



Residents' Perception of Physical Planning Regulations in Three Secondary Cities in Nigeria (A Study of Osogbo, Ile-Ife, and Iwo)

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Abstract

This paper assessed residents' perception of physical planning regulations with a focus on three major cities (Osogbo, Ile-Ife, and Iwo) in Osun State. Resident's perception was determined by level of awareness of physical planning regulations and experience with administrative practices in the enforcement of physical planning regulations in the study area. For data collection, each of the cities was stratified into three developmental zones, with satellite imageries of built-up areas in each city being subjected to Fishnet analysis in a GIS environment. An average of one house was randomly selected from an area of 0.6 km^2 . Thus, 108, 62 and 56 houses were selected in Osogbo, Ife and Iwo respectively and one resident was sampled in each of the selected houses to arrive at the sample size of 226 residents, to whom copies of the questionnaire were administered. Findings revealed that residents were not quite aware of physical planning regulations in each study area and that those with some knowledge of such regulations acquired it in the course of interacting with planning agencies. It was also found that administrative practices on the enforcement of physical planning regulations were not quite effective. Therefore, it is recommended that physical planning agencies should aim for more effectiveness in raising public awareness on physical planning regulations while improving their own administrative practices.

Keyword: Osun State; Perception; Planning Agencies; Physical Planning Regulations; Residents

1.0 Introduction

In Nigeria, as is the case in most developing countries, the rapid rate of urbanisation has not been matched by effective planning responses. Various studies have established that Nigerian cities have experienced changes in spatial extent and form without proper coordination (Fadare & Daramola, 2008; Daramola & Olojede, 2011; Olawuni & Daramola, 2013; Daramola et al., 2017). These cities experienced haphazard development as a result of urban growth without adherence to the principles of physical planning. The mixture of this haphazard development with a handful of planned areas has made Nigerian cities a combination of order and disorder, grandeur and squalor, as well as virtue and vice. In spite of these problems, the urban growth rate in Nigeria remains unprecedented and cities continue to be marked by consistent drastic changes in population, spatial extent and structure.

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The rapid physical expansion of Nigerian cities and its associated disorganised development in terms of inadequate building layouts, poor neighbourhood legibility, land fragmentation and poorly constructed buildings are evident (Daramola & Olowoporoku, 2016). Addressing these problems calls for proper physical planning. According to Okpala (2008), physical planning is the process of programming the coordination of the direction and structure of urban growth with the goal of ensuring that all land use needs (economic, social, environmental, institutional, cultural and recreational) are provided for in compatible and symbiotic relationships for all urban populations. Daramola (2021) defines physical planning as the theory and practice of the development, growth and management of human settlements through the effective coordination of their various land uses to ensure the efficient functioning of their systems in a sustainable manner.

The foregoing definitions reveal that physical planning has certain responsibilities in order to secure well-planned cities. According to Daramola (2018) these responsibilities are twofold: development plan preparation (logical arrangement of developmental activities in space) and development control (stipulation of adequate standards for developmental activities in pursuit of strategic ends). Nevertheless, these physical planning responsibilities can only be effectively ensured with adequate recourse to physical planning regulations.

Physical planning regulations are a collection of interrelated statutory and administrative instruments for the purpose of regulating the use of land and controlling the appearance, arrangement and character of buildings and facilities in the overall interest of the community (Oloyede, 2010). These regulations are enacted in order to ensure effective control of building development and are executed in residents' interest by the relevant planning agency. Among the regulations are building codes, development plans, land subdivision guides, planning standards, planning laws and zoning codes (Alonge, 2019). Despite the existence of such regulations, urban land use development tends to be undertaken in a manner that constitutes environmental challenges. This is an indication that urban residents that are mostly subjected to the enforcement of these physical planning regulations may not be aware of them or may not be ready to comply with physical planning regulations.

Yet, well established in the literature is the indispensability of compliance with physical planning regulations in the achievement of coordinated urban development. Thus, studies such as Abubakar, Lizam and Yassin (2013), Daramola (2018) and Alonge (2019) have identified the various factors that encourage lack of compliance with physical planning regulations among urban residents, e.g., socioeconomic characteristics, level of awareness of the benefits associated with physical planning regulations as well as the negative consequences associated with their violation, and developer desire for profit maximisation. Besides, since compliance with physical planning regulations is a function of their effective enforcement, the administrative practices of planning agencies have also been identified as factors influencing compliance with physical planning regulations (Sarkheyli & Sharifi, 2012; Abubakar, Lizam & Yassin, 2013). Among these practices are the granting of approvals, development monitoring, supervision of constructions, creation of awareness on planning regulations and localisation of planning regulations.

These compliance factors stress the importance of assessing residents' perception of physical planning regulations. Simply put, perception is the sensory experience of the world involving the recognition of environmental stimuli and the actions taken in response to such stimuli. In other words, perception enables humans to navigate their environment and to make critical decisions about the environment. For instance, residents' perception of physical planning regulations in relation to the administrative practices of planning agencies may be viewed in terms of their awareness of the administrative practices, requirements and benefits of physical planning regulations and their responses (compliance or noncompliance) to the regulations. It may be necessary to explain the need for incorporating perception into this study. Contemporary urban problems require solutions that should be designed by various categories of experts as well as the

people who will benefit from whatever policies emerge. As perception studies show (Daramola & Olowoporoku, 2016; Daramola, 2018; Alonge, 2019), stakeholder engagement is important because it guides policymakers and policy planners with regard to the required regulations at any given time. This study therefore attempts to examine residents' perception of physical planning regulations in Osun State, Nigeria.

2.0 Literature Review

The indispensability of compliance with physical planning regulations in the achievement of coordinated urban development has been identified in the literature (Gough, 1996; Arimah & Adeagbo, 2000; Fekade, 2000; Rakodi, 2003; Few et al., 2004; Kombe, 2005; Kuen-Tsing, 2005; Alnsour & Meaton, 2009; Sarkheyli & Sharifi, 2012; Abubakar, Lizam & Yassin, 2013; Gyau, Awuah & Hammond, 2014; Olojede & Daramola, 2015; Daramola, 2018). A study by Offiong (2014) examined the socioeconomic characteristics of property owners and their level of compliance with building regulations in Calabar, Nigeria. The study concluded that the socioeconomic characteristics of property owners or developers, especially income and educational status, determine the level of compliance with building regulations in the study area. Investigating the basic data of developers of illegal constructions in a Taiwanese city, Kuen-Tsing (2005) found that socioeconomic characteristics such as age, education, occupation, monthly income and respondent household size influenced compliance with building regulations. On their part, Arimah and Adeagbo (2000) studied compliance with planning standards across the residential zones of Ibadan and found differentials in residents' compliance with planning standards based on their socioeconomic characteristics.

Other studies have established the relationship between cognitive factors such as experience, awareness, values and needs of the people and their response to physical planning regulations (Francescato & Mebane, 1973; Onibokun, 1985; Jiboye, 2008; Abubakar, Lizam & Yassin, 2013; Gyau, Awuah & Hammond, 2014). As Gyau, Awuah and Hammond (2014) found in a Ghanaian community, non-conformity with development standards was intentional and cases of compliance in the community were mainly by members of the elite who needed evidence of compliance for benefits such as loans. In Tehran, Sarkheyli (2012) examined level of compliance with physical planning regulations. The study concluded that certain developers did not comply with the regulations because of their low level of awareness of the benefits associated with compliance with physical planning regulations as well as the negative consequences associated with their violation. It was also revealed that profit maximisation was the reason for some developers' violation of physical planning regulations. In line with such studies, it is expedient to assess the level of residents' awareness of and response to physical planning regulations in the study area.

According to Alnsour and Meaton (2009), the level of compliance with physical planning regulations is a function of two factors: differences in the socioeconomic characteristics of house developers/owners and enforcement of physical planning regulations under which the developers operate. These could be undertaken through various administrative practices, e.g., development monitoring, supervision of constructions, provision of equipment, personnel training and creation of awareness on planning regulations. Therefore, this study examines the enforcement of physical planning regulations in the study area and also determines its level of effectiveness in creating awareness of and ensuring compliance with physical planning regulations in the study area. Based on the foregoing, this study assesses residents' perception of physical planning regulations in Osun State with particular focus on Osogbo, Ile-Ife, and Iwo.

3.0 Study Area

The study area is Osun State, located in western Nigeria. With Osogbo as its capital, the state has 30 local government areas (LGAs), each with a number of political wards; the state has three senatorial

districts of Osun West, Osun East, and Osun Central. From the LGAs, Osun State Government has also created 38 local council development areas (LCDAs) and administrative offices. The LCDAs are meant to take development closer to the people. Within these political divisions of the state are several towns and cities of varying sizes, with the most notable being Osogbo, Ile-Ife, Ilesa, Iwo, Ede, Ikorodu, Ikeja, Ejigbo, and Ila-Orangun. These urban settlements are distributed across the three senatorial districts, with the LGAs and LCDAs located in the aforementioned urban centres and others of lower status. In relation to physical planning, there are planning offices at both the state and local levels in the state. At the state level are the Ministry of Lands, Physical Planning and Urban Development, the Capital Territory Development Authority, and the Osun State Property Development Corporation. In each LGA and LCDA there is a Department of Town Planning and Land Services. Each planning office is responsible for the enforcement of physical planning regulations in its jurisdiction.

4.0 Methodology

To select eligible respondents, the researchers employed the multistage sampling procedure. The first stage involved the adoption of the political division of Osun State into three senatorial districts, followed by the selection of the largest city in each of the senatorial districts. The researchers focused on the largest cities because they have hosted planning offices for many years and therefore have a long history of enforcement of physical planning regulations. It is also evident that physical planning is more effective in large cities in Osun State when compared with smaller urban centres. Thus, residents of such large cities were considered more suitable to serve as respondents on the perception of physical planning regulations. Osogbo, Ile-Ife, and Iwo were therefore selected from Osun Central, Osun East, and Osun West senatorial districts respectively.

Sequel to the selection of these cities was their stratification into three developmental zones based on the period of development of each section of the city. The developmental zones are the core areas (areas developed in the pre-colonial era), the transition zones (areas developed in the colonial era) and the suburbs (areas developed after independence). Due to homogeneity of each of these developmental zones, a political ward was randomly selected in each of the zones across the three selected cities. The satellite imagery for each developmental zone was acquired and subjected to Fishnet analysis in a GIS environment to generate automated grid intersections at intervals of 750 metres; thus, an average of one (1) house was selected from an area of 0.6 km². Consequently, 108, 62 and 56 houses were selected in Osogbo, Ile-Ife, and Iwo respectively, with one resident picked in each of the selected houses to arrive at the sample size of 226 residents, each of whom received a copy of the questionnaire.

Information was elicited on resident's profile, resident's level of awareness of physical planning regulations and resident's perception of administrative practices on enforcement of physical planning regulations in the study area. Apart from the information supplied on their socioeconomic attributes, the respondents were requested to rate their levels of awareness of physical planning regulations and effectiveness of administrative practices on a 5-point Likert scale (1 = not at all aware/very ineffective to 5 = extremely aware/very effective). For data analysis, cross tabulation and Analysis of Variance (ANOVA) were used for some data collected. In the course of computing indexes from the data based on the Likert Scale, the designated values of 1, 2, 3, 4 and 5 were used to allot weight to the options. The Weight Value (WV) for each criterion was obtained by the product of the number of responses for each rating to a variable and the respective weight of the value, which was expressed as:

$$WV = F_i V_i$$

where WV was the weight value, F_i was the frequency of responses for variable i , V_i was the weight attached to responses on variable i , and i was the designated value of the Likert point response under consideration.

5.0 Findings and Discussion

This section discusses the profiles of the respondents, sources of residents' awareness of physical planning regulations, level of awareness of physical planning regulations and perception of the effectiveness of the administrative practices on the enforcement of physical planning regulations in the study area. All the tables in this section emanated from the field survey conducted by the authors in the year 2023.

5.1 Respondents' profiles

The profile of each respondent comprises gender, age, level of education, average monthly income and years of living in place of residence. These variables are considered important because they play a key role in evaluating people's perception on any subject (El-zien et al., 2006; Somja, 2013; Daramola & Olowoporoku, 2016). Results from the analysis are presented in Table 1.

Findings on the gender of respondents revealed that 50.9% of the respondents in Osogbo were males and 49.1% were females. In Ile-Ife, 90.3% of the respondents were males and 9.7% were females. Furthermore, in Iwo, 73.2% were males and 26.8% were females. In general, 67.3% of the respondents sampled were males and 32.7% were female. This shows that there were more males among the respondents than females. Respondent age is another basic characteristic that contributes significantly to identifying and understanding an individual's view on physical planning activities. The age groups were divided into two, i.e. ≤ 45 (young adult) and ≥ 45 (adult). In Osogbo, 18.5% and 81.5% were less than 45 years and above 45 years respectively. In Ile-Ife, 37.1% were less than 45 years and 62.9% were older than 45 years old. Also, in Iwo, 76.8% were less than 45 years and 23.2% were older than 45 years. In all, 38.1% were less than 45 years and 61.9% were older than 45 years. This indicates that the residents were of age to give reliable information on the perception of physical planning regulations. The ANOVA results ($F = 69.113$; $p < 0.001$) indicated that age distribution of the residents varied significantly across the three cities.

Table 1: Profiles of the respondents

Attributes	Osogbo	Ile-Ife	Iwo	Total
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Gender				
Male	55 (50.9%)	56(90.3%)	41 (73.2%)	152 (67.3%)
Female	53 (49.1%)	6 (9.7%)	15 (26.8%)	74 (32.7%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Age				
≤ 45	20 (18.5%)	23 (37.1%)	43 (76.8%)	86 (38.1%)
≥ 45	88 (81.5%)	39 (62.9%)	13 (23.2%)	140 (61.9%)
Total	108 (100.0%)	62(100.0%)	56 (100.0%)	226 (100.0%)
Educational Attainment				
Primary	28 (25.9%)	11 (17.7%)	6 (10.7%)	45 (19.9%)
Secondary	48 (44.4%)	14 (22.6%)	19 (33.9%)	81 (35.8%)
Tertiary	32 (29.7%)	37 (59.7%)	31 (55.4%)	100 (44.3%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Average Monthly Income				
$\leq \text{₦}60,000$	42 (38.9%)	13 (20.9%)	0 (0%)	55 (24.3%)
$\geq \text{₦}61,000$	66 (61.1%)	49 (79.1%)	56 (100%)	171 (75.7%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Years of living in place of residence				
1 - 5 years	4 (3.7%)	8 (12.9%)	0 (0%)	12 (5.3%)
6 - 10 years	29 (26.9%)	8 (12.9%)	31 (55.4%)	68 (30.1%)
Above 10 years	75 (69.4%)	46 (74.2%)	25 (44.6%)	146 (64.6%)
Total	108 (100%)	62 (100.0%)	56 (100%)	226 (100%)

Further findings on educational attainment of the respondents revealed that in Osogbo, 25.9%, 44.4% and 29.7% of them possessed primary, secondary and tertiary education respectively. In Ile-Ife, 17.7% of the respondents attained primary education, 22.6% attained secondary education and 59.7% attained tertiary education. Also, in Iwo, respondents with primary, secondary and tertiary education constituted 10.7%, 33.9% and 55.4% respectively. In all, the majority (44.3%) of the respondents had tertiary education, while 19.9% and 35.8% had primary and secondary education respectively. This high level of education increases level of awareness and perception of residents about issues affecting them.

Findings on the average income earned monthly revealed that 38.9% of the respondents in Osogbo earned less than ₦60,000 while 61.1% earned above ₦61,000. In Ile-Ife, the proportion of respondents that earned less than ₦60,000 accounted for 20.9% and 79.1% earned above ₦61,000. In the Iwo area, none of the respondents earned less than ₦60,000 and all the respondents earned above ₦61,000. Further findings on the mean income across the residential zones revealed that the mean monthly income in the Osogbo, Ile-Ife, and Iwo areas were ₦32,810, ₦65,360 and ₦87,100. The results of the ANOVA test [$F(117, 2) = 9.286, p = 0.004 < 0.05$] revealed that there was a significant difference in the monthly income of respondents in the different areas. In summary, it can be inferred that the average monthly income of respondents increased as distance increased from each area.

Findings on the years of living in place of residence revealed that in Osogbo 3.7%, 26.9% and 69.4% stayed between 1 and 5 years, 6 to 10 years and 10 years above respectively. In Ile-Ife, the majority of residents, at 74.2%, had stayed above 10 years, while in each case, 12.9% had stayed between 1 to 5 years and 6 to 10 years. Also in Iwo, the majority had only stayed for the period of 6 to 10 years and 44.6% had stayed above 10 years. These findings corroborate the position of Lindell and Perry (2000), Eisenman et al. (2006) and Reininger et al. (2013) that length of residence of respondent influences environmental awareness. This is because the longer people live in an area, the more likely they are to understand the prevailing environmental challenges there.

5.2 Residents' Sources of Awareness of Physical Planning Regulations

Also analysed were sources of awareness of physical planning regulations of residents (see Table 2). Findings revealed that most of the residents became aware of physical planning regulations while seeking planning approval and after being served administrative notices such as contravention notice, stop work notice, quit notice and demolition notice. Other notable sources were through enlightenment campaign, experience with demolition exercise, outdoor advertisement such as billboards and posters, the mass media, as well as friends and neighbours, etc. These findings indicate that most respondents became aware of physical planning regulations in their quest for physical development. Therefore, it may be concluded that the level of awareness of physical planning through sources such as the mass media, outdoor advertisement and enlightenment campaigns was low in the study area.

Table 2: Residents' sources of awareness of physical planning regulations

Source of Awareness	Osogbo		Ile-Ife		Iwo		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
When seeking plan approval	70	37.8	36	19.5	44	23.8	150	100.0
When served with notices	53	39.3	25	18.5	31	23.0	109	100.0
Outdoor advertisement	17	37.8	9	20.0	11	24.4	37	100.0
Enlightenment campaign	21	38.9	10	18.5	13	24.1	44	100.0
Through friends and neighbours	17	39.5	8	18.6	9	20.9	34	100.0
Mass media	15	37.5	9	22.5	9	22.5	33	100.0
When building collapsed	11	42.3	4	15.4	5	19.2	20	100.0
During demolition	22	39.3	11	19.6	12	21.4	45	100.0
During conflict resolution	11	39.3	5	17.9	7	25.0	23	100.0
Total	237	38.7	117	19.1	141	23.1	495*	100.0

* The total exceeded the normal total due to multiple responses

5.3 Residents' Level of Awareness of Physical Planning Regulations

Alongside enquiry into the sources of awareness on physical planning regulations in the study area, investigation was also done on the level of awareness of physical planning regulations in the study area (see Table 3). Findings were made on the elements of physical planning regulation in relation to the following planning functions: planning law, development plans, planning standard, building code, subdivision regulations, planning schemes, granting of planning permit, development monitoring supervision of constructions and localisation of planning regulations. Findings revealed that respondents in Osogbo, Ile-Ife, and Iwo were aware of planning law, the building code and planning schemes and rated them as the predominant planning functions (rated 1st, 2nd and 3rd respectively). Also, granting of planning permit, creation of open spaces and the formulation of physical development policies were rated 8th, 9th and 10th respectively. These planning functions were rated low in the study area.

The RAI computed were 2.174, 2.173, and 2.171 for Osogbo, Ile-Ife, and Iwo respectively. Based on these computations, the levels of residents' awareness with these identified elements of physical planning regulations are close and below average. This implies that the level of residents' awareness ranges between 'being unaware' and 'just aware' concerning the elements of physical planning regulations. Also, the low range of the indexes of the three zones (= 0.04) and the relative low value of the standard deviation against each of the element are indications that regardless of the locations and socioeconomic attributes of the residents, they all have a low level of awareness of physical planning regulations.

Table 3: Residents' level of awareness of physical planning regulations

Functions	Osogbo		Ile-Ife		Iwo	
	Mean	Rank	Mea	Rank	Mea	Rank
Planning Law	2.287	1st	2.306	2nd	2.271	2nd
Street naming and house numbering	2.175	5th	2.211	4th	2.136	6th
Settlement of dispute on land use	2.175	5th	2.211	4th	2.136	6th
Granting of fence permit	2.175	5th	2.211	4th	2.136	6th
Formulation of physical development	2.092	8th	2.096	6th	2.106	7th
Sub-division regulations	2.101	7th	2.134	5th	2.090	8th
Creation of open spaces	2.083	9th	2.096	6th	2.075	9th
Granting of planning permit	2.037	10th	2.096	6th	2.015	10th
Development monitoring	2.138	6th	2.096	6th	2.136	6th
Supervision of constructions	2.231	3rd	2.211	4th	2.245	3rd
Localisation of planning regulation	2.231	3rd	2.250	3rd	2.242	4th
Building code	2.231	3rd	2.250	3rd	2.245	3rd
Preparation of development plans	2.194	4th	2.250	3rd	2.242	4th
Preparation and approval of residential	2.194	4th	2.250	3rd	2.181	5th
Planning schemes	2.268	2nd	2.319	1st	2.310	1st
RAI	2.174		2.173		2.171	

5.4 Administrative Practices for Enforcement of Physical Planning Regulations

This section presents the results on the perception of residents on administrative practices for the

enforcement of physical planning regulations in the study area (Table 4). Parameters discussed include granting of planning permit, development monitoring, supervision of constructions, and creation of awareness of planning regulations, etc.

An enquiry was also made on the perception of residents on the granting of approvals by planning agencies in Osogbo, Ile-Ife, and Iwo. Findings revealed that 5.2%, 7.1% and 17.3% rated this activity to be 'very effective', 'effective' and 'just effective', while majority (i.e. 51.8% and 18.6%) consider these activities to be 'ineffective' and 'very ineffective' respectively. These findings indicate that majority of the residents in the study area had a negative perception on the administrative practices of the planning regulation agencies on granting plan approvals. They also reflect a similarity in residents' perception on practices across different zones of the study area. This similarity was confirmed to be significant based on the result ($\chi^2 = 110.233$ and $p = 0.000$) of the Chi-Square test.

The researchers also enquired into residents' perception on development monitoring in the study areas. It was revealed that 14.6%, 12.8%, 8.8% and 6.3% were rated to be 'very ineffective', 'just effective', 'effective' and 'very effective' respectively. The majority, i.e. 57.5%, rated development monitoring to be 'ineffective' and this shows that residents in the study areas were not satisfied with the practice of planning agencies on development monitoring in the areas. It was also observed that there was a similarity in respondents' perception the across different cities.

Regarding the perception of residents on supervision of construction by the planning regulation agency in the study areas, it was found that majority of the respondents had a negative perception on the practice of supervising construction work by the regulation agency, as 54.4% and 11.9% of the respondents rated the practice to be 'ineffective' and 'very ineffective' respectively. Only 23.5%, 3.5% and 6.7% of them rated the practice as 'just effective', 'effective' and 'very effective' respectively. Moreover, the perception on this practice by the respondents was found to be similar among respondents in the different zones of the study areas. This shows that the planning regulation agency may be inefficient in the undertaking their administrative practice of supervising construction projects.

Table 4: Administrative practices for enforcement of physical planning regulations

Administrative Practices	Osogbo	Ile-Ife	Iwo	Total
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Granting of Approvals				
Very ineffective	21 (19.4%)	15 (24.1%)	6 (10.7%)	42 (18.6%)
Ineffective	54 (50.0%)	28 (45.1%)	35 (62.5%)	117 (51.8%)
Just effective	20 (18.5%)	9 (14.6%)	10 (17.9%)	39 (17.3%)
Effective	9 (8.3%)	5 (8.1%)	2 (3.6%)	16 (7.1%)
Very effective	4 (3.8%)	5 (8.1%)	3 (5.3%)	12 (5.2%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Development Monitoring				
Very ineffective	16 (14.8%)	8 (12.9%)	9 (16.1%)	33 (14.6%)
Ineffective	67 (62.0%)	31 (50.0%)	32 (57.1%)	130 (57.5%)
Just effective	10 (9.3%)	9 (14.5%)	10 (17.9%)	29 (12.8%)
Effective	8 (7.4%)	8 (12.9%)	4 (7.1%)	20 (8.8%)
Very effective	7 (6.5%)	6 (9.7%)	1 (1.8%)	14 (6.3%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Supervision of construction				
Very ineffective	10 (9.3%)	8 (12.9%)	9 (16.1%)	27 (11.9%)
Ineffective	62 (57.4%)	31 (50%)	30 (53.6%)	123 (54.4%)
Just effective	27 (25%)	15 (24.2%)	11 (19.6%)	53 (23.5%)
Effective	3 (2.8%)	3 (4.8%)	2 (3.6%)	8 (3.5%)
Very effective	6 (5.5%)	5 (8.1%)	4 (7.1%)	15 (6.7%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Awareness creation on planning regulation				
Very ineffective	15 (13.9%)	10 (16.1%)	8 (14.3%)	33 (14.6%)
Ineffective	60 (55.6%)	32 (51.6%)	30 (53.6%)	122 (53.9%)
Just effective	17 (15.7%)	8 (12.9%)	11 (19.6%)	36 (15.9%)
Effective	7 (6.5%)	5 (8.1%)	6 (10.7%)	18 (7.9%)
Very effective	9 (8.3%)	7 (11.3%)	1 (1.8%)	17 (7.7%)
Total	108 (100.0%)	62 (100.0%)	56 (100.0%)	226 (100.0%)
Localisation of planning regulation				
Very ineffective	16 (14.8%)	8 (12.9%)	9 (16.1%)	33 (14.6%)
Ineffective	52 (48.1%)	37 (59.7%)	30 (53.6%)	119 (52.7%)
Just effective	27 (25.0%)	10 (16.1%)	12 (21.4%)	49 (21.7%)
Effective	3 (2.8%)	3 (4.8%)	2 (3.6%)	8 (3.5%)
Very effective	10 (9.3%)	4 (6.5%)	3 (5.3%)	17 (7.5%)
Total	108 (100%)	62 (100%)	56 (100%)	226 (100%)

Analysis of the perception of residents on the creation of awareness on planning regulations showed that 14.6%, 15.9%, 7.9% and 7.7% rated this practice to be 'very ineffective', 'just effective', 'effective' and 'very effective' respectively. The majority (53.9%) of the respondents rated this practice to be 'ineffective'. This shows that the practice of creating planning regulation awareness in the study area by the regulation agency was not efficient, thus hindering some developers from complying with planning regulations because of ignorance.

Findings were also made on the localisation of planning regulations in the study areas. The ratings were 14.6%, 21.7%, 3.5% and 7.5% for 'very effective', 'just effective', 'effective' and 'very effective' respectively. Findings also showed that majority (52.7%) of the respondents had a negative perception on the practices of localising planning regulations by the planning regulation agencies in the study areas. This trend of rating is observed to be the same across each of the residential zones.

6.0 Conclusion

The study assessed residents' perception of physical planning regulations in Osun State, Nigeria and found that administrative practices for the enforcement of physical planning regulations were not quite effective in terms of granting of approval, development monitoring, preparation of development plan, formulation of physical development policies, and preparation as well as approval of residential layouts. Also, the residents were not so aware of the physical planning regulations in the study areas and their sources of awareness were mainly occasions of business dealings with the planning agencies. This low level of awareness had a corresponding effect on their level of compliance with physical planning regulations in Osun State.

To ensure effectiveness of physical planning activities in the study areas, it is suggested that planning agencies at both the state and local government levels should be adequately staffed, funded and equipped in the drive for the creation of awareness on, as well as enforcement of, physical planning regulations in the cities. It is also necessary to sensitise the public about the dangers of disregarding physical planning regulations. Generally, concerted efforts must be made by the government and other stakeholders to enlighten citizens on the importance of physical planning regulations, especially through the mass media.

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References

Abubakar, A.; Lizam, M. and Yassin, A. M. B. (2013). A Review on the Models of Compliance with Residential Development Standards in Nigeria. A paper presented at the 2nd International Conference on Technology Management, Business and Entrepreneurship held on 5th December 2013 at Mahkota Hotel Melaka Malaysia.

Alnsour, J., & Meaton, J. (2009). Factors affecting compliance with residential standards in the city of Old Salt, Jordan. *Habitat International*, 33(4), 301–309. <http://dx.doi.org/10.1016/j.habitatint.2008.08.003>.

Alonge, Z. O. (2019). Residents' Perception of Physical Planning Regulations in Akure, Ondo State, Nigeria. An MSc Thesis Submitted to the Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria.

Arimah, B. C., & Adeagbo, D. (2000). Compliance with urban development and planning regulations in Ibadan, Nigeria, 24, 279-294.

Daramola O. (2018). Revisiting the Legal Framework of Urban Planning in the Global South: An Explanatory Example of Nigeria. In Alemu, K. T. and Alebachew, M. A. (eds) *Handbook of Research on Sustainable Development and Governance Strategies for Economic Growth in Africa*, 258-261.

Daramola, O. (2021). *A Comprehensive Handbook on Urban and Regional Planning in Nigeria*. Zaria: Ahmadu Bello Press Ltd.

Daramola, O., Olojede, O., Ojo, A. & Olowoporoku, O. (2017). Duplication of urban planning functions in a Nigerian state: uncovering the causality. *Planning Malaysia:Journal of the Malaysian Institute of Planners*, 15(3), 93-104.

Daramola, O., & Olojede, O. (2011). Pluralism in Urban Governance: Implications for Urban Planning in Nigeria. In S. O. Fadare, B. T. Aluko, & A. O. Afon (Eds.), *Urban Governance and Environmental Challenges in West African Sub-Region*, 183-205.

Daramola, O. P. & Olowoporoku, O. A. (2016). Environmental Sanitation Practices in Osogbo, Nigeria: An Assessment of Residents' Sprucing-Up of their Living Environment. *Journal of Economic and Environmental Studies XVI(4)*: 699-716.

Eisenman, D. P., Wold, C., Fielding, J., Long, A., Setodji, C., Hickey, S., & Gelberg, L. (2006). Differences in Individual-Level Terrorism Preparedness in Los Angeles County. *American Journal of Preventive Medicine* 30:1-6. <http://dx.doi.org/10.1016/j.amepre.2005.09.001>.

El-Zien, A., Nasarallah, R., Nuwayhid, I., & Makhoul, J. (2006). Why do Neighbours have Different Environmental Priorities? Analysis of Environmental Risk Perception in Beirut Neighbourhood. *Risk Analysis XXVI* (2): 425-455.

Fadare, W., & Daramola, O. (2008). Multi-sectoral Approach to Urban Growth Management in Africa. *Journal of the Nigerian Institute of Town Planners*, 21(1), 33-5.

Fekade, W. (2000). De "cits of formal urban land management and informal responses under rapid urban growth, an international perspective, 24, 127-150.

Few, R., Gouveia, N., Mathee, A., Harpham, T., Cohn, A., Swart, A., & Coulson, N. (2004). Informal subdivision of residential and commercial buildings in São Paulo and Johannesburg: living conditions and policy implications. *Habitat International*, 28(3), 427-442. [http://dx.doi.org/10.1016/S0197-3975\(03\)00042-0](http://dx.doi.org/10.1016/S0197-3975(03)00042-0).

Francescato, D. and Medane, W. (1973) How Citizens view Two Great Cities. Milan and Rome in Down, R. M and Stea, D. (eds). *Image and Environment Chicago Aldire*, 98.

Gough, K.V. (1996). Self-help housing in urban Colombia; alternatives for the production and distribution of building materials. *Habitat International*, 20(4), 635-651. [http://dx.doi.org/10.1016/0197-3975\(96\)00043-4](http://dx.doi.org/10.1016/0197-3975(96)00043-4).

Gyau, K., Awuah, B., & Hammond, F. N. (2014). Determinants of low land use planning regulation compliance rate in Ghana. *Habitat International*, 41, 17-23. <http://dx.doi.org/10.1016/j.habitatint.2013.06.002>.

Jiboye, A. (2008) A Study of Public Housing Satisfaction in Lagos, Nigeria. Unpublished PhD Thesis, Department of Urban and Regional Planning. Obafemi Awolowo University, Ile-Ife, Nigeria.

Kombe, W. J. (2005). Land use dynamics in peri-urban areas and their implications on the urban growth and form: the case of Dar es Salaam, Tanzania. *Habitat International*, 29(1), 113-135. [http://dx.doi.org/10.1016/S0197-3975\(03\)00076-6](http://dx.doi.org/10.1016/S0197-3975(03)00076-6).

Kuen-Tsing, S. (2005). Research on problem of illegal construction in a city- Take Kaohsiung city for example, Magisterial Thesis, Institute of Interdisciplinary Studies for Social Sciences, National Sun Yatsen University.

Lindell, M. K. & Perry, R. W. (2000) Household Adjustment to Earthquake Hazard: A Review of Research. *Environment and Behavior*, XXXII (4):461-501.

Offiong, V. E., Offiong, R.A. and Ekpe, I.A. (2014). Socio-Economic Characteristics of Property Owners and Level of Compliance with Building Regulations in Calabar, Nigeria. *International Journal of Humanities, Social Sciences and Education*, 1(1), 26-32.

Okpala, D. (2008). *Revisiting Urban Planning in Sub-Saharan Africa "Anglophone" Countries*. Unpublished Regional Study prepared for the Global Report on Human Settlements.

Olawuni, P. O., & Daramola, O. P. (2013). Urban Governance and Access to Environmental Sanitation Services: An Example from Ile-Ife, Nigeria. *Journal of Applied Technology in Environmental Sanitation*, 3(1), 43-48.

Olojede, O. and Daramola, O. (2015). A Review of Urban and Regional Planning Administration in Nigeria. *Journal of Environmental Design and Management*, 7(2), 41-50.

Oloyede, S. (2010). Tackling Causes of Frequent Building Collapse in Nigeria. *Journal of Sustainable Development*, Vol. 3, No. 3.

Onibokun, P. (1985). Socio-cultural constraints on urban renewal policies in emerging nations. The Ibadan Case. In Onibokun, A.G. (Ed), *Housing in Nigeria. A Book of Reading*. Nigeria Institute of Social and Economic Research, 393-405.

Rakodi, C. (2003). Politics and performance: the implications of emerging governance arrangements for urban management approaches and information systems. *Habitat International*, 27(4), 523-547. [http://dx.doi.org/10.1016/S0197-3975\(03\)00004-3](http://dx.doi.org/10.1016/S0197-3975(03)00004-3).

Reininger, B. M., Rahbar, M. H., Lee, M., Chen, Z., Alam, S. R., Pope, J., and Adams, B. (2013). Social Capital and Disaster Preparedness Among Low Income Mexican Americans in a Disaster-Prone Area. *Social Science and Medicine* 83:50-60. <http://dx.doi.org/10.1016/j.socscimed.2013.01.037>.

Sarkheyli, E. & Sharifi, A. (2012). An investigation for the reasons for non-compliance with FAR regulations in Tehran. *Cities*, 29, 223-233.

Somja, P. (2013). An investigation into Gender Differences in Pro- Environmental Attitudes and Behaviours. *Honors Scholars Theses*. 404 http://digitalcommons.uconn.edu/srhonors_theses/404.