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Ethno-Religious Violence and Neighbourhood Facilities Provision: Evidence From Jos, Nigeria

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Abstract

Neighbourhood facilities could be seen as auxiliary or ancillary infrastructural utilities and services that are essential part of residential accommodation. The value or worth of housing accommodation is being determined and assessed by looking at the nearby, surrounding and adjoining community public facilities, utilities and services that enhance and improve quality of life of the residents of such area. As a result of the persisting crises and violence that are witnessed in Jos metropolis, neighbourhood facilities were greatly affected. The provision, availability and maintenance of such community infrastructures in Jos are negatively affected and curtailed by the ongoing chaos. The study is aimed at examining the effect of sectarian violence and civil unrest on the provision, availability and maintenance of community facilities, utilities and services in Jos. Proportionate and stratified random sampling techniques were employed so as to generate the sample upon which the questionnaires would be administered. The study adopted different tools of analysis which include: tables, graphs, charts and discussions. The findings revealed that ethno-religious violence influence the provision, availability and maintenance of existing neighbourhood facilities in the study area. The implication of the study lies in the fact that neighbourhood facilities in the areas that are considered as safe zones were found to be in good state of repair as opposed to the unsafe zones. Therefore, the values of residential properties would rise in areas that are violent free and vice versa. The study recommends that neighbourhood facilities should be provided in all the areas affected by the crisis. The government should provide security in all the unsafe areas in order to prevent against vandalizing of the neighbourhood facilities.

Keywords: Ethno-religious Violence, Neighbourhood Facilities, Property Values, Services and Utilities

1. Introduction

Community services and facilities are institutional demand and responses to essential and fundamental individual needs, such as protection, health, education, recreation and safety. Numerous categories of community services and facilities have been determined to be indispensable to the community, and are making available by the public sector. Other public utilities, facilities and services are provided by the private sector as a pre-requisite and requirement of development and advancement in the city. Neighbourhood utilities, facilities and services necessary for new development are based upon inhabitants generated by the most recent expansion, and comprise park land, libraries, facilities, police services fire services and school facilities. Other community and public services, utilities and facilities are favored and preferred to address and tackle the desires of precise and exact populations or strong public and community demand, such as golf courses, childcare centers, senior, and centers. In Jos metropolis, these ancillary and subsidiary facilities, utilities and services are not sufficiently provided in some tactical and planned areas owing to the ongoing and unending crisis. Areas that are classified or categorized as unsafe zones could barely benefit from these infrastructural facilities, utilities and services as they are the target of devastation and destruction in the event of any violence (New York: Human Rights Watch, 2005 and 2006 and Toure, 2006).

Community facilities, utilities and services contribute enormously to groups and individuals as well as quality of life in the society. They provide appropriate and regimented services, a sense of uniqueness, and help in defining the municipal's visual quality. The municipal utilities, facilities and services component defines the city's standards and guidelines for certain community utilities, facilities and services. Expansion of community facilities and providing services is guided by the goals, objectives and policies of the public facilities element. (Magazine Blunt Truth, 2010 and Muhammad, 2007)



Neighborhood facilities and utilities are essential community services that enhance safety, public health and welfare. Public facilities include healthcare facilities, schools, cemeteries, public safety services, libraries, parks, childcare facilities and other governmental facilities. Utility systems include wireless networks, sanitary sewerage, solid waste and disposal systems, telecommunication services, lake management services, storm water management, water supply, and gas and electric services. Adequate fire and police protection, water supply, roads, parks, sewage disposal, schools and other municipal facilities and services are essential to guard the community healthiness, security and wellbeing of Jos inhabitants. Public arrangement for facilities and services can guarantee that they are provided as the locality grows and can trim down community costs by encouraging highest potential use of obtainable facilities if there are no civil unrest and communal clashes (Lanre, 2006 and Muhammad, 2005)

Community amenities, facilities and services ought to be provided at levels essential to sustain the growth and enlargement planned for industrial, commercial, residential and rural areas. The amenities, facilities and services required to maintain this growth and development are: sewer and water, streets and recreational services. The expenses of sufficient facilities and services ought to be kept as small as possible, cost-effective comparative to the benefits obtained and disseminated justifiably. Expansion of services and construction of facilities to sustain designed development should avert significantly reduced service levels and be timed to avoid problems before they need costly corrective action, while avoiding the costs of untimely surplus capacity in facilities, amenities and services. Sectarian violence leads to destruction of community facilities in violent and conflict neighbourhoods (Nnoli, 2003; Oladoyin, 2001 and Ostien, 2009)

2. Models of Conflict Pattern by Swanstrom and Weissmann

A conflict is not a stagnant state of affairs, but a flexible one in which the concentration level changes over a conflicts' life cycle (Swanstrom and Weissmann, 2005). An understanding of the conflict cycle is indispensable for an understanding of how, where and when to apply diverse strategies and procedures of conflict avoidance and management. Over time, several suggestions and models of conflict patterns have been developed. Among these models and recommendations, a number of patterns show up. Conflicts have a tendency to be described as recurring in regard to their concentration levels, i.e. rising from (relative) stability and tranquility into crisis and war, afterward decreasing into relative peace.

Good number scholars also have the same opinion that these cycles are repeating their self as stated by Swanstrom and Weissmann, (2005). This suggestion is powerfully supported by empirical and experimental research on conflict patterns. In this way, it should also be stated that a lot of scholars add stable, occasionally called resilient, peace as a supplementary phase in which the conflict is considered resolved, that is, the reoccurring pattern of the conflict has been stopped up. Indeed, most models split both the escalation and deescalation of the conflict cycle into phases. It can also be realized that in some instances, the conflict model has taken the shape of a U, or an upside-down U as noted by Swanstrom and Weissmann (2005). Thist could be seen in figure 1 below.



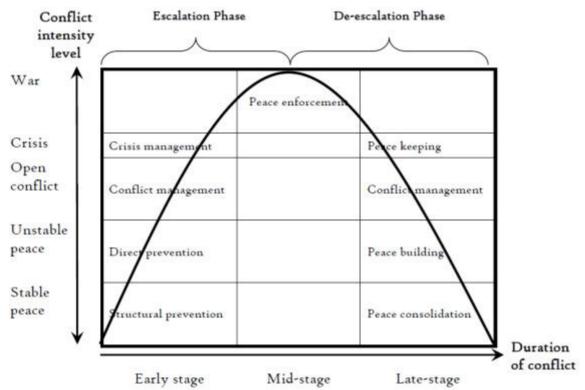


Figure 1: Chronological Phases of Conflict Intensity Levels, (Swanstrom and Weissmann, 2005)

The curve in figure 1 is alienated into five levels of conflict concentration (stable peace, unstable peace, open conflict, crisis, and war) in a total of nine sequential phases. *Stable peace* is a situation where nervousness between the parties is low and there exists dissimilar types of associations and collaboration between them, often including financial and environmental assistance, as well as cooperation within other nonsensitive concern areas (Swanstrom and Weissmann, 2005). During a period of *unstable peace*, worry has increased. This is a situation where, notwithstanding the existing negative peace, the tension among the parties is so high that peace no longer seems assured.

An *open conflict* is a situation whereby the conflict is distinct and the parties have taken actions to deal with it, even if coercive options are not put in place. In the *crisis phase*, the danger of war is about to happen and coercive alternatives are the preferable or probably incorporated. There may be intermittent hostility among the parties at this phase, but there is no usual open fighting. In the *war phase*, on the other hand, there is prevalent and powerful violence. In the de-escalation phase the pattern is upturned, stirring from warfare to crisis, through open conflict and unbalanced peace to lastly attain a state of stable peace (Swanstrom and Weissmann, 2005).

3. The Concept of Neighbourhood

Adelman (2004). stated that the term neighbourhood means different things to different people, depending upon the context in which it is used and the circumstances under which it is considered. In the past, the word neighbourhood has been distorted by two major misconceptions (Anas, 2006). The first was an idealised notion of what a neighbourhood *should be* rather than what it *actually is*. Such phrases as "homogeneous grouping of people" or "similarity of backgrounds" do not necessarily describe residential neighbourhood as they exist and are not fully accurate for nonresidential districts (Apgar & Kain, 1972). People of different backgrounds are different but usually compatible land use activities come together and remain together for various reasons (Bruch and Mare, 2005). The other mistake of the past has been perpetuated by appraisers, mortgage lenders, and the federal government through a misunderstanding of the effect on property values by racial minorities (Cervero and Duncan 2004).

Dubin (1992) and Egert and Mihaljek (2007) defined neighbourhood in a broader term which is a generalised definition of a neighbourhood, as a bounded area wherein certain land use activities are attracted and retained by sets of linkages. Ideally, these activities are compatible, but if they are not, there is still a neighbourhood. Unquestionably, a neighbourhood's economic and social strength is enhanced if its activities are compatible. This relationship may be called its linkages (Fong and Milena (1999). "Linkages" are the "glue" that hold a neighbourhood together. Linkages may be thought of as external economies and centripetal forces. It is the periodic interaction between people or establishments that draw and hold them together (Cheshire, 2007). In a residential neighbourhood, linkages may exist between the home, shopping, schools, recreational parks, health



care centers, social and religious centers, and place of employment (Denton and Douglas, 1991).

Usually, it is not difficult to delineate a neighbourhood, because of natural or artificial barriers that enclose it or because of physical attributes or development practices that characterised the area (Diamond, 1980). In most planned communities, neighbourhoods come into existence as a result of deliberate design by developers who, with the aid d restrictions, control the character, growth, and expansion of neighbourhoods (Charles, 2000 and Do, Wilbur and Short, 1994). Mere size, of course, does not determine a neighbourhood. However, the larger the sizes, the better the protection from infiltration by inharmonious land use influences or detrimental property uses. At the same time land use activities near the center of a large neighbourhood or district sometimes are remote from desired supporting services (Cheshire and Stephen, 1998 and Chahal, 2000).

4. Neighbourhood Characteristics

Quang, Robert and James (1994) noted that in judging the quality of a residential neighbourhood, the following physical, population, and economic factors warrant analysis:

Table 1: Neighbourhood Characteristics. (Cheshire and Stephen, 1998)

Physical Features	Population Characteristics	Economic Influences	Influence of Physical, Population and Economic Characteristics on Residential Property Value
Components and Elements that form part of a Builoding Structure	Types of residents- as to income, religion and education	Extent (percentage) of development	Positively and negatively influence residential property value
Nature of terrain	Living habits and care of homes	Percentage of homes owner occupied	Positively and negatively influence residential property value
Nature and load-bearing capacity of soil, Features of natural beauty	Attitude toward law and government	Trends in the cost of land in a given metropolis	Positively and negatively influence residential property value
Drainage facilities, both natural and fabricated	Homogeneity of cultural and civic interest	Professional and occupational means of earning a livelihood and income stability	Positively and negatively influence residential property value
Street pattern and street improvements, including essential public utilities	Age grouping and size of families	Taxation and assessment levels, and tax burdens	Positively and negatively influence residential property value
Type of architecture and quality of housing	Ethnic, native and cultural background	Zoning, restrictions, subdivision regulations, building codes, planning restrictions, plot size and deed restrictions	Positively and negatively influence residential property value
Nature, frequency, and cost of public transportation facilities	Single household or multiple household residents	Investment quality of area for , and institutional mortgage loan financing	Positively and negatively influence residential property value
Proximity to schools, stores, and recreational facilities	Occupational distribution of the residents	Price range and rental value of neighbourhood homes	Positively and negatively influence property value
Freedom from environmental hazard, crime and waste disposal	Gender, class and stratification of the household	Sources of financing residential property developmentby the residents	Positively and negatively influence property value



5. Social Forces Influencing Neighbourhood Values

Paul and Stephen (1998) lamented that people create value; hence the compatibility and congeniality of people in an area are important to sustain and enhance neighbourhood desirability and property values. In a good-quality neighbourhood there will be compatibility and a sense of personal security among residents as well as maintained properties (Myles, Garnett and Wendy, 2000). Inspecting the neighbourhood and interviewing its residents will give additional value clues to the living habits of residents and their care of property. These external evidences give the neighbourhood a character of its own. Well-kept lawns, attractive landscaping, neat and well-maintained buildings, and clean, quiet thoroughfares all are important ingredients for stable property values (Munneke and Carlos, 1999; and Morenoff and Sampson, 1997). Martin (1998) observed that attitude toward government is another essential social trait that enters into a quality rating. Ownership and possession of property are legally backed and sanctioned. Respect for law and judiciary opinions minimises vandalisation and the violation of constitutional rights to the quiet enjoyment of life, liberty, and property (Apgar and Kain, 1972)... Law-abiding citizens, too, will refrain from the illegal and illicit use of premises- use that undermines the moral character of the area (Do, Wilbur and Short, 1994). A breakdown in moral fiber, respect for law, and law enforcement itself destroys neighbourhood value more swiftly than do the physical forces of wear, tear, decay, and the actions of the elements (Thorsnes, 2000). Peter and Carolyn (2002) argued that another social characteristic lending support to neighbourhood stability and value is the relative homogeneity of cultural interests. Generally, this homogeneity is evidenced by friendly relations among neighbours, membership in the area's civic organisations, organised neighbourhood social and cultural events, the extent of residential participation in social clubs, and the sharing of recreational facilities by residents of all ages (Petras and Greenbaum, 2006). This social aspect of neighbourhood population is, of course, closely linked to the homogeneity of occupational and professional economic interest (Robert and Elizabeth, 2003).

6. An Overview of Neighbourhood Facilities

Skogan (1986) stated that public facilities and services are institutional responses to basic human needs, such as protection, health, education, safety, and recreation. Certain types of public facilities and services have been determined to be essential to a community, and are provided by the public sector. Contending on the same issue, Quigley (1985) argued that facilities that go a long way to make a community or neighbourhood a livable environment include the following: water, drainage, waste disposal, storm water drainage, waste water, schools, parks, open space, recreational areas, fire protection, police, public utilities etc (Social Exclusion Unit, 2001).

Sampson, Raudenbush and Earls (1997) highlighted that public utilities, such as fire stations and utility subdivisions shall be located, designed and oriented in a manner which is harmonious with adjoining residential development and reduce impacts associated with noise, night time illumination and odors (South and Crowder, 1997). With the exception of existing high voltage transmission line, all new electrical and communication facilities shall be installed underground; however, pad-mounted transformers and electrical substations are permitted. This policy shall not apply to 5-acre parcels or larger (Steines, 977). All these would enhance residential property value in a given metropolitan area.

South and Crowder (1998) observed that other public facilities are provided by a private sector as a requirement of development in a city. Public facilities and services required for new development are based upon population generated by the new development, and include park land and facilities, police services, fire services, school facilities and libraries (Thomas and Jeffrey, 2002). However, there are circumstances where by the provision, availability and maintenance of such facilities could not be ascertained. Intangible location attributes negatively influence the provision of such facilities in a metropolis. Other public services and facilities are desired to address the needs of specific populations or strong public demand, such as senior centers, childcare centers and golf courses (Thorsnes, 2000).

White, Robert and Shilian (1994) established that public facilities contribute to the quality of life for both individuals and groups in the community. They provide convenient and efficient services, a sense of identity, and assist in defining the city's visual character and increase land and landed property value. The public facilities and services element define the city's standards and guidelines for certain public facilities and services (Van Ham and Clark 2009). Development of public facilities and providing services is guided by the goals, objectives and policies of the Public Facilities Element. The element's overall goal is to provide a full range of necessary public facilities and services that are convenient to users, economical, and reflect the needs of citizens.

Li and Brown (1980) lamented that the goals are achieved by implementing objectives, together with the related policies, emphasising the following components: Community facilities and utilities are integral community services that enhance public health, safety and welfare. Community facilities include schools, libraries, cemeteries, healthcare facilities, childcare facilities, public safety services, parks, and other governmental facilities (Zhou and Kockelman, 2005). Utility systems include telecommunication services, wireless networks, sanitary sewerage, water supply, solid waste and disposal systems, storm water management, lake management services, and gas and electric services (Logan, 2001).). Adequate roads, sewage disposal,



water supply, fire and police protection, parks, schools and other public facilities and services are necessary to protect the public health, safety and welfare of the residents.

Public planning for facilities and services can ensure that they are provided as the neighbourhood grows and can reduce public costs by encouraging maximum possible use of existing facilities (Krivo and Peterson, 1996). Hayes and Taylor (1996) recommended that public facilities and services should be provided at levels necessary to support the growth and development planned for residential, commercial, industrial and rural areas. The facilities and services needed to support this growth and development are: streets, sewer and water and recreational services (Howley, 2009 and Irwin, 2002).

The costs of adequate facilities and services should be kept as low as possible, cost-effective relative to the benefits received and distributed equitably. Extension of services and construction of facilities to support planned growth should prevent substantially reduced service levels and be timed to prevent problems before they require expensive remedial action, while avoiding the costs of premature excess capacity in facilities and services consistent with the plan concept, existing built-up areas have priority for public spending over rural areas. In general, according to So, Irwin and Bockstael (2004) public spending for facilities and services should be as follows:

- a) To maintain or upgrade existing facilities and services where necessary to serve existing development at applicable service level standards.
- b) To upgrade facilities and services within existing service areas where possible to support planned growth at higher service levels.
- c) To serve new development at appropriate service level standards where necessary

Adequacy of existing and proposed public facilities and services must be considered when land use plans are prepared, when regulations are adopted and when individual land development proposals are reviewed (Gray and Joelson, 1979).

Violent Crime and Property Values in Nigeria

In a research conducted by Bello (2011), she concluded that occupants of properties in the neighbourhoods studied perceived crime (especially burglary, robbery and vandalism) to be very high especially in Oke. The results of her multiple regression analysis revealed a negative impact of crime on property values. This eventually means that as crime increases rental values of property decreases as it could be seen in table 5.1 and 5.2 below.

Table 5.1: Perception of Crime by Occupants in Oke-aro, (Bello, 2011)

- mary area - rear persons as a second of a second mark (= rear, = rear)							
Type of Crime Commited	Very Low	Low	High	Very High	Mean Score		
Burglary	4	9	28	48	3.24		
Robbery	6	11	26	46	3.03		
Trespass	28	22	19	20	2.35		
Assassination	26	31	23	9	2.17		
Vandalism	10	19	30	30	2.90		

Source: Bello (2011)

Table 5.2: Perception of Crime by Occupants in Alaba-Layout,

Type of Crime Commited	Very Low	Low	High	Very High	Mean Score
Burglary	11	16	28	30	2.90
Robbery	15	14	26	30	2.72
Trespass	21	24	21	19	2.45
Assassination	26	28	21	10	2.18
Vandalism	14	13	27	31	2.88

Source: Bello (2011)

Bello (2011) used weighted mean score for the occupants in respect of crime as shown in Tables 5.1 and 5.2. The results of her analysis revealed that mean score value for burglary (3.24) and robbery (3.03) in Oke – aro are approximately high compared to that of Alaba - layout (burglary (2.90); robbery (2.70)).

She therefore concluded that the implication of this may be because Oke –aro is classified as slum area and the inhabitants live in poverty and are engaged in diverse crime (Omole, 1995). Hence the occupants in Okearo perceive crime to be very high. The findings of this research were restricted to only one intangible attribute of location, that is, crime. It did not include other variables of intangible aspects of location like violence, ethnic background, cultural identity, native inclination, safety, religious inclination, indiginity, security of life and property as other indicators of property value.



7. Research Methodology

7.1 Data Collection Instruments

A combination of self-administered questionnaires and in-depth personal interviews were considered most appropriate as data collection instrument for this research due to the advantages derivable from both approaches. The questionnaires ensured that questions posed to the respondents were uniformly phrased, thus permitting objective comparison of results while interviews gave the respondents opportunity to express views more expansively than would be possible with a closed-ended questionnaire. Moreover, the interviews permitted explanation of issues in the questionnaire by the researcher in areas where some respondents may not be fully knowledgeable. The intention was to frame questions in the form of a questionnaire combined with personal interviews to clarify information where required by the respondents.

7.2 Sampling Technique and Procedure

The procedure for choosing the sample units from a population is known as sampling. While the population of study may be finite or infinite, the sample is necessarily finite and there are various techniques of selecting units that make up the sample, which have been categorised into probability and non-probability techniques. In respect of this research, stratified random sampling probability technique was used.

Correct sampling procedures require very strict adherence to certain logical principles. The problem then is how to obtain a sample which is representatively relevant to the research. Several sampling techniques are available; however each one is suitable for a particular type of survey and purpose of research. In this research, the stratified random sampling technique was employed in collecting and gathering data for the research. Figure 5.7 illustrates the steps in stratified random sampling employed in the research.

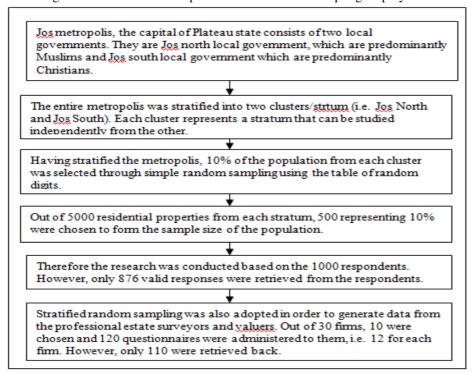


Figure 1: The Steps in Stratified Random Sampling, (Field Survey, 2011)

Jos metropolis, the capital of Plateau state consists of two local governments. They are Jos north local government, which are predominantly Muslims and Jos south local government which are predominantly Christians. The entire metropolis was stratified into two clusters (that is, Jos North and Jos South). Each cluster represents a stratum that can be studied independently from other. Having stratified the metropolis, 10% of the population from each cluster was selected randomly using the table of random digits. In other words, out of 5000 residential properties from each stratum, 500 representing 10% were chosen to form the sampe size of the population. Therefore the research was conducted based on the 1000 respondents. However, only 876 valid responses were retrieved from the respondents.

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, 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 imperative because of local



variations in the metropolis. Stratified random sampling was also employed in order to generate data from both Muslims and Christians residential neighbourhoods as it could be seen in table 5.7 and 5.8 below.

Table 2: Data from Sampled Residential Properties from Muslim Neighbourhoods, (Field Survey, 2011)

Building		Number of		Distance of				
	Rent	Bedrooms	Buildings	Property to			Rate	Bathrooms
	(Nigerian		(Year)	Violent				
	Naira)			Areas (%)				
I	Y	X1	X2	X3	X4	X5	X6	X7
1	85000	2	20	20	3	2	2	1
2 3	138000	3	21	40	2	3	2	2
3	157000	3	25	60	4	1	1	2
4	210000	1	30	80	1	1	2	1
5	230000	2	41	100	1	2	3	1
6	65000	3	15	20	2	4	2	2
7	130000	3	32	40	4	1	1	2
8	110000	1	35	60	1	1	3	1
9	178000	2	27	80	1	2	3	1
10	125000	1	22	100	1	1	2	1
11	80000	3	24	20	2	3	3	2
12	100000	4	28	40	4	2	2	3
13	195000	5	35	60	5	1	2	3
14	165000	3	40	80	2	2	1	2
15	120000	1	34	100	1	1	2	1
16	70000	3	20	20	2	3	3	2
17	90000	3	28	40	2	3	1	1
18	16500	4	21	60	5	1	1	3
19	14000	2	30	80	2	2	2	1
20	200000	3	25	100	2	3	1	2
21	180000	3	23	80	2	2	3	2
22	100000	2	20	100	2	4	2	1
23	30000	1	35	20	1	2	2	1
24	160000	3	26	60	2	2	3	2
25	130000	3	25	40	2	3	3	2

As it could be seen in table 2 above, the data from sampled residential properties from Muslim neighbourhoods were generated. The data obtained from twenty-five (25) randomly selected properties were used to test the effect of intangible location attributes on residential property values in the study area.



Table 3: Data from Sampled Residential Properties from Christian Neighbourhoods, (Field Survey, 2011)

Building	Current	Number	Age of	Distance	Types of	Number	Occupancy	Number of
	Rent	of	Buildings	of	Building	of	Rate	Bathrooms
	(Nigerian	Bedrooms	(Year)	Property		Floors		
	Naira)			to				
				Violent				
				Areas				
				(%)				
I	Y	X1	X2	X3	X4	X5	X6	X7
1	95000	2	21	20	3	2	2	1
3	130000	3	20	40	2	3	2	1
	165000	3	21	60	4	1	1	2
4	200000	1	26	80	1	1	2	1
5	210000	2	31	100	1	2	3	1
6	75000	3	19	20	2	4	2	2
7	157000	3	22	40	4	1	1	1
8	1000	1	23	60	1	1	3	1
9	180000	2	19	80	1	2	3	1
10	120000	1	28	100	1	1	2	0
11	76000	3	26	20	2	3	3	2
12	120000	4	21	40	4	2	2	2
13	185000	5	31	60	5	1	2	3
14	168000	3	41	80	2	2	1	2
15	115000	1	29	100	1	1	2	0
16	80000	3	24	20	2	3	3	1
17	110000	3	28	40	2	3	1	1
18	175000	4	21	60	5	1	1	2
19	135000	2	31	80	2	2	2	1
20	210000	3	27	100	2	3	1	2
21	175000	3	18	80	2	2	3	2
22	110000	2	22	100	2	4	2	1
23	40000	1	17	20	1	2	2	1
24	175000	3	22	60	2	2	3	2
25	150000	3	28	40	2	3	3	2

Table 3 above illustrates the data from sampled residential properties from Christian neighbourhoods. The data were employed in order to see whether intangible location attributes greatly influence the values of residential properties in the study area. The data were also obtained from twenty-five (25) randomly selected residential properties in the Christian neighbourhoods.

8. Research Findings

As discussed earlier in chapter two, residential property is viewed as a bundle of services or a basket of goods which includes the physical structure itself, the ancillary facilities and services within and around it, as well as the general environmental qualities and amenities that surround the building. In other words, housing is a broad term. It extends beyond a structure with a roof over ones head. It encompasses all the surrounding community or neighbourhood facilities, utilities and service which go a long way in making a community a liveable environment. Having this in mind, there is a need to study the condition of the neighbourhood facilities in the study area, that is, their provision, availability and how they are maintained.

8.1 Condition of Neighbourhood Facilities before the Conflicts

Based on the available literature and as a result of the interview conducted in the study area, it is suffice to say that, neighbourhood facilities in the study area were in a good condition before the violence took place. They were evenly distributed across the metropolis. Table 4 and figure 2 below throw more light on the condition of the neighbourhood facilities prior to the culmination of the sectarian violence and civil unrest in the study area.



Table 4: Condition of Neighbourhood Facilities before the Conflicts, (Field Survey, 2011)

Condition before Crisis	Number of Respondents	Percentage (%)
Very Good	523	59.7
Good	281	32.1
Fair	59	6.7
Poor	13	1.5
Total	876	100

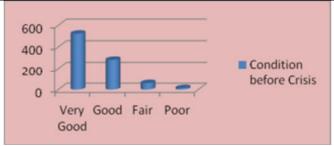


Figure 2: Condition of Neighbourhood Facilities before the Conflicts, (Field Survey, 2011)

From table 4 and figure 2 above it can be concluded that the neighbourhood facilities in Jos metropolis were in a good state of repair before the culmination of the conflicts. For instance, about 60% of the respondents disclosed that the neighbourhood facilities were in a very good state. While about 33% of the respondents pointed put that the neighbourhood facilities were in a good condition. Only about 8% of the respondents reveal that the neighbourhood facilities were either fair or poor prior to the conflicts. Based on the above findings, it is sufficient to conclude that fracas in the study area leads to the destruction, demolition and degeneration of the neighbourhood facilities. It can also be deduced that lack of provision and maintenance of these facilities was as a result of this frequent violence that devastate the city. Fear of destroying it again makes the government to abandon many of these neighbourhood facilities.

8.2 Condition of Neighbourhood Facilities after the Conflicts

Looking at the condition of neighbourhood facilities in the study area after the conflict would give an insight on whether the intangible location attributes has positive or negative effect on the existing neighbourhood facilities, utilities and services. Jos the capital of Plateau state is blessed with many infrastructural facilities, utilities and services which include electricity, telephone, tap water, tarred roads, drainage facilities, waste dump sites, parking space, schools, hospitals, play ground, recreational facilities, health care centers, shopping malls, markets, worshipping places, police stations, open space, super markets, retail shops, wholesale shops, warehouses and so on. Table 5 and figure 3 below depict the condition of the neighbourhood facilities, utilities and services in the study area after the fracas.

Table 5: Condition of Neighbourhood Facilities after the Conflicts, (Field Survey, 2011)

Condition after Crisis	Number of Respondents	Percentage (%)
Very Good	19	2.2
Good	31	3.5
Fair	261	29.8
Poor	565	64.5
Total	876	100

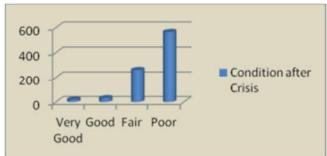


Figure 3: Condition of Neighbourhood Facilities after the Conflicts, (Field Survey, 2011) From table 5 and figure 3 above, it can be seen that majority of the respondents in the study area disclosed that



after the chaos took place; most of the neighbourhood facilities were devastated, destroyed and demolished. For example, about 65% of the respondents confess that the neighbourhood facilities, utilities and services are in a very poor condition after the conflicts. Only about 30% of the respondents state that the facilities, utilities and services are in a fair condition. Only very few (about 6%) respondents administered with the questionnaires say that the neighbourhood facilities, utilities and services are in a good or very good condition after the fracas.

8.3 Reasons for the Poor Condition of the Existing Neighbourhood Facilities in the Study

A number of reasons were postulated by the respondents for the poor condition of the neighbourhood facilities, utilities and services. These ranges from lack of maintenance, frequent violent ethno-religious conflicts to careless attitude of the government. Table 6 and figure 4 below shade more light on this issue.

Table 6: Reasons for the Poor Condition of the Existing Neighbourhood Facilities in the Study, (Field Survey, 2011)

Reasons for the poor Condition	Number of Respondents	Percentage (%)
Intangible location attributes	589	67.2
Lack of Maintenance	163	18.6
Careless Attitude of the Government	48	5.5
Corruption on the Part of the Government	76	8.7
Total	876	100

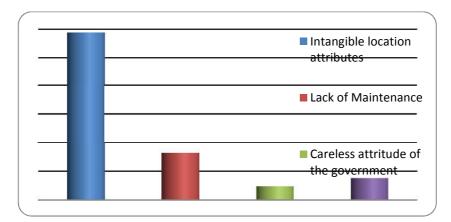


Figure 4: Reasons for the Poor Condition of the Existing Neighbourhood Facilities in the Study, (Field Survey, 2011)

From table 6 and figure 4 above, one can easily notice that the neighbourhood facilities, utilities and services are still in poor condition because of the fear of destroying and demolition it again. According to the staff of ministry of works and housing in Jos, the government is not having the courage to renovate the facilities because they had been destroyed in the past several times after repairing them For instance, about 68% of the respondents stated that intangible location attributes are the main reason why the government could not renovate most of the existing neighbourhood facilities, utilities and services. Only about 32% of the respondents disclosed that other reason rather than the above discourage the government from renovating them. It can be deduced from the above findings that neighbourhood facilities, utilities and services in the areas that enjoy relative security are still in their good condition. It can also be concluded that, intangible location affects the provision, availability and maintenance of the existing neighbourhood facilities, utilities and services in the study area.

It has been established through the finding of this research that majority of the respondents interviewed could not easily purchased residential accommodation in the areas that are safe. This is because of the high price charged by the owners. Apart from this, other problems encountered by the respondents when buying residential accommodation include the activities of middle men (estate agents), ward head fraud people and son. According to one estate surveyor and valuer interviewed, all these problems were as a result of increase in residential property value in safe zones to the detriment of the violent areas.

8.4 Provision, Availability and Maintenance of Neighbourhood Facilities, Utilities and Services in the Study Area

As stated earlier in chapter one, neighbourhood facilities are part and parcel of a building structure. Residential accommodation is incomplete without the availability, maintenance and provision of these ancillary utilities, facilities and services. Table 7 below illustrates the availability, provision and maintenance of these facilities in



the study area.

Table 7: Provision, Availability and Maintenance of Neighbourhood Facilities, Utilities and Services in the Study Area, (Field Survey, 2011)

Study Area, (Field Survey, 2011)								
S/N	Facilities, Utilities and Services	Provision, Availability and Maintenance of such Facilities in Violent Free	Provision, Availability and Maintenance of such facilities in Violent Prone	Total Number of Respondents from Each Violent Free and Violent	Percentage (%) from Violent Free Areas	Percentage (%) from Violent Prone Areas		
1	Fire Protection	Areas Adequate,	Areas Inadequate,	Prone Areas				
1	The Trotection	598(278)	613(263)	876	68.3(31.7)	70.0(30.0)		
2	Primary, Secondary and Tertiary Institutions	Adequate, 571(305)	Inadequate, 497(379)	876	65.2(34.8)	56.7(43.3)		
3	Recreational Services	Adequate, 589(287)	Inadequate, 688(188)	876	67.2(32.8)	78.5(21.5)		
4	Heal Care Facilites	Adequate, 599(277)	Inadequate, 527(349)	876	68.4(31.6)	60.2(39.8)		
5	Police Services	Adequate, 634(242)	Inadequate, 598(278)	876	72.4(27.6)	68.3(31.7)		
6	Libraries	Adequate, 511(365)	Inadequate, 547(329)	876	58.3(41.7)	62.4(37.6)		
7	Senior Centres	Adequate, 587(289))	Inadequate, 479(397)	876	67.0(33.0)			
8	Children Centres	Adequate,	Inadequate,			54.7(45.3)		
9	Golf Courses	618(258) Adequate, 487(389)	571(305) Inadequate,	876 876	70.5(29.5)	65.2(34.8)		
10	Cemeteries	Adequate, 619(257)	789(87) Inadequate, 189(687)	876	70.7(29.3)	90.1(9.9)		
11	Healthcare Facilities	Adequate, 569(307)	Inadequate, 637(239)	876	65.0(35.0)	72.7(27.3)		
12	Childcare Facilites	Adequate, 639(237)	Inadequate, 563(313)	876	72.9(27.1)	64.3(35.7)		
13	Public Safety Services	Adequate, 579(297)	Inadequate, 558(318)	876	66.1(33.9)	63.7(36.3)		
14	Telecommunication Services	Adequate, 582(294)	Inadequate, 639(237)	876	66.4(33.6)	72.9(27.1)		
15	Wireless Network	Adequate, 499(377)	Inadequate, 731(145)	876	57.0(43.0)	83.4(16.6)		
16	Sanitary Sewerage	Adequate, 591(285)	Inadequate, 659(217)	876	67.5(32.5)	75.2(24.8)		
17	Water Supply	Adequate, 573(303)	Inadequate, 762(114)	876	65.4(34.6)	87.0(13.0)		
18	Solid Waste and Disposal Systems	Adequate, 603(273)	Inadequate, 729(147)	876	68.8(31.2)	83.2(16.8)		
19	Storm Water Management	Adequate, 598(278)	Inadequate, 719(157)	876	68.3(31.7)	82.1(17.9)		
20	Gas and Electric Services	Adequate, 511(365)	Inadequate, 713(163)	876	58.3(41.7)	81.4(18.6)		
21	Adequate Roads	Adequate, 591(285)	Inadequate, 699(177)	876	67.5(32.5)	79.8(20.2)		
22	Sewage Disposal	Adequate, 583(293)	Inadequate, 647(229)	876	66.6(33.4)	73.9(26.1)		
23	Open Space	Adequate, 614(262)	Inadequate, 697(179)	876	70.1(29.9)	79.6(20.4)		
24	Wetlands and other Forms of Open Space	Adequate, 549(327)	Inadequate, 739(137)	876	62.7(37.3)	84.4(15.6)		
25	Active and passive parks	Adequate, 419(457)	Inadequate, 792(84)	876	47.8(52.2)	90.4(9.6)		
26	Natural Areas	Adequate, 629(247)	Inadequate, 684(192)	876	71.8(28.2)	78.1(21.9)		
27	Neighbourhood Park	Adequate, 578(298)	Inadequate, 757(119)	876	66.0(34.0)	86.4(13.6)		



	1					,
28	Mini Park	Adequate, 537(339)	Inadequate, 679(197)	876	61.3(38.7)	77.5(22.5)
29	Community Park	Adequate, 581(295)	Inadequate, 719(157)	876	66.3(33.7)	82.1(17.9)
30	Drainage and Street Lighting	Adequate, 575(301)	Inadequate, 647(229)	876	65.6(34.4)	73.9(26.1)
31	Garbage and Recycling Services	Adequate, 478(398)	Inadequate, 782(94)	876	54.6(45.4)	89.3(10.7)
32	Transmission Lines and Cell Phone Towers	Adequate, 791(85)	Inadequate, 178(698)	876	90.3(9.7)	20.3(79.7)
33	Commercial Businesses and Services	Adequate, 625(251)	Inadequate, 112(764)	876	71.3(28.7)	12.8(87.2)
34	Swimming Pool	Adequate, 493(383)	Inadequate, 847(29)	876	56.3(43.7)	96.7(3.3)
35	Worshipping Places, Synagogues & other Associated activities	Adequate, 569(307)	Inadequate, 279(597)	876	65.0(35.0)	31.8(68.2)
36	Ambulance Services	Adequate, 559(317)	Inadequate, 653(223)	876	63.8(36.2)	74.5(25.5)
37	Day Care Centres, Nursery and Kindergarten	Adequate, 589(287)	Inadequate, 588(288)	876	67.2(32.8)	67.1(32.9)
38	Government Offices and Facilities	Adequate, 671(205)	Inadequate, 782(94)	876	76.6(23.4)	89.3(10.7)
39	Museums and Art Galleries	Adequate, 539(337)	Inadequate, 657(219)	876	61.5(38.5)	75.0(25.0)
40	Post Offices	Adequate, 623(253)	Inadequate, 247(629)	876	71.1(28.9)	28.2(71.8)
41	Convenient Food Stores	Adequate, 481(395)	Inadequate, 399(477)	876	54.9(45.1)	45.5(54.5)
42	Dental Offices and Laboratories	Adequate, 378(498)	Inadequate, 769(107)	876	43.2(56.8)	87.8(12.2)
43	Dry Cleaning and Laundry Facilities	Adequate, 472(404)	Inadequate, 735(141)	876	53.9(46.1)	83.9(16.1)
44	Business, Professional and Personal Services Use	Adequate, 489(387)	Inadequate, 173(703)	876	55.8(44.2)	19.7(80.3)
45	Retail Trade Activities	Adequate, 499(377)	Inadequate, 276(600)	876	57.0(43.0)	31.5(68.5)
46	Public and Private Parks	Adequate, 572(304)	Inadequate, 773(103)	876	65.3(34.7)	88.2(11.8)
47	Children Play Ground	Adequate, 637(239)	Inadequate, 587(289)	876	72.7(27.3)	67.0(33.0)
48	Land for Athletic Fields	Adequate, 169(707)	Inadequate, 128(748)	876	19.3(80.7)	14.6(85.4)
49	High Voltage Electrical Transmission Lines	Adequate, 693(183)	Inadequate, 294(582)	876	79.1(20.9)	33.6(66.4)
50	Water and Natural Gas Trunk Pipe Lines	Adequate, 489(387)	Inadequate, 748(128)	876	55.8(44.2)	85.3(14.6)
51	Wastewater Treatmentt Systems	Adequate, 597(279)	Inadequate, 739(137)	876	68.2(31.8)	84.4(15.6)
52	Access road	Adequate, 509(367)	Inadequate, 583(293)	876	58.1(41.9)	66.6(33.4)
53	Burglary Proof	Adequate, 617(259)	Inadequate, 179(697)	876	70.4(29.6)	20.4(79.6)
54	Refuse Disposal Facilities	Adequate, 638(238)	Inadequate, 691(185)	876	72.8(27.2)	78.9(21.1)
55	Toilet Facilities	Adequate, 657(219)	Inadequate, 388(488)	876	75.0(25.0)	44.3(55.7)
56	Kitchen Facilities	Adequate, 539(337)	Inadequate, 510(366)	876	61.5(38.5)	58.2(41.8)



57	Drainage Channel	Adequate,	Inadequate,			
		615(261)	659(217)	876	70.2(29.8)	75.2(24.8)
58	Fenced Round	Adequate, 562(314)	Inadequate, 635(241)	876	64.2(35.8)	72.5(27.5)
59	Watching Day	Adequate,	Inadequate,			
	Service	417(459)	757(119)	876	47.6(52.4)	86.4(13.6)
60	Watching Night	Adequate,	Inadequate,			
	Service	492(384)	127(749)	876	56.2(43.8)	14.5(85.5)
61	Wall Fence	Adequate,	Inadequate,			
		486(390)	139(737)	876	55.5(44.5)	15.9(84.1)
62	Public and Private	Adequate,	Inadequate,			
	Wells	566(310)	311(565)	876	64.6(35.4)	35.5(64.5)

Based on the findings above, it could be seen that the neighbourhoods that are classified as violent prone areas lack a reasonable number of neighbourhood facilities utilities and service. According to the respondents, the main reason for the inadequate, insufficient, shortage and poor condition of these basic infrastructural faciliries, utilities and services are due to the volatile nature of their neighbourhoods when it comes to ethno-religious crises. On the other hand, there is adequate and sufficient provision and availability of neighbourhood facilities in violent free areas.

The respondents disclosed that these facilities, utilities and service are in their good condition because of absence of violence in their locality. This finding is not compatible with the findings of Mallo and Anigbogu (2009) where they concluded that the lack of availability and provision of these facilities is due to low socioeconomic backround of the respondents and also due to careless attritude of the government. It can be documented based on the above findings that intangible attributes of location play a vital role in determining the provision, availability and maintenance of community facilities, utilities and services in the study area.

9. Conclusion

Based on the findings, it is sufficient to conclude that sectarian violence and civil unrest in the study area lead to the destruction, demolition and degeneration of the neighbourhood facilities. It can also be deduced that lack of provision and maintenance of these facilities was as a result of this frequent violence that devastate the city. Fear of destroying residential properties and neighbourhood facilities again makes the government reluctant to repair them which eventually abandon many of these neighbourhood facilities. It can be deduced from the findings that neighbourhood facilities, utilities and services in the areas that enjoy relative security are still in their good condition. It can also be concluded that, incessant sectarian violence and civil unrest affect the provision, availability and maintenance of the existing neighbourhood facilities, utilities and services in the study area.

This study has validated and in some cases invalidated a number of theories and postulations in orderly process of thought. This research investigates the impact of ethno-religious violences as factor that influence the provision, availability and maintenance of neighbourhood facilities in Jos metropolis, Nigeria. In addition, it was established that there was relationship between the independent variables (ethno-religious violence) and dependent variable neighbourhood facilities) because of its importance as residential property value indicator.

References

- Adelman, R. M. (2004). Neighbourhood Opportunities, Race and Class: The Black Middle Class and Residential Segregation. *Journal of City and Community*, 4(3), pp. 43-63.
- Aliyu, A. A. (2012). *Impact of Intangible Location Attributes on Residential Property Value in Nigeria*, Unpublished PhD Dissertation, Department of Real Estate, University Tun Hussein Onn Malaysia.
- Anas, A. (2006). A Model of Residential Change and Neighbourhood Tipping. *Journal of Urban Economics*, 7(5), pp. 358-370.
- Apgar, Jr. W. C. & Kain, J. F. (1972). Neighborhood Attributes and the Residential Price: Geography of Urban Areas. *Proceedings of the Winter Meetings of the Econometric Society, Toronto, Ontario.* Canada: Ontario Printing Press. pp. 28-30.
- Bruch, E. E. & Mare, R. D. (2005). *Neighbourhood Choice and Neighbourhood Change*, Los Angeles, CA. California Centre for Population Research University of California.
- Cervero, R. & Duncan, M. (2004). Neighbourhood Composition and Residential Land Prices: Does Exclusion Raise or Lower Values? *Urban Studies*, 41(2), pp. 299-315.
- Chahal, K. (2000). Ethnic Diversity, Neighbourhoods and Housing, London: JRF Foundation.
- Charles, C. Z. (2000). Neighbourhood Racial Composition Preferences: Evidence from a Multiethnic Metropolis. *Soc. Probl.* 47(3), pp. 379-407.
- Cheshire, P. C. & Stephen, C. S. (1998). Estimating the Demand for Housing, Land, and Neighbourhood Characteristics. *Oxford Bulletin of Economics and Statistics*, 60(3), pp. 357-368.
- Cheshire, P. (2007). Segregated Neighbourhoods and Mixed Communities: A Critical Analysis. London: Joseph



- Rowntree Foundation and LSE.
- Denton, N. & Douglas, M. (1991). Patterns of Neighbourhood Transition in a Multi-Ethnic World: U.S. Metropolitan Areas, 1970-1980. *Demography* 28(1), pp. 41-63.
- Diamond, D. (1980). The Relationship Between Amenities and Urban Land Prices. *Land Economics*, 56(1), pp. 21-32.
- Do, A. Q., Wilbur, R. & Short, J. (1994). An Empirical Examination of the Externalities of Neighbourhood Churches on Housing Values, *Journal of Real Estate and Urban Economics*, 9(1), pp. 127–136.
- Dubin, R. A. (1992). Spatial Autocorrelation and Neighbourhood Quality. *Regional Science and Urban Economics*, 22(3), pp. 433-452.
- Egert, B. & Mihaljek, D. (2007). *Determinants of House Prices in Central and Eastern Europe*, BIS Working Papers No. 236, Basel.
- Fong, E. & Milena, G. (1999). Differences in Neighbourhood Qualities among Racial and Ethnic Groups in Canada. *Sociological Inquiry*, 69(1), pp. 575-598.
- Gray, C. M., & Joelson, M. (1979). Neighbourhood Crime and the Demand for Central City Housing. In Gray, C. M. (ed). *The Costs of Crime*, Beverly Hills: CA: Sage.
- Hayes, K. J. & Taylor, L. L. (1996). Neighbourhood School Characteristics: What Signals Quality to Homebuyers? *Economic Review, Federal Reserve Bank of Dallas, Fourth Quarter*, *3*(5), pp. 2-9.
- Howley, P. (2009). New Residential Neighbourhoods within the Inner City: An Examination of Neighbouring. *Irish Geography*, 42(1), pp. 327-356.
- Irwin, E. G. (2002). The Effects of Open Space on Residential Property Values. *Land Economics*, 78(4), pp. 465-480
- Irwin, E. & Bockstael, N. (2004). Land Use Externalities, Open Space Preservation, and Urban Sprawl. *Regional Science and Urban Economics*, 34(1), pp. 705-725.
- Krivo, L. J. & Peterson, R. D. (1996). Extremely Disadvantaged Neighbourhoods and Urban Crime. *Social Forces*, 75(1), pp. 619–648.
- Li, M. M. & Brown, H. J. (1980). Micro-Neighbourhood Externalities and Hedonic Housing Prices. *Land Economics* 56(9), pp. 125-141.
- Logan, J. R. (2001). Ethnic Diversity Grows, Neighborhood Integration Lags Behind. Rep. Lewis Mumford Cent. Comp. *Urban Reg. Res.* 2(6), 171-179.
- Lanre, O, (2006). Ethno-Religious Conflicts and the Travails of National Integration in Nigeria's Fourth Republic. http://www.dawodu.com/adeyemi3.htm (accessed 26 January 2009).
- Magazine Blunt Truth (2010). Ethnic and Religious Cleansing on the Plateau. *Cover Story* in 2(1), Jos Nigeria: Shekinah Prophetic Rhema Publications.
- Martin, D. (1998). Automatic Neighbourhood Identification from Population Surfaces. *Environment and Urban Systems* 22(1), pp. 107-120.
- Morenoff, J. D. & Sampson, R. J. (1997). Violent Crime and the Spatial Dynamics of Neighbourhood Transition: Chicago, 1970–1990. *Soc. Forces* 76(9), pp. 31–64.
- Muhammad, Z. (2007). Who Owns Jos North LGC? The Historical Background of the Hausa-Fulani in Jos North. Jos: University Press.
- Muhammad, S. A. (2005). An Examination of the Concepts of "Place of Origin" and "Indigene" in Nigerian Law. University of Jos, Unpublished LL.M. Thesis.
- Munneke, H. & Carlos, S. V. (1999). A Housing Price Model with Endogenous Externality Location: A Study of Mobile Home Parks, *Journal of Real Estate Finance and Economics*, 19(1), pp. 113-132.
- Myles, J., Garnett, P. & Wendy, P. (2000). Neighbourhood Inequality in Canadian Cities. *Statistics Canada, Analytical Studies Branch* Research Paper Series, No. 160, Ottawa.
- New York: Human Rights Watch (2006). They do not Own this Place: Government Discrimination Against "Non-Indigenes" in Nigeria. New York: Human Rights Watch.
- New York: Human Rights Watch (2005). Revenge in the Name of Religion: The Cycle of Violence in Plateau and Kano States. New York: Human Rights Watch.
- Nnoli, O. (Ed.) (2003). Communal Conflict and Population Displacement in Nigeria, PACREP Book Series No
 1. Pan African Centre for Research on Peace and Conflict Resolution, Enugu, Nigeria: Enugu University Press.
- Oladoyin, A. M. (2001). State and Ethno-Communal Violence in Nigeria: The Case of Ife-Modakeke. *Africa Development*, 27(1), pp. 195-223.
- Ostien, P. (2009). Jonah Jang and the Jasawa: Ethno-Religious Conflict in Jos, Nigeria. *Sharia Debates in Africa*, University of Bayreuth. [http://www.sharia-- in-- africa.net/media/publications/]
- Paul, C. & Stephen, S. (1998). Estimating Demand for Housing, Land, and Neighbourhood Characteristics. *Oxford Bulletin of Economics and Statistics*, 60(1), pp. 357-382.
- Peter, C. & Carolyn, D. (2002). The Effect of Group Homes on Neighbourhood Property Values. Land



- Economics, 75(1), pp. 620-626.
- Petras, T. L & Greenbaum, D. (2006). Crime and Residential Choice: A Neighbourhood Level Analysis of the Impact of Crime on Housing Prices. *Journal of Quantitative Criminology*, 22(40), pp. 299 317.
- Quang, A. D., Robert, W. W. & James, L. S. (1994). An Empirical Examination of the Externalities of Neighbourhood Churches on Housing Values. *Journal of Real Estate Finance and Economics*, 9(1), pp. 127-136.
- Quigley, J. M. (1985). Consumer Choice of Dwelling, Neighbourhood and Public Services. *Regional Science and Urban Economics*, 15(1), pp. 153-159.
- Robert, D. M. & Elizabeth, E. B. (2003). Spatial Inequality, Neighborhood Mobility, and Residential Segregation. Los Angeles: University of California.
- Sampson, R. J., Raudenbush, S. W. & Earls, F. (1997). Neighbourhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science*, 277(5328), pp. 918-924.
- Skogan, W. G. (1986). Fear of Crime and Neighbourhood Change. Crime and Justice, 8(1), pp. 203 299.
- Social Exclusion Unit (2001). A New Commitment to Neighbourhood Renewal. London: Cabinet Office.
- South, S. J. & Crowder, K. D. (1998). Leaving the Neighbourhood: Residential Mobility between Black, White, and Integrated Neighbourhoods. American Sociological Review, *63(5)*, pp. 17-26.
- South, S. J. & Crowder, K. D. (1997). Escaping Distressed Neighbourhoods: Individual, Community, and Metropolitan Influences. *American Journal of Sociology*, 102(29), pp. 1040-1084.
- Steines, D. M. (1977). Alternative Models of Neighbourhood Change. Social Forces 55(4), pp. 14-23.
- Swanström, N. L. A. & Weissmann, M. S. (2005). Conflict, Conflict Prevention and Conflict Management and Beyond: A Conceptual Exploration. Washington, D.C: Johns Hopkins University-SAIS.
- Thomas, A. D. & Jeffrey, E. Z. (2002). The Impact of School Characteristics on House Prices: Chicago 1987–1991. *Journal of Urban Economics*, 52(5), pp. 1-25.
- Thorsnes, P. (2000). Internalising Neighbourhood Externalities: The Effect of Subdivision Size and Zoning on Residential Lot Prices. *Journal of Urban Economics*, 48(3), pp. 397-418.
- Toure, K. T. (2006). Ethno-Religious Conflicts in Northern Nigerial. On the website of the Nordiska Afrikainstitutet, http://www.nai.uu.se/publications/news/archives/042ibrahimkazah/
- Van Ham, M. & Clark, W. A. V. (2009). Neighbourhood Mobility in Context: Household Moves and Changing Neighbourhoods in the Netherlands, *Environment and Planning*. 41(9), pp.1442-1459.
- Weicher, J. C. & Robert, H. Z. (1973). The Externalities of Neighbourhood Parks: An Empirical Investigation. *Land Economics*, 49(1), pp. 99-105.
- White, M. J., Robert, F. D. & Shilian, W. (1994). Ethnic Neighbours and Ethnic Myths: An Examination of Residential Segregation in 1910. pp. 175-208. In Susan, C. W. (Eds.) *After Ellis Island*. NY: Russell Sage.
- Zhou, B. & Kockelman, K. (2005). *Neighbourhood Impacts on Land Use Change: A Multinomial Logit Model of Spatial Relationships*. Presented at the 52nd Annual North American Meeting of the Regional Science Association International, Las Vegas, Nevada.

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