PATTERN AND URBAN MANAGEMENT CHALLENGES OF DEVELOPMENT CONTROL VIOLATIONS IN WUSE DISTRICT F.C.C ABUJA

BY

JIBRIN GARBA

Department of Urban and Regional Planning
Faculty of Environmental Design
Ahmadu Bello University,
Zaria-Nigeria

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JIBRIN GARBA

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Zaria-Nigeria

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DECLARATION

I hereby declared that the work of this thesis entitled "PATTERN AND URBAN MANAGEMENT CHALLENGES OF DEVELOPMENT CONTROL VIOLATIONS IN WUSE DISTRICT F.C.C ABUJA" has been carried out by me in the Department of Urban and Regional Planning under the Supervision of Dr. Adamu Ahmed and Mal. U. F. Yaya. The information derived from the literature has been duly acknowledged in the text and the references provided No part of this thesis was previously presented for another award at any university.

Jibrin Garba _____ _____

Signed Date

CERTIFICATION

This thesis titled "PATTERN AND URBAN MANAGEMENT CHALLENGES OF DEVELOPMENT CONTROL VIOLATIONS IN WUSE DISTRICT F.C.C ABUJA" by Jibrin Garba meets the regulations governing the award of the degree of M.Sc. of Ahmadu Bello University and is approved for its contribution to knowledge and literary presentation.

_____	_____
Dr. Adamu Ahmed *(Chairman Supervisory Committee)*	Date
_____	_____
Mal. U. F. Yaya *(Member Supervisory Committee)*	Date
_____	_____
Dr. M. Sani *Head of Department*	Date
_____	_____
Prof. Adebayo Joshua *Dean of Post graduate school*	Date

DEDICATION

This thesis is dedicated to my Mother Hajia Aishatu Umaru and my Brother Alhaji Lawal Jibrin for their unflinching support and prayers before, during and after this programme. And to my uncle Late Dr. Husseini Ahmed former Dean Faculty of Environmental Design for his altruistism,guidance and concern while alive. May Allah accept this work as one of *sadaquatuljariya* in his favour for setting the foundation of my higher education, Amin

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ABSTRACT

This thesis examines the pattern and urban management challenges of Development Control Violations in Wuse District of Federal Capital city of Abuja. Its primary scope is on the level of compliance to Development Control standards for residential plots in the study area with reference to Land Use, Density, setback, building and fence height. The study identified 2,763 residential plots allocated in Wuse I and II out of which 21% (574 plots) were picked as sample for detail analysis in the study. The results from the analysis indicates that violation of land use by contravention from residential to other uses constitutes the highest form of violation of development control standards in the study area with 238 cases (42%), set back was identified to be second with 161 cases (28%), density/building height violation constitutes 151 cases (26%); while fence height violation was found to be the least with 24 cases (4%) of the total development control violations studied. Challenges established from the study include traffic congestion, inefficient service delivery (e.g. water, electricity and sewage), and poor visual quality or aesthetics. Recommendations made include; review of the Abuja Master Plan, Urban upgrading and renewal, accelerated infrastructural development of phase II and III, effective traffic management, autonomy of the Development Control Department, review of the land use change approval process and development control guidelines, and the strengthening of the development control department. In conclusion, the study raised issues of concern to urban planners and managers which indicate the need for a framework for creating a practicable and livable habitat in our cities through ensuring synergy with all relevant stakeholders and institutions involved in city building for sustainable development.

CHAPTER ONE

DESIGN OF THE STUDY

1.0 INTRODUCTION

Urban planning, development and management are the logical steps towards achieving a beautiful, convenient, efficient and safe human settlement. They are to ensure the long-term quality of the land for human use, the prevention or resolution of social conflicts related to land use, give guidance in regional land use planning and the conversation of ecosystems. Urban management bon the other hand, is expected to, among other things, guarantee orderliness, convenience, security, equitable distribution of land, empowerment of government to ensure a more judicious, orderly and healthy development of urban areas and easier access to land for both public and private land development, the lack of which can delay urban development. Development control is one of the instruments of land use management for effective urban development.

The purpose of development control is to protect amenity and the environment in the public interest. It is not designed to protect private interests that negate the public interest (Aluko, 2000). The principles of development control implies that all applications for planning permission must be decided in accordance with relevant policies within the development plan prepared and published unless other material considerations indicate otherwise (Brown, 2002). Development control is therefore "policy led" rather than "influence led". In other words, it relies on the “plan-led” whereby development plans are formed. Development control contributes to urban management by ensuring that it is the approved land development provisions that are

actually developed on the ground. In this way, the obvious environmental and socio-economic problems which may occur from violations are avoided.

It is when the role of development control in the management of urban systems is critically analyzed that the implications of violations can be well appreciated. For instance, in most quarters, overpopulation of urban centre is agreed to be a factor behind inadequate services, utilities and facilities as well as causes of pollution, overcrowding, traffic congestion, insecurity, etc. Also, the control of physical development that leads to overpopulation is critically important towards preventing or solving the associated problems of physical growth.

An important aspect of urban management is the political and administrative structure of cities and the major challenges that they face to provide both social and physical infrastructure services. These include managing urban economic resources, particularly land and the assets of the built environment, creating employment, and attracting investment in order to improve the quality and quantity of goods and services available (Clarke, 1991). However, it has not been very clear how this is achievable without ensuring that such socio-economic and physical plans to be realized are interpreted in a land use plan and employ development control for harmonious implementation.

Nigeria is one of the most rapidly urbanizing countries in Africa and the challenges that come with this, especially ill the area of urban management that government faces are enormous (FMH&UD, 2003). Attempts to meet the challenges facing the building environment in the country has motivated the government to articulate and introduce some programs and policies as well as create institutions to control and manage development of urban settlement. The urban development boards in all the

states and the development control Bye laws are the instruments of the control of urban land use. The common experience in Nigeria cities, however, has been that of widespread violations.

1.2 STATEMENT OF RESEARCH PROBLEM

Development control ensures that developments approved are actually implemented on the ground, and those environmental and socio-economic problems during development are resolved prior to commencement of development. The constitutional responsibility for the enforcement, control and management of town rests with state development Boards, which apply edicts created by the states. For Abuja, the Federal Capital City and its territory, the Federal Capital Development Authority (FCDA) and now the Abuja metropolitan management agent that responsible for development control based on the provision of the Nigerian Urban and Regional Planning Act of 1992.

The growing problems of managing towns and cities in Nigeria have been traced to development control violations (Abdulrashid, 1986, Abubakar, et al 2000 and Sunday2009). But data is lacking regarding to this relationship to assist urban planners and manager. In Abuja, studies by Ogehi (2002) and Barau et al (2000) have limited coverage on type violations and the association to failure of Development Control, with recommendations preferred on how the shortcomings can be resolved. By avoiding the detailing of violation patterns and by restricting the interrogation of such patterns on issues of development control failure, such studies are generally in adequate in value to assist urban management in discharging their responsibilities and effective. The lack of on the implications of the violations from such studies is an additional shortcoming that needs to be corrected, which this study seeks to advices

using Abuja as case study. This is drawn from the observation that Development Control Violations differ across districts, so are the explanations and challenges. Both have no known explanations, based on Academic Research and this studies draws justification as such. By its focus, three (3) questions are to be answered and using Wuse district as case study:

(i) What are the types and pattern of violations?

(ii) What are the explanations for the types and patterns?

(iii) What implications arise from such patterns?

1.3 AIM AND OBJECTIVES

1.3.1 AIM

This study examines the types and urban management challenges of Development Control Violations in Abuja, the Federal Capital City, as a basis for identifying problems and making recommendations for improvement.

1.3.2 OBJECTIVES

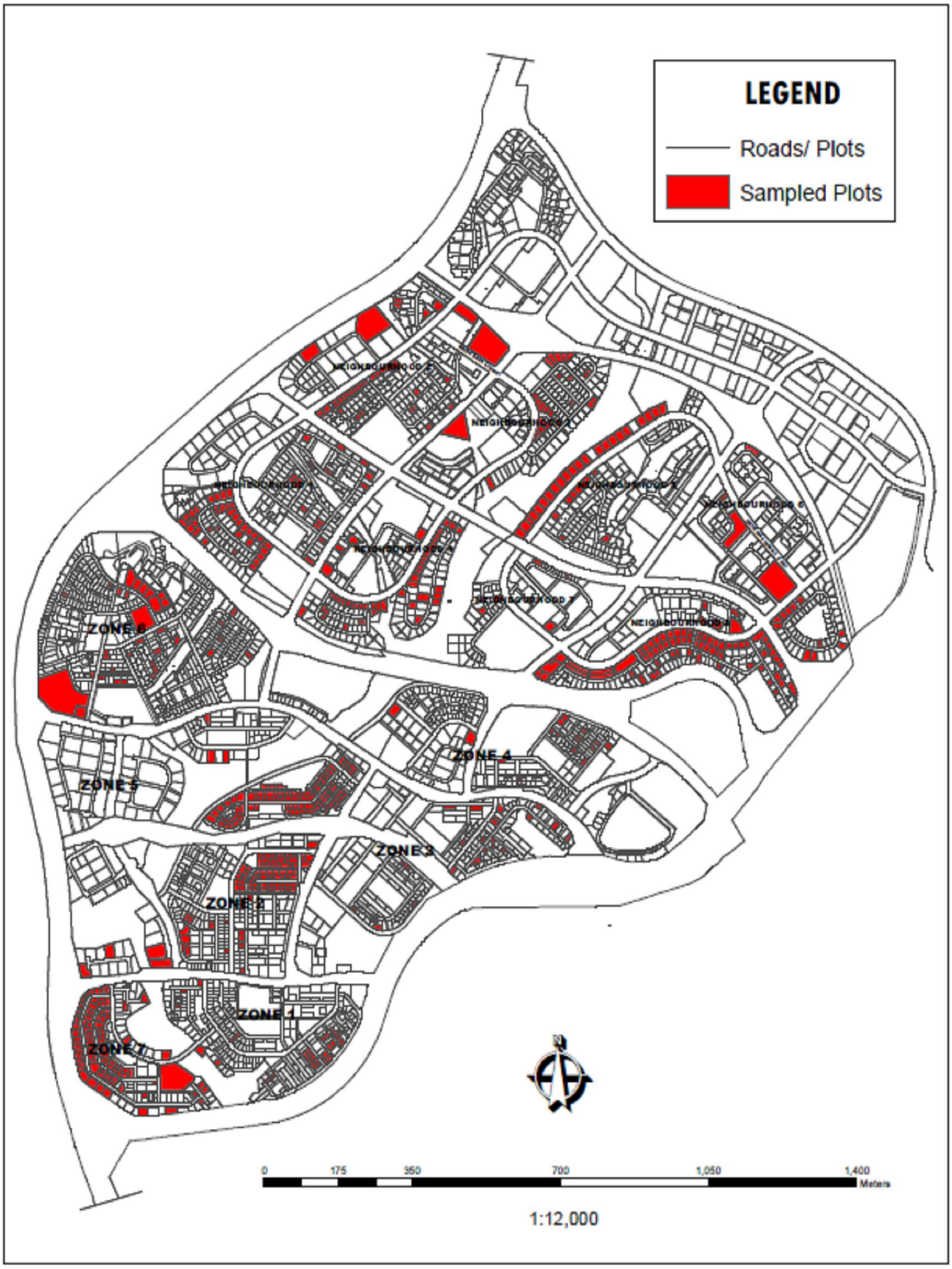
The aim of the study will be achieved through the following objectives:

1) To analyse development control process and its role in urban management.
2) To determine the urban management practice of development control in Abuja:
3) To examine the type of development control violations in Abuja;
4) To establish the urban management challenges of development control Violations in Abuja;
5) To make appropriate recommendations for improvement of urban management towards effective development control in Abuja.

1.4 SCOPE AND LIMITATION

The study will cover the analysis of various patterns and dynamics of development control violations in phase I of the Federal Capital City as well as the urban

management challenges. The study is limited to residential neighbourhoods in Wuse I and II districts because it was one of the first developed districts and has the highest cases of development control violations over the other districts in FCC Therefore, this will serve as a basis for generalization of violation characteristics.



Source: FCDA Abuja/Field Survey, 2010

Fig. 1.1 Wuse District: Sampled Plots

CHAPTER TWO

2.00 ROLE OF DEVELOPMENT CONTROL IN URBAN MANAGEMENT: A REVIEW OF LITERATURE

2.1 THE CONCEPT OF DEVELOPMENT CONTROL

The term development, just like the term planning has so many facets. Generally, development can be seen from economic, social, political and physical perspectives.

In the context of physical planning, the Nigeria Town and Country Planning Law, 1946 states, "development in relation to any land includes any building or rebuilding operations and any use of the land or any building thereon for a purpose which is different from the purpose for which the land or building was last being used". The use of land or land development is further extended to cover the placing or keeping on any land of any shed, tent o: other object whether fixed or movable or collapsible, which is not a building. This means that any occupation and a change in use, other than agriculture, may be regarded as development. In a country like Nigeria which is experiencing a rapid rate of urbanization, it is imperative that development must be planned and controlled.

Her Majesty's Standard Organization (1964) defines development control' as the "process by which a planning authority exercises its statutory- duty to control all development in accordance with the-provisions of the development plan". Essentially, development control encompasses some related legal and administrative techniques and instruments designed to safeguard, regulate, conserve and disburse' land or part thereof in line with approved land use plans. Development control therefore regulates the building and or rebuilding in, on or under land.

Olajuyin et al (1985) states that development control ensures that there will be adequate light, ventilation, playgrounds for children, open spaces for relaxation and recreation with cetera, in any planned land development. In order to prevent conflict and to promote a harmonious inter-relationship, industrial, agricultural, public and semi-public as well as other land uses are properly and carefully zoned, guided and developed. It also involves the regulation of the detailed aspect of development about which precise guidance cannot be given by the development plan.

Magaret Roberts (1974) identifies two main technical devices used in the development control process. These are landuse zoning and planning standards. Planning standards have two main dimensions-prescriptive and regulatory. The regulatory standards used in development control by planning authorities include those related to residential density, plot ratio, ventilation, car parking control and highway standards among others. The perspective standards built into development control are used in preparation of the development plans.

Development control also involves environmental ecological and pollution control. This includes the protection and preservation of areas of greenbelt, parks, land, wildlife, water and air. This necessitates the use of performance standards to prevent pollution in the environment, more especially in industrial cities and towns.

2.2 THE PROCESS OF DEVELOPMENT CONTROL

The process of development control involves a number of stages (See fig. 2.). The process starts in the first stage with the preparation of a development plan. This is the stage where the government makes a decision as to the preparation of a development plan: This is the stage where the government makes a decision as to the preparation of

a development plan for a particular area. After taking the decision, the planning - authority is usually instructed to design the plan or give out a contract for plan.

The second stage in the process involves the approval of the development plan that has been prepared. The approval makes the plan a valid document worthy for implementation. The approval is most often given by the State Governor as in the case of Nigeria.

Programming of the plan and project assignment is the third stage in the process of development control. It involves the programming of plan into projects which are either private or governmental. In the case private, such as residential and industrial development, the plots are allocated to individuals or organizations that develop them according to the provisions of the approved plan. The programming of plan by the government involves the making of sequential steps in the implementation of the programmes. For this, the government budgets some money or the implementation of the programmes and projects.

Project assignment involves the assigning of the projects to operators for further detailing, designing and or tendering the projects as in the case of government. Similarly, the private developer assigns his consultants to prepare the project document taking into consideration the development control regulations and the provisions of the plan. The programming of plan and project assignment stage is directly correlated to the next two stages, that is, tools and arrangement for development control as well as the recognition of the existing development.

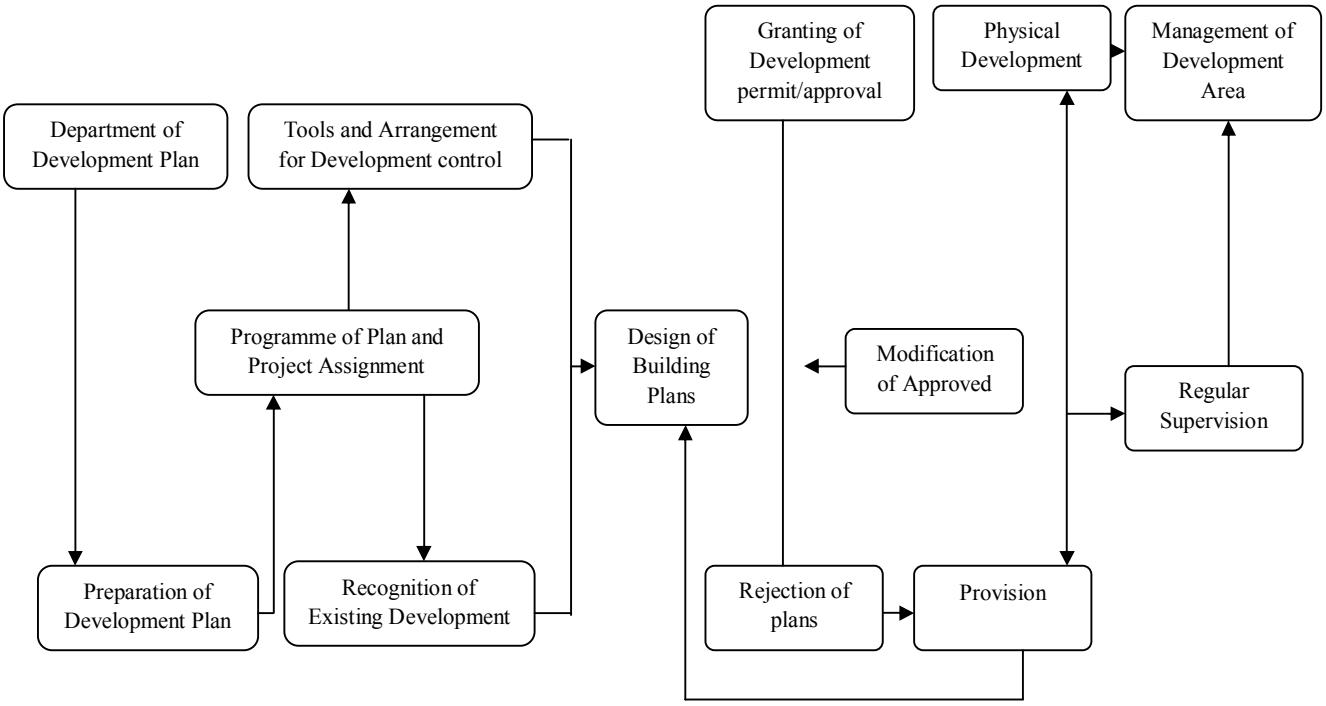


Fig. 2.1: A chart showing the Process of Development Control

Source : Magaret Roberts, 1974.

Design of the building plans is the next stare, this involves the designing of building plans with consultants taking into account the various standards specified by the building regulations of the building regulations of the planning authority.

The granting of development permits and approval of the building plans follows the design of building plans stage. In this stage the plans prepared are accompanied by applications for development permission and usually submitted to the planning authority. The authority scrutinizes the plans and gives her approval if they satisfy the development control regulations. With the approval of the authority, the applicant is qualified to commence the physical development of the site. However, with the rejection of the plans, the applicant has to go back to his consultants for the revision and redesigning of the plans in line with the authority's regulations. Likewise, in modifying the approved plan that is being implemented, it requires the sanction of the

authority and therefore new development permission. Moreover, the subsequent stages of physical development, management of developed area and regular supervision go together simultaneously.

There is often regular supervision of development sites by the development control inspectors to ensure strict adherence to the provisions of the approved plans. They also supervise the management of developed areas to ensure that the use of the buildings is in accordance with the approved use. But in a situation where the development or use of land or building goes counter to the provisions of the development plan, the planning authority enforces control alter detecting the contraventions. This may involve the revision of the physical development plan as a whole or part thereof which is also subject to regular supervision and policing. Thus, the process of development control is a continuous process.

2.3 ROLE OF DEVELOPMENT CONTROL IN URBAN MANAGEMENT

Effective development control mechanisms plays on important roles in management and development of urban areas or communities as well as enhances urban management frameworks for our cities. The followings are fundamental roles it plays.

2.3.1 Promoting spatial harmony

Development control ensures spatial coordination and organization of various land uses in harmony with each other for a balance space creation. Master plans regulate land uses in terms of conformity and development control enforces compliance to the stipulated land use codes and zoning regulations of areas. These enhances and facilities framework for an effective urban management programme, if the urban communities and areas well planned communities at urban areas facilitates effective management and planning programmes for realizing the visions of urban management goals and objectives.

2.3.2 Development control in practice

The promotional practice of development control is established by the laws and edicts of two and country planning is to facilitate the following activities.

2.3.3 Regulation for the implementation of planning schemes

Layout plans, master plans etc are prepared to guide the future or immediate development of planning schemes the development control authority or department uses the prepared layout plans, master plans, district plans, local plans and action plans to serve as a guide to them to monitor, regulate and control development programmes. The master plan comprises of an analysis of problems and proposals for improvement of already built up areas and development for new areas during the foreseeable future.

For instance the Kaduna state edict number10 of 1985, which among other functions assigned the state urban planning board with responsibilities to prepare, publish and implement planning schemes for each designated urban centre within the state. Also in Federal Capital Territory (FCT), the FCDA is responsible for the preparation, publishing and implementation of planning schemes. The implementation is to be regulated by the development control development of Abuja metropolitan management council (AMMC).

2.3.4 Development and planning permission

This refers to expert advice official by the development control departments or authorities on land use including development in areas without layout; it also includes the permission of the conversion of land use as long as it satisfies the requirements of planning standards. Both state and federal capital territory use the Nigerian Urban and Regional Planning Law for granting permission as contained in section 30 - 36 of the

law. Also, SECTION 57 (1) OF THE 1990 Act of Britain town and country planning law, provides that, subject to the following provisions of that section, planning permission is required for the carrying out of any development of land from the development control authority (RTPI, 2009).

2.3.5 Enforcement of control

This is a strong legal tool for ensuring compliance with planning and development control measures as prescribed by the existing master plan under implementation.

Approved sites for development are subjected to regular supervision to ensure conformity. Normally violation of great magnitude renders approval invalid and attracts action. In enforcing control in developed areas or existing developments the Nigerian Urban and Regional Planning g Law of 1992 section 44(2) provides for the full application of or enforcement of development control measures even over developed areas, that is, areas that exist prior to the commencement of the law.

Under the British system of planning control, to develop without planning permission is not a criminal offence. However, there is a sanction to ensure that unauthorized development can be prevented. The sanction provided by the law is the enforcement notice machinery contained in part VII of the 1990 Act. Under this machinery, once an enforcement notice takes effect, the development which is unauthorized must cease or be removed. If it is not, then, and only then, is a criminal offence committed of failure to comply with the enforcement notice.

2.4 RELEVANCE OF DEVELOPMENT CONTROL

The relevance of development control cannot be divorced from the general relevance of Urban and Regional Planning as stipulated by the various town and country

planning laws zoning ordinance, building control codes and bye-laws in both developed and developing countries these among others include the followings:

i. Creation of a physical and socio-economic environment which is conducive to healthy and decent timing. This is achieved through effective land use zoning enforcement which entails specifying in the planned areas for major uses, such as residential, commercial, industrial, institutional, open spaces, utilities, transportation arid so on. Development control planners ensure that projects are located as classified in the broad use zones.

ii. Achievement of a balanced land use pattern so that the planned area is well integrated with the overall structure of the larger-community. This is achieved through managing of developed areas as stipulated in part VII of the 1990 Act of the British planning laws and the section 44(2) of the Nigerian Urban and Regional Planning law, decree No. 88 of 1992 for the full application of development control measures over developed areas, that is, areas that exist prior to the commencement of the law.

iii. Provision for an easy access to developments and to achieve an efficient circulation within the developed areas. This is provided through effective and efficient development control supervision and routine policing of developed and areas under development as well as regulations and assessing planning schemes and activities for development.

iv. Provision of adequate and suitable location of spaces for various land uses and activities through enforcement of planning standards and regulations in the preparation of layouts, land use plans for certification and development.

v. Creation of healthy and safety environment that meets the basic societal or communal requirements for privacy ventilation and pollution free developments for habitation.

vi. Development control is also relevant to communities and development, because it ensures effective and efficient use of resources both capital and natural resources. Capital in terms of ensuring cost effective developments and projects, while natural resources in terms of efficient utilization of land for a best fit development for both the promote i.e. (proponent) of the project and the users of the project or developments (Christopher, 1976).

2.50 CHARACTERISTICS OF DEVELOPMENT CONTROL VIOLATIONS

There are various types of development control violations, and are defined in terms of the character or pattern of the violation; these include:

2.5.1 Contravention of approved building plan

The process of building plan approval consists of submission of a set of drawing specifying the nature and extent of any proposed floor area coverage, according to the provisions of the building plan regulation. It is common for individual to obtain approval from planning authority only to do something else or modify or alter the development in contravention. Depending on the extent of alteration or modification, the development control authority enforces penalty ranging from fee or levy to partial or total clearance or both.

2.5.2 Change of use

This involves the change of an approval plan by the development control authority to an entirely different use without permission. For example converting residential uses into commercial or even industrial users. This constitutes violation even where

development exists in residential or commercial area. When such cases are detected levies and betterment fees are collected from the violator.

2.5.3 Development on public land

All land belongs to the government as provided for by the Nigerian land use Act of 1978. Any development on land requires prior consent of the government. In practice however, people engage in development without permission. Even land earmarked for government projects is sometimes encroached by the public. Developers however, suffer the consequences of his/her action once the government enforces the law by seizing or taking over the land while all developments are cleared.

2.5.4 Development on road reservation

Physical planning standard provides for right of way (R.O.W.) for instance 45m road reservation is provided from the centre of the metal portion of the highway for both sides. Any encroachments by the public constitute a violation for which a restoration is necessary. The reservation is made with a view to provide for future expansion and also give room to street furniture.

2.5.5 Development on farm land

It is often common for individual to convert farmlands into residential use and to some extent industrial use without permission. Such farmland are usually at the periphery of urban centres and are illegally sub-divided and sold in contravention of due provision of the law. Even right of occupancy for agricultural use is or normally granted on condition that no change of use will be entertained until after 5 years.

2.6 PROMOTING INVESTMENT PROSPECTS OF URBAN AREAS/CITIES

Through land use planning regulations, development policing or supervision and enforcement of zoning and building codes or bye-laws; development control promotes

investment prospects of urban areas and cities. This is achieved through place creation in terms of spatial harmony, infrastructural facilities provision and urban ecological balance that are facilitated by development control mechanisms. Urban communities or areas that have adequate investment prospects attract effective urban management programmes for sustainability of the yielding prospects of the city.

2.6.1 Ensures healthy and safety of the urban environment

Health and safety of the urban communities is a basic and important component of urban management programmes. Through effective development control activities, the health and safety of both natural and the cultural (built) environment is achieved. This is done through the regulation of land uses in terms of harmony of use and enforcement to achieve health and safety codes as provided by the planning laws, edicts and bye-laws of the development control authorities and departments. Pollution and environmentally unfriendly activities and uses are separated from a living spaces or areas by the land use plans or master plans, enforced and facilitated by the development control departments to ensure health and safety of the urban ecology.

2.6.2 Ensures security and protection in urban areas

Urban management interventions seek to enhances and promotes security and protection of lives and properties of the urban communities (UNHSP, 2007). This is facilitated through effective development control activities by ensuring soundness of building plans and architectural drawings for construction. The safety requirements of such proposals as stipulated in the development control guide lines are well and fully adhered to and fully enforced in development. This is an important component of development control in both development and developing countries; safety requirements of communities and buildings are fully enforced and supervision carried

out to ensure compliance for the safety: and protection of lives and properties of people or communities.

2.6.3 Promotes urban ecological balance

Efficient urban ecological balance is one of the major mandates of urban management. Urban ecological balance is achieve through effective urban planning and management of the various components of the urban environment for the creation of harmonious, investment, healthy, safety and security wise as well as livable communities. These are facilitated by the regulations and enforcement of urban design implementation schemes and projects through light and density control, parking control, pollution and emission control and landscape and environmental control measures by the development control authorities or departments. There are checked at the planning permit processing stage up to site development and completion phases or stages by the development control departments in ensuring urban balance between natural and built up (man-made) environments for sustainable development.

2.7 DEVELOPMENT CONTROL PRACTICES IN SOME SELECTED CITIES

2.71 Development control in the United Kingdom

Development Control, Planning Control or Development Management (in Scotland) is the element of the United Kingdom's system of Town and Country Planning through which local government regulates land use and new building. it relies on the "plan-led system" whereby Development Plans are formed and the public consulted. Subsequent development requires Planning permission, which will be granted or refused with reference to the Development Plan as a material consideration. The term "Development control" is often abbreviated to DC. There are 421 Local Planning Authorities (LPAs) in the United Kingdom. Generally, they are the local Borough or District Councilor a unitary authority. Development involving mining, minerals or

waste disposal matters is dealt with by County Councils in non-metropolitan areas. Within national parks, it is the National Park.

Authority that determines planning applications (although in Scotland the situation is slightly different, whereby the Cairngorms National Park Authority only has the power to call-in and determine certain applications' which it deems to be of importance to its objectives).

2.7.1.1 History

When the UK's system of Town and Country Planning was established by the Town and Country Planning Act of 1947, it was generally expected that the great majority of new built development would be undertaken by the public sector: Local Authorities, New Town Development Corporations, and the then-new National Health Service, for example. In those cases the commissioning body would grant itself planning permission for the proposals concerned. However, a separate system to grant or withhold planning permission for the small amount of development which would be undertaken by the private sector was also required. This was the origin of the modern system of planning control. In fact this expectation was entirely mistaken as, by the mid 1950s, the rate of private sector development was vastly exceeding that of the public sector. In modern times all development, including that by government departments and local authorities requires planning permission, and is subject to the same process of democratic scrutiny as any private developer.

In recent years planning has become a key means of delivering a number of the government's objectives relating to climate change, reducing carbon emissions, access to housing and improving the supply of housing, enhancing biodiversity and a number of other emerging priorities. Although these are addressed via the process of

formulating local planning policies for the area of each LPA on a local basis, as far as the public are concerned it is development' control and the process of determining planning .applications which is the most evident part of the planning system as a whole.

Note that within the United Kingdom, any significant development may require a variety of different consents from different agencies before commencement, such as approval of construction materials and methods under the relevant Building Regulations). The term "development control" is usually used only in reference to control under Town and Country Planning legislation.

2.7.1.2 Scope of development control in UK

The UK is distinguished from most countries in that the lawful occupier of any 'land or buildings will not only have title to their land (a freehold, leasehold, or license from the actual land owner), but also requires planning title for any buildings on the land, or uses to which the land and buildings are put. Planning title (usually referred to as "planning permission") was granted for all pre-existing buildings and uses in 1948. Since that date planning permission has been required for all new development. A grant of planning permission relates to the land or building(s) concerned. With a few rare exceptions it is not specific to the person, organization or firm who obtained the permission.

"Development" in UK planning law is defined as the carrying out of any building, engineering, mining or other operations in, on, over under land, or the making of any material change in the use of any buildings or other land. Certain types of development are specifically excluded from the definition of development, such as routine building maintenance and repair. Many categories of minor development are classified by legislation as "permitted development" (PD). These are in effect granted

an automatic planning permission by law, rather than requiring any specific application for planning permission. Although still defined as "development" these works avoid any need to engage with the planning system and can be undertaken by land owners as a right.

Uses of land and buildings are classified into "use classes" and any change from one use class to another use class is automatically a "material change of use" amounting to development. Some small scale changes between use classes are nevertheless "permitted development" and hence do not require planning permission. Certain types of use or activity do not fall into a specific use class and are termed "sui generis". Any change of use of "sui generis" land requires planning permission. In practice most uses are a composite of several uses so that, say, a factory might well have an ancillary office and perhaps storage uses, all within the same premises. In such a case however the primary use would be that of a factory (use class Bl or B2).

There is a separate system of control over alterations to buildings which are listed as being of architectural or historic interest ("listed buildings")' Alterations to such a building that affect its character or appearance require "listed building consent" (and may also require planning permission if the scope of the proposed alterations or development is above that classified as permitted development). The owner of a listed building can also be compelled to keep it in a good state of repair to safeguard its architectural or historic significance (Keith, 1997).

Trees and woodland which are of particular importance to local amenity or ecology may be made the subject of a tree preservation order (TPO). Unless those trees are dead, dying or dangerous, then consent is required for their removal, and generally a replacement tree may well be required.

If development is carried out without planning permission then the LPA may take "enforcement action" to have the building removed, the land reinstated, or at least undertake the minimum measures required to prevent any harm arising. (Generally, a retrospective application for planning permission would be invited first, and action taken' if planning permission is then refused.) Almost all planning permissions are granted conditionally and enforcement action can also be taken to secure compliance with the condition is imposed. Unauthorized development can be the subject of a "stop notice" if there is an urgent need to prevent further harm.

2.7.1.3 Principles of development control in UK

1. Development Plan and Local Development Framework

All applications for planning permission must by law be decided in accordance with relevant policies within the Development Plan prepared and published by the LP A, "Unless other material considerations indicate otherwise". Planning Control is therefore "policy led" rather than "influence led". From 2006 each area's Development Plan is to be replaced by a Local Development Framework (LDF). These will incorporate a large measure of community and public involvement in preparing the new local planning policies by which applications will be decided in future years.

The planning policies expressed in the LDF deal with a wide range of local issues including promoting more energy efficient transport facilities, highway proposals and highway safety, ensuring an adequate supply of land for housing and other uses, safeguarding areas of countryside, and safeguarding important landscapes or sites of historic, ecological or scientific importance. More specific policies usually promote best practice in building design as a reflection of local traditions and priorities. The interests of sustainability are to be built into all LDFs, not only in terms of energy efficiency, but also in promoting economic growth, regeneration, and the fostering of

strong and inclusive communities. Whatever their local priorities, future LDFs will be a key policy document for all local authorities, enabling them and other local agencies to engage in spatial planning for their local area on an inclusive and "joined up" basis.

2. Design and Access Statement

Planning applications for most major developments must be accompanied by a Design and Access Statement. This is not just a description of the development, but also explains how the design was arrived at, what local planning policies have been observed, how any public engagement has been reflected in the design, and how relevant principles of good design have contributed to the proposal. Commercial issues may well have been paramount, but this document enables the lay public to understand how the finished proposal was arrived at, and acts as a check upon the quality of the decision making process which led to that proposal by the developer concerned.

3. Material considerations

The issue of what might be a material planning consideration in deciding any given case can be complex. This issue has never been legislated upon by Parliament and consists entirely of judge-made law arising out of numerous cases decided by British courts. Any local planning policy or Government policy is clearly material, as are issues of public safety or amenity. An important point is that planning control is concerned only with the broad public interest, rather than to protect anyone or more people's private interests. Competition between businesses can never be a planning consideration; neither can the developer's profit' motives, or any supposed loss of value to nearby properties. Private covenants over land or any subject which is regulated by other legislation are also incapable of being a material planning consideration when deciding a planning application.

In deciding a planning application LPAs have a duty to have regard to all of the relevant and material planning considerations. However, while they cannot choose to simply ignore a relevant issue, provided they behave reasonably they are entitled to decide how much weight should be given to competing priorities.

If planning permission is to be refused, or if enforcement action is to be taken against unauthorized development, then the LPA must give reasons in writing, which show "demonstrable harm to interests of acknowledged importance". Unpopularity is not grounds for refusal of planning permission. A proper reason for refusal of planning permission must be based on the tangible harm which would be brought about by the proposal, as reflected in a relevant policy or other matter relating to planning, and in order to protect the public interest. Similarly, if a condition is to be imposed on the grant of any planning permission, compliance with that condition should be essential to make acceptable a development which would otherwise be unacceptable, (i.e. refused planning permission).

4. Appeals against decisions

Almost any decision made by an LPA is subject to a right of appeal in the event of refusal of planning permission, the taking of enforcement action, imposition of an onerous or improper condition on a granted planning permission, or the failure of the LPA to determine the application within a timely period ("non-determination"). The right of appeal applies only to an applicant or developer who is aggrieved by the decision of an LPA. Third parties such as a member of the public who disagrees with the decision of an LPA to grant planning permission do not have any right of appeal. Planning appeals in England and Wales are administered and decided by the Planning Inspectorate, which is an executive agency of the UK Government. In Scotland

appeals are determined by the Scottish Government Directorate for Planning & Environmental Appeals (DFPEA), and in Northern Ireland appeals are determined by the Planning Appeals Commission. An Inspector (in England and Wales), Reporter (in Scotland), or Commissioner (in Northern Ireland) investigates the question and decides to uphold or overturn the decision of the LP A. The decision is based on a fresh look at the case considering the representations that have been made by each party. A planning inspector (or equivalent) may find furls with the reasoning of the LPA but still dismiss the appeal based on their own reasoning of the issues and planning policies which are relevant to the case. In England around 70% of planning appeals uphold the original decision of the LPA.

5. Public involvement in development control in U.K

The public have a right to be consulted before any planning application is decided by the LPA. Land owners immediately adjoining the application site are usually notified, a public notice may be posted in nearby streets, and sometimes a notice is published in the local press. Planning applications must be decided in a timely manner and only 21 days is normally allowed by law for the public to express their views. Planning applications can be viewed on the LPA's website and comments can be submitted by email.

Most planning applications are decided by an authorized senior officer of the LPA under what are known as "delegated powers". Only major or controversial applications are decided by elected councilors meeting as a "Planning Committee" of the authority concerned. The agenda of the committee meeting with a report by planning officers on each planning application is usually published at least five working days before the meeting. The report on any planning application should contain a description of the development, a fair summary of any public comments

received, state the relevant planning policies which have a bearing on the decision and a discussion of the issues raised - all leading to a recommendation to either grant or refuse planning permission. The elected Planning Committee may act on the advice of their professional planning officers, or occasionally may take a different view.

Planning Committee members should vote to represent the interests of the whole community they represent, including those who will later live or work in any new development, rather than any narrower local view. The committee may refuse planning permission for development when their own professional planning officers have recommended that planning permission be granted, or allow an application that officers recommend should be refused.

Refusal of an application, whether by committee or under delegated powers, may be challenged by an appeal through the Planning inspectorate. If officers had recommended the application, the LPA usually has to rely on the same officers to make the case to the Inspector against it. Objectors to a successful application have no right of appeal, except by a legal challenge to the courts, although for some significant applications (e.g. involving major policy matters) the Secretary of State may "call in" an application for review.

Subject to making arrangements in advance, many LPAs will invite applicants and members of the public to address the Planning Committee before making their decision. However, the Committee is "a meeting conducted in public", rather than "a public meeting"; although given an opportunity to speak at the outset of the meeting, members of the public will not be allowed to join in the committee's debate. There are a number of LPAs that still do not permit the public or the applicant to speak at the committee meeting at all.

There are often different views as to what constitutes "fairness" in deciding planning applications. Many public objections to new development are explicitly based on a perception of unfairness that developers and landowners should be allowed to profit, while near neighbour, the local environment or the community as a whole does not. More specific objections may also be given, but this apparent unfairness is the fundamental of many if not most public objections to new development. The process of development and re-development is seen as an immediate cost or inconvenience to those living nearby, and any benefits are invariably to the community as a whole, over a wider geographical area, and over time. The most obvious beneficiaries of any development are those who will later live or work within it but their views are not heard when a planning application is being decided. Even a well managed LPA, making decisions in light of published planning policies and after extensive public consultation, will still attract accusations of unfairness.

Unless a member of the public raises one or more material planning considerations which were not apparent beforehand, it is unusual for public views to override the relevant planning policies when the decision is made. The importance of public opinion is in adding flavour to the issues from the point of view of the decision maker. They can be especially important in deciding how much "weight" to give to different material considerations. Unpopular proposals often attract well orchestrated public opposition and it is not unusual for an LPA to receive multiple copies of the same pre-written letter of objection from a large number of people, or petitions with numerous signatures. It is not unknown for LPAs to receive letters of objection to a proposal with fake names and addresses in an effort to increase the level of apparent public opposition to a planning application. Some objectors to a development will

also write to their Member of Parliament or to other people who are mistakenly believed to have influence over' the outcome of a planning application but MPs will scrupulously avoid seeking to influence the proper functioning of a democratically elected LPA. Although members are democratically elected, they should not decide applications on the basis of strength of public opinion, but according to planning law; if there are no substantial planning grounds for refusing an application, a planning inspector at appeal could well order the LPA to pay costs.

The most effective method of influencing the outcome of a planning application is to make representations to one or more of the elected councilors who form the LPA, whose contact details are readily available on the LPA's website. Local councilors who are also members of the LP A's Planning Committee may be reluctant to meet with applicants' or members of the public in person in order to prevent subsequent allegations of bias or pre-determination when the Planning Committee comes to make a decision.

Elected Councilors who are Members of the Council's Planning Committee are subject to their Council's general Co de of Conduct which requires them to register interests, declare personal interests and withdraw from the meeting if they have a prejudicial interest. As Members of the Planning Committee, however, they are subject to additional legal restrictions derived from the common law of bias. There have been several recent legal decisions on this and the present position (following the decision of the Court of Appeal in Persimmon Homes Teesside Limited v. Lewis 2008) is that whilst Members may have a predisposition to a view on a particular application, they must not have predetermined it in the sense that they come to the Planning Committee with their mind closed to the arguments of fellow members and the advice of the Officers. This causes difficulty, because members of the public,

action groups etc. not only ask Councilors to listen to their views, but also try to persuade them to commit for or against a Planning Application without understanding that if they do so they will be precluded from voting at the Committee.

Most LPAs are receptive to public complaints and seek to learn from them. The great majority of public complaints about planning matters concern an alleged error in procedure, rather than the outcome of a permitted development as later built. A member of the public whose complaint is well founded and who has suffered genuine injury or injustice as a result of maladministration can pursue their complaint through the UK's Local Government Ombudsman

2.7.2 Development control in Malaysia

The Malaysian administrative system is divided into three major levels of hierarchy: the Federal Government, State Government and Local Government, the latter being the local authority for its area. In 1976, the Local Government Act 1976 (Act 171) was promulgated providing a consolidated framework for local authorities. It also empowers the authority to undertake a wide range of functions. The planning powers of local authorities were thereof stipulated in the allied Town and Country Planning Act. The act stated that the local authority shall be the local planning authority for the area of the local authority, thus, conferring a primary physical planning responsibility at the local level and not at the state level as previously practiced. To carry out this function, the local authority shall prepare a two-tier development plan for the purpose of organizing, controlling and planning the development and use of land and buildings in their area. Strategic or policy decisions are to-be incorporated in Structure Plans while detailed decisions are to be laid out in the Local Plans (Yaakup et al., 1994).

Development at the local level obviously involves a lot of policies and implementation decisions which have to consider the cost and benefit to every level of urban dwellers. The interdependency between investments and their environment and the need to integrate all groups of inhabitants in urban society under decent living condition would be the prime concern of urban planners and managers at local level. Given the win range of activities over the years, the local authorities have amassed a huge amount of information of which a substantial portion is geographical in nature such as layout of housing scheme, road and drainage system, composition and distribution of population, distribution of land use and so forth. Unfortunately, these data are often inaccessible even to the local administrators, the main reason being the database management system which is based on manual filing system, making retrieval of information difficult and time consuming. To alleviate the problem, a number of authorities employ computer database system such as Data Base IV, Filmmaker, Statistical Analytical system or Statistical Package for Social Scientist. While these systems help tremendously in information retrieval and analysis, they do not handle spatial data very well. Thus, jobs assigned to the system are quite limited to routine retrieval (Yaakup et al. 1995).

2.7.2.1 Development Control-Process and Procedure in Malaysia

The process of development control involves a technique for the systematic compilation of expert quantitative analysis and qualitative assessment of project land use and property development viability, including its effect on the surrounding area, and the presentation of results in a way that enables the importance of the predicted results, and the scope of modifying or mitigating them to be properly evaluated by the relevant decision making body before a planning permission is rendered.

The context of urban planning, the present system of development control in most local authorities in Malaysia is by the granting or refusal of planning permission for development. The local authority is empowered to grant or refuse any planning application in its area. The recent amendment to the Town and Country Planning

Act requires that certain planning application shall be accompanied by a development proposal report which include a written statement and a plan to

i. describe the present condition of the land to which the application relates; and
ii. describe the proposed development, in particular on how it would be likely to have a significant effect on the built environment (Ali, 1990).

In most cases, a development proposal report involves a technique for the systematic compilation of expert quantitative analysis and qualitative assessment of the proposed project's land use and development viability, including its effect on the surrounding are?, and the presentation of results in a way which enables the importance of the predicted results, and the scope for modifying or mitigating them, to be properly evaluated by the relevant decision making body before a decision on an application is rendered (Yaakup, Johar and Dahlan, 1997). Information required for a development proposal report would therefore include the following major aspects:

i. Status of land and restrictions;
ii. Land use analysis and intensity of development - this includes land use zoning, population density zoning, height limit, plot ratio, plinth area, predetermined public area;
iii. Analysis of issues and potential of sites - this includes site location, existing drainage system, topography and slope, existing road system, existing land use, natural features which must be preserve and development potential;

iv. Analysis of surrounding development - this includes infrastructure, type, intensity and facilities available in the surrounding area;

v. The policies of the Structure Plan and Local Plan if available.

In addition, a planning proposal report sho.uld also observes the planning standards or other policies which may be imposed from time to time. The report will then have to be verified by the local authority concerned, in particular by the Planning division. The report together with other considerations will be used as a basis for making decision. The actual practice of development control however may differ from one local authority to another depending mainly on the size and status of the authority.

2.7.2.2 Development Control in Kuala Lumpur City Hall

Kuala Lumpur, the capital of Malaysia has evolved as the center of economic growth activities for the Klang Valley and the country. The development of Kuala Lumpur has taken the form of a definite concentration of physical and economic activities in the center with ribbon developments taking place along the major arterials leading into the city. The City Hall of Kuala Lumpur is the largest municipal authority as far as size and functions are concerned whereby administration and management are undertaken by 20 different departments or units namely the Planning Control Division, Building Control Division, Enforcement Unit, Administration Division as well as the Secretariat, each having its own head. Together, the departments are headed by a Director General who is assisted by two Deputy Director Generals. The Mayor appointed by the Prime Minister heads the entire organization and is an administrator with vast power and authority over decision making as far as development is concerned.

Planning legislation in Kuala Lumpur was traced back to 1881 (Baharom and Yusof, 2001) whereby an important and critical legislative action was taken after the big fire catastrophe. However 'urban planning' was only introduced in 1921, while legislation that directly regulates town planning activities was later introduced in1930. Eventually, the sudden need for better planning was realized with the new Kuala Lumpur City Act (Planning) in 1973 (Act 107). It is the first ever legislation meant to control urban planning and development and related activities (Malaysia, 1973). When Local Government Act (Act 172) was introduced in 1976, which incorporated Structure Plan under 20 years strategic planning, it also included Local Plan meant to develop framework for social policies, urban economic activities and environmental issues. Later, a dedicated Act meant only for Kuala Lumpur was passed by Parliament that incorporates major principles covered under Act 107 and 172).

All applications for development in the city of Kuala Lumpur will have to be submitted to City Hall for approval. Depending on the type and scale of development, these applications will be processed and considered by either one of the following committees:

i. Town Planning Committee I; and

ii. Town Planning Committee II.

The Town Planning Committee I chaired by the Mayor looks at the proposal for comprehensive and large-scale development, layout plans, change of use of land and increased density, and the application for the use of government land. This committee comprises the Director General of city Hall, Deputy Secretary to the Minister of Federal Territory, and all the directors of the technical divisions. Before an application is reviewed by this committee, it will have to go through all the technical departments for comments and recommendations, based on decision is derived

whether to approve or approve with conditions or reject the proposed development, after which the Development Order will be issued by the Mayor. The Town Planning Committee II looks into the application for development of shop houses, detach houses, mosques, industrial buildings, etc. the procedure adopted by the Town Planning Committee II is similar to the former committee, except that the Development Order will be issued by the Director General.

Development control is considered very important for Kuala Lumpur Metropolitan, especially in the Commercial Central Area which has the highest concentration of development compared to the rest of the city. It has a mixture of traditional shop houses, office complexes and modern hotel-cum shopping complexes. To date the area still receives numerous applications either for new development or redevelopment. The City Hall receives many applications to redevelop the traditional shop houses to be replaced by a more up-beat commercial buildings (Adom, 1992). Such small-scale development often carried out by private developers can be completed in record time but does little to contribute to the aesthetic aspect of the city since it is done-in a piecemeal manner. Applications for new development include hotel or shopping complexes and mega projects (floor space of more than 1 million square feet) normally carry out based on privatization concept. Potential areas being planned for such developments include open space, government land, school and river. Presently, development of this area is based on the rather outdated development plan of 1970, which does not provide adequate guidelines to control the developments. In addition, the City Hall applied some form of planning standards and restrictions such as plot ratio, density and plinth area. However, such restrictions can still be negotiated by compensating with payment of development charges, provision of car parking and other facilities, surrendering land for road widening or providing

building setback. The concern is that the development of the area if not properly and efficiently controlled, will not only adversely affect the form of the planned growth but that the image and identify of Kuala Lumpur will be eventually lost. To plan and control development in such area requires an information system that is capable of not only assisting in day-to-day routines but should also aid in formulating development strategies able to cope with the fast changing scene.

2.7.2.3 The Development Control System

Development Control System developed for Kuala Lumpur City Hall integrates several sub systems to execute specific functions (Joharet. Al., 2006). In general, the Development Control System has seven main sub systems, which are:

i. Planning Authorization Sub System
ii. Building Control Sub System
iii. Enforcement Sub System
iv. Geospatial and Planning Information Sub System
v. Information Kiosk Sub System
vi. Meeting Presentation Sub System
vii. Documentation Processing Sub System

2.7.3 Development Control Practice: Case of Akure

All the three tiers of government - federal, state and local - are involved in land management in Nigeria in most cases through their agencies. This section will be concerned with identifying and discussing agents of land administration and management in Akure. The responsibility for controlling and managing land in Akure rests on Ministry of Works Lands and Housing. The task is undertaken by three departments of lands services, Urban and Regional planning and Surveying (Alabi and Akinbode, 2010; Aribigbola, 2008).

2.7.3.1 Law

Formal land use planning and management in Nigeria began in 1863 with the enactment of the Town Improvement Ordinance by the colonial government (Federal Government of Nigeria, 1863). The ordinance was meant to control development and urban sanitation in Lagos, then the federal capital of Nigeria. However, modern planning could be said to begin in the country in 1946 when the Nigerian town and Country Ordinance was enacted. Western Region where Akure was located enacted its own Town and Country Planning law that forms chapter 123 of the laws of Western Nigeria. This law among other provisions established Town Planning Authorities (TPAS), which were to control and guide the orderly development of the settlements within their jurisdiction by approving proposals for physical development and the, preparation of development schemes and land use plans (Olujimi, 1993). In March 1979, as a result of the poor staffing situation and non-availability of a staff pension scheme, Ondo State government abolished the APAS including Akure Area Planning Authority. In its place, a unified town planning control system was adopted which centred all town planning activities in the Town Planning Division of the Ministry of Lands and Housing. Following the centralisation of planning in Ondo State in 1979, the responsibility of planning Akure was taken over by the state government and the Town Planning Division (now Department of Urban and Regional Planning) of the Ministry of Works and Housing. As a result of the need to guide and control development of the city as a state capital and to also cope with the rapid growth of the city, a private planning consultant was commissioned by the state government to prepare a master plan for the city. The plan that covers the period 1980 – 2000 was completed in 1983. Examination of the plan did not revealed evidence of involvement or consultation with stakeholders at all the various stages of articulating

the plan. Surveys using questionnaire were employed to collect data on the socio economic characteristics of residents of the city that were used to project and make provision to meet the needs of people in the city. A review of the process adopted in the preparation of the plan by the consultant shows that the public were not involved or consulted on the components and provisions of the master plan.

2.7.3.2 Practice:

Investigations revealed that there is within the ministry land use and allocation committee created by the land use act for the purpose of allocating lands to desiring members of the public. This committee as found out from field survey is not in existence in Ondo state, Therefore, the responsibility of allocating land is now being discharged by the Commissioner for Works on behalf of the Governor. Field investigations shows that the three departments mentioned above performed different functions in land administration and land management. Land Services is headed by a Director and the department is responsible for managing government land and estates, acquire land for public use and land allocation. It should be noted that the activity of the department in the area of land allocation is limited to government land which account for less than 10 percent of urban land use in Akure. However, the department is responsible for issuing certificate of occupancy to land owners and users. It is also responsible for land acquisition for public use.

2.7.3.3 Success

Beside the preparation of master plan for the city, another major instrument for planning in the city is the use of layout, where parcels of land are divided into plots of various sizes and for different uses such as residential, industrial, commercial, public and semi public uses. In this regard, members of the public particularly families are required to submit their proposed layout plans to the Area Urban and Regional

planning Office for planning approval. Investigations revealed that to date a total of 641 residential layout plans have been processed and approved in Akure by members of the public as against 20 by public and semi public organizations in the town (Olajuyigbe, and Rotowa, 2010). Approved layout plans are required before planning permissions are granted to developer to commence physical development. The process of approval of layout start with the submission of a proposed subdivision plan. The plan is scrutinized by officers of AURPO to determine conformity of the plan with planning requirements and standards. Where a plan falls short of planning standards it is returned to the promoter for necessary corrections and amendment. When the promoters have complied with all requirements, such layout plans are accepted and recommended by the Area Urban and Regional Planning Officer to the Director of Urban and Regional Planning at the state ministry of Works, Lands and Housing for approval (Olajuyigbe and Rotowa, 2010).

Another area in which the planning office functions in the city, is the area known as 'Protest and Petition". In this case, any member of the public that is disturbed by his neighbour is allowed to report to the planning office, where an officer of the ministry is deployed to investigate and report to the office for final settlement.

Besides the above, the Department also carries out development control where the city according to the Area Planning Officer, the city is divided into six' zones and Zonal inspectors are appointed to go round their zones daily to identify and stopped contravention. This activity according to the ministry is hampered by inadequate facilities such as motor vehicles and motorcycles. At present the Area Officer does not have vehicle of any kind. Development control is being carried out when, aggrieved individuals comes forward to report contravention. Field investigations

shows that besides the master plan prepared for the city in 1980, the various residential layout prepared by families and pockets of projects going on in the city, no concert efforts have -been made to imbibe and incorporate new planning initiatives and approaches to practice in the city . Consequently, planning activity is still restricted to approval of plans and control of physical development that is not effective.

The major initiative to urban planning in Ondo state was the enactment of the urban and regional planning edict of 1999. This edict patterned after the 1992 Urban and Regional Planning Act that seeks to create state urban and regional board and local planning authority at the state and local government level respectively in the state. This law purports to transfer city planning to the local government council. Members of the Board and Authorities are to consist of professionals including Town Planners, Engineers, Land surveys, Architects, Estate Surveyors, Builders, and Lawyers among others.

2.7.3.4 Challenges /problems

Empirical investigations arid observations of urban dynamics in Akure indicate that at moment urban planning has very little influence over the process of land management in the city, changes in land use patterns are the result of a series of ad hoc solutions. For instance Ondo state is one of the 13 beneficiary states in Nigeria under the World Bank Assisted Community Based Urban development project. Thus, two communities: Oke Aro Eyinke and Irowojo dopetu were identified in Akure to benefit from the project. Under the project infrastructure and municipal services such roads, water supply, and waste management scheme were upgraded and provided in the selected communities. However, this project was carried out outside the formal land

use planning and management system, they are carried out by committees under the Governor's office.

Constraints to Effective Land Planning and Management in Akure having discussed land use planning and management systems in Akure, it is evident that land use management is ineffective and uncoordinated in the city. A number of factors are responsible for this state of affairs. These constraints are briefly discussed as follows.

- Non Adoption and Utilization of Modern Planning Approaches.
- Inadequate Manpower
- Poor and Inadequate Funding
- Lack of coordination of their activities.

2.8.0 Development Control in the FCC

2.8.1 History of the FCC

Abuja is the capital city of Nigeria; the city is bordered to the north by Kaduna State, to the east by Nassarawa State, to the south-west by Kogi State and to the west by Niger State. Prior to its creation, Nigeria was administered from LAGOS as its capital.

The land of Abuja was the southwestern part of the ancient kingdom of Zazzau (Zaria). The name "Abuja" was derived from Abu [a, a brother to Muhammadu Makau, the last hausa ruler of Zaria. Makau had left Zaria after being defeated by the Fulani and settled in the area now known as Abuja. In 1825 his brother Abu [a succeeded him as the 62nd King of Zaria (Wikipedi.org, 2012).

The full name of Abuja was Abubakar (shortened to "Abu") and the name was given to him because he was light in complexion (in Hausa "Ja" means red or fair). He became known as "Abu- [a". "Abu the fair one" (other sources claim that the name

"Ja" was derived from the last name of his father which was "Jatau"). Abuja then built a new capital for his Kingdom and called it "Abuja",

In 1975 (precisely 9th August) the then Federal Military Government under Late General Murtala Muhammed set up a seven man panel (Dr. Akinola Aguda, Chairman; Chief E. E. Nsefik, Secretary; Dr. Tai Solarin, Professor O. K. Ogan, Colonel M. P. Professor A. Gandonu, Members) to examine the capacity of Lagos to continue serving as the Federal Capital of Nigeria, to advise the Government on whether Lagos should remain the Capital, and to recommend alternative sites for the capital.

The committee recommended that the Federal Capital he moved from Lagos and suggested several alternatives such as Okene, Kafanchan, Markurdi, Ile, Auchi and Agege but recommended the area which is now the Federal Capital Territory of Abuja as an alternative site for a new Capital City On 4 February 1976, the Federal Military Government of Nigeria, led by General Muhammad Murtala, established Abuja as Nigeria's new Capital by virtue of the Federal Capital Territory Decree No.6 of 1976. Following the recommendations of the Justice Akinola Aguda Committee, the Decree legalized the creation of the Federal Capital Territory (FCT). The Federal Government was to move from Lagos to the new Federal Capital over the course of 20 years. The FCT Act of 1976 placed the entire land mass of the FCT under the auspices of the Federal Government. The Act also established the Federal Capital Development Authority (FCDA) with the responsibility of spatial planning and development of the FCT (Ngex, N.D).

In 1977, the FCDA commissioned International Planning Associates (IPA) to develop a 'Master Plan' for the FCT. The Master Plan for Abuja, the New Federal Capital of

Nigeria - designed by International Planning Associates (IPA) and approved by the Federal Military Government in 1979 - explained the Committee's rationale for moving the Federal Capital to Abuja, as follows:

The City of Lagos is incapable of functioning GIS both a Federal Capital and State Capital, due to the problems of inadequate land space for development commensurate with its status as the Capital of Nigeria.

- Lagos is identified with predominately one ethnic group. A New Capital in a more central location would provide equal access to Nigeria's great diversity of cultural groups.
- A New Capital is desirable that would be secure, ethnically neutral, centrally accessible, comfortable and healthful, and possess adequate land natural resources to provide a promising base for urban development.
- A New Capital is needed as a symbol of Nigeria's aspirations for unity and greatness.

Authorities also justified relocating the Federal Capital to Abuja as a means by which to balance development across the country by establishing economic opportunities in the 'middle belt' of Nigeria. Authorities believed the creation of the Capital would foster new employment opportunities in the FCT, as well as the neighbouring states of Niger, Kwara (now Kogi) and Plateau (now Nasarawa). The movement of the Seat of Government to Abuja became effective on 12 December 1991 (Ngex, N.D).

During 1991, over 200 000 public sector workers relocated from Lagos to the FCT, along with staff from foreign embassies and the offices of multilateral and bilateral agencies. According to the census of 1991, the population for the FCT was estimated at 378 671. Following more than two decades of military rule, the 29 May

1999inauguration of civilian-elected President Olusegun Obasanjo became a further incentive for Nigerians from all walks of life and members of the international community to relocate to Abuja.

As at now, the Federal Capital City (FCC) is planned to cover an area of about 250 sq. km, while the rest of the Territory of the city region covers about 7,750 sq. km. The entire Territory itself was carved out from three states, namely, Niger State which contributed seventy-nine percent of the land area and seventy-one percent of the indigenous population, Nassarawa State which contributed sixteen percent and twenty-one percent respectively, and Kogi State which made a contribution of five percent and eight percent respectively. Until the creation of the FCT, the area was among the least developed in the country, lacking any form of developmental amenity and infrastructure. Things have now changed and are still changing at a pace hardly matched by any other part of the country (Online Nigeria, 2012).

2.8.2 The Abuja Master Plan

During an 18-month period, IPA undertook a master planning process that involved: "a review of relevant data, the selection of a Capital, City site, the preparation regional and city plans and an accompanying design and development standards manual." On 15 February 1979, The Master Plan for Abuja, the New Federal Capital of Nigeria was submitted to the FCDA.

The Master Plan for Abuja was "designed to provide long-term guidance the orderly implementation of the new Capital City. As such, the plan is more than land- use maps, since it provides a general framework for development within which planning for various systems and sectors can continue. The 25-year-plus focus requires that .the plan must recognize changes and uncertainty by making provisions for foreseen

growth and transition, as well as unfore- seen events. The Master Plan was intended to cover and coordinate land use, transportation, housing services and other infrastructural facilities in a manner that was cost-efficient and recognized their inter-relationships.

The FCC master plan as prepared by IPA made proposals for a projected population of 3.1 million people on the basis that the plan will cater for the needs and value systems of all the cultural groups in Nigeria and as well meet the needs of foreigners whom for one reason or another have to live in the FCC for their missions. The plan was intended to develop the FCC as a cosmopolitan city where both indigenous and foreign population can live together in peace and harmony.

The master plan proposed four phases of development for the city and budgeted a total land area of 25,658 hectares of land for the development. See table below for the land use budget.

Table2.1: Land use budget for FCC

Land Use	**Land Budget in Ha**	**Percentage**
Residential	12,486	48.69
Commercial	561	2.19
National Government	500	1.96
Light industry	920	4.00
Transportation	1,705	6.65
Institutional	891	3.44
Parks, Open space/garden	8,435	32.86
Sport and recreation	160	0.62
Total	**25,658**	**100**

Source: Abuja Master Plan, 1979.

In the master plan, the city was designed with the smallest unit designated as neighbourhood. Each neighbourhood has a neighbourhood centre. The neighbourhood centre bears the responsibilities of providing facilities and social services such as

primary schools, shops dispensaries/ clinic, postal agency, community hall etc. the neighbourhoods have allotted population target for the purpose of sustaining the centre's facilities knowing fully well that overpopulation will place a burden on the facilities. The next hierarchy of Residential development is the Districts. The districts are accordingly made up of between four to six nieghbourhoods. A number of districts are also combined to make up a sector with a sector centre. Various categories of roads and highways are provided which include minor access roads, local streets, collector roads, arterial roads, express ways and transit ways. Sewage system, power and pipe borne water supplies were also addressed in the master plan.

2.8.3 Implementation of the FCC Master Plan

Since the implementation of the FCC Master Plan commenced in 1979, development actions have been concentrated largely in phase I made up of Garki I and II, Wuse I and II, Maitama, Asokoro and Central Business District of the city. The infrastructural provision has attained about 90% completion. What is upstanding essentially is the development of the transit ways, express ways and phase II of the Central Business District.

For the phase II of the city, infrastructural development is currently being provided in the Districts of Utako, Jabi, Gudu, Part of Mabushi and Katempe extension.

However, there was a quasi attention to the management of the city; this manifested itself in the gradual deterioration of the city system. The uncontrollable influx of people into the city and the attendant volume of activities without corresponding managerial capacity further aggravated the situation. The need to reverse the trend became an urgent necessity.

It was against this background that the Government of formal president Olusegun Obasanjo through an executive order created Abuja Metropolitan Management Council (AMMC) in November, 2005 with the air» of instituting sustainable structures for effective management and gradual restoration of the Federal Capital Territory.

2.8.4 Management Framework of the FCC

The FCC is managed by Abuja Metropolitan Management Council (AMMC) whose activities are being monitored by the Minister of the Federal Capital Territory. The AMMC is coordinated by a coordinator; it consists of five (5) administrative departments each of which is being headed by a Director. The departments are;

- Administration and Finance
- Development Control
- Facilities Maintenance and Management
- Parks and Recreation
- Urban Affairs

The Functions of AMMC among others include the following;

i. To initiate and formulate policies that would guarantee service delivery by its constituent Departments.
ii. To oversee and coordinate the activities of all Departments under its authority.
iii. To ensure proper maintenance and management of the city's infrastructural facilities, utilities and services in a sustainable and cost effective manner.
iv. To cooperate and encourage interaction between similar organizations and agencies responsible for city management at local and international levels.

v. To brief and advice FCTA from time to time on matters relating to city management.

2.8.5 Mission and Vision of AMMC

AMMC is with the mission of providing a management of a first class and inclusive city comparable to any other city in the world. The vision is to provide sustainable services to the residents of FCT. The Abuja Metropolitan Management Council (AMMC) operates through four technical and one service departments. The technical departments include: Parks and recreation, Urban Affairs, Development Control and Facilities Maintenance and Management; while the service department is the Administration and finance department. The major activities / functions of AMMC includes:

a. To initiate and formulate polices that could guarantee efficient service delivery by its constituent Departments;
b. To oversee and co-ordinate the activities of all departments under its Authority;
c. To ensure proper maintenance and management of the city's infrastructural facilities, utilities and services in a sustainable and cost effective manner;
d. To cooperate and encourage interaction between similar organizations and Agencies responsible for city management at Local and International Level;
e. To brief and advise the Federal Capital Territory Administration – FCTA from time to time on matters relating to city management.

2.8.6 Department of Development Control

The Department of Development Control is the organ of the FCT Administration that is saddled with the responsibility of monitoring and ensuring compliance with all development guidelines, largely, the Abuja Master Plan and the FCT Regional Development Plan as conceived by the founding fathers before 1979. The Development Control was a Division under the Department of Planning and Survey before it became a full-fledged Department of its own in 2002. The Department is one of the five Departments brought under the supervision of the Abuja Metropolitan Management Council which in 2007 replaced Abuja Metropolitan Management Agency established in 2005.

The department is tasked with the following statutory functions:

- Granting official permit for all forms of physical developments, private and public, and monitoring same to ensure suitability of completed development structures for human habitation.
- Granting of setting-out permit, stage approval permit and continued monitoring to ensure proper implementation.
- Planning and installation of street furniture e.g. signboards, billboards, signages, telecommunication mast and other amenities and conveniences.
- Determination and applications of appropriate sanctions for non-compliance with development guidelines and regulations.
- Monitoring and enforcement of physical development in line with the provisions of the Master plan and other development control guidelines.
- Providing guidelines for the improvement of aesthetics of individual and public properties and over all street scape.
- Offering of advice and counseling to prospective developers.

These statutory functions are sometime streamlined to suit the current realities and best practices. Its mission statement is to control the orderly implementation of the Master Plan of the Federal Capital Territory (FCT) towards the enhancement of the health, safety and convenience of all uses for living, working, recreation and interactions (DODC Manual, 2007).

The Federal Capital City and indeed the entire Territory have witnessed flagrant abuse and distortion of development policies and guidelines. The period preceding the one under review was characterized by unscrupulous land speculation, manifested through indiscriminate conversion of flood plains and green areas, unprecedented and spontaneous growth of slums and squalid settlements leading to the collapse of infrastructure and other essential services, as well as an extremely low urban environmental quality. There were also increased rate of traffic congestion, crime and haphazard development contrary to the aspirations of the founding fathers and concepts of the Master Plan for the new capital city. The urban environment was indeed degenerating to a hopeless and helpless situation.

2.8.6.1 Vision, Goal and Objectives of the Department

The department is established with the vision of nurturing a world class capital city comparable to any other to optimum stage of development. The goal is to undertake the implementation of the Abuja Master Plan towards enhancing the health, safety and satellite settlements for living, working, recreation and interception. The objectives of the department include the following:

- To nurture a world class Capital City comparable to any other at optimum stage of Development.

- To undertake/ coordinate the implementation of the Abuja Master plan towards enhancing the health, safety and convenience of the City and satellite settlements for living, working, recreation and interaction.
- To establish a credible and accelerated building plan approval process through world-best practices.
- To prevent illegal development and building collapse.
- To enforce the designated landuses in line with the Master plan provisions
- To enhance the orderly development of Telecommunication infrastructure for improved efficiency and effectiveness of GSM communication in FCT.
- To control public signage's for improved aesthetics.
- To enhance optimization of infrastructure through building height controls, enforcement of activities related thereto-parking, vehicular movement into roads etc

2.8.6.2 Basic Activities of the Department of Development Control

The basic function of the Department is to enforce the provisions of the Master Plan and other guidelines for physical development, thus the activities of the department include the following;

i. Processing and granting official permits for all forms of physical development - public or private and monitoring same, to ensure compliance of completed structures for human habitation and or use in the FCT.
ii. Monitoring and control of physical development to prevent and redress illegality,
iii. Control of technical requirements 011 outdoor advertisement e.g. billboards, sign boards etc. and telecom masts in liaison with AIIC.

iv. Application of appropriate sanctions for developments that are in contravention of designated land use.

v. House numbering.

vi. Planning and enhancements of standards for street vistas and views by enforcing building lines.

vii. Providing guidelines for the improvement of aesthetics of individual and public properties, overall urban scape standards and distribution of urban conveniences.

viii. Offering advice and counseling to prospective developers.

2.8.6.3 Staffing of Department of Development Control

The Department of Development Control is headed by a Director who oversees all the activities of the Department. The office of the Director carries out Administrative, Public Relations, Accounts and Transports functions.

Immediately under the Director are five Deputy Directors (Deputy Director, Development permit; Deputy Director, Amenities and Aesthetics; Deputy Director, Monitoring and Enforcement; Deputy Director, Building inspectorate; and Deputy Director, Logistics). Under the Deputy Directors, are assistant Directors who assist the Deputy Directors in carrying out the functions of the Department following the offices of Assistant Directors is the officer of chief town planning officer, Assistant Chief town planning officer, Principal town planning officer, senior town planning officer, programme analyst, District officers and site officers. See the organogram of the Department of Development Control below.

2.8.6.4 Development control procedure

The Department in control developments issue out permits before any development could be carried out. See the workflow of development permit below.

Developers submit concept drawings/designs of the proposed development in CAD format to the town planning office of the department of development control for town planning assessment. After assessing the design, it is passed for architectural assessment when approved, but if not, the design is sent to servicom help desk for onward emailing to the developer's consultant. From the architectural assessment, the design is passed for structural assessment after which it is sent for electrical assessment if approved otherwise, it passes to servicom help desk. After electrical assessment, the design is passed for mechanical assessment if approved but if not; it is also passed to the servicom help desk. After the mechanical assessment, the design is passed for town planning recommendation unit for recommendation if approved; otherwise it is passed to the servicom help desk. From the town planning recommendation, the design is passed for executive approval and final sealing.

- Political Will and support. The need to be swift/firm against public test, and 'chancing' through willful illegal development (Public enlightenment & persistent enforcement & firmness).
- Manpower need - especially middle-level professional (Staff hunt).
- Fast-tracking of Building Plan approval (E-vetting rigorously commenced).
- Emerging slum across FCT Border e.g. Mararaba (Nasarawa State and Madalla (Niger State). Need for synergy with the States (Cross-border Committee) to enhance the health, safety and convenience of the cross-border environment for living, working, recreation and interaction.

- Equipment (Regular maintenance and pursuit of budgetary provisions) Effective monitoring and control of illegal development in Area Councils (Establishment of Development Control offices there).
- Public image (Re-orientation & invigorated disciplinary measures).
- Allocation in not only un-serviced layouts but those without Engineering Designs e.g. Dawaki
- Indigenous villages within the City - Lugbe, Garki Village
- Double land-use plans i.e. URP (Master plan) and AGIS(Purpose Clause)
- Networking with AGIS
- Decision on Commercial Streets, servicing of service Sectors/Districts. Etc
- Low Income Housing
- Court injunctions (Need to sensitize judiciary)
- Developments by the Nigerian Army
- Federal Government Agencies - especially FM1H&UD

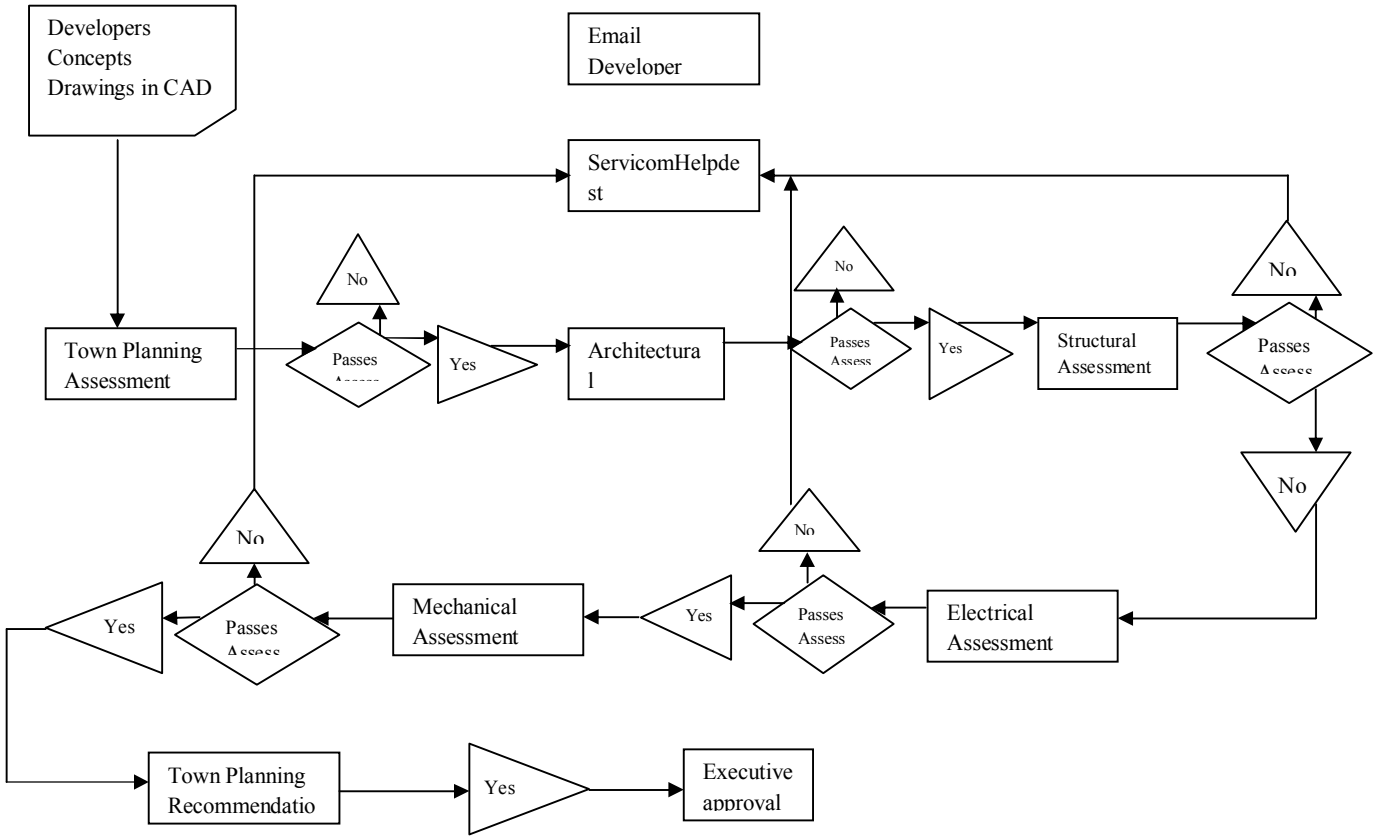


Fig 2.8: The Workflow of Development Permit of Development Control Department

Source : www.basildon.gov.uk/chttpHandler,ashx?id=540dp=0, 2011.

CHAPTER THREE

METHODOLOGY

3.0 METHODOLOGY

The procedure or set of procedures applied in the execution of a task is what is described as methodology. Involved in such procedures is the analysis of the principles of methods, rules and postulation employed. It is important to identify what data is required for analysis, where to obtain it, how to obtain it, what method of analysis is relevant, and what method of presentation will better provide useful information.

3.1 DATA REQUIRED

i. Physical and socio-economic characteristics of the area
ii. Master plan and land use map of the area
iii. Development pattern of the area
iv. Development control laws, policies and guidelines of the area
v. Cadastral sheets of the study area
vi. Satellite imagery of the area
vii. Land use allocation reports with regards to land use changes or allocations or rejection
viii. Record of land allocations with reference to uses specified
ix. Outcome of the field surveys, interviews and questionnaires i.e. (raw data).

3.2 DATA TYPES AND SOURCES

In order to achieve the research objectives, both primary and secondary data will be required to be able to draw meaningful conclusion. The surveys will be conducted as follows:

i. **Primary Data:** This will involve personal interview, field observation, questionnaire administration, focused group discussion and pilot survey.

ii. **Secondary Data:** This will be sourced from published and unpublished materials, It will include review of related literatures, records, journals, documents, maps and surveyor cadastral sheets and records, information's from relevant technical and administrative departments and agencies of the Federal Capital Territory administration (FCTA), such as Abuja Metropolitan Management Council (AMMC), Abuja Geographic Information System CAGIS), Federal Capital Development Authority (CDA), National Population Commission (NPC). The data obtained from the field survey will be presented using ideographic or photographs for easy comprehension, graphic techniques will be employ such as bar charts, tables and line graphs for presentation of results. Best practices in effective development control would be used as bench mark representing an ideal system of development control.

Table 2.2 Data required and sources

Sources	**Data Required**	**Sources**
Primary Data	Socio-economic characteristic of residents of the study area	Field survey through focus Group Discussion, interview, and Questionnaire Administration
	Physical/Spatial Characteristics of the study area	Reconnaissance survey, field observation, based maps and satellite images
Secondary Data	Records on plots allocation made in the study area	FCDA, AGIS
	Data on applications for planning permit	AMMC (Development Control)
	Data o n recorded violations made against DC standards	AMMC (DC)
	Land use maps of the District in the FCC	FCDA, AGIS
	Master plan of FCC and detailed site development plans of the District in the FCC	FCDA
	Data on the setting out permission granted and violations made	AMMC

Source : Author's Fieldwork, 2010.

iii. Collection Technique

The physical data will be collected through reconnaissance survey which involves moving around the study area with the aim of understanding the place better. There will also be field surveys which involves physical visit of some of the plots to take detail observations on site. The socio-economic data will be collected through the administration of questionnaires to land allotees at the study area, as well as, interviews which will be conducted among relevant government officials from Department of Development control, AMMC.

3.3 SAMPLING TECHNIQUE

Wuse I and II districts of phase I of the Federal Capital City are made up of total allocated plots of about 2,763 for residential use. The sample size for the field survey is estimated at 18% which will actually be derived from the average ratio of the plots which have been zoned to for residential uses. Wuse I and II districts of phase I of the Federal Capital City are made up of total allocated plots of about 2,763 for residential developments. However, a cluster sampling was adopted for the study area. Wuse I is identified with seven (7) clusters as zones which are made up of 1608 plots, while Wuse II is found with eight (8) clusters as residential neighbourhoods which is made up of 1155 plots. A sample size of 18% were adopted for the field survey, this were actually derived from the average plots which have been zoned for residential uses. In each cluster, 18% of the residential plots were obtained, out of which every fifth (5th) plot is counted in a systematic sampling frame for detail analysis for the research. From these, a total of 506 plots were surveyed for detail analysis for the research work. Table 1.5.4(a) and 1.5.4(b) below shows the sample plots surveyed as computed.

Table 3.3 (a) Sample Plots in Wuse I

S/No	Areas/Location	Total/Covered
1.	Zone 1	40
2.	Zone 2	44
3.	Zone 3	34
4.	Zone 4	53
5.	Zone 5	27
6.	Zone 6	69
7.	Zone 7	24
	Total	291

Source: Author's Fieldwork, 2010.

Table 3.3 (b) Sample Plots in Wuse II

S/No	Areas/Location	Total/Covered
1.	Neighbourhood 1	40
2.	Neighbourhood 2	29
3.	Neighbourhood 3	24
4.	Neighbourhood 4	33
5.	Neighbourhood 5	12
6.	Neighbourhood 6	20
7.	Neighbourhood 7	23
8.	Neighbourhood 8	34
	Total	215

Source : Author's Fieldwork, 2010.

CHAPTER FOUR

ANALYSIS OF DEVELOPMENT CONTROL VIOLATIONS AND CHALLENGES

4.1 INTRODUCTION

This chapter presents the data obtained on the pattern explanations and implications of Development Control violations in Wuse district. It is organized into three parts. Part one presents the data obtained and the analysis on the types and spatial pattern of violations relating to land use, development density, building height, setback and fence height. Part II provides the explanations for violations, and part III the challenges for urban management. The findings are used as basis for recommendations that are presented in chapter five. The findings generally are that, of the 2,763 residential plots in Wuse I & II Districts, about 574 were established to have violated in the study area.

4.2 Land use Violations and Pattern

Land use violations were determined by comparison of existing land use against the provisions made in the detailed site development Plan, about 238 were established to have been converted to other uses. New uses introduced ranged between commercial and public (educational and health uses). The disaggregation of the data obtained by the districts as shown, the highest violation of land use occurred in Wuse II with 139 cases which represent 58% of total violations in the study area. The violations in Wuse I were 99 (42%) of all land use violations. The types of violations were further disaggregated by specific land uses and by district which is shown in table 4.2. Combined for the two districts, the proportion of conversions to commercial use is the highest in the study area with 199 cases (84% of total violations).

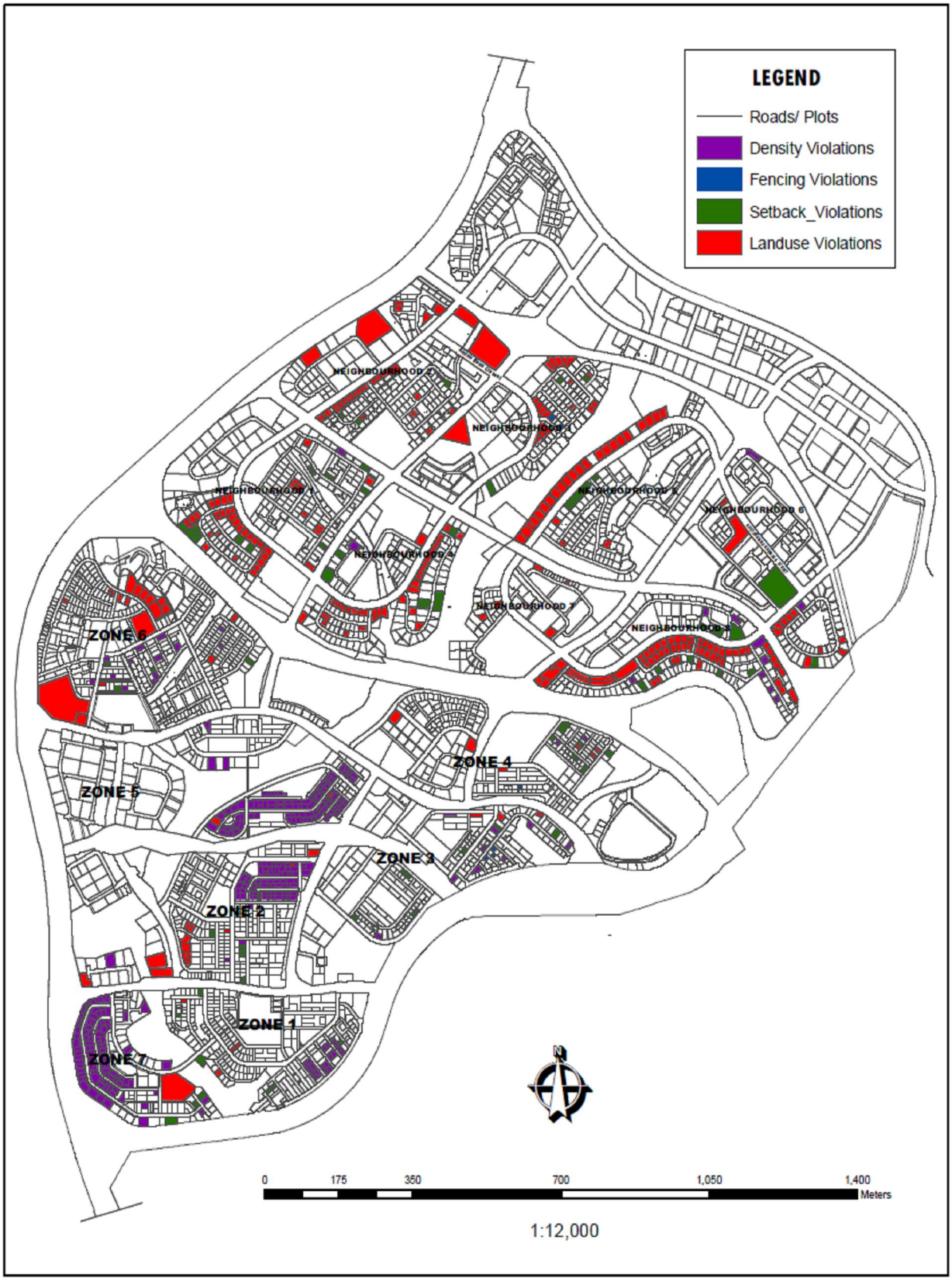


Fig. 4.1 General plan violations in Wuse district

Conversions to public use (Health and office facilities) are the next in importance and ranked 2nd and 3rdrespectively. Conversion to Educational use is the lowest (2%) in the two districts.

Table 4.1: Total Land Use Violations in Wuse I and II

District	No of Land Use Violation	Percentage (%)
Wuse I	99	42
Wuse II	139	58
TOTAL	**238**	**100**

Source: Author's Fieldwork, 2011.

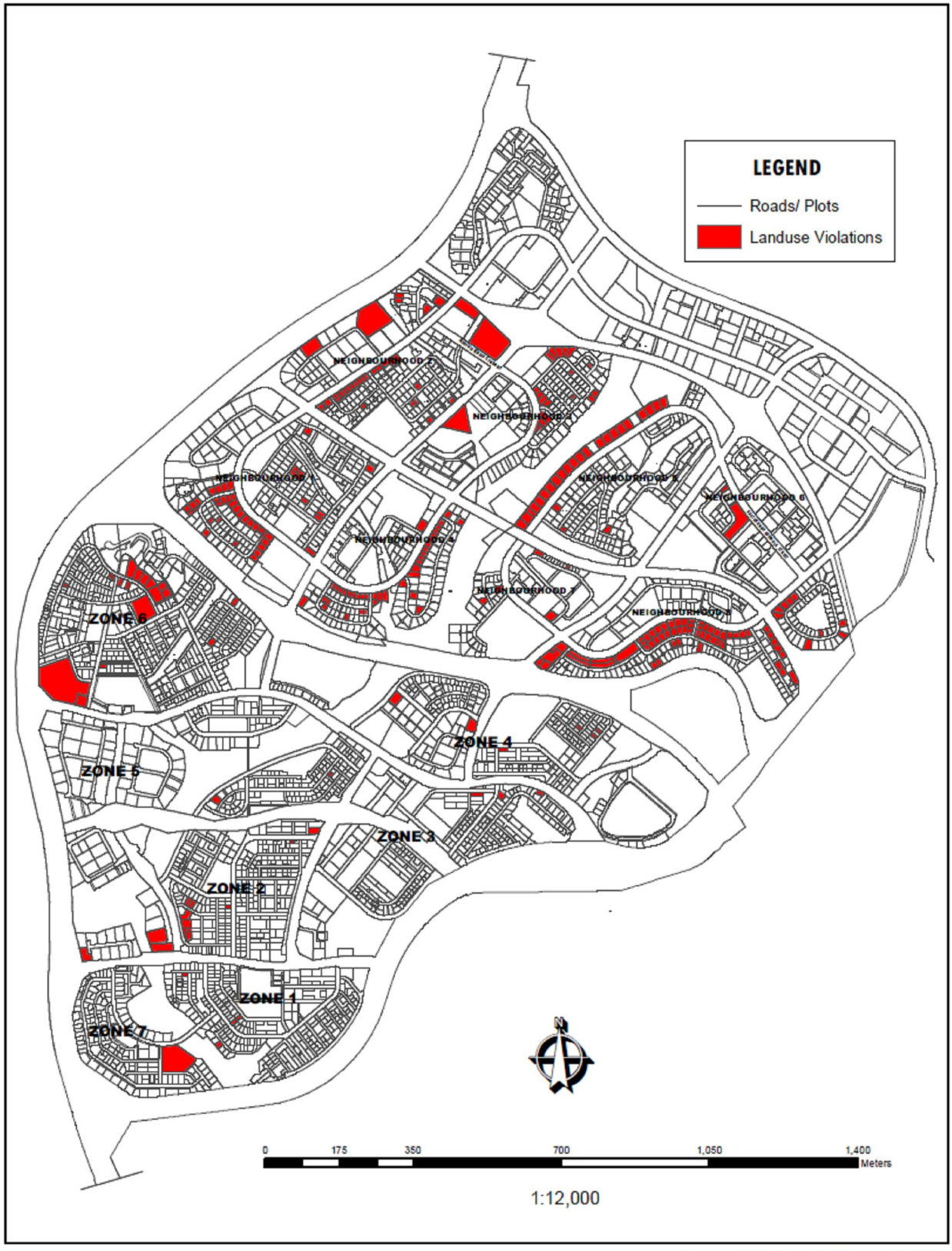
Between the two districts, conversions to Commercial and Health uses were higher in Wuse II (121 and 12 cases) than in Wuse I (78 and 6 cases). Most of the conversions to Public use (75%) on the other hand are in Wuse I.

Table 4.2: Residential Land Use Conversion at Wuse I and II District

Land use Violations	Wuse I	Wuse II	Total	Total %	Ranking
Commercial	78	121	199	84	1st
Education	3	2	5	2	4th
Public	12	4	16	7	3rd
Health	6	12	18	8	2nd
Total	99	139	238	100	

Source : Author's Fieldwork, 2011.

A further analysis was carried out to establish the types of activities introduced when commercial conversions occur. The new activities introduced, Conversions to private offices is the highest across the two districts with 133 cases (67% of the total). Hotels/Restaurants accounted for 30 cases (15% of the total) and banks 10% of all cases. Conversion to shops is the lowest, at 16 (8% of the total) across the 2 districts. Disaggregated by districts, the highest (89) conversion to private office use (67% of total) occurred in wuse II. Most of the conversions to Banking use also occurred in Wuse II with 12 (60%) cases. Conversions to shopping centres were uniformly spread across the districts.



Source: FCDA Abuja/Field Survey, 2010

Fig. 4.2 Wuse District:Pattern of Landuse Violations

Table 4.3: Breakdown of Activities Introduced Following Commercial Conversion

Type of Commercial Use Violations	Wuse I	%	Wuse II	%	Total	%
Bank	8	40	12	60	20	10
Hotel/Restaurant	18	60	12	40	30	15
Private Office	44	33	89	67	133	67
Shops	8	50	8	50	16	8
TOTAL	78	39	121	61	199	100

Source: Author's Fieldwork, 2011.

The spatial pattern of Land Use Violations was observed mostly in the serviced residential areas (see figure 1). In wuse I, the spatial pattern of Land Use Violations occurs (about 70%) along local streets while others are sparsely distributed (30%). District Plate I and II shows a school and public office and a hotel built on a residential plot along Lome street (Important Local Street) in Wuse I.



Plate I: ASchool and Public Office Built on a Residential Plot at Lome

Source : Author's Fieldwork, 2011.

Similarly, the conversions to banks are visibly sighted along some Important Local Streets (ILS) where residential plots have been converted to banking halls for example

Bank PHB at Noukchot Street Wuse I and the Federal Capital Territory magistrate court building at Wuse zone II as shown on plate 3



Plate II: A Hotel Developed at Residential close on Plot 1979, Lome Crescent, Wuse I
Source : Author's Fieldwork, 2011



Plate III: A magistrate court developed, at a ILS in Wuse Zone 2, Wuse I
Source : Author's Fieldwork, 2011.

In Wuse II, land use violations occurred mainly along collector streets (60%) while other violations are scattered within neighbourhoods (40%).This is shown in figure I. The spatial pattern of conversions is more pronounced at areas abutting arterial/collector Streets like Adetokunbo Ademola and Aminu Kano crescents. Along these streets, conversions to commercial uses are rampant with activities like banks,

private offices, hotels and restaurants. Expectedly, such locations give developers the advantage of displaying products and services due to easy accessibility and high volume of vehicular movement (See plate IV and V showing hotels offices and bank along Aminu Kano and Adetokunbo Ademola Crescents)



Plate IVa: Residential Building Converted to Hotel and Private Offices at Aminu Kano Crescent Wuse II. (Collector Street)

Source : Author's Fieldwork, 2011.



Plate IVb: Residential building converted to hotel and private offices at Aminu Kano crescent Wuse II. (Collector street)

Source : Author's Fieldwork, 2011.



Plate V: showing Conversion from residential to commercial use (Restaurant and Bank) at Kolda Link (ILS) off Adetokunbo Ademola Crescent Wuse II

Source : Author's Fieldwork, 2011.

The spatial pattern of hotel location has no affinity with the hierarchy of roads, as they are irregularly distributed.(See Figure 1).

Table 4.4Comparison of Landuse Violation Records between Field Survey and Official Record

Areas plot	Surveyed Plots	Official records			% of deviation
		Approved	Unapproved	Total	
Wuse I	99	4	46	50	51
Wuse II	139	14	73	87	63
Total	238	18	119	139	

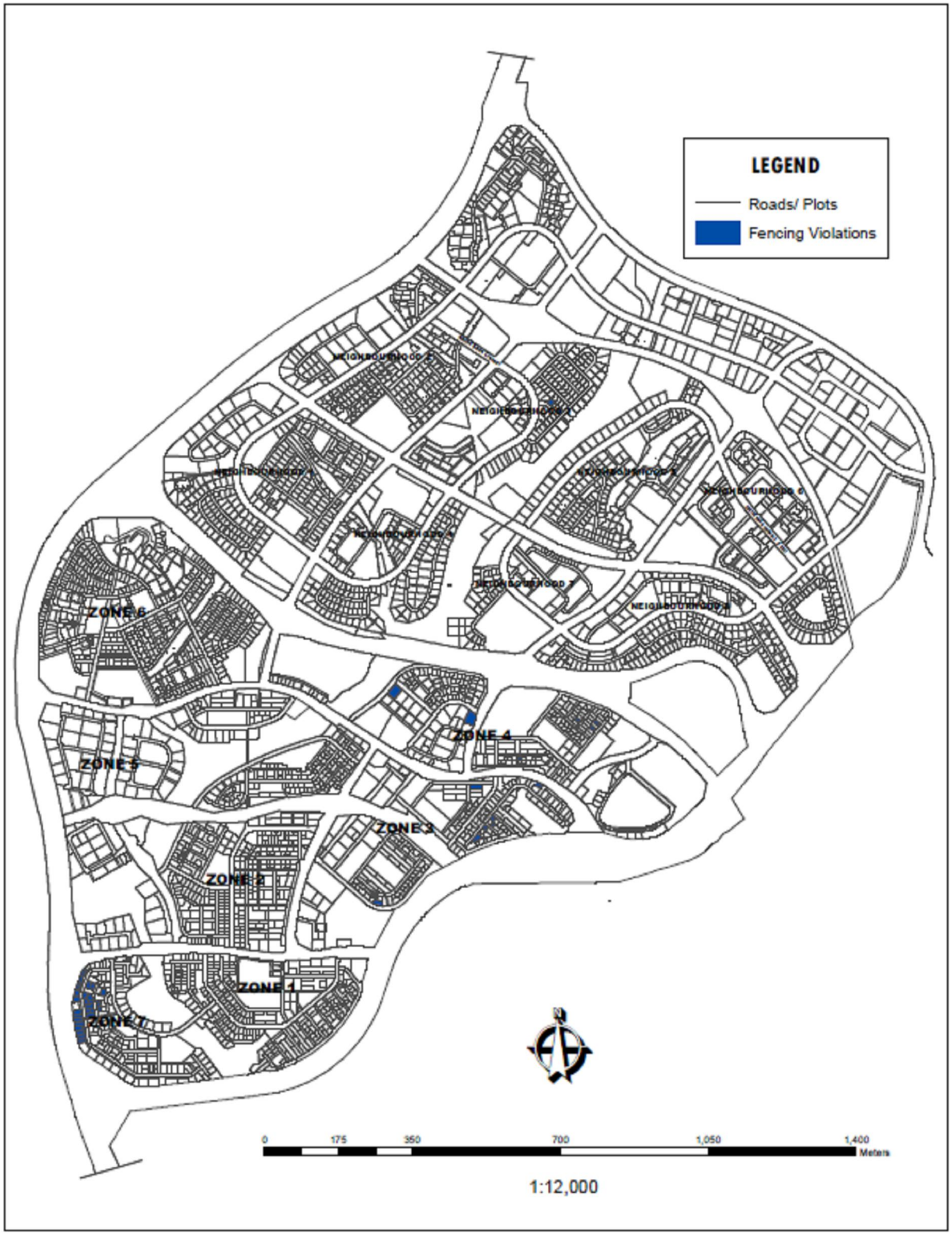
Source : Author's Fieldwork, 2011 and FCT committee on change of Landuse/Residential Density

The analysis further compared the level of efficiency on the part of respective committee (FCT committee on change of Land use and Residential Density) with respect to documentation of landuse violations as well as various approval granted and others disapproved vis-a-vis the established level of violation cases from the field survey. Table 4.4 shows that in Wuse I, 99 cases of violations were identified, while comparing with the establish records of the committee 50 applications for change of use were recorded out of which only 4 were granted approval indicating 51% deviation from the field source, while in the case of Wuse II, field survey has established 139 cases of violation compared with the official record of 87 applications

for change of use received out of which only 14 applications were granted approval, representing 63% deviation from the field survey source.

4.2.2 Fence Height Violation

Fence height violation constitutes the least of all violations in the study area. The Development Control regulation for fencing of residential areas has limited the front fence wall to one meter block wall and 0.5m steel iron with 2.0m fence wall at the side and rear. This is considered safe, transparent and of good aesthetic quality. About 92% of these categories of violation are carried out within residential properties at Wuse I. The argument is either for an improved security or for aesthetic appeal of areas and most of the developers of commercial properties for the total removal of the front fence wall thereby providing free access to the properties. This is encouraged by the Department of Development Control, in view of the need for improved accessibility and circulation in the commercial areas and thus, account for the low violations in Wuse II. Furthermore, the violation of fence height standards are predominantly located at the government built residential quarters due to the increasing demand for privacy and the advent of the security challenges facing the city and the nation at large. The study established that, while the residential areas violate via increase in front fence height, the reverse is noticed in residential cum commercial properties. This is due to the fact that, the later attract customers through window shopping and provide ease accessibility. See table 4.5.



Source: FCDA Abuja/Field Survey, 2010

Fig. 4.3 Wuse District:Pattern of Fencing Violations

Table 4.5: Breakdown of Fence Height Violations in Wuse I and II

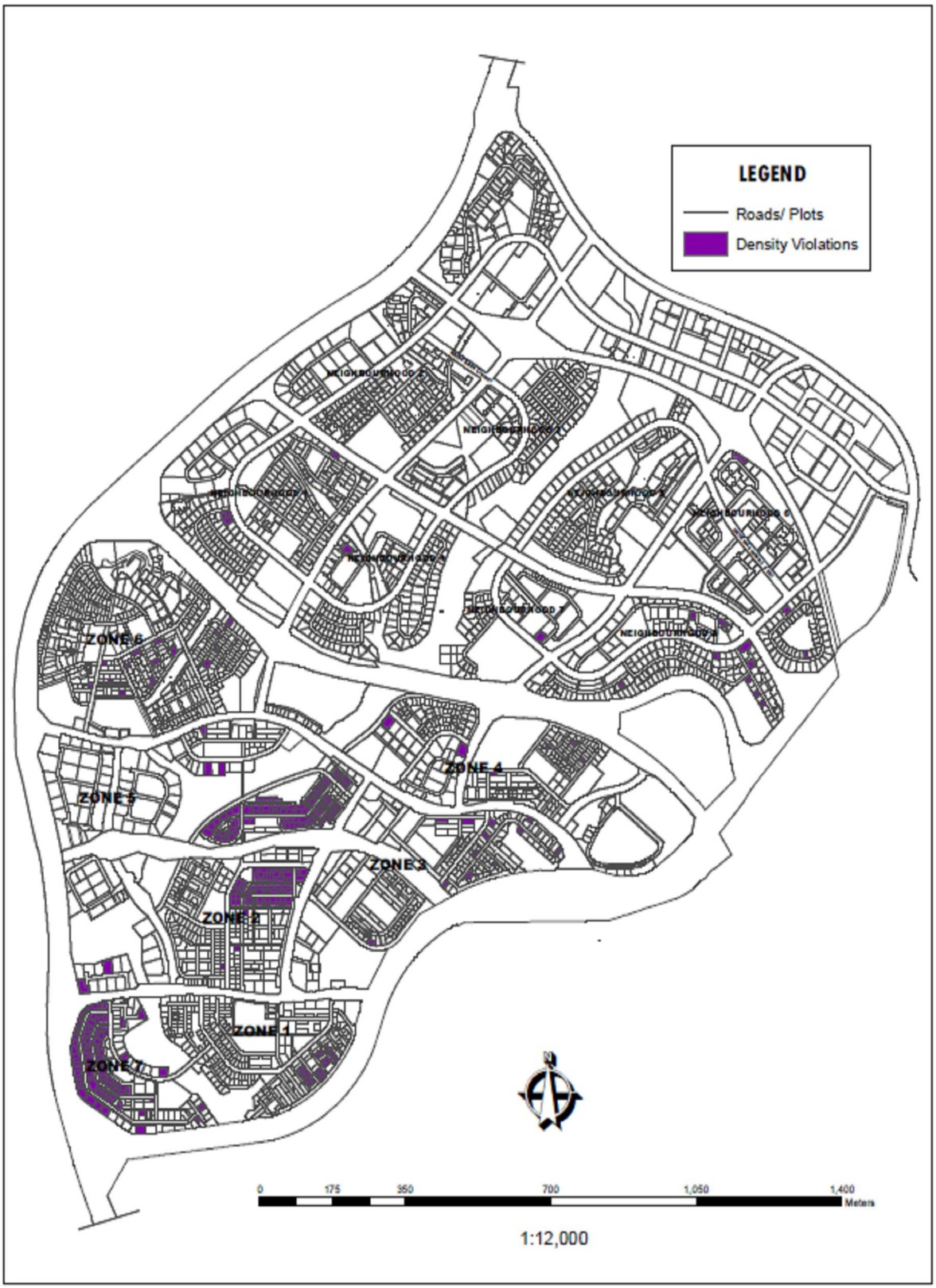
S/no	Violations	Wuse I	Wuse II	Total
1.	Total Fence Height Violation	22	2	24
2.	Percentage	92	8	100

Sources: Author's Fieldwork, 2011

4.30 Building Density Violations

The number of houses and floor height status are the basis of determining the density. In other words, the type of density of a residential plot determines the number of families and the type of buildings to be developed and accommodated. Basically, three types of densities were identified: low, medium and high density. The Development Control regulations provides that a low density plot within the Federal Capital City is to be between 1500m^2 and 2,500m^2in size and accommodate a duplex with not more than 2 families. The medium and high density plots are to be block of flats of 4-6 and 6-8 flats respectively and smaller in size than the low density plots. The total numbers of plots by density proposed to the two districts are shown in table 4.7.

The general picture obtained from the study reveals a significant number of cases associated with residential density violations. While some plots are built lower than the minimum family and floor height requirement, some have exceeded. Plots developed at lower densities than required are mostly in Wuse I. This is the area of Government housing developed to accommodate civil servants relocated from Lagos. Under pressure to provide such housing and without adequate funding, this area has been built as low density development rather than high as officially provided for in the approved layout plan. Most of the violations to higher density are in Wuse II. This has happened mainly by land use conversion (Residential to Commercial etc).



Source: FCDA Abuja/Field Survey, 2010

Fig. 4.4 Wuse District:Pattern of Density Violations

Table 4.6 Summary of Density of Plots in Wuse I and II

Density	Wuse I	Wuse II	Total
High Density	101	81	1094
Medium Density	511	467	978
Low Density	64	627	691
Total	1588	1175	2763

Source: Author's Fieldwork Culled from Land Use Layout Plan for Wuse I & II, 2011

Of the 151 recorded cases of violations in the two districts, a conversion to high density has the highest level of occurrence (80.8%).

Table 4.7 Total Density Violations in Wuse I and II and their Ranking

S/NO	DENSITY	TOTAL	PERCENTAGE	RANKING
1	High Density	122	80.8	1
2.	Medium Density	14	9.3	3
3.	Low Density	15	9.9	2
	Total	151	100	

Sources: Author's Fieldwork, 2011

As established, violations through low density development involve for instance of development of two (2) floor buildings instead of four (4) floors in officially designated high density areas. This specific case accounted for 63 violations. Violations through high density development involved the section of higher numbers of floors than originally planned for densities.

Table 4:8 Violation of Building Height in Wuse I Districts

No of Floors	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**Total**
High density	46	63	0	1	0	0	110
Medium density	4	1	1	2	0	1	9
Low density	1	1	4	2	0	0	8
Total	51	65	5	5	0	1	127

Source**: Author's** Fieldwork, 2011

Accounted for 12 violations through medium density development involved the erection of lower numbers of floors than originally planned for see table 4.10.

Table 4.9: Violation of Building Height/Floors based on Development Densities in Wuse II District

No of Floors	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**	**Total**
High density	0	0	12	0	0	0	12
Medium density	3	0	0	1	0	1	5
Low density	0	0	11	0	0	0	11
Total	3	0	19	1	0	1	24

Source: Author's Fieldwork, 2011.

4.40 Set Back Violations

Set back violations occurred mainly in the residential plots that have been converted to other uses. The minimum set back of each residential plot/building is determined by its density and general building line along the street corridor. The front, side and rear setbacks as well as inter building set back (where 2 or more buildings exist) are the major items that determine set back violations. Set back enhances proper circulation and ventilation when adequately observed. Non compliance generates multiple problems such as parking problem, poor ventilation and fire outbreak.

Most of the set back violations were established to have occurred in Wuse II. Here about 70% of cases (see table 4.11.) have taken place. Such pattern is not unconnected with the high rate of changes of building use in the district. However Wuse I was found to have the least case of setback violations simply because, it was originally developed by Government and according to the set back standards

Table 4.10 Breakdown of Set Back Violations in the Study Area

S/NO		Wuse I	Wuse II	Total
1.	Total Set Back Violations	48	113	161
2	Percentage %	30	70	100

Source: Author's Fieldwork, 2011.



Source: FCDA Abuja/Field Survey, 2010

Fig. 4.5 Wuse District:Pattern of Setback Violations



Plate 6: A Bank with only 3m front setback at Nouakchott Street, Wuse Zone 1 and it associated traffic problem.
Source : Author's Fieldwork, 2011

4.5.0 EXPLANATIONS FOR VIOLATIONS

4.5.1 Inadequate Staffing and Funding of Development Control Development

The DCD is faced with the task of controlling the physical development and enforcement of the provision of the master plan of the FCT the responsibility is subject to proper and effective surveillance of the area for development control department to effectively discharge it statutorily responsibility there must be vibrant surveillance of development through at the FCT. This is depending on the availability of manpower to carry out their task and logistic supports such as utility vehicles that can take officials to the site study carried out that the department is grossly under staff to carry out.

4.5.2 Poor Motivation and Corruptive Tendency

Enforcement of Development control measures curtail people's freedom to build. There are therefore usual reactions from threat through attacks of officers to litigation, in the event of field officers fall victim of any of the negative reactions the erring developers, the department does little to salvage the situation especially through hazard allowance, special package/incentives to the victim etc. the absence of

enhanced welfare package and remuneration undermine the staff zeal and commitment toward discharge of the statutorily responsibility.

Furthermore some staffers of the control dept with corruptive tendencies connive with desperate developers that control were the DC regulations by overlooking the violations perpetuated at the site.

This act of compromising the statutory responsibility of M and E of DC standards greatly undermines the master plan provision. It thus, explains a great deal of violation that has occurred in FCT.

4.5.3 Poor Enforcement of Development Control Guidelines.

The Development Control Department is faced with the task of controlling physical development and enforcement of the provision of the master plan of the Federal Capital Territory. This mandate is dependent on availability of adequate staffing and logistics. Established from the study, there is inadequate staffing and logistic support is poor. The two districts covering more than 900ha and with 2,763 residential plots is currently monitored by 8 staff only (see table 4.12). Only utility vehicle is available for both monitoring and enforcement. Staffs therefore, are limited to two site visits a week. Without regular surveillance, many illegal developments spring up regularly. Development Control activities therefore have become reactionary rather than preventive. There is also poor motivation of staff occasioned by exposure to risks and intimidation from offenders during and after enforcement activities.

Another reason for the violation is the corrupt tendencies of staff at the Development Control Department. Some staff of the Control Department connives with dubious developers by overlooking the illegal developments within the area. This act of compromising the statutory responsibility of monitoring and enforcement of

Development Control standards greatly undermines the master plan provision. It thus, explains a great deal of violation that has occurred.

Table 4.11 Available Manpower for Development Control in Wuse I and II

S/NO	CADRE	NUMBER		
		WUSE I	WUSE II	REGISTERED
1.	Principal Town Planning Officer	1	1	Registered
2.	Senior Technical Officer	1	-	Not
3.	Town Planning Officer I	1	2	Not
4.	Town Planning Officer II		1	
5.	Higher Technical Officer	1	-	Not
	Total	**4**	**4**	**1**

Source: Author's Fieldwork, 2011.

4.5.4 Economic Considerations

One of the reasons for violations of land use through conversions is economic. It relates to the higher rent value associated with the converted uses compared to approve uses, which in most cases is residential use. About 60% of the respondents agreed that the returns on investment from commercial or other converted properties is higher, and thus, make it more profitable for people to violate and pay the penalty for contravention. Private organizations, Banks, health centres, hotels, restaurants and public institutions are among the major organizations activities that mostly take place in the converted structures and usually they pay higher amount of money to rent the structures due to accessibility and market potentials of the area. The basic economic considerations relate to increase in development densities and setback violations to gain more value from the location of the district and because alternative locations for commercial uses are not available.

4.5.5 Difficulty in Obtaining Approval for Change of Use

Difficulty in obtaining approval relates to change of use and change of development density. The responses from the questionnaire administered reveals that 52% of

Landlords that violated the land use attributed their actions to the cumbersome nature of the conversion approval process which involves several technical and administrative procedures including the Final Consideration of the Hon. Minister. Usually, this takes more than one year even when applicants have fulfill all requirements. This delay results in the various sharp practices in the study area as desperate developers lack patience to wait for the long bureaucratic process.

4.5.6 Proximity to the Central Area

The central area is the Central Business District (CBD) of the Federal Capital City and the commercial nerve centre of the Federal Capital Territory. The study area is 5 minutes drive to the Central Area and it is in close proximity to the three Arms Zone. Such location is observed to have a direct influence on the pattern of violations established in the study area. The Central Area when fully developed is supposed to provide for the commercial needs of the capital city, these functions, but as established, its implementation level is below 40% as infrastructures and services provision is very low. This explains further reasons for mounting pressure on the neighbouring areas of phase 1 especially Wuse and Garki I and II districts for commercial developments. In those areas also, land use violation is equally high.

4.5.7 Slow Development of Phases II and III

The study established that Wuse I and II (both phase I Developments) have been rated high in terms of availability of infrastructures and services compared to areas in phase II (old Katampe, Mabushi, Wuye, Dakibiyu, Jahi, Kado, and durumi), phase III (Karsana, Mbora, Kaura, and Dape) and phase IV (Karmo, Kafe and Idu). The slow pace of development of these areas appears to have resulted to pressure for development in Wuse I and II. In addition to the established failure in the development of infrastructure in such areas, the non provision of sector, districts and

neighbourhood centers in phase II, III and IV creates pressure on the exiting developed centre at Wuse. The accelerated demand for commercial areas influences the level of violations in the study area.

4.5.8 Lack of Coordination between Organizations of Government

Another major explanatory factor to the flagrant violation of Land uses in the study area is the absence of effective coordination between the Department of Urban and Regional Planning and the Department of Development Control. The basic coordinating agencies as observed above have been operating in isolation without harmony between them; the result is overlap of functions and duplication of roles and responsibilities making development control difficult to comply with by individuals and developers in the FCT. The above mentioned agencies lack adequate coordination synergy between them. Therefore, result to time waste in making building plan approval as well as contribute to the frustration of the proponents of development. These affects the effective monitoring and control activities in the Federal Capital Territory, more alarming in the case of Wuse I and II districts of the FCC.

4.5.9 Technical Shortcomings of the Abuja Master Plan

The Master plan is a document that forecast low land are to be judiciously located also the order to enhance better standard of living, working, circulation and recreation. It is hypothetical statement and dynamic process that can be assessed with time. The Abuja Master plan is more than 32 years old of implementation thus; the rate of violation of land use in the study established the technical shortcoming of the Abuja Master Plan for zoning the major collector streets of Aminu Kano and Adetokunbo Ademola Crescents as mainly residential areas. The spate of conversions of these areas to mostly commercial use due to the attractiveness of the corridor to

such activities and easy accessibility has justifiably proved the technical error in the zoning. Such areas needed to have been promoted rather as multifunctional areas in order to reduce the incidence of land use change as well as emulate best practice worldwide.

4.5.10 Socio Cultural Factors

Socio-cultural factors such as class, wealth, privacy, believes, freedom and security are expressed physically in a built form in form of housing form and pattern as well as house design elements FCT, though was conceived to be devoid of any culture else the culture that was designed for it by the master plan should consider priority the cultural norms and values of an average Nigerian whom the design was meant for. The study has established that; these important variables for a sustainable design was not considered by the plan, therefore result to the development of neighbourhoods and houses that don't responds to the basic social needs of most residents in the study area as well as the established violations of the social components of the housing design such as privacy needs as against offence and building height violations as previously established. Therefore, this explains further the reasons for violating the zoning provisions of the master plan by residents in the study area.

4.5.11 Government Induced Changes

The relocation of the Federal Capital Territory to the present Abuja is a major factor for reducing violations in the F.C.C. Abuja was not fully developed when the decisions to more the FCC was taken. To accommodate both people and activities as a result of this decision, pressure mounted by federal government which result to the rush relocation was experienced while the basic infrastructures and services were not in place for the habitation of people. The induced relocation by government resulted to the acceleration of development in the Federal Capital Territory without

consideration to various planning standards as well as specification with respect to densities of development as provided in the master plan, explains the observed violation of building density in the study area.

4.6 URBAN MANAGEMENT CHALLENGES OF VIOLATIONS

Due to the extensive violation of land uses (residential to commercial) traffic congestion has generated been created among Adetokunbo Ademola and Aminu Kano Crescent in Wuse II for instance, a high traffic congestion was established as a result of violation of building setbacks and land use conversions. This has to do mainly with on street parking resulting from in adequate parking facilities. These problems are more pronounced in the areas such as: Afri-Bank (Mainstream Bank) and Fin-Bank, Zenith Bank all along Aminu Kano Crescent, others include; offices, eateries/restaurants along Adetokunbo Ademola Crescent in Wuse II.

4.6.1 Inefficient Delivery of Services

As a planned environment, the Federal Capital Territory has specified infrastructural requirements based on the established uses and densities of areas; any deviation from the specification will result to chaos and problems. Wuse I and II are not an exception, the development of the land use plan of the areas stipulated the ultimate infrastructure requirement at different stages of its development; but due to the extensive violation of land use changes in the area, it was established that infrastructural facilities have become inadequate and epileptic in supply. Such problems include inadequate or shortage in water supply, elliptic electricity supply as a result of overloading of the capacity of the existing supply systems (transformers) and leakage and blockage of the existing sewer lines in Wuse I and II. These problems

were a product of the continuous construction of land uses in the study area. Critical of such problems include:

i. **Water supply:**

The water demand of the study area was based on the population distribution and the activity envisaged in the district (Land Uses of the area). Hence, the implications of conversion from Residential to commercial have result to the poor or inadequate supply. The specifications of the design for water supply to residential area are 230 Litters/Capital/Day against offices and commercial uses at 500 Littres/ Capital/ Day. The above explains the water shortage that characterized the land use change of the areas. For example; 230 littres/capital/day was proposed for the areas, but due to continuous violations the demand has rose to about 600 litres/capital/day, almost tripling the supply designed for the area.

ii. **Power supply:** the situation observed in the case of water supply was also established in power supply system of the area. Power supply was found to be elliptic in supply due to load sharing among neighbourhoods in the district. Population increase due to the intensity of development beyond the planned densities was identified to be the major reason for the poor supply in the areas. For instance, a 208,289kw (208.29MW) was designed for the area, but the demand for electricity in the area has risen to about 200MVA which is a value beyond the designed supply for the area. This further explains the implication of the violation in the areas.

iii. **Sewage:** The Plan of the area provided a sewage system that meets the planned population of Wuse I and II. Due to the established level of violation of building density of the areas in form of population increase, the consequences was found to be over stretching of the existing sewer pipes in both Wuse I and II districts.

Sanitary problems have direct impact on the health conditions of the residents of an area as it affects the overall environmental wellbeing of the areas. It was established that, the designed maximum daily discharge of Wuse I and II was 2.0 times for day emerging for trunk lines 2.5 times per day emerging from main lines; also a change have been identified with the peak hourly discharge in which the maximum daily becomes 1.5 times the designed for the area and 1 times daily maximum for main lines which indicates under provision of the utility line in the area. These changes are as a result of the violations of Land Uses from residential to commercial, as well as an increase in the density of areas.

4.6.2 Aesthetics

Urban Aesthetics is a function of visual quality of urban spaces. The visual image is enhanced by urban design elements such as flowers and hedges, fence and building design. In the case of Wuse I and II, the violation of building set back, fence height and unregulated building design have greatly affected the aesthetic quality of the neighbourhoods in the study area. For instance, the encroachment of buildings by violating the set back results to the destruction of flower beds and hedges planted for aesthetic reasons. The Violation of fence height from 1.5m to about 3m and above which were made from poor construction materials has resulted to the distortion of the aesthetic appeal of the area. Areas that have the pronounced cases include the Kigoma street in Wuse zone 7 where over 55% of Fences have been raised to the roof (above the standard) constituting un-aesthetical appeal of the area.

CHAPTER FIVE

SUMMARY OF FINDINGS AND RECOMMENDATION

5.1 Summary of Findings

The first is that major finding have been established from the study. Development control standards of Federal Capital City have been violated through conversion of residential plots to commercial and public uses. The second is that, density standards of residential plots have been violated by development of low density housing within supposedly high density areas. Third, building setbacks of residential plots have been violated through redevelopment of the plot, overdevelopment and changing the building use thereby affecting proper circulation and parking.

The fence height violation was found to be the least cases of violation in the study area, but was also indentified to have affected the beauty or aesthetics of the study areas by increasing the height of the fence and distorting the soft Landscape of most important streets in the study areas. There is a correlation between the slow pace of development in the central business district and conversion of residential to other uses (mostly commercial) in the study area. That Wuse II has the highest cases of change of building use violation

That the government built houses constitutes the highest violation cases of plot density/floor height and fence height violation in the study areas. That the privately built houses recorded the least fence violations over public houses in both Wuse I and II districts. That lack of infrastructure at or development of commercial centres of adjoining areas of other phases contributed to the violation of residential plots in the study area.

The master plan has also contributed to the land use violation, this was observed from the study that the land uses along the important arterial roads and local areas have been continue by the plan implementation and therefore, explains the high cares of violation in the study area

5.2 RECOMMENDATIONS

Having discussed the findings in this study and their implications, a number of recommendations are here by presented with the hope that they can be considered for implementation.

5.2.1 Review the Abuja Master Plan

The District Plan of Wuse I and II should be reviewed to accommodate the socio-economic realities/changes in the design of residential plots abutting collector/arterial roads to multifunctional development. This is because of the changing needs in which all the residential plots along the identified places have been converted to commercial use and basically due to the socio-economic benefits attached to such conversions. Reviewing the district plan to incorporate the emerging trend will go a long way in planning with the people and not for the people which in turn guarantee sustainability and lessen violation in the study area. Example of such areas is both Adetokunbo Ademola and Aminu Kano crescents collector streets that were taken over by commercial activities.

Furthermore, this recommendation should be extended to include other areas of phase II, III and IV which have not been built so as to provide similar scenario experienced by the older districts.

5.2.2 Urban Upgrading/Renewal

The violation of density standard through development of bungalow structures in an area earmarked for high density developments is among the highest violation of the Development Control regulation in the study area. The situation is more disturbing considering the level of infrastructure and underground services provided in line with the stipulated density and population of the area. Changing the density by developing lower as experienced in Wuse Zone 1, 2, 3, 4, 7 result in gross under utilization of available resources, and great distortion of both the population density and sky line of the area.

In view of the above, with the inevitable advent of urbanization in the country and the financial constraints in the provision of infrastructure in the city, it's more economical and beneficial to create room for upgrading of the affected areas to their planned density. This can be achieved by encouraging the affected neighbourhoods to develop vertically in line with the provision of the high density status. Palliative measures in the form of soft loan scan be provided to developer with AMMC coordinating with Banks such as ASO savings and loans while the Certificate of Occupancy serve (little documents) serve as collateral for the loans. In other words, real property Developers may enter into agreement with the Land Lord, to develop and lease out after some times. This idea will help restoring the density of the area, increase accommodation, enhance the value of the properties as well as judicious utilization of the underground service provided.

5.2.3 Accelerated Development of Phase II and III

New districts especially in phase II and III of the city should be opened in up order to reduce the pressure in phase I. When these districts are opened up and commercial

land uses are properly developed, people will rather develop commercial plots than pay heavy penalty for converting existing residential houses into commercial uses. Furthermore, there will be less problems associated with the conversions. This can be effectively carried out by public private partnership which will involve government providing land for private developers to develop them for the interest of the city and the infrastructural level collected by government will be remitted to the dedicated account of the developers.

5.2.4 Traffic Management

The need to create synergy between related agencies such as Abuja Environmental protection Board (AEPB), the Transport Secretariat and Abuja Metropolitan Management Council (AMMC) in form of a joint task force to control on street parking, dumping and littering on the access roads which constitutes traffic congestion along access roads and major arterial roads in the study area. Zero setbacks between the road and property line should be introduced along the proposed multifunctional arterial/collectors and commercial road corridors (Adetokunbo Ademola and Aminu Kano) so as to discourage on street parking by improving parking provision in the study area. Furthermore, Development Control should encourage underground parking in order to discourage onsite parking.

5.2.5 Autonomy of the Development Control Department

In view of the enormous responsibility that the Development Control Department has which cannot be done without effective and efficient surveillances mechanism, the Department should be given the autonomy of a parastatal status. This will afford it to generate and disburse according to their needs and also pay its staff an enhanced salary that will be attractive in a way to discourage abuse of office.

5.2.6 Strengthened Development Control Department

The existing staff strength of the department vis-à-vis number of professional staff per district which is on the average of one person to a district is quite short of achieving positive result. Furthermore, the situation where two or more districts are being monitored by less than 4 staff is by law grossly inadequate and will not be able to represent the dept at the districts. Therefore, adequate manpower is needed in order to cater for efficient processing of Building Plan Approvals, Monitoring of site Developments, enforcement of compliance and prevention of violation among other schedules.

Each neighborhood should have at least a registered town planner supported by not less than two (2) site officers that monitored and control developments and subsequently report to the District officer who coordinate and communicate with the management. The Department of Development Control has a unique problem of utility vehicles. The situation where two or more districts share one utility vehicle is counterproductive to the monitoring and enforcement mandate in the capital city. Therefore, as a matter of necessity, each district should have not less than 2 utility vehicles that will be used to conduct their routine exercise. Furthermore investigation carried out indicates poor maintenance culture of the damage or faulty vehicle, this also has to be checked to ensure that all faulty one are put on the road immediately this will enhance effective monitoring and prevent violations in the city.

The process of decentralization of site offices is a good idea, but it has to be done holistically such that, district offices should be located at the centre of the appropriate district. This will bring the department closer to the people and complaints,

applications and observations can be received and dealt with. As well, this will enable close monitoring development and preventing illegal activities.

The welfare of staff is a very important aspect of motivation, in view of the high risk evolve in the Development Control activities especially during demolition which sometime leaves many staff injured and the machines vandalized, the Department should make available hazard allowance to all staff. Furthermore, granting life insurance to all staff on out duty will give a sign of relief to the staff to redouble their effort toward executing their mandate.

Training and re-training of staff is very important tool of human resource development. Knowledge expires and so has to be renewed occasionally in order to be relevant in the urban management system. In view of the above and the ever increasing challenges of urbanization and development, the department should ensure that it sponsored her relevant professionals to their annual professional development programs or any other relevant program at least once in a year. This will broaden their minds, widen their scope and enable them share experience with others as well as leant from best practices would wide. Federal Capital Territory will benefit since no town is an island.

As a means instilling discipline and generate result, the Department needs to reinforce her disciplinary committee with harder to be actions taken against corrupt and indiscipline officers, such officers when found wanting can be referred to their professional bodies for further stiffer sanctions. This action will instill discipline and prevent established corruption in the department.

5.2.7 Review of Land use Change Process

Land use change procedure was identified to be cumbersome and involves prolong bureaucracy, therefore, it is suggested that the custodian of the master plan the Department of Urban and Regional Planning (DURP), should be saddled with the mandate of coordinating and processing changes in land use and give outright approval without long delay in conjunction with relevant department such as Development Control, AEPB, Water Board, PHCN, Parks and Recreation and transport secretariat. By empowering DURP to grant approval for Landuse change on behalf of the Honourable minister, the administrative procedure is boycotted and thus, expedient approval would be granted where possible.

5.2.8 Review of Development Control Guidelines

The effort of Development Control Department in setting up a Technical Committee to review the 2007 edition of the manual is commendable. Also, acknowledged is the effort put towards transforming the department from cumbersome manual system to electronic submission and vetting of building plans for approval. Lastly, the collaboration of the department with NICOMSAT in order to achieve the target of electronics monitoring of development are also recognized in this thesis and wish to call on the Federal Capital Territory Administration to encourage the department with logistic, training of staff (in and outside the country) in order to learn best practice from other cities and meet up with the challenges of a fast developing city as well as achieving the Government vision of transforming Abuja into World Class City.

5.2.9 Adopt ICT in Monitoring and Surveillance of Development Control Process

General researches have established the importance of ICT in the overall development control process i.e. both the field and office based monitoring and surveillance process as well as the record processing and documentation such ICTs includes GIS interface, artificial intelligence interface, database interface as well as web interface for development control programmes. Therefore, this study hereby urged the department for immediate adoption of modern based ICTs for development control as well as the overall management of the Abuja capital city at large. Therefore NICOMSAT should provide the above ICT support tools for the effectiveness and efficiency of Development control to be achieved using an integrated platform that would allow for creating, updating and tracking of planning Authorizations, Building Control Authorizations, Geospatial and planning information, monitoring and supervision of construction sites and grant and achieve all approvals electronically. The system should also be capable of housing reports on site investigation, rendering warning notices, control actions and reports on certain decision made by the Development control online and real time. Enquiries from such database should be possible from Desktops at various offices, from the Internet and from Mobile phones of users.

REFERENCE

Abdul-Rashid, H. (1986): The Effectiveness of Development Control in Kano Metropolis. Unpublished M.Sc (URP) Thesis ABU Zaria.

Achard, F., H. D. Eva, P. Mayaux, H. J. Stibig, and A Belward (2004): Improved Estimates of Net Carbon Emissions from Land Cover Change in the Tropics for the 1990s Global Biogeochemical Cycles 18, GB2008. Doi

Adeyeye, L.A. (2010): Understanding Urban and Regional Planning Law and Administration of Disputes in Nigeria. Published by Timade Ventures, Ile-Ife, Oshun state.

Adom, R. (1992): PeraturanMengemukakanPermohunanPerecenganke Unit Pengeikalan Dan SeniBadar, Report of Department of Planning and Building Control. Unpublished, Kualar Lumpur City Hall.

Alabi, M.O. and Akinbode, A. (2010): *Towards Effective Planning in Local Governments in Nigeria, Environmental Research Journal, 4(2): 173-176*

Alder, J. (1979): Development Control. Published by modern legal studies, Sweet and Maxwell Ltd, London.

Aluko, O. (2000): "The Socio-Economic Attributes of Housing Rentals in Nigeria" in Akinbamijo, O. (ed.) Effective Housing in the 21st Century, pg. 250-259. Multhhouse press, Ibadan.

Aribigbola, A. (2008): Improving Urban Land Use Planning and Management in Nigeria ; A Case of Akure. Theoretical and Empirical Researches in Urban Management, 3 (9) : 1-14

Austin-Aike and Partners (2008) Abuja Master Plan Review: Update of Existing Land Use Along Some Major Roads in Phase I. (Final Report)

Baba K, Fernandex B, Dermeno G, and Solanki S. (2010) Residential / Industrial Land Use. Los Angeles. Pp 6.

Barau, S, Andrew, J.B, Makun, D.D, Sambo, S, Usman, H, and Nuhu, H.B. (2000): The level of Land Use Distortion in Maitama District, Abuja. Unpublished B.URP. Dissertation, U.R.P. Department, A.B.U. Zaria.

Brown, K. (2002): Innovations for Conservation and Development.

Christopher, W. (1976): Town Planning and Pollution Control, Manchester University Press, pg 165-189.

Clarke, G. (1991): Reconciling Informal and Formal Land Management: An Agenda for Improving Tenure Security and Urban Government in Poor Countries.

Clouser, R. L. (2010): Issues at the Rural –Urban Fringe: Land use conflicts. Florida University of Florida.

Clouser, R. L. and Olexa, M.T. (2010) Issues at the Rural Urban Fringe: Florida State Laws Related to Land Use Change.

Development Control Department FCT Abuja (2007): Abuja Development Control Manual Abuja, Nigeria.

FAO (2001): Global Land Resources Assessment 2000 Main report Land paper 140 Rome.

Federal Ministry of Housing and Urban Development (2003): Urban Sustainable in Developing Countries' Megacities: Modeling and Predicting Future Urban Growth in Lagos.

FCAA (1980): The New Federal Capital of Nigeria, A Guide to Plot Development in Abuja.

FCDA: A New Federal Capital for Nigeria Design and Development Manual Technical Report No.5

FCDA: General Land Use Plan Phase III Abuja.

FCTA/FCT URP Tribunal (2011): The State of Urban and Regional Planning Practice in Nigeria. Paper presented at the 2011 Urban and Regional Planning Tribunal National Conference in Abuja.

HMSO (1964): A Desperately Slow System? The Origins and Nature of the Current Discourse on Development Control. Review of the Development Control System, Final Report London, pg 5-6.

Hogan, C.M. (2009) Painted City: Lycaonpictus. Global Twitcher.com.ed. N. Stromberg

Houghton, R. A (1999). The Annual Net Flux of Carbon to the Atmosphere from Changes in Land Use 1850-1990. Tellus 51B: 298-313

Houghton, R. A (2003): Revised Estimates of the Annual Net Flux of Carbon to the Atmosphere from Changes in Land Use and Management 1850-2000. Tellus55B(2): pp 378-390.

Houghton, R. A., and J. L. Hackler. (1995) Continental Scale Estimates of the Biotic Carbon Flux from Land Cover Change: 1850 – 1980 ORNL/CDIAC – 79, NDP-050, Carbon Dioxide Information Analysis Centre, Oak Ridge National Laboratory, U. S. Department of Energy, Oak Ridge Tennessee.

Houghton, R. A., and J. L. Hackler. (2001): Carbon Flux to the Atmosphere from Land Use Changes: 1850-1990 NDP-050/R1, Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U. S. Department of Energy, Oak Ridge, Tennessee.

http://www.en.wikipedia.org/wiki/Abuja 07-14 March 2007.Assessed 12:35 Saturday 10th March, 2012.

http://www.ngex.com/nigeria/places/states /abuja.htm (n.d)

http://www.onlinenigeria.com/links/abujaadv.asp. Assessed 12:52 Saturday 10th March, 2012.

International Planning Associates (1979): Abuja Master Plan

IPCC Special Report (2010): LandUse Change and Forestry and FAO Land and Water Division .

Issues on Land Use Change Outlined in Document FCCC/KP/AWG/2008/8, UNFCCC Website, Retrieved 2009-10-11

Jaeker W.G, Plantinga AJ (2007) How Have Land Use Regulations Affected Property Values in Oregon. OSU Extension.

Johar, F., Yaakup, A., Che'Man, N., Sulaiman, S. (2006): *GIS in Development Control Process: The case of Development Control System for City Hall of Kualar Lumpur. In 6th ASIA GIS Conference, Malaysia. Pg 4-6. (Unpublished).*

Keith, T. (1997): Development Control : Principles and Practice. UCL Press Limited, Great Britain.

Kim W. L, Chi C. and Wong, K.F. (2003) Exploring Geography of Change in Exploring Geography 1A (2ed.) Hong Kong; Oxford University Press. pp. 55-57.

Land Use Change, Final Year of Work, UNFCCC website.Retrieved 2009-10-11.

Land Use, Land-Use Change, and Forestry (LULUCF), Glossary of Climate Change Acronyms, UNFCCC Website.Retrieved 2009-01-11.

Magaret, R. (1974): Ecosystem Processes Along An Urban To Rural Gradient. Ohio State University, Department of Entomology, 735 Neil Ave.

Marcos M. P. (2010): Analysis of Development Control Violations in Jimeta Area of Adamawa State unpublished B.URP Dissertation, ABU Zaria.

Milton Keyres Development. Corporation (1980) Abuja New Fed. Capital of Nigeria Submit Plan for the North West District (Areas G and H).

Milton Keyres Dev. Corporation (1980) Abuja New Fed. Capital of Nigeria Final Plan for the North West District (Areas G and H).

Milton Keyres Dev. Corporation (1979) *Abuja New Fed. Capital of Nigeria phase I Area Final Report Federal Capital Development Authority.Land Use and infrastructure proposals*

Mohammed, A. Omata, G.A. Ibrahim, Y. Tarfa, H.P. Mohammed, D. Mohammed, A.I. Maman, O. and Kaior, N. (2000); Effectiveness of Development Control in the Federal Capital City: Case Study of Garki I District. Unpublished B.URP. Dissertation, U.R.P. Department, A.B.U. Zaria.

Mohammad, Z. (1996): The Role of Physical Planning in Sustainable Development. Federal Department of Town and County Planning, Kuala Lumpur, Malaysia.

Ogechi O. E. (2000): Assessment of Patterns and Effects of Changes in Abuja Master Plan An M. Sc (URP) Thesis unpublished ABU Zaria.

Olajunyin, L.O. and Olayiwola*, (1985): Problems and Prospects of Development Control: A Case Study of Ile – Ife. Journal of The Nigerian Institute Of Town Planners IV and V : 23-32.*

Olajuyigbe, A.E. and Rotowa, O.O. (2010): Optimizing Physical Planning in the Developing Economy – A Case Study of Ondo State. Journal of Sustainable Development, 4(4), 202-209.

Olujimi, J.A.B. (1993): "The Administration of Physical Planning in Nigeria: The Ondo State Experience, Landscape and Urban and Planning Journal (An International Journal of Urban Planning, Ecology, Landscape Planning and Landscape Design, Amsterdam). 25, 115-126

Richard C.G, Thomas E. L, and Rita M. (eds) (2001). Lessons on Land Use Change from Amazonia: The Ecology and Conservation of a Fragmented Forest. ISBN 0-300 – 08483-8

Robert, H. (1996) Forest Gardening P. 124

Royal Town Planning Institute (2009): Town and County Planning Act of 1990. Professional Planning Guidance, U.K

UN Land Degradation and Land Use/Cover Data Sources (2007).

UN Report on Land Use Change (2007) Web Archive (1)

United Nations Human Settlements Programme (2007): Challenge of Planning in Relation to Urban Safety and Security. Global Report on Human Settlement, pg 40.

www.intergov.org: intergovernmental Panel on Land Use Change

www.basildon.gov.uk/chttpHandler,ashx?id=540dp=0, accessed at 2:34pm on 21 march, 2011.

APPENDIX I

LAND USE VIOLATION IN WUSE I

S/N	PLOT NUMBER	WUSE CADASTRAL A02
1	349	*
2	347	*
3	417	*
4	377	*
5	455	*
6	487	*
7	485	*
8	1534	*
9	443	*
10	1644	*
11	2379	*
12	1482	*
13	564	*
14	1346	*
15	1344	*
16	2293	*
17	1392	*
18	2444	*
19	1445	*
20	335	*
21	231	*
22	2330	*
23	2326	*
24	1760	*
25	1688	*
26	1687	*
27	2124	*

28	1979	*
29	1981	*
30	1767	*
31	2259	*
32	1638	*
33	1608	*
34	1529	*
35	1424	*
36	1430	*
37	369	*
38	220	*
39	188	*
40	865	*
41	906	*
42	2198	*
43	1000	*
44	1008	*
45	319	*
46	516	*
47	500	*
48	2299	*
49	336	*
50	1844	*
51	6	*
52	13	*
53	18	*
54	27	*
55	26	*
56	40	*
57	36	*
58	45	*

59	50	*
60	10	*
61	5	*
62	16	*
63	1	*
64	14	*
65	81	*
66	2098	*
67	2774	*
68	2018	*
69	188	*
70	2014	*
71	284	*
72	269	*
73	1402	*
74	1471	*
75	2227	*
76	1341	*
77	2035	*
78	2048	*
79	2031	*
80	2008	*
81	670	*
82	1820	*
83	293	*
84	1301	*
85	1313	*
86	1240	*
87	667	*
88	653	*
89	1470	*

90	70	*
91	37	*
92	2397	*
93	707	*
94	721	*
95	712	*
96	2010	*
97	32	*
98	665	*
99	112	*

LAND USE VIOLATION IN WUSE II CAD A07/A08

S/N	PLOT NUMBER	CADASTRAL A07/A08
1	472	*
2	486	*
3	1261	*
4	487	*
5	514	*
6	513	*
7	515	*
8	328	*
9	529	*
10	536	*
11	537	*
12	539	*
13	540	*
14	548	*
15	549	*
16	555	*
17	561	*
18	1065	*

19	1057	*
20	1066	*
21	1055	*
22	1077	*
23	1079	*
24	1056	*
25	518	*
26	1058	*
27	1165	*
28	1247	*
29	1086	*
30	1187	*
31	834	*
32	831	*
33	832	*
34	586	*
35	575	*
36	660	*
37	661	*
38	662	*
39	1115	*
40	1148	*
41	1147	*
42	1258	*
43	1179	*
44	1177	*
45	178	*
46	1173	*
47	1257	*
48	21	*
49	22	*

50	756	*
51	109	*
52	110	*
53	111	*
54	112	*
55	113	*
56	115	*
57	116	*
58	117	*
59	118	*
60	119	*
61	120	*
62	666	*
63	131	*
64	132	*
65	133	*
66	134	*
67	108	*
68	99	*
69	98	*
70	90	*
71	91	*
72	81	*
73	81	*
74	73	*
75	72	*
76	64	*
77	63	*
78	1221	*
79	1245	*
80	180	*

81	141	*
82	140	*
83	139	*
84	1215	*
85	1214	*
86	1260	*
87	346	*
88	347	*
89	1168	*
90	1169	*
91	1170	*
92	485	*
93	480	*
94	488	*
95	494	*
96	1261	*
97	507	*
98	513	*
99	510	*
100	526	*
101	1012	*
102	542	*
103	550	*
104	559	*
105	1062	*
106	567	*
107	160	*
108	418	*
109	411	*
110	412	*
111	460	*

112	457	*
113	789	*
114	145	*
115	1137	*
116	445	*
117	471	*
118	1123	*
119	442	*
120	600	*
121	603	*
122	641	*
123	627	*
124	1328	*
125	652	*
126	656	*
127	661	*
128	1139	*
129	1387	*
130	692	*
131	697	*
132	701	*
133	1202	*
134	687	*
135	682	*
136	662	*
137	668	*
138	1236	*
139	672	*

SET BACK VIOLATION IN WUSE I

S/N	PLOT NUMBER	CADASTRAL A02
1	2259	*
2	414	*
3	396	*
4	487	*
5	1608	*
6	1513	*
7	772	*
8	34	*
9	76	*
10	77	*
11	2035	*
12	2312	*
13	1	*
14	15	*
15	38	*
16	697	*
17	305	*
18	2365	*
19	78	*
20	2448	*
21	224	*
22	225	*
23	2018	*
24	2017	*
25	2016	*
26	220	*
27	188	*
28	869	*
29	906	*
30	2198	*

31	1000	*
32	1008	*
33	516	*
34	500	*
35	2299	*
36	894	*
37	2305	*
38	1434	*
39	241	*
40	2031	*
41	1688	*
42	1346	*
43	1529	*
44	40	*
45	772	*
46	785	*
47	521	*
48	542	*

SET BACK VIOLATION IN WUSE II

S/N	PLOT NUMBER	CADASTRAL A08
1	477	*
2	504	*
3	501	*
4	511	*
5	507	*
6	521	*
7	536	*
8	542	*
9	1315	*

10	1065	*
11	1081	*
12	1072	*
13	603	*
14	1141	*
15	1381	*
16	692	*
17	697	*
18	236	*
19	1236	*
20	668	*
21	662	*
22	682	*
23	687	*
24	1242	*
25	223	*
26	224	*
27	30	*
28	111	*
29	98	*
30	64	*
31	117	*
32	127	*
33	312	*
34	366	*
35	340	*
36	328	*
37	310	*
38	309	*
39	290	*
40	1139	*

41	1275	*
42	1269	*
43	1278	*
44	1286	*
45	1297	*
46	1303	*
47	1291	*
48	761	*
49	753	*
50	766	*
51	1326	*
52	88	*
53	113	*
54	135	*
55	131	*
56	1301	*
57	1283	*
58	1312	*
59	367	*
60	351	*
61	342	*
62	357	*
63	313	*
64	1259	*
65	1195	*
66	59	*
67	591	*
68	926	*
69	1204	*
70	125	*
71	78	*

72	1205	*
73	1360	*
74	445	*
75	698	*
76	711	*
77	669	*
78	690	*
79	660	*
80	640	*
81	644	*
82	229	*
83	21	*
84	89	*
85	39	*
86	116	*
87	119	*
88	140	*
89	201	*
90	907	*
92	342	*
93	235	*
94	701	*
95	701	*
96	709	*
97	715	*
98	1202	*
99	254	*
100	244	*
101	216	*
102	121	*
103	1110	*

104	1303	*
105	1291	*
106	1374	*
107	1361	*
108	133	*
109	600	*
110	603	*
111	661	*
112	636	*
113	646	*

DENSITY VIOLATION IN WUSE I

S/N	PLOT NUMBER	CADASTRAL A02
1	2098	*
2	173	*
3	188	*
4	2014	*
5	2774	*
6	2018	*
7	112	*
8	118	*
9	828	*
10	824	*
11	728	*
12	749	*
13	747	*
14	296	*
15	764	*
16	815	*
17	808	*

18	807	*
19	802	*
20	755	*
21	34	*
22	701	*
23	76	*
24	77	*
25	696	*
26	2035	*
27	2048	*
28	2008	*
29	2039	*
30	653	*
31	667	*
32	658	*
33	1257	*
34	1254	*
35	1249	*
36	1245	*
37	1320	*
38	1329	*
39	811	*
40	293	*
41	517	*
42	1824	*
43	1820	*
44	250	*
45	247	*
46	2016	*
47	220	*
48	188	*

49	865	*
50	906	*
51	2198	*
52	1000	*
53	1008	*
54	319	*
55	516	*
56	500	*
57	2291	*
58	366	*
59	1849	*
60	335	*
61	1503	*
62	1491	*
63	1476	*
64	1455	*
65	1497	*
66	1572	*
67	2312	*
68	1462	*
69	1457	*
70	1408	*
71	1413	*
72	2259	*
73	1430	*
74	1547	*
75	1638	*
76	1574	*
77	1605	*
78	1513	*
79	1304	*

80	2305	*
81	369	*
82	1424	*
83	2293	*
84	1393	*
85	1392	*
86	1434	*
87	2312	*
88	1346	*
89	1379	*
90	1632	*
91	1433	*
92	1433	*
93	564	*
94	500	*
95	2031	*
96	678	*
97	2276	*
98	1066	*
99	1067	*
100	1068	*
101	1638	*
102	487	*
103	2255	*
104	1529	*
105	1529	*
106	1608	*
107	894	*
108	13	*
109	1137	*
110	785	*

111	1059	*
112	1212	*
113	1055	*
114	542	*
115	511	*
116	521	*
117	536	*
118	507	*
119	1304	*
120	1308	*
121	1316	*
122	854	*
123	1416	*
124	1322	*
125	212	*
126	1331	*
127	1979	*
128		

DENSITY VIOLATION IN WUSE II

S/N	PLOT NUMBER	CADASTRAL A07/A08
1	87	*
2	30	*
3	111	*
4	98	*
5	64	*
6	117	*
7	127	*
8	1239	*
9	1204	*

10	82	*
11	176	*
12	930	*
13	956	*
14	766	*
15	113	*
16	753	*
17	761	*
18	507	*
19	1231	*
20	312	*
21	309	*
22	290	*
23	1269	*
24	501	*

FENCE HEIGHT VIOLATION IN WUSE I

S/N	PLOT NUMBER	CADASTRAL A07/A08
1	1503	*
2	778	*
3	124	*
4	118	*
5	112	*
6	142	*
7	145	*
8	743	*
9	56	*
10	70	*
11	45	*

12	77	*
13	2031	*
14	1820	*
15	284	*
16	269	*
17	1430	*
18	2312	*
19	2293	*
20	1393	*
21	487	*
22	1513	*

FENCE HEIGHT VIOLATION IN WUSE II

S/N	PLOT NUMBER	CADASTRAL A08
1	483	*
2	698	*