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## Core-Housing Development as Feature of Class Stratification in Jos Metropolis of Plateau State, Nigeria.

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### ABSTRACT

In every human society social classes exist and most often identified by the kind of food they eat, the clothes they wear, their means of transportation, and the kind of houses in which they live. This paper identifies housing as one of the commonest features by which social classes in the Jos metropolis can be identified. In this direction, attempt is made to link core-housing with low and middle-income groups in the Jos metropolis. In this process, the metropolis was divided into ten clusters, using road networks as boundary lines, after which, one neighbourhood was selected at random in each of the clusters and a systematic sampling method was used to decide the number of questionnaires to be administered in each neighbourhood depending on the number of core-housing in each of the selected neighbourhoods. A total of 244 questionnaires were administered to household heads who happen to be the owners of the core-houses. This was followed by data cleaning and compilation through the use of Statistical Package for the Social Sciences (SPSS) and frequencies and percentages were used for descriptive statistical results which were presented in tables and charts. Findings show that the core-housing occupants are predominantly the low and middle income groups. The majority of the houses are compound type and multiple row housing which are characterized by shared kitchens, bathrooms and toilets. Some of the houses are developed without building plans and building permits or approvals by the urban development authorities. It is recommended that government or housing authorities concerned can help solve this problem by reviewing these procedures and as well reduce the fees payable for the approval of building plans and other related documents. Standards too should be reviewed to incorporate core-housing design elements into the overall set of building standards. Finally the improvement in technological ideas of manufacturing building materials like locally made burnt bricks will also reduce cost of production and increase quality and durability of core-housing.

**Key words:** Housing, Core-Housing, Household, Socio-Economic Characteristics

### INTRODUCTION

Rapid urbanization and population growth have caused many problems in developing cities in Nigeria. Cities grow too rapidly; infrastructures are not able to keep up with the swelling population. Housing is one of



the major problems these cities are facing today. The continuous influx of people from rural to urban areas has drastically increased urban population. Hence, these migrants who cannot afford proper housing resolve to build core-housing without adequate basic utilities and services. With a population of over 160 million people, Nigeria is Africa's most populous nation and the leading oil and gas producers in Africa (Maren, 2011). With a combination of push and pull factors, urban migration to these developing cities within Nigeria economy as the case may be, accounts for over 55% of population growth (World Bank, 2013). This has led to a serious shortage of proper housing. Nigeria's housing deficit is estimated around 16 million units and it requires more than ₦56 trillion to provide the 16 million housing units to bridge the housing deficit at a conservation cost of ₦3.5 million per unit in the country (World Bank, 2013).

The population figures above, points to the degree of housing shortfall in the country, and because of the desire of the large population to live in cities, they have little or no option but to reside in some form of the overcrowded neighbourhoods. Some of the open spaces within these neighbourhoods have been sold out by landlords and small units of houses have been built on them most of which are informal and without proper title to such lands. In Nigeria, the low income people are identified as wage earners or self-employed people whose income is below the maximum annual income of the highest salary grade level within the civil services structure (Federal Ministry of Works and Housing, 2012). Several housing programmes have been carried out in Nigeria with the principle of low income housing. For instance, the Civil Service Homeownership Scheme, the Prototype and Mass Housing Schemes have all been targeted to the low income. However, one basic reality is that units produced under these schemes are often not accessible to the low income groups due to stiff competition for the available houses among the low and medium income groups. Where the so called low income houses are available in the market, they are often not affordable since the average housing price ratio to average household annual income is generally low in Nigeria (Omole, 2001).



One may ask the question - What exactly qualifies as a core-housing? According to Urban Land Institute of the United States of America (2014), core-housing might be 300 square feet in New York City or 500 square feet in Dallas. They conducted a study to evaluate from CA multiple perspectives, the market performance and market acceptance of core and small units and the learnt that no standard definition exists for the subject. Cavallary (2012) as cited in Bello (2014), established that no official definition exist, though most homes that are smaller than 500 square feet (approximately 45.5 square meters) are considered to fall into this category. He discussed the issue further noting that a core-house is usually suitable as a living space for two people, and construction of such house can be much lower than that of a full-size house. Core-houses are designed to be minimal structures, but they are not lacking in normal features such as bedrooms and bathrooms. For the purpose of this research, core-housing is defined as development of housing at an incremental bases, that is housing been built on a piece meal basis – the foundation may be done completely but the entire structure might not be raised all at once. A section of the building is being built, roofed and occupied by the household while the rest of the structure is built incrementally.

## **Conceptual Clarification and Literature Review**

### **Concept of Housing**

In order to understand the concept of housing, it is necessary to distinguish between shelter, house and housing. Shelter is a physical structure with a covering which originally is meant for protection from harsh elements of climate such as rain, wind and sun. It is a physical space enclosed for the protection of man from elements of weather. Shelter was provided in pre-historic ages under trees, in caves and later in tents made from animal skin (Sulyman, 2015). However, there is a concept of shelter which was defined by Habitat Agenda (2003) to mean more than a roof over one's head. It also means adequate security, security of tenure, structural stability and durability, adequate lighting, heating and ventilation; adequate basic infrastructure, such as water-supply, sanitation and waste-management facilities, suitable environmental quality and health related factors and adequate and accessible location



with regard to work and basic facilities all of which should be available at an affordable cost.

Housing all over the world has remained a phenomenon that affects every facet of mankind. Its importance is so pronounced that it reflects the social, physical and mental wellbeing of man irrespective of his socio-economic status, color or creed. It represents the most basic human needs and has no doubt considerable impact on the health, welfare and productivity of the individual (Ademiluyi, 2010). Housing literally is defined as Buildings or shelters in which people live, a place to live, a dwelling and to Nations, a critical component in social and economic fabric. As a unit of the environment, it has a profound influence on the health, efficiency, social behavior, satisfaction and general welfare of the community (Onibokun 1985). To most groups housing means shelter but to others it means more as it serves as one of the best indicators of a person's standard of living and his or her place in the society (Nubi, 2008). The totality of ideas and views expressed about what housing entails brought about two clear definitional dimensions of the term housing. First, housing is seen as an economic process and product. Second, it is also seen as a social symbol. As an economic product, housing represents a commodity traded in the housing market. It is a product of investment and a means of income generation, (Jinadu, 2007). As an economic process, housing is described as the ways and means by which housing goods and services are produced through the interactive construction processes of land acquisition, housing finance mobilization, material assemblage and actual construction Tuner, (1992).

The Housing sector can be considered in the context of production of housing goods and services for consumption by various classes of consumers ranging from individuals, families, corporate bodies, etc. The housing sector is the buyer of intermediate goods such as brick, cement, iron etc. from other sectors of the economy, and uses other forms of labour (both skilled and unskilled) for the production of housing goods and services. There is a strong relationship between the construction sector and broader economy, and the sector supports stronger multiplier effects than many other sectors. In addition to the above case, the housing sector is also a supplying sector. Thus, from this stand, the housing sector



makes inputs of various forms, from preliminary stages of project initiation, drawing of building plans, construction of buildings and so on, which in the long run brings forth considerable value in terms of output (Jinadu, 2007). Adequacy should be determined together with the people concerned, bearing in mind the prospects for gradual development. On the other hand, a house is a physical structure which human beings use for shelter. It has all the facilities, equipment, services and devices needed or desired for healthy living. Therefore it can be concluded that all houses are shelter but not all shelters are houses. This is because shelter which does not have all the facilities, equipment, services and devices needed for healthy living is not a house but mere shelter (Sulyman, 2015).

### **The Concept of Core-Housing**

It is generally accepted that no standard definition exists regarding the term – core-housing. A core-unit is somewhat an ambiguous term that covers anything from a relatively small studio or one-bedroom apartment to a short-term lease, Single Room Occupancy (SRO) unit with communal kitchen and common room areas. In fact, many in the industry are moving away from branding their units as core because the term has begun to arouse negative connotations associated with higher density, overcrowding, and transient populations (Keivani, 2008). In New York City and Philadelphia, the minimum size requirement for a new dwelling unit is 400 square feet. However, former New York City mayor Bloomberg waived this requirement for the adapt NYC competition, which defined core-apartments as studio apartments that range between 275 and 300 square feet and include fully functioning kitchens and accessible bathrooms (Turner 1992). In the city of San Francisco, new legislation was passed allowing apartments as small as 220 square feet, so long as 70 square feet of this space is allocated to a bathroom and kitchen (Turner 1992). In the District of Columbia, the minimum size for an apartment is also 220 square feet but with no prescription regarding allocation of space within the unit. In Boston, the minimum size for a dwelling unit is 450 square feet within one mile of public transit, but again this requirement was waived for a demonstration project in the Innovation District to allow development of smaller units. In some Midwestern and Texas housing markets, units ranging between 400 and 500 square feet are described as core-units. Seattle and Portland have no

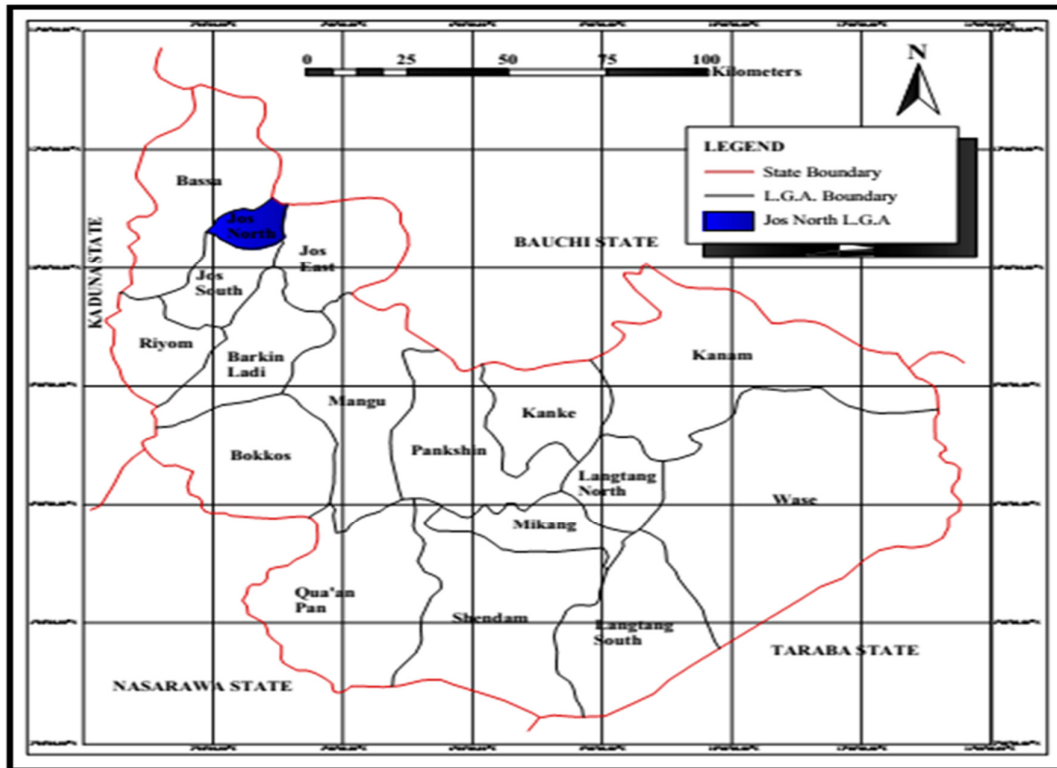


minimum size requirements for their markets, which probably explain why their markets are two of the best examples of cities demonstrating a tremendous amount of experimentation with very small units, including a wide range of communities offering SROs and core-units (Gbadeyan, 2011).

Thus, the concept of core-units is to some degree relative to the market in which they exist. For the purposes of this research effort, a distinction was made between SRO units and core-unit apartments with fully functioning kitchens and bathrooms. Although some trading range probably exists in the square footage depending upon the market, a good definition of a core-unit is a purpose-built, typically urban, small studio or one-bedroom using efficient design to appear larger than it is and ranging in size from as little as 280 square feet up to as much as 450 square feet (which roughly equates to 20 percent to 30 percent smaller than conventional studios in a given market). Many core-units under 350 square feet feature built-in storage units and flexible furniture systems (e.g., Murphy beds, hideaway kitchen modules, convertible tables, and so on) to make these smaller spaces work. To put the size of a core-unit into perspective, a 300-square-foot core-unit studio apartment is slightly larger than a one-car garage but considerably smaller than a two-car garage (Keivani, 2008).

### Study Area

Plateau State lies between Latitudes  $6^{\circ}\text{N}$  and  $14^{\circ}\text{N}$  and Longitudes  $3^{\circ}\text{E}$  and  $10^{\circ}\text{E}$ . Plateau State has been known for its heterogeneity with respect to ethnicity, cultural backgrounds and social groupings. The largest concentration of these ethnic groups are found in Jos the capital city of Plateau State.



**Figure 1.1** Location of Jos North Local Government Area.

Source: Plateau State Ministry of Lands, Survey and Town Planning, Jos (2023)

Jos metropolis is the capital of Plateau state, Nigeria. It lies between latitudes  $9^{\circ}51'30''N$  to  $10^{\circ}02'00''N$  and longitudes  $8^{\circ}48'00''E$  to  $9^{\circ}05'00''E$ . Its headquarters lies in the city centre of Jos. It has an area of  $291\text{km}^2$  and a population of 821,718 as at the 2006 census. The city is located on the Jos Plateau at an elevation of about 1,238 metres or 4,062 feet high above sea level. The Jos Plateau is located almost at the centre of Nigeria. It is probably the home of the largest number of ethnic groups, with the largest concentration in the Jos town, capital of Plateau State. Here, almost every ethnic group in Nigeria is represented. The growth and development of the Jos town can be attributed to several factors, pulling populations of different socio-cultural, linguistic and religious backgrounds, creating a unique diversity in the social configuration of the area. This diversity has added beauty to the God-given attractiveness of the physical environment (Kudu, 2017).



The area known as Jos today was inhabited by indigenous ethnic groups who were mostly farmers. The British colonialists used direct rule for the indigenous ethnic groups on the Jos plateau since they were not under the Fulani emirates where indirect rule was used. The Fulani Empire controlled most of northern Nigeria, except the Plateau province and the Berom, Mwaghavul, Ngas, Tiv, Jukun and Idoma ethnic groups. It was the discovery of tin by the British that led to the influx of other ethnic groups such as the Hausa, Igbo, Yoruba, thus making Jos a cosmopolitan city (Wikipedia). Generally speaking, the formation of the Jos Town is traceable to as far back as the pre-colonial period. This period witnessed waves of migrations from both outside and within the area to the Jos area. However, the traditions identify the earliest settlers at the area as the Du section of Berom, the Kishi village of Rukuba and the Anambi clan of Anaguta (Kudu, 2017).

The emergence of Jos as a modern city is associated with colonialism and its attendant economic policy, tin mining, Christian Missionaries, Hausa traders and Fulani cattle rearers. Although the Fulani did not live in the urban centre of Jos, the selling of their cattle for meat gradually acquainted them with the city life, and some of them eventually abandoned their cattle for the city. Among them were those who acted as middle men in the cattle trade, the proceeds of which some of them enrolled in the literacy classes, after which they secured employment in the colonial administration as messengers (Kudu, 2017). Probably of all the factors which pulled population from across the Nigerian area to the Jos Plateau, the tin mining industry was the strongest. During the early stages of its exploitation, from 1903 to 1906, the local population remained the only source of labour, which was even supplied on casual basis in the tin fields (Maren, 2011).



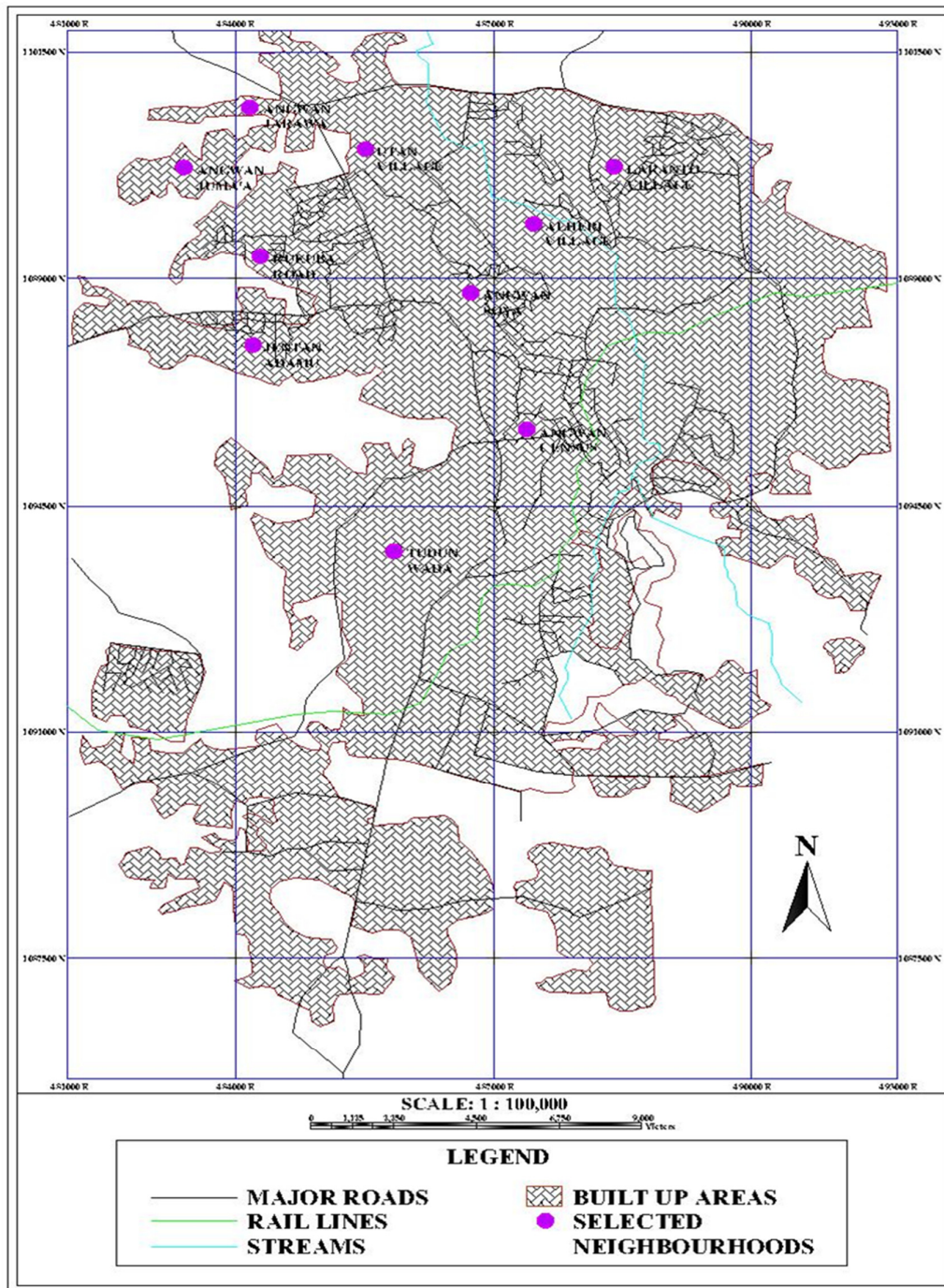


Figure 1.2 Jos Metropolis in State Setting

Source: Plateau State Ministry of Lands, Survey and Town Planning, Jos (2023)



## RESEARCH METHODS

Questionnaires were directed to household heads. On the other hand secondary data was obtained from journals, textbooks, maps, internet and other relevant documents. Information gathered were analysed using descriptive statistics such as frequency count and percentages which was used to explain the factors responsible for core-housing development in Jos metropolis. According to the 2006 National census exercise, Jos metropolis had a population of 900,000. Thus, with a population census figure of 900,000 in 2006, the projection to 2017 is 1,021,395. Hence, from the recommended sample size for interview in the Table 4.1 below, 4% of the total core-housing occupants will be used as sample size.

**Table 1.1 Recommended Standard for Sample Size**

Population	Recommended Sample Size for Interview	
	Maximum %	Minimum %
Under 50,000	20	10
50,001 – 150,000	12	5
150,001 – 300,000	10	3
300,001 – 500,000	7	2
500,001 – 1,000,000	5	1
Over 1,000,000	4	1

Source: Adopted from Wells (1975)

The Jos metropolis was divided into ten clusters to enhance considerable level of inclusion of all areas. From the delineation of the metropolis into ten clusters, the population of core -housing in the selected neighbourhoods and the number of questionnaires to be administered in each neighbourhood is shown in Table 4.2 below.

**Table 1.2 Distribution of Questionnaires among the Selected Neighbourhoods**

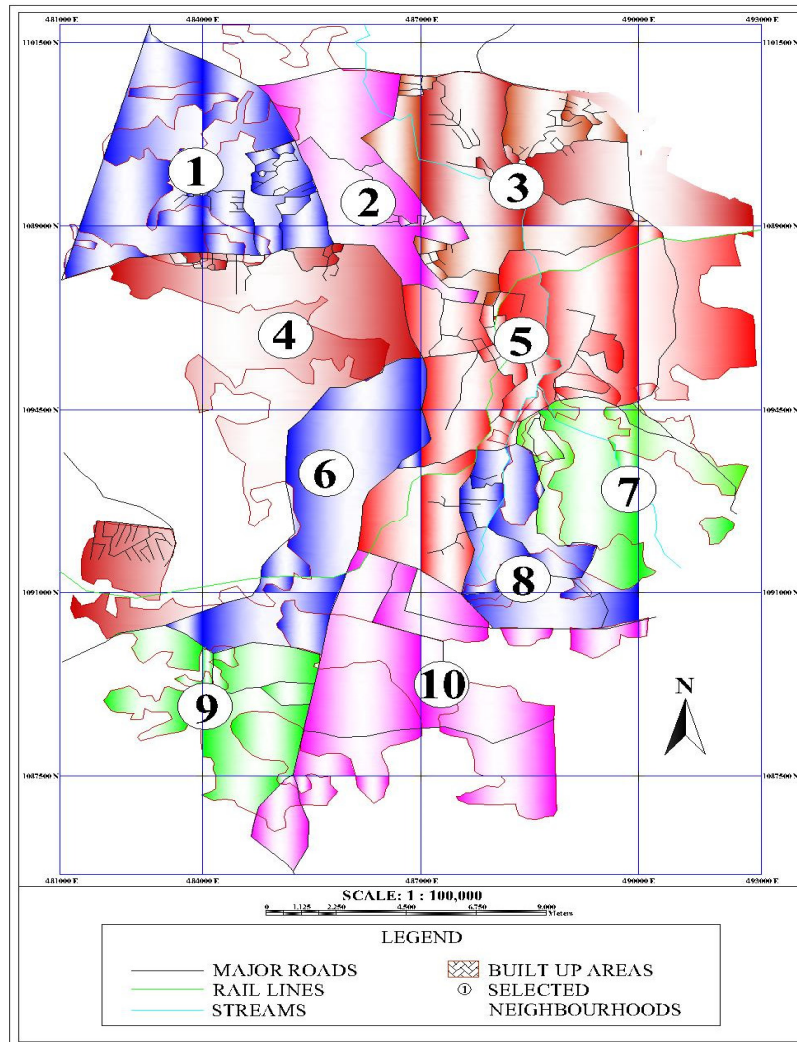
S/N	Neighbourhoods	Population (Number of Core-Houses)	Number of Questionnaires to be Administered
1	Utan Village	822	33
2	Angwan Jarawa	453	18
3	Sabon gari	621	25
4	Angwan Census	779	31
5	Rukuba Road	523	21
6	Jentan Adamu	652	26
7	Alheri Village	724	29



8	Angwan Soya	401	16
9	Angwan Jumma'a	673	27
10	Laranto Village	456	18
Total		6104	244

**Source: Authors Field Survey, 2023.**

The target population of the study is the total number of core-housing occupants in the selected neighbourhoods. The metropolis was divided into ten clusters using road networks as boundary lines, after which, one neighbourhood was selected in each of the clusters and a systematic sampling method was used to decide the number of questionnaires to be administered in each neighbourhood depending on the number of core-housing in each of the selected neighbourhoods. The ten clusters are shown in figure 3.1 below.



**Figure 1.3 Delineated Zones for Systematic Sampling.**

Primary data was gathered by means of personal observation, interviews and questionnaire administration. The questionnaire was designed in such a way as to facilitate information regarding socio-economic characteristics such as sex, marital status, level of education, occupation and income level. Information on the characteristics of core-housing was also collected that is, building type, type of building materials used (walls, roofing sheets, foundation, windows, doors, floor finishing and ceiling finishing), plot sizes, building sizes, duration of construction work and sources of housing finance. Data on the strategies adopted by residents in the construction of core-housing was also collected some of



these strategies included self-help, hired builders, joint efforts from family or joint efforts from friends.

## RESULTS AND DISCUSSIONS

### Socio-Economic Characteristics of Respondents

The survey conducted reveals that 88.1% of the respondents are males, while 11.9% are females. This shows that house ownership is higher on the side of males than females. 69.9% of the respondents are married while 23.8% of the respondents are single, thus presenting a fact that family size determines the need for housing. 42.6% of the respondents have attended tertiary institutions, 25.1% have primary school certificates, 21.7% have secondary school certificates while adult education and other forms of education have 5.3% percent each. It was also deduced that traders constituted 14.3% of the total respondents, civil servants and students had 12.7% of the total respondents, students constitute 12.3% of the total respondents, farmers are 5.8% while other forms of occupations comprised 54.9% of the respondents. With regards to the income level of the core-housing occupants it was deduced that 42.6% of the respondents earn above N20,000, 30.4% earn between N5,000 and N10,000. 21.7% earn between N15,001 and N20,000 and 5.3% earn between N10,001 and N15,000.

**Table 1.3 Socio-Economic Characteristics of Respondents**

Variables	Frequency	Percentage
<b>Sex</b>		
Male	215	88.1
Female	29	11.9
Total	244	100
<b>Marital Status</b>		
Single	58	23.8
Married	168	68.9
Divorced	2	0.8
Widow	12	4.9
Widower	4	1.6
Total	244	100
<b>Educational Status</b>		
Tertiary	104	42.6
Secondary	53	21.7
Primary	61	25.1



Adult Education	13	5.3
Others	13	5.3
Total	244	100
<b>Occupation</b>		
Farming	14	5.8
Trading	35	14.3
Civil Servant	134	54.9
Student	30	12.3
Others	31	12.7
Total	244	100
<b>Income (₦)</b>		
₦5,000 – ₦10,000	74	30.4
₦10,001 – ₦15,000	13	5.3
₦15,001 – ₦20,000	53	21.7
Above ₦20,000	104	42.6
Total	244	100

Source: Field Survey, 2023.

### Housing Characteristics

The survey conducted reveals that 49.6% of the houses are compound types of housing, while flats constitutes 25.3% of the total core-houses, multiple row housing constitutes 25.1% of the total core-houses. 60.7% of the walls are constructed with sandcrete blocks, while 39.3% are constructed with mud blocks; this shows that quite a good number of this core-houses will be durable and thus have a longer life span. 90.2% of the core-houses are roofed with zinc, while 9.8% are roofed with aluminium; this is a reflection of the income of the core-housing occupants. 59.8% of the core-houses are built on sandcrete block foundation, 25.9% of the core-houses are built on stone foundation while 14.3% of the total core-houses are built on concrete foundation. These core-housing developers find the cement blocks cheaper than stones and pure concrete foundation. 61.5% of the core-houses have steel frame windows with louvers, 27.0% of the core-houses have wooden swing windows, and despite the cost of aluminium sliding windows some of the core-housing occupants could still afford them, they account for 11.5% of the total core-houses. 88.9% of the total core-houses have metal or steel doors while only 11.1% of the total core-houses have wooden doors. Results showed that 94.3% of the houses had sand/cement screed floor finishing while only 5.6% of the core-housing had floor tile finishing. 66.4% of the ceiling finishing are with



Saw-dust board, 18.0% are with asbestos ceiling sheets and 15.6% are with P.V.C. The survey conducted reveals that core-houses on plot sizes of 101 – 150m<sup>2</sup> comprise 36.9% of the houses interviewed while plot sizes of between 51 – 100 m<sup>2</sup> constitute 32.8% of the total houses. Plot sizes of 151 – 200 m<sup>2</sup> plot sizes account for 19.7% and < 50 m<sup>2</sup> sized plots account for 10.6%. Some of the plots that falls under Less than 50m<sup>2</sup> were plots which either had no definite size or no demarcations at all.

The inventory collected on the sizes of the core-houses reveals that 31.6% of the houses have an average size of less than 50 m<sup>2</sup>, 27.5% of the sampled houses have average size of between 61 - 65m<sup>2</sup>, 22.5% of the houses have an average size of between 51 - 55m<sup>2</sup>, while 18.4% of the total houses have an average size of between 56 - 60m<sup>2</sup>. Findings on the duration of time used in building these core-houses reveals that 49.2% of the respondents took more than 6 years to build their houses, 30.7% of the respondents took less than 1 year to build their houses, 11.1% of the respondents took 4 to 6 years to build their houses while 9.0% of the respondents took 1 to 3 years to build their houses.

**Table 1.4 Housing Characteristics**

Variables	Frequency	Percentage
<b>Building Type</b>		
Flat	62	25.3
Multiple Row Housing	61	25.1
Compound Housing	121	49.6
Total	244	100
<b>Wall Materials</b>		
Sand Crete Blocks	148	60.7
Mud Blocks	96	39.3
Total	244	100
<b>Roofing Materials</b>		
Zinc	220	90.2
Aluminium	24	9.8
Total	244	100
<b>Foundation Materials</b>		
Stone	63	25.9
Sand Crete Block	146	59.8
Concrete	35	14.3
Total	244	100



<b>Type of Windows</b>		
Wooden (Swing)	66	27.0
Steel Frame With Louver	150	61.5
Aluminium Slides	28	11.5
Total	244	100
<b>Type of Doors</b>		
Wooden (Swing)	27	11.1
Metal (Swing)	217	88.9
Total	244	100
<b>Type of Floor Finishing</b>		
Tiles	14	5.7
Sand/Cement Screed	230	94.3
Total	244	100
<b>Type of Ceiling Finishing</b>		
Asbestos	44	18.0
PVC	38	15.6
Saw-dust Ceiling Board	162	66.4
Total	244	100
<b>Average Plot Size</b>		
Less Than 50m <sup>2</sup>	26	10.6
51 – 100m <sup>2</sup>	80	32.8
101 – 150m <sup>2</sup>	90	36.9
151 – 200m <sup>2</sup>	48	19.7
Total	244	100
<b>Duration of Construction Work</b>		
Less Than 1 year	75	30.7
1 year – 3 years	22	9.0
4 years – 6 years	27	11.1
More Than 6 years	120	49.2
Total	244	100
<b>Sources of Housing Finance</b>		
Own Savings	181	74.2
Cooperative Society	35	14.3
Family members and Friends	28	11.5
Total	244	100
<b>Mode of Construction</b>		
Self-Built	40	16.4
Hired Builder	33	13.5
Family Members and Friends	171	70.1
Total	244	100

Source: Field Survey, 2023.





### Facilities and Services within the House

The survey conducted reveals that all respondents have kitchens, however some occupants who don't use the shared kitchens prefer to cook outside or in their living rooms. All respondents claim to have toilets. All respondents have bathrooms to take their bath. 35.7% of the respondents have in-built stores to store either food stuff or any other valuable properties, but 64.3% of the total respondents do not have in-built stores, this implies that they either use the kitchen or empty passages to keep their food stuff or other valuable things. The survey conducted reveals that 79.9% of the respondents do not have dining areas or dedicated space for eating, they eat their food either in the living room, bedrooms or even outside.

**Table 1.5 Facilities and Services within the House**

Availability of Facilities									
Kitchen		Toilet		Bathroom		Store		Dining	
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
100%	0%	94.3%	5.7%	94.3%	5.7%	35.7%	64.3%	20.1%	79.9%

Source: Field Survey, 2023.

### Location of Facilities and Services

59.0% of the respondents have their bathrooms outside the house within the compound while 35.3% have their bathrooms within the house others claimed they don't take their bath in the house rather the bath either in their friends' houses or neighbouring compound, they account for 5.7% of the total respondents. 64.8% of the respondents have their toilets located outside the house while 29.5% have their toilets located inside the house. However, others claimed they do not use the toilets in the house rather they use the toilets in the neighbouring compound, accounting for 5.7% of the total respondents. Respondents who have their kitchens located within the house and those who have their kitchens located outside the house both constitute 47.1% of the total respondents, while those who use other forms of kitchen facilities constitute 5.8% of the total respondents.



**Table 1.6 Location of Facilities and Services**

Bathroom		Toilet		Kitchen	
Inside the House	35.3 %	Inside the House	29.5%	Inside the House	47.1%
Outside the House	59.0%	Outside the House	64.8%	Outside the House	47.1%
Others	5.7%	Others	5.7%	Others	5.8%

Source: Field Survey, 2023.

## RECOMMENDATIONS

A general improvement in housing provision for the ever increasing population will definitely improve the standard of living in the Jos metropolis. Housing being one of the most basic needs of man must be a subject of utmost concern to the government. However when the citizens begin to improvise certain measures to meet this need, the government should also play a vital role which will help in the successful development of this houses and at the same time ensure that acceptable standards are adhered to in the course of development which will in the long-run improve health and safety of its occupants. The following recommendations are geared towards improving core-housing development in this study area and on a larger scale, to make housing affordable and accessible to all.

1. Standards – this study found out that most of these houses have been erected without following the conventional procedures for development. Some of the houses are built without building plans, without building permits or approvals by the authorities. This is because of the financial implications and cumbersome procedures of obtaining all these documents. The government or housing authorities concerned can help solve this problem by reviewing these procedures and reducing the fees payable for the approval of building plans and other related documents. Standards should be relaxed instead of being too rigid so as to incorporate core-housing designs elements into the overall set of building standards.
2. Loan facilities – the study shows that developers of core-housing hardly rely on mortgage institutions and other financial institutions for loans. This is simply because of the stringent conditions as well as the high interest attached to accessing loans for housing development. Financial institutions can play a very significant role in this regard by reducing the interest rates on loan facilities as well as eliminating



some of the stringent conditions that a prospective developer must meet before gaining access to loans.

3. Building materials subsidy – the housing market that is saddled with either the production or importation of building materials should be supervised by the housing authorities in order to check the costs of building materials, this is because greedy manufacturers and importers of building materials have high tendencies of inflating prices of building materials and housing goods. Another measure that can be taken by the government can do with this regard is to also involve in partnership with manufacturers of building materials to buy these products directly from the manufacturers and make them available to developers at subsidized rates.
4. Technological improvements – locally made building materials will be able to perform as well as the foreign materials if the technology involved in their production is improved. Houses built with burnt bricks have the capacity to withstand very harsh weather conditions even when not plastered. Therefore the locally manufactured clay when subjected to heat will also serve the same purpose. Well treated and polished wood can also serve as materials for floor finishing as well as ceiling finishing. Doors and windows too can be made from hard wood in an aesthetic way to look good and serve the purpose of security at the same time.

## CONCLUSION

Core-units have generated considerable interest and some controversy in the minds of people as well as in the housing industry in the past several years. Research has shown that the migration toward smaller average unit size housing such as one-bedroom units and rental of small apartment with shared facilities and common kitchens, bathrooms and toilets within communities are a growing trend. Whether this turns out to be a lasting phenomenon or a passing fad, core-units have renewed the focus on efficient layouts and innovative design solutions. Many of these smaller units are designed and configured to feel larger to potential renters than older conventional units by virtue of higher ceiling heights, larger windows, built-in storage, and in some cases, shared toilets and bathrooms. Evidence from the housing markets indicates that smaller units tend to outperform conventional units as far as low and middle



income earners are concerned. Core-units are not for everyone and core-units may not be the solution for every location, hence there is need for the housing authorities and agencies concerned to integrate designs of core-housing units in their housing programmes especially low-income housing schemes. There should be some degree of adjustments and review of housing standards to create opportunity for development on smaller plot sizes for housing. Core-housing units should not be seen only from the negative point of view but from a more positive angle.

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