Appraisal of Physical Planning Practice in the University of Cross River State, Calabar Campus, Nigeria

Solomon Effa Bassey, Celestine Chinedu Eze

Urban and Regional Planning, University of Cross River State, Cross River State, Nigeria

ABSTRACT

This study is aimed at assessing physical planning practice in land use administration of the University of Cross River State, Calabar Campus. The study adopted a field survey method through questionnaires administration. The study formulated the following objective; knowing the Agency responsible for physical planning practice in the university, examining the level of compliance of the developers with existing planning standards and regulation for guiding development, identifying the role played by the physical planning unit in controlling physical development on campus, identifying the problems encountered in the physical planning practice and administration in the area. The findings of this research reveal that the performance of the physical planning is not very effective sequel to inadequate fun and other constraints from government. The findings also show that the existing physical structures like the lecture halls are highly unconducive due to lack of maintenance, the study therefore suggest that better building maintenance approach as a way of enhancing the aesthetics and good functionality of the university's physical environment be put to place. The study however concluded that the major problem encounter by the physical planning practice process is lack of maintenance of the existing structures that have been developed within the university. The study recommended that government should provide adequate funding for physical development to enhance physical planning practice in the University of Cross River State, Calabar Campus.

KEYWORDS

Physical Planning, Land use administration, Physical Development, Campus Planning, Physical Practice Planning standards, physical

I. INTRODUCTION

Physical planning is the process of making decisions on land use to create an orderly and aesthetic environment for living, working, circulation, and recreation. It involves making choices among alternatives and determining future courses of action in the public interest. Physical planning aims to create a functionally efficient and aesthetically pleasing physical environment through the spatial ordering of land use in both urban and rural settings. The main purpose of physical planning is to achieve sustainable development. The Nigerian Institute of Town Planners (NITP) highlights the purpose of planning as making the environment meet the demands of tomorrow, satisfying the pluralistic values and standard needs of identified groups, ensuring harmony among activities, and maximizing investment, convenience, functionality, living, and working within the environment.

To ensure that decisions made on land use are in the best interests of citizens, a legal framework is necessary. In Nigeria, the Nigerian Urban and Regional Law (CAP N 138 LFN 2004) and the law establishing the Town Planners Registration Council (CAP T 7 LFN 2004) provide the rules and regulations for the control of Town Planning practice. However, many Nigerians believe that physical planning is solely a public sector activity, and many graduates of Urban and Regional Planning rely on government employment. With the rising number of graduates, employment opportunities in the public sector may shrink. Land use planning identifies alternatives for land use and selects the best options to meet economic and social needs while safeguarding future resources (World Bank, 2018). Physical planning today affects not only the present generation but also future generations. Therefore, it is essential to plan ahead and utilize resources efficiently to prevent their depletion. Physical Planning Administration is a branch of Public Policy that regulates Land Use efficiently and ethically, preventing Land Use Conflict. This concept is not new in Nigeria, dating back to the 1800s when local methods of administration were used.

The University of Cross River State, Calabar Campus, is a tertiary institution located in the heart of Calabar, Nigeria. The campus has several strengths, including its well-located and serene environment, as well as a clear master plan guiding its physical development. However, the campus is facing rapid growth, which has put pressure on existing infrastructure and facilities, resulting in inadequate parking, transportation, and maintenance of buildings. Additionally, the campus lacks adequate green spaces and landscaping, which is essential for creating a conducive learning environment. Despite these challenges, the university has opportunities to explore public-private partnerships, incorporate sustainable design principles, and engage with the local community to promote mutual benefits and development. However, the university faces competition from other tertiary institutions, concerns about safety and security, funding constraints, and environmental degradation. To address these challenges, the university needs to develop strategies to maintain and improve its facilities, ensure the well-being of students and staff, and promote sustainable practices and responsible waste management. Overall, the university's physical planning practice has both strengths and weaknesses, and addressing the challenges and leveraging the opportunities will require careful planning, collaboration, and investment in the university's physical environment. By doing so, the university can create a conducive learning environment, promote sustainability, and enhance its reputation and social responsibility.

A. Statement of the Problem

One of the major problems of physical planning practice in the University of Cross River State, Calabar Campus, Nigeria, is the rapid growth of the university, which has put pressure on the existing infrastructure and facilities. This has resulted in inadequate parking and transportation facilities for students and staff, as well as a need for repair and maintenance of some buildings and facilities. Additionally, the campus lacks adequate green spaces and landscaping, which is essential for creating a conducive learning environment. Another problem is the lack of effective physical planning and management, which has led to haphazard development and poor utilization of space. This has resulted in inefficient use of resources, congestion, and environmental degradation. Furthermore, the university's physical planning practice has not kept pace with the changing needs of the institution, resulting in a mismatch between the physical environment and the academic and social needs of students and staff.

Moreover, the university's physical planning practice has not adequately addressed issues of sustainability, accessibility, and social responsibility. The campus lacks adequate facilities for students with disabilities, and the physical environment does not promote social interaction and community engagement. Additionally, the university's physical planning practice has not incorporated sustainable design principles, resulting in high energy consumption and environmental degradation. Furthermore, the university's physical planning practice has not effectively engaged with the local community, resulting in a lack of mutual benefits and development. The university's physical development has not been aligned with the local economic and social development goals, resulting in a disconnect between the university and the local community. Finally, the university's physical planning practice has not been adequately funded, resulting in a lack of resources to maintain and improve the physical environment. This has led to a decline in the quality of facilities and services, which has negatively impacted the academic and social experiences of students and staff.

B. Aim and Objectives

The aim of this study is to assess Physical Planning Practices and the administration of urban land use planning principles in the University of Cross River State, Calabar. The objectives are are:

- To identify agencies responsible for the Physical Planning Administration in the University of Cross River State, Calabar.
- To identify the roles played by the development control unit in controlling physical development in the University Campus.
- To examine the level of compliance of the developers with the existing planning standards and regulations guiding development in the University Campus.
- To identify the problems encountered by the physical Planning administration in the University Campus.

C. Research Materials and Methods

This study employed both qualitative and quantitative research methods to gather and analyze data. The researcher used survey questionnaires, oral interviews, and personal observations to collect data, and then analysed it using both quantitative and qualitative analysis techniques. The study utilized both primary and secondary sources of data, including questionnaire surveys, interviews with stakeholders, and existing literature. The study population consist. The study population consists of the total residents of the study area and workers of the University of Cross River State, Calabar Campus. The population of the study area is 86,689 persons.

To determine the sample size, the Yaro Yamane formula of infinite population was used, which resulted in a sample size of 400. This means that 400 questionnaires was administered among respondents in the study area, comprising residents and staff of the study area, while oral interviews was conducted with staffs of ministry of lands, housing and urban development, and Physical Planning Unit of the University. Data were collected through questionnaire administration and personal observation. The statistical method used for this study is percentage analysis, which will be presented in tables, charts, and descriptive analysis. This method will help to analyze and interpret the data collected to arrive at a dependable solution to the research problems.

1. Study Area

University of Cross River State (UNICROSS) formerly Cross River University of Technology (CRUTECH) Calabar campus is located within Calabar South Local Government Area of Cross River State (figure 1). The institution lies within latitude 40°54'N and 40°58'N of the equator and longitude 80°15'E and 80°25'E of the Greenwich meridian as shown in figure 2 and 3 below (Cross River Geographic Information Agency, 2021). UNICROSS is a state- owned tertiary institution, the Calabar campus is considered the main campus of the institution, which is located in Calabar South Local Government Area of Cross River State. University of Cross River State, Calabar campus has eight (8) faculties such as; Faculty of Engineering, Faculty of Environmental sciences, Faculty of Education, Faculty of Sciences, Faculty of Biological Sciences, Faculty of Architecture, Faculty of Physical Sciences and Faculty of Communication Technology. General Administrative block, Banks, multipurpose halls, male and female hostels and other support services in the institution.

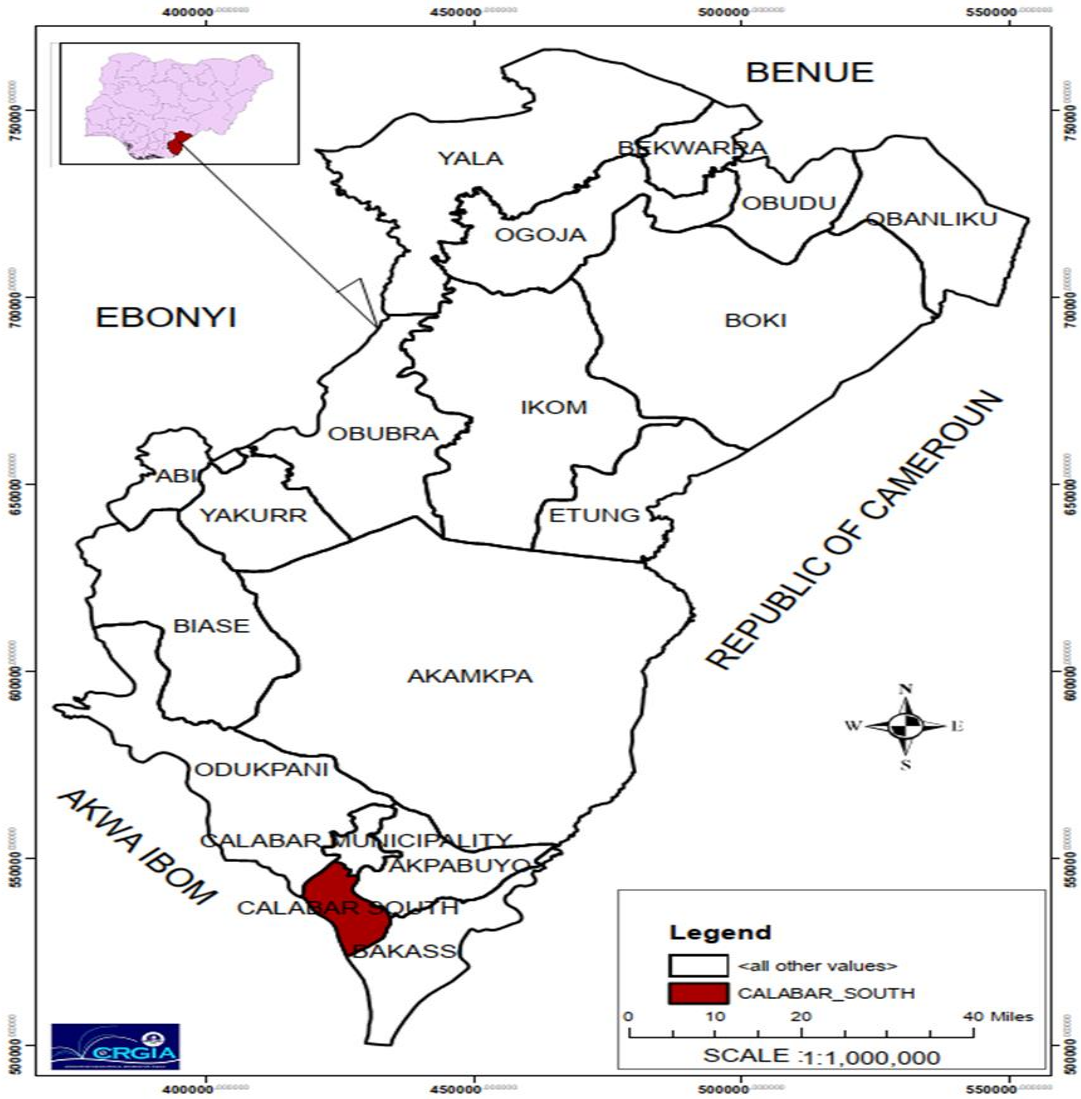


Figure 1: Map of Cross River State showing Calabar South Local Government Area; insert Map of Nigeria

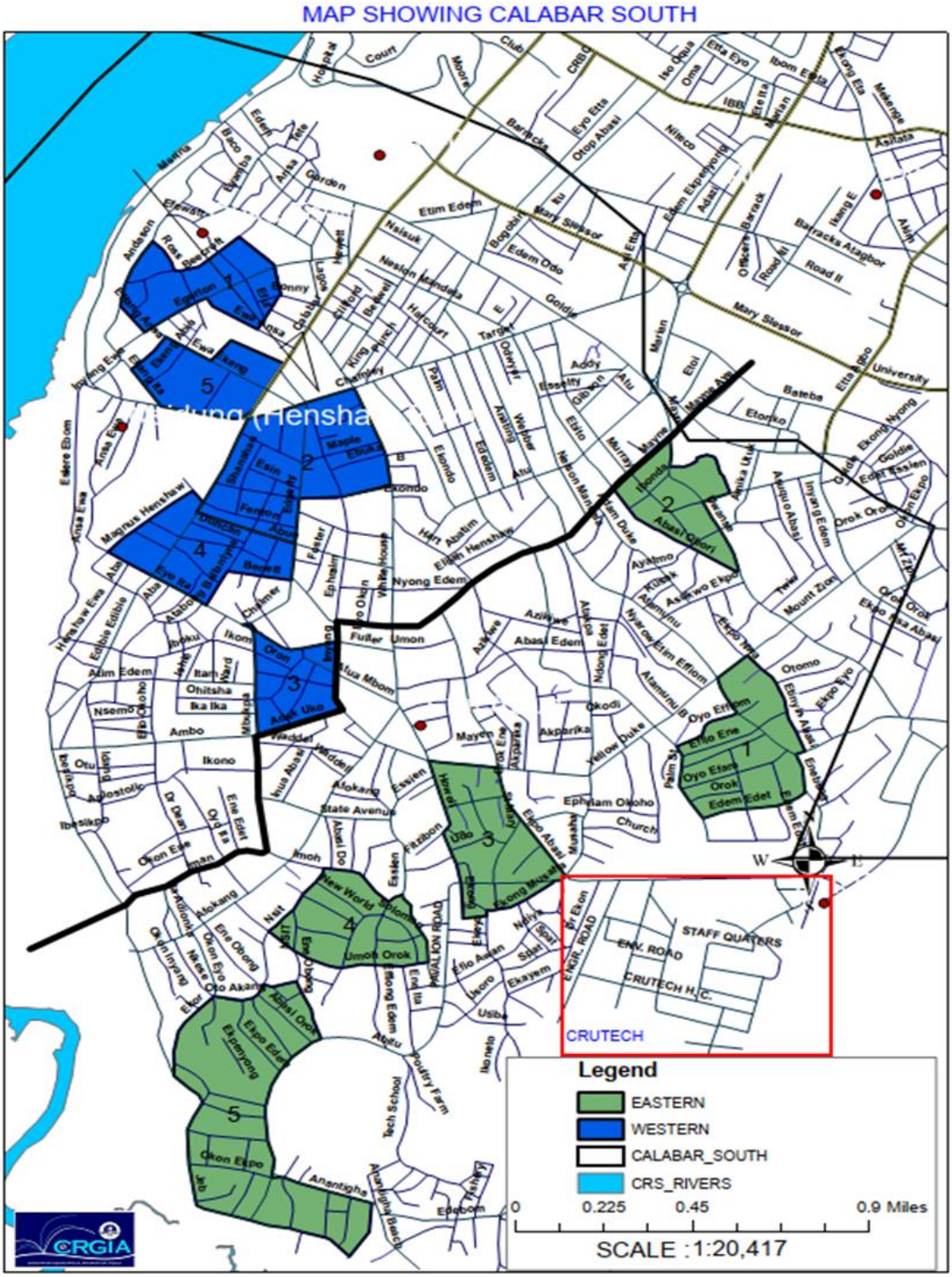


Figure 2: Map of Calabar South L.G.A showing UNICROSS, Calabar Campus



Figure 3: Map of UNICROSS, Calabar Campus

II. DATA ANALYSIS AND RESULTS

Primary sources were obtained through questionnaire administration and field observations, while secondary sources were obtained from the Physical Planning Department of the institution. From the sample size, 400 questionnaires were distributed in the study area, however only three hundred and eighty (379) copies were returned to analysis which shows 95% response and good representation of the study area.

Table 1: Analysis of the Effectiveness of Current Physical Planning Practice within Unicross

Responses	Frequency	Percentage
Effective	220	58
Ineffective	51	13
Very effective	108	29
Total	379	100

Table 1 presents an analysis of the current Physical Planning Practice within the University of Cross River State. The results indicate that a majority of respondents (58%) perceive the current practice as effective, while 13% consider it ineffective. Notably, 29% of respondents rate the practice as very effective. These findings suggest that the Physical Planning Practice is effective to some extent, but falls short of being very effective. This may be attributed to limitations such as financial constraints or other factors, which hinder the practice from reaching its full potential.

Table 2: If the Existing Physical Structures Are Conducive For Academic Activities and Student Life

Responses	Frequency	Percentage
Highly Conducive	6	2
Conducive	20	5
In-conducive	51	13
Highly In-conducive	302	80
Total	379	100

Table 2 presents a stark reality regarding the physical structures provided for academic activities and student life at the university. A overwhelming majority of respondents (80%) described these structures as highly inconducive, while 13% considered them inconducive. In contrast, only a small minority of respondents held positive views, with 5% finding the structures conducive and a mere 2% deeming them highly conducive. The table unequivocally highlights that the physical infrastructure in place for academic activities and student life is largely unsuitable, with a significant majority of respondents expressing strong dissatisfaction.

Table 3: How Satisfied Are You with the Accessibility and Layout of Facilities, Such As Classroom, Laboratories, Recreational Park and Administration Building

Responses	Frequency	Percentage
Very satisfied	34	9
Satisfied	58	15
Dissatisfied	281	74
Very dissatisfied	56	2
Total	379	100

Table 3 presents a damning assessment of the accessibility and layout of university facilities, including classrooms, laboratories, recreational parks, and administrative buildings. A mere 9% of respondents expressed strong approval, stating they are very satisfied, while 15%

reported being somewhat satisfied. However, a staggering 74% of respondents expressed dissatisfaction, and a further 2% were extremely dissatisfied. The overwhelming majority of respondents are unhappy with the accessibility and layout of these facilities, highlighting a critical need for improvement to ensure a more navigable and user-friendly campus environment.

Table 4: Analysis of Adequate Provision for Green Spaces and Recreational Areas within the University Campus

Responses	Frequency	Percentage
Adequate	279	74
Severely inadequate	61	16
Inadequate	39	10
Total	379	100

Table 4 presents an analysis of the provision of green spaces and recreational areas within the university campus, yielding mixed results. While a significant majority of respondents (74%) believe that the university provides adequate green spaces, a notable minority express concerns about the sufficiency of these areas. Specifically, 16% of respondents describe the provision of green spaces and recreational areas as severely inadequate, and a further 10% consider them inadequate. This suggests that, although the majority are satisfied with the current provision, a substantial number of respondents feel that more needs to be done to enhance the availability and quality of green spaces and recreational areas on campus.

Table 5: What Improvement Would You Suggest To Enhance The Aesthetics And Functionality Of The University Physical Environment?

Responses	Frequency	Percentage
More green spaces	75	19
Better building maintenance	245	65
Enhance lightening	50	13
Improved signage and navigation	9	3
Total	379	100

Table 5 highlights the respondents' suggestions for enhancing the university's physical environment. The results show that the majority of respondents (65%, totaling 245 individuals) prioritize better building maintenance as the most critical factor in enhancing the aesthetics and functionality of the university community. This is followed by 19% of respondents (57 individuals) who advocate for the creation of more green spaces and recreational areas to improve the study environment. Additionally, 13% of respondents (39 individuals) suggest enhancing lighting, and a small minority of 3% (9 individuals) recommend improved signage and navigation. The overwhelming emphasis on better building maintenance underscores the need for targeted investments in this area to significantly enhance the overall quality of the university environment.

Table 6: Analysis of Specific Challenges Encountered with Regard to Physical Infrastructure and Planning Within the University

Responses	Frequency	Percentage
Lack of maintenance	160	42
Insufficient funding	194	51
Poor infrastructure planning	19	5
Safety concerns	4	1
Others	2	1
Total	379	100

Table 6 presents a detailed analysis of the specific challenges encountered by Physical Planning Practitioners regarding physical infrastructure and planning within the university. The results reveal a clear hierarchy of challenges, with insufficient funding (51%, 194 respondents) and lack of maintenance (42%, 160 respondents) emerging as the dominant concerns. These two challenges collectively account for 93% of the responses, indicating that they are the primary obstacles faced by practitioners. In contrast, other challenges such as poor infrastructure (5%, 19 respondents), safety concerns (1%, 4 respondents), and miscellaneous issues (1%, 2 respondents) are relatively minor. The overwhelming emphasis on funding and maintenance highlights the need for targeted interventions to address these critical challenges and enhance the physical infrastructure and planning within the university.

III. DISCUSSION OF RESULTS

The findings of this study show that the performance of Physical Planning Practice is effective to an extent, but not very effective, due to poor funding and other constraints. This is revealed in Table 6, where 220 respondents (58%) consider Physical Planning Practice to be effective, and 108 (29%) consider it very effective. Furthermore, the findings reveal that existing structures for academic activities appear highly unconducive due to lack of maintenance. Similarly, the findings show that existing recreational spaces and parks, proposed and implemented by Physical Planning Practitioners, are not adequately maintained. The findings suggest better building maintenance as a way to enhance the aesthetic and functional quality of the university's physical environment. This is evident in the fact that 245 respondents (65%) consider better building maintenance the key to improving and enhancing the university's aesthetic functionality. Additionally, the major problem encountered by the Physical Planning Practice process is the lack of maintenance of existing structures developed within the university (see Table 6). This may be due to inadequate funding allocated to the Physical Planning unit for maintenance, leading to the deterioration of physical properties.

This finding aligns with a previous study carried out by Mabogunje and Oluwadiya (2015), which investigated the challenges of physical planning practices in urban areas. Mabogunje and Oluwadiya study revealed that inadequate funding, poor maintenance, and lack of expertise are major constraints to effective physical planning practices, leading to a decline in the aesthetic and functional quality of urban environments. Specifically, Mabogunje and Oluwadiya study found that 75% of urban areas struggle to maintain their physical

infrastructure, resulting in a negative impact on residents' quality of life and overall well-being. The current study's finding that poor funding and lack of maintenance are significant constraints to physical planning practices in the University of Cross River State, Calabar Campus, reinforces the scholars earlier conclusions and highlights the need for urgent attention to address these challenges in both urban and institutional contexts.

IV. CONCLUSION

The appraisal of physical planning practice in the University of Cross River State, Calabar Campus, Nigeria, reveals a mixed performance. While the practice has been effective to some extent, it falls short of being very effective due to constraints like poor funding, inadequate maintenance, and lack of resources. However, this study provides valuable insights into the current state of physical planning practices, identifying strengths, weaknesses, opportunities, and threats. By addressing the identified challenges and implementing proposed recommendations, the university can create a more inclusive, sustainable, and vibrant campus community. To achieve this, the university should prioritize funding, adopt a proactive maintenance culture, and engage stakeholders in the planning process. By doing so, the university can enhance the aesthetic and functional quality of its physical environment, support academic excellence, and improve the overall experience of students, staff, and visitors. Ultimately, this study underscores the importance of continuous evaluation, adaptation, and improvement in physical planning practices to support the university's mission and vision in pursuit of academic excellence and community engagement. Planning in Nigeria: challenges and opportunities. Journal of Geography and Regional Planning, 8(6), 1l6-126.

REFERENCES

[1] Agbola T. (2009) A review of essential sustainable development principles in housing: challenges and solution to housing problem 12 (9) 184-196.
[2] Keeble, L. (2001). Physical planning practice in urban areas. Journal of Urban Planning, 127(3), 23-35.
[3] Duruzoechi, A. (2010). Evaluating physical planning practice in Nigeria. Nigerian Journal of Environmental Studies, 1(1), 12-25.
[4] Kadiri, I. (2012). Physical planning and development control in Nigeria. Journal of Building and Land Development, 12(1), 34-47.
[5] NITP (2016). Nigerian Institute of Town Planners. Physical planning practice guidelines. Retrieved from (link unavailable).
[6] Egunjobi, L. & Opawole, A. (2016). Urbanization and urban development in Nigeria: Issues, challenges, and prospects. African Research Review. 10(2), 1-16.
[7] Mabogunje, A. L. & Oluwadiya, KS. (2015), an overview of town