



## Evaluating the Prevalence of Illegal Structures Development in Osogbo, Southwest Nigeria

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**Abstract:** The study was designed to assess construction of illegal structures in Osogbo, Osun State, Nigeria. The specific objectives of the study include assessing the level of awareness of the respondents on national building regulation. The research examined the level of illegal structures in Osogbo and identified strategies to curb the incidence factors that account for the construction. In the methodology, a sample size of 142 was chosen for the study. Questionnaire administration and personal observation were deployed to elicit vital data from the respondents and the professional allies. Data generated from the survey were analyzed using the statistical tools such as descriptive statistics (percentages and frequencies) and the relative importance index. Findings revealed that 42% of the structures in Osogbo metropol was exclusively constructed without official permit or approval from relevant authorities; 58% of the existing structures had illegal modification whilst, illegal additions accounted for 71.7% of the structures. The findings of the survey indicated that institutional, physical, educational and socio-economic factors aided the proliferation of illegal development in the city. Observation further revealed that all the illegal structures in Osogbo were owned by the educated elites and such structures were either not completely occupied, thus attesting that the educated residents are major violators of building construction regulations. Findings further revealed that, imposition of high penalties on culprits by the local authority, automating of permit acquisition, monitoring

and detection of illegal building operations are amongst the measures which could be instituted to address such a problem. The study concluded that there should be regular public education on building regulations. Moreover, there should be public-private partnership in curbing illegal structures and automating Permit acquisition, monitoring and detection of new structures by the authorities concerned.

**Keywords:** Illegal structure, development, building regulation, prevalence, Osogbo

## 1.0 Introduction

From the perspective of Town Planning regulation, any additions or alternations to structures without the prior approval of the Planning Authority are regarded as, illegal building works, for examples the illegal (unauthorised) construction of metal cages, air-conditioning cooling towers, canopies, rooftop structures, subdivision of flats, structural alternations and drainage connections. All illegal building works are liable to demolition. Illegal building work usually takes many forms and can range from very minor technical breaches, which cause little or no environmental harm, to absolute environmental law breaches for projects that lack outright approval of government agency.

Mounting of illegal (unapproved) structures within urban space for business purpose has become a major problem in towns, cities and municipalities of most developing countries in the world of which Nigeria is not an exception to this development (Acquah-Harrison, 2004). Weiner (2003) mentioned that, the Nigeria central government at a time ordered the demolition of all illegal structures in the Federal Capital Territory of Abuja, specifically those erected on sewage lines, green areas, and conservation zones for

environmental sanity and security. In expanding the argument of illegal siting of structures, Kumar (2012) indicated that in India lands-use planning is highly esteemed therefore, each city marks areas for a particular type of development.

Despite the numerous efforts at both the international and local levels to address this problem, its existence keeps on rising especially within the towns and cities of the developing countries (Adjei-Mensah, 2010; UN-habitat, 2003). Study has shown that illegal structures are frequently constructed on public rights and places reserved for schools, open spaces, nature reserves, parks, roads, market and sanitation sites (Freiku, 2003). Further studies also have revealed the location specific of unapproved structures, many of which are found scattered within agricultural lands. The practice has been described as being frightening by the United Nations habitat. (Ali and Sulaiman, 2006; UN-habitat, 2003). Illegal structures sometimes do not always consented with the provisions of the national building regulations (Ioannidis, Psaltis and Potsiou, 2007)

Construction of illegal structures is a form of slum which keeps on rising in many developing countries of which Africa nations are parts (Warah, 2003). Accordingly, Weiner (2003)

indicated that, it is now common for 30 to 60 percent of an entire city's population to live in structures and neighborhoods that have been developed illegally thus, it is very challenging for governments to furnish such areas, with infrastructure and services essential for health and general well-being. Andoni (2007) argued that, illegal structures pose many serious social, political, economic and environmental implications hence, the need to address it by both governments and civil society. All building works require the building department's prior approval of plans, and consent to commence works (except certain exempted works). Without this approval, building works are illegal and subject to enforcement action by the building department. There are many old privately owned structures that contain 'illegal building works', especially on the external aspects of the structure. Illegal building works can aggravate building deterioration and pose high structural defects due to fire safety risks; it may also cause hygiene problems and environmental nuisance.

According to Ioannidis et al. (2007), some distinct factors might account for construction of illegal structures in several countries. The import of the study hinges on the premise that the findings will help to curtail the phenomena in other parts of developing nations where this menace is most prevailing. Besides, its captivating tendency for further research into issues relating to management of structure construction in Nigeria is sacrosanct. In a nutshell,

the research aims to evaluate the prevalence of illegal structures in the city of Osogbo and identifying strategies to curb the incidence. This is being achieved through four objectives including: assessing the level of illegal structures in Osogbo (the study area); examining factors influencing construction of illegal structures in the town; assessing the awareness of Structure-owners on the National Building Regulations and to identify strategies that will ameliorate construction of illegal structures.

In a brief outlook, Osogbo, the administrative headquarters of Osun State (Southwest Nigeria), with an area of 47km.sq lies firmly on coordinates 7°46' North and 4°34' East. The Nigerian population census of 2006 puts the middle ranked city's population at 156, 694 and five years after it assumed the administrative capital city status. Osogbo shares boundary with other middle ranked towns within the same region – including Ikirun, Ilesa, Ede, Egbedore and Iragbiji and is easily accessible from any part of the State because of its central location. Proximity wise, the town is about 48km from Ile-Ife, 32km from Ilesa, 46km from Iwo, 48km from Ikire and 46km from Ila-Orangun. Osogbo is becoming a notable commercial and industrial centre within the Southwest geopolitical region of Nigeria. The town is said to have attained prominent in 1907, when the British Cotton Growing Association sited in the town an industry for growing and ginning of cotton, which soon followed by the building of the first factory of the Nigerian Tobacco Company (NTC) in



generating hot discussion, and more intensively as urbanization and population of human race continue to surge. Obviously there would not have been exigency for establishing control agencies or standard into any system if every system works in harmony and with no negative implication to the system. It therefore behove that urban physical growth in world developing nations can only meet the global expectation upon it only if the stakeholders know what measures to take to rebirth a working city, devoid of crisis (Simon, 2019). Principally, much of the incidences of poor Physical forms or malfunctions of Nigerian cities structures and their management inefficiency, are results of unabated urbanization impact coupled with many years of absolute neglect by the governments to implement long-term policies that are suitable for both rural and urban areas. The transformation from agricultural age to industrial era in the developed nations was a gradual process but a manageable process with the introduction of certain measures of control to prevent abnormal practices in man activities including housing or shelter provision.

This study in its theoretical review on one hand centres mainly on the perspectives of professional and users of the physical environment and on the other hands beams light on the concepts of urbanization and sustainability. The concept of urbanization from literature perspective is related to specialization, industrialization and economic development. McGranahan and Satterthwaite (2014) have contended

empirically that a higher level of urbanization is associated with higher per capita income implying that urbanization is integral to economic growth. The rapid nature of urbanization and the lack of preparedness coupled with inability to invest in basic urban infrastructure and services in the developing countries have created a complex environment for physical development especially in relation to urban governance and its implication for urban environment. Allen (2009) asserted that contemporary process of urbanisation in the developing world is characterised not just by a shift in the locus of poverty – from rural to urban – but more significantly compounded with the ‘urbanisation of poverty and social exclusion’ that derive from socio-economic, gender and ethnic inequalities. This is what Agbola (2005) referred to as “false urbanization” which is driven by demographic forces rather than economic and industrial forces.

The concept of urban sustainability draws from “true urbanization” rather than “false urbanization”. Allen (2009) outlined five urban sustainability dimensions to assess whether any given practice, policy or trend is approaching urban sustainability. These are economic sustainability, social sustainability, ecological sustainability, physical planning or built environment sustainability and political sustainability. The five dimensions are the five pillars whose interactions determine the effectiveness of urban management. The political component manages the other four to ensure social equity and

justice. Unfortunately, in developing countries, robust interaction among the five components is grossly lacking with the resultant effect of the prevalence of unmanaged or illegal developments. Habib (2005) referred to such developments as the survivalist responses of marginalised persons with no alternative. This agrees with the contention of this study that spatial and economic deprivation resulting from unplanned urbanization engenders illegal physical developments in the Nigerian urban space.

Four theories have been identified in literature to have aligned with the study ('informal structures' evolution). They include the land management theory, the colonial legacy theory, the inadequate economy theory, and the demand and supply disequilibrium theory. Logically, as an economic concept, demand and supply disequilibrium theory establishes a strong relationship of the growth of illegal structures to economic factors. The theory emphasises that the emergence and growth of informal settlements is caused by the imbalance between demand and supply of urban commodities such as land, services and infrastructures. These explanations simply imply that there is no one single theory that can fully explain the emergence and expansion of informal settlements. In view of this, the study adapted the Sietchiping (2004) concept of informal settlement which attributes the growth of illegal structures to a multiplicity of factors such as socio-cultural, socio-economic, physical and institutional factors.

The land management theory is a school of thought that affirms the belief that institutional factors such as inefficiency of urban authorities, poor land management practices, and inadequate urban planning schemes; create informal settlements in urban areas (Fekade, 2000). The United Nations (2007) affirmed that the excessive bureaucratic dealing while issuing land development/ building permits, and corruption of public officials are two institutional factors that have aided the evolution of illegal structures. In its related stance, the inadequate economy theory suggests that economic factors in respect to introduction of new economic system plays a vital role in the development of informal settlements.

The fourth and not the least in importance index is colonial legacy theory. The theory relates the expansion of informal settlements to both political and historical factors, especially colonialism, post-colonial practices, and civil or political instabilities. Where these proliferate, no proper development will be attained. The colonial administrators have a divided interest towards the native settlements, always wanted to segregate themselves from the natives who continued to live in slums and squalors (Debusmann and Arnold, 1996; Global Urban Observatory, 2003). In a nut shell, this study aligns with the opinion that, if all these theories as discussed above could be adopted as a model in the authorized structures in all Nigerian urban areas, the incidence of illegal structures' evolution in the study area (Osogbo, Southwest Nigeria) could easily be

controlled to some degrees if not totally abolished.

### 3.0 Methodology

The study employed the use of both primary source (basically through the engagement of questionnaires and field observations) and secondary source of data collection relevant to the research topic under investigation. These include existing information both in print and in soft especially via the internet. The primary data include information on respondents' socio-economics and demographic characteristics, factors responsible for the construction of illegal structures, the awareness of structure-owners on National building regulations, the level of construction of illegal structures and strategies to curb the incidence of illegal structures phenomenon.

The questionnaires were administered to structure owners in the study area and also to the people working at the four (4) planning agencies in Osogbo; the Federal Ministry of Work, Housing and Power, Osun State Capital Territory Development Authority, and two physical planning area offices in each of the local government area in the study area.

Interview was conducted in the four (4) planning area offices. Interview was granted to the Head of each of the

physical planning department whose opinion is critical to the achievement of the study objectives. Both the sampling frame and sample size were derived from the existing two local Government Areas (LGAs) in Osogbo – that is, Osogbo LGA and Olorunda LGA. A total of 276 occupied illegal structures were counted in the 11 selected wards through reconnaissance survey.

For the purpose of this research 50% of the total identified illegal occupied structures were considered for questionnaires administration with the use of random sampling technique. A total of 138 questionnaires were administered using random sampling throughout the 11 areas (wards) selected from 13 areas considered as the domain of illegal structures within the study area as shown in Table 1. Olorunda LGA wards comprise - Ayekale, Ota-efun, Oke-oniti, Koboogbogboe, Testing ground, Oke-Ado, while Osogbo LGA includes; Oke-Baale, Capital Hotel, Oke-Ijetu, Atelewo, Owodeilesa road (based on the information given by OSCTDA). The areas selected include: Ayekale, Ota-Efun, Oke-Oniti, Koboogbogboe, Testing ground, Oke-Ado, Oke-Baale, Capital Hotel, Oke –Ijetu, Atelewo, Owodeilesa road.

Table 1: Sampling size for structure owners.

S/n	Name of areas	Population of ea (number of stru	Numl Streets ar	Numb Occupiet struct	Number of Occupied l structu	50% Numl Occupied I structur
	Ayekale	500	1	24	12	12
	Ota- efun	490	1	30	10	15
	Oke- oniti	310	2	32	18	16.5
	Kobonigbogboe	442	2	26	8	13
	Testing ground	312	1	21	8	13
	Okeodo	418	2	20	10	10.5
	Okebaale	527	1	25	15	10
	Capital hotel	620	1	22	12	12.5
	Okeijetu	710	1	20	17	11
	Atelewo	319	2	20	13	10
	Owode-ilesa road.	550	2	35	18	17.5
Total		5,198	21	27	141	138

Furthermore, a prototype questionnaires were administered to the planning agencies in order to elicit information on illegal structures and prevailing development control mechanism in the study area. This research engages observation checklists technique (also known as building inspection form) to help in ascertaining the totality (in presence and extent) of illegal structures during the physical inspection of the structures. Data collected by the checklist includes: characteristic of illegal structures, number of illegal of structures.

The data collected from the field were processed using Statistical Packages for Social Sciences (SPSS). Field generated data were equally analyzed with the help analysis techniques, relative importance index and descriptive statistics (percentages and

frequencies). Descriptive statistics aided in analyzing data from the Observation Checklist. Relative Importance Index was employed to rank and assess the level of awareness of structure-owners on the national building regulations.

Relative importance index was employed when assessing structure-owners awareness on the National Building Regulations. The respondents were asked to rate the various statements to indicate the extent to which they agree to the statements on the questionnaire, based on a five-point Likert scale, where 1 represented Strongly Disagree, 2 – Disagree, 3 – Undecided or Uncertain, 4 – Agree; and 5 – Strongly Agree. In the analysis of the extent of their agreement to the various statements, in order to ascertain their level of awareness on the National Building Regulations,

Relative Importance Index (RII) formula was applied as follow.

Where, W: weighting given to each statement by the respondents and ranges from 1 to 5; A- higher response integer (5), and N-total number of respondents.

**4.0 Results and Discussions**

It is imperative to begin the examination of the major challenges of illegal construction from different perspectives, particularly from the angle of field generated results. It suffices to say that the expectation is high for a State administrative headquarters and urban areas as far as their conformity to decent practices in development is concern. The prescribed planning and development standard for urban centres are far raised higher than with the peri-urbans

settlements. One of the expectations is the fact that planning permission (through application) must be obtained prelude to any form of development or change of use. Table 1 clearly shows the summary of three years (2013, 2014 and 2015) of applications submitted to the two local government areas (core metropolis) planning authority. On the whole (in the two LGAs) a total of 1,187 plan applications were submitted for consideration out of which 912 or 77% was approved. The approval performance can be described as good if such they can be reflected in the actual execution. Many approved plans are usually not implemented to the letter as some developers change the plans at execution stage.

Table 2: Evaluation of Plan Applications in Osogbo metropolis -2013 - 2015

Years	Osogbo LGA			Olorunda LGA		
	No of plan submitted	Approved	Unapproved	No of plan submitted	Approved	Unapproved
2013	294	232 79%	62 21%	129	90 70%	39 30%
2014	325	247 76%	78 24%	142	102 72%	40 28%
2015	209	174 83%	35 17%	88	67 76%	21 24%
<b>Total/AvT</b>	<b>828/276</b>	<b>653 /218</b>	<b>175 /58</b>	<b>359 /116</b>	<b>259 /86</b>	<b>100 /33</b>

Table 2 reveals the gradual reduction in the numbers of plan approval requests in the two local governments, as 2014 tend to have the highest submitted of the three years (2013 -2015). The expectation should be that that a continuous rise in request will be maintained. Whereas many factors could be responsible for

this – such as low level of effective demand by the potential individual or that such individual have resorted to ‘the easy way’ of building without proper permission. From the observation checklists technique used and Table 1, a total of 417 illegal structures (both the occupied and unoccupied ones) were identified in

the study area. Majority of the approved plans must have defaulted

at executing stage of their projects.

#### 4.1 Socio-Economic and Demographic Characteristics of Respondents

Table 3: Socio-economic Characteristics

Status	Frequency	Percentage
<b>a. Age Distribution characteristic</b>		
Below 30	6	4.3
31-40	46	33.3
41-50	58	42.0
51-60	20	14.5
Above 60	8	5.8
<b>Total</b>	<b>138</b>	<b>100.0</b>
<b>b. Educational Attainment</b>		
Basic	11	8.0
Secondary	36	26.1
Tertiary	89	64.5
Informal	2	1.4
<b>Total</b>	<b>138</b>	<b>100.0</b>
<b>c. Monthly Income classification</b>		
Less than ₦20,000	20	13
₦20,001 – ₦40,000	78	63.2
₦40,001 – ₦60,000	25	14.2
Greater than ₦60,000	15	9.7
<b>Total</b>	<b>138</b>	<b>100</b>
<b>d. Occupation of the Respondents</b>		
Business Owners	59	42.8
Professional/Civil servants	45	32.6
Vocational	24	17.4
Pensoiners	10	7.2
<b>Total</b>	<b>138</b>	<b>100</b>

Table 3 depicts the relevant socio-economic/demographic variables of the respondents including their educational and occupational statuses. It is a known fact that age is an important variable to consider with respect to ownership of structure, this step out of the fact that a minor may not be knowledgeable to handle

building construction. Most of residents and owners of illegal structures are young adults who are in their active working age. Accordingly, respondents were asked to indicate their age. The age of the respondents were categorized in ten year intervals in order to know the particular age range that contains the majority of

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respondents. The major respondents' age brackets were the age brackets 41-50 and 31-40 representing 42% and 33.3% respectively. This implies that high percentage of the residents and real owners of the perceived illegal structures are young adults who are in their active working age. More so, the distribution pattern of Table 3 is an attestation that matured persons provided the needed information for this research.

Another important attribute of residents that could influence their perception is their education level. It is a known fact that individuals with high educational status may be more sympathetic to the poor look of their environment more than individuals with low levels of education. It was established from Table 3 that nearly all the respondents covered by the investigation had attended one or more from the basic, secondary and tertiary institutions at 31.0%, 31.6% and 32.3% respectively. Respondents with informal education only accounted for 5.2% of the total. It is obvious that larger percentage of the respondents are educated, which give them better knowledge and awareness about the environmental quality in their area or location. However, contrary to the results of this research indicating that huge percentage of the educated elites are owners of those illegal structures. Table 3 further revealed that 64.5% of the structure-owners had tertiary education; 18.1% secondary; 8.0% basic and only 1.4% had no formal education. This perhaps could be attributed to the effect of Free Basic Education Programme being practiced in Nigeria, which aimed at making

everyone attain at least basic education.

As can be viewed in Table 3 (Income variable), the level of monthly income in the study area tends to agree with the reality of the physical attributes of the environment in terms of illegal construction. Whereas 63.2% of the respondents (modal class) earn between N20,001 and N30,000, only 9.7% of the respondents earned N60,000 and above. The monthly salary earners of between the minimum wages of N18,000 to N40,000 may often find it difficult to pay off all approval fees for development and even more to construct a qualitative structure for healthy living. In the nutshell the table revealed that monthly income of the individual in real sense tends to influence their rate of living standard, meaning that the higher the income of an individual, the higher the propensity to build according to the building guidelines. This is because higher income earners can afford to buy or build their houses in a high brown area within the community.

The occupation of a respondent amongst other things, determines a respondent's level of income. The level of income influences a person's ability to build, consequently, becoming a structure owner. A study by Global Development Research Centre (GDRC) (2003, cited in Adjei-Mensah, 2010) revealed that, the occupational status of structure-owners tend to influence construction of illegal structures. Drawing insights from Melesse (2006) who opined that, most illegal structures are largely

being put up by economically well to do persons in the society.

The occupation variable has different categories such as: 'Businessmen'-referring to those who were self-employed; 'Professional/Civil servants'- referring to those with formal training from recognized tertiary institutions (for instance, Teachers, Nurses, Doctors and the likes); 'Vocational' refers to those who had training through the master-apprenticeship means, and lastly, 'Pensioner'. Accordingly, Table 3 summarizes the occupation status of the respondents viz: 42.8% were 'businessman'; 32.6% were 'professional /civil servants'; 17.4% were 'vocational' and 7.2% were 'pensioners'. This implies that those who are self-employed, 'businessmen' have built more structure than the other categories; this might be attributed to the result of better returns from entrepreneurship engagement. The 'professional' often find themselves in the public sector as civil servants. However, large sections of workers in the public sector are not reliably paid thus, explaining the inability of individual concerned to own too many structures. It was, however, not surprising that 42.8% of the structure owners were 'businessmen'. This affirmed Melesse (2006) opinion that, most of illegal structures are largely being put up by economically well to do persons in the society.

#### **4.2 Awareness of Building Permit**

Structure-owners demonstrated high level of awareness on building permit in Osogbo. Most of them expressed views that were in line with building

regulations, in relation to the various questions that were asked on building permit as shown in Table 4. A clear look at the rating shows a high percentage of the respondents that agreed to the statements from the building regulations; according to ranking level of awareness of building regulations, the variable statement: Official Approval is required for any addition, modification & extension to structures, ranked 1st with RII value of 0.409. Next to it is, 'Every stage of the building requires the Authority's approval before the next scheme.', which ranked 2nd with RII value of 0.407. Ranking 3rd was the variable, 'Town Planning authorities can stop me from development, if I do not possess the required land valid particulars with RII value of 0.400. In the same vein, the statement that: An intended developer must inform the Town Planning Authorities on actual date of commencement ranked 4th with RII value 0.391. Furthermore, the statement that: Since I possess building permit I have the right to erect any structure on the land ranked 5th with a RII value of 0.368. The other statement variables continue to maintain ranks until the very last: 'Any structure executed to the satisfaction of the Planning Authority shall be issued with a certificate of completion for use before one occupancy'. the 9th in ranking with RII value of 0.340. These results from Table 4 indicated that structure-owners in Osogbo had high level of knowledge with respect to building permit. This probably may be due to their high level of literacy as displayed in Table 3. Statistics also shows that a

reasonable percentage of people still

contravene planning rule intentionally.

Table 4: Awareness on Building regulations - Building permit

BUILDING PERMIT		Rating and weighted value							
		<i>Strongly disagree</i>	<i>Disagree</i>	<i>Undecided</i>		<i>Agree</i>	<i>Strongly agree</i>	$\Sigma W$	$R_i$ Rank
No	Statement(Variable)	1	2	3	4	5			
1	One must be notified receipt of his/her pern application by 7 days decision on his/her pe application by 3 mont	11	36	22	41	28	453	0.365	6 <sup>th</sup>
2	An intended developpe inform the Town Plan Authorities on actual commencement	11	32	14	36	45	486	0.391	4 <sup>th</sup>
3	I have the right to commence the buildir without official apprc since I own the land	26	23	27	30	32	433	0.349	8 <sup>th</sup>
4	There is limited durat that my permit can las	13	30	26	43	26	453	0.365	6 <sup>th</sup>
5	Every stage of the bui requires the Authority approval before the ne scheme.	11	12	20	65	30	505	0.407	2 <sup>nd</sup>
6	Any structure execute the satisfaction of the Planning Authority sh issued with a certifica completion for use be one occupancy.	14	46	20	34	24	422	0.34	9 <sup>th</sup>
7	Since I possess buildi permit I have the righ erect any structure on land	24	20	17	43	34	457	0.368	5 <sup>th</sup>

8	Town Planning authorities can stop me from development, if I do not possess the required land valid particulars.	13	21	15	48	41	497	0.4	3 <sup>rd</sup>
9	Official Approval is required for any additional modification & extent structures	12	13	20	55	38	508	0.409	1 <sup>st</sup>

**4.3 Awareness on Plot Development**

The level of awareness of structure-owners on plot development in Osogbo followed similar pattern as the

awareness on building permit. Most of the answers that the structure-owners gave were in line with the provisions of the National Building Regulations.

Table 5: Awareness on building regulations-Plot development

No	Statement (Variable)	Rating and weighted value					ΣW	RII	Rank
		Strongly Disagree	Disagree	Undecided	Agree	Strongly agree			
1	All sites susceptible to flooding not be built upon without prior provision for flood control.	13	36	17	26	46	470	0.681	4 <sup>th</sup>
2	All buildings erection inside/outside drain, culvert, or watercourse, high tension cable or near a sewer forbidden	8	15	21	43	51	528	0.765	2 <sup>nd</sup>
3	Two metres set back from one building to another must be maintained	8	3	25	50	52	549	0.796	1 <sup>st</sup>
4	It is mandated that the Total floor area of the structures stay within 80% of the plot total area	8	23	43	39	25	464	0.672	5 <sup>th</sup>
5	It is prohibited for any building to encroach into sections reserved for utility lines enhancement	7	21	20	33	57	526	0.723	3 <sup>rd</sup>

Accordingly, Table 5 gave a summary of the answers given by respondents. The building regulations clearly emphasize that: Two metres set back

from one building to another must be maintained, however, this statement ranked 1st with RII value of 0.796.

In addition to this, the statement, All buildings erection inside/over a drain, culvert, or watercourse, under a high tension cable or near a sewer are forbidden ranked 2nd with RII value of 0.765. Furthermore, the statement, It is prohibited for any building to encroach into sections reserved for utility lines enhancement ranked 3rd with RII value of 0.723, while the statement, all sites susceptible to flooding must not be built upon without prior provision for flood control ranked 4th with RII value of 0.681. Accordingly, the statement that, 'It is mandated that the Total floor area of the structures stay within 80% of the plot total area' ranked 5th with RII value of 0.672. The distributions of Table 4 indicated that, the level of awareness of structure-owners about plot development in Osogbo is very low.

Where,  $n = 138$  (number of respondents),  $A = 5$  (total number of variables)

More so, the Tables 3 (on respondents' socio-economics characteristics) and 4 variables were considered to have significantly impacted the construction of illegal structures in Osogbo metropolitan area. However, those variables with RII below 0.700 moderately influence construction of illegal structures. In addition to this, it could be concluded that, following the distributions of Tables 4 and 5, the level of awareness on the National building regulations, exhibited by structure-owners in Osogbo was considered far above average. Thus, the finding is inverse to the two studies carried out in Ghanians' cities by Adinyira and

Anokye (2013) and Adjei-Mensah (2010). They both affirmed that, construction of illegal structures occurs due to ignorance of people about the national building regulations, rather, the institutional and legal factors are more influential to the constructions of illegal structures development in their investigations. This often lead to institutional inefficiencies in curbing the menace of illegal construction or development. It is valid to conclude that non-punitive sanctions against offenders, corruption and contradictory laws amongst others are the major factors of influence in the emergence of illegal structures in the study area. Apparently, it is expedient that planning authorities through the instrumentality of development control brace up while proper sanctions should be meted out to offenders to avert this phenomenon.

## 5.0 Conclusion and Recommendations

Based on the findings and the objectives of the research, the following conclusions were drawn: First, as bureaucracy and corruption have characterized the operations of the planning agencies, specifically the Physical Planning Department and the Works department, thereby leaving most construction in Osogbo without a proper supervision. Furthermore, structure-owners level of awareness on the National building regulations on issues relating to Building permit and Plot development was very low and this had largely contributed to construction of illegal structures. Consequently, curbing construction of illegal structures may require multiple

strategies such as governments' application of high penalties in case of detection of illegal building construction; moreover, there should be public-private partnership in curbing illegal structures and automating Permit acquisition, monitoring and detection of new structures by authorities.

In view of the study's findings the under stated recommendations will go a long way to ameliorating the incidence of the so called 'illegal structures' in Osogbo metropolis and in other urban centres in the region.

First, the State and local governments should enact legislation to make the

national building regulation effective or enforceable. Second, planning agencies should organize an educational /enlightenment campaigns in order to educate the populace about the Nigeria building regulations - that the National Building code should be introduced into the school curricular so that it can be offered as a course in different faculties/schools to reduce the level of ignorance. Third, all Illegal structures should be regularized after the non-conforming portions have been demolished in line with the provisions of the National building regulations, as a first step to decongesting Osogbo town.

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