

Socioeconomic Factors Influencing Land Use Conversion in Apete, Ibadan, Nigeria

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Abstract

The crux of this study was to examine socioeconomic factors influencing incidences of land use conversion in the study area. With regards to this study, 302 structured questionnaires, constituting 5% of the research population, were administered using simple random sampling technique. The sum of 292, out of these questionnaires, was retrieved and analyzed using appropriate statistical test. Findings from this study revealed that location, increase in economic activities, growth in population of the area, age of structures, stern demand for land uses, ignorance, and collaboration with investors were the principal factors inducing land use conversion in this locale. The study equally discovered, in terms of land use conversion intensity in this area, that increase in economic activities and age of structures were more phenomenal when compared to other factors. To this end, the study recommends review and enforcement of master plan of this area with a view to accommodating increasing economic activities in the locale. It further advocates routine monitoring and inspection of development on land in this locale, and communicating appropriate contravention notices to owners of unapproved structures in this area. Public enlightenment programme to orientate residents of the community is also advocated in the ills of land use conversion.

Keywords

Socioeconomic, Land Use, Conversion, Ibadan

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1. Introduction

Land is a finite resource [7]. Its supply, acquisition, ownership and control remained an endogenous desire resonating in the heart of man in his contemporary society. This is mirrored from the standpoint that land in every clime is regarded as a catholicon for improved socio-economic growth and development [4]. Thus, issues of land use planning and management especially in our urban panorama by government and the governed should be seen as a national decision requiring holistic approach with a view to achieving harmony and optimality in the use of this valuable resource bequeathed onto mankind.

The above narrative since the dawn of the 20th century especially in the developing continent of Africa is nothing

but a mirage. This is accentuated by spontaneous population increase due to industrialization, urbanization, globalization and climate change among others with its spill-over effect triggering pressure on existing urban land uses [1]. In reality, it takes little analysis to exposit that issues of land supply and demand chain in the urban sphere in Nigeria is in a state of conundrum cutting across social, cultural, political, legal, and economic challenges [17]. Ogunkan and Jelili [18] averred that the multifunctional dynamics of land use remained the major impetus aggravating increased competition which had unarguably midwived into steep prices for this immovable resource in our urban landscape. The domino effect of this urban land use dynamics is made manifest in areas of property alienation [1]; especially, those of the urban poor and ultimately, issues of land use conversion.

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The term land use conversion could be viewed from different perspectives. However, there seems to be unanimity among scholars that it is an afterthought adventure designed to accommodate land uses not originally planned for in a geographical milieu. This preceding assertion is unequivocally the true picture of what is obtainable in Nigerian urban centres characterized by defective master plans and poor land administration policies and programmes. Capping off this discourse, [10] maintained that this subject-view is a common phenomenon in Nigerian cities with its implication traversing economic, demographic, technological and socio-cultural intellection. This is obvious in clusters of land uses cutting across residential, commercial, industrial, religious, institutional purposes among others in no definite pattern in a homogenous space.

The fact remained that land use conversion has, to some extent, generated high level of positivism in the socio-economic development of property owners in our urban sphere. Corroborating this view, [17] submitted that it is an epos of sound economic transformation which seeks to allocate land to its best use which in turn maximizes property management. In the picture of [26], it is conceived as a maxim of economic returns which provides the propensity to accommodate new physical re-development in a geographical space. It is even interesting to note from the revelation of [16] that substantial proportions of these conversions tend to have the approvals of government planning agencies as every tier of government in Nigeria seeks to improve their internally generated revenue (IGR) through the payment of land use change fee among others.

In spite of the gains associated with land use conversion in the preceding paragraph, scholars in the built environment are of the consensus that the subject-view is an aberration [14], devoid of clear and logical planning as well as environmental impact thoughtlessness [24]. The upshots of these sticking points are evident in development plans interruptions and traffic congestion challenges [10], as well as poor environmental functionality and low liveability index [17]. Others include overpopulation, pollution, urban sprawl, threat to land security, pressure on existing infrastructural facilities and so on.

Going by the words of [6], the use of land is better enhanced through information retrieval on existing land use patterns and alterations in land use over the space of time. To this end, [27] as well as [25] argued that to effectively tackle the challenges of land use conversion, a knowledge base on the causes and factors influencing this subject-view become a matter of necessity. Thus, the thrust of this paper will be directed towards revealing socioeconomic factors influencing land use conversion in Apete, Ibadan, Nigeria, with a view to providing suggestive measures that would substantially

address identified challenges in the study locale and other cities of similar morphology.

2. Literature Appraisal

It is fast becoming a cliché to note that the issue of land use conversion is one of the most pressing challenges confronting Nigerian urban centres [14]. This is not surprising when taking into cognizance the fact that urban centres in Nigeria are as a result of spontaneous evolution and not spatial planning. Thus, the staunch demand for space to accommodate competitive land uses which have been argued to be tending towards residential-commercial inclinations could only be achieved through land use conversion [8].

In a nutshell, land use conversion challenges across the 36 states capital have been reported in literatures. What seems to be different is the intensity and implication of these conversions. The effect of these challenges is obvious in residential accommodation shortages and skyrocketing housing rent [2]. Thus, the economic climate in Nigerian urban centres fuelled by agglomerative business activities and their associated economic benefits have continued to be a motivating incentive for land owners to rationally alter their land uses with little or no considerations to its spill-over cataclysm.

The work of [10] titled land use conversion and traffic situation in Lagos, Nigeria, was an eye-opener when it comes to indiscriminate land use conversion in Lagos metropolis. They further lamented that the intensity of slipshod property conversions in Victoria Island had unabatedly heightened the challenges of transportation infrastructure as the negative effects arising from these emerging commercial activities and soaring patronages were hardly ideated for, via transport route modifications. In the same vein, Festac Town situated in the western part of Lagos metropolis, is highly infamous for illegal residential land use conversion to mixed uses [20]. The crux of this matter remained that no part of Lagos metropolis is immune to land use conversion giving the tempo of diversified commercial activities going on in this city.

The storyline with regards to the trend of land use conversion in Calabar is not different. Ojikipong, Agbor, and Emri [19] remarked that it is a common phenomenon in Calabar to see residential buildings being wholly or partially converted to commercial and light industrial uses with its attendant implications. The situation in Port Harcourt is apparently evident in intense demand for commercial spaces and as a result of limited accessibility to land, the stimulus for residential land use conversion in this urban sphere arises [5]. Nwachukwu and Ukpabi [14] equally documented that the menace of indiscriminate land use conversion is obvious in every stratum of Enugu city. According to them, the demand

for space to accommodate commercial uses has gone so rife with no effort towards corresponding increase in supply.

These land use conversion challenges are even more pronounced in the core of Nigerian urban centres. This view was in tandem with the submissions of [10] where they noted that the city core tends to witness invasion of commercial as well as other series of business and trading activities which often is in conflict with government approved land use plans. This is even conspicuous from the socio-economic status of the urban poor in Nigerian city cores and pecuniary gains associated with land use conversion. This class of people are often disposed to converting their land and landed properties from residential to commercial uses with a view to improving their capital base.

Juxtaposing above assertion with the state of land use conversion in Taiwo road at the core of Ilorin metropolis, [22] reported that the heartbeat of this city is laced with indiscriminate property conversions characterized with intricate interlink of residential, commercial, and mixed development in a haphazard manner. Likewise, [9] and [16] deduced that property conversion is fundamentally influenced by profit maximization in Akure city core.

These low-income earners in Nigeria city core who have got their landed properties alienated most times relocate to fringes of cities where they set up squatter settlements thereby compounding the problem of urban blight formation [14]. This according to [11] and [19] is a true reflection of central Minna where low-income dwellers often migrate outside city centres due to residential accommodation shortages inflicted by unguided property conversions.

It is even heartrending to note that Abuja, the capital territory and the only city birthed through the instrument of town planning, is not spared from the waves of aggressive land use conversion. Unah [28] explicitly revealed in his research titled Residential housing redevelopment and its impact on Asokoro district of Abuja, Nigeria that this part of the metropolis, popular for her adorable residential landscape, is being engulfed with the challenges of land use conversions marked with thickening commercial activities springing up in this locale. He further pointed out that the trajectory of residential-commercial transition in this district is obvious in the varieties of commercial enterprises; including corporate and private offices like banks, supermarkets, eateries, churches, pharmaceutical outlets, schools, hotels and guest houses with its social and security ills.

At this juncture, it is imperative to note cap-a-pie that issues of land use conversion across the over 100 cities in Nigeria is so replete that single piece of writing could not document.

However, scholars are of the parallel opinion that land and buildings will continue to witness alterations in their usage from low to high-profit orientation shaped by diverse anthropogenic activities competing for this scarce immovable resource [23, 2]. Dishearteningly, planning institutions in Nigeria with the mandate of putting in place development control mechanism as well as enforcing relevant planning statutes are incapacitated by myriads of challenges which include political interference, lack of skilled manpower, weak legislations, among others [13]. It is from this end that [17] concluded that if the pace at which development permits and approvals are being altered is not arrested, urban centres in Nigeria might be heading towards an impending chaos in her developmental processes.

3. Materials and Methods

3.1. The Research Locale

Ibadan is one of the oldest cities whose existence predates colonial escapade in Nigeria. With regards to her demography, it is the third largest metropolis in Nigeria after Lagos and Kano [29]. In terms of socio-political structure, Ibadan was the administrative headquarter of the defunct western region of Nigeria, and the current capital of Oyo State; a home to eleven local government areas (LGAs) [3]. Geographically, the city is situated between latitude $70^{\circ}26'N$ and $70^{\circ}28'N$ and longitude $30^{\circ}50'E$ and $30^{\circ}53'E$ [21]. The multifunctional nature of the city from time immemorial cutting across commercial, industrial, educational and administrative development had been adduced to be the centripetal forces attracting people of different walks of life to this metropolis. This is evident in her population figure of 2.55 million as documented in the 2006 population census conducted by the National Population Commission (NPC) [3].

The spatial coverage for this study is limited to Apete, a community in Ido LGA in Ibadan [15]. It is a home to a Federal Polytechnic and sizeable numbers of commercial and industrial enterprises. Consequently, the population of this locale is fast increasing in geometric fashion owing to influx of students and people from Oyo State in particular and Nigeria in general to this area with the cumulative effects crosscutting residential housing shortages and increasing rents [12]. As a result of this, owners of landed properties in this locale are shaped by market forces to rationally alter landed properties with a view to accommodating increasing demand for residential and commercial spaces. The study area is represented graphically both at the national and local settings in Figures 1, 2, and 3.

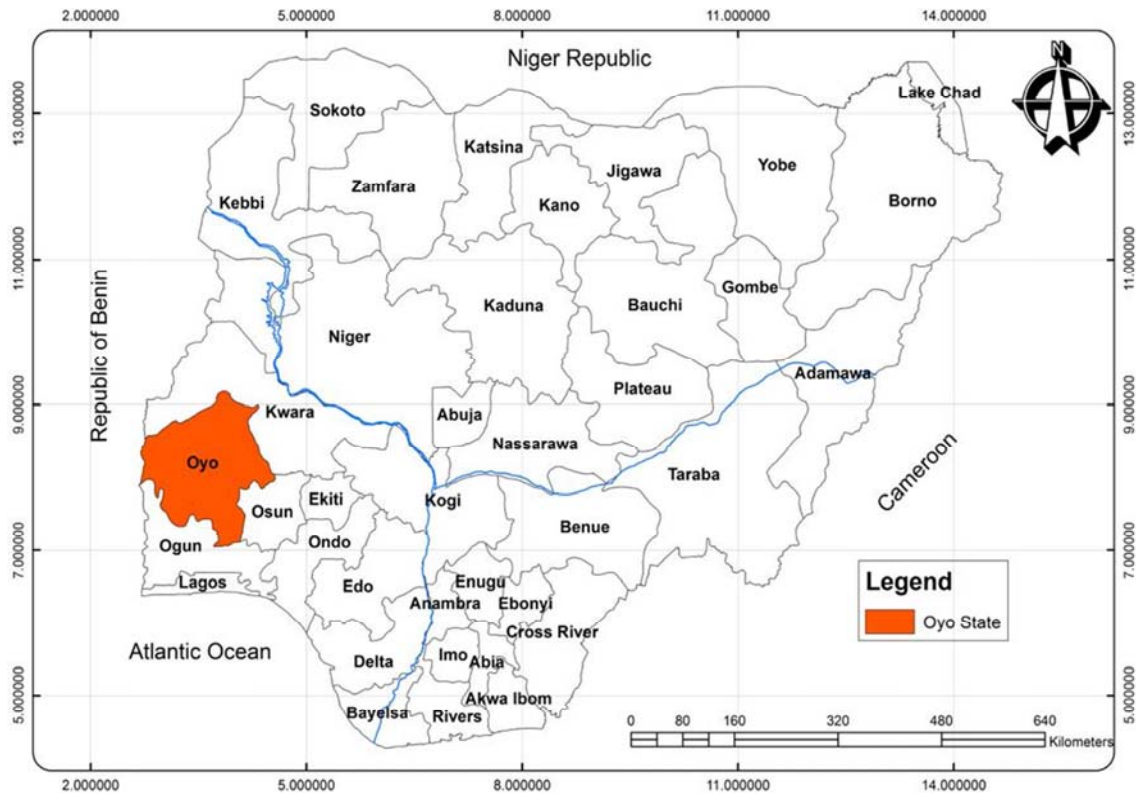


Figure 1. Map of Oyo State in the National setting.

Source: Ministry of Lands, Housing and Urban Development Ibadan (2019)

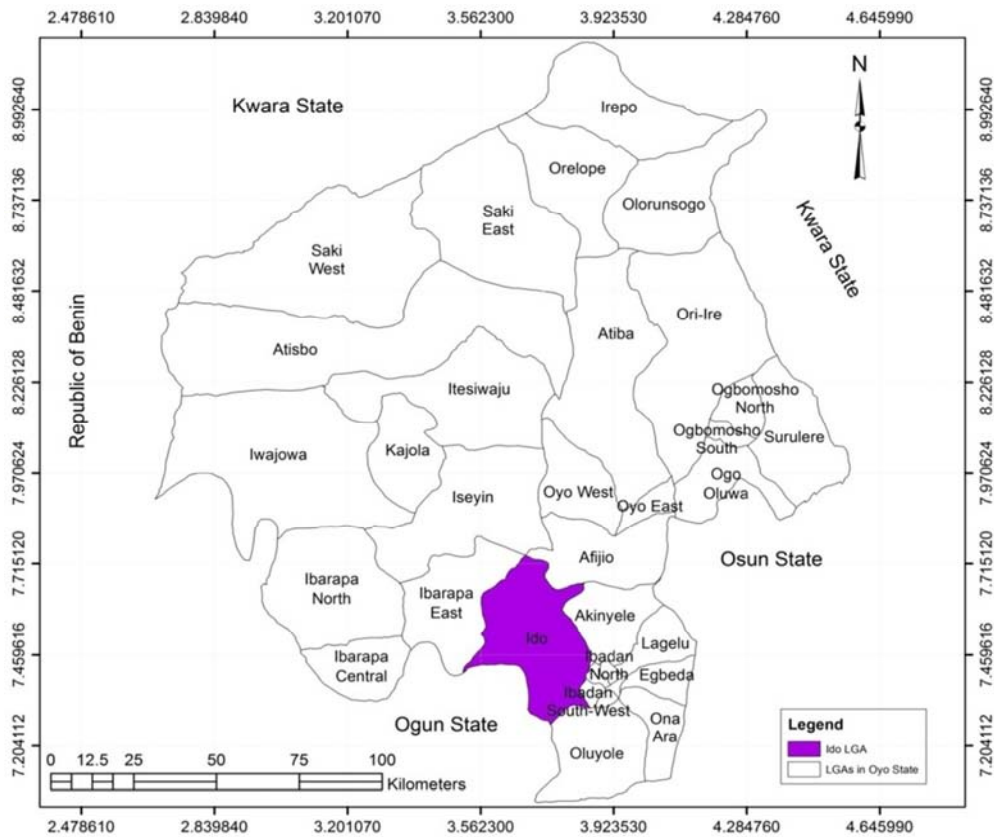


Figure 2. Ido LGA in Oyo State setting.

Source: Ministry of Lands, Housing and Urban Development Ibadan (2019)

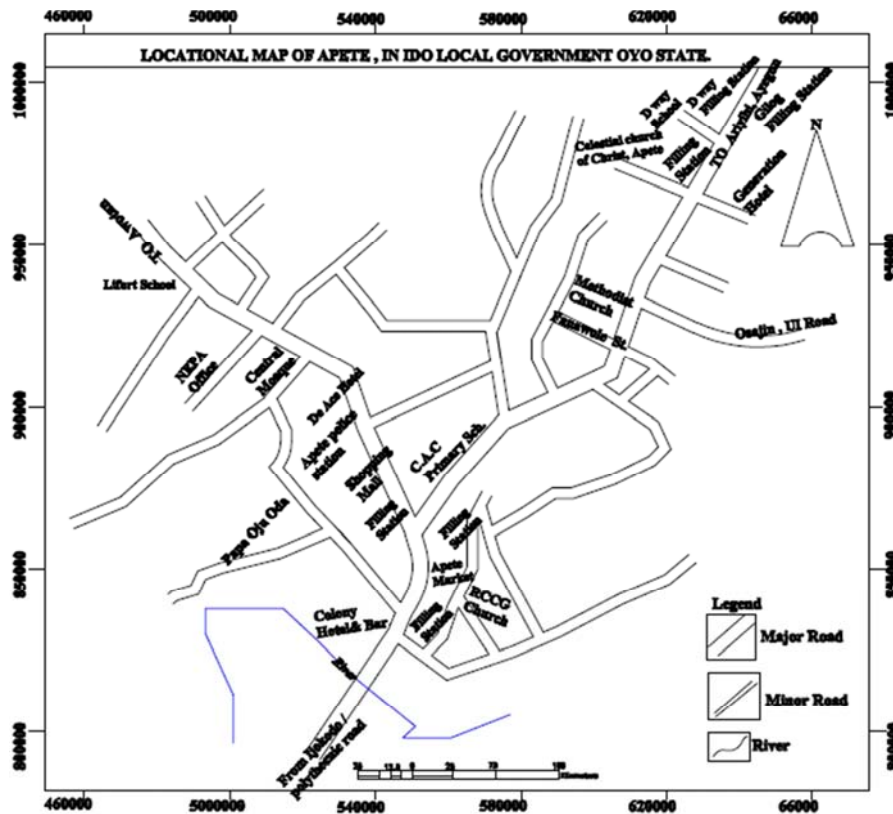


Figure 3. Locational map of Apete community in Ido LGA.

Source: Retrieved from Google Satellite Imagery (2019) and digitized by the authors

3.2. Research Database

The population of Apete community in 1991 was 2464 [3]. Looking at the fact that the 2006 national population census figures were not disaggregated into localities, the 1991 census figure was projected to 2019 to arrive at 6036. With respect to data collection for this study, a 5% of this estimated research population amounting to 302 persons was interviewed with the aid of structured questionnaires which is considered reasonable going by the virtue of her spatial extent and mono-ethnic configuration. These questionnaires were administered scientifically using simple random sampling on house-heads or adults with requisite knowledge where house-heads are inevitably unavailable. Data retrieved from sampled respondents were subjected to appropriate statistical interpretations and meticulous discussions.

4. Results and Discussion of Findings

Out of the 302 questionnaires administered in the course of this study, 292 constituting about 96.7% as highlighted in Table 1 were retrieved which is plausible for the analysis of a research in such a homogenous community.

Table 1. Dataset Appraisal.

Questionnaire Administration	Frequency	Percent
Number of Questionnaires Retrieved	292	96.7
Number of Questionnaires Not Retrieved	10	3.3
Total Questionnaires Administered	302	100

Source: Field Survey (2019)

4.1. Factors Responsible for Land Use Conversion in the Study Area

The precision for decision making is calibrated on a five-point likert scale of strongly disagree to strongly agree. To be precise, Strongly Disagree (SD) = 1, Disagree (D) = 2, Neutral (N) = 3, Agree (A) = 4, and Strongly Agree (SA) = 5. A geographic expedition to this locale glaringly revealed that the location of landmark features such as the Polytechnic Ibadan in this community and close proximity to University of Ibadan had invariably stimulated the need for landed properties conversion to accommodate rising residential and commercial needs in this area. This was empirically evident in Table 2 with a mean score of 4.08 pointing to the verity that land use conversion is an intriguing phenomenon in this geographical area. Furthermore, increasing economic activities, as noted by sampled respondents, had wittingly aggravated issues of land use conversion in this community. This was proven statistically in Table 2 with a mean score of

4.16. The point from this statistical revelation rests on the fact that “as commercial orientation of an area increases, the need for commercial spaces arises and when not matched with corresponding increase, conversion from residential to commercial uses becomes challenging” as it is been witnessed in the study locale.

The population of this community has increased in more than two folds over the past thirty years. This could be attributed to the influence of the Polytechnic Ibadan located in this area which has continued to be the pull factor attracting people to this locale for educational purpose, employment opportunities and economic exploits. Consequently, this has invariably heightened the need for residential and commercial land uses to accommodate surging population in this area. This is a true reflection of the current happenings in Apete community flawed with indiscriminate property conversion and acute residential housing shortages as it was elicited in Table 2 with a mean mark of 4.19. Similarly, data extrapolated from respondents in this community affirmed that age of buildings was one of the factors inducing land use conversion as depicted in Table 2 with a mean score of 4.03. This was obvious in the course of this survey; especially, in the heart of this community and proximate areas to the Polytechnic Ibadan where ageing residential structures were converted to commercial uses.

Table 2. Factors responsible for land use conversion in the study locale.

Variables Consider	Mean	Std
Location	4.08	0.955
Increased economic activities	4.16	0.916
Growth in population of the area	4.19	0.856
Age of structure	4.03	1.048
Stern demand for land uses	4.23	0.901
Ignorance	4.06	0.981
Collaboration with investors	4.01	1.065

Source: Field Survey (2019)

Data retrieved from respondents in the study area, as indicated in Table 2, shows that issues of surging demand for residential and commercial land uses is not matched with corresponding supply thereby stimulating spontaneous land use alterations.

Table 3. Association between Demand and Location as a Factor Inducing Land Use Conversion.

Location	Demand					Total
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Strongly Disagree	0(0%)	0(0%)	0(0%)	1(14.3)	6(85.7%)	7(100%)
Disagree	0(0%)	9(40.9)	0(0%)	8(36.4%)	5(27.7)	22(100%)
Neutral	0(0%)	0(0%)	2(14.3%)	12(85.7%)	0(0%)	14(100%)
Agree	8(5.4%)	0(0%)	3(2%)	108(73.5%)	28(19%)	147(100%)
Strongly Agree	2(2%)	0(0%)	0(0%)	18(17.6%)	82(80.4%)	102(100%)
Total	10(3.4%)	9(3.1%)	5(1.7)	147(50.3%)	121(41.4%)	292(100%)

Source: Field Survey (2019)

4.3. Nexus Between Increased Economic Activities and Age of Structures

With respect to the nexus between increase in economic

This was conspicuous in this locale in the form of either housing transformation or total conversion from residential to commercial uses or mixed uses. As shown in the table, a mean value of 4.06 revealed that, the residents were unacquainted with town planning laws guiding land use development despite the fact that majority of them were literates. Hence, they did not see land use conversion as anathema to orderly development in the locale. It is even heartrending to note that unethical conduct of built-environment professionals was part of the factors inducing land use conversion in the study area. This is illustrated in the table with a mean score of 4.01. These set of professionals were often alleged to collaborate with landed properties investors to compromise extant planning regulations for primordial interests which is made manifest in the areas of land use conversions and other environmental anomalies in this area.

4.2. Association Between Demand and Location as Factor Inducing Land Use Conversion

A critical appraisal of data elicited in Table 3 with regards to probable connection between location and demand for land and landed properties overwhelmingly revealed that both are indiscrete elements influencing land use conversion in Apete community. This is obvious in the Strongly Agree row and column in the table with the nexus between these factors accounting for about 80.4%. This statistical exposition could be hinged on presence of government’s institutions over the space of time, as submitted by sampled respondents, which had invariably attracted investors to the area. The bottom-line of this discourse is premised on the ground that the locational advantage of the study area is the major impetus stimulating staunch demand for land uses in this community. Looking at the challenge of limited accessibility to land and shortfalls in land demand and supply chain in this locale, investors are often disposed to acquiring existing properties from the locals and in turn convert them to other uses with higher economic returns which in most cases is in contrast with their original plans.

activities and age of structures as factors inducing land use conversion in Apete community, Table 4 categorically elicited explicit agreement between these elements of discourse. Suffice to say that spontaneous increase in

commercial activities in this area had in no small measure influenced redevelopment and conversion of old residential structures into commercial land use which have been

established to a considerable degree in this survey to be in conflict with approved land use plans.

Table 4. Nexus between increase in economic activities and age of structures.

Increased Economic Activities	Strongly Disagree	Neutral	Agree	Strongly Agree	Total
Strongly Disagree	8(100%)	0(0%)	0(0%)	0(0%)	8(100%)
Disagree	0(0%)	14(100%)	0(0%)	0(0%)	0(0%)
Neutral	0(0%)	0(0%)	12(010%)	0(0%)	12(100%)
Agree	5(3.4%)	6(4.1%)	120(82.2%)	15(10.3%)	143(100%)
Strongly Agree	8(7.1%)	9(8.0%)	8(7.1%)	87(77.7)	112(100%)
Total	21(7.2%)	29(9.9%)	140(47.9%)	102(34.9%)	292(100%)

Source: Field Survey 2019

4.4. Level of Land Use Conversion Induced by Each Factor in the Study Area

Having established empirically that all elemental factors under considerations in this survey as reported by respondents contributed substantially to the challenge of land use conversion in Apete community, the study went ahead to unearth the intensity of this conversion actuated by each of these factors. Subsequently, the assumptions of binary logistic regression which upholds that predictor variables should either be categorical or continuous; the outcome variable in dichotomous nominal scale of measurement was employed in this research to achieve the above subject-view. For clarity purpose, the predictor variables are all factors

under consideration in this survey while the dependent variable is level of conversion.

Results in Table 5 showed that increase in economic activities and age of structures were the major propelling factors influencing conversion from one land use to the other at p -value < 0.05 . This statistical outcome is justifiable looking at the emerging economic activities going on in this community which had in turn influenced the conversion of ageing structures of low-profit to higher-profit orientation. Though other factors under study might be negligible at p -value < 0.05 in this test, however, it could be scholarly argued that they are all products of increased economic activities in the study area [17].

Table 5. Variables in the Equation.

		B	S.E	Wald	df	Sig	Exp(B)
Step 1 ^a	Location	0.892	1.737	0.264	1	0.608	2.439
	Increase in economic activities	7.699	2.399	10.303	1	0.001	2206.168
	Growth in population of the area	0.159	2.723	0.003	1	0.953	1.172
	Age of structures	4.698	2.196	4.579	1	0.032	109.743
	Demand factor	2.272	2.590	0.769	1	0.380	9.700
	Ignorance	-2.723	2.595	1.101	1	0.294	0.066
	Collaboration with investors	-0.387	2.537	0.023	1	0.879	0.679
	Constant	-58.460	11.036	28.063	1	0.000	0.000

Variable(s) entered on step 1: Location, Increased economic activities, Growth in population, Age of structures, Demand factor, Ignorance, Collaboration with investors,

Source: Computer Print-out (2019)

5. Conclusion and Policy Recommendations

The waves of land use conversion in our cities are alarming and thought-provoking. Intriguing variables which include location, increase in economic activities, growth in population, age of structures, stern demand for land uses, ignorance and collaboration with investors had been empirically proven in this study to be the propelling factors influencing land use conversion in Apete community, Ibadan. Unfortunately, government and other stakeholders with the responsibility of putting in place mechanism to address these socioeconomic factors inducing this subject-view are more tilted towards the economic orientation of land use

conversion with its upshots springing myriads of challenges to mankind in our urban landscape. No wonder why Nigerian cities are always poorly ranked in the comity of nations when it comes to liveability index. To tackle this challenge headlong, the following suggestive policy recommendations are advocated:

1. Lines and points in the master plan of this area should be enforced to the letter. If need be, it should be reviewed to accommodate increasing economic development in this locale.
2. Institutions of government and other stakeholders with the mandate of ensuring orderly control and development in this area should be alive to their responsibilities. Routine monitoring and inspection of land allocation and usage

should be sustained to guard against continued haphazard development occasioned by spontaneous land use conversion in this locale.

3. Conflicting land uses in this area should be reprovved through the communication of appropriate contravention notices to owners of unapproved structures with a view to remedying the challenge of land use conversion in this locale.
4. This study equally advocated for public enlightenment campaign through seminars, workshops and mass media to sensitize and re-orientate residents of the study area on the ills of indiscriminate land use conversion.

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