



ANALYSIS OF COMMERCIAL LAND USE CHANGE IN BIDA TOWN, NIGERIA.

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Abstract

Commercial lands in most Nigerian urban centres have sprawled and converted adjoining residential land uses in a manner in which residential properties are significantly affected by such changes. This led to inadequacy of parking lot, rising residential rental value, abuse of land, traffic congestion in the residential areas and degradation of urban quality. This paper therefore, aim to analyses the urban land use change trends; specifically adjoining residential lots taken up by commercial uses; with a view to consider it effect on formal housing delivery in Bida town, Nigeria. This research work focus on the fringe of the central business districts, like Gbagbara avenue, Esso high way, Estu Masaba road and round-about spot across Bida cinema down town of the metropolis, where it has been observed of steady conversion in residential land use to various uses, commercial uses in particular. In the recent time, there are noticeable increasing economic activities along the intra-city roads in Bida due to failure of the multi-nucleated central business districts to contain the increasing demand for commercial premises such as: office space, shopping plaza and car parking space; thus firms eventually have the incentive to move into the residential areas. This trend is supported by classical urban economic theories which confirm that as economic activities grows over time; other areas closest to the central districts would tend to absorb the emerging business activities. The sources of data for the study were primary source via interview and administration of sets of questionnaires; also publications, journals and internets form the secondary source. Simple random sampling was adopted in order to analyse the extent at which residential land use converted for commercial uses in the selected residential neighbourhoods of the town. The study indicate that profit maximisation arising from the increasing demand for commercial premises, physical obsolete nature of residential properties, are contributing factors that give rise to sudden land use changes from residential to commercial in Bida urban. The findings also indicate that the manner of urban land

use change is completely out of the scope established by land use regulations. The study concludes that with high pressure on commercial properties in the metropolis, the residential property market is adversely affected which caused a turn-around on commercial properties development thereby reducing the housing stocks, rising residential properties rental values, physical development challenges, land uses control challenges and abuse of land. The paper recommends that the land use policies be revived and introduction of a data base of real estate transactions.

Keywords: *Commercial Lands, Formal Housing Stock, Urban Land Use Changes, Urban Land Use Theories and Bida Urban*

INTRODUCTION

Urban land use change is a global phenomenon occurring over time which could be noticed either in a mild or wholistic scale in a particular urban centre (Raharjo, 2005). The rapid growth pace in Nigerian cities has tremendously brought about changes in land uses especially, residential to commercial uses of which Bida urban is not an exceptional (Ifeoluwa, 2011). This trend have being evidenced in the recent situation analysis of land use changes in most Nigerian cites, perhaps due to relative small proportion of commercial land allocation in relation to other land uses especially residential uses (Abdulrahman & Mohammed, 2015).

Commercial lands in most Nigerian urban centres have sprawled and converted adjoining residential land uses which led to traffic congestion in the residential area, rising residential rental value, mixed land uses, traffic congestion in the residential areas and degradation of urban quality. It has being observed that commercial activities in mega cities has taken an independent dimension outside the scope of the zoning regulations guiding it development and intensity of use (Abdullahi, Ijaiya, Abdulraheem & Abdulkadir, 2011).

The situation analysis of urban land use change have indicated that profit maximisation arising from the increasing demand for commercial premises, physical obsolete nature of residential properties and failure of the central business district to contain the ever increasing economic activities are contributing factors that gave rise to sudden land use changes from residential to commercial in Bida urban which have results to reduction in the formal housing stocks, rising residential properties rental values, physical development challenges, land uses control challenges and abuse of land (Blessing, 2010).

It is on this background that the study therefore, seek to analyses the urban land use change trends; specifically adjoining residential lots taken up by commercial uses; with a view to consider it effect on formal housing delivery, taken cognisance of fringe

of the central business district, like Gbagbara avenue, Esso high way, Estu Masaba road and round-about spot across Bida cinema down town of the metropolis, where it has been observed of steady conversion in residential land use to various uses, commercial uses in particular.

However, certain issues warranted for analysing residential to commercial land use changes in the study area. Since land use changing from residential to commercial entails the conversion of an existing residential vacant lot or building into a commercial premises, or structure, the number of residential properties which have been taken up over by the new commercial buildings such as construction of new shopping malls, public motor parks and market stalls among others are not equally been replaced within the same neighbourhood, this causes a shortfall in the overall housing stock in a given urban area (UN Habitat, 2007). This is however, in line with the recent enumeration of housing stocks which has expressed concern over the high shortage of formal housing in medium density residential neighbourhoods of in Bida township of which, a few available stocks experience steady conversion into commercial centres. (National Population Census, 2018). This land use changes in the metropolis has contributed to higher property values and its attendant urban problems to include traffic congestion in the central district, over stretching of infrastructural amenities and reduction of land area for housing, parking, and open space. This comes about as a result of rapid population growth in urban centres, unplanned city expansion, mixed land uses and the increasing demand on urban land for business activities poses a great deal of challenge to residential land use (Sedney, 2012).

Generally, commercial activities has attracted land away from residential use which generates stiff competition among firms for the desired locations which tend to escalate land values above those of the surrounding land parcels engaged for housing purpose due to this effect (Seeley, 2003). And this has been a case for Bida urban, as such decent housing are becoming unaffordable to the majority of the households and consequently, the urban poor being pushed to live in poorly built houses with inadequate space to accommodate and secure the comfort and safety of family members. The land use regulation made it possible for an urban area to function and map out the pattern of land uses in a way that achieve comfort, safety, aesthetic and habitable urban environment (Saleh, 2014). The constant changes in urban land use are the utmost concern of city planners and police makers (Asamoah, 2010). In most Nigerian mega cities, there has being clear indices of the inefficiency of planning regulations, Perhaps inactiveness of enforcement of terms and conditions which has resulted grossly to noncompliance of such planning laws by property/land users; this scenario has brought about conflicting land uses in the study area (Gandu, 2011, Ndabula *et al.*, 2013; Saleh *et al.*, 2014). This is also related to the incapacity of the

planning authority in addressing the uncoordinated land development pattern and unparalleled urban growth in enhancing quality environment for the general well-being of the urban populace (Olayinka, 2012). Akinbabijo (2012) argued that the incapacity of the regulatory organs could directly be linked to inadequacy of well-equipped workforce and integrated planning programmes to monitor and bench-mark the trends in land use changes as it affect the overall housing stocks, formal housing in particular. The illustrations above are outcomes of various researches on urban issues and land use change scenarios which poses a related situation in the case of Bida town in an attempt to analyse residential to commercial land use change and it implications on formal housing stock in the study area during the study.

The aim of this paper is to analyses urban land use change trends; specifically adjoining residential lots taken up by commercial uses; with a view to consider it effect on formal housing delivery in Bida town from 2008 to 2018; with a view to develop a framework that serve as a guide to relevant stakeholders, in creating awareness on the possible implications of the high sensitivity of demand for business premises to short-term output changes which will oversees land use change in urban centres, targeted for Bida urban.

In achieving this aim; the following objectives are pursued:

- (i) To analyses the effect of converting residential land use to commercial uses on formal housing stock in Bida town.
- (ii) To assess the rate of land use changes from residential to commercial in the study area within the study period.
- (iii) To examine the rationale of commercial activities changing locations from the central district to residential areas in the study area.
- (iv) To establish whether the conversion of residential properties to commercial use contributes to the formal housing deficit in the study area (2008-2018).

The Framework of Analysing Residential to Commercial Land Use Change in Bida Urban

The framework of this study is however, based on two dimensions identified in the body of knowledge in analysing residential to commercial land use changes and it attendant effect on residential properties within yhe fringe of the CBD. These include;

- (i) **Negative Effect of Residential to Commercial Land Use Chang on Residential Properties**

The study firstly adopts the research frameworks by Raharjo, (2005); Egbenta, (2009); Asamoah, (2010); Sedney, (2012); and Tomisi *et al.*, (2016). In their studies, it has being observed that urban land use change drivers are mainly by urban population

growth; Failure by the Central Business Districts to contain further economic activities; The unplanned expansion of urban area and encroachment by intra-urban migration for various purposes; Profit maximization motive; Infrastructural amenities; Increase in demand for commercial use; Change in taste and fashion; Accessibility; Safety and security; and Land use control measures. Their combined research findings indicates that land use succession residential to commercial land use in particular, results into mixed land use which significantly contravenes the development control, the most noticeable one is reduction in formal housing stock (UN Habitat, 2007). Several other negative effects could be listed such as: traffic congestion, over stretching of infrastructural facilities and noise pollution (Adebayo, 2009).

(ii) **The relationship between urban land use change and formal housing stock**

Secondly, the philosophy of this study emphasised that demand and supply forces that drive land use changes from residential to commercial is between those that have a long-run influence and those that affect shorter-term dynamics. Nigel & Williams (2009), illustrate the cogent relationship that exists between land use change and housing shortage; explaining that when the total quantity of housing stock in an urban area remain constant, and that there is boom in the overall economy, the demand for housing would increase; and consequently push upward the price of residential property. Land users in the low and middle income class who cannot afford the rising prices move away from these residential zones into particularly, fringe of the Central Business District and end up in squatter settlements. From this understanding, it could be seen that land use changes does not equally made available residential properties taken up as new commercial premises within the same neighbourhood, this results to shortage in the overall housing stock in a given urban areas (UN Habitat, 2007).

Material and Method

The Study Area

Bida [Local Government area of Niger State](#) is located southwest of Minna, the capital city on the [A124 highway](#) (a regional road) linked Ilorin to Minna and Abuja. The Local government area has an area of 1.698 km² and a population of 266,008 (National Population Census, 2006) with [9°05'N, 6°01'E, 9.083°N, 6.017°E, Coordinates](#). Bida is a dry arid town being which is the second largest city in [Niger State](#). The major ethnic group is the [Nupe](#). Bida is the headquarters of the [Nupe Kingdom](#) led by the Etsu [Yahaya Abubakar](#) and consisting of many districts, such as [Katcha](#), [Lapai](#), [Mokwa](#), Enagi, Baddeggi, [Agaie](#), [Pategi](#), Lemu, [Kutigi](#), and others. The leadership style of the ancient town of Bida is emirship, and the head of the town is addressed as [Etsu Nupe](#). The town is known for its production of traditional crafts, notably glass

and brassware. Bida is also known for its Durbar festival. It is also the home of the Federal Polytechnic, Bida (Max Lock, 1980).

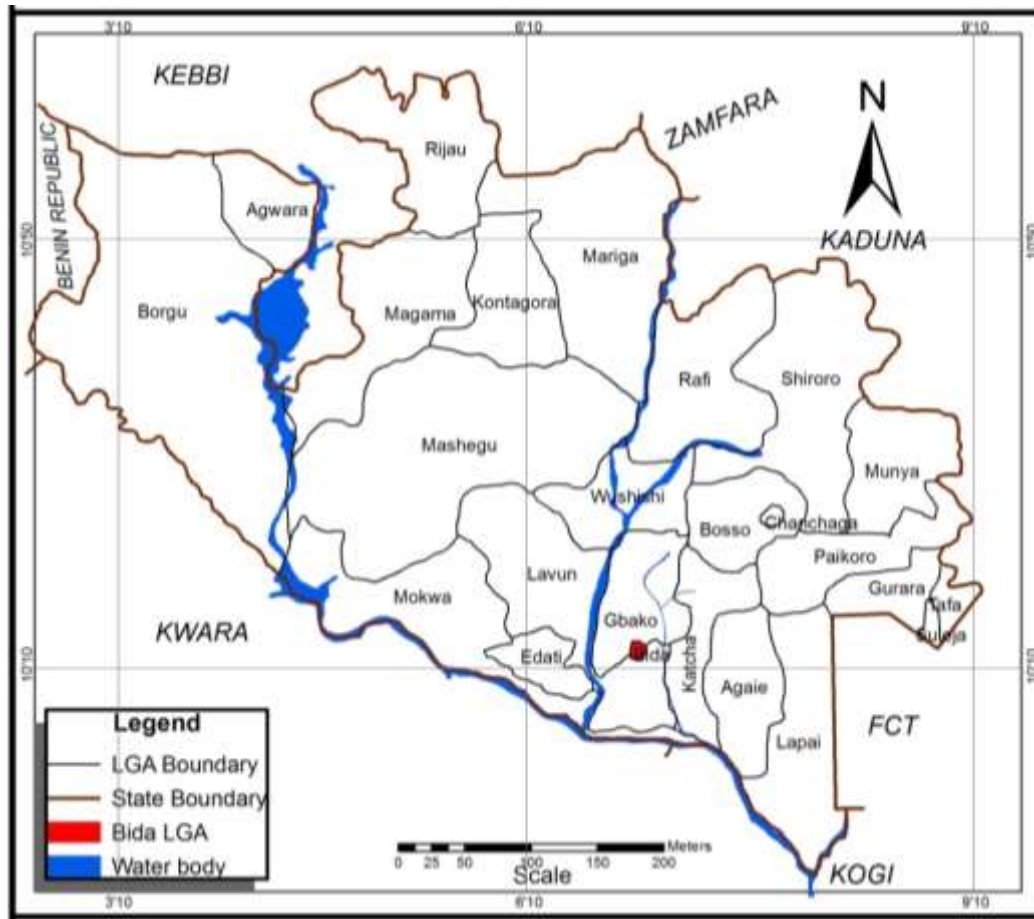


Figure 1.1: Map of Niger State Locating Bida study Area.

Source: Niger State Ministry of Lands and Housing, 2018

Conceptual Review

Abdusalam (2007), refers to commercial lands as class of real estate basically designed for investment purpose. The concept has being regarded as premises utilised for trading activities to includes hotels, shops, petrol stations, departmental stores, offices and warehouses designed, built and operated for profit realising purpose either through production of goods and/or provision of services in form of wholesale or retail outlets (Ogunsola, 2014). Naomi (2007); expressed in the same vein as space put in for business activities to include petro filling station, shops, show rooms, hotels, offices and other buildings or premises built and operated for investment purpose.

Formal housing stock is viewed in the form of an individual residence; comprising cluster of buildings on a designated site provided with adequate infrastructural

services, in mapped, decent, safe, secure and sanitary neighbourhood for habitation of the respective occupants (Kuye, 2016). It is apparently noticed that formal housing stock is much desirable than informal residential units, in the sense that it provides an ideal neighbourhood attributes (Sydney, 2012). Chileshe, (2003), asserts that adequacy of the infrastructural facilities in the formal settlement make it attractive for residential properties steadily being converted to commercial premises. On the the fact that in a growing city like Bida experiencing a deficit in residential property units due to increasing demand for commercial uses households in the fringe of central district tend to convert land use from residential to commercial (Mohammed, 2018).

The complete alteration of particular land use type to other land use types connotes land use change (Tilumanywa, 2013). The outcome of complex interplay between man and his physical surroundings are land use change patterns. Specifically, land use alteration occurs when a particular land is changed from the use that was initially allocated due to invasion and succession, economic rents, highest and best use and other factors that incorporates urbanisation in its entirety (Ademola, 2012).

The Effect of Residential to Commercial Land Use Change in Urban Centres have being reviewed. Mathews William (2006), observed from an empirical studies of sylvan urban centre of North Carina that the effects of residential land use conversion to commercial uses are usually felt by residence of the affected neighbourhood. Blessings A. (2010), ascribed certain implications in residential to commercial land use changes as follows:

- (i) Decreases formal housing stock
- (ii) Challenges in Land Use Control Measures
 - (iii) Increases economic activities in residential zoned areas
 - (iv) Challenges in physical development
 - (v) Increasing land and property values
- (v) Misuse of land

The main causes of these changes in land uses are associated with factors like:

- (i) The central business districts failure to contain the ever increasing demand of office space,
- (ii) Traffic congestion in the central business districts
- (iii) And inadequate parking space; thus prompting companies to move into the residential areas (UN Habitat, 2007).

Below is the interrelationship between for drivers and effect of residential to commercial land use changes:

Figure 2.1:

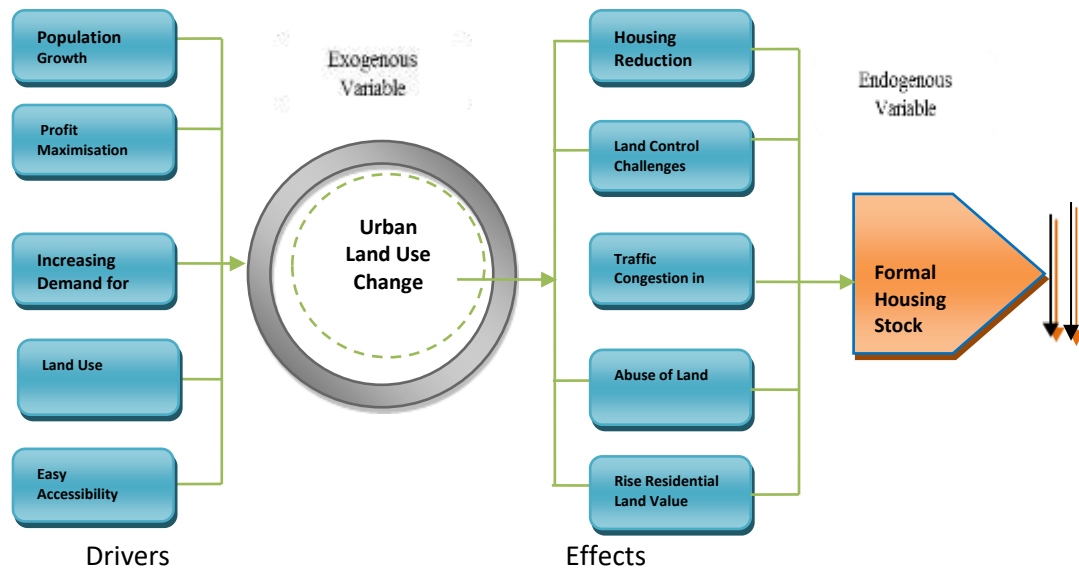


Figure 2.1: The Conceptual Framework for the Study.

(Adapted from Raharjo, 2005; Egbenta, 2009; Asamoah, 2010; Sedney, 2012; and Tomisi *et al.*, 2016).

Methods and Procedures

The Study Population

The study population comprise of planning authority, property developers and Real Estate Surveyors in Bida town; particularly commercial property developers, Niger state geographical information system an Estate Firms. The commercial real estate developers are expected to provide information on yearly stocks of commercial property development projects under taken between the periods (2008-2018); the planning authority will make readily available information on the extent of residential land use taken up by commercial uses without planning approval; and Estate Firms making available data base of overall real estate transactions in the study area. The table below shows data collected from each of the population and sources.

Sources of Data

Table 3.2 Source of Data and Collection procedure

Population	Data for study	Data sources
Commercial property developers in Bida	Data on annual number of commercial property development in Bida	Primary Source
Estate Firms	Data on the overall real estate transactions in Bida	Primary Source

Niger State Geographical Information System	Data on aerial photography, images, topographical and land use maps showing the changes that have occurred without approval over the study period.	Secondary Source
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Source: Authors field survey (2019)

Methods of Data Collection

A closed-ended questionnaire was designed to collect relevant information from real estate surveyors and commercial property developers in Bida for this study. Personal interview conducted targeted the commercial property developers in the industry. The sampling technique adopted for this research work was Simple Sampling Technique.

Data Analysis Techniques and interpretation for the Study

The table below describes appropriate data analytical techniques adopted for the set out objectives of the study, as thus:

Table 3.5: Study Objectives, Data Collection Methods and Analytical techniques

Objectives of Study	Type of Data collected And sources	Analytical techniques
To examine the effect of converting residential land use to commercial uses on formal housing stock in Bida town. (2008-2018)	Data on annual number of commercial property development encroaching residential uses (NUDB minna annual bulletin)	Descriptive (mean, graphs)
To assess the rate of land use changes from residential to commercial in the study area within the study period.	Data on annual ratio of residential to commercial lands developed & land use maps in Bida (REDAN, NIGIS, minna & NUDB, minna publications)	Descriptive
To examine the rationale of commercial activities changing locations from the central district to residential areas in the study area.	Data on population growth trend in residential areas, performance of the local planning authority, state & nature of infrastructural services and annual number properties development in the study area.	Correlation

(Federal office of statistics publications, NUDB minna & ministry of works, minna)

Results and Discussion

Land Use and Human Activities in Bida Urban

The built up area of Bida as at late 2017 was over 3,170 hectares (Town planning office, Bida). Figure 4.4 show different land uses in the Metropolitan areas.



Figure 1.4: Land use Map of Bida

Source: Niger State Ministry of Lands and Housing, 2015

Findings

The situation analysis of factors responsible for continuous conversion of residential lands to commercial uses in Bida metropolis are identified as follows:

1. Incapability of the planning authorities to protect and maintain the integrity of the commercial land central core.
2. There was also an underestimation of the type and category of commercial use for land that later was in demand.
3. The growth of shops along major roads like Esso-Texaco roads, Esso-BBC junction high way, Gbagae new avenue and Est-Masaba road on account of scarcity of spaces.
4. Existence of old buildings that features gross sick syndromes around the city core bush business operators further to residential areas.
5. Population growth and quest for business operators to maximise profit warranted for increasing demand for business space.

Conclusion

The study concludes that profit maximization arising from the increasing demand for commercial space uses, physical aging of residential building structure leading to obsolesces, are contributing factors that gave rise to sudden commercial land use taking over the residential lands and properties in Bida town. The study also reveals that there is no strong legal framework or monitoring to check conversion of existing land use structure in the area. With high pressure on commercial properties in the area, it is an indication to investors and developers of a boom in the commercial property market. Negative effect of these developments are increasing traffic congestion and over stressing of available facilities within the major roads as neighborhoods near the central business district.

The study therefore advice that, rational developers should be aware of the business cycles, in that demand for new building are highly sensitive to short-term output changes. Building cycles and urban growth in Bida and other urban centres in Nigeria should be explored by further study for a better understanding of the dynamism of real property market in the country and whether the new uses are compatible with other uses.

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