

Analysis of Urban Households' Preference for Informal Access to Residential Land in Minna, Nigeria

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Abstract

Over the years, the urban land markets in Nigeria have been grappling with conflicts between the formal and informal institutions who have remained the dominant players. Despite the provision of the Land Use Act of 1978, which vested in the states, the power to hold and administer all lands within their territorial boundaries, interests are still being transferred informally. These transactions continue defying all risks associated with insecure tenure. The purpose of this study therefore, is to investigate the factors responsible for the choice of households' access to land through informal channels. Data was obtained through questionnaire from 362 land owners and analysed using descriptive statistics and factor analysis techniques. The results revealed that, households' preferences for informal access to residential land are influenced by socio-economic factors with 37.9% variance, inefficiency in the urban land administration with 21.2% and planning and development control issues with 17.7% variations respectively. Thus, the main conclusion of the study is that the predominant influence of these factors on the urban land market will continue to sustain the informality of land access in Minna. The study recommends the decentralisation of land administrative system and reduction in the planning standards to enhanced formal land access.

Keywords: Urban Households, Informal Access, Residential Land, Insecure Tenure Factors

Introduction

Informal land markets have remained popular and expanding rapidly throughout developing countries of the world. This phenomenon to certain extent has not spared some of the developed cities as it has also smeared their urban landscape shaping their peri-urban development contours. The emergence and sustenance of informal land markets has seemingly become a characteristic of the general urban morphology and the imbalance created by the socio-economic inhibitions of the urban dwellers. Although it

is also a presage that is most times blamed widely on public institutions and policies for the lacklustre response to emerging changes in societal land needs.

The global trend in urban population growth particularly among the developing countries has resulted in a significant response to the demand for urban residential land by households with supply constraints. Adding to the supply constraints is the demand type itself which is basically a derived one, and often ineffective in view of the level of economic inhibitions faced by majority of the urban households. The next issue aside from the supply limitation is that of accessibility. Even when there is an ample supply of residential layouts by the government, access is often marred by challenges ranging from institutional (administrative), socio-economic to ethno-religious impasse as revealed by Avav (2002) and Bello (2007).

In the urban land markets, the ideal expectation is that mechanisms like the price system, demand and supply, information systems as well as social considerations should create a level of accessibility to land. However, these expectations are not always met as the mechanisms do not usually bring about the efficiency in the market system where access to land can be guaranteed. Yet the multifarious land needs of households have continued to rise consistently inflating the pressure of demand for land. The intensity of demand under this circumstance follows the non-perfect substitution and finite nature of land unlike other economic goods. Stemming from the above market situation, the increase in demand practically does not equate the supply. This therefore, leaves the price system to dictate solely the allocation and distribution of land in the market among the competing demands. Following that majority of the urban low income households presents ineffective demand, they become vulnerable to market segregation hence highlighting the pertinence for the state's intervention. Payne, Durand-Lasserve and Rakodi (2009) also posited that it will be essential for government intervention if the poor are to stand a chance of having access to land in better locations within the urban areas.

The state's intervention is meant to create and sustain equilibrium in the market system through legal and social-oriented policies and programmes. However, in some African countries, the intervention of the state has rather created a genre of problems. One of these problems is that of centrality in the administration of land leading to bureaucracy, inefficiency and often vulnerable to corrupt practices and indiscretions. The dilemma being faced by the urban households under these circumstances is that, the market remains imperfect and state's intervention is not providing the much needed or expected balance in the allocation and distribution system. In this wise, the alternatives available to the urban low-income households' are the informal channels of access to lands. Durand-Lasserve (2006) also opined that they are the only practical and realistic alternatives to meeting the diverse land needs of the urban low income households.

Aside from the compelling fact that they are a realistic approach, Leduka (2004) and Oloyede, Ajibola and Oni (2007) were able to establish in their studies that, these alternative channels have also contributed significantly in the delivery of residential lands.

It is worthy of note here that, despite the significant contributions in terms of access provided by the informal land channels, transaction here does not come on a platter. In fact it is a market where investments in its commodities come with some form of high risks. For instance, in the face of the existing formal land legislations, acquisition of informal rights lacks basic tenure security, hence susceptible to expropriation *pro bono* or with inadequate compensation. Furtherance to the above, Kironde (2003) enumerated other problems of informal land transactions to range from high transaction costs to defective property rights. Another significant problem of informal land transactions identified by Kwame and Antwi (2004), is that of double sales. According to their study findings, this accounted for 90% of market problems in Tema, Accra and Kumasi. Other challenges also includes those of insecure tenure rights and property delineations (Rakodi and Leduka, 2005)

The irony here is, despite these risks, urban households often retain their preferences for the rather precarious informal transfer and acquisition of rights to the much secured states' sanctioned channels. This sometimes involves those urban households with the willingness and ability to access land in the formal land markets. It is therefore on this premise that this study sought to analyse the underlying reasons (factors) explaining urban households' choice of alternative source of access to residential land in Minna, Nigeria.

The justification for this study is based on the need to contribute to the rather scarce empirical literature relating to urban households responses to the challenges of access to urban residential land in Nigeria. A substantial number of studies have been carried out focusing more on the challenges of accessibility, informal land delivery and tenure security. The studies of Sivam (2002); Bello (2007) and Oyedokun et al, (2011) all relates to this streak of literature. Hence it is expected that findings here will also avail the government and stakeholders the appropriate information towards policy reformations and the development of realistic strategies towards enhancing better access to urban lands.

Inadequacies of Public Institutions and Informal Land Markets

The formal land administrative systems, whose legal frameworks are established on rules most times based on import ideologies from past colonial regimes, have failed in

most developing countries. In some cases, they are perceived as alien and in conflict with the customary institutions and practices (Augustinus and Deininger, 2005). This perception has, on one hand, made the practical applicability of the formal land laws very challenging without adjustments to them. Whereas on the other, it has given rise to normative rules from the informal tenure systems that have come to operate side by side with the formal land laws (Molen, 2003; Lamba, 2005). Hence, the dualism or plural nature of urban land control and management has opened up opportunities for the economically less privileged urban dwellers by providing desirable alternatives to land access.

In Nigeria, the National Land Policy, the Land Use Act (LUA) of 1978 (now Land Use Act, Cap 202 Laws of the Federal Republic of Nigeria, 2004) came in as government intervening measures to harmonise the various existing land legislations. This was also aimed at forestalling the incessant interplay of the customary holdings and the legal framework put in place for administrative control. The Act seeks to make land available and accessible to all citizens of the country with equal rights and interests. Thus the key objectives of the Act are to streamline and simplify the management and ownership of land; assist the citizens of the country irrespective of their social status, gain access to land. Since its commencement, the LUA has made changes and improvements particularly in the areas of undue ethnicity opposition in public acquisition and the gender stigma in land holdings.

However, weak institutional framework and poor implementation of the LUA has created numerous problems for land management, particularly in the housing sector of the economy (Otubu, 2008). Empirical studies conducted within the urban areas of Nigeria and other sub-Saharan African countries have indicated that public institutions are not performing sufficiently. The studies of Twarabamenye and Nyandwi (2012) in Butare Town in Tumba section of Rwanda and Bizimana, Mugirameza, Twarabamenye, and Mukeshimana (2012) in Kigali all provides evidence of unrestrained informal land market activities. This accounts for 68.7% of land access compared to government's 7.7%, making local sales agreement the predominant evidence of proof of ownership. Furthermore, in Ethiopia, Gondo (2009) evaluates institutional response options to land informalisation in five major cities while Kuma and Ighalo (2015) assesses the effect of land accessibility on housing delivery in four states within the North Central Nigeria. The outcome from these studies revealed the ineptness of government to present appropriate response to the diverse land needs of the urban households. Infact the government's administrative capacity apparently becomes overwhelmed by the complex level of informalisation. With this trend, Africa presents 50% of tenure security problem with insecure land rights predominantly among its suburban population compared to Asia with 40% (Deininger, 2003).

Determinants of Informal Land Access

The public institutions' impervious nature in response to emerging challenges of access to urban land is one of the main determinants of informal land access and development. Government failure here is linked to firstly, their continued reliance on outmoded policies that have outlived their relevance. Secondly, the unrealistic urban land use regulations and standards as well as their bureaucratic predispositions (Gondo, 2009). Oloyede, Osmond and Ayedum, (2011), also provide very pertinent justification for the choice of informal land access. They posited that, the markets offers access to affordable sites and a loose off from the rigid and centralised land use control of the formal market hence making it attractive.

Lamba (2005) and Mudalige (2007) presented economic performance and weak institutional framework that could not sustain the formal system of land delivery as resilient determinants of informality. Their opinion hinges on the fact that as long as urban poverty continues to exist, so will informal land markets and developments prevail. Therefore, this translates to mean that, the poorer the economies of developing countries, the more sustainable informal land markets become.

Finally, informal land market has continued to attract larger participants due to its gradual improvement in the issue of legitimacy in proof of ownership. Overtime, the holders of these informal rights builds up confidence by gaining certain level of legitimacy and more secure tenure overtime. Rakodi (2007) noted that the informal land delivery channels do not just avail significant supply of residential land but are most effective following their user-friendliness and social legitimacy. An improvement in this feature of the informal land market have advanced to provide the minimal level of tenure security required for settler housing to occur (Chung and Hill, 2002; Chand and Yala, 2006). In this way, more family and friends (within ethnic and religious circle) are encouraged to settle close to each other to provide security which contributes significantly to the growth of informal settlements.

Methodology

Data Source and Collection

This survey research adopted the use of questionnaire as a primary instrument for data collection. Data required were mainly those on socio-economic characteristics of respondents, their sources of access to land, and factors influencing their choice of informal land access. These factors were adapted from earlier studies based on those relevant to this research framework and measured on a 5-point scale (1 = Very insignificant.....5 = Highly significant). The study population required for the survey

were mainly residential land owners sampled among the peri-urban neighbourhoods of Minna predominated by residential developments. It provides suitable areas of access to sampling elements whose size was determined by the formula;

$$n_o = Z^2 \times \{p(1-p)\}/d^2$$

Where; n_o = sample size sought for, Z = Standardized normal value (confidence level) = 95% (1.96), p = Estimated rate (47%) and d = Precision range (confidence interval) = 5%, thus; This sample size of 382 was rounded off to 400 to enhance the chances of high a response rate. The population of the study were selected based on data requirement and includes those land owners that have developed and occupied their property. Also those who were developing their property as at the time of the survey. Hence a set of 400 questionnaires were distributed to the respondents through a random sampling technique. The survey attained 91% response rate with 362 questionnaires filled and returned.

Suitability and Reliability test of dataset for Analysis

A test of the suitability or appropriateness of the dataset for Factor Analysis (FA) was conducted using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity as shown in Table 1 below. The KMO values ranges between 0 and 1, with the value of 0.5 to 1.0 considered appropriate and value below 0.5 regarded as unsuitable.

Table 1: KMO and Bartlett's Test

Test Technique Value		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.711
Bartlett's Test of Sphericity	Approx. Chi-Square	2566.743
	Df	55
	Sig.	.000

The KMO value was calculated at .711 suggesting a satisfactory sample adequacy, while the Bartlett's Test of Sphericity which uses the Chi-square distribution, has an associated significant p -value of .000 ($p < .05$) indicating the appropriateness in the use of FA technique.

The second test is a reliability analysis of the dimension set measuring the factors influencing households' choice of informal access to residential land. This was conducted using the coefficient alpha technique (Cronbach's Alpha α). The Cronbach's alpha essentially relates with the variables (or items) in a construct and as the correlation

between the items increases the alpha coefficient also increases. Hence, it measures the internal consistency or reliability of the scale used in this study and the results in Table 2 below indicates the alpha $\alpha = .821$ for all items in the construct. Thus the test results show relatively stable and consistent characteristics that indicate a very good level of reliability.

Table 2: Result of reliability test

Dimension	No of Variables	Cronbach's Alpha (α)
Total variables in the construct	11	.821
Socio-Economic determinants	5	.912
Inefficient Land Administration	3	.848
Planning and Development Control	3	.849

The result also reflects the alpha α coefficient for the statements under socio-economic determinants, inefficient land administration and planning and development control respectively.

Data Analysis Technique

Analysis of data was made using descriptive statistics and Factor Analysis (FA) technique. The extraction of the factors from the variables measured was determined by the Kaiser's criterion, which provides for only factors with the Eigen value greater than one (to be extracted). The extracted factors were further rotated using the orthogonal rotation technique with Varimax routine within the components.

Results and Discussion

Demographic Characteristics of Respondents

The general characteristics of the respondents as reflected in Table 3 below shows that majority of them (35.4%) are under the employment of the government followed closely by those self-employed who constitute 34.5%. The respondents also live in family units averaging between 6 and 10 members (53.3%). Their monthly income levels falls predominantly between N51,000 and N80,000 while those who earns between N81,000 and N100,000 constitutes 21.5%.

Table 3: Socio-economic characteristics of Respondents

Items	Description	Freq	%
Occupational Sectors	Public employment	128	35.4
	Formal private employment	109	30.1
	Self-employed	125	34.5
	Total	362	
Household Size	2 – 5	142	39.2
	6 – 10	193	53.3
	11 and above	27	7.5
	Total	362	
Income Levels (₦'000) (Monthly)	10 – 30	32	8.8
	31 – 50	73	20.2
	51 – 80	94	26.0
	81 – 100	78	21.5
	101 – 130	49	13.5
	131 and above	36	9.9
	Total	362	100

Source: Field survey, 2015

Sources of Access to Land

Respondents' sources of access to residential land as well as title held in land (proof of ownership) are depicted in Table 4 below. It has shown that purchase of land from private individuals accounted for 37.8% of the total land access. Acquisition through families that own land contributes 32.9% of the overall access while government sources accounts for the least access by households with 3.4%.

Table 4: Sources of access to residential land and proof of ownership

Item	Description	Freq	%
Sources of access to land	Inheritance/Gift	58	16.0
	Family that owned Land	119	32.9
	Private Individuals	137	37.8
	Government	12	3.4
	Plot Subdivision	36	9.9
	Total	362	100
Proof of land ownership	Statutory title	168	46.4
	Informal/customary title	194	53.6
	Total	362	100

Source: Field survey, 2015

The predominant proof of ownership of land (title) by the sampled land owners is by informal sales agreements executed between the initial land owners and the buyers and this accounted for 53.6% of land transactions. However, 46.4% of the land owners hold statutory right of occupancy either through direct allocation from the government or through title registration. In grouping the respondents' access to land into formal and informal, evidence have shown that 96.6% accesses land outside government source while 9.4% were granted rights by the government.

Analysis of Factors Influencing Informal Land Access

In analysing the factors from data obtained, a sample of 292 (80.7%) of responses were used out of the 362 total responses. This was because 19.4% of the respondents access lands through sources which in their opinion may not provide a better judgement for analysis i.e. 16% accessed their lands through inheritance which was their legitimate customary rights and 3.4% accesses through the government which is a formal source.

A number of variables were generated for analysis and a descriptive statistics of each of the variables is presented in Table 5. The average score for all the responses appears comparable and evenly spread.

Table 5: Descriptive Statistics of the study variable

Variables	N	Mean	Std.Err	Std.Dev
Less government development control in the area	292	2.479	.070	1.194
Very easy to access and takes less time	292	2.521	.066	1.123
High land prices in the formal markets	292	2.425	.072	1.223
To avoid high cost of obtaining development permit	292	2.517	.070	1.197
Complex allocation procedures and title registration	292	2.527	.072	1.222
Preferential treatment of applicants by land officials	292	2.534	.075	1.283
Cheaper (Less cost of transaction)	292	2.723	.070	1.202
Lack of available government layout	291	2.605	.070	1.200
Ethnicity and religious influences	292	2.462	.072	1.225
High cost of carrying out land survey	292	2.390	.069	1.178
Households income	292	2.582	.068	1.165

Source: Field survey and analysis, 2015

From the result of the FA technique used, a total of 3 factors were extracted with their eigenvalues ranging from 4.168 for factor one to 1.951 for factor three and accounted for a total of 76.84% variation in the factors influencing urban households' preferences for informal access to residential land in Minna (see Table 6 below).

Table 6: Total Variance Explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4.168	37.889	37.889
2	2.334	21.219	59.107
3	1.951	17.737	76.844
4	.815	7.412	84.256
5	.574	5.219	89.475
6	.474	4.309	93.784
7	.245	2.229	96.013
8	.169	1.537	97.550
9	.102	.927	98.477
10	.088	.798	99.275
11	.080	.725	100.000

Source: Extraction Method: PCA.

The Varimax rotation routine was applied and factors with less than 0.3 loadings were suppressed. This minimises the complexity in the size of variable loadings for ease of distribution within the components (factors). With the outcome from the rotation technique, **Factor 1** has 5 variables with significant correlation loadings while **Factor 2** and **3** are loaded with 3 variables respectively as presented in Table 7 below.

Table 7: Rotated Component Matrix result for factor distribution

	Component		
	1	2	3
Less government development activities in the area			.934
Very easy to access (Takes less time)	.887		
High land prices in the formal land market	.808		
To avoid high cost of obtaining development permit			.929
Complex allocation procedures and title registration		.898	
Preferential treatment of applicants by land officials		.807	
Cheaper (less transaction cost)	.842		
Lack of available government layouts			.725
Ethnicity and religious influences	.855		
High cost of carrying out land survey		.867	
Household's income	.868		

Source: Field survey and analysis, 2015

The variables were ordered and sorted by size within the factors for ease of interpretation following the outcome from the Varimax rotation solution as indicated in Table 8 below. Here, households access to residential land through informal sources was influenced by the “ease of access and less time taken”, “level of income”, “ethnicity and religious influences”, “cheaper with less transaction cost” and “high prices of land in the formal market”. These variables displayed stronger correlation loadings and are basically Socio-economic in nature, accounting for a total variation of 37.89%.

Table 8: Variables ordered to size within factors

Factors	Component		
	1 $\alpha = .912$	2 $\alpha = .848$	3 $\alpha = .849$
Factor 1: Socio-economic determinants			
Very easy to access (Takes less time)	.887		
Household's income	.868		
Ethnicity and religious influences	.855		
Cheaper (less transaction cost)	.842		
High land prices in the formal land market	.808		
Variance (%)	37.89		
Factor 2: Inefficient Land Administration			
Complex allocation procedures and title registration		.898	
High cost of carrying out land survey		.867	
Preferential treatment of applicants by land officials		.807	
Variance (%)		21.22	
Factor 3: Planning and Development Control			
Less government development control activities in the area			.934
To avoid high cost of obtaining development permit			.929
Lack of available government layouts			.725
Variance (%)			17.74
Total Variance (%)			76.88

Source: Field survey and analysis, 2015

The second factor is tagged 'Inefficient Land Administration' with 21.22% of the total variance. The variable loading under this factor includes; "Complex allocation procedures and title registration", "high cost of carrying out land surveys" and "preferential treatment of applicants by land officials". This factor relates mainly to the juridical function of land administration and considered one of the most pertinent.

The third factor relates to the issue of planning and development control. This factor explains 17.74% of the variance and comprised of variables such as "less government development control activities in the area", "to avoid high cost of obtaining development permit" and "lack of available government layouts".

The result of analysis has shown that the informal land market in Minna have made significant contribution towards the provision of residential land accounting for 96.4% of the total access. It has ultimately influenced the households' penchant for land access by providing certain level of convenience. This comes in form of affordable

prices (accessible to low income earners), on-time delivery and less transaction costs. It has also provided for ethnicity and religious clustered settlement which serves as a major enhancer of some form of security of tenure and social legitimacy. This attribute constitutes one of the strengths of the informal land markets (Rakodi and Leduka, 2005 and Chand and Yala, 2006).

Inefficiency in the administration of urban land is another catalyst for urban households' inclinations to informal land markets in Minna. It explains the bureaucracy and unwieldy nature of the processes involved in land allocation and title registration. Considering that the framework for land administration in Nigeria provides for a centralised form of control, it leaves a few government officials with the task of handling its complex system. In Minna, this central control has led to certain ill-practices by land officials who accords some form of preferential treatment to some applicants. This act on one hand is symptomatic of the indigene-settler phenomenon that has become endemic in most states in Nigeria today as revealed in the studies of (Aluaigba, 2009 and Oyedokun et al, 2012). On the other hand, it explains the corrupt practices by land officials lined towards personal aggrandisement.

Planning and development control activities in Minna also contributes significantly to households' decision on the channels of access to land. Most of the sampled households prefer their present location of land due to high standards involved in the regulation and control of land developments in government layouts. This is because development standards oftentimes increase land prices and as such increase cost of development (Sivam, 2002). The inability of government to develop new residential layouts in Minna has put a lot of pressure of demand on the existing ones. Contrariwise, access by these urban households is seriously impeded with the rise in land prices due to the demand. The ill-practices perpetrated by some land officials accentuated by the bureaucratic nature of the system is not restrictive to the low income households only. In fact, it has also explained the decision of some economically stable households to seek for land within the unplanned precincts of Minna urban for development as alternatives measures.

Conclusion

Access to land, particularly the residential type, is an important desire of every household or individuals following its significant socio-economic implications. The understanding of the various factors underscoring households' proclivities towards informal land access was the main focus of this study. Hence, analysis was carefully made using data collected from landowners within Minna urban. Significant findings made have led to the conclusion that, the attributes of the informal land markets have

presented better options to land accessibility than the formal market in Minna. The demand for urban residential land has apparently overwhelmed the government's ability to manage efficiently its administrative machinery. Also government's inability to develop more residential layout and the regulation and high standards required for development, has obviously not augur well with the predominant low income households. Finally, the institutional shortcomings and the natural predisposition of the Minna urban households to dwell along ethnicity and religious clusters have significantly shifted their preference to informal land access.

The study recommends that the government as a matter of policy should provide some level of decentralisation in the land administration system. This should allow for effective local government and community (customary owners) participation to reduce the bureaucracy and corrupt tendencies of land officials. The government should also partner with the communities and families that own land at the peri-urban areas as stakeholders to establish new layouts. Minimum and realistic development standards can be set to ensure effective accessibility. This would provide the government some level of control over the rate of informal developments.

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