

Implications of environment security-related factors as determinant of residential mobility in Jimeta-Yola, Nigeria

Suleiman G. Purokayo¹

Universiti Utara, Sintok
Department of Economics and Finance,
OYA Graduate School of Business,
Kedah 06010, Malaysia.
Email: suleimangambiyo@ymail.com
Phone: +60102412396

Yusuf Gabdo²

Department o Economics,
Modibbo Adama University of Technology,
Yola, Adamawa – Nigeria
Phone: +2347068180600.
Email: ysgabdo@yahoo.com

Abstract

Households have different motives for changes in their residence. Factors range from United Nation defined environmental refugee, which could be argued to have myriad definitions. When an environment is said to be no longer secured in a homelands where an individual lives before the event occurs due to several reasons – natural or manmade, can said to result into an environmental refugee. Growing residential mobility issues in Nigeria has resulted from both demographic dynamics and land use issues. The objective of this study is to highlight the growing trends in residential mobility which in recent times has evolved into new housing dimensions and decisions by households. Residential mobility in Nigeria has in recent times resulted in residential segregation due to ethno-religious conditions of individuals. In parts of Northern Nigeria, trends have forced households to settle in locations that are less sectarian location due to rising tensions in different wards or towns. In Yola, a study of this trend is based on a survey of six wards to examine the impacts of residential mobility based on income and environmental factors. Results suggest that decisions to move depended on perceived security threats and ethnic-religious factors. The study recommends that residential decisions along ethnic platforms should encourage cultural dynamics that could be a tool for innovations in a particular location; secondly, religious harmony should be seen as a vehicle for peaceful coexistence.

Key words: environmental refugees, residential mobility, ethno-religious crisis, security.

1.0 Introduction

Residential mobility is a highly planned process with impacts on both the households' decisions and behaviours based on myriad factors, because decisions to relocate to an environment comes with it both pleasant and unpleasant 'basket' of factors. Residential move may be defined as the adjustment of the housing situation to suit, as much as possible, the housing need of an occupant through a change in place of residence (Rossi, 1955). This definition may have been overtaken by some innovations in housing theories, but it retains an essential component of why people relocate to other places.

1. PhD Student

2. Lecturer/PhD student

Residential movements are the basic process whereby households seem to improve the quality of their housing, and the type of neighbourhoods that they inhabit, and are intimately connected with changes as a whole. Moves are transitions in people's lives, and neighborhood transitions are the consequences of aggregated individual mobility transitions. There are also many new studies on finding an alternative dwelling if the most preferred house is unavailable – which may be related to incomes of the household, location, and factors related to demographic effects. More recent scholars have noted that population-environment relationships are much more complex and are influenced by many more human activities than just procreation. (Entwisle and Stern, (2005).

In the past two decades, factors that affects residential mobility in Nigeria has gone beyond issues related to income or generally economic factors that may inhibit the choice of any residence in a particular location in Nigerian towns. This is because of a steady growth of sectarian locations since the time of the religious conflicts in Kano (northwest geopolitical zone), the Maitasine sect riots were the worst political and religious uprising between 1980 and 1983 (Ukiwo, 2003), Yola, Maiduguri, (both in the Northeast), Jos (North central) and other town in Nigeria, has shaped specific choices for residential mobility even in the same city – some suburbs are crisis prone and other lesser when compared. (Clarke, 1988). Most recent bug in Nigeria is the crisis related to a religious sect, the Boko Haram, probably an upshots from the Al-Qaeda in the Islamic Maghreb, this sect have inflicted sufferings to mostly the Northern regions of Nigeria, (Salifu, 2012).

Current trends of this crisis has dictated residential mobility from specific areas of a town or wards that are 'religiously conducive' to either the same religious interests or complete relocation to other towns. For instance states in the North Central geopolitical zone of Nigeria, Jos, Kaduna are a case in point. In Kaduna for instance, Muslims or Christians don't seldom live in the same environment, except in government housing schemes. In Jos also the scenario is the same. Over the years these trends have dictated the choice of residential location. There are however other factors which seems to be secondary – income, the heterogeneous nature of the Nigerian society – defining cultural clicks and special locations, places curved out for rich Nigerians or government reserve areas.

In most Nigerian towns there cumulative effects of mobility factors on a neighbourhood setting, emphasizing the complexities involved in the residential mobility process and its repercussions on some wards or settlements. This has effects on the environment quality. The circumstances or conditions that surround one; especially the location (s) in which people live or work. The central point when assessing the quality of environment is its effects on human beings and other organisms - it thus has myriad characteristics, which includes incorporating elements of security, and the definition of security to include as not only 'absence of war.'¹ In a typical environment of conflict, peace is a valuable commodity treasured in a common Boko Haram location.

Residential mobility may initiate changes in households' social and demographic characteristics or in response to transformation in factors that are related to the location of residence (Dieleman 2001, Clark and Onaka 1983). This however is related to the so called environmental refugee status. Changes in environment that brings about such transition. Literature on environmental refugee abounds due to several factors, and this brings about the increasingly urgent political debate around environment and questions about the flight of people from a location; research has sought to discover whether or not environmental change or stressors can cause, or force human migration (Morrissey, 2012), due to increasing volatility of the environment in Nigeria, and particularly in the northern parts of Nigeria.

The objectives of this study is to examine the physical characteristics of residential wards in Jimeta - Yola (achieved by 6 sampled wards), the nature and pattern of the environment and to investigate the quality that determines residential mobility in the wards due to increasing ethno-religious crisis. This will be achieved by a case study approach method - a research method for observing a specific populace or

individual case with a goal of investigating a focused hypothesis or make a broad observation of behaviour or experience (Yin, 1994).

1.1 Geological Formation and indigenous population of Yola

Adamawa State (Yola) in general is a picturesque mountain land traversed by big river valley of Benue, Gongola and Yerdseram. The valleys of Cameroon, Mandara and Adamawa

1. Kofi Annan. "Towards a Culture of Peace." <http://www.unesco.org/opi2/lettres/TextAnglais/AnnanE.html>

mountains form part of this undulating landscape. Like most areas in the Northern Nigeria, the soil of Adamawa State is derived from basement complex, while few other places are on sandstones shales and alluvium. Yola consists of alluvium soil (Tini and Naphtali, 2012)

There are eleven wards in Jimeta these wards are Jambutu, Doubeli, Nassarawo, Luggere, Karewa, Yelwa, Limawa, Alkalawa, Gwadabawa, Rumde and Malamre wards.

2. Literature Review.

The growing concerns for housing has been the main concerns for United Nation Centre for Human Settlement (Habitat) and the World Bank in 1990, whose principal objectives is to monitor the performance of the housing sector in various countries; where some countries have been beneficiaries from the institution's funding. Apart from the issues related to funding by various institutions towards achieving these objectives, for instance in Nigeria funds provided by various mortgage institutions and housing schemes, the concerns seems to be shifted from issues related to land and housing, where in most cases have been ineffective due to various bottlenecks and corruption, (Ibimilua, 2012), (Doherty, 2012) –with a housing need according to the World Bank, Nigeria's housing deficit stands at over 12 million.(Doherty, 2012).The growing concerns in Nigerian housing needs is recently on the quality of the environment. Environmental concerns have overshadowed other demographic changes in Nigeria – from the growth of ethno-religious crisis, arm robbery, abductions in particular regions has placed new concepts in residential mobility.

Since the mid-20th century, various researchers have approached the question 'why do people move?' differently (Simmons 1968, Lu, 1999). Yet, two distinctive strands are explicit in the literature of residential mobility: (i) the sociological approach of dissatisfaction and stress; and (ii) the economic perspective of equilibrium and utility maximization (Clark, Deurloo and Dieleman 2006). The Sociological question arises from that fact that an individual is not been satisfied or distressed by missing relationships and locational factors which may be new to an individual. Economic factors are related to economic opportunities in the new location – nearness to market factors, small trading opportunities (which important for most Nigerian families for extra income to the family), connectivity or access to a mode of transport which has effect on the family income – for instance families staying in a location more than 70-100 klms from Abuja and each bread winners goes to the city for office work.

2.1 Conceptual issues - residential mobility.

Residential mobility is tied to many factors ranging from a factor that affects environmental quality to locational stress. These may be generally grouped into two broad categories, the expected satisfaction from the alternative location from information about the desired location, and dissatisfaction from the current location. These may be tied to: (i) the sociological approach of dissatisfaction and stress; and (ii) the economic perspective of equilibrium and utility maximization (Clark, Deurloo and Dieleman 2006). Sociological issues relates to dynamics of relationships and interactions over time that bring about aspects locational segregation which tends to result into groupings in the housing location either by religious or

ethnic or racial considerations, which is a growing trend in Nigeria, (Ukiwo, U. 2003 and Aliyu Ahmad Aliyu, 2012). In Jos (North Central Nigeria), Kaduna (North Central) Maiduguri and Potiskum (North Eastern Nigeria) the situation has deep implications on the once prosperous towns. The economic perspectives are related to residential mobility that is due to market locations, cost-benefit consideration and attractions of a thriving economic activity or employment. There are other benefits to the family that has small business outlets (tied to market). The locational stress according to Clark and Cadwallader, 1973, locational stress in which a system is unable to make adjustments in response to disturbances in its environment; accordingly, locational stress can be defined as: “the stress experienced by an individual household at a particular location.” Generally speaking the Nigerian economy is stress ridden. Perceived threat will lead a person to feel stress. This includes physical threats, social threats, financial threat, and so on. Entrepreneurial skills seems to be truncated by many things – insufficient or lack of power that inhibits trade, alerts in many wards of religious extremists, difficulties in connecting appropriate locations and so on are some of the causes of stress in Nigeria. Stress occur from various sources – deaths, crime, family change, arguments, physical changes, new locations are some causes of stress. Of recent, even conflicts around some of the border towns of Nigeria have been sources of stress because individuals would relocate to escape such environments, and neighboring states are affected due such conflicts that affected Economic Community of West African States (ECOWAS) region.

2.2 Environmental refugee

Environmental refugee is been credited to Essam El-Hinnawi's United Nations Environment Programme (UNEP) paper (1985) to refer to existence of migration forced by environmental crises. Maitasine crisis in 1985, current Boko Haram crisis in Nigeria has forced much relocation from some wards, cities and interstate transfers. Most people from South-South, South West and other people whose indigeneship is not from the North of Nigeria have been environmental refugees. Environmental refugees in Nigeria occurrence is in various forms – the Niger-Delta (Nigeria's bloc) crisis has suffered this phenomenon due to soil degradation and lack of proper use of oil wealth from the region and backward state of the region despite high oil revenues from the region. Arm conflicts in the region for over past 10 years (during Obasanjo and Yardua-Jonathan leaderships years), conflicts has forced refugees (Ibeanu, 2000, Orogun, 2010, Omotola, 2007). Environmental refugees is also prevalent in Nigeria, especially for Sahelian regions of the North east and North West where low agricultural yield occurs due to low rainfall – connected to the fast desert encroachments, Geisler, (2000) amongst other studies. Religious crisis and the rise of fundamentalism and ethnic factors resulted in crisis in Nigeria - Salifu, U. (2012), Ukiwo, U. (2003), (Bulus, 2005), (Dung, 1999), (Akinwale, 2011), Kumolu, (2011), Erhagbe, (2012), this rising dynamics in the Nigerian society has resulted to most of the movements of people from some locations in towns, wards and even interstate residential mobility. Thus security and safe residential environment has been determined by afore mention factors - the current Boko Haram security threats, has been the greatest security threat now in the Northern Nigeria.

2.3 Residential segregation

There are different forms of segregation that have existed according to numerous literatures especially on racial segregation which also affected housing decisions among African Americans (Zhang, 2011) and many other studies exist. There are other factors that have impacts on residential environment - incomes levels are forms of residential segregation - market forces that affect the supply and demand for housing, and intergroup dynamics that substantially affect residence decisions. Wilson, F., & Hammer, R. (2001), are of the view that, comprehensive residential package—including neighbourhood ethnic homogeneity, housing quality, commuting, other neighbourhood characteristics, and perceptions of

neighbourhood problems and services—with a variety of factors that affect the residential distribution of urban populations. This view is typical of scenarios in Nigerian towns. For instance, Aliyu et al, (2012) accounts of residential segregation in Jos – a city in North Central geopolitical zone of Nigeria, as a result of the ongoing religious crisis in the city, it has a process of residential mobility and movements to locations that accommodates people of same ethnic background and faith. This phenomenon is more prevalent in the northern state of Nigeria. In Borno state (the birth place of Boko Haram sect), there has been mass movements of people from specific locations in the city to a relatively safe wards (less sectarian). Dung-Gwom and Rikko (2009), opined that the key factor that brought about residential mobility and segregation in Jos town are amongst others political control of Jos, indigeneship issues (son of the soil syndrome), economic domination, and high concentrations of Christian faith in the state, has had impacts on movements or reallocation of some individuals in some parts of the Jos town. Zhang, (2011)

Residential segregation on the basis of race and socioeconomic status is both a highly visible phenomenon in the most of Africa which spells the over widening gap between the rich and poor, which also affects the types of housing (ghettos) that exist in some parts of the cities. Where segregation is extreme, as in the case of urban ghettos, there is a sense that the combination of poverty, adverse neighbourhood spillovers, and isolation from mainstream society, Bayer, P., McMillan, R., & Reuben, K. (2004), these scenario creates the idea of the type of housing in this location, who suffer from forced reallocation for a certain development purpose. This group is always vulnerable from every crisis that happens in Nigeria, and as a matter of fact an individual in this environment is seldom the springboard for igniting such crisis. Religious crisis starts most times from the ghettos not from the high income housing locations – evidence from Maiduguri (northeast), Kano and other towns all started from the ghettos. Thus residential segregation happens on different platforms. In Nigeria is also the case, but the current phenomenon is ethno-religious factors.

3.0 Methodology and Data

A case study method is used in the analysis of this paper – a qualitative approach Methodology study approach. Data was sourced from selected wards in the study area.

The data for this research work are obtained through the Questionnaire survey.

Three hundred and ten (310) questionnaires were administered for the survey. Six wards are randomly selected as indicated in the table below, using the simple random sampling technique. The systematic sampling is a method where a starting point is randomly selected on the list and then every (nth) house on the list is selected is questionnaire administration.

Table 1: Wards in Jumeta - Yola.

SN	Residential District	Selected Wards	Questionnaire
1.	Gwadabawa	Dougirei	40
2.	Yelwa		
3.	Limawa		
4.	Rumde	Rumde	63
5.	Ajiya	Old GRA	40
6.	Alkalawa		
7.	Luggere	Lower Luggere	63
8.	Karewa	Karewa GRA	40
9.	Doubeli	Bauchi street	64
10.	Nassarawo		
11.	Jambutu		
	TOTAL	6	310

Authors' survey 2010

Though random sample were applied, some criteria was noted in the selected wards.

- (i). These wards were the enclave and or locations where causalities were high in Jimeta and had experience high refugees during previous crisis (Omede, 2012).
- (ii). Locations are where militants and sympathizers were located (Doubeli ward and Lower Luggare).

3.01 Qualitative Method of analysis

Qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. There are two key approaches that guide case study methodology; one proposed by Robert Stake (1995) and second by Robert Yin (2003, 2006). Both seek to ensure that the topic of interest is well explored, and that the essence of the phenomenon is revealed. Residential Mobility (environmental refugees) occurring from one location of a particular town to another and sometimes to other towns and cities as results of religious or ethnic conflicts in some part of Nigerian, has been a phenomenon that has been worrisome. This is because some individuals have lost life savings, houses, and property burnt or destroyed, sometimes occurring two to three times in a year. Jos (North Central), Maiduguri, Potiskum, Bauchi (North-eastern states), Kano (North Western) and some towns mostly in Northern Nigeria has suffered from this phenomenon of religious conflicts. There have been resolutions to prevent occurrences through both public and communal initiatives, but this has not been successful. (Marchal, 2012)

Questionnaires surveys were distributed on environmental characteristics, incomes levels of households and the choice to move or not, even though this surveys may not have shown why people (based on voluntary decisions) relocate, but it gives a picture of the environment that had placed pre-desire to move because of these environments (inadequate waste disposals, perceived threats), but their incomes and perceived threats would have created an effective desire to relocate. Thus opportunities opened to these households are limited based on cost of house rent or decisions to build. Characteristics of the population in terms of gender composition were not considered in this study.

3.02 Data

3.02.1 Environmental factors.

Question 7 – How long have you lived in this ward *.

TABLE 2. Environmental factors in the Wards.

WARDS	1 – 10		11 – 20		21 – 30		31 – above		TOTAL	
	<i>Freq.</i>	<i>%</i>								
Ajiya	19	47.5	14	35	6	15	1	2.5	40	100
Gwadabawa	17	42.5	11	27.5	5	12.5	7	17.5	40	100
Karewa	11	27.5	9	22.5	19	47.5	1	2.5	40	100
Luggare	14	22.2	24	38.0	15	23.8	10	15.8	63	100
Rumde	10	15.8	18	28.5	23	36.5	12	19.0	63	100
Doubeli	10	15.6	25	39.0	26	40.6	3	4.6	64	100
TOTAL	81	26.1	101	32.5	94	30.3	34	10.9	310	100

Source: Field survey 2010

*(a ward is the smallest political unit in Nigeria).

In the category on table 1, Luggare, Rumde and Doubeli (with the highest frequencies) are places where low income people and cost of rent is relatively low, but the ethno-religious composition is high.

Question 8 Distribution of household income by neighborhoods.

TABLE 3: Distribution of household income by neighbourhoods

WARDS	Less than N50,000		50,001 – 300,000		300,001 – 450,000		450,001 – 600,000		Above 600,000		TOTAL	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Ajiya	29	72.5	11	27.5	-	-	-	-	-	-	40	100
Gwadabawa	15	37.5	14	35.0	5	12.5	4	10.0	2	5.0	40	100
Karewa	19	47.5	18	45.0	3	7.5	-	-	-	-	40	100
Luggere	55	87.3	8	12.6	-	-	-	-	-	-	63	100
Rumde	62	98.4	1	1.5							63	100
Doubeli	59	92.1	5	7.8	-	-	-	-	-	-	64	100
TOTAL	239	77.0	57	18.3	8	2.5	4	1.2	2	0.6	310	100

Source: Field survey 2010

Majority of the respondents in all six wards fall under low income category

Question 9: Most serious environmental problems in ward.

TABLE 4: Environmental problems in ward.

WARDS	SOLID WASTE		LIQUID WASTE		TOTAL	
	Freq.	%	Freq.	%	Freq.	%
Ajiya	34	85	6	15	40	100
Gwadabawa	40	100	-	-	40	100
Karewa	40	100	-	-	40	100
Luggere	54	85.7	9	14.2	63	100
Rumde	14	22.2	49	77.7	63	100
Doubeli	8	12.5	56	87.5	64	100
TOTAL	190	61.2	120	38.7	310	100

Source: Field survey, 2010

Three wards, Luggere, Rumde and Doubeli wards have serious environmental problems ranging from heaps of waste deposited by household and floods during rainy season, Population density is also very high, these are features of these wards.

Question 10 – If you have a choice, will you move from this environment?

TABLE 5: Decision to relocate to another environment/ward

WARDS	MOVE		STAY		TOTAL	
	Freq.	%	Freq.	%	Freq.	%
Ajiya	12	30	28	70	40	100
Gwadabawa	6	15	34	85	40	100
Karewa	1	2.5	39	97.5	40	100
Luggere	53	84.1	10	15.8	63	100
Rumde	45	71.4	18	28.5	63	100
Doubeli	45	70.3	19	29.6	64	100
TOTAL	162	52.2	148	47.7	310	100

Source: Field survey 2010

Table 5, the decisions to move or stay is shown in the table in the 'stay' or 'move' columns. It has important implications on the category of households in terms of incomes or affordability of a habitat.

4.0 Results and Discussions

From tables 1 – 5, it shows the characteristics of the environments of the wards in terms of incomes, environmental characteristics (floods, refuse disposal - where malaria is endemic due to health of the environment), and table 5 shows despite of the features of each ward:

(i). Ajiya (70%), Gwadabawa (85%), Karewa (97.5%) expresses the desire not to relocate. (ii). The case of Luggare (84.1%), Rumde (71.4%) and Doubeli (70.3%) expresses desire for residential mobility.

In the first category (i), the reasons not to move may be due to:

(a). High percentage of families have the same ethnic background and are one of the dominant tribes in Yola (fulbe, Verre, Bata, Hausa).

(b). In Gwadabawa ward, most of the housing is built by government (government built) residential estates and are for the low level incomes category, the proximity of offices for civil servants (government employed workers) doesn't involve higher transport cost – easily accessible.

(c). Water supply and proximity to the Benue River is an important source for extra income - dry season farming, fishing activities.

In (ii) however, the desire to move in these wards may be due to:

(a). From the past years where religious crisis had impacted on households, Doubeli, Luggare wards were strong enclaves where religious leaders (Musa Makani, the leader of Maitsine leader) was located, thus perceived threats still exist in the minds of individuals (Adulkarim, 2011, S. U. Fwatshak, 2010), because of the occurrence such scenarios over the years.

(b). These wards experience floods due to their proximity to River Benue, with tributaries new residential areas.

(c). Drainages in these wards are poorly constructed or non-existing.

(d). Refuse disposal facilities are not available which encourages 'refuse hills' build-ups of refuse, this breed mosquito bites, an high malaria prevalence in the area, Jennifer et al, (2012), Akogun, (2005), MSF, (2012).

Residential mobility in Yola has undergone many phases from the inception of the Adamawa State of Nigeria as one of the nine states created on the 27th of August, 1991. Historical records show that some of the disciples of Usman Dan Fodio like Modibbo Adama and Lamido Kabi² founded some of the settlements that now make up the State. The evolution of the state had brought with it many several aspects of land administration and residential areas in the state, including the wards already mentioned above.

5.0 Conclusion

There are myriad factors that have impacts on residential mobility, but in recent times, ethno-religious factors have played an important role. This is due largely to favorable locations for fundamentalist to live and propagates their practices, including harassments, strictness as in the case of the recent Malian country case.

The wards each has its environmental features – settlements carved around ethnicity and religious affiliation (mostly with the dominant tribes, Fulbe, Verre, Lakka, Bata, etc) – other tribes that settled in the area includes Hausas from far north of Nigeria and immigrant from Cameroon and Chad (and speak another form of fulfulde (fulani) language, especially from Cameroon, formerly in Nigeria) who are traders and engaged in agro-allied activities. Settlements encouraged residential mobility along these lines (tribal and religious lines).

The growth of these settlements had introduced various aspects, including religious activities and ethnic festivals. Residential areas are grouped according to income (affordability of cost of rent), and traditional Fulani settlements, government reserved areas. Low income locations encouraged the influx and high densities of available housing, and attract immigrants to such locations. The 'bursting of the bubble' is the

beginning of discernment among settlers and religious prominence, also the opportunity by fundamentalists to introduced divisions among the people. Environmental refugee results because some individuals are forcibly made to move from the environments due to a dominant believe, son of the soil arguments, and other factors. These are the 'starters' of residential mobility in Yola, mainly caused by the growing insecurity in Yola.

The conclusion of this paper could be an important public policy matter – from table 5, where important policy issues could be derived. The decisions to move or stay have multifaceted policy implications. First, settlements on ethnic platforms should encourage cultural dynamics that could be a tool for innovations in a particular location, secondly, religious harmony should be seen as a vehicle for peaceful coexistence amongst the people and thirdly, refugees situations create burden on government, affects all segments of the society and relationships, thus the worldwide Christian-muslin dialogue, (see McGarvey, 2009), Ludwig, (2008), Takim, (2004)), amongst others.

Finally, the paper is limited along surveyors and or architectural point of views, where soil types for housing projects and quality could results to residential mobility. Major limitations are data and nature of surveys based on the internal environment, and using the year 2010 views of respondents. The arguments however is that religious crisis still persists in different wards – from Maitasine in 1980s to Boko Haram crisis to date in Nigeria, especially in the Northeast region, where Yola is located (see map of the Nigeria with the region shown in yellow in the appendix page.).

2. <http://www.onlinenigeria.com>

References

- Adulkarim, H. T. (2011). Conflict prevention and post conflict peace building in Nigera:Gender perspective. *College of Education Minna, Niger, Nigeria*.
- Akinwale, A. A. (2011). Integrating the traditional and the modern conflict management strategies in Nigeria. *African Journal on Conflict Resolution*, 10(3).
- Akogun, O. B., & John, K. K. (2005). Illness-related practices for the management of childhood malaria among the Bwatiye people of north-eastern Nigeria. *Malaria journal*, 4(1), 13.
- Aliyu Ahmad Aliyu, R. B. K., David Martin, Mohd Lizam Mohd Diah, & Ali, H. M. (2012). Implication of Intangible Location Attributes on Residential Segregation in Jos, Nigeria. *Journal of Sustainable Development*, Vol. 5, No. 11; 2012(11), 1-17.
- Alkali, M. N., Monguno, A. K., & Mustafa, B. S. (2012). Overview of Islamic Actors In North-eastern Nigeria.
- Baxter,P and Jack.S, (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report* 13(4), 544-559.
- Bimilua, A. (2012). The Nigerian National Housing Policy in Perspective: A Critical Analysis. *Journal of Social Development in Africa*, 26(2), 165-188.
- Bulus, I. (2005). Education, Peace and Stability in Nigeria's Budding Democracy.
- Clark, William A.V., Marinus C. Deurloo, and Frans M. Dieleman. "Residential Mobility and Neighbourhood Outcomes." *Housing Studies*, 2006: 323-342.
- Clarke, P. (1988). Islamic reform in contemporary Nigeria: Methods and aims. *Third World Quarterly*, 10(2), 519-538.
- Dung, J. Y. (1999) URBAN VIOLENCE AND EMERGING LAND AND HOUSING MARKETS IN JOS, NIGERIA.

- Dung-Gwom, J. Y., & Rikko, L. S. (2009). *Urban Violence and Emerging Land and Housing Markets in Jos, Nigeria*. Paper Presented for the ISA Housing Conference, Glasgow, 1-4 September 2009, .pp. 291-311.
- Entwisle, B., & Stern, P. C. (2005). *Population, land use, and environment: Research directions*: National Academy Press.
- Erhagbe, E. (2012). ETHNICITY IN THE MATRIX OF PEACE AND RECONCILIATION IN NIGERIA. *European Scientific Journal*, 8(16).
- Estiri, Hossein, (2012, Why and How families move: Residential Mobility and Housing Consumption behaviour consumption behaviours, restructured (September 21, 2012). Available at SSRN: <http://ssrn.com/abstract=2192742> or <http://dx.doi.org/10.2139/ssrn.2192742>
- Geisler, C., & Letsoalo, E. (2000). Rethinking land reform in South Africa: an alternative approach to environmental justice.
- Ibeanu, O. (2000). Oiling the friction: environmental conflict management in the Niger Delta, Nigeria. *Environmental change and security project report*, 6, 19-32.
- Jennifer A. Tyndall, P., Shehu Jamiu Olumoh, Lawrence Oborkhale, Emmanuel Apari, MD, Ishaya Nyitiba MD & John Audu Bwala. (2012). The Dilemma of Falciparum Malaria and Telecommunications in North-eastern Nigeria. *AMERICAN JOURNAL OF SCIENTIFIC AND INDUSTRIAL RESEARCH*, American University of Nigeria, Lamido Zubairu Way(2012), 1-9.
- Kumolu, C. (2011, JUNE 17, 2011). How Maitasine raised curtains for militancy, *Vanguard, Nigeria*, pp. 1-10. Retrieved from <http://www.vanguardngr.com>
- Lu, M. (1999). Do people move when they say they will? Inconsistencies in individual migration behavior. *Population & Environment*, 20(5), 467-488.
- Marchal, R. (2012). Boko Haram and the resilience of militant Islam in northern Nigeria. *Norwegian Peace building Resource building Centre, NOREF REPORT*.
- McGarvey, K. (2009). *Muslim and Christian women in dialogue: the case of Northern Nigeria* (Vol. 42): Peter Lang Pub Incorporated.
- Morrissey, J. (2012). Rethinking the 'debate on environmental refugees': from 'maximalists and minimalists' to 'proponents and critics'. *Journal of Political Ecology*, 19, 37.
- MSF. (2012). MSF Responds to Floods in Nigeria. *Doctors Without Borders/Médecins Sans Frontières (MSF)*, 2012(1-2).
- Omede, A. J. (2012). The Nigerian Military: Analysing Fifty Years of Defence and Internal Military and Fifty Years of Internal Security Operations in Nigeria (1960-2010). *Kamla-Raj 2012, J Soc Sci*, 293-303 (2012), 33(3).
- Omotola, J. S. (2007). From the OMPADEC to the NDDC: an assessment of state responses to environmental insecurity in the Niger Delta, Nigeria. *Africa Today*, 54(1), 73-89.
- Orogun, P. S. (2010). Resource control, revenue allocation and petroleum politics in Nigeria: the Niger Delta question. *GeoJournal*, 75(5), 459-507.
- ROSSI, P.H. (1955). *Why Families Move: A study in the Social Psychology of Urban Residential Mobility*, The Free Press, Glencoe, Illinois.
- SCHOLTEN, H.J. (1984). *Planning*
- S. U. Fwatshak. (2010). Radical Islam in the Lake Chad Basin, 1805-2009: From the Jihad to Boko Haram *Egodi Uchendu papers, University of Nsukka, Nigeria*.
- Salifu, U. (2012). Understanding the Dynamics of Islamic Radicalism in Nigeria is key to Bringing Boko Haram to Book. *Institute for security studies*.
- Simmons, James W. "Changing Residence in the City: A Review of Intraurban Mobility." *Geographical Review*, 1968: 622-651.
- Simon, Herbert A. "Decision Making: rational, Nonrational, and irrational." *Educational Administration Quarterly*, 1993: 392-411.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Tini, N. H., Peter, Y., & Naphtali, G. (2012). THE USE OF REMOTE SENSING AND GIS TECHNIQUE FOR APPRAISAL OF SPATIAL GROWTH IN MUBI METROPOLIS, ADAMAWA STATE, NIGERIA. *Continental Journal of Environmental Design and Management*, 1(1).

Ukiwo, U. (2003). Politics, ethno-religious conflicts and democratic consolidation in Nigeria. *The Journal of Modern African Studies* 41(01), pp 115-138.

Wilson, F., & Hammer, R. (2001). Ethnic residential segregation and its consequences. *Urban inequality: Evidence from four cities*, 272-303.

Yin, R. K. (1994) *Case Study Research - Design and Methods (2 nd Ed.)* Newbury Park: Sage Publications

Zhang, J. (2011). Tipping and Residential Segregation: A Unified Schelling Model*. *Journal of Regional Science*, 51(1), 167-193.

Appendix I

Table 6. Map of Nigeria according to Geopolitical Zones.

