



## EFFECT OF CONTRAVENTIONS OF BUILDING REGULATIONS AND INFORMAL LAND SUBDIVISION ON THE QUALITY OF BUILT ENVIRONMENT IN ENUGU STATE, NIGERIA.

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**ABSTRACT:** *The study examined the effect of contraventions of building regulations and informal land subdivision on the quality of built environment in Enugu State. The study adopted survey design and was carried out in Enugu State, Nigeria. The population for the study was 88 respondents which comprised 36 building technology lecturers and 52 building technology lab technologists from the Department of Building Technology in Enugu State University of Technology and the Department of Industrial Technical Education, University of Nigeria, Nsukka respectively. Due to the manageable size of the population, no sampling was done as the entire population was used as the sample of the study. The instrument for data collection was a 37-item structured questionnaire which was validated by 3 experts. A total of 88 copies of the instrument were administered to the respondents by the researchers with the help of 2 research assistants. The instrument was analyzed using weighted mean and standard deviation while the hypotheses were tested at 0.05 level of significance, using t-test statistics. The study found that contraventions of building regulations and informal land subdivisions in Enugu State have greatly affected the built environment negatively. The study recommends that the local authorities in Enugu State should create awareness campaigns on community planning which will be strengthened during plan implementations by capacitating the local leaders in order to reserve and maintain spaces for construction projects and agriculture based livelihood activities.*

**KEYWORDS:** Built Environment, Building Regulations, Building Contraventions, and Informal land subdivision.



## INTRODUCTION

The built environment is made up of physical features of the society. Luteranya (2021) defined the built environment as the human-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighborhoods and cities that can often include their supporting infrastructure such as water supply and energy networks. The built environment is a material, spatial, and cultural product of human labour that combines physical elements and energy in forms for living, working, and playing (Gunn, 2016). Therefore, the built environment has to do with the human-made spaces in which people live, work, and recreate on a day-to-day basis. It often highlights the connection between physical space and social consequences. It impacts the environment and how society physically maneuvers and functions, as well as less tangible aspects of society such as socioeconomic inequity and health.

The preservation of our built environment is not an option because it is necessary for humankind's existence. Ayolamimo and Owei (2015) cited the importance of building regulations and their enforcement in the developed world in overhauling unhealthy practices that have caused poor housing conditions and unhealthy environments in their built environments in past years. However, it is different in most developing countries, especially in Nigeria; there is widespread mismanagement of land, recurring periods of building collapse, building fires, sick buildings, and urban defacement (Jimoh, Al-Hassan, Imimole & Ahmed, 2017). As such, in 2010, the Lagos State government established a building control agency to control building construction activities within the state. Similarly, on August 1, 2024, the Enugu State Government issued an embargo on the issuance of building clearance and approvals for properties without title documents, expressing dismay that a significant number of lands had been issued building approvals without title documents (The Guardian Newspaper, 2024).

Land is a highly valuable commodity in most major cities in Nigeria, including in Enugu State. This has made the enforcement of land use and building regulations a challenging task for local authorities. As a result, there are numerous cases of informal residential land subdivision as well as building contravention across major cities in Nigeria (Chendo, & Obi, 2015). This has put significant strains on urban infrastructure planning and management. For instance, Babalola (2015) reported that the water and electricity networks are frequently disrupted in Nigeria due to the excessive demand caused by the construction of informal and unregistered residential buildings. Adebayo, Bukola and Omowumi (2022) noted that only few local planning authorities have Architects and Engineers in Enugu State. None has a Surveyor or Lawyer while other staff are predominantly Planners. As a result of this, the process of vetting development documents most times is not thorough, leaving the developers to take advantage of the process. The procedure has led to substandard practices in building production such as deficient structural drawing, alteration of approved drawings, building without development permit, approval of technically deficient drawings, illegal alteration of existing buildings and substandard materials (Mba, 2014). And with planners only taking charge, many sites are developed without permission as the process involved in obtaining this permission is cumbersome, rigorous and unending, making it difficult and at most times utopia for the developer to obtain the permission (Ekop, 2007). This singular act has made it very difficult for the numerous planning authorities to control development, which is a good reflection of what is obtainable in most developing countries and in the long run making such



developments come up haphazardly, illegally or as informal settlement. Such disruptions diminish the quality of the built environment. Creating a system to respond to some needs within the built environment also demands the consistent assessment of its adequacy through building regulation. Despite the frequent occurrence of informal subdivisions and building contraventions in Nigeria and Enugu State in particular, there is no research exploring its impacts on the quality of built environment. This is a gap that this study intends to fill.

## LITERATURE REVIEW

### Building Regulations

Building regulations have been adjudged as one of the tools of development control. The role and need for physical planning in any society has long been given its due recognition all over the world. Innocent (2019) pointed out that the town planning authority's building regulation is a legal document guiding development control operations in Nigeria. It was observed that Development Control was initiated and later created by Nigeria Urban and Regional Planning Law of No 88 of 1992 to ensure orderliness in planning of cities and towns by stipulating permissible standards for all aspect of planning activities to ensure that land is properly allotted and use in a manner that eliminates conflicts (Ibrahim & Raji, 2018). Ojo-Fajuru and Adebayo (2016) pointed out that the building regulations guide the operations of the building industry by defining particular materials, methods of erection as far as quality and standards are concerned, including the use of any specified materials or methods of erection or compliance with any specification, standard specification, code of practice or standard method. Therefore, building regulations exist in order to regulate in the public interest the development and use of land.

Moreover, any developments that do not consider health, welfare and quality of life should be discouraged. Therefore, it is necessary to control building construction activities through building regulations. Building regulations are aimed at ensuring the health and safety of building users and facilitating sustainable development. According to Sodiya (2016), building regulation is an indispensable tool that ensures the application of the minimum requirements set for building construction to guarantee safe, healthy and accessible buildings. Ojo-Fajuru and Adebayo (2016) affirmed that the building regulation is meant to regulate building design to ensure safe, healthy, accessible and sustainable building facilities for current and future generations. Snelling (1997) identified five major issues in land development, that is, health, safety, economy, convenience and amenity. Building regulations are needed to ensure that proposed buildings, their relationship with each other and with open spaces are regulated. Meanwhile, town planning regulations most times have not enjoyed public acceptance and cooperation and this has always constituted an impediment to effective physical planning. According to Ude, Umeh and Ukwunna (2017), strong resistance, violence and non-compliance to regulations have been recorded by physical planning officers and these among others have been factors causing haphazard development that characterized many of the urban areas in Enugu State. It has been noted that among the causes of this resistance and non-compliance are lack of public awareness of the planning laws and regulations, public



misunderstanding of town planning activities, and in some cases failure of the planners to protect the public interest and carry them along in their activities.

However, the safety and sustainability of our built environment can be questioned due to various reports on the performance of our built structures and the use of our land-based resources. The use of our buildings and the activities that created them do not consider the sustainable principle of safety for the present and future generations. Additionally, the abuse of our landed resources is evidenced in the activities that are carried out on them, and as such, it could deny the generation to come of this monumental wealth. Due to the above, the need for the populace to comply with building regulation activities has been far from achieved in Nigerian major cities, the consequences of which are haphazard development, non-functional society, unhealthy environment, general problems of sustainability, building contraventions and informal land subdivision.

### **Informal Land Subdivision**

Informal land subdivision has always been a dominant feature of urbanization in many developing countries in Africa, Asia, and Latin America. Snelling (1997) defines land subdivision as the division of a parcel of land into two or more lots, plots, sites, or other divisions of land for the purpose, whether immediate or future, of sale or of building development. Land subdivision is often the initial stage in the process of converting rural land for urban uses which involve the division of land into plots or lots for sale and development (Agheyisi, 2018). The purpose is to provide an orderly and efficient development of a new incorporated township. However, informal land subdivision means nonconformity with urban planning laws and development control norms, and to some extent, land occupancy regulation (Nkwanyana, 2015). Informal land subdivision occurs when informal landowners subdivide and sell their plots without consultation with the urban planning professionals and disobeying the government subdivision regulations in planning area (Layi & Adebayo, 2016). As the motive behind their intentions is maximum profit, they often have no provision of space for public services and land for public uses. Informal land subdivisions mostly are taking place in peripheral areas which have been combined into the municipal planning areas following the extension of urban administrative boundaries. This eventually affects the trend and quality of spatial development in the planning area as it results in engendering spontaneous growth and development (Agheyisi, 2018). The settlements produced by the informal private sector are unplanned. Infrastructural and housing standards are very low with the absence of public amenities.

For instance, over the past four decades, various cases of the informal subdivision have been reported in Nigerian cities such as Lagos, Kaduna, Abuja, Port Harcourt, Anambra, and Enugu State (Ude, Umeh & Ukwunna, 2017). Recent United Nations (UN) housing reports also show that informal settlements developed following informal land subdivision are no longer only limited to African cities. Instead, there is an increase in informal settlements at the international level, especially in Major African cities such as Tripoli, Lagos, Khartoum, Enugu and Kano, which were found to be the most likely locations for the growth of illegal settlements (Udoma, 2014). In the Middle East, particularly in Iraq and the Palestinian Territories, factors such as geopolitical tensions and migration have led to the emergence and growth of several semi-formal settlements



(Simon, Samuel & Edu-Buandoh, 2015). Ojo-Fajuru and Adebayo (2018) pointed out that these practices are not a new phenomenon, especially in Enugu State, but at the same time it increased the scale and intensity in the last years as a result of booming residential and commercial activities. Due to the rural-urban migration, the population of Enugu metropolitan city has grown rapidly over the past few decades.

The inability of the authorities to appropriately respond to the increased demand for housing has resulted in the rise of informal subdivision of residential land for the purpose of meeting housing needs. Other common contraventions are related to setback rules, Floor Area Ratio (FAR), building height violation, and other structural violations (Ojo-Fajuru & Adebayo, 2018). Overall, the main motivation behind these contraventions is to maximize the amount of available floor space that is needed to accommodate the increased urban population. In the absence of proper monitoring and control by the responsible planning authorities, these contraventions have grown significantly, causing serious issues for the built environment. Ibrahim (2008) reported that the division of agricultural land in developing countries is widespread, primarily from agricultural areas, where it became natural to divide the agricultural land into plots of land and sell them to people to develop into houses. They are often not reported. Government entities are not informed of such divisions. It found that 32% of all planned government land was illegally divided, and 7.5% were merged, while 90% were non-governmental planning. Among the reasons that led to these divisions was the ignorance of 54.5% of the owners of land that these divisions are illegal (Kahraman, Saati & Misir, 2006).

### **Building Contraventions**

Building contravention is defined as the non-compliance, disregard, disobedience or breaking of civil laws by builders (Ibrahim & Gyoh, 2018). Building contravention occurs when a property violates building regulations, zoning laws, or other planning rules. Onwuanyi and Ndinwa (2017) noted that contravention notices are a formal document issued by local authorities when a property violates building regulations, zoning laws, or other planning rules. These notices serve as a warning to property owners or developers, requiring them to address specific violations to avoid further legal action or penalties. Understanding contravention notices and how to resolve them is crucial for maintaining compliance and ensuring that development projects proceed smoothly.

However, previous studies have reported non-compliance with requirements of building standards in a global context. Non-conformity with and enforcement of codes, standard, and energy building regulation have been recorded in some developing regions like Africa, Latin America and Middle East (Job, Opata & Mulongo, 2014). Also, Ibrahim and Toyobo (2014) noted that in many Nigerian cities, poor compliance became a common phenomenon. In the last four decades of rapid urbanization, disaster risk increased dramatically because of an unplanned increase of the built environment. These have resulted in negative effects of building contraventions such as urban expansion, increasing unsafe buildings, expanding squatters and slums, destroying green landscapes and imbalances between vertical density and population density.



## STATEMENT OF THE PROBLEM

Millions of people live in sub-standard and sub-human environments plagued by slum, squalor and grossly inadequate social amenities. Poor construction quality constitutes major challenges, requiring rapid and positive attention from stakeholders. Despite the leading role of building regulations in management of the environment, its comprehensiveness, multi-dimensionality and base in the public interest, urban and regional planning has remained far removed from popular public consciousness. It is also surprising that many members of the public are yet to be aware of the various planning laws regulations and therefore most times often alarmed, resentful and bewildered by these regulations. Reports show that building regulation standards are most times not adhered to, and construction clients are, many a time, dissatisfied with projects done in Enugu State. Stakeholders in the building construction industry have different perceptions of quality standards; this has adversely affected quality standards in the industry. Major causes of building collapse in major cities in Nigeria including Enugu State is lack of adherence to building regulation standards. Barriers exist that hinder the adherence to quality standards in the Nigerian construction industry.

Most attempts by urban planning agency officials to achieve healthy cities especially through development control often bring them face to face with a high level of non-compliance, lack of understanding and at times hazards and dangers. Insults and abuse by developers within the Enugu Metropolitan city have also been recorded. This and many more have impeded development control activities and have been documented as one of the reasons for shanties and slums that characterized most towns of the developing countries, Enugu State inclusive. It is in this direction that this study attempts to examine the effect and negative consequences of contraventions of building regulations on the quality of the built environment in Enugu State. This is capable of exposing experts and other stakeholders to the level of awareness of the people on building regulations and their level of compliance or otherwise with planning rules and regulations.

### Purpose of the Study

The main purpose of the study is to determine the effect of contraventions of building regulations on the quality of the built environment in Enugu State. Specifically, the study determined:

1. The types of building contraventions widely engaged by builders in Enugu State.
2. The negative effects of contraventions of building regulations on the quality of the built environment in Enugu State.

### Research Questions

1. What are the types of building contraventions widely engaged by builders in Enugu State?
2. What are the negative effects of contraventions of building regulations on the quality of the built environment in Enugu State?



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## Hypothesis

The following null hypotheses were tested at 0.05 level of significance:

**H<sub>01</sub>:** There is no significant difference between the mean responses of building technology lecturers and building technology lab technologists on the types of building contraventions widely engaged by builders in Enugu State.

**H<sub>02</sub>:** There is no significant difference between the mean responses of building technology lecturers and building technology lab technologists on the negative effects of contraventions of building regulations on the quality of the built environment in Enugu State.

## METHODOLOGY

The study adopted survey design and was carried out in Enugu state. The population for the study was 88 respondents. The population comprised 36 building technology lecturers and 52 building technology lab technologists from the Department of Building Technology in Enugu State University of Technology and the Department of Industrial Technical Education, University of Nigeria, Nsukka respectively. Due to the manageable size of the population, no sampling was done as the entire population of 88 respondents was used as the sample of the study. The instrument for data collection was a 37-item structured questionnaire which was validated by two (2) experts from the building technology unit of Industrial Technical Education Department University of Nigeria, Nsukka and one (1) expert from the Department of Building Technology in Enugu State University of Technology. Cronbach alpha method was used to test the internal consistency of the items which yielded a reliability coefficient of 0.86. A total of 88 copies of the instrument were administered to the respondents by the researchers with the help of 2 research assistants and 85 valid copies were returned, representing a 96% response rate. The instrument was analyzed using weighted mean and standard deviation while the hypotheses were tested at 0.05 level of significance, using t-test statistics with the aid of Statistical Package for Social Sciences (SPSS) software.



## RESULTS

Data for answering research questions 1 to 2 were presented in Table 1 to 4.

**Table 1: Mean responses and standard deviation of respondents on the types of building contraventions widely engaged by builders in Enugu State.**  $N = 85$

S/N	Item Statements	$\bar{X}$	SD	Remarks
1	Building houses without a building permit.	4.22	0.82	Agreed
2	Addition of floors and illegal balconies and construction of additional parts such as car garages, umbrellas, sheds, warehouses or outdoor bathrooms, etc to the building.	3.55	0.86	Agreed
3	Non-compliance with plot coverage ratio and occupancy rate.	4.04	1.09	Agreed
4	Changing the building plan variation from the building line without a building permit.	4.52	0.54	Agreed
5	Lack of basic facilities in the houses (kitchen, bathroom, utilities, etc.).	4.46	0.50	Agreed
6	Poor ventilation, acoustic and thermal insulation in the house.	3.96	0.86	Agreed
7	Construction does not commit to the height specified by legislation and controls.	3.83	1.21	Agreed
8	The use of a constricted plan instead of the one issued during building permit.	4.10	1.01	Agreed
9	Informal exploitation of land like stone queering, oil exploration, illegal drilling borehole exercises etc.	3.54	1.09	Agreed
10	Different between approved plans by authorities and implemented plans.	4.90	1.17	Agreed
11	Non-compliance with structural & technical regulations.	3.56	0.86	Agreed
12	Building on forbidden places such as government reserved areas GRAs, community land or ancestral lands.	3.53	1.21	Agreed
13	Inadequate fire safety measures by failure to install appropriate fire alarms, smoke detectors, and fire-resistant materials.	3.54	1.09	Agreed
14	Inadequate support for load-bearing elements, leading to structural instability.	3.62	0.54	Agreed
15	Insufficient ventilation in areas like bathrooms, kitchens, and attics, leading to moisture build-up and mould.	3.70	0.51	Agreed
16	Unsafe electrical installations, including improper wiring and overloaded circuits.	3.66	0.86	Agreed
17	Failure to meet the required insulation standards, leading to energy inefficiency and higher heating costs.	3.83	1.21	Agreed
18	Incorrect installation of plumbing systems, leading to leaks and water damage.	4.04	1.09	Agreed
19	Not providing adequate access for persons with disabilities.	4.52	0.54	Agreed





20	Non-compliant staircases contravention: staircases that do not meet the required dimensions or safety standards.	4.46	0.50	Agreed
21	Inadequate drainage systems contravention: poor design or installation of drainage systems, leading to water logging and structural damage.	3.96	0.86	Agreed

### X = Mean SD = Standard Deviation

The data in Table 1 reveal that all the 21 items have their mean values ranging from 3.85 to 4.90. This shows that the mean value of each item was above the cut-off point of 3.50, indicating that the items were agreed by the respondents as the types of building contraventions widely engaged by builders in Enugu State. The SD ranged from 0.21–1.17, which shows that the respondents are not too far from each other in their responses.

**Table 2: Mean responses and standard deviation of respondents on the negative effects of contraventions of building regulations on the quality of built environment in Enugu State. N= 85**

S/ N	Item Statements	<u>X</u>	SD	Remarks
22	Increasing unsafe buildings.	3.53	1.16	Agreed
23	Expanding squatters and slums.	4.07	0.41	Agreed
24	Destruction of gardens, green areas and landscapes.	3.82	0.99	Agreed
25	Imbalances in the distribution of population density.	4.03	1.13	Agreed
26	Destruction of the spatial system and the city's main structure.	3.97	1.06	Agreed
27	Exacerbation of the social and cultural problems of the inhabitants of residential neighborhoods.	4.17	1.08	Agreed
28	Inadequate infrastructure and public services led to poor clean water, electricity and narrow streets due to side street parking on both sides of the road.	3.95	0.86	Agreed
29	Overcrowding since the number of houses resulting from the subdivision is higher than the number of dwellings initially planned.	4.04	1.09	Agreed
30	Poor sewage networks due to the enormous pressure that is not designed to absorb it.	4.52	0.54	Agreed
31	Insufficient parking leading to the spread of side parking and on the sidewalks.	4.46	0.50	Agreed
32	Inadequate play areas and public areas: Public squares and playgrounds have transformed into residential buildings.	3.96	0.86	Agreed
33	Lack of aesthetics because of the failure to apply the legislation on the type of allowed use and the height of construction and other specific leads to the loss of character of a neighborhood.	3.83	1.28	Agreed
34	There is inadequate ventilation due to the small size of plots or homes and the disappearance of the garden space which contributed to the increase of pollution.	4.10	1.01	Agreed



35	Loss agriculture land due to high demand for residential housing, has an implication on the livelihoods of some residents as the agriculture activity is diminishing with time.	4.04	1.09	Agreed
36	Lack of space for provision of storm water drainage leads to insufficient coverage of storm-water drainage systems along the roads and settlement.	3.95	0.86	Agreed
37	Lack of space for infrastructure provisions such as roads, a situation which has constrained housing development in these areas.	4.04	1.09	Agreed

$\bar{X}$  = Mean SD = Standard Deviation

The data in Table 2 reveal that all the 16 items have their mean values ranging from 3.53 to 4.17. This shows that the mean values of each item was above the cut-off point of 3.50, indicating that all the items were agreed upon by the respondents as the negative effects of contraventions of building regulations on the quality of built environment in Enugu State. The SD ranged from 0.41–1.86 which shows that the respondents are not too far from each other in their responses.

## HYPOTHESIS 1

**Table 3: T-test analysis of building technology lecturers and building technology lab technologists on the types of building contraventions widely engaged by builders in Enugu State.**

S/N	Respondents	N	$\bar{X}$	SD	Df	t-cal	t-tab	Remark
1.	Building technology lecturers	36	3.71	0.49	50	0.52	1.13	Not Significant
2.	Building technology lab technologists	52	3.51	0.70				

**Key:** N = No of respondents,  $\bar{X}$  = mean, SD = standard, Df = degree of freedom, t-cal = calculated value, t-tab = tabulated value, ns = not significant.

Table 3 shows that the t-calculated value is 0.52 which is lower than the tabulated value of 1.13. Therefore, there is no significant difference between the mean responses of building technology lecturers and building technology lab technologists on the types of building contraventions widely engaged by builders in Enugu State. So the null hypothesis in the mean scores of the two groups was not rejected.



## HYPOTHESIS 2

**Table 4: t-test analysis of building technology lecturers and building technology lab technologists on the negative effects of contraventions of building regulations on the quality of the built environment in Enugu State.**

S/N	Respondents	N	$\bar{X}$	SD	df	t-cal	t-tab	Remark
1.	Building technology lecturers	36	3.81	0.3	50	0.21	2.01	Not Significant
2.	Building technology lab technologists	52	3.52	0.86				

**Key:** N = No of respondents,  $\bar{X}$  = mean, SD = standard deviation, df = degree of freedom, t-cal = calculated value, t-tab = tabulated value, ns = not significant.

Table 4 reveals that the t-calculated value is 0.21 which is lower than the table value 2.01. This shows that there is no significant difference between the mean responses of building technology lecturers and building technology lab technologists on the negative effects of contraventions of building regulations on the quality of the built environment in Enugu State. Therefore, the hypothesis of no significant difference in the mean scores of the groups of respondents was not rejected.

## DISCUSSION OF THE FINDINGS

The finding of this study reveals the types of building contraventions widely engaged by builders in Enugu State, some of which include: building houses without a building permit; addition of floors and illegal balconies and construction of additional parts such as car garages, umbrellas, sheds, warehouses or outdoor bathrooms, etc to the building; and non-compliance with plot coverage ratio and occupancy rate. The finding is in consonance with Babalola (2015) who stated that during informal subdivision of land, there is inequitable and unjust contribution of land for public spaces. This leads to the depletion of land for public utilities, cramped housing conditions, poor circulation and increasing threat to public health. This is due to the fact the landholders in affected areas do not equitably contribute land proportionally to the size of the land owned. Their interest is to acquire more residential plots that they can sell to the land developers at profitable selling prices. Chendo and Obi (2015) also supported the findings by stating that engaging building contraventions such as illegal buildings, unplanned building and rough building constructions lead to inadequate space for social services because spaces for locating education facilities, health, recreational (playgrounds and open spaces) and marketplace are lacking in the area.

The finding also discloses the negative effects of contraventions of building regulations on the quality of built environment in Enugu State. Some of them include: increasing unsafe buildings, expanding squatters and slums, and destruction of gardens, green areas and landscapes. This result is in line with Ojo-Fajuru and Adebayo (2016) who stated that most agriculture land in



affected areas is diminishing with time due to the fact that the land owners subdivide and sell their land to meet the high demand for residential plots, which has an implication on the livelihoods of some people. Some of the land owners could no longer sustain their livelihoods after subdividing and selling most of their land that was initially used for farming activities. As a result, they had to engage in other activities such as casual labourers in farm and construction sites, selling building materials such as sand and cement blocks, and petty trading activities like selling vegetables, operating kiosks and other perishable goods. Innocent (2019) also stated that informal land subdivision has resulted in informal housing development characterized by narrow roads, poor accessibility and storm water drainage systems. The problems associated with lack of space for provision of storm water drainage leads to insufficient coverage of storm water drainage systems along the roads and in most areas within the settlement. Hence, the potential space for future basic community infrastructure services provision and facilities is increasingly being depleted. Lack of space for construction of drainage systems is the problem of the availability of space for storm water management. This is also complicated by the spontaneous house construction and extensions some of which lead to the blockage of natural storm water flow areas. Also, crude dumping of solid waste lead to the blockage of few existing natural storm water channels.

## CONCLUSION

The main objective of this research was to explore the effect of contraventions of building regulations on the quality of the built environment in Enugu State. The study concludes that contraventions of building regulations and informal land subdivisions in Enugu State have greatly affected the built environment negatively. Some parts of the area lack spaces for provision of social services and agriculture-based livelihood activities. Most landowners in the state had subdivided their land without any guidance from the town planning authority and without complying with the planning regulations. It appears that most landowners have insufficient education and awareness on urban planning regulations and laws. Possibly that is why they never collaborated with the planning authority in order to avail more plans and provide space for social services and control the growth of unplanned spatial development.

## RECOMMENDATIONS

To address this challenge of the effect of contraventions of building regulations on the quality of built environment in Enugu State, the following recommendations were made:

1. The study recommends creation of awareness campaigns on land and planning laws. This awareness campaign should be provided to particularly informal landowners to ensure compatibility of land uses and minimize or reduce land wastage and mismanagement. Hence, the local authorities in Enugu State should create awareness campaigns on community planning, which will be strengthened during plan implementations by capacitating the local leaders in order to reserve and maintain spaces for agriculture-based livelihood activities. This also will encourage informal landowners and community members to play a role as



actors in the guidance of the aforementioned spaces by discouraging the contraventions of building regulations and informal land subdivisions for the future livable settlements.

2. Prepare a planning scheme or a framework. The local authorities should prepare a planning scheme or a framework to guide land development in Enugu State, especially areas which are yet to be developed so as to prevent informal land subdivision and land use incompatibility in these new areas as it is done in modern cities of the world.

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