The Impact of Ethno-Religious Crisis on Location Decisions and Values of Residential Properties in Jos, Nigeria

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Abstract
Location is among the main determinants of residential property value. It has been realised from the existing literature that location could either be tangible or intangible in nature. Tangible location factors include accessibility, transportation, closeness to central business districts etc. On the other hand, intangible location factors are those attributes of location that are invisible in nature. They include race, ethnic background, crime, safety, skin colour, native inclination, apartheid, cultural background, security, religious inclination, socioeconomic background, indigene ship and the like. This study is intended to examine the effect of these intangible location attributes on the values of residential properties in the study area. The data for this research was sourced through interviews, field survey and questionnaires. Tables and charts were employed in order to analyse the data for the research. Pictures were also taken in order to give pictorial information of what is on ground. In order to arrive at the required sample size for the research, stratified random sampling was adopted. The study area was divided into two clusters, that is, Jos North and Jos South. The outcome of the research revealed that areas that are classified as violent free neighbourhoods command high rental and sales value of land and landed properties. The research discovered that people prefer areas that are predominantly of their religious and ethnic extraction. As a result of that, the residential pattern of the study area was drastically altered. It can be concluded that intangible location attributes play a vital role in dictating the price of land and landed properties. Investors and real estate developers should take into consideration intangible attributes of location when determining the worth of land and landed property in the study area.

Keywords: Intangible Location Attributes, Landed Property, Rental Value, Residential Property and Sales Value

1.1 Introduction and Theoretical Exploration
Location is in the midst of the most important determinants of residential property value. It is a well documented fact that location could either be viewed as tangible or intangible in its entire ramification. Physical location factors include: closeness to central business districts, accessibility, community facilities, utilities and services, transportation building codes, demand, supply, planning restrictions, population increase, zoning regulation, closeness to place of work, components or elements that form part of a building structure, building codes, environmental protection laws, subdivision regulations, waste dumpsites, and the likes (Aliyu, 2012). Conversely, invisible attributes of location are those attributes of location that are imperceptible and unseen in nature. They comprise: crime, native inclination, race, religious inclination, safety, cultural identity, ethnic background, security, indigene ship, violent free areas, apartheid, household preference, violent prone areas, socioeconomic background, and what have view (Aliyu, 2012). Due to the incessant and ongoing anarchy that has bedevilled the city of Jos for nearly one and half decade, there has been a slow and steady process of residential rearrangement, repositioning and change of ownership in line with ethnic, native, cultural and religious background, which ultimately resulted in splitting the metropolis into like two dissimilar and diverse cities in one municipality by having an region that is exclusively for Muslims and Christians as well (Aliyu, 2012).

A lot of earlier researches in the area of residential property value indicators directed on numerous tangible location attributes which shape the foundation of land and landed property value. Early scholars who excellently did well in this regard are Ricardo (1817) and Von Thunen (1828). In his contention, Ricardo established that the main factors influencing land and landed property value in any given area is nothing rather than the fertility, productiveness or quality of land. He consequently concluded that areas that are more productive command higher value as match up to areas that are infertile. Von Thunen, further extended the theory of location by looking at transportation cost as the main indicator of land and landed property value. Ricardo and Von Thunen’s theory are still relevant in the present time but they could only be appropriate in some areas. Their theory was criticised due to advancement in technology as most of the assumptions of these classical theorists were formulated before the industrial revolution.

Notable researchers who further explored location theory include: Firey (1974), Hansen (1959), Hoyt (1939), Kauko (1999), Laakso (1992), Tiebout (1956), Wieand, (1973) and Zipf (1949). Other researchers who
supported this claim are Wingo (1961a and 1961b) and Alonso (1964). Alonso’s PhD dissertation was published and became available in the 1960s. Wingo and Alonso’s main point of contention is that families prefer to reside in neighbourhoods where they are sure of good accessibility, location, and transportation. A family is enthusiastic to expend most of their earnings in order to obtain a residential accommodation that fulfills such qualities.

Subsequent researchers extend that nearness to city centre or inner city, population size, demand, supply, rent, subdivision regulations, zoning regulations, building codes, environmental protection laws and planning restrictions are the most important determinants of land and landed property value. The proponent of this theory include: Leeuw (1971a), Leeuw and Ekanem (1971b), Linneman (1981), Paul and Daniel (1998), Pollakowski and Wachter (1990), Thorsnes (2000) and Thornse and McMillen (1998) among others. Other researchers attribute significance, importance and value to land and landed property as a result of property tax payment. For example, Bramley (1993), Hansson (1987), Larry and Jane (1990), Oates (1969) and Pollakowski (1973) professed that areas that pay property tax command low value according to many urban dwellers and vice versa.

To other professionals concerned with land and landed property valuation, the value of residential property could be arrived at by looking at the structural components or elements that comprise a building. Based on their claim, buildings with magnificent doors, roof, floor, window, finishes and good decorations command high value match up to those lacking these essential qualities. To be more precise, some researchers attribute value to land and landed property due to the inherent quality, machineries or structural mechanisms of the building. Researchers in this regard include David and Peter (1974), Gregory (1971), Hughes and Sirmans (1992, 1993 and 1994), Irwin and Bockstael (2004), Kohlhase (1991),


Alternatively, to other land and landed property specialists, residential property value is determined by looking at the availability, maintenance and provision of the basic public infrastructural utilities, facilities and services that go a long way in making a neighbourhood or a community a liveable environment. In other words areas that have schools, market, shopping malls, hospitals, neighbourhood parks, medical health care, police stations, water, electricity, roads, worshipping places, wholesale and retail shops and so on command high value compare to those areas that lack such public utilities, facilities and services. The proponents of this theory include: Cheshire and Stephen (1995 and 1998), Do, Wilbur and Short (1994), Leggett and Bockstael (2000), Lutzenhiser, Noelwah and Netusil (2001), Paul and Stephen (1998), Quang, Robert, and James, (1994) and Tse (1998).

Numerous scholars have employed records of land and landed property transaction to assess environmental factors and, more importantly, study the influence of harmful waste dumpsites and contaminants on land and landed property values. Many scholars, such as: Garrod and Willis (1994), Greenberg and Hughes (1992), Ketkar (1992), Kiel (1995a), Kiel and McClain (1995b), Kohlhase (1991), have constantly established that nearness to locally unwanted land uses and other harmful waste dumpsites has negatively influenced the values of land and landed properties. Based on the aforementioned models and theories, it is obvious that land and landed property value is determined by many factors. From the foregoing, it could be noticed that the previous researches on the subject matter have many shortcomings as they have given disproportionate attention to physical factors that determine residential property value. Only very few researches were conducted on intangible location attributes as indicators of land and landed property value. It is therefore against this background that the research investigates intangible location attributes as factors that indicate and influence the values of land and landed properties in the study area. The research questions which this study seeks to answer are:

i. To what extent do the intangible location attributes influence the values of residential properties in the study area?

ii. How do the intangible location attributes affect the sales and rental values of land and landed properties in the study area?
2.1 The Study Area

Plate 1: Plateau State Map, (Federal Republic of Nigeria, 2011)

Plate 2: Map of the City of Jos, (Plateau State Government, 2011)

3.1 Research Methodology
3.1.1 Sampling Technique
In order to arrive at a reliable sample and data collection instrument, there is a need to investigate the purpose of undertaken a research (Creswell, 1994 and Crotty, 1998)). Stratified random sampling was also employed in order to generate data from both Muslim’s and Christian’s residential neighbourhoods as it could be seen in table 1 as well. In a broader perspective, data were collected by field survey, interviews, self-administered surveys through questionnaire and direct observation. Data on property value were obtained from consultancy firms because records of sales and rents transactions are kept in their archives.
3.1.2 Instruments for Data Collection
A combination of self-administered questionnaires and semi-structured interview were deemed most suitable as data collection tools for this research due to the advantages obtained from both approaches. The questionnaire make sure that all questions directed to the respondents were consistently phrased, therefore allowing objective judgement of outcome while interviews allow the respondents chance to convey views more lengthily than would be achievable with a closed-ended questionnaire. Furthermore, the interviews allowed elucidation of matters in the questionnaire by the investigator in areas where some respondents may not be totally conversant.

Two types of questionnaires (Questionnaires I and II) were administered. Questionnaire I was addressed to the respondents or occupiers of residential properties, while Questionnaire II was administered to consultancy firms. Out of the questionnaires administered to the respondents, 88% were able to retrieved back. On the part of the consultancy firms, 92% responses were gotten from the survey. Details could be found in table 1.

A total of 1000 questionnaires were administered to the respondents. Out of 1000 questionnaires administered to the respondents, 876 valid responses were used to analyse the information pertaining to the effect of intangible location attributes on residential property value in Jos city. Stratified random sampling was also adopted in order to generate data from the professional estate surveyors and valuers. Out of 30 firms, 10 were chosen and 120 questionnaires were administered to them, that is, 12 for each firm. However, out of 120 questionnaires administered to the professional firms, only 110 were retrieved back. This is necessary to achieve a reasonable spread in the location of interviews and questionnaires to be able to obtain a cross-section of data regarding the impact of intangible location attributes on residential property value in the study area. This is also imperative because of local variations in the metropolis.

<table>
<thead>
<tr>
<th>Table 1: Questionnaires Administered to Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S/N</strong></td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

Source: Field Survey (2011)

3.1.3 Method of Data Analysis
Pictures were taken to depict how houses, shops, market, hospitals, places of worship etc were burnt and razed to ashes in the study area. This is imperative because it helps in displaying how the intangible location factors affect the value of residential properties in the study area. Most of the data presented using simple percentage distribution tables were also complimented with the aid of statistical graphs. For example histogram was employed to analyse some of the data in the research.

4.1 Results
4.1.1 Variations in the Typical Yearly Rents Collected by House Owners in the Study Area
Considering the nature of the research, a trend in the average annual rental value of tenement buildings, flats, duplexes, semi-detached houses and four bedroom bungalows is highlighted for low, medium and high density residential neighbourhoods in Jos (Dung-Gwom and Rikko, 2009) from 2001 – 2011 as presented in table 2 and figure 1-5. Although, laws of demand and supply and price of building construction, location, accessibility, element of a building, transportation, neighbourhood utilities, facilities and services greatly affect the values of residential property, it is on the other hand discovered that there was a aloft increase in rent of tenement building, flats, duplex, semi-detach house and four bedroom bungalow from 2001 through 2006 and between 2008 and 2011. These periods were the time when civil unrest repeatedly occurred in Jos as noted by Dung-Gwom and Rikko (2009).
Table 2: Variations in the Typical Annual Rents Collected by House Owners from 2001-2011 in Jos Metropolis

<table>
<thead>
<tr>
<th>Type of Building</th>
<th>Variations in the Average Annual Rents Charged by Landlords from 2001-2011 in Nigerian Money (Naira (₦))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenement</td>
<td>30,000</td>
</tr>
<tr>
<td>Flat</td>
<td>50,000</td>
</tr>
<tr>
<td>Duplex</td>
<td>70,000</td>
</tr>
<tr>
<td>Semi-Detached</td>
<td>80,000</td>
</tr>
<tr>
<td>Four Bedroom Bungalow</td>
<td>100,000</td>
</tr>
</tbody>
</table>

Sourced: Field Survey (2011)

Figure 1: Annual Rent of Six Bedroom Tenement House from 2001 to 2011
Source: Field Survey (2011)

Figure 2: Annual Rent of Three Bedroom Flat House from 2001 to 2011
Source: Field Survey (2011)

Figure 3: Annual Rent of Duplex House from 2001 to 2011
Source: Field Survey (2011)
The table and figures above present a variation and trends in the rental value of tenement, flat, duplex, semi-detached and four bedroom bungalows for low, medium and high density areas (Dung-Gwom and Rikko, 2009) in Jos between 2001 and 2011. An examination of the above table reveals that rents in the study area maintain an upward movement from 2001 to 2011. This is as a result of frequent crises that take place in the study area (Dung-Gwom and Rikko, 2009).

For instance, rental value of a tenement building in 2001 was ₦30,000, but it increased to ₦85,000 in 2011. The difference between the rental value of tenement building in 2001 and 2011 is ₦55,000. The same goes to flat houses which in 2001, the rent paid was ₦50,000. While in 2011, it increased to ₦125,000. The difference is ₦75,000. Duplex houses were rented at ₦70,000 in 2001, but in 2011 it raises to ₦38,000. The difference is much, ie ₦68,000. The same applies to semi-detached house and four bedroom bungalows which in 2001 the rents paid were ₦80,000 and ₦100,000 respectively. They however increased to ₦157,000 and ₦230,000 respectively.

4.1.2 Variations in the Typical Sales of Residential Properties in Jos Metropolis

The current and estimated rental values were presented per square meter below. The variation and percentage variation were also highlighted.
Table 6: Estimated Rental Values of Residential Properties in the Study Area

<table>
<thead>
<tr>
<th>Buildings</th>
<th>Current Rent Per Square Metre (₦)</th>
<th>Estimated Rental Values Per Square Metre (₦)</th>
<th>Variations (₦)</th>
<th>Percentages Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,000.00</td>
<td>4,106.50</td>
<td>1,106.50</td>
<td>36.88333</td>
</tr>
<tr>
<td>2</td>
<td>4,000.00</td>
<td>7,168.49</td>
<td>3,168.49</td>
<td>79.21225</td>
</tr>
<tr>
<td>3</td>
<td>3,500.00</td>
<td>(641.13)</td>
<td>(4,141.13)</td>
<td>-118.31800</td>
</tr>
<tr>
<td>4</td>
<td>1,000.00</td>
<td>295.00</td>
<td>195.00</td>
<td>19.50000</td>
</tr>
<tr>
<td>5</td>
<td>3,000.00</td>
<td>4,806.49</td>
<td>1,806.49</td>
<td>60.21633</td>
</tr>
<tr>
<td>6</td>
<td>5,000.00</td>
<td>6,894.18</td>
<td>1,894.18</td>
<td>37.88360</td>
</tr>
<tr>
<td>7</td>
<td>4,500.00</td>
<td>6,632.94</td>
<td>2,132.94</td>
<td>47.39867</td>
</tr>
<tr>
<td>8</td>
<td>1,000.00</td>
<td>1,701.18</td>
<td>701.18</td>
<td>70.11800</td>
</tr>
<tr>
<td>9</td>
<td>3,000.00</td>
<td>4,521.99</td>
<td>1,521.99</td>
<td>50.73300</td>
</tr>
<tr>
<td>10</td>
<td>1,000.00</td>
<td>2,563.77</td>
<td>1,563.77</td>
<td>156.37700</td>
</tr>
<tr>
<td>11</td>
<td>6,000.00</td>
<td>6,455.97</td>
<td>455.97</td>
<td>7,59950</td>
</tr>
<tr>
<td>12</td>
<td>7,000.00</td>
<td>8,256.04</td>
<td>1,256.04</td>
<td>17.94343</td>
</tr>
<tr>
<td>13</td>
<td>8,000.00</td>
<td>9,761.84</td>
<td>1,761.84</td>
<td>22.02300</td>
</tr>
<tr>
<td>14</td>
<td>6,500.00</td>
<td>7,479.69</td>
<td>979.69</td>
<td>15.07215</td>
</tr>
<tr>
<td>15</td>
<td>1,500.00</td>
<td>2,887.05</td>
<td>1,387.05</td>
<td>92.47000</td>
</tr>
<tr>
<td>16</td>
<td>6,000.00</td>
<td>6,717.10</td>
<td>717.10</td>
<td>11.95167</td>
</tr>
<tr>
<td>17</td>
<td>6,000.00</td>
<td>7,874.12</td>
<td>1,874.12</td>
<td>31.23533</td>
</tr>
<tr>
<td>18</td>
<td>6,500.00</td>
<td>7,817.44</td>
<td>1,317.44</td>
<td>20.26831</td>
</tr>
<tr>
<td>19</td>
<td>2,000.00</td>
<td>4,608.95</td>
<td>2,608.95</td>
<td>130.44750</td>
</tr>
<tr>
<td>20</td>
<td>6,000.00</td>
<td>4,693.30</td>
<td>(1,306.57)</td>
<td>-21.77617</td>
</tr>
<tr>
<td>21</td>
<td>4,000.00</td>
<td>4,258.48</td>
<td>258.48</td>
<td>6,46200</td>
</tr>
<tr>
<td>22</td>
<td>3,000.00</td>
<td>7,027.37</td>
<td>4,027.37</td>
<td>134.24567</td>
</tr>
<tr>
<td>23</td>
<td>1,000.00</td>
<td>3,079.12</td>
<td>2,079.12</td>
<td>207.91200</td>
</tr>
<tr>
<td>24</td>
<td>4,000.00</td>
<td>6,894.81</td>
<td>2,894.81</td>
<td>72.37025</td>
</tr>
<tr>
<td>25</td>
<td>3,500.00</td>
<td>6,390.31</td>
<td>2,890.31</td>
<td>82.58029</td>
</tr>
</tbody>
</table>

Source: Field Survey (2011)

As it could be seen in the above findings, the rental values of residential properties have increased tremendously due to the influence of intangible location attributes on the values of residential properties in the study area. This is a clear indication that intangible location attributes in the study area determine the rental value of residential properties in areas that are prone to violence. This upward increase is as a result of high demand which people express in searching for accommodation that are located in violent free areas.

Before the violent crises, price of residential accommodation in Jos metropolis stays stable and rising increase since 2001 is witnessed. This is as a result of incessant ethno-religious conflicts that are taking place in the study area. Prior to the fracas, residential accommodations were being sold at a reasonable amount. However, all of a sudden, the price inflated to an alarming rate and later to a stage that is beyond thoughts. Table 3 and figure 6-10 present the trends in the average sales of tenement houses, flats, duplex, semi-detached house, four bedroom bungalow.

This finding also validates the findings of Dung-Gwom and Rikko (2009), in which they discovered that price of residential property has persistently increases from 2001 to 2009. This allow the research to conclude that beside other indicators that are accountable for dictating land and landed property prices, there has been a non-stop rise in demand for tenement, flat, duplex, semi-detached house and four bedroom bungalow from 2001 through 2011 by people dispersed from the central metropolitan areas after 2001, 2008, 2010 and 2011 ethno-religious crisis.

Based on the interview conducted with the respondents, the response obtained from them further validates and confirms the response obtained from the questionnaire survey. The respondents revealed that in the medium density areas there has been a steady acceleration in the sales worth of flats, tenement houses, duplex, four bedroom bungalow and semi-detached houses. They further attribute this to the ongoing crisis in the study area. The high density areas have experienced a very slower increase in the sales values of such category of property. They argue that this scenario emerge because most of the crises that have occurred in Jos for more than a decade often begin from the high density areas which are mostly in the inner city of Jos (Dung-Gwom and Rikko, 2009).

The respondents stress the fact that people in the study area have been compelled to sell their land and landed property in order to transfer to peri-urban areas where they feel safer. Professional consultants disclosed
that price worth of residential properties in areas bedeviled by incessant sectarian violence is not frequently come across through open market value as also noted by Dung-Gwom and Rikko (2009). As such Dung-Gwom and Rikko concluded that residential price arrived at are more often than not ‘forced sale values’ and not ‘open market values’. They further asserted that this is the main reason why the sales of tenement house, flats, duplex, semi-detached house and four bedroom bungalow have not convincingly increased in high and medium density neighbourhoods in Jos metropolis.

Table 3: Variations in the Standard Sales of Residential Accommodations in Jos Metropolis

<table>
<thead>
<tr>
<th>Type of Building</th>
<th>Variations in the typical Sales of Residential Accommodations in Jos Metropolis from 2001-2011 in Nigerian Money {Naira (₦) (×1000)}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenement</td>
<td>300</td>
</tr>
<tr>
<td>Flat</td>
<td>1,000</td>
</tr>
<tr>
<td>Duplex</td>
<td>1,200</td>
</tr>
<tr>
<td>Semi-Detached</td>
<td>2,800</td>
</tr>
<tr>
<td>Four Bedroom Bungalow</td>
<td>3,200</td>
</tr>
</tbody>
</table>

Source: Field Survey (2011)
As it can be seen from table 3 and figures 6-10 above, the sales value of tenement, three bedroom flat, duplex, semi-detached house and four bedroom bungalows increased gradually from 2001 until 2011 when a sharp rise was observed, which continued till 2011 as also documented by Dung-Gwom and Rikko (2009). For instance, in 2001, a complete flat was sold at N1,000,000. However, in 2011, it rises to N4,500,000. This scenario is also applicable to all the rest of the houses surveyed. In 2001, four bedroom bungalow was sold at N3,200,000, while in 2011, the price increased to N7,800,000.

The findings of this study establish that apart from other indicators that are responsible for establishing property values or worth, there has been a persistent increase in demand for tenement, flat, duplex, semi-detached house and four bedroom bungalow from 2001 through 2011 by those respondents that were forced to relocate to the inner city or outskirt areas in the metropolis after 2001 and 2008, 2010 and 2011 ethno-religious crisis as also revealed by Dung-Gwom and Rikko (2009).

Results obtained from field survey and personal interview with consultancy firms and respondents in the course of this study revealed that in the medium density areas there has been a slow increase in the sales
value of flats, tenement houses, duplex, four bedroom bungalow and semi-detached houses. As a matter of fact, the high density areas are experiencing a very slower increase in the sales values of such category of properties (Dung-Gwom and Rikko, 2009). The findings of this study show that in Jos metropolis most of the conflicts have their genesis from the high density areas which are often found in the inner city or central business district of Jos. As a result of the violence, people have been coerced to forcefully sell their landed properties in order to move to the outskirts of the city that are regarded as safe zone areas (Dung-Gwom and Rikko, 2009).

Sales values of property in areas affected by crises are not often established through open market bidding where the buyer and the seller are willing to negotiate without any preconceived idea in the mind of one another. It can, therefore, be concluded that prices of land and landed property that is been arrived at are in most cases ‘forced sale values’ and not ‘open market values’ as disclosed by Dung-Gwom and Rikko (2009). According to the consultants and respondents that were interviewed, this is the main reason why the sales of tenement house, flats, duplex, semi-detached house and four bedroom bungalows have not sufficiently escalated in high and medium density residential neighbourhoods in the study area as also discovered by Dung-Gwom and Rikko (2009).

4.1.3 Variations in the Price of Land in Jos Metropolis

It is a well known fact that, despite the fact that there is incessant violence in the metropolis, the demand for land has upwardly increase in areas that are violent free to the detriment of areas that are violent prone. Due to the congestion that is being witnessed in the central business district of Jos, people have resorted to perpendicular and vertical expansion in order to get where to live. The price of land has continued to increase upwardly in the suburbs of Jos where the Christians are in the majority. The variation in the price of land that has been discovered in the course of conducting this research is also in line with the findings of Dung-Gwom and Rikko (2009), of which a fluctuation in the standard price of land in some chosen suburb areas which encompass low, medium and high density residential areas is presented in table 4 below.

Table 4: Variations in the Price of Land (50x50 ft) from 2001 to 2011 in Jos Metropolis,

<table>
<thead>
<tr>
<th>Cost of Land</th>
<th>90</th>
<th>140</th>
<th>150</th>
<th>180</th>
<th>240</th>
<th>270</th>
<th>270</th>
<th>400</th>
<th>700</th>
<th>1,000</th>
<th>1,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2001</td>
<td>2002</td>
<td>2003</td>
<td>2004</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
</tr>
</tbody>
</table>

Source: Field Survey (2011)

Figure 11: Variations in the Cost of Land (50x50 ft) from 2001 to 2011 in Jos Metropolis Source: Field Survey (2011)

The price of land has increased steadily from 2001 to 2011. For instance, land was sold at ₦90, 000 in 2001. By 2011, the price of similar land increased to ₦1, 500,000. The difference between price of land in 2001 and 2011 is ₦1, 410,000. This is a huge amount compare to what is being witnessed in violent free area in the metropolis as revealed by Dung-Gwom and Rikko (2009).
Table 5: Residential Relocation in Jos Metropolis

<table>
<thead>
<tr>
<th>Issues Observed</th>
<th>Conclusions Drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Pattern</td>
<td>The residential pattern was severely distorted. Followers of the two religions started to live in divided areas out of panic of eruption of another upheaval.</td>
</tr>
<tr>
<td>Border Demarcation</td>
<td>The Jos foremost road which demarcates Jos North from Jos South, provides a natural boundary for this separation. After the violence, most Christians residing in Jos North migrated to the south of the city across the major dual carriageway, while many Muslims who were inhabitants in the south relocated to the north.</td>
</tr>
<tr>
<td>Commercial Activities</td>
<td>However, with the Jos north harbouring most of the most contemporary businesses as well as infrastructural facilities, thousands of Christians on a daily basis troop across the main road to the north to carry out their businesses.</td>
</tr>
<tr>
<td>Mass Exodus</td>
<td>This mass evacuation reverses itself towards the close of business every day, as Christians rush to go back to the south, for the reason of security concern.</td>
</tr>
<tr>
<td>Traffic Congestion</td>
<td>The traffic jamming and overcrowding on a daily basis witnessed during these two movements is so dense that the travelling, which normally should not take more than twenty minutes, ended up for as much as one and a half hours.</td>
</tr>
</tbody>
</table>

Source: Field Survey (2011)

4.1.4 Jos, Plateau State Turned from Home of Peace and Tourism to Home of Killing and Destruction

Before the crisis, Jos was regarded as a centre of tourism and peace until 7th September 2001 when clashes broke out in Jos, the state capital, between Muslims and Christians. These crises end up in violence through burning houses, shops, farms, Churches and Mosques. Different types of weapons were normally used whenever the violence erupts. Many people were killed and properties worth billions of Nigerian money (Naira) were destroyed. The crises were recorded since 2001 up till 2012. Furthermore, many respondents revealed that many people sought violent free areas by retreating into areas divided based on ethnic or religious background where they have assurance that their life and property would be protected.

4.1.5 Houses and Places of Worship Burnt and Razed to Ashes in Jos South, A Predominantly Christian Area

The incessant violence in Jos culminates into wanton destruction of residential properties. The areas that are badly affected by the violence in both Jos North and Jos South include: Dilimi, Gangare, Sarkin Arab, Abba Nashehu, Rikkos, Nasarawa, Anguwan Rimi, Bukuru, Rafin-Pa, Yan Keke, Anguwan Rogo, ‘Yan Taya, Bauchi Road etc. However, the neighbourhoods that are in Jos South include: Kerana, Anguwan Doki, Sabon Layi, Anguwan Mayangu, Kila Kwata Santa, Kugiya, Gyel, Anguwan Kare, Bwandang, Anguwan Dabba, Keara, Sita, Kayan Ruwa, Cikin Gari, Unguwan Salanken Railway etc. Some of the name of streets in Jos South include: ‘Yan Lilo, ‘Yan Doya, ‘Yan Lemu, ‘Yan Katifa, ‘Yan Wake, Zangon Streat and Mallam Idi Streat. Plates 1-6 show Muslim houses burnt in predominatly Christian neighbourhoods.

Plate 1: A House Burnt in Jos South, (Field Survey, 2011)
Plate 2: A Mosque Burnt in Jos South, (Field Survey, 2011)

Plate 3: A House Burnt in Jos South, (Field Survey, 2011)

Plate 4: A House Burnt in Jos South, (Field Survey, 2011)
4.1.6 Houses and Places of Worship Burnt and Razed to Ashes in Jos North, A Predominately Muslim Area

The plates below (that is, 7-12) indicate how places of worship and residential properties belonging to Christians were razed in predominatly Muslim Areas. The areas that form Jos North include: Bauchi Road, Dilimi Street, Nasarawa Gwomg, Dutse Uku, Rikkos, Gangare, Sabon Fegi, Unguwan Rogo, Unguwan Rimi, Unguwar Rukuba, Tudun Wada, Janta Adamu, Gada Biyu, Fara Gada, Sabon Layi, Alheri, Tudun Fere and so on.
Plate 8: A Church Burnt and Razed to Ashes in Jos North, (Field Survey, 2011)

Plate 9: A Hospital Razed and Destroyed in Jos North, (Field Survey, 2011)

Plate 10: A House Burnt in Jos North, (Field Survey, 2011)

Plate 11: A House Devastated and Destroyed in Jos North, (Field Survey, 2011)
5.1 Conclusions
From these findings, it is established that residential property value is a function of numerous indicators. These factors can either be physical or invisible in nature. Tangible location attributes (transportation, accessibility, demand and supply, nearness to community facilities, utilities and services, elements or components that form part of a building structure, closeness to central business district, zoning regulations closeness to central business district, closeness to waste dump sites, household preference, population of a given area, building codes, environmental protection laws, subdivision regulation, planning restrictions, etc) were found to be of major significance in ascribing land and landed property value in violent free areas (safe zones).

It has also been documented in the course of this research that invisible location attributes (crime, apartheid, ethnic background, race, safety, social cohesion and solidarity, religious inclination, economic status, security of life and property, native inclination, prestige cultural identity, socioeconomic background, violent free areas, norms and values, violent prone areas, skin colour and the likes) are the most important indicators of land and landed property values in violent prone areas (unsafe zones).

It suffices to state that this research extends the existing wealth of knowledge on the determinants of residential property value. Sales and letting values of residential properties have determinedly increased and keep a very high upward movement in areas that are not volatile to violence and vice versa. It has been revealed that the price of tenement, detached house, semi-detached house and bungalows were on the increase.

The repercussion and implication is that intangible location factors have a direct impact on rental value and sales value of residential properties in the study area. Unless strong measures are put in place by those in power, the condition will keep on deteriorating in the near future. There is a strong need on the part of the investors and estate valuers when carrying out feasibility and viability studies or valuation to take into cognisance the invisible location factors in the study area.

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