodates high-class neighbourhoods like the Government Reserved Area (GRA), New Layout; middle- class areas like Army Signal, Lokongoma I, Lokongoma II and Zone 8; and low-class areas of Adankolo and Kabawa. The peripheral areas of Gadumo, Ganaja, Otokiti, Zango, Crusher, Felele, Sarki Noma, and Nataco accommodate the most recent development, consisting of mixed social classes and groups.

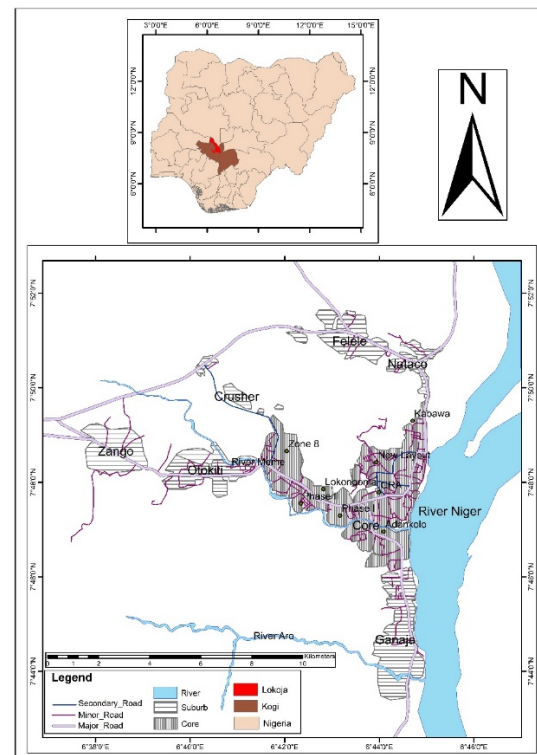


Figure 1: Lokoja: Study Area

The built-up urban area is continuously increasing, with new housing estates, institutions and commercial complexes appearing further from the centre in the adjoining settlements, mainly along the main transport routes, on former farm land and forests, reducing green areas. Most of these land use changes at the fringe were uncontrolled and unplanned, posing new challenges for planning.

Research Methodology

The survey research design was adopted to gather data for this study. Data was derived from questionnaire, complemented with structured interviews and ground checks. The study area consisted of six suburban settlements, out of which three formerly separated settlements at the periphery of Lokoja were sampled for this study. The reason for this was due to the limitation of time and finances. The three sampled suburbs are: Ganaja, Felele and Zango.

The target population for the study encompasses household heads in the settlements. Due to lack of information about the population of these new developing areas, the study purposively selected streets with major new development for administration of the questionnaire. In every selected street, systematic sampling of the houses was adopted from where households were selected for the administration of the questionnaire. In every sampled street, the questionnaire was administered on household head of every third house until all the selected streets were covered. In situations where there are multiple households in a house, only one household was selected for the administration of questionnaire. At the end, 145 household heads, representing 52 from Ganaja, 48 from Felele, and 45 from Zango suburban areas filled the questionnaire. In addition, secondary data were obtained from

the National Population Census Report, journals, reports and textbooks. Data collected encompasses socio-economic and housing characteristics, residential background, housing quality, factors influencing location and satisfaction with the performance of infrastructural facilities.

The respondents were asked to rate the importance of the factors driving the location in the suburbs based on the principle of the Likert Scale (Likert, 1961). The scale was ranked in a descending order of importance (Very High=5, High=4, Average=3, Low=2 and very Low=1). Seventeen factors were identified as major variables influencing residential location in the suburbs of Lokoja. For easy references, these factors were aggregated and attached with identification codes: X₁, X₂, X₃, X₄, X₅ (Table 1). Further, 5-point Likert scale was used to measure the level of satisfaction with the facilities. Respondents indicated their level of satisfaction or dissatisfaction which were weighted as Strongly Dissatisfied=1, Dissatisfied =2, Average=3 Satisfied=4, and Strongly Satisfied=5.

Table 1: Identification Codes of Factors Influencing Residential Location

Factors	Aggregate	Codes
Quiet environment, closeness to nature, suitability of the house, desirable lot size.	Amenity of the Location	X ₁
Search for more space, desire for healthy environment, more privacy, children friendliness.	Home Ownership	X ₂
Nearness to work place, school, closeness to the central city.	Nearness to work place	X ₃
Absence of heavy traffic, noise, dirty conditions of neighborhood; crowded houses.	Neighborhood considerations	X ₄
Affordability of land, housing	Cost Consideration	X ₅

Data collected from respondents were analysed using percentage and the Relative Importance Index (RII). Simple percentages and mean scores were employed for the analysis of data collected from the field. The factors' values ranked by respondents were transformed into RIIs for each factor. Mathematically, this is expressed as follows (Likert, 1961):

$$RII = \frac{\sum W}{A * N}$$

where W is the weighting given to each factor by the respondents to the survey ($i=5$ to 1), A is the highest weight (which is 5 in this case) and N is the total number of respondents. Each of the identified factors influencing residential location was computed to identify the most important factors. The factors were ranked based on RII values, which enabled the identification of the most important factors influencing residential location in the suburbs of Lokoja. The higher value of RII indicated the factor that influenced residential location.

Furthermore, Facility Availability Indices (FAIs) were computed for the listed facilities and the ratings ascribed by respondents were assigned weight values of $5, 4, 3, 2, 1$ for the listed facilities. The mean, variance and standard deviations of the FAI distributions were also calculated to measure the scatters about the mean. One-way analysis of variance (ANOVA) was used to test whether there were variations in the level of satisfaction with the performance of infrastructural facilities in the study area at 5% significance level.

Results and Discussion

Socio-economic characteristics of respondents

The elements included in the socio- economic characteristics of the sampled respondents are the age, sex, marital status, level of education, occupation and income (Table 2). The age

distribution of respondents is positively skewed with greater proportion in middle age groups. A little less than 59% of the respondents were between 20 and 40 years of age. Proportions of the respondents in age group $51-60$ and more than 60 years constituted 8% and 10% respectively. The suburbs were characterised by a high proportion of married residents, with 72% being married; 17% were single and others constituted only 11% . The high incidence of married respondents corroborates Odunjo's study of peri-urban areas of Ibadan which have shown that most of the respondents have been married (Odunjo,2014). The sex ratio of the suburban areas was high with the males predominating. The male headed households constituted 64% , while 36% were females. The predominance of male headed households in the area is due to patriarchy which is common among the tribes in the area and confirms findings by Adeboyejo and Abolade (2007) that most Nigerian households were headed by males.

The result of educational attainment shows that about half of the respondents (51%) have attained secondary education, 29% had tertiary education, 15% had primary education, and only 4% do not have formal education. The result further indicates that residents of the suburbs exhibited a heterogeneous occupational structure. The predominant employment was in the informal sector with 56% being engaged in the commercial and technical occupations. About 25% were civil servants, while farming and others accounted for 13% . The high contribution of the informal sector in the study area is contrary to what obtains in advanced countries where a great majority of dwellers in the suburbs work in civil service and intellectual positions (Nagy and Hegedus, 2016), but confirms Adesina's findings in Ibadan where a large part of the population worked in the informal sector (Adesina, 2007).

Analysis of average monthly income was constituted by the values of income per family. In 47% of the families, only the head of household earned income while for the 53% of the respondents, both the husbands and the wives earned income. A total of 50% of the respondents earned less than ₦100,000; which is equivalent to \$241 at current exchange rate of ₦415.914 to the dollar. Only about half of the population earned more than ₦100,000. The implication of this income distribution is that the majority of residents in the suburban area were below the middle - income level, which is between ₦150,000 to ₦500,000 (Robertson, Ndebele & Mhango, 2011). This result, however, contradicts what obtains in Europe and America where increased social status and living with like-minded neighbours constituted the process of suburbanisation as reported by Nagy and Hegedus (2016), and Gainsborough (2002). From the findings of Bishop (2009), suburban living in advanced countries leads to segregation of residences according to income. This tend to exacerbate social and ethnic division, particularly in American cities, where the inner cities were dominated by non-white communities and the suburbs being almost exclusively for whites. This trend does not apply in the study area, and so, living with peers is not important to residents of suburban settlements.

The results on the means of transportation of residents in the suburbs showed that only 27% of the households owned one car, 7% owned more than one car and 66% do not own any private car. The car's owning families prefer to use private car for transportation because they considered the car as the most convenient means of transport. In the suburbs of advanced countries, the transport habits of suburban residents show the dominance of the private car as the means of movement in suburban areas (EEA, 2006, Nagy and Hegedus, 2016). Private

car ownership constitutes the requisite mobility and life style especially for families with children to enable them functions effectively. The over 60% of families in the study area do not own private cars, thus, they utilise public transport to commute to work, shops, recreation centres, markets, and transportation of children to school.

Table 2: Socio-economic Characteristics of Respondents

Variables	Freq.	%	Variables	Freq.	%
Age			Occupation		
20 - 30	54	37	Civil Servant	37	26
31 - 40	32	22	Trading	59	41
41 - 50	33	23	Technician/Artisan	22	15
51 - 60	12	8	Farming	10	7
61 and above	14	10	Retired	12	8
Total	145	100	Unemployed	5	3
			Total	145	100
Gender					
Male	93	64	Average Monthly Income (₦)		
Female	52	36	0 - 30,000	16	11
Total	145	100	30,000 - 60,000	23	16
			60,000 - 90,000	25	17
Marital Status			90,000 - 120,000	42	29
Single	24	17	120,000 - 150,000	30	21
Married	105	72	150,000 and above	9	6
Divorced	3	2	Total	145	100
Widowed	3	2			
Separated	10	7	Ownership of Cars		
Total	145	100	No Car	96	66
			One car per household	39	27
Educational Level			Two or more cars	10	7
No Formal Education	6	4	Total	145	100
Primary	23	16			
Secondary	74	51			
Tertiary	42	29			
Total	145	100			

Source: Author's Fieldwork, 2021.

Housing Characteristics and Quality

Table 3 presents the type of housing units in the study area. There were more bungalows (65%) and multi-flat (18%) housing than storey housing (4%) because of the availability of land, which facilitates horizontal rather than vertical growth. Most of the housing in the suburbs were built with high quality modern building materials. The walls of 90% houses were built with cement blocks while only 9% were of burnt bricks. Majority of the respondents (67%) used tiles, marble and terrazzo for flooring while (32%) plastered. Corrugated iron sheets and Long span aluminium roofing sheets representing 24% and 57% respectively, were the common roofing materials used by respondents in the study area. Furthermore, the table presented the size of plots that houses were located on. Over 40% of the properties have been constructed on 1 plot, which is equivalent to 900 square metres, while 27% of the respondents constructed their house on more than 1.5 plots of land. Those who utilised more than 1.5 plots used them for multi-structure and multi-family housing. This result confirms Olayiwola & Olaitan, 2019 whose research in Oshogbo observed that building houses on large plots of land are common at the outskirts of the city. The greatest number of the houses were constructed on purchased land.

Table 3: Quality of Housing Materials

Housing Quality	Freq.	%	Housing Quality	Freq.	%
House Type			Ceiling materials		
Traditional Compound	4	3	Asbestos	83	57
Bungalow	95	65	Plywood	12	8
Storey Building	7	5	Concrete	16	11
Duplex	13	9	POP	33	23
Multi - Flat	26	18	Cardboard	1	1
Total	145	100	Total	145	100

Materials Used for the Wall			Size of land (Plot size)		
Cement blocks	131	90	0.5	6	4
Burnt blocks	13	9	1	62	43
Mud	1	1	1.5	39	27
Total	145	100	2	15	10
			2.5	10	7
Flooring Materials			3	7	5
Tiles/marble/Terrazzo	98	67	3+	6	4
Plastered	46	32	Total	145	100
Earth Surface	1	1			
Total	145	100	Method of Land Acquisition		
			Purchased	117	81
Roofing Materials			Inherited	23	16
Corrugated Iron sheets	35	24	Leased	5	3
Long span sheets	83	57	Total	145	100
Concrete	6	4			
Roofing Tiles	21	15			
Total	145	100			

Source: Author's Fieldwork, 2021

The facilities available in the sampled houses are shown in Table 4. The main source of water supply in the suburban areas of Lokoja are bore hole and pipe borne water, with bore hole supplying water to 49 % of the respondents. Also, the Abuja Electricity Distribution Company is the main source of electric power supply; supplying power to 84% of the respondents while other power sources such as kerosene and solar are less important. The Table 4 reveals that, the use of modern means of communication was popular as 89% used Global Mobile System of communication (GSM), while only 2% used the postal services. Modern toilet facilities in the form of water closet were fully installed in 88% of respondents' houses, but the solid waste disposal system was very poor. Only 9% of the respondents disposed their waste through the public system while the over 90% used unsanitary method of waste disposal at the

backyard, pit, gutter and others. The importance of facilities in housing has already been confirmed by Bourne (1981), who opined that facilities and devices are needed for physical, mental and social well-being of the family and individual.

Table 4: Housing Facilities

Housing Facilities	Freq.	%	Housing Facilities	Freq.	%
Water sources			Toilet Facilities		
Pipe borne water	43	30	Water system	127	88
Bore hole	71	49	Pit	15	10
Well	27	18	Bush	2	1
Stream	4	3	Stream	1	1
Total	145	100	Total	145	100
Sources of Power			Waste Disposal System		
Public power supply	121	84	Backyard	73	50
Generator	19	13	Pit	37	26
Kerosene	3	2	Gutter	17	12
Solar power	2	1	Public waste Disposal Site	13	9
Total	145	100	Stream	2	1
			Incinerator	3	2
Means of Communication			Total	145	100
Land Telephone	13	9			
GSM	129	89			
Postal	3	2			
Total	145	100			

Source: Author's Fieldwork, 2021.

House Ownership and Residential Background of Residents

The result of house ownership in Table 5 indicates that rental accommodation accounted for 82% of the housing tenure of residents before they moved to the suburbs. However, house ownership status of the same respondents

improved substantially. A higher proportion of dwellings were fully owned, particularly in the newer and outer parts of the suburbs. Owner occupier housing tenure predominated in the area (59%); rentals constituted 27% while others accounted for the remaining 24%. The result goes to prove owner occupancy tenure as the aspiration of the people.

Table 5. Housing Ownership Status

Tenure Type	Former		Current	
	Number	%	Number	%
Owner	16	11	86	59
Renter	119	82	39	27
Family House	3	2	7	5
Employer	7	5	13	9
Total	145	100	145	100

Source: Author's Fieldwork, 2021

Data on the previous location of residence shows a high proportion of residents in the suburb had an urban rather than a rural background. For example, the previous addresses of 69% of suburban residents were the central city of Lokoja while the original settlers and centripetal migration accounted for 22% and 9% respectively. This provide a strong support to the view by Pryor (1972) that the city is the main source of residents in the fringe. Analysis of the length of residence of respondents in the suburb shows that about 79 % of residents of suburban area of Lokoja spent less than 5 years, only 15% have spent 11years and more (Figure 2). Length of residence gives a useful indicator of the general age of development of the area.

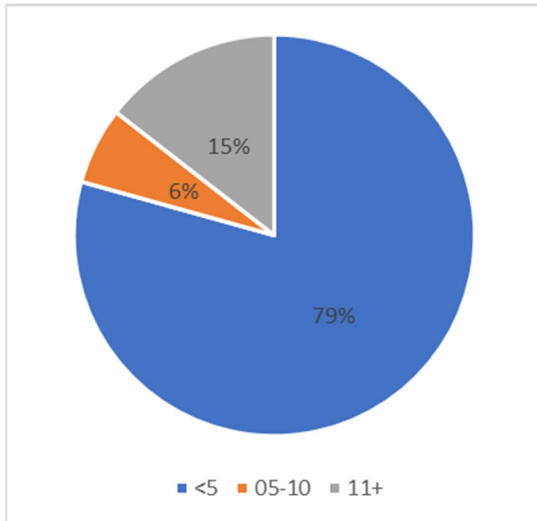


Figure. 2: Length of Residence in the Suburb
Source: Author's Fieldwork, 2021

Figure 3 shows location of employment of respondents of this study. The majority of the work places of residents in the suburb were the city itself. Nearly half of the respondents (49%) worked in the central city proper where the ministries, institutions and commercial centres are concentrated. As many as 44% and 7% worked in the suburb and outside the city respectively. In addition, the majority of the retail centres and schools patronised by the residents of suburbs were in the urban area itself, rather than in the suburb or surrounding rural areas. Meaning that though living far away from the central city, residents were economically tied to the central city.

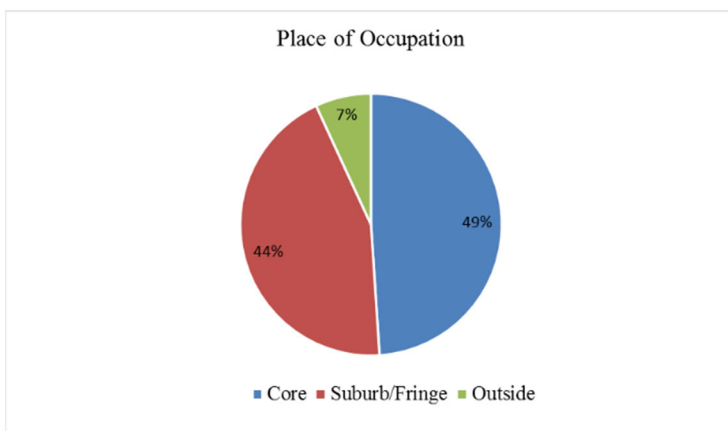


Figure 3: Places of Employment of Suburban Residents
Source: Author's Fieldwork, 2021

Driving forces for Location of Residence in the Suburb

A variety of factors were reported to have attracted respondents to locate in the suburbs. This study found out and discussed the factors that influenced residential location in the suburbs of Lokoja. First, the factors were grouped into five aggregate form and then treated on the basis of the identified three suburban areas, and later discussed as a single settlement. Table 6 contains the scores, while Table 7 shows the RII values and the ranks of the factors.

Table 6: Scoring of Factors Driving Residential Location by Area

Suburb	Scores	Factors Influencing Location				
		X_1	X_2	X_3	X_4	X_5
Ganaja	5	16	14	13	20	11
	4	22	22	20	13	23
	3	9	11	13	12	12
	2	3	3	4	4	4
	1	2	2	2	3	2
	Total	52	52	52	52	52
Felele	5	13	10	12	11	25
	4	25	27	16	17	9
	3	5	8	12	15	9
	2	2	1	6	3	3
	1	3	2	2	2	2
	Total	48	48	48	48	48
Zango	5	12	14	13	7	12
	4	13	16	17	18	15
	3	13	11	7	5	6
	2	1	2	6	10	9
	1	6	2	2	5	3
	Total	45	45	45	45	45

Source: Author's Fieldwork, 2021

It is important to report that there are variations in the value of the factors that influenced the location of residents in the suburban areas. Amenity was the most important factor for residential location in Ganaja, cost considerations was more important in Felele, home ownership was of more value in Zango (Table 7).

Table 7: RII Values of Factors Influencing Residential Location by Area

Factors	Ganaja			Felele			Zango		
	SW	RII	Rank	SW	RII	Rank	SW	RII	Rank
X_1	203	0.781	1	187	0.779	2	159	0.707	3
X_2	199	0.765	2	186	0.775	3	173	0.769	1
X_3	194	0.746	4	174	0.725	5	168	0.747	2
X_4	199	0.765	2	176	0.733	4	147	0.653	5
X_5	193	0.742	5	196	0.817	1	159	0.707	3

Source: Author's Fieldwork, 2021

Table 8 considers Lokoja suburbs as one settlement, where all the factors were treated at the settlement level. The overall scores in Table 9 indicate that neighbourhood considerations was rated as the least important factor (RII = 0.720), and home ownership was rated as the most important factor (RII = 0.769) influencing residential location in Lokoja. In a similar study carried out by Bell (1956), he found that home ownership supports family life as children have access to more space for play and relaxation.

Table 8: Overall Scores of Factors Influencing Residential Location

Factors	Frequency of Scores				
	5	4	3	2	1
X_1	41	60	27	6	11
X_2	38	65	30	6	6
X_3	38	53	32	16	6
X_4	38	48	32	17	10
X_5	48	47	27	16	7

Source: Author's Fieldwork, 2021

The Table 9 shows that all the factors influencing the location of residents in the suburbs of Lokoja have RII values greater than 0.5, meaning that all the factors were important for the respondents choice. For better assessment of the contributions of each factor, a comparison of RII values and ranks by area and factors are shown in Table 10.

Table 9: Overall RII of Factors Influencing Residential Location

Factors	N	A*N	SW	RII	Rank
X_1	145	725	549	0.752	3
X_2	145	725	558	0.769	1
X_3	145	725	536	0.739	4
X_4	145	725	522	0.720	5
X_5	145	725	548	0.756	2

Source: Author's Fieldwork, 2021.

Calculated from Table 7

SW = Sum of Weights.

Table 10 shows that, the majority of the inhabitants of Ganaja ranked amenity as the most important factor (0.781) in their choice of location, followed by home ownership and neighbourhood considerations with the value of 0.765. In Felele, Cost considerations ranked 1st with 0.817 and amenity ranked 2nd factor. Here land is relatively cheap because the place is opening up for development with the recent location of Federal University Lokoja to that part of the town. In Zango, the most important factor was home ownership with the factor value of 0.769, while nearness to work place has ranked 2nd with the value of 0.747.

However, when all the areas were collapsed as a single settlement, the result were different. Home ownership (0.769), cost considerations (0.756), amenity of location (0.752) and nearness to work place (0.739) were the four most important factors influencing residential location in the suburbs of Lokoja.

Table 10: Comparison of RII Values and Ranks by Area and Factor

Rank	Area						Overall	
	Ganaja		Felele		Zango			
	Facto tors	RII	Facto rs	RII	Facto rs	RII	Facto rs	RII
1 st	X_1	0.78 1	X_5	0.81 7	X_2	0.76 9	X_2	0.76 9
2 nd	X_2	0.76 5	X_1	0.77 9	X_3	0.74 7	X_5	0.75 6
3 rd	X_4	0.76 5	X_2	0.77 5	X_1	0.70 7	X_1	0.75 2
4 th	X_3	0.74 8	X_4	0.73 3	X_5	0.70 7	X_3	0.73 9
5 th	X_5	0.74 2	X_3	0.72 5	X_4	0.65 3	X_4	0.72 0

Source: Author's Fieldwork, 2021.

Availability and Satisfaction with Infrastructural Facilities

Suburban residents were generally more satisfied with their current house and housing environment but were unsatisfied with infrastructural facilities. Tables 11 and 12 give the data on availability and satisfaction with infrastructural facilities in the suburbs. Ganaja settlement has the highest level of availability of infrastructural facilities with the mean value of 65.5%, followed by Zango with 52.4% while the least was Felele with 44.3%. That Ganaja and Zango values are higher than Felele may be attributed to the fact that several Government Housing Estates are located in both settlements. Ganaja also enjoys comparatively stable electricity supply compared to the others.

Table. 11: Availability of Infrastructural Facilities Across the Suburbs

Facilities	Ganaja			Felele			Zango		
	A(x) %	NA	x- $\bar{x}$	A(x) %	NA	x- $\bar{x}$	A(x) %	NA	x- $\bar{x}$
Tap water	100	0	34.5	14	86	30.3	18	82	- 34.4
Borehole Water	78	22	12.5	64	36	19.7	73	27	20.6
Well Water	94	6	28.5	90	10	45.7	89	11	36.6
Waste Collection	26	74	- 39.5	22	78	- 22.3	22	78	- 30.4
Drainage	46	54	- 19.5	30	70	- 14.3	33	67	- 19.4
Open Space	38	62	- 27.5	26	74	- 18.3	73	27	20.6
Electricity	96	4	30.5	76	24	30.7	73	27	20.6
Road	46	54	- 19.5	32	68	- 12.3	38	62	14.4
Mean $\bar{x}$	65.5	34.5		44.3	55.7		52.4	47.6	

Source: Author's Fieldwork, 2021

There was a general low satisfaction with tap water, waste collection, drainages, open spaces, and roads. On the other hand, there was overall satisfaction with borehole water and well water in the area. In specific case of Ganaja, respondents have indicated high level of satisfaction with tap water and electricity supply while Zango has satisfactory responses to open space. In the case of Ganaja, the electricity and tap water supplies rank as being the best in Lokoja. Zango is the most recent urbanizing settlement, so it has ample number of open spaces compared to other areas. The result agreed with Batty, Besussi & Chin (2003) findings that social facilities are less developed in suburban areas.

To check whether the level of satisfaction with the performance of infrastructural facilities are the same across the suburban communities in Lokoja, ANOVA was used. The result of this analysis in Table 6 revealed no significant variation in the level of satisfaction across the suburbs ($F = 3.44$). In other words, no suburb is exempted from unsatisfactory performance in infrastructural facilities.

Table 12: Variations in the Satisfaction with Infrastructural Facilities Performance

Variable	Source of Variation	Sum of Squares	df	Mean Square	F
Infrastructure Performance	Between Samples	23.9	2	11.9	3.44
	Within Samples	498	145	3.44	
	Total	522.3	144		

*Not significant at 5% alpha level

Source: Author's Fieldwork, 2021.

Conclusion

This study analysed the factors that influenced the location of residents in the suburb of Lokoja. The study has shown that suburban areas of Lokoja were not strictly segregated for the upper- and middle-income group as there was a large representation of the low- income earners in the area. House ownership was found to be an important factor driving residential location to the suburbs, one of the means through which residents have been able to improve their quality of life. Hence, ownership and functional facilities and services are important factors to residents of the suburbs. Therefore, the study recommends that the government should implement the housing policy that will stimulate the easy house ownership for the residents of urban areas. This is also vital in planning and development of residential neighbourhood as well as policy implementation on the best housing tenure type in the urban environment.

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