OSUN GEOGRAPHICAL REVIEW

Published by the Department of Geography, Osun State University, State of Osun, Nigeria

ISSN: 2695 - 1959 Volume 2, 2019; 64 - 73



IN KANO METROPOLIS, NIGERIA

I.M. Dankani

Department of Geography, Usmanu Danfodiyo University, Sokoto Corresponding author's e-mail: imdankani@gmail.com

Abstract

This study examined land owners and land fragmentation in Kano Metropolis, Nigeria. The practice of land fragmentation or sub-division is gaining prominence particularly along the fringes of Kano Metropolis. Land owners with large parcel of land engages in informal land subdivision without involving planners and land administrators resulting in emergence of fragmented land lots which are often too small and below the approved standard. Data for the study was obtained primarily through the administration of structured questionnaire to 84 prominent land owners in the metropolis selected through a combination of purposive and snowballing sampling techniques. Major findings of the study revealed that there is high incidence of land fragmentation in the study area. Majority of the respondents (82%) fragments land below 50x50ft. The main reasons for engaging in land fragmentation according to the respondents were to maximize returns from the land and fragmented lands are more affordable and preferred by the urban poor according to 44% and 31% of the sampled respondents respectively. The study further reveals that 87% of the respondents do not involve government officials in the course of fragmenting land due to fear of losing the land or part of it as well as the huge charges that will be incurred if officials of the State Ministry of Lands and Survey are involved. The study recommends among others that Government should make it mandatory for land owners to contact or liaise with the State Ministry of Lands and Survey before fragmenting any land. This is with the view to ensure compliance with planning rules and regulations and at the same time give the area a semblance of planned neighborhood.

Keywords: Landowner, Land fragmentation, Kano Metropolis

Introduction

Land is a vital tool in agricultural production and growth of towns and cities. The emergence, growth and sustainability of any urban area relies heavily on how land is accessed, managed and controlled. Urbanization in sub-Saharan Africa is altering traditional livelihood strategies and displacing agricultural land uses in many areas (Angel *et al.*, 2005; Adeboyejo and Abolade, 2007). Olima (2003) opined that population growth rate in both urban and rural areas do not commensurate with the quantity of land supplied. The rising demand for urban land therefore tends to be met primarily by converting peri-urban agricultural land at the periphery of the existing built-up area (UN-Habitat, 2010; Toulmin,

2008). Land is needed to provide housing, infrastructure, food production and animal rearing and to absorb the ever-increasing influx of migrants into urban setting. This made land to be in high demand and a commodity desired by all and sundry. One critical issue about land whether in urban or rural setting is ownership. The ownership vested all rights to land on the owner. The right could be customary/traditional or in modern days the right vested on landowners by the Land Use Act of 1979. Right over land in Nigeria could be either statutory or customary. The statutory right of occupancy as interpreted in Section 50 of the Act is a right of occupancy granted by the Governor under the Act for a maximum holding period of 99 years mostly in urban areas. Customary right of occupancy as also

interpreted in that section of the Act is the right of a person or community lawfully using or occupying land in accordance with customary law and includes a customary right of occupancy granted by a Local Government under the Act (FGN, 1978). Population increase coupled with economic development or rise in income level resulted in increased demand for residential land by the populace. Thus, making the land owner particularly with large parcel of land a powerful actor in urban land development process with the immense opportunity of engaging in land fragmentation or subdivision. Land owners are those individuals or agencies bestowed with the right to own and use land. Land owners' decision to release land for development is the first stage in urban land conversion process (Martin, 1975). The willingness to release land for sale or development could be influenced by the encroaching built-up area or interest (pressure) from prospective buyers.

Kano metropolis, one of the fastest growing urban area in Northern Nigeria has been experiencing growth and expansion both in terms of population and land uses. For instance, in 1952, the total population in Kano metropolis was 127,000, the population increased to 1.5 million in 1991 and it is expected to reach 3,801,000 by the year 2020 based on the 2.8% annual growth rate. Similarly, Land use change in Kano metropolis like elsewhere has generally occurred at the expense of agricultural land (Sustainable Kano Project 1997) particularly on the fringes of the city. From 1966 – 2016, the residential land use has increased by 44.94% (from a mere 28.19Km² – 144.5km²) while agricultural land has declined tremendously by 32.56%. Going by this trend in growth, it is obvious that land is in high demand in Kano metropolis by both individuals and agencies of government and the fact that the demand outweighs the supply leads to the emergence of land fragmentation. Land fragmentation has been defined by Dovring (1965) as the division of land into a great number of distinct plots. Agarwal (1972) defines land fragmentation as a decrease in the average size of land holdings and a decrease in the size of the individual plots in a farm holding. Fox (2010) defines land subdivision as "the division of a parcel of land into two or more lots, plots, sites, or other divisions of land for the purpose, whether immediate or future, of sale or of building development".

For the purpose of this study, the fragmentation or subdivision referred to is the informal not the formal fragmentation. Informal land fragmentation often affects the direction and quality of urban development, it engendered spontaneous growth as well as add-on development (Agheyisi, 2018). The informal fragmentation connotes negativity which in the context of human settlements refers to nonconformity with urban planning laws and development control norms, and to some extent, land tenure regularization (Durand-Lasserve, 2006; Agheyisi, 2016). Angel et al (1993) averred that informal subdivision occurs when landowners subdivide and sell their plots in contravention of government subdivision regulations. As the motive behind their development is maximum profit, they often have no provision for public amenities and land for public uses. Furthermore, as the plots are developed, contravention of planning rules and a lack of coordination of transport access to subdivision blocks can cause traffic problem in the future (Brennan, 1993).

Major informal settlements emerging in Kano metropolis are products of fragmented land lots despite the numerous planning challenges they pose. If this trend is allowed to continue it will have an adverse effect on the development and sustainability of metropolitan Kano in the foreseeable future. There is dearth of study or literature in the study area on land fragmentation for residential purposes. Bulk of what exists focus on fragmentation of agricultural land and its effect on productivity as well as how society members get access to development land (Dankani, 1998, 2008, 2011 and 2013; Agheyisi 2016). The behaviors and actions of land owners in Kano metropolis need to be studied in order to unearth the reason(s) behind fragmentation of residential land by land owners and its implication on the environmental quality and sustainable development of metropolitan Kano.

The study seeks to provide answers to the following research questions:

- i. How do the landowners get access to large parcel of land?
- ii. What are the factors responsible for the proliferation of land fragmentation?
- iii. What are the likely implications of land subdivision on environmental quality?
- iv. What is the role of government or planning agencies in addressing this issue?

Study Area

Kano State lies between latitude 10° 31' 41.14'N and 12° 34' 10.57'N and between longitude 7° 41'26.40'E and 9° 23' 17.50'E. Kano metropolitan area lies

between latitude 11° 55' 23.93'N and 12° 3' 53.10'N and longitude 8° 27' 42.26'E and 8° 36' 41.62'E and is 1549 feet above sea level. The estimated area of Kano metropolis increased from 122.7 square kilometers in 1962 to 154.6 square kilometers in 1981, an increase of about 25% based on the average expansion rate of two square kilometers per annum (Na'Abba, 2002 see Figure 1).

For many centuries, Kano has been the largest and

most influential commercial town in the Sudan zone. The settlement is probably over one thousand years old and was first situated on the vicinity of Dala Hill, the source of iron, which the inhabitants smelted and fabricated (Urquhart, 1977). The Kano chronicle records the first king of Kano as Bagauda whose ascension was stated to be in the year 999 AD. The 19.2 square kilometer of the city walls were completed by the twelfth century.

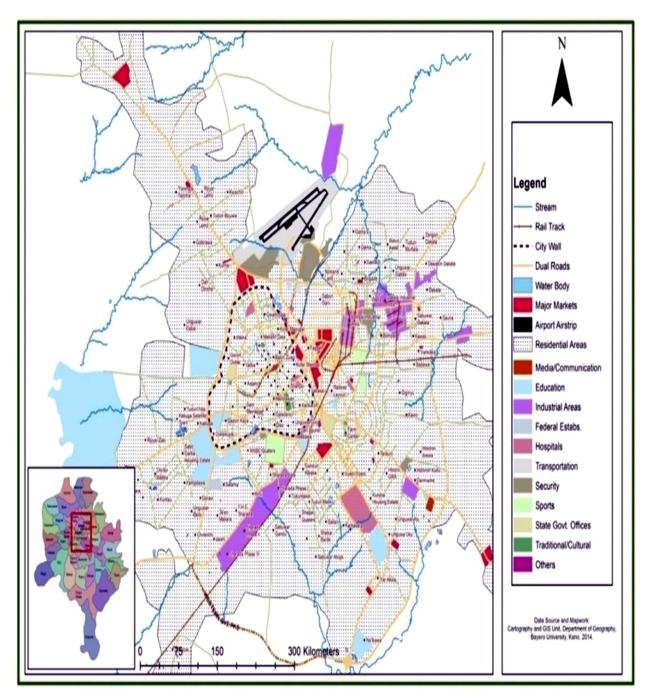


Figure 1: Kano metropolis

Source: Cartography and GIS unit, Bayero University, Kano

Morphologically, Kano has ceased to be confined to its wall. Because the original city became a unit by itself while Fagge, Nasarawa, Sabon Gari, Gwagwarwa, Tudun Wada, Tarauni, Na'ibawa, Hausawa, Gyadi-Gyadi and Kurnar Asabe all grew into distinct morphological unit. This phenomenal growth (both real and anticipated) is the influence of the preparation of the Trevallion plan in 1963 with a view to setting a statutory framework that could guide, influence and control the development of metropolitan Kano. The desired goal however could not be achieved due to lack of proper and effective implementation of the plan.

Presently, there are a lot of infilling going on as well as outward expansion into adjoining villages. Metropolitan Kano has been redefined vide Edict No. 15 of 1990. By the edict, Kano metropolitan area consists of all land within the radius of 32 km from Kurmi market. Thus, the metropolitan area includes;

- The Dala, Municipal, Nasarawa, Fagge, Tarauni, Gwale, Kumbotso and Ungogo Local Government Areas.
- ii. Parts of Dawakin Tofa, Gezawa, Kura and Rimin Gado Local Government Areas.

Materials and Methods

Data for this study were principally obtained via primary source. The instrument of primary data collection used was a structured questionnaire administered to landowners who were engaged in the act of land fragmentation from selected areas of the metropolis.. The questionnaire was divided into two key sections. The first section (A) focused on the socio-economic characteristics of the respondents while section B dwells on what motivated them to engage in land fragmentation, how they go about the process of fragmentation and the challenges they experience in the course of their activity. Similarly, supporting information was also obtained from key actors in land transfer and development processes such as land dealers and officials of the Ministry of Lands and Survey and Kano State Urban Planning and Development Agency (KNUPDA). The essence of interacting with these actors is to shed more light on the factors facilitating land fragmentation as well as the efforts or lack of it from urban managers and policy makers to address the situation considering its

negative impact on the built environment. Secondary information was also obtained from published document both print and online.

Respondents for the study were selected via the combination of purposive sampling and snowballing sampling techniques. The operation of the purposive sampling technique employed here involves the identification of major landowners who are known to the land dealers, District and ward heads as well as officials of the State Ministry of Lands and Survey, Kano State Urban Planning and Development Agency (KNUPDA) on the basis of their involvement in land fragmentation in the study area. A total of 37 names were collected from the field through this way and were compared in order to avoid duplication of names. These names served as the initial sample frame and the snowballing technique was employed on the basis of the list of

The Snowball technique entails asking the first interviewee to name other land owners known to him who could be included in the sample. The same applies to subsequent land owners. The essence of this was to ensure that no other major land owners who engages in land fragmentation was left out of the list. This list was then used as the sampling frame from which land owners were selected using purposive sampling technique. Snowball technique was also employed here, because of the fact that it is one of the best ways of reaching those land owners who usually prefer to operate without much publicity (Abrahamson, 1983). It also provides a way of introducing the researcher to other land owners by the land owners themselves. This method would surely enhance the co-operation of the sampled land owners. In all a total of 84 key land owners were selected through the methods described above.

In analysing the responses to the questionnaire, statistical tables showing frequencies and percentages were used. Tables were followed with the descriptive analysis of our findings.

Results and Discussion

Table 1 shows the socio-economic characteristics of the sampled landowners in metropolitan Kano who engaged in the act of land fragmentation for onward disposal to interested buyers.

Tables 1: Socio- economic characteristics of the respondents

	Frequency	%
Sex		
Male	81	96
Female	03	04
Main Occupation:		
Business/Trading	56	67
Civil Servants	07	08
Land Dealing	13	15
Others (specify)	08	10
Duration in the Act of Land Fragmentation		
Less than 5 years	07	08
6-10 years	26	31
11-15 years	13	16
Above 15 years	38	45

Source: Author's Fieldwork, 2018

Investigation into the sex of the respondents shows that males constitute the majority (96%) while only 4% were females. Occupationally, 67% of the respondents are into business and trading, 15% are into land dealing, 10% are into other occupations such as transportation, and manufacturing activities while civil servant accounted for 8% of the sampled respondents. An inquiry into the duration of respondents in the act of land fragmentation reveals that 45% of the respondents have been in the act for over 15 years and 31% between 6-10 years. Kano has been a renowned center of commerce for a time immemorial. Majority of the populace engages in one form of trading/business or the other. Dealing in land or act of buying and selling land in Kano is one of the most lucrative businesses particularly to those traders and businessmen who view it as a secondary occupation as well as a lucrative way of saving excess profit in landed property which often acts as a hedge against inflation (Ajayi, 1997; Mamman, 1996; Dankani, 2008). Land is a commodity in high demand by residents of Kano metropolis to build houses both for owner occupation or to provide rental accommodation to those who could not afford to build their personal houses. There exists in metropolitan Kano group of individuals who engaged solely in land dealing. Apart from linking buyers and sellers of land these categories of people do purchase large parcel of agricultural land from peasant farmers and subdivide it into small plots for residential purpose. History has eloquently shown that private land transfer or acquisition has been widely practiced in the study area and to some people it has been a source of livelihood for decades (Mortimore, 1967; Main 1988; Dankani, 2013).

The major means of land acquisition by the

landowners is through purchase as depicted by the responses of 94% of the sampled respondents and 6% of the respondents claimed that they inherited the land they fragmented. This finding is in line with studies by Dankani, (2013); Rakodi, (2005 and 2007) and Agheyisi, (2012) which shows that purchase is widely regarded as the major means of land acquisition by over 70% of the people in the study area and the Northern region at large. One major finding here is the absence of land acquisition by the respondents from the state government or the local government. Several studies such as Dankani, (2011, 2012, 2013); Agheyisi (2012) and Rakodi, (2005, 2007) have clearly shown how difficult it is to acquire land from the government through statutory allocation. The process of land allocation by the state nowadays is entirely tortuous, lengthy, expensive and full of so many bottlenecks which often compelled individuals to resort to the informal land market in order to acquire land (Mamman,1996; Abubakar and Dankani, 2013). The emergence of the informal land market was borne out of the failure of the government to provide sufficient land for development and the increasing pressure and demand for land (Onokerhoraye, 2010).

Analysis of data in respect of the average size of land respondents fragment shows that 42% claimed they often fragment land above 5 hectares, 19% fragments land that is between 2-3 hectares. From the findings it is obvious that respondents prefer fragmenting large parcel of land that can produce lots of plots of varying sizes. The bigger the land the higher the number of plots that can be carved out of the land and the higher the returns from the investment. Respondents were asked the average size of plot they often carve out of the large parcel of land they own.

Their responses reveal that majority 82% normally carve out plots of less than 15m x15m. Only 4% of the respondents claimed the average size of plot they carve out is 15m x 20. In the study area the standard size of land approved by the government is 15m x15m particularly in a high density residential areas but the landowners having large parcels of agricultural land usually took advantage of the encroaching city and engages in fragmentation of land parcel below the approved standard size (15m x15m) without recourse to planning bodies. Such fragmented plots locally referred to as 'Awon Igiya' are often small in size (as small as 6m x 9m), irregular in shape and with poor accessibility. These plots are carved out by farm owners often without seeking government's consent or intervention though the sale of the land is usually with the consent of the Local Traditional Authority contrary to the provisions of the 1979 Land Use Act which states that all land holding within the urban areas are under the control and disposition of the State Governor. The Act also made it clear that no right or interest may be assigned, mortgaged, transferred, sublet or otherwise be alienated without the consent of the state Governor. Under the Act, it is illegal to sell plots or undeveloped land and the transfer of farmlands is a serious offence. Sections 21; 22 and 26 of the Act are clear about illegal transfer of lands without obtaining permission.

A study by Dankani and Shera (2018) on the implications of fragmented residential land on the built environment in Kano metropolis reveals that neighborhood streets are narrow most often not up to 3 meters in width, in some areas only one car can pass

at a time while in others cars cannot pass through at all. In some areas around Kurna and Dorayi houses were separated by narrow alley popularly known as *lungu* in Hausa language typical of what is obtainable in the traditional city of Northern Nigeria..

With respect to means of ownership, landowners give to buyers of land, data in Table 2 shows that 87% of the respondents claimed that the only document they give to purchasers of land is the 'sale agreement documents; which comprises of signature of buyer, seller, ward head or District head and witnesses to the transaction which in most cases includes the land dealers who linked up buyers of land with the sellers. On the other hand 13% of the respondents claimed they hand over Letter of Grant to prospective buyers obtained from the State Ministry of Land which can be used at a later stage to apply for issuance of C of O following the dictates of land administration policy in the state. The dominance of sale agreement document as a means of land ownership is a clear testimony of the proliferation of and preference for informal land acquisition in the study area.

Respondents were asked in Table 4 why they engaged in the act of land sub-division or fragmentation, 44% claimed they were into the act to maximize returns from the land. On the other hand 31% of the respondents stated that the land when fragmented are easily disposed while 25% are of the view that fragmented land is often more affordable to the urban poor. One major reason behind sub-division of land by the respondents is to maximize profit. Value of land is continuously rising and land owners do make a lot of profit from investing in land.

Tables 2: Land Fragmentation Issues

	Frequency	%
Major Means of Land Acquisition		
Purchase	79	94
Inheritance	05	06
Average original Size of Land being fragmented		
Less 1 Ha	06	07
2-3 Ha	16	19
4-5 Ha	27	32
Above 5 Ha	35	42
Average size of plots after fragmentation		
Less than 15m x 15m	69	82
15m x 20m	12	14
Above 20m x 75m	03	04
Ownership Document given to buyers		
Letter of Grant	11	13
Sale Agreement Document	73	87

Source: Author's Fieldwork, 2018

Tables 3: Reasons for Land Fragmentation

	Frequency	%
Why do you fragment land?		
To maximize return from the land	37	44
It is easily disposed	21	25
It is affordable to the urban poor	26	31
Do you involve officials of State Ministry of Land before fragmenting?		
Yes	11	13
No	73	87
If yes why?		
It makes the area to have semblance of Planning	04	36
It guaranty ownership as C o O or Letter of Grant are issued	05	45
Its enhances the value of the land	02	18
If No, why?		
Fear of losing land or part of it	29	40
Huge Charges incurred	34	46
Others (Specify)	10	14

Source: Author's Fieldwork, 2018

Furthermore, the view that fragmented lands are often affordable to the urban poor could be buttressed by the fact that financial limitation often compelled people to acquire fragmented land. With their meager income, they cannot afford land in the inner city or planned areas with standard plot sizes. Fragmented plots are most often cheaper, affordable and preferable to the populace due to ease of acquisition and with little or no pressure from planners during development (Dankani and Shera, 2018).

It is interesting to note that among the respondents there are those who liaise with government officials before fragmenting land. An inquiry into whether respondents involve officials of the State Ministry of Lands and Survey before fragmenting land reveals that 87% of the respondents responded with no while 13% responded with yes. Those who responded with yes were further asked why they involve the officials of the State Ministry of Land and Survey before fragmenting land. From their responses, 45% of the responded stated that involving the official of State Ministry of Lands and Survey guaranty ownership of land as most often Certificate of Occupancy (C of O) and Letter of Grant are issued to the buyer of land by the government agencies. 36% of the respondents also stated that involving the officials makes an area to have a semblance of planning while 18% stated the involving the officials in fragmenting land enhances the value of land in the area. One major essence of involving officials of the State Ministry of Lands and Survey and other professionals in subdivision or fragmentation of land lots is that it allows for orderly

and efficient development of the land by provision of adequate sites and spaces for general public uses so that residents could have access to community services. Emphasis is given to safety and control measures to guide against danger to health, fire outbreak, flooding and other adversities as enshrined in the Town and Country Planning Law, CAP, 123, (1975).

On the other hand, responses of those who do not involve the officials before fragmentation shows that 46% do not involve the officials because they have to pay a huge charges which majority could not afford, 40% claimed they do not involve the officials of State Ministry of Lands for the fear of losing their land completely or part of it.

The fear expressed here is that whenever officials of state ministry of lands are involved in land subdivision they always insist on reserving land for public use such as roads, drainages, at times schools and markets and this according to the respondents greatly reduced the sizes of their land affecting their expected return from initial investment. In the same vein this category of respondents also alleged that some land officers will insist on giving some parcel of land during sub-division. Other respondents (14%) gave other reasons such as involving government often results in a lot of delay and paper works as well as the desire to work independently without involving government officials. In Kano just like other states in Nigeria, provision of land administration services are often characterized by delays, bureaucratic and administrative bottlenecks and corrupt practices and this scare a lot of citizen

Tables 4: Engagement in Provision of Basic Infrastructure

	Frequency	%
Do you provide infrastructure on the fragmented plots		
Yes	00	00
No	84	100
If no, Why?		
Not considered as landowner responsibility	49	58
Do not have the financial strength	24	29
Others (Specify)	11	13

Source: Author's Fieldwork, 2018

from seeking formal consent of the government in land related matters

Information in Table 4 focuses on whether respondents provide infrastructure on the sites they fragmented. The entire respondents (100%) responded with "No" signifying that they do not provide infrastructure on the sites. Further inquiry revealed that 58% of the respondents were of the view that provision of infrastructure is not their responsibility, 29% of the respondents also opined that provision of infrastructure involve huge financial investment and they do not have such financial resources to engaged in such. 13% of the respondents cited other reasons such as increase in value of land which may scare prospective buyers particularly the urban poor is the reason they don't engaged in provision of services. Other respondents within the same group of those who cited other reasons stated that they do not engage in provision of infrastructure for the fear of involving government officials in their activities. The fact that fragmentation of land occurs in contravention of government sub-division regulation(s), the settlement that emanates from such areas are often devoid of clearly defined recognizable structure or layouts, public amenities and land for public uses. This often results in a random character that confuses the identity of city communities, creates chaos in the pattern of land uses and prohibits coherent patterns of any kind.

Conclusion

Cities in Nigeria are evolving and growing in a highly unsustainable manner. Land as a vital resource for urban development and means of livelihood needs to be properly distributed and managed. Informal fragmentation of land does not augur well for good urban planning, wellbeing of residents (due to space constraints) and the quest for sustainability. Growth of urban areas in Nigeria should be well regulated with the view of creating a healthy environment for

the residents. One major step in ensuring sustainability of our cities is by regulating the fragmentation of land lots so that the built-up environment that will emanate from such areas conforms to standard spatial planning guidelines. Regulating land fragmentation will surely prevent misuse of land and haphazard development. One obvious reasons for the proliferation of informal land fragmentation and development in Nigerian cities was borne out of planning failure and the inability of the government and its agencies to force compliance with the standard rules governing land ownership and administration. It is important to note that the way land is acquired, used and managed goes a long way in determining the sustainability or otherwise of any urban area. It is indeed a fact that cities are notoriously difficult to govern, but if managed inclusively, effectively and holistically, it could be one of the most important gateway to a sustainable future.

In order to ensure orderly growth and development of our cities using land as the building block, the study wishes to recommend as follows:

- i. Government should make it mandatory for land owners to contact or liaise with the State Ministry of Lands and Survey before fragmenting any land. This will ensure compliance with planning rules and regulations and at the same time give the area a semblance of planned neighborhood.
- ii. There is a need for the Government to summon the much desired political will to ensure that rules governing land development are adhered to and sanction be imposed on defaulters to serve as deterrent.
- iii. Government should try to reduce the excessive delays encountered in the provision of land administration services. The delay most often than not compelled land owners to by-pass the government and act independently.

iv. Government should engage in a kind of Public-Private- Partnership in the provision of basic infrastructure, this will lessen the financial burden that scares land owners from provision of infrastructure.

v. There is a need for a holistic approach to ensure that land as a vital tool in urban growth and development is properly distributed and managed using efficient tools of land administration and land use planning.

References:

- Abrahamson, M. (1983), Social Research Methods; London, Prentice-Hall.
- Abubakar, R. T. and Dankani, I. M. (2013) Land Dealer Behavior in the Informal Land Market in Sokoto Metropolis. *Studies in Humanities*, 7:130-152.
- Adeboyejo, T. and Abolade, O. (2007), Household Responses to Urban Encroachment on the Rural Hinterland in the Ogbomoso Urban Fringe, Nigeria.http://www.populationenvironment research.org/workshops.jsp#w2007
- Agarwal, S. K. (1972). Economics of Land Consolidation in India. New Delhi: Chand.
- Agheyisi, E.J. (2012) Channels and Institutions of Informal Land Delivery in the Urbanizing Fringes of Benin City, *Sokoto Journal of the Social Sciences*, Vol 2, Number 1 Pp: 52-64.
- Agheyisi, E. J. (2016). Evaluating the conformity of informal land subdivision with the planning law in Benin metropolis. *Land Use Policy Vol.*59, Pp:602–612.
- Agheyisi, J. E. (2018) Land Subdivision in Peri-Urban Areas of Sub-Saharan African Cities: Conceptual Definitions and Policy Guidelines. *Ghana Journal of Geography* Vol. 10, No.2 Pp:98–128.
- Ajayi, J.O. (1997) Land Use Changes in Metropolitan Kano Between 1962 and 1992, Being a Paper Presented at the 40th Annual Conference of Nigeria Geographical Association B.U.K Kano, May 4–7.
- Angel, S. Sheppard C.S; Civco, L.D; Buckley R. Chabaeva and Gitlin LA, (2005) The Dynamics of Global Urban Expansion. Transport and Urban Development Department. The World Bank, Washington D.C.
- Brennan, E. M. (1993). "Urban land and housing issues". In Kasarda, J. D. and Parnell, A. M.
- (eds), *Third World Cities: Problems, policies and prospects*. Newbury Park, United States of America. Sage Publications.
- Dankani, I.M. (1998), 'The Role of Private (Individual)
 Property Developers in the expansion of Kano
 Metropolis'. Unpublished M.Sc Geography

- Dissertation. Dept of Geography. U.D.U Sokoto, Nigeria.
- Dankani, I. M. (2008) Property Developer Behaviour in Kano Metropolis, An unpublished PhD Thesis, Department of Geography, Usmanu Danfodiyo University, Sokoto.
- Dankani, I. M. (2011) Access to Land as a Constraint towards Private Property Development in Metropolitan Kano. *Yobe Journal of Environment and Development*. Vol3 No. 1, Pp:47-63.
- Dankani I. M. (2012) Access to Development Land in Kano: The Imperative for the Creation of Sustainable Cities. In Dejo, A. Ogundiya, I. S. Tukur, G. and Dankani, I. M. (eds) 50 years of Nigeria's Nationhood. Issues and Challenges for Sustainable Development. P.307-325 Crown F. Publishers, Ibadan.
- Dankani, I. M. (2013) Land Administration and Access to Development Land in Kano Metropolis: The Dilemma of Ordinary Nigerians *Book of Reading in Public Administration* Vol, 11, Pp:211-223.
- Dankani I. M. and Ibrahim Muhammad Shera (2018)
 The implication of Fragmented Residential Land
 on the Built Environment of Metropolitan Kano,
 Nigeria, *Confluence Journal of Environmental*Studies (in press)
- Dovring, F. 1965: Land and Labour in Europe in the Twentieth Century, Third Edition. The Hague: Nijhoff.
- Durand-Lasserve, A. (2005). Land for Housing the Poor in African Cities. Are Neo-Customary Processes an Effective Alternative to Formal Systems? In Hamdi, N. (Ed.), *Urban futures: Economic development and poverty reduction,* London: ITDG Publishing.
- Federal Government of Nigeria (1978) *Land Use Decree No. 6, 1978*, Government Press, Lagos.
- Fox, M. (2010) The Land Subdivision Process. Retrieved from http://www.tuggleduggins.com/publications/Fox.htm.
- Mamman, A. B. (1996), The Nature and Effect of the Activities of Private Residential Developers in Sokoto, Paper Presented at *Workshop on Land*

- Administration in Nigeria; Bayero University, Kano.
- Main, H.A.C (1988), Recent Change in Transfer of Land Rights in Hausa Land with a Kano Example: A Paper Presented at Workshop on Land Administration and Development in Northern Nigeria; March (1989) P. 69 78.
- Martin, L.R.G (1975), Land Use Dynamics on the Toronto Urban Fringe: Information Canada for Environment Canada, Ottawa.
- Mortimore, M.J. (1967), Land and People in the Kano Close Settled Zone. Occasional paper Nov,1 Department of Geography. Ahmadu Bello University, Zaria.
- Na'Abba, I. S. (2002), Transformation of the Kabuga Housing Estate. Unpublished MSc Land Administration Dissertation, Department of Geography, B.U.K.
- Olima, W. H. A., (2003). *Urbanisation and Housing Challenges*. Cities in Africa Conference.
- Rapporteur's report.
- Onokerhoraye, A. G. (2010) Land Reform and Challenges for Vision 20:2020. 4th Annual Lecture Faculty of Environmental Sciences, Nnamdi Azikiwe University, Awka.

- Rakodi, C. (2005). Informal Land Delivery Processes in African Cities. www.idd.bham. ac.uk
- Rakodi, C. (2007). Land for Housing in African Cities: Are Informal Delivery Systems Institutionally Robust and Pro-Poor? *Global Urban Development*. 3(11), (online). Available at www.globalurban. org/GUDMag07vol3Iss/rakodi.htm Accessed 11th march 2018
- Sustainable Kano Project (1997), Kano State Economic Profile. Government Press, Kano, Nigeria.
- Town and Country Planning Law; CAP. 123 (1975).

 Bendel State of Nigeria Land/Development,
 Building and Provision of Roads Regulations
 Order, 1975.
- Toulmin, C. (2008). Securing Land and Property Rights in Sub-Saharan Africa: The Role of . *Land Use Policy*, Vol.26, pp10–19.
- UN-HABITAT (2010). The State of African Cities 2010: Governance, Inequality and Urban Land Markets, Nairobi, UN-Habitat.
- Urquhart, A.W (1977), *Planned Urban Landscapes of Northern Nigeria*, Zaria, Ahmadu Bello University Press.