ASSESSMENT OF THE IMPLEMENTATION OF BWARI MASTER PLAN

BY

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MSC/ENV-DESIGN/2014/2011-2012

Department of Urban and Regional Planning

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Being aDissertation Submitted to the School of Postgraduate Studies, in Partial Fulfillment of the Requirements for M.Sc. Degree in Urban Management

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DECLARATION

I hereby affirm that this thesis has been prepared by me and it is the record of my research work and it has not been previously presented for a degree. I hereby assure that all sources of information were specifically acknowledged by means of references.

Sign   Date

CERTIFICATION

This is to certify that this thesis “Assessment of the implementation of Bwari Master Plan” has met the regulation governing the award of Master of Science (M.sc) Degree in Urban Management of the department of Urban and Regional Planning, Ahmadu Bello University, Zaria and it is approved for its contribution to knowledge and literary presentation.

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DEDICATION

I dedicate this thesis to my God who is the author and the finisher of my faith and to my late father who never lived to see this thesis completed and to the rest of my family who never slept in times of my distresses undergoing this programme. I pray that God in His infinite mercy will bless you richly in Jesus Name. Amen.

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ABSTRACT

The importance of Plans implementation in the planning process cannot be overemphasized. This is because, without effective implementation of plans, such plans will be as good as no plans at all. This brought about the study. The study aimed at assessing the implementation of Bwari Master Plan with the view to determining the level of achievement of the implementation of the plan. The study adopted Kerg model as an analytical technique and criteria for the assessment of the implementation of the Master Plan's proposals. The model uses weight ranking criteria of 0%, 01-19%, 20-39%, 40-59% and 60% and above. The ranking value of 0% of any proposal represents no implementation of the proposal while proposal with ranking values of 01-19%, 20-39%, 40-59% and 60% and above represent weak, low, fair and full levels implementation of the proposal. At the end of the assessment, it was established that the implementation of the plan is weak considering the current implementation phase of the plan. The study also established that out of 31,512 cumulative number of land use elements proposed for development in the study area only 58.43% of the cumulative number of the land use elements have been implemented and with the 58.43% of the overall land use implemented, the land uses only covers 17.02% of the total land area proposed for implementation of the land uses which signifies the weak level of implementation of the land uses of the plan. Based on these established facts, the following recommendations were given to ensure an improvement in the implementation process of the plan. They includes the review of the proposals of the plan, the review of the strategies use in the implementation of the plan, adhering to Required Planning Standards for the Development of the Proposals, the introduction of Conscious Planning Regulation in the Development of Indigenous/organic Areas of the Urban Area,none Partisan politics in the Land Use implementation of the Urban Area and conscious improvement in Budgetary allocation for the Development of the Urban Area.

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LIST OF ABBREVIATIONS

FCDA	Federal Capital Development Authority
STDA	Satellite Towns Development Authority
AMMC	Abuja Municipal Management Council
AGIS	Abuja Geographic Information System
AEDB	Abuja Environmental Development Board
FCTWB	Federal Capital Territory Water Board
AEDC	Abuja Electricity Distribution Company
FCTTC	Federal Capital Territory Telecommunication Commission
BAC	Bwari Area Council
FCT	Federal Capital Territory
FCC	Federal Capital City
IPA	International Planning Associates
JAMB	Joint Admission and Matriculation Board
NEPA	Nigerian Electric Power Association
PHCN	Power Holding Company of Nigeria

CHAPTER ONE
BACKGROUND TO THE STUDY

1.1 Introduction

The place of implementation in the planning process can never be overemphasized. Though, politics and public policy are the major factors that determine urban development, master plan is one of those policy documents that shape urban development (Keunta, 2010). It influences the growth of urban population, land use and infrastructure development and service provision. The implementation of master plan document determines the level of development of any geographical area it is meant to address. Master plan document is a policy document that guide physical development of any geographical area. The document is designed for a considerable number of years and it is made up of existing inventory of development of the geographical area at which the design is meant for and also contents the proposals for future development. Proposals of a master plan document are the requirement at which the document is aimed at addressing after the plan has been adopted. The implementation of such requirements determines the level of achievement of the plan for the geographical area it is meant for.

Bwari master plan is not an exception; the implementation of the requirements of the master plan determines the level of achievement of the plan for the urban areawhich is the basis of this study. The study aimed at assessing the implementation of Bwari master plan with the view to determine the level of achievement of the proposal of the plan for the urban area. Though, studies have shown that urban areas in Nigeria have failed to meet up to the requirement of their master plan proposals due to issues likepolitical interference, bureaucratic nature in the plan's implementation processes or otherwise. Nevertheless, the case of BwariMaster Planis not yet ascertained whichisthe thrust of the study.

1.2 Statement of Problem

Bwarimaster plan is one of the master plans for urban areas in the FCT. The plan was designed and commissioned in 2003 by the host body for physical development of the FCT-the FCDA. Before the advent of the plan, the city had grown organically and the growth had posted threat to the environment. And thethreat ranges from physical problems, social problems and economic problems experienced in the urban area. The physical problemsof the urban area comprises of lack of pipe borne water; epileptic power supply; poor roads condition and lack of drainage system. While others includes the jumbled together of physical structures without planning input; pressure on the existence health facilities, poor roads connectivity andsocial infrastructure such as town hall, libraries, primary schools, health centers etc. are almost non-existence. The social problems also involve the problems of exponential growth of student population in Bwari due to the existence of polytechnic and law school/government colleges,the problems of technical and general infrastructure inadequacy. While the economic problemson the other hand involve the indiscriminate sitting of uses and misused of land; poorly developed existence market to allow more profitable transaction and unavailability of financial institutions except BwariAso Saving and Loan Limited which was overstretched and always congested in the urban area.

The existence of these problems prompted the design of the master plan and the master plan has been the sole guide for the physical development of the urban area since its adoption but yet the problems are still experienced in the urban area. Because of these problems, there have been speculations on whether the plan can or cannot attend full implementation within the stipulated phases of its implementation. And if the plan cannot what would be the next line of action? Should the implementation strategies use for the implementation of the proposals be reviewed or the proposal themselves need to be reviewed. This suggestion and speculations has been the pondering issues in the minds of the stakeholder of the urban system which is the basis of this study. Thestudy did not attempt to assess the performance of stakeholders involvement in the implementation of the plan rather it aim at assessing the implementation of Bwari master plan with the view of determining the level of achievement of the implementation of the plan for the urban area. With this study one can attempt to answer some of the questions in the minds of the stakeholders on whether either the implementation strategies for the implementation of the proposals be reviewed or the proposals of the plan themselves be reviewed. The plan has four implementation phases and thethird phase of implementation is almost elapsing which call the need for the assessment.The study aimed at answering the following questions; what are the proposals of Bwari master plan? What is the extent of the development of the proposals of the master plan? And what is the level of implementation of the proposals of the master plan for the urban area?

1.3 AIM AND OBJECTIVES

1.3.1 Aim

Theaim of the study is to assess the implementation of Bwari master plan and the factor responsible for the level of the implementation of the plan with the view of determining the level of achievement of the implementation of the proposalsfor the urban area.

1.3.2 Objectives

(1) To review the concepts of master plan, master plan assessment and implementation

(2) To review the proposal of the master plan forthe urban area

(3) To assess the level of implementation of Bwari master plan

(4) To make appropriate urban management recommendations for improvement.

1.4 Scope and Limitation

The study only covered the land use proposals of the master plan for the urban area. The consideration of the provision of facilities, utilities and services proposed for the land uses were exempted from the study. Rather emphasis was made on the category of land uses proposed by the plan and the level of achievement of the implementation in the urban area. Also factors responsible for thelevel of implementation of the land uses were also highlighted for improvement.

1.5 The Study Area

1.5.1 Background of the Study Area

Bwari urban area is located in the north-eastern part of FCT, Abuja. It is approximately 15 kilometer north of Abuja city and 25 kilometer northeast of suleja, in Niger state. Geographically, the area is bound by two natural regions: the Kau plain and ZumaBwariAso Hills in the northeast. The northern expressway of Abuja is the boundary between Abuja Municipal Area council and the Bwari Area Council. Sub-regionally, the area is surrounded by over twenty (20) minor settlements: Sabongari, Zango, Kuchiko, Kuduru, Zuma, Kogo and Ushafaare the immediate settlements of the urban area. Others are farther away from the township.

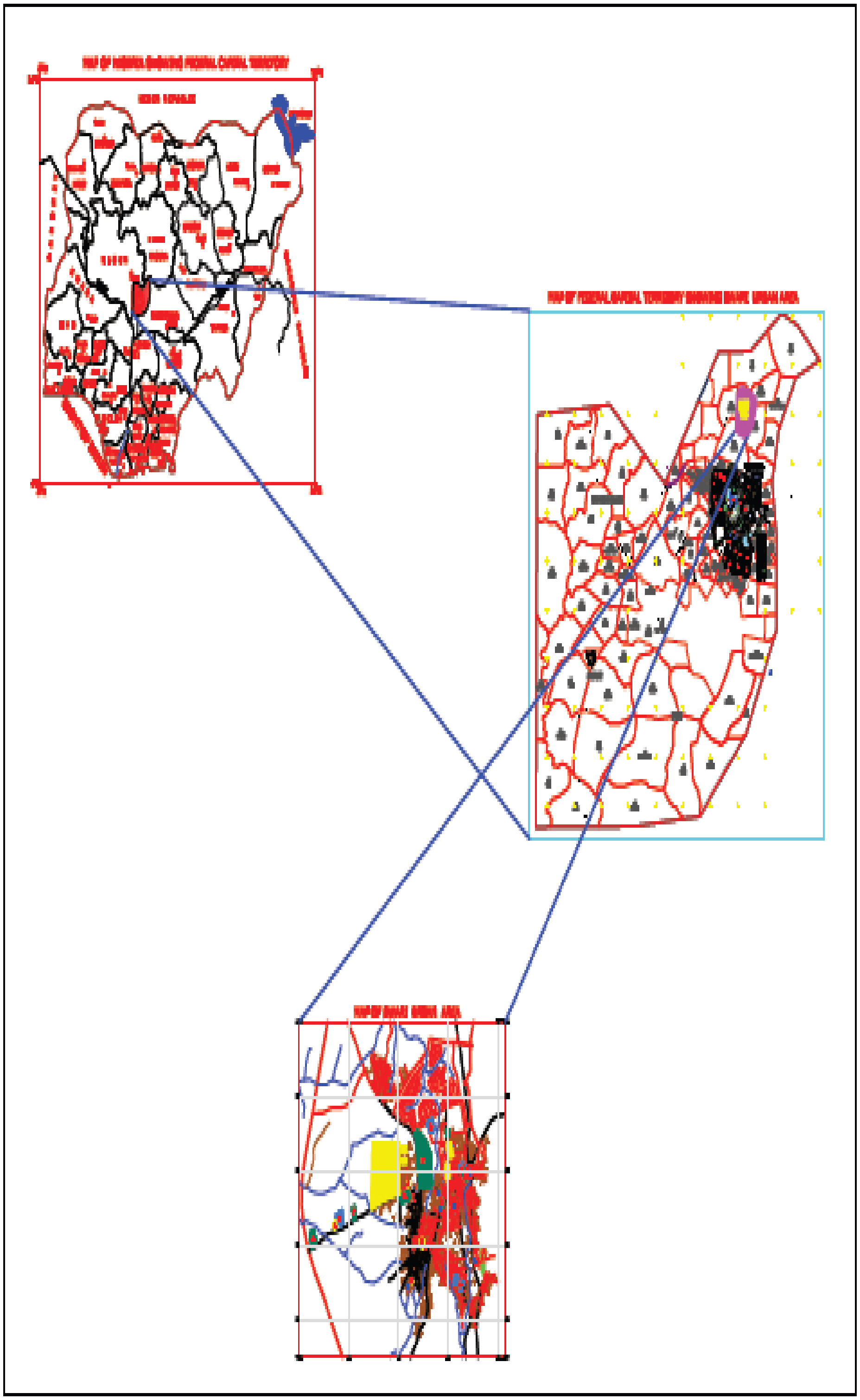


Figure 1.5: Geographical Location of Bwari Urban Area
Sources: Abuja Geographical Information System (AGIS), 2015

1.5.2 Historical Development of the Study Area

The Bwariurban area is dominated by Gbagyinatives (the original settler of the area). The natives are the original settlers of the urban area and constitute almost 40% of the residents of urban area.The conscious development of the area could be traced back to the first ever master plan of FCT which classified the urban area as one of the FCT third order settlements after the Federal Capital City (FCC) and Gwagwalada (IPA, 1079). The inclusion of the settlement in the master plan led to the design of action plans andthe development of first single lane regional road from FCC to the urban area and inclusion of the urban area in FCT power grid.

In 1983, the urban area was also included in the FCT Regional Development Plan which classified the urban area as one of the satellite towns after evaluating the available potential of the area to includes high degree of alluvial plain for agriculture and forestry, parks, recreation and othersFCT resettlement and regional infrastructure (Doxiadis, 1983). The inclusion of the urban area as one of the satellite towns of the FCT led to the development and setting of Joint Admission and Matriculation Board (JAMB) headquarter, Federal Girl Government College Bwari and the Nigerian Law School headquarter. And in 1996, the urban area was made the head quarter of Bwari Area Council (as one of the third tiers of government in Nigeria). The establishment of the urban area as the local government head quarter aggravated the development of new towns such as the Sabongari; rehabilitation of urban roads, construction of Saiduprimary school, the design of so many layouts amongst such include action area I and II layouts,Bwari extension layout; Bwari Technology village layout,Bwari quarter's extension layout, etc.Bwarizonal head of registry, Abuja magistrate court and Bwari Area

Council Secretariat.These spatial growth and expansions of the urban area prompted the design of the comprehensive master plan for the urban area

CHAPTER TWO
LITERATURE REVIEW

2.1 Conceptual Definition of Master Plan

Master plan as a concept has a distinctive meaning depending on the perspective researchers are looking at it. Though many scholars have interpreted the concept differently, the content of the document still remain the same. Whichever term the word is been use, master plan document is seen as a whole document of a city with master design for the physical development of a territory of the city Alfred Bettman. Alfred Bettmanalso viewed the document as a comprehensive document that involves the activities of other sectors. Kent (1964) alsodefined it as “ordinances of general plan with official statement of a municipal legislative body which set forth its major policies concerning desirable future physical development of an area”. Kent viewed the document in the administrative way; he viewed it as a policy document that has gone through the processes of debating in the house of congress before ascentment by the supreme head of any urban area. Roger (1999) in his own view defined the term as the supreme policy over policies in Britain. He defined it as “a traditional planning in Britain with master or comprehensive planning that devising a plan to cover development, use land in order to maximize the overall benefit, and then ensuring adherence to the scheme”. Black (1975, p.1) on his part infers to the term as “the official public document adopted by a local government as a policy guide to decisions about the physical development of a community”. Whichever perspective the document is being looked upon, master plan documents are document designed by planning profession and have legal backing and involves series of activities of all sector of any geographical area.

2.2 Description of a Master Plan Document

After a look at master plan documents abroad and here in Nigeria, the package of the document contain two major components-the written component and the drawing. Meltzer (1972, p.458) also asserted that the master plan document contain the model of the plan area and the written document. The model represents the drawing and the written components represent the statistical information that support planners' proposals. Black (1975, pp.23-30) described the form of a master plan to be completely in a single document that contain large drawing showing the general physical design proposed for entire community; written texts and whatever maps, illustrations and tables are needed to support the text. Black advocated for a single volume master plan document. A review of the master plan of Abuja, Nigeria agrees with the single volume recommendation but the plan document for Enugu, Jalingo, and Umuahia are in more than one volume. Although the one volume single master plan looks better in the spirit of comprehensive planning, the multi-volume is observed to have dichotomized the plan into various stages of presentation to the client. The description above has tagged the single master planning document to the named "the booklet" and the "brochure plans".

2.3 Organization of a Master Plan Document

As diverse as the overall forms of master plan above are described, so also are the organization varied, arranged and made up of different items. A review of master plans of different consultants has shown this. Amongst them are the Urban Development Consultant (1979); Dar Al-Handasah consultants (1977); Endodesign Group International (1981); and International Planning Association (1979) reveals varieties of content and also has some common similarities. Black (1975, pp.26-30) identifies the sub-division of a typical master plan to content the introduction material; background information; summary of physical development; concluding material; large drawing of the given design for the community and the problematic material. Dar Al-Handasah prepared different master plan in the different parts of Nigeria. the typical documents content of plan include the introduction; summary; regional determinants of development; local determinants of development; appendix A: planning of methodology; appendix B: Implementation; appendix C: technical methodology; appendix D: survey; and Bibliography. In the two volumes of master plan document prepared for Jalingo in 1979 by urban development consultant, the content of the plan were organized in the two volumes. The volume one (1) was tagged: existing situation. The content include the preamble; aims and objectives; national and state setting; physical characteristic; population characteristics; economic characteristics; existing land use and housing; socio-cultural and entertainment facilities; transportation and engineering services. Volume two (2) is tagged: the plan. It contain the summary of existence situation; general consideration; the planning proposals; standard need in units; the master plan descriptions; phasing of the proposal for development; legal implication and the implication of the plan.

Outside the Nigeria example, Baer (1997) outlined the content of master plan document of the mid-west city in the United States to contain four (4) parts. The first part contain the nature, purpose and scope of planning document; the planning processes; general planning and goals; community inventory; community analysis; policies for community development; plan for physical development; plan implementation and review. The second part contain the history of mid-west city development; physical features; land use;

social factors; economic factors related to planning urban form analysis; planning for functional elements; churches; commercial areas; industrial areas; recreational and educational areas; open spaces; public facilities; public libraries; and transportation. The third part includes the general provisions; the long-range comprehensive plan; the transportation plan; the mid-range plan; and the short-range plan. The last part is the implementation stage. It contains capital improvement/programming; housing codes; sub-division of regulations and zoning system. The review of the Nigerian, America and the European content of master plan, the similarities that can be deduced as the content of the master plan document include the introductory material; the summary; data presentation and analysis; the proposals; the conclusion and bibliography/appendix.

2.4 Function of a Master Plan Document

In a democratic society where legislative body is involved in the master planning processes, the plan draws the attention of the legislators to the community major development problems and opportunities. They then make decision on the kind of environment the create (Black, 1975, p.12). In this point the plan determined the direction of the policy of the community. The plan also establishes policies effectuation through long-range with the appropriate phasing of the plan to provide a task for each period within which its implementation period. Black (1975, p.13) put it as “practical working guide to the legislators in making every day decision”. The master plan serves as a view of conveying advises. It is a major instrument by which planning authority and staffs present findings and recommendation to the legislators. The master plan serves as an educational value for those who read it. It offers great revelation about a city or region. It arouses interest in the affair of the community, offer people factual information on the present condition of their communities and probably trends based on facts. It awakens readers to the possibility of the future and operation of the local government and making some idea on city planning. Black (1975, p.16) added that the educational function of a master plan promotes citizenship participation in local government. Master plan serves a vehicle for exploration as its depict many function to the planning staffs; the executives; operating agencies for physical development; voters; politician and the general public at the drafting of the plan and its adoption. The plan gives implementation direction especially in the preparation of zoning ordinances, sub-division control, urban renewal, and the development plan. The master plan establishes the priority of a community by bringing in line the function of departments of municipal government-public works, utilities and others socio-economic and physical facilities (Black 1975, p.19).

2.5Contents of a Master Plan Document

Obateru (2003) depicts that the content of a master plan document illustrates the functionality classification of the land use proposal aiming at achieving the aims and aspiration of the city. He also maintained that the master plan document should be able to review the present stage of inventory of development to establish the strength and weaknesses of development of the area in question before proposal is made. Proposal of any master plan should be able to address the overlap and shortfall of the required stage of development of the area.He also maintained that any development on land that does not depict the functional provision of the guided policy document is illegal. To attain the functional development of infrastructures, land uses and service provision of the urban area must be a tool to guarantee that.

2.5.1 Land Use Proposals

Land use proposals are defined as activities area on land. Obateru (2003) describes it as land subdivisions, spatial planning, and physical allocation of land for development purposes. He also asserted that land distribution and allocation ensuresdevelopment is in right place and right time. Therefore land use proposals are physical planning concept aimed at ordering the use of land and the character of citing of building and communication routes so as to secure the maximum practicable degree of economy, convenience and beauty. Whichever way the term represents, land use proposals deals with land distribution, zoning of activities, allocation and development in space. The term precisely highlight the pre-occupation of urban and regional planning profession with the spatial organization of activities areas of land which is the physical dimension or aspect of development planning whose others components are economic and social planning.These could comprise of residential, commercial, recreational, institutional, social-cultural, industrial, educational, health, land use for road circulation and vacant/green land for future development. Obateru exclaimed that land uses must be zoned in such a way that their activities must be harmonized to form the functionality of the urban system. And any urban area that these provisions are arbitrary to themselves does not create efficiency in urban development.

2.5.2Physical Infrastructure Provisions

Physical infrastructure is also a component of master plan proposal. It comprises of all intended land use structure to be developed as transportation facilities and public utilities. The public utilities consist of electricity, water and gas supply, sewerages and drainage (storm water system) and telephone services. Obateru (2003) exclaimed that transportation facilities are large users of land and it is the determinant element of a modern city.

2.5.3Social Service Provisions

This is also known as community proposal for service provision. They comprisesof proposed facilities for health, educational establishment, socio-cultural facilities,institutional services facilities, commercial facilities and recreational facilities. All these land uses facilities are recommended to be developed on a flat land and gentle slope of 0-.2.0 degree and 2.0-6.0 degree respectively. In a planned urban area, Obateru(2003) recommended that all these facilities should not cover more than 20-25% of the entire land area of the urban area.

2.6 THE MASTER PLAN ASSESSMENT

Plan assessment is one of the evaluation methods in Planning. Though, the subject has received little attention in physical planning discipline but has significant impacts in measuring the impacts of pre development, development and post development stage of the planning processes.As part of evaluation in the planning process, Trochim (2000) defined the term in the business perspective, he defined it as a systematic way of evaluating the worth or merit of some objects. He maintained that assessment in other disciplines has their methodology and typology embedded in them but not in planning. He thereby concluded that assessment in planning focuses on what to assess, how to assess and relevance potentials of the assessment subject. On the other hand Baer (1997) defined plan assessment in physical planning perspective, he postulated that plan assessment depends on who is undertaken the assessment, at what point the assessment is been undertaken in the planning processes and with what method the assessment is been undertaken. Baer focuses on post-hoc outcome assessment which deals with what happen after adoption of plan. This type of assessment aim at proffering answer to the question of what happen to the plan that has been adopted? Was it useful? Or did it achieve it intended effect proposed for it? This type of assessment (Post-hoc assessment) is also known as monitory especially in British Town Planning literatures or retrospective assessment as it may be otherwise called.

2.7 Types of Assessment in Master Planning

In the field of physical planning also, master planning document is considered as an art object and there are different ways of viewing or assessing an art object. Baer (1997) attempted to identify six (6) ways of describing an object which include the identification, description, explication, explanation, interpretation and evaluation. Greene (1973) on the other hand, identified three (3) categories of assessing an art work which include historic, reactive and judicial. The assessment of an art object is undertaken by historical perspective. This is done by assessing the origin of the art object. The origin of an art object is determined bythe impression giving by the art work, the analysis of the art work, the interpretation and orientation of the art work itself. The reactive assessment of an art work has to do with general or cemiqueassessment of the value of the objects. While the judicial method deals with assessing the philosophical believes and generalization of object matte of the art work. The most interesting type of assessment was given by Trochim(2000). Trochimidentified ten (10) fundamental type of assessment which was later grouped into three basic categories. The three basis categories include normative assessment, interpretive assessment and descriptive assessment.

2.7.1 Normative Assessment:

Normative assessment depends upon believing on something outside the environment after assessing and scrutinizing the environment in relation to the standards explicit on believes. The judgement of this type of assessment can only be prescribes by the established standards indicators established by the study. This type of assessment has its basis in doctrine, system, types or measure.

2.7.2 Interpretive Assessment:

The interpretive assessment is impressionistic in nature and evocative or advocatory in character. Whether an assessment of a design environment is right or wrong in relation to some external norms or standards, the outcome of assessment has no consideration here, rather interpretive evaluation attempt to make us see the environment in a particular way.

2.7.3 Descriptive Assessment:

Descriptive assessment depict physical phenomena and recount pertinent events in the life of a designer, it tells about historic context of a design process and construction as the context influence design decisions or details the design process itself. Descriptive evaluation deal with either picture of a city or building or the process of its generation, the biography or the contextual in character of the object in view. This is the level at which this study is applicable. The study is descriptive in nature. In using descriptive assessment method in this study, Goodman (1968) identified forms or norms of urban design in which the assessment can be carried out.

1. Objective design of a single object or a standardized series of them (a building, chair, a bridge)
2. Projects design of a design geographical area in which there is a definite clients, a concrete programmes, a foreseeable time of completion and effective control over

the significant aspect of forms (e.g. a building project, even a small new campus or a town)

3. System design of a functionally connected set of objects over a large area but does not make a complete environment (an arterial street system, a lightening system).
4. City or environmental design of a general spatial arrangements of activities and objects over an extended area, where the client is multiple, the programmes is indeterminate, control is spatial and there no stage of completion.

2.8 APPROACHES TO MASTER PLAN ASSESSMENT

The approaches in master plan assessment are distinctively different from other disciplines. Baer (1997) outlined three basic approaches of assessment in planning. They include conformance-based approach, performance-based approach and utilitarian (or modified-utilitarian) based approach.

2.8.1 Conformance-based Approach

The conformance-based assessment approach is an approach that evaluates the degree to which whether final outcomes or impactof objects is conformed to the stated goals and intentions expressed in a policy or program. In portraying this approach, Baer (1997) describes itas an approach of measuring success or failure of one or two or more policy or projects/programmes following set of standards. This type of approaches are particularly suited for evaluating project planning, whereby plans acts as blueprints of the intended end-state as well as the measures that have to be implemented in order to achieve that end-state of standards.

2.8.2 Performance-based Approach

Performance-based assessment is focus on the usefulness of a plan or policy in guiding and informing subsequent decision making, regardless of whether the final outcomes fit with the goals and intensions expressed in the policy programmeor not. This type of approach are appropriate methods ofassessmentof strategic spatial plans, which serve as coordinated devices for projects and other measures taken by a range of different actors. Strategic planning is predominantly used at the regional or national level and useful for situations that are characterized by a high degree of uncertainty and conflict

2.8.3 The Utilitarian-based Approach

Finally, utilitarian assessment approach is usually used by social sciences and basically uses cost-benefit analysis and cost-effectiveness analysis method. The method of this approach is applied prior to theassessments of the expected future impacts of feasible alternatives objects (Goodman, 1968). In the use of this approach Goodman (1968) outlined processes to be followed in undertaken the assessment and these processes are below:

1. There must be collection of factual details of the present symptom of development and the description of the historical situation of development of the environment in which the master plan is developed.
2. Qualitative studies of the existing projects involving the following up to the consequences of innovation and the study of the desirability and functional performance of the methods adopted by the designer
3. Study user experience and opinion on particular provisions that have long term aims of providing an improve framework for the general identification and specification of users need.

2.9 CRITERIA FOR THE ASSESSMENT OF MASTER PLAN PROJECT

There are numerous criteria for the assessment of master planning project. In view of this, Goodman (1968) identified five criteria for assessing policy programme/project which includethe Sensation of the project, diversity of sensations of the objects, easy identification of the objects in places of the environment, spatial legibility of the physical environment, and the perception of the meaningfulness of the environment. In specific term the policy programmes/projects must be visible and have identifiable parts related to each other and in time and space. To buttress this fact, Goodman outline qualities of policy or programmes that assessment can be made. These qualities are outlined below.

- **Spatial form**: this is centrally concern with man as a mobile animal. This should include accessibility such as location, scales, general form clarity of definition, and the linkages between structures. All these must be recorded in two or three dimensional diagrams in long section coverage plans or isometric views.
- **Visible life and activities:** to achieve the overall design and balance environment, the sign of other people in action, a consonance fascination for all observers must be assessed.
- **Visible evidence** of plant and animal life is of similarly importance
- **Diagrams:** diagrammatic models and selected photographs or sketches can be used to convey the location, apparent intensity, rhythms and types of life and activities open to view.
- **Visibility;** the general visible form of major landmarks and the location from which they can be seen-skylines, land forms, and building masses must be

assessed. Manipulation of visibility is well known device of the environmental design.

2.10 The Place of Assessment in the Master Planning Processes

Plan assessment isonly determined by the functionality of design indicators embodied in the master planning process. The indicators form the integral parts of the planning process. With this Baer (1997) identifies five (5) types of assessment in themaster planning processes. The type of assessment include (1) plan assessment (2) plan testing and assessment (3) plan critique (4) comparative research and professional assessment and (5) post-hoc assessment of plans outcomes

2.10.1 Plan Critique

Plan critique is done by person other than the plan authors but nevertheless typically trained as professional planners. It is usually undertaken after the plan publication but before the plan has had time to be put into practice and certainly before any measurable result is occurred. It is the first type of evaluation technique. The criteria being invoked by this are individual, implicit and somewhat idiosyncratic being based on professional virtuosity- it is an art of professional value judgment and conceptual power.

2.10.2 Plan Testing and Evaluation

Plan testing and assessment is also synonymous to plan evaluation in the plan making process. This type of assessment is performed by the team or groups that prepared the plan not by outside critics. Cost-benefit analysis or goal achievement analysis are best use analytical devices for this type of evaluation. Plan testing and assessment is undertaken based on planner ability to adopt the best alternative after analyzing and testing two or more alternative plans. In testing and assessment of plans, the assessment of alternative ways of achieving the plan goals and objectives is paramount. With this,Baer(1997) suggested ways at which plan testing and assessment can be undertaken. They include testing of alternative plans; evaluating the test; choosing the best alternative; implementing the plan; comparing the predicted outcomes and appraising the significant of any anticipated consequences.

2.10.3 Comparative Plan Research and Professional Assessment

This type of assessment is similar to critique but the methodology is quite different. The assessment occurred after the plan adoption. Either before outcomes is evaluated or with outcomes not intended to be part of the assessment. In this technique, the assessor is the researcher, either someone inside an organization that prepare the plan and who is trained in how to improve subsequent plan or outside pure research firm but trained in some discipline other than planning. Usually, in these types of evaluation, several plans are compared systematically. To established the criteria, the evaluator must assumed that planning should be a rational process; it should be a democratic decision making process; the plan should add to the body of knowledge of urban design. The research is filled with circular reasoning; preconceive solution; and self-fulfilling prophecy. It is based on decision on popularization of social science theory; superficial analogy; and doubtful rules of dump. The participation of citizen in decision making that affect their lives was almost ignored in this type of evaluation.

2.11. THE MASTER PLAN IMPLEMENTATION

The term implementation of plan simply deals with providing the right site for a right thing at the right time at the right place. It involves setting of buildings road network forthe general development of the area. Obateru (1986)describes implementation of plan as an attempt to solve problems of urban growth and decay. That implementation of master plan deals with setting of feature physical form and structures of town to create a functional,efficient physical environment for living, working, circulation and recreation. He further identified andoutlines the main elements of an implementation of plan to include residential, industrial, commercial,health, education, public administration, transportation, public utilities, mineral workings derelictland. Obateru (1986) maintained that adequate space should be provided for these land uses instrategic and appropriate locations. Implicit in this exercise is the employment of the techniqueof land use zoning and development.

Collingworth (1974) identified two types or component of zoning, first there is the regulationwhich governs building uses. Second, there must be zoning plan of the ground showing thedifference in real land use district on the land. He ascertained that in land use zoning, an attemptis made not only to achieve a balance landscape allocation and providing adequate land for thevarious Land use activities in appropriate locations in the city but also concerned with the formof development and the quality of the physical environment that is provided. Okpala (1984) maintained that theallocation and locations in the physical master plan are made to ensure the following;

I. Compatibility with other Land uses particularly to minimize health hazard. A substantial proportion of environmental problem in the process of development caused by locating importable Land uses development close to each other.

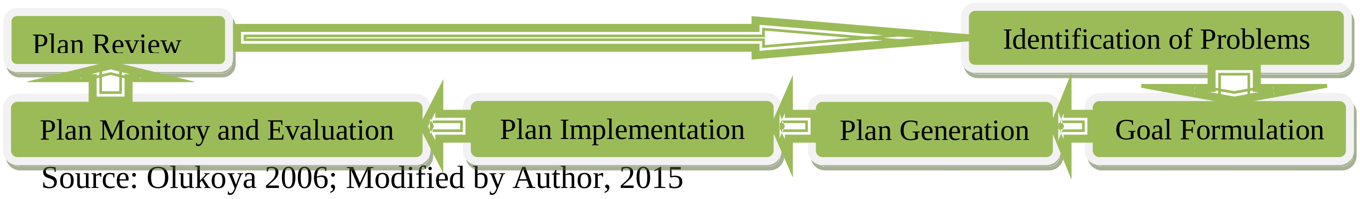
II. Complimentarily to ensure symbolic relationship[s] of functions and Land uses so as to minimize friction (human and vehicular) and their resultant negative environmental fallouts (externalities) on the individual or the society. The problem of negative externality, after all is to get people to abstain from something or actions that imposed cost on other or the society as a whole.

III. Economy in the use of Land by avoiding unnecessary duplications or wasteful and inefficient lateral extension and stretching of utilities and infrastructure. In other words, it strives for the provision of urban spatial pattern that minimize waste of resources relative to benefits with economic, social and environmental in the dynamic setting rapid urban expansion.

IV. Ensure that all necessary uses (including residential, industrial, commercial, recreational and leisure) therefore by phasing the development of a given settlement of region, aids in its orderly development.

2.12 The Place of Implementation in the Master Planning Processes

It is severally believes by planners that planning is a continuous process and not a single-short action. The work of Ogbazi (1992, pp.130-133); Kent (1964); and Black (1975, pp.19-25) amongst others have attested to the fact that planning is a continuous set of functions perform intentionally in order reach some result. Being a process therefore, Ogbazi (1976) identified four classical elements of master planning processes to include goal setting; identification of policies alternatives; evaluation of means against ends; and the implementation of decisions. Okeke (1990) identified four element of a planning process to content scanning of the environment; formulation of goals and objectives; plan formulation; and plan effectuation or implementation. Ogbazi (1992, pp.130-133) identified nine stages as elements of a master planning process. They include broad establishment of the context; establishment of goals and objectives; generation of planning proposals; evaluation and choices; implementation; monitory and reviews. At the look at the review of different stages of master planning processes, it is observes that master planning process should include identification of problems; survey and refining of goals and objectives (goals formulation); plan generation; plan implementation; monitory; and review.



Source: Olukoya 2006; Modified by Author, 2015
Figure 2.12: The Place of Implementation in the Master Planning Process

2.13 Factors Influencing Master Plan Implementation

The process of controlling the use and development of land is influenced by severalfactors. The degree of influence of such factors may tend to enhance or negate theeffectiveness of plan implementation. These factors to include the following:

I. The Plan

The nature of the master plan or development plan for a town or city has some influenceon development control in that town or city. Where a plan contains in it realisticproposals based on the community needs, implementation tends to be easier and moreeffective. However, where the plan of a town is based on proposals which are unrealisticand unrelated to the people's desires negates effective implementation.

II. Political Factor

The political factor strongly influences planning in general and master planning inparticular politics cannot be separated from planning, for the two go together hand inhand. The influence of politics can be positive when development control gets thenecessary political backing. This tends to enhance the enforcement of developmentcontrol measures by the planning authority concerned.The negative aspect of politics in master plan implementation is in a situation whereindividuals in government have strong private interests in land development to protect.

Therefore, whenever the political factor negatively influences development control, theoperation of the development control machinery is rendered important. However,whenever it is positive, the enforcement of development control is facilitated and therebybecoming more effective.

III. Administrative Factor

The administrative factor refers to the composition and organizational structures andmachinery responsible for the implementation of the plan. The administrative factor hasgreat influence on plan implementation. In a situation where the organizational structureand composition is faulty, the machinery will also be defective and ineffective; henceplan implementation may be both difficult. However, where the machinery is wellorganized in-terms of both composition, clear definition of function/roles and well-structured administrative framework, the machinery will be smooth and implementationof the plan will be facilitated and made more effective.

IV. Technical Factors

The technical factors have great influence on master plan implementation. The technicalfactors refer to the quality of manpower, the availability or otherwise of materials,machinery and equipment as well as the technical expertise necessary for handling thevarious developments control functions. In most developing countries, these are one ofthe problems confronting master plan implementation. Professional planners aregenerally few and where they are found in sizeable number, they are usually not involvedin the decision making process. This leads to little or none effective utilization of theirexpert technical know-how. In such a situation, the implementation of master plan isrendered ineffective..

V. Financial Factor

The provision of finances is one of the most vital factors that influence planimplementation. Availability of funds at the right time and adequate quantity is vital both the planning authority that implement the plan and the individual developers. Theplanning authority needs money to purchase machinery and equipment, paycompensation to land and property owners that might have been affected by developmentplans as well as maintenance of staff and other recurrent expenditures.

Therefore, timely release of adequate funds to planning authorities and individual'sdevelopers tends to enhance implementation. Similarly, untimely release of fund as wellas inadequate funds negates proper implementation of plans.

VI. Socio-Cultural Factors

Any type of planning band enforcement or regulation arrangement is for the commongood and has to incorporate human behaviors and attitudes commonly referred to as culture. Where the plan incorporates the culture of the people, implementation isenhanced. However, his situation is lacking in most of the developing countries. Thus, itis no wonder that people in these countries view planning and development controlnegatively.

VII. Legal Factor

Legal tools are the backbone of planning in general and development control inparticular. They provide the required legal protection of the efforts of the planners inmaking the city function effectively and creating the environment that is conducive forhuman beings to live (Abdul-Rasheed, 1984). In developing countries of Africa, Asia,

VIII. Public Participation

Public participation in panning is very crucial. It plays a major role in planimplementation. The involvement of the public in planning helps to reduce publicexpenditures and ensures democratic base for planning. This makes the people to initiateplanning scheme themselves with the assistance of the planning authority on their land. Insuch a situation, the planning authority approves the plan with little or no complicationsthat go with the enforcement. This serves as a big relief to the planning authority.

2.14The Bwari Master Plan

Bwari master plan was designed by Molaj Design consultant in collaboration with Frontline Design Associates. It was commissioned by FCDA in 2003 (the highest physical development body of FCT, Abuja) and the implementation took effect in January 2004.

2.14.1 Issues that Prompted the Design of theMaster Plan

The design of Bwari master plan were prompted by the environmental problems which became issues of concern to the physical development of the urban area and these issues are classified into social issues, physical issues and economic issues.

The social issues are the environmental problems of the urban area before the advent of the plan. And these social problems comprises of unavailability of land for development purposes by intending developers,exponential growth of student population in Bwari due to the existence of polytechnic and law school and government colleges and the existence of inadequate health facilities for the inhabitance of the urban area and the problems of technical and infrastructure inadequacy.

There is also issues relating to physical development of the urban area and these issues involves the lack of pipe borne water; epileptic power supply; most roads are untarred and without drainage channels; physical structures are jumbled together almost without planning input; pressure of the existence health facilities, roads are poorly connected; social infrastructure such as town hall, libraries, primary schools, health centersetc. are almost non-existence in the study area.

The economic issues were not exempted in the urban area. They includeindiscriminate sitting of uses and misused of land; lack of economic facilities that makes workers to stay off-site as far as the city of Abuja, hence incur undue expenses in transporting themselves to and from work on daily basis; poorly developed existence market to allow more profitable transaction and increase revenue and unavailability of financial institutions except BwariAso Saving and Loan Limited which was overstretched and always congested.

2 14.2The Purpose for the Design ofBwari Master Plan

The purpose of the plan was to proffer solutions to the emerging issues of the urban area. And the way to do it was by providing land tenure system by making land available for intending developers of the urban area and providing adequate health facilities for inhabitant of the urban area and by also providing adequate roads connectivity and linkages and provision of adequate social services. Others purposes includes the provision of efficient technical and social infrastructure for the urban area and creatingemployment opportunities for the inhabitant of the urban area by encouraging the operation of financial institution within the urban area and to improve in housing development and provision of the urban area.

2.14.3 The Design of BwariMaster Plan

To achieve the purposes of the plan above, a land area of 6455.011ha was designated for development. The designated area runs from 11 kilometers by 9 kilometers from the center of the town and terminates at Kuduru northeast and eastward of Zumarock and through southeast of Kogo and westward of law school, adjacent to the bridge.

2.14.4 The Land Use Goal of the Plan

The goal of the plan includes;

1. To guide wholesome development through comprehensive land use plan, comprising Bwari and adjoining settlement
2. To givepre-eminent allocation to institutional land use development on the basis of existence land use philosophy and national roles of towns in accommodating significant federal institutions.
3. To propose in the plan for a target population of about one million people as a population catchment area to the FCT
4. To upgrade the existence settlement to an ideal living environment via imaginative and feasible urban renewal schemes
5. To enforce zoning laws in order to present indiscriminate location/development of incompatible uses
6. To encourage private housing development in order to solve housing problems therein
7. To protect land integrity and statutory allocation

8. To makegovernance of city participatory

2.14.5General Planning Goals of the Plan

The planning goal of the plan for the urban area includes;

i. To design a plan torepresent a proposed land use map up to a period say 20 years
ii. To be practically aimed at enhancingBwari outlook and make the town a self-sustaining satellite town
iii. To design a development plan and establishes a development strategies for Bwari's growth and recommend a public enlightenment programmes for the populace and all other stakeholders who will be involved in the development
iv. To design a plan to serves as a joint boundary commission between the Federal ministries, Federal Capital Territory and the Bwari Area council
v. To owe to the remoteness of the urban area the Abuja planning standards, the plan should be a little lower than that of the FCC.

2.14.6Goals for Residential Densities

The goals for residential density of the plan are;

1. To provide development which are physically responsive to the character of the natural environment and the socio-culture life of the people;
2. To provide insurance and maintenance of good health, safety and welfare;
3. To develop planned interrelationship of residential development, public and commercial facilities serving local resident
4. To produceliving environments that is aesthetically attractive.
5. To produceliving environments that is compatible with the needs of and the living patterns of future residents.
6. To include the idea of vertical development so that large areas of land would not be used at a sloop, for bungalow building along.

7. To maintain of the conventional residential density classification with moderation to suit this peculiar situation.
8. Todevelop high-density plots to be within the range of 300-450 m^2 and would take 60% of the total land designated for residential development.
9. Todevelopmedium density plots to vary between 450 m^2 and 650m^2 and will not cover more than 30% of the residential areas.
10. To develop low - density plot range from 650 m^2 - 1000m^2 maximum and shall cover about 10% of the residential areas.

2.15The Land Use Proposals of Bwari Master Plan

To achieve the development of the designated land area proposed by the plan, the designated land area were subdivided into individual land uses as reviewed in table 2.15.

Table 2.15: TheLand Uses Proposal of Bwari Master Plan

Land Use Proposals	Total Land Area (ha)	%
Residential	3053.00	47.29
Commercial	275.07	3.98
Educational	218.75	3.38
Services/cottage industry/employment areas	381.25	5.90
Government/public institutions	260.41	4.03
Recreation	101.50	1.57
Circulation	1020.53	15.81
Under-developable/green areas	1162.50	18.04
Total	**6455.011**	**100**

Source: Bwari Master Plan, 2003

2.15.1 Detail Proposals of the Land Uses of the Plan

Thesubdivision of the land area designated by the plan for the land use development were also further subdivided into land use elements and the land use elements are expected to be developed within each of the land use proposed to be developed in the urban area. Figure 2.15.1 and table 2.15.1 shows the detail proposals of the land uses and land use elements proposed to be developed in the urban area.

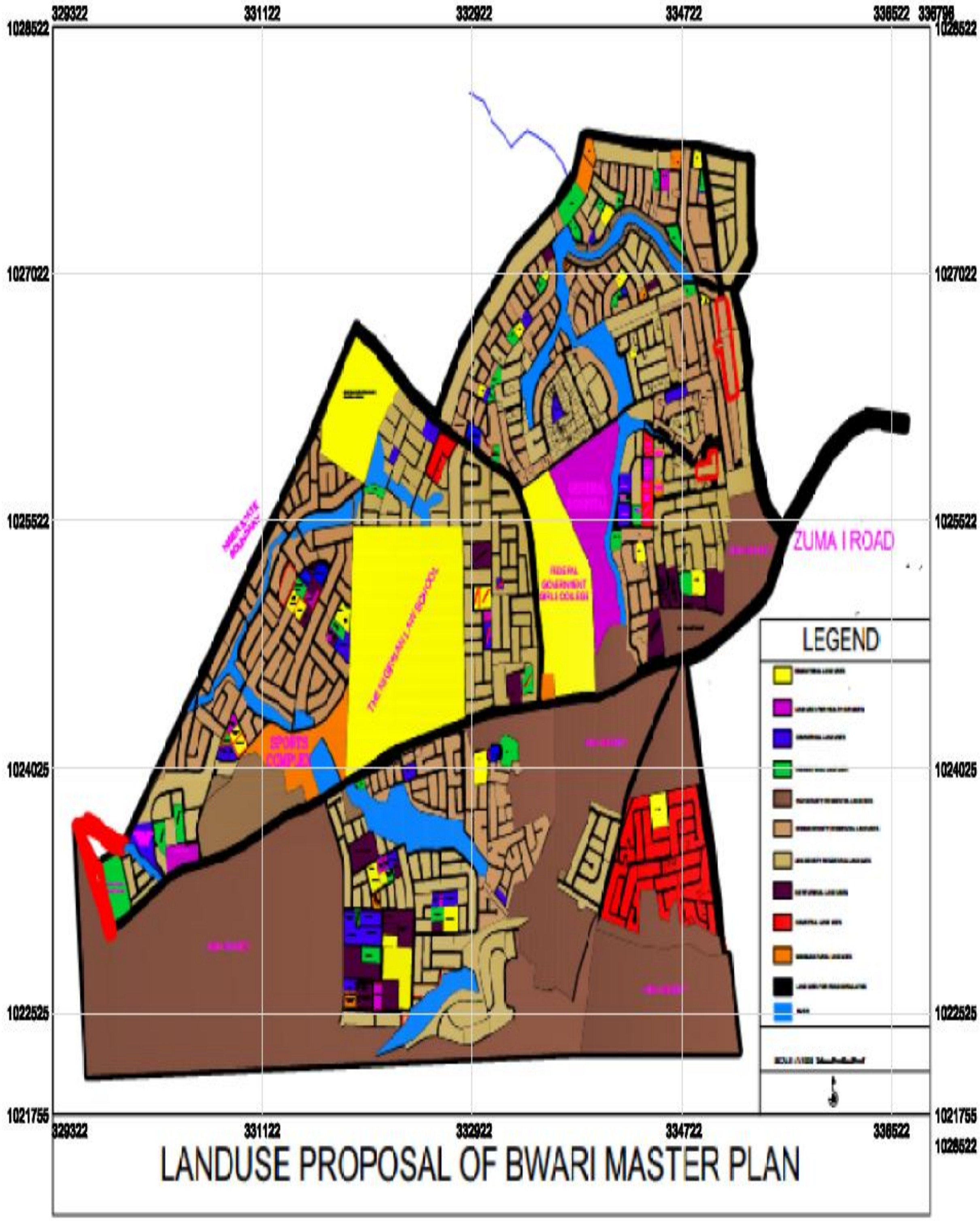


Figure 2.15.1: Bwari Land Use Plan
Source: Bwari Master Plan, 2003

Table 2.15.1: Details Proposals of Bwari Land Uses

Proposed Land Uses	**Proposed Land use elements**	**Plots of the Proposed land use elements**	**Proposed Total land area (ha)**
Land Use for Residential Density	High income residential Density	6460	1587.568
	Medium income residential Density	9690**30000**	610.60 **2503.46**
	Low income residential Density	13850	305.30
Educational land uses	Primary school	15	3.75
	Nursery school	25	4.50
	Nursery/primary School	4	1.75
	Specialized institution	2	100
	Secondary schools	9 **61**	4.5 **177.68**
	Technical/vocational school	4	2.00
	Secondary/technical/vocational	1	0.5
	University	1	160.0
Land uses for health services	Maternity homes/Health clinics	9	1.11
	Health centers	6	1.50
	General hospital/Medical centers	1 **50**	2.01
	Neighborhood hospital	3	4.11 **14.25**
	Dispensaries	13	0.50
	Health offices	18	5.02
Socio-cultural land uses	Place of worship (Church)	6	2.36
	Place of worship (mosque)	4	0.86
	Cemeteries (Muslim)	1	1.41
	Cemeteries (Christian)	1	0.45
	Public libraries	2	0.50 **32.42**
	Post offices	1 **27**	0.50
	Community sport center	4	6.30
	Stadium	1	8.03
	Neighborhood parks	6	9.00
	Central parks	2	2.01
	Museum	1	1.00
Industrial land uses	Large/major industries	31	37.56
	Medium scale industries	64 **990**	48.70 **139.96**
	Small scale industries	895	53.70
Recreational land uses	Children playground	3	0.84
	Organized open space	6	3.28
	Parking area/space	2	0.58
	Playground (adult)	1	0.41
	Sport complex/game village	1	22.37
	African garden	1 **22**	0.22 **33.93**
	Recreation/open spaces	2	1.27
	Org. open spaces/children Playground	1	0.40
	Public open spaces	3	2.24
	District parks	1	1.37
	Motor parks	1	0.95
Institutional land uses	Administrative institutions	34	149.22
	Traditional institutions	1	0.64 **165.97**
	Judicial institutions	5 **50**	4.90
	Security/safety institutions	10	11.21
Commercial land uses	Shopping centers	23	10.0
	Petrol/filing stations	4	2.52
	Corner's shops	3	0.42
	Markets	3	2.25
	Local market	1	1.23
	Banks	2 **38**	1.30 **19.54**
	Business centers	1	0.71
	Commercial centers	1	1.11
	Shopping malls	1	0.89
	Departmental store	1	0.41
Land use for Road circulation	Arterial road	1	22.78
	Collector road	3 **274**	107.04 **802.27**
	Local access road	270	672.45
Unorganized open space/vacant land	Unorganized open space/green area and agric/Vacant land	-	2186.80
Total		**31,512**	**6455.011**

Source: Bwari Master Plan, 2003

2.16 Designed Phasing for the Implementation of the Plan

The master plan was designed to undergo twenty (20) years implementation process and we are in the third phase of the implementation of the plan (2003-2023) as shown in table 2.16

Table 2.16: Designed Phasing of the Implementation of the Proposal of the Plan

Phases	Subjects	Timeline	Remarks
1st	I & II	2004-2008	Implemented
2nd	III & IV	2009-2013	Implemented
3rd	V & VI	2014-2017	On-going implementation stage
4th	VII, VIII & IX	2018-2023	Not yet implemented

Source: Bwari, Master Plan, 2003

2.17Established Management Institutions for the Implementation of the Master Plan

Federal Capital Development Authority (FCDA) is the established pioneer for physical development of FCT and it environ and it is the main coordinator of the implementation of Bwari master plan. The agency is supported by the activities of other agencies such as the STDA, AMMC, AGIS, AEDB, FCTWB, AEDC, FCTTC and BAC.

FCDA was establishedby decree No. 6 of 1979 and it is responsiblefor overseeing the overall physical development of FCT through the design of physical development plans as guideline for development of the area. Satellite Towns Development Authority (STDA) was formerly a department under FCDA but was carved out as an autonomous agency and it is responsible for opening up/developing the Satellite Towns by providing infrastructural facilities to the teeming rural dwellers, thereby improving their living standards through the provision of better environment services and basic amenities which would further reduce the pressure already existing in the capital city.Abuja Municipal Management Agency (AMMC)is a monitory and supervision agencies and was also one of the department of the FCDA but later carve out in 2003. It is responsible for the supervision of development through the approval of development permit and the demolition of structures that are not consonant with the standard of development of the FCT.

The Abuja Geographic Information System (AGIS)is a computer based agency responsible for cadastral mapping. It was also part of the FCDA but later carved out in 2003 as an autonomous agency. It is responsibleforthe following functions; providing a Comprehensive, all-inclusive, state-of-the-art, foolproof, Computerized, Geospatial Data Infrastructure for the FCT; Computerize the cadastral and land registry for the FCC (Federal Capital City), the Area Councils and the and Satellite Towns of the Federal Capital Territory (FCT).Abuja Environmental Development Board (AEDB) is a service provision agency andwas established in 1997 and it is responsible for the Control of, removal and disposal of liquid wastes; control, removal and disposal of solid wastes; Control of Vector pests, rodents and reptiles; the Control of Portable and waste water effluent discharges; the Control of Noise which constitute nuisance through the use of septic tanks and sewage maintenance; bush burning, poaching and indiscriminate felling of trees; stray and wandering animals; public convenience and Cemeteries; the use of residential areas for prohibited purposes; and walking or driving on prohibited areas. The Federal Capital Territory Water Board (FCTWB) is a supporting agency and was established in 1981 and it is responsible for the Control, management, installation and maintenance of all water works and service vested or to be vested on the Board by the Minister of the Federal Capital Territory.The Abuja Electricity Distribution Company (AEDC) was formerly under Nigerian Electric Power Association (NEPA) but later changed to Power Holding Company of Nigeria and in 2013 was later privatized and it is currently own by AEDC.The FCT Telecommunication Commission (FCTTC)is a telecommunication agency and it is responsible for owning and maintaining the distribution network, supporting equipment, managing meter installations, carrying out servicing and billing, coordinating consumer credit and revenue collection. It was established by Act No. 3846 as amend of the federal republic of Nigeria. And the Bwari Area Council which is one of the third tiers of government in Nigeria and it is responsible for roads infrastructure provision, parks and gardens, recreational areas, sports Centre's, housing infrastructures, solid and liquid waste management, hospitality industry provisions, health and educational services provision. The Area Council was established in 1996.

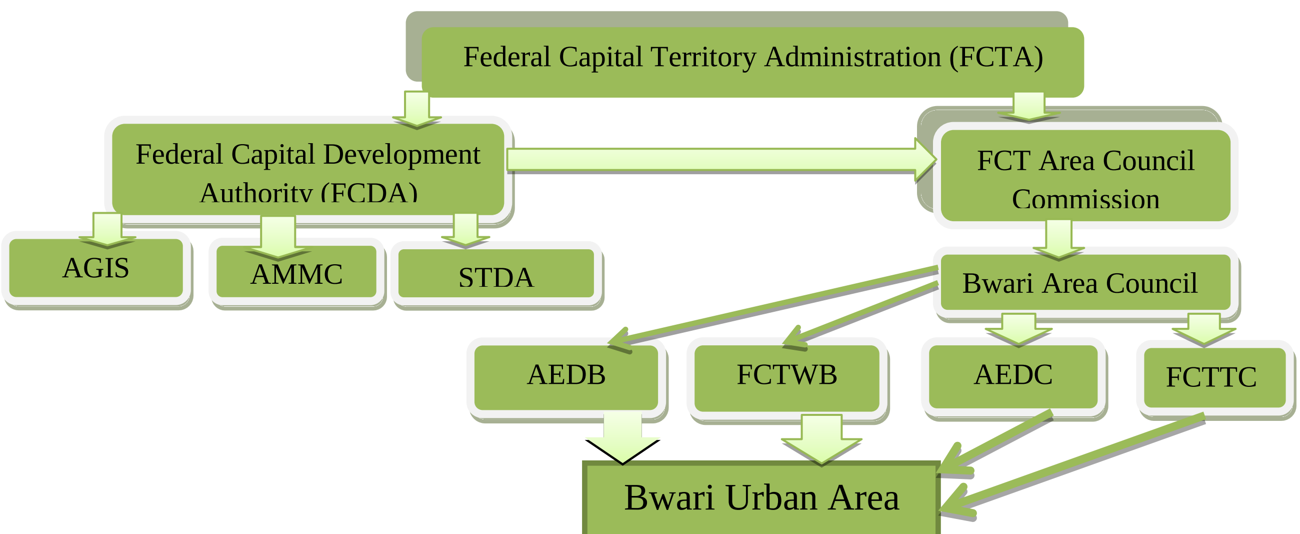


Figure 2.17: Management Institutional Framework for the Implementation of Bwari Master Plan
Source: Bwari Area Council, 2003

2.18 Review of Related Studies on Master Plan Implementation

There are past studies on the implementation of master plan which were reviewed locally and in abroad. Among the one that were reviewed for this study is the Sambo (1993)which deals with analysis of strategies used in Kaduna in the financing of urban infrastructure development projects.The study revealed that government financial commitments towards the provision ofinfrastructure on planned sites had declined over the years. This is because the demand forthe maintenance of existing urban infrastructure and provision of new ones far outweighs thefinancial disposal of the government. The studies also reveals that increase in cost ofinfrastructure provision has led to the abandonment of many infrastructure developmentprojects. Therefore, there is need for the evolution of alternative approach for financing urbaninfrastructure development projects, considering the resources available and socio-economiccharacteristics of the area.

There is also study done by Catanese and Snyder (1979) on the assessment of implementation problems on development projects/programmes. The study observed that a strong political commitment appears to be anecessary but not always a sufficient condition for the adoption and successfulimplementation of physical project or plan proposals. Sternstein (1974) also observed thatproblem with implementation in the third world is the ‘severely limited number of competenthigh level administrators and executives’. He commented that in fact, it appears that manydeveloping countries have embarrassing few professional planners and urban managers.Sternstein also observed that in Bangkok, Thailand, competent top level administrators arefew but professionals and technicians are fewer.Studies have also shown that multiplicity of planning agencies has not itself a problem, but theoverlapping area of jurisdiction and lack of cooperation and coordination. This wasearlier on expressed by Abdul-Rahman (1995) in Yola, where conflict exists betweenMinistry of Works, Yola Local Government and the Adamawa Urban Planning Authorityover road construction and maintenance as well as conflict over land allocation'. Suleiman (1981) maintained that the multiplicity of implementation agencies makes it difficult toachieve a common cause or goal as they are largely autonomous and comply with directives attheir own convenience.

Studies have also shownthat the low generation of urban finance has considered it to be due toweak urban management in Borno State, and also inadequate funds generated fromregistration fee, survey fees, rents etc. are not invested in urban development programs hencethere is no systematic methods of collecting property rent and other revenues.Dean (1997) in a study titled "inefficient financial management" revealed that lots of fundsare being spent extravagantly which, if spent decisively, would give a higher value return. Hefurther observed that the nature in which fund allocation is also very inadequate as funds arealmost always released lately, and inevitably causes delay in implementation.

Zhu D. (2008) also carried out a study titled "Project Finance risk control-A lesson of under control and lose-control risk in Public Private Partnership/Build Operate and Transferprojects" and addresses the BOT/PPP projects related-risk control from a practical and anempirical perception. The study recommended that a successful BOT project must integratefull elements and make the contracts integrity and ready also regulation and governmentsupport are another critical element which should be taken into account. At the end of thestudy, several reflective suggestions are made.Okeke (1998) also observed that the implementation of proposed plans are seldom considered inthe review of factors that hinder the use of master plans for physical development actions inNigeria. Many of these plans are alleged to be riddled with problems of obsolescence andinadequate provisions that render them useless. As such, the plans are only a parody of realitythan an urban development instrument.

According to Ahmad (1996) in the study “risk management in BOT project financing”describes BOT model, its different phases as well as the parties involved and theirrelationship, success factors and the causes of projects failure are identified. The studyexamined the risk involved in each phased of the project and suggested methods to mitigatethese risk. Emphasis was made in the financing of the project and since allocating risk is theessence of project financing, the study describes the allocating of risk to the parties best ableto manage them. The study also examined the types of capital and debt in project financingand finally presented the Channel Tunnel project as a case study for BOT model. Bjorn andKarin (2002) showed that three factors are of special importance when choosing a certainfinancial arrangement. These three factors are project location, duration of the project and itssize measured in monetary terms.

There is also a study on “Project Benefit Assessment”, Kuswardono (1997). The study established that services delivery indicator of the improvement plan is relatively well defined, the level of usage, usefulness of services and beneficiaries satisfaction also need to be redefined.There was also a review on the performance assessment of the effectiveness of form based codes or design codes and conventional zoning on Fort McPherson redevelopment plan by Keuntae, (2010). The study established that in terms of optimization and compactness, convention zoning regulation has a better standardof ensuring effective design of conventional zoning compared to the formed based codes system.There is also a study Iliasu (2012) on assessment of the implementation of tourism master plan in the Nigeria Federal Capital Territory, Abuja. The study established that the proposed projects/programmes of the tourism master plan had low level of performance.There was also a study on the assessment of the achievement of Jaipur regional master plan (Kurya, 2011). The study concluded that regional master plan is a vehicle of ensuring effective regional development of an area.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 The Introduction

The study adopted the conformance based assessment technique as a technique used in assessing the level of achievement of the implementation of the master plan. The conformance-based assessment is anapproach that evaluates the degree to which final outcomes or impacts of the plan are adhered to the stated goals and intentions expressed in a policy, program or plan. The approach also helps in measuring success or failure of one or two or more variable provided in a plan following set of standards. It is also suitable for assessing the performance of development project in planning. At this stage, theplan acts as blueprints of the intended end-state of the land uses which can be measured. The chapter also examined the stages at which the study was undertaken, the types of data collected, the technique used in the assessmentof the data and how the data were analyzed.

3.2 The Conceptual Framework for the Study

As revealed in figure 3.2, the study employed five technical frameworks or stages for the completion of the study. Stage one involves the establishment of the need for the study which is the proposal of the study. In this stage the purpose of the study was established. Stage two involves the review of relevance literatures. This helps in establishing gaps between other studies and the study under review. The third stage is the methodology which was the review ofmain techniques used for data collection and analysis. This stage involves the outlining of the types of data used for the study, method of data collection, the establishment of analytical technique and the assessment criteria used during the study. Stage four is the presentation of result and finding. This was generated after the data has been collected, analyzed and presented while stage five which representsrecommendation and conclusion. Recommendation and conclusion are suggestions and lesson drawn from the entire study.

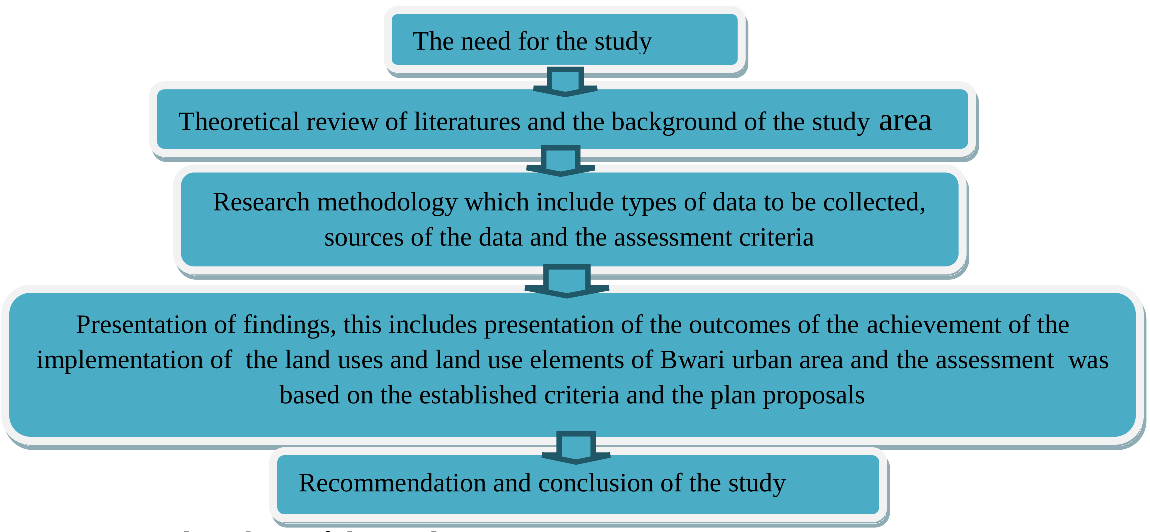


Figure 3.2: Flowchart of the study
Source: Field survey, 2015

3.3 METHODS OF DATA COLLECTION

3.3.1 Data Required for the Study and Its Sources

As specified in the scope, the study only focuses on land useproposals of the plan. And the data used in this study were basically land use data. The data types are revealed in table 3.3.1

Table 3.3.1: Data Required for the Study and Their Sources

Data types	Data required	Sources
Primary data	Types of the land uses developed in the study area, the quantity of the land uses developed and their land use elements in the study area, the land area coverage for each of the land uses and land use elements.	Satellite imagery and reconnaissance survey Interview with FCDA, BAC AGIS, AMMC and STDA
Secondary data	Theoretical review of already made information relevant to the study.	Bwari master plan, FCT master plan, FCT Regional Development Plan, text books, journals, government official documents and internets.

Source: Field survey, 2015

3.3.2Data Collection

The study areas were divided into land uses categories and data on individual land use element which made up each of the land uses were collected. The land use elements were the basic at which the data were acquired for the study as reviewed in table

Table 3.3.2: Methods of Data Collection

Land uses	**Land use elements**	**Number in space**	**Land area coverage**
Land use for residential density	High density residential land uses with total land area between 300-450m^2, Medium density residential land uses with land area between 450-650m^2 and low density residential land uses with land area from 650m^2 and above	No. of uses in space for each of the land use element	Land area cover by the elements in space
Educational land uses	Primary school, Nursery school, Nursery/primary School, Specialized institution, Secondary schools, Technical/vocational school, Secondary/technical/vocational and University	No. of uses in space for each of the land use element	Land area cover by the elements in space
Commercial land uses	Shopping centers, Petrol/filing stations, Corner’s shops, Markets, Commercial Banks, Business centers, Commercial centers and Shopping malls	No. of uses in space for each of the land use element	Land area cover by the elements in space
Public/government institutions	Administrative institutions, Traditional institutions, Judicial institutions and Security/safety institutions	No. of uses in space for each of the land use element	Land area cover by the elements in space
Recreational land uses	Children playground, Organized open space, Parking area/space, Playground (adult), Sport complex/game village, African garden, Recreation/open spaces, Org. open spaces/children Playground, Public open spaces, District parks and Motor parks	No. of uses in space for each of the land use element	Land area cover by the elements in space
Land use for road circulations	Arterial road, Collector road and Local access road	No. of uses in space for each of the land use element	Land area cover by the elements in space
Land use for Services/cottage industry/employment areas	1. **Socio-cultural services include** Place of worships, Cemeteries, Public libraries, Postal services, Community sport center, Stadium, Neighborhood parks, Central parks, and Museum 2. **Health services include** Maternity homes/Health clinics, Health centers, General hospital/Medical centers, Neighborhood hospital, Dispensaries and Health offices 3. **Industrial services**Large/major industries with employment level above 50 people, Medium scale industries with employment level between 10 and 49 people and Small scale industries with employment level below 10 people.	No. of uses in space for each of the land use element	Land area cover by the elements in space
Unorganized open space/vacant	Unorganized open space/green area and agric/Vacant land		Land area cover by the elements in space

land				

Source: Field survey, 2015

3.3.3: Survey Instrument for Data Acquisition

For the purpose of this study, four survey instruments were used for data collection. They include satellite imagery, Review of published materials, field survey and observation. Satellite imagery was used to obtain raster information from the Google earth; the information was then digitized and analyzed for the study. Review of published materials as a method was also used. This provided official document on the provision of the land use development in the study area. While field survey and observation were used to establish the relationship between ground conditions of the land uses and satellite images. Obtaining information on flood reach extent based on historical eye witness accounts, coordinates and altitude and the obtaining of information on physical characteristics of the floodplain of the area. Hand held Global Position System (GPS) and Mobile GPS were used. The hand held GPS was used to take geographic coordinates and altitude while the mobile GPS was used to get instant image of the neighborhood.

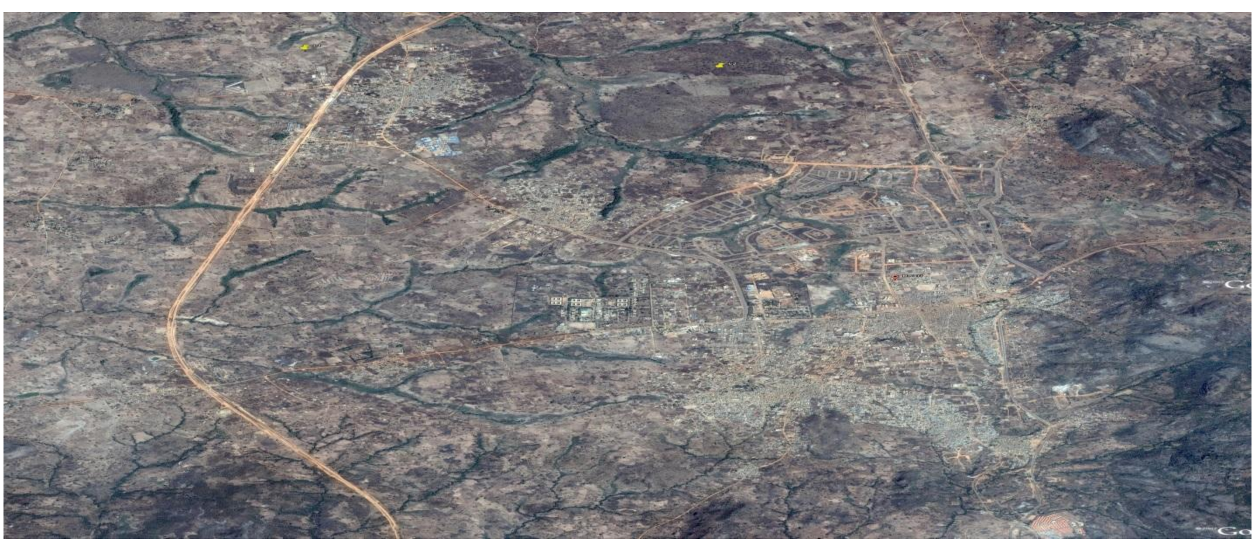


Figure 3.3.4: Satellite Image of Bwari Urban Area

Source: Lansat2015

3.3.4Data Analysis

The data for this study were analyzed by the use of simple percentage which is a descriptive statistical method. The computation of the data was done in such a way that the level of implementation was ascertained for the purpose of rating the achievement of the implementation of the land uses. The computation was done by dividing the actual implementation level of the study area by the proposal of the plan itself. The unit of measurement of data was in hectares as revealed by the plan. Except in rare cases where meter squares had to be used.

3.3.6 Data Presentation

The data for this study were presented by the use of tables and maps. Maps were used to shown the prototype of the land use proposal of the plan and the level of land use development of the Bwari urban area. Tables were also used to present the outcome of the level of achievement of the implementation of the land uses and it was also used to present the analysis of the proposals of the plan for the urban area. The table was also used to demonstrate how assessment criteria for the study can be applied.

3.4 **METHOD OF DATA ANALYSIS**

3.4.1 AssessmentCriteria for the Study

The study adopted Kerg model as criteria for the assessment.Kerg model was developed in 2004 by KergHansenn and uses weighted metrix model use in assessing the implementation of Spatial Projects/programmes. The model was used in assessing the implementation of Spatial Projects in theLuthunian Urban DevelopmentProgrammes.and also used for the assessment of the implementation of tourism development plan projects in Abuja, Nigeria.

3.4.2 Application of KergModel

Kerg model as a weight ranking model assumes that Master Plan proposals are development projects/programmeson the ground. Their attributes are feasible and can be measured numerically whether physically, socially and economically. Master plan proposals are physical development projects/programmes on the ground and their attributes can be measured numerically. The criteria uses parameters such as percentage score in computing the actual implementationlevel of plan’s proposal over the proposed multiplied by hundred.In applying this model in assessing the level of implementation of development projects/programmes, there are three processes involves; the establishment of criteria index, the interpretation of the index and the weighting of the total score index.

3.4.3 The Establishment of Scoring index or Criteria

The establishment of scoring index is simply establishing of weight for range of values which is known as score values and the establishment of weight helps in determining of rating system of performance of the development projects/programmes. In Kerg model, the model uses score value of zero (0) point to 3.0 point to express the level of implementation of the development projects/programmes under study. The 0 point signified that the implementation of the development project/programmes is operating from 0-10% of its proposal while point 3.0 which is the highest point of the score indexsignified that the implementation of the development project/programmes is operating from 60% and above of its proposal. This model expresses criteria in such a way that ambiguity, subjectivity and biasness are avoided.

Table 3.4.3: Scoring Index of Kerg Model

Performances in percentage	Scores point
0-10	0
10-20	0.5
20-30	1.0
30-40	1.5
40-50	2.0
50-60	2.5
60-70	3.0

Kerg model 2004

3.4.4Interpretation of ScoresIndex

The interpretation of score index occurs when there was need to give a level of significant or draw conclusion as to the level of implementation of the development projects. In doing that, Kerg model uses four categories of rating which are none, partial, moderate and full in interpreting the scores index of the development projects/programmes as shown below.

1. None level of implementation: This was when the proposal of the plan has not been implemented at all. In this case the implementation of the development project or programmesis operating at 0% of its proposals.
2. Partial level of implementation: This was when the proposal of the plan is implemented but the implementation level is between 01-39% and having score index of 0.1-1.9.

3. Moderate level of implementation: This was when the proposed development project/programme of the plan is implemented but the implementation level is operating between 40-59% of its proposal and having score index of 2.0-2.9.
4. Full level of implementation: Thiswas when the proposed development project/programmeis implemented but the implementation level is operating from 60% and above of it proposal and has a score index of 3.0.

Table 3.4.4: Interpretation of Scoring of Kerg Model

Score index	Interpretation	Implementation outcomes (%)	Implementation level
0	Zero effect on the requirement of the proposed project/programme of the plan	0%	None
0.1-1.9	Low and weak effect on the required proposed project/programme of the plan	01 – 39%	Partial
2.0-2.9	Average and strong effect on the required proposed project/programme of the plan	40– 59%	Moderate
3.0+	Adequate effect on the requiredproposed project/programme of the plan	60+	Full

Kerg model, 2004; Modified by Author 2014

3.4.5The Weighting of the Total ScoresIndex

The weighting of the total scores index is the summation of the overall scoring of the proposed development projects/programmes implemented. The overall weighting also takes the form of individual project/programmes implemented by cumulatively adding the overall attributes of the development projects/programmes implemented divided by the overall proposed of the projects/programmes multiply by 100 thereby subjecting the outcome to the score index established by the model and draw conclusion as shown on table

Table 3.4.5: Total Scores Index.

Implementation outcomes (%)	Implementation level	Score index
0	None	0 point
01-39	Partial	0.1 point-1.9 point
40-59	Moderate	2.0 points-2.9 point

60 and above	Full	3 points and above

Source: Kerg 2004

Mathematically, Kerg model is expressed as.

$$K=\Sigma x/n*100$$

K = constant value (this is the means of the Kerg point).

Σx = summation of the point of individual project performance scores.

n= total number of scores in Kerg index.

3.4.6Rationale in the Application ofKergModel in thisStudy

Bwari master plan proposals are physical development projects/programmes on the ground and their attributes are feasible and can be measured numerically, physically, socially and economically.In using Kerg model as assessment criteriain this study, the establishment of score index for points was exempted due to complexity of result rather simple percentage was used as the scoring index for simple presentation of result and analysis. The study also chooses five categories of rating ranging from none, weak, low, fair, full were used to show the level of implementation of the plan’s proposals. The choice of this kind of rating was due to the fact that the implementation of the plan proposals is still on-going and the choice of rating like “partial and moderate” cannot depict that the implementation of the master plan is on-going rather it shows that designed phases for the implementation of the plan has been exhausted which has not. As revealed in table 3.4.6, Modification was also made to include “weak” level of implementationwhich has an outcome level of between 01-19%. This was included to guarantee detail level of performance of the development projects/programmes

Modification was also made to include the type of recommendation to be given at each level of implementation. To achieve that, each opinion of the speculative stakeholders were involved. The recommendation assumed that each rate of performance of the proposal can only guarantee either the review of both the strategies used in the implementation of the proposal and the proposal themselves, or the review of either the proposal or the implementation strategies themselves thereby holding one constant, or the two of the suggestion be hold constant or suspended.

To assign each recommendation to the rating of the implementation of the study, the study assumes that "None and weak level of implementation" is a critical stage of the implementation and it was recommended that both of the implementation strategies and the proposal of the plan themselves be reviewed while proposals with low levelof implementation was recommended that either of the proposal of the plan or the implementation strategies used for the implementation of plan be reviewed if there is need for improvement in the implementation of the proposal of the plan. The study also assigned that proposal with fair level of implementation should be recommended for the implementation strategies and the proposal of the plan be maintained. This was the fact that the proposal of the plan can attend full implementation considering the present phase of the plan if nothing is changed between the proposal of the plan and its implementation strategies. Proposal with full implementation was recommended that the implementation of the proposals and the implementation strategies should be suspended. This was due to the fact that the proposal had attended full implementation and there is no need for further implementation of it in the urban area to avoid over concentration of the land uses at the detriment of other uses.

Table 3.4.6: Summary of the AssessmentCriteria for the Study

Implementation outcome (%)	Interpretation	Level of implementation	**Remarks**	Recommendation
0	Zero effect on the master plan proposals	None	Not achieving at all	Implementation strategies/the proposal of the plan both be reviewed
01-19	weak effect on the master plan proposals	Weak	Achieving but weak	Implementation strategies or the proposal of the plan be reviewed
20-39	Low effect of the master plan proposals	Low	Achieving but on low level	Implementation strategies strengthened while the proposals be held constant

40-59	Average and strong effect on the on the master plan proposals	Fair	Achieving adequately	Implementation strategies and the proposal of the plan be both maintained
60+	Adequate effect on the master plan proposals	Full	Had achieved	Implementation strategies and the proposal of the plan be suspended

Source: Kerg 2004 but Modified by author, 2015

3.5 ANALYTICAL FRAMEWORK FOR THE STUDY

As reviewed in figure 3.5 the analytical framework of the study content six stages. All the stages were employed to ensure effective analysis of the data for the study.

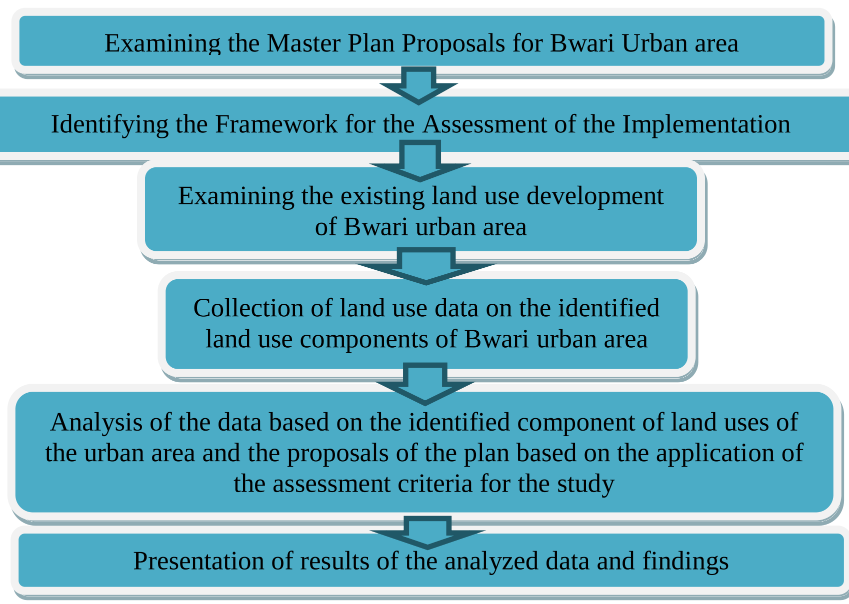


Figure 3.5: Analytical Framework of the Study
Source: Field Survey, 2015

3.5.1 Examining the Proposals ofMaster Plan

The source of this data was from the review of proposals which was embedded in the master plan document. It was the basic requirement for the study. The data reviewed from the document was presented in table. Though the use of prototypes map was attached to establish the proposed distribution pattern of the land uses.

3.5.2 Identification of the Framework for the Assessment

The framework for assessment identified for this study is the Kerg model was used to establishthe rate of the implementation of the master plan as revealed in the study.

3.5.3 Examining the Existing Development of BwariUrban Area

The data for this analysis were collected by the use of satellite imagery. The imagery of the study area were collected and digitized as a raster image. The raster image wasqueried and relationships between the imageries and the ground component were analyzed. on the map and that of the ground. The established relationship was done through personal survey. The personal survey was the medium at which numerical value of data were collected.

3.5.4 Collection of Data

Data collected for the study were basically land use types and it was collected through the review of the document of the master plan and that of the study area. The data reviewed from the master plan document were cross examined with the provision in the study area to ascertain the level of performance.

3.5.5 AnalyzingData for the Study

The analysis of data was done through cross examination of the data reviewed in the study area and that of the master plan document. This was to ascertainthe level of implementation of the plan in urban area. Kerg model was used as criteria for this purpose.

3.5.6 Conclusion and Recommendation

These were inferences and suggestions drawn and given from the overall study. Inferences are conclusion drawn from the overall study while suggestions were the advices given at the end of the assessment. Inferences were drawn from the result of the entire outcome of the study while suggestions attempted to seek the way forward based on the established outcome of the study.

CHAPTER FOUR
ASSESSMENT OF THE IMPLEMENTATION OF THE PLAN

4.1 Introduction

As revealed in chapter three, the study is basically a conformance based study. To achieve that, chapter four of the study fore mostly examine the existing land use development of the Bwari urban area and thereby using it to assess the level of the implementation of the land uses of the plan. The assessment only limits itself to the proposal of the individual land uses and land use elements of the plan. The study also concentrated on theimplementation of the numerical values of the land uses and the land use elements in space and their land area coverage.

4.2 The Bwari Land Uses Development

After the assessment of the study area, the study show in figure 4.3 and table 4.3 that not all proposal of the plan for the urban area have been implemented. The land use that has experience development comprises forresidential land uses, land usefor commercial services, educational land uses, land use for health services, public/institutional land uses, industrial land uses, and land use for socio-cultural services. Others include land use for hospitality industry, land use for road circulation and open spaces which wasmeant for future development.The number of the land use plots developed are 18512 comprises of 17975 for residential, 28 for educational, 22 for health services, 21 for socio-cultural services, 268 for industrial services and 16 for institutional services. Others include 30 for commercial services and 67 for road circulations. The developed land uses covered an area of1478ha comprises of 569.50ha for residential land uses, 108.10ha for educational, 8.87ha for health services, 8.59 for socio-cultural services, 27.24ha for industrial services and 125.73ha for public institutions. Others also include 14.25ha for commercial services and 235.89ha for road circulation as revealed in table 4.3. Unorganized open spaces and agricultural land are land use meant for future development as proposed by the plan. The table also revealed the land use element for each of the land use in the study and the number of land uses developed by each of them. The area land coverage for each of them was also revealed as seen in table 4.3.

4.3Descriptions of the Development of BwariLand Uses

As revealed in figure 4.3, the study shows that most land uses ofBwari urban area are located in the high density residential area. With only few of the land uses distributed in the planned areas of medium and low densities. The location of most land uses in the high density residential area was dueto the fact that land in the high density residential area were of less cost compare to the medium density and high densities areas and conscious planning regulation is not applicable in the development of the land uses in the high density area compared to the medium density and low density residential areas.The study also revealed that residential land uses is the most dominant land uses of the study area followed by educational land uses, land uses for health services, commercial land uses, institutional land uses and socio-cultural land uses. Though some of the land uses were found as mixed land uses to others land uses but assessment were made on land uses that has defined land area. The land uses that fall into the mixed land use category are some of the educational land use elements such as primary schools and nursery school, land use elements for health services dispensaries and health offices and commercial land uses and commercial services such as corner shops, departmental store and business centers.

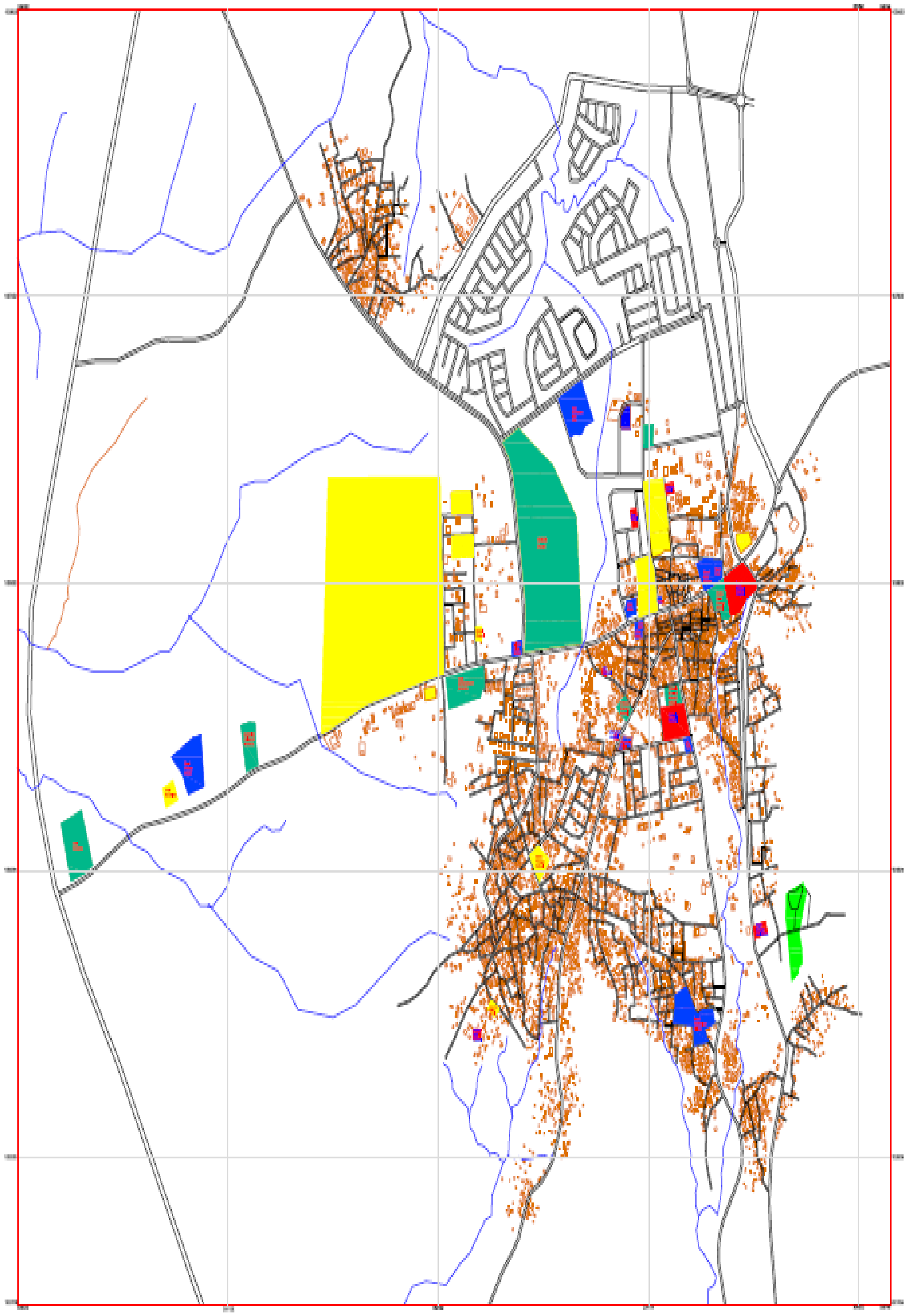


Figure 4.3: ExistingLand Use Development of Bwari Urban Area
Sources: Field Survey, 2014

Table 4.3: Existing LandUse Developmentof BwariUrban Area

Land Uses	Land Use Elements	Proposed Land Use Plots		Total land area (ha) of the land use plots	
		Proposed	Existing	Proposed	Existing
Residential Land Uses	Low density residential land uses Medium density residential land uses High density residential area	6460 969030000 13850	1471 351917975 12985	1587.568 610.602503.46 305.30	147.93 211.20569.50 210.37
Educational Land Uses	Primary school Nursery school Nursery/primary School Specialized institution Secondary schools Technical/vocational school Secondary/technical/vocational University	15 25 4 261 9 4 1 1	5 12 3 028 7 0 0 1	3.75 4.50 1.75 100177.68 4.5 2.00 0.5 160.0	0.95 1.40 0.96 0.00108.10 2.30 0.00 0.00 102.49
Land Uses for Health Services	Maternity homes/Health clinics Health centers General hospital/Medical centers Neighborhood hospital Dispensaries Health offices	9 6 150 3 13 18	4 5 122 3 3 6	1.11 1.50 2.0114.25 4.11 0.50 5.02	0.67 0.46 1.618.87 3.23 0.24 0.20
Socio-cultural Land Uses	Place of worship Cemeteries Public libraries Post offices Community sport center Stadium Neighborhood parks Central parks Museum	10 2 1 1 127 4 6 1 1	17 2 1 1 021 0 0 0 0	3.22 1.86 0.50 0.50 6.3032.42 8.03 9.00 2.01 1.00	5.06 3.17 0.23 0.13 0.008.59 0.00 0.00 0.00 0.00
Industrial Land Uses	Large/major industries Medium scale industries Small scale industries	31 64990 895	4 26268 238	37.56 48.70139.96 53.70	6.05 6.9227.24 14.27
Recreational Land Uses	Children playground Organized open space Parking area/space Playground (adult) Sport complex/game village African garden Recreation/open spaces Org. open spaces/children Playground Public open spaces District parks Motor parks	3 6 2 1 1 122 2 1 3 1 1	0 0 0 0 0 00 0 0 0 0 0	0.84 3.28 0.58 0.41 22.37 0.2233.93 1.27 0.40 2.24 1.37 0.95	0.00 0.00 0.00 0.00 0.00 0.000.00 0.00 0.00 0.00 0.00 0.00
Institutional Land Uses	Administrative institutions Traditional institutions Judicial institutions Security/safety institutions	34 1 550 10	4 1 516 6	149.22 0.64 4.90165.97 11.21	115.95 0.47 4.01125.73 5.30
Commercial Land Uses	Shopping centers Petrol/filing stations Corner's shops Markets Commercial Banks Business centers Commercial centers Shopping malls	23 4 3 3 238 1 1 1	7 3 2 3 530 6 2 2	10.0 2.52 0.42 2.25 1.2319.54 1.30 0.71 1.11	2.94 0.95 0.16 2.05 3.9014.25 0.67 2.01 1.57
Land Use for Road Circulation	Arterial road Collector road Local access road	1 3274 270	1 367 63	22.78 107.04802.27 672.45	21.09 102.84235.89 111.96
Unorganized open space/vacant land	Unorganized open space/green area and agricultural/Vacant land	-		**2186.80**	**5356.16**
Total		**31,512**	**18413**	**6455.011**	**1478.00**

Source: Field survey, 2015

4.4 Level of development of BwariLand Uses

As revealed in table 4.3, the cumulative land use development in Bwari urban area is 18413 and the land uses covers 1478ha of the urban area which represents 17.02% of the overall land area proposed by the plan for the land uses. This indicates that undevelopedarea of Bwari urban area is82.98% of the proposal. It also indicates that large span of land has not been developed in the urban areaas revealed in table 4.4.

Table 4.4: Level of Bwari Land Use Development

Level of Development of the Land uses	**Land area (ha)**	**%**
Developed Area	1098.85	17. 02
Undeveloped area	5356.16	82.98
Total	**6455.011**	**100**

Source: Field survey, 2015

4.5 The Assessmentof the Implementation of the Land Uses

In the assessment of the implementation of the land uses, the study assumes that no development on land without a plot and no plot without a plan. The study also assumes that any development of landin the study area has an effect on the proposal of the plan and any plot developed is assumed implemented. The assessment was done through the use of the criteria below.

$$K = \Sigma x/n*100$$

4.5.1Implementation ofLand Uses for Residential Density

The study revealed that residential land useis the bulk of the land uses of the study area and it constitutes the highest of the land use element of the study area with 59.91%. The land use also covered the highest of the land area of the study area with 569.50ha which represents 22.74% of its proposal in the plan. Among the land use elements of the residential land uses, the high density residential land use element constitutes the highest of the land use elements of residential land useswith 72.24% while low density residential land uses and medium density residential land uses constitutes 7.55% and 20.01% of the land use element of residential land uses respectively. The high density residential land usesalso occupy the largest area of residential land uses with39.21%while low densitiesand medium density of the land uses coverthe land area of 24.61% and 36.18% respectively.Meanwhile the proposed number of land use plots implementedreveals that 93.76%, 36.32% and 22.78% of the high density, medium density and low density residential land use elementshave been implemented respectively.

However, theimplemented land area revealed intable 4.5.1 shows that highdensity residential land useshave attended full implementation withimplementation outcome of 68.90% indicating that the land use element had achieved adequatelyand need no further implementation of the land use in the study area to avoid overconcentration of theland use element. Meanwhile, land area for medium density residential land uses havelowlevel of achievement with implementation outcome of 34.58%signifying that the land use elements is being achieved but below level which implies that the implementation strategies need to be strengthenedthereby holding fast the proposal of the plan as it has been if there need for improvement in the implementation of the land use element. However, low density residential land uses have weak implementation with implementation outcome of 9.32% indicating that the land use is achieving but at the weak level signifying that either the proposal of the plan or the implementation strategies be reviewed if there is to guarantee improvement in the implementation of the land use element.

Table 4.5.1: Implementation of theLand Area for Residential Density

Land use elements	Total land area proposed	Total land area implemented (ha)	Implementation outcome (%)	Implementation Level

High residential Density	305.30	210.37	68.90	Full
Medium residential density	610.60	211.20	34.58	Low
Low residential density	1587.57	147.93	9.32	Weak

Source: Field Survey, 2015

4.5.2ImplementationofLand Uses for Educational Services

The study also revealed that educational servicesconstituteonly 0.15% of the total land usesof the study area which is the third largest land use elements implemented in the study area. The land use covered an area of 108.10ha and hasan area density of 0.06% of the entire land area of the study area. The land use occupies an area of 6.20% of the entire area of the study areawhich represents 39.02% of the proposal in the plan.Among the land use elements of educational land uses, Nursery school has the highest land use element ofthe educational land useswith 42.85% and covered an area of 31.11% of its proposal in the plan while university constitutes the lowestof the land use elements with 3.57% and also covers the largest land area of the educational land uses with 94.81%.Meanwhile, the implementation of the land use plots reveals that 48.00%, 33.33%, 75.00%, 100.00% and 77.77% ofthe proposed land usesfor nursery schools, primary schools and combined primary/secondary school, combined secondary/technical/vocational school, a university, secondary school, technical/vocational school have been implemented respectivelywhile land use for specialized institution hasnot been implemented.

However, the implemented land areaof the land use elements indicates intable 4.5.2shows that onlyone of the land use elementhadattended been fully achieved with implementationoutcome of 64.06% indicating that the land use element had fully achieved and no need for further implementation of the land use element in the study area to avoid overconcentration of the land use element over others. Meanwhile, three of the land use elements are not achieving at all. They all have the implementation outcome of 0.00% of their proposals signifying that their proposals and the implementation strategies used in the implementation of the proposal need to be reviewed if there is need for improvement in the implementation of the land use elements. However two of the land use elements have low level of achievement while two also have fair level of achievement. The two with low level of achievement are indicating that there is need for the strengthening of the implementation strategies thereby holding fast the proposal of the plan as it is if there is need for improvement in the implementation of the land use elements while two with fair level of achievement are indicating that the level of implementation of the proposal is adequate considering the present stage of implementation of the plan. As such the implementation strategies and the proposal of the plan for these land use elements need to be maintained to avoid over-implementation of the proposal at the expiring phase of implementation of the plan.

Table 4.5.2: Implementation ofLand Area for EducationalLand Uses

Land Use Elements	**Total Land Area Proposed (ha)**	**Total Land Area Implemented (ha)**	**Implementationoutcome %**	**ImplementationLevel**
Nursery school	4.50	1.40	31.11	Low
Primary school	3.75	0.95	25.33	Low
Nursery/primary school (combined)	1.75	0.96	54.85	Fair
Secondary school	4.50	2.30	51.11	Fair
Technical/vocational school (combined)	2.00	0.0	0.0	None
Secondary/technical/vocational school (combined)	0.50	0.0	0.0	None
University Specialized institutions	**160.00** 100.00	102.49 0.0	64.06 00.00	Full None

Source: Field survey, 2015

4.3Implementation of Land Uses for Health Services

The study also shows that land use for health services constitutes 0.12% of the total land use elements of the study area. The land use represents the third largest land use elements of the study area. Though 92.10% of the land use is privately owned, theland use cover an area of 8.87ha which represents 62.24% of the total land area proposed for the land use in the plan. The public sector only owned less than 10.00% of the land use elements for health services. The study also revealed that 44.89% of the land uses proposed for this sector have been implemented and the implemented land uses cover an area of 8.87ha.The land use also hasan area density of 0.06% and occupies a land area of 0.6%of the total land area of the study area. However, the implementationof theproposed land use elements for the land use reveals that33.33%, 23.07%, 44.44%, 83.33%, 100.00% and 100.00% of theland use elements for health offices, dispensaries maternity home/clinics, health centers, neighborhood hospital and thegeneral hospital havebeenimplemented respectively.

Nevertheless, the implemented land areaof the land useelements indicated intable 4.5.3shows that three of the land use element for health services have attendedfull implementation with implementationoutcome of 67.05%, 80.75% and 80.67%respectively indicating that the land use elements hadachieved and need no further implementation of theproposal in the study area to avoid over concentration of the land use elements at the detriment of others. Meanwhile, only one of the land use elements has low level of implementation which is the health center. The health center has theimplementation outcome of 30.67% indicating that the land use element is achieving but below average which signified that there is hope for the land use elements to attend full implementation if the implementation strategies of the plan are strengthened and the proposals are maintained. Nevertheless, two of the land use elements have fair level of implementation with implementation outcome of 53.09% and 48.86% respectively which indicates that the land use elements are achieving adequately considering the present phase of the implementation of the plan. In this case the implementation strategies for the implementation of the proposals and the proposals themselves need to be maintained to avoid either over-implementation of the proposal at the expiring phase of the plan or under implementation of the proposal especially if the implementation strategies use in the implementation of the proposals is suspended while the proposals are maintained.

Table 4.5.3: Implementation of the Land Area for Health Services

Land Use Elements	Total Land Area Proposed (ha)	Total Land Area Implemented (ha)	Implementation outcome (%)	Implementation Level
Health offices	5.02	2.66	53.09	Fair
Dispensaries	0.50	0.24	48.86	Fair
Maternity homes/private clinics	1.11	0.67	67.05	Full
Health centers	1.50	0.46	30.67	Low
Neighborhood hospital	4.11	3.23	80.75	Full
General hospital	2.01	1.61	80.67	Full

Source: Field Survey, 2015

4.5.4Implementation of the Land Uses forSocio-cultural Services

For socio-cultural land uses, the study also revealed that the land use constitutes 0.11% of the land uses of the study area and the land use implemented represents 77.77% of the total land uses proposedby the plan for the urban area.The land use covers an area of 8.59ha of the total land area which represents 20.03% of the total land area proposed by the plan for the land use. The land use alsohas an area density of 0.058% and covers anarea of 0.58% of the total land area of the study area. However, the number of the proposed plot implemented for the land use elements reveals that50.00%, 100.00%, 170.00% and 100.00% of thepublic library, postal service,places of worship and cemeteries have been implemented respectively.

Meanwhile, the implemented land area of the land use elements indicated intable 4.5.4shows that six of the socio-cultural land use elements have none level of achievement. They all have 0.00% of the implementation outcome of their proposals indicating that none of the land use elements had been implemented which signify that the implementation strategies and the proposals of the plan for the land use elements need to be reviewed if there is need for the improvement in the implementation of the land use elements before the expiring phase of the plan. Nevertheless, two of the land use elements have attended full implementation with implementation outcome of 157.14% and 170.43% respectively. This indicates that the land use elements had fully achieved and need no further implementation of its proposals in the urban area to avoid more over concentration of the land use elements as it has already been over-concentrated. Meanwhile one of the land use elements has fair level ofimplementation and one also has low level of implementation. The one with fair level of implementation has implementation outcome of 46.00% which indicates that the land use element is achieving adequately and need no any review of either the proposal of the plan or the implementation strategies for improvement in the implementation process of the plan. While the one with low level of implementation has an implementation outcome of 26.00% indicating that the land use element can attend full implementation considering the present phase of the implementation of the plan if the implementation strategies are strengthened and the proposals are held constant.

Table 4.5.4: Implementation of Land Area for Socio-cultural Services

Land use elements	Total Land Area Proposed (ha)	Total Land Area Implemented(ha)	Implementation outcome (%)	ImplementationLevel
Stadium	8.03	0.00	0.00	None
Community sport center	6.30	0.00	0.00	None
Central/neighborhood parks	11.01	0.00	0.00	None
Museum	1.00	0.00	0.00	None
Library	0.50	0.23	46.00	Fair
Cultural/games village	10.45	0.00	0.00	None
Postal services	0.50	0.13	26.00	Low
Places of worship	3.22	5.06	157.14	full
Cemeteries	1.86	3.17	170.43	Full

Source: Field survey, 2015

4.5.5Implementation of Land Usesfor Industrial Services

Land use for industrial activities constitutes the fourth largest land uses of the study areawith 1.46%. The land use covers an area of 27.24ha which represents 1.018% of the total area of the study area and has an area density of 0.018%. The land area implemented also represents 19.46% of the total area proposed for development by the plan for the land use. The study also revealed that 26.70% of the proposed industrial land use elements have been implemented. Meanwhile the implementation of theland use elements for the industrial servicesrevealsthat 12.90%, 40.62% and 26.59% of the proposed large scale industrial service elements,medium scale industrial service elementsand small-scale industrial service elementshave been implemented respectively.

However, the implemented land area for the land use elements indicates in table 4.5.5showsthat two of the land use elements for industrial land uses have weak level of Implementation with implementation outcome of 11.26% and 14.21%respectively indicating that the implementation of the land use elements is achieving but at a weak level and might not attend full implementation if either the proposal or the implementation strategies use for the implementation of the proposal of the land use elements are not review. Meanwhile one of the land use elementswhich is the large industrial service element has low level of implementation with implementation outcome of 37.99% signifying that the land use element can attend full implementation if the implementation strategies of the land use elements are strengthened and the proposals of the planmaintained.

Table 4.5.5: Implementation ofLand Area forIndustrial Services

Land use elements	Total Land Area Proposed (ha)	Total Land Area Implemented (ha)	Implementation outcome (%)	Implementation Level
Small scale industrial land uses	53.70	6.05	11.26	Weak
Medium scale industrial land uses	48.70	6.92	14.21	Weak
Large scale industrial land uses	37.56	14.27	37.99	Low

Source: Field survey, 2015

4.5.6 Implementation of Land Use forRecreational Services

For the case of recreational land uses, the study revealed that none of the land use element has experienced any level of implementation. As a result table 4.5.6;show that all the recreational land use elements are not achieving at all. They all have 0.00% outcome of implementationindicating that none of the proposal for the land use has been implemented in the study area.

Table 4.5.6: Implementation of Land Area for Recreational Services

Land use elements	Total Land Area Proposed (ha)	Total Land Area Implemented	Implementation outcome (%)	Implementation Level
Children playground	0.84	0.0	0.0	None
Organized open space	3.28	0.0	0.0	None
Adult playground	0.41	0.0	0,0	None
African garden	0.22	0.0	0.0	None
Recreational/open space (combined)	1.27	0.0	0.0	None
Organized open space/children playground (combined)	0.40	0.0	0.0	None
Public open space (unspecified)	3.61	0.0	0.0	None

Source: Field survey, 2015

4.5.7Implementation of Land Uses for Public Institutions

The study also revealed that Institutional land use of Bwari constitutes the least of the land uses of the study area. Though, the land use occupies the second largest area of the study area with 125.57ha but only constitutes 0.08% of the land uses of the study area. The land use has an area density of 0.85% of the entire land area of the study area. The implemented land uses constitutes 27.07% of theland useselements proposed to be developed by the plan and represents 76.00% of the total land area proposed by the plan for the land use. Though mostof the institutional land uses proposed have not been implemented but the ones implemented serve as reference points in the study area because of their uniqueness in space and land area coverage of the land use compare to other uses. Meanwhile the proposed institutional land use elements implemented in the study revealed that 100.00%, 11.76% and 70.00% of theland use element for traditional and judicial institution, administrative institutional and security and safety institution havebeen implemented respectively.

Nevertheless, the implemented land area for the land use elementsindicates in table 4.5.7shows that the three of the land use elements for public institutional land uses have attendedfull implementation with implementation outcome of 77.60%, 82.24% and 73.43% respectively indicating that the land use elements hadachievedadequately and does not need further implementation of theirproposals to avoid the over concentration of the land use elements in the urban area. However, one of the land use elements which is the security and safety institution is having fair level of Implementation with implementation outcome of 50.47% indicating that the land use element is achieving adequately and can attend full implementation if the proposal of the plan for the land use element and the implementation strategies are maintained.

Table 4.5.7: Implementation of Land Area for PublicInstitutions

Land use elements	Total Land Area Proposed (ha)	Total Land Area Implemented(ha)	Implementation outcome (%)	ImplementationLevel
Administrative institutions	149.18	115.77	77.60	Full
Judicial institution	4.90	4.03	82.24	Full
Traditional institution	0.64	0.47	73.43	Full
Security/safety institution	10.50	5.30	50.47	Fair

Source: Field Survey, 2015

4.5.8Implementation of Commercial Land Uses

Commercial land uses of the study area was supposed to be developed through public private partnership approach but as at the time of investigation, the study revealed that only Bwari Area Council has been responsible for the development of the sector in the urban area. Meanwhile, the land use constitutesonly 0.16% (informalities non-inclusive) of the total land use element of the study area and has an area density of 0.0096%. The land use also occupies a land area of 14.25ha which represents 72.92% of its proposal in the plan and also represents 0.96% of the total land area of the study area. The study also revealed that 78.94% of the land usesproposed for commercial land usehave been implemented. Among the land uses implemented, Commercial bank covers the largest portion of the land area implemented for commercial land uses with 26.37% while corners shop occupies the lowest of the land areaimplemented for the land use with 1.12%. For the implementation of the proposed land use elements, the study reveals that 250.00%, 100.00, 30.43%, 66.66%, 600.00%, 200.00%, 75.00% and 75.00%of the proposed land use elements for commercial banks, specialized market,shopping centers, corner shops, business centers, commercial centers, shopping mall and petrol/filing station havebeen implemented respectively.

Meanwhile, the implemented land area for the land use elements indicates in table 4.5.8shows that six of the land use elements for commercial land uses have attended full implementation with implementation outcomes of 91.22%, 95.77%, 180.00%, 176.47% and 87.21% respectively. This indicates that the land use elements have achievedadequately and need no further implementation of theproposal in the study area to avoid over concentration of the land use elements in the urban area at the detriment of other elements. Nevertheless, one of the land use elements has low level of implementation; one has fair level of implementation while one has noimplementation. The one with fair level of implementation which is the corner shop has implementation outcome of 38.69% indicating that the implementation of the land use is achieving adequately considering the present phase of the implementation of the plan. In this case the implementation strategies and the proposal of the plan for the land use elements are maintained because any action of reviewing either the implementation strategies or the proposal can lead to under implementation or over implementation of the proposals especially at the expiring phase of the plan. Meanwhile the one with low level of implementation is the shopping center. It has the implementation outcome of 28.11% which indicates that the land use element can still attend full implementation if the implementation strategies use for the implementation of the proposal are strengthened while the proposal are held constant. While the other one with no implementation is the departmental store. It has implementation outcome of 0.00% indicating that none of the proposal of the plan for the land use element has been implemented and it signify that both the implementation strategies and the proposal of the plan for the land use element need to be reviewed if improvement need to be recorded in the implementation at the expiring phase of the plan for the land use element.

Table 4.5.8: Implementation of Land Area for Commercial LandUses

Land Use Elements	Total Land Area Proposed (ha)	Total Land Area Implemented (ha)	Implementation outcome (%)	ImplementationLevel
Commercial Banks	1.30	3.90	300	Full
Specialized market	3.48	2.05	91.22	Full
Business centers	0.71	0.67	95.77	Full
Shopping centers	10.00	2.94	28.11	Low
Commercial center	1.11	2.01	180.00	Full
Shopping malls	0.89	1.57	176.41	Full
Petrol station	2.52	0.95	87.21	Full
Departmental store	0.41	0.0	0.0	None
Corner's shop	0.42	0.16	38.69	Fair

Source: Field survey, 2015

4.5.9Implementation of Land Uses for Road Circulation

The assessment of land use for road circulationwas based on mere existence of roads that can be identified and recorded in the study area irrespective of the quality of the roads available. At the time of the assessment, the study revealedthat 74.47% of the proposals of the plan for road circulation have been implemented. The road implemented covers a total land area of 235.89ha which represents 29.40% of the total land area proposed for it in the plan. Bwari road circulation also constitutes 16.01% of the total land area of the studyarea. For the individual land use element of the road circulation, the study revealed that arterial road covers the lowest portion of the land area of the road circulation with8.94% while local distributor occupies largest portion of the land area with 47.46%. The implementation of the proposed land use elementsfor the road circulationalso reveals that 100.00% and 23.42% of the proposals for arterial road and collector road each have been implementedrespectively while 23.42% of thelocal distributors havealso been implemented.

However, theimplemented land area for the land use elements of road circulation indicates intable 4.5.9shows that the two of the land use elements which is the arterial and Collector roads have attended full implementation with implementationoutcome of 92.56% and 96.08%respectively indicating that the land use elements had achieved and no need for further implementation of theirproposals in the study area. As such, any attempt can lead to over-implementation of the proposals for the land use elements in the urban area.Nevertheless local access has low level of implementation with implementationoutcome of 16.65% indicating that the proposal of the plan is achievingbut below average which implies that the land use element can attend full implementationif the proposal of the plan isheld constant while the implementation strategies for itsimplementation strengthened.

Table 4.5.9: Implementation of Land Area for Road Circulation

Land Use Elements	Total Land Area Proposed (ha)	Total Land Area Implemented (ha)	Implementation outcome (%)	Implementation Level
Arterial roads	22.78	21.09	92.56	Full
Collector's roads	107.04	102.84	96.08	Full
Local access roads	672.45	111.96	16.65	Weak

Source: Field survey, 2015

4.6 Overall Achievement of the Implementation of the Land Uses of the Plan

At the end of the assessment, the study revealed that 58.53% of the proposal of the land uses for the urban area has been implemented. The implemented land uses only covered 17.02% of the land area proposed for the development of the land uses. The percentage of the land uses implemented per each category of the land use shows that 59.91%, 45.90%, 44.00%, 77.77%, 27.07%, 0,00%, 32.00%, 78.94% and 24.45% of the proposed land uses for residential areas, educational land uses, land use for health services, socio-cultural land uses, land use for industrial services, recreational land uses, land use for public institutions, commercial land uses and land use for road circulations have been implemented respectively. One could be tempted to say that the implementation of the proposal of the plan is achieving but it will be interested to note the 58.53% of the overall numbers of the land uses proposed that are implemented only covered 17.02% of the land area designated for the implementation of the land uses. This is not interesting at all considering the present phase of the implementation of the plan for the urban area. One could also say that the proposal of the plan for the land uses were too ambiguous which is not true. The only reason behind the performance stage of the implementation of the land uses is the fact that most of the land uses implemented are located in the high density residential area and the high density residential areas have no standard planning regulation is applied during implementation anddevelopment of the land uses. And these areas have cost of land compared to planned areas of medium density and low density. The areas also have less or no bureaucracy nature in land acquisition and control and also less political interferences during the process of land acquisition and control of development.

Meanwhile, table 4.6.2 show that the implemented land area for each of the land uses indicates that none of the land use has attended full implementation rather two of the land uses have fair level of Implementation with implementation outcomes of 49.42% and 48.40% respectively indicating that the land uses are achieving adequately considering the present phase of the implementation of the plan thereby encouraging the maintenance of the proposal of the plan and the implementation strategies use for the implementation of the proposal of the plan. Nevertheless, one land use has low level of implementation, one also has no implementation and four have weak level of implementation. The land use with low level of implementation has implementation outcome of 23.11% indicating that the land use is performing but below average but can attend full implementation if the implementation strategies use for the implementation of the proposals of the land uses are strengthened while the proposals for the land use are held constant. The land use with no implementation has implementation outcome of 0.00% as specified by the assessment criteria which signify that none of the proposal for the land uses is implemented in the study area. This level of achievementcalls for total overhaul of the proposal of the plan and its implementation strategies if improvement needs to be achieved in the implementation process of the land uses. The land uses with weak have implementation level of 18.65%, 5.18% and 11.72% respectively indicating that the land use is achieving but at weak level signifying that either the implementation strategies or the proposal of the plan for the land uses need to be reviewed if improvement need to be made in the implementation process of these land uses of the plan.

After the end of the overall assessment, the study revealed that the overallachievement of the implemented land area of the plan is weak considering the present phase of the implementation of the plan as revealed in table 4.6.2. The overalldesignated land area for the implementation of the land uses has the implementation outcome of 17.02% indicating that the implementation of the land area is achieving but at the weak level signifying that there is need for a review of either the proposal of the plan for the land uses or the implementation strategies use for the implementation of the land uses of the plan.

Table 4.6Overall Implementation of the Total Land Area of the Land Uses of the Plan

Land Uses	Total Land Area Proposed (ha)	Total Land Area implemented (ha)	Implementation outcome (%)	Implementation Level
Residential	3053.00	569.50	18.65	Weak
Commercial	275.07	14.25	5.18	Weak
Educational	218.75	108.10	49.42	Fair
Service/industry/employment areas	381.25	44.70	11.72	Weak
Public/government institutions	260.41	126.41	48.40	Fair
Recreational	101.50	000.00	0.00	None
Circulation	1020.53	235.89	23.11	Low
Green/undevelopable area	1162.50	Nil	Nil	Nil
Total	**6455.011**	**1098.85**	**17.02**	**Weak**

Source: Field survey, 2015

4.7 Performance of the Institutions Responsible for the Implementation of BwariMaster Plan

The study also revealed that it is not all agencies reviewed in chapter two of this study are responsible for the land use implementation of the urban area. Some of the institutions are used as supporting agencies for utilities and service provisions in the study area while other are used as subsidiaries agencies that augment the activities of FCDA who are the pioneer of physical (with land use inclusive) development of the FCT and its environ. The assessment of the performance of these institutions was focus on agencies with direct influence on land use implementation of the urban area. And these agencies include the FCDA as a mother agency andsubsidiary agencies such as the STDA, AMMC, AGIS, BAC and the AEDB. At the end of the assessment, the study revealed that is was not all land uses that have been allocated for development by the FCDA have been developed.

Others intending developers have not submitted their intending plan for approval of development and some that have been submitted have not been approved which serves as a yardstick for the development of the urban area. among these, table 4.7 shows that out of the 31,512 number of land usesproposed for implementationby FCDA only 23.83% of the land uses have been allocated for development and among the land uses allocated for development only 53.44% of the intending developers have submitted their plans for approval of development and among these only 90.01% had been approved for development. It was also revealed by the study that none of the STDA proposed project for the development of Bwari urban area has been implemented because of lack of approval of annual budget for the development of the area and the study also revealed that there were also controversial structures that have been mark for demolition by AMMC but no action was made on them because of the political interferences as revealed in table 4.7.

Table 4.7: Performance of the Institutions Responsible for the Implementation of Bwari master Plan

Public institutions	Performance of the institutions for Land use development of the urban area
FCDA	It's responsible for the 31,512 of the land use elements proposed by the plan, 23.83% of the land use elements have been allocated for development among which only 53.44% have submitted their plans for approval of development and only 90.01% of the submission have been approved
STDA	None of the project proposed by this agency had been implemented in urban area
AMMC	The study revealed that controversial structures have been mark for demolition but no action was made on them because of the political interferences in the urban area.
AGIS	The study revealed that all the land use plots proposed of the plan has been computerized as the cadastral and land registry of the FCT.
BAC	The area council has been the institutions responsible for the provision some of health, educational recreational services of the urban area. Others include the services of solid and liquid waste management of the urban area.

Source: Field survey, 2015

4.8 Explanatory Factors Responsible for the Implementation Level of the Plan

1) **High Bureaucratic Nature Involves in the Land Allocation:**The study also established that land developers always finds it difficult to acquire land for development because of bureaucratic nature involves in land allocation and acquisition for development. The study also revealed that evenif there are situation where the land is accessible, it use to take longer time toacquire title and approval of development. Nevertheless, the cost of the land acquisition and approval is always expensive and not commendable.

2) **Political Interferences in the Land Allocation Process:**It was also revealed by the study that responsibility development agencies are frequently deterred by the political authority within the urban jurisdiction. A good example is the Abuja Municipal Management Council restriction to carry out its function severally on illegal and substandard property development in the Bwari urban area due to political interferences.

3) **Non-approval of Budget for some of the Proposed Projects of the Agencies for Development:** The study alsorevealed that most of the proposed projects of some of the agencies responsible for physical development of the urban area always failed execution because of non-approval of budget for such project by the National Assembly Budget review committee.

4) **Compromise on the Side of the Professional in the Discharge of Professional Duties:** It was also revealed by the study that some of the land use elements implemented are either over implemented or under-implemented indicating that there is over allocation of some of the land uses at the detriment of the others.

This calls for adherence to the professional ethic during discharge of duties by professional for physical development of the urban areas.

5) It was also revealed by the study that most of the land use implementation of the study area is witnessed in the high density residential areas which are mostly the indigenous area of the urban area where no conscious planning effort is applied for the development of land uses. This calls for the introduction of conscious planning regulations for indigenous area of the urban area to checkmate substandard development of land uses and to also avoid over concentration of development in the area thereby encouraging the development of planned areas.
6) The study also revealed that most of residential land uses were implemented within the customary land ownership where no conscious planning regulation is applied. This also calls for the introduction of conscious planning regulations for indigenous area of the urban area to checkmate substandard development of land uses and to also avoid over concentration of development in the area thereby encouraging the development of planned areas
7) The study also revealed that the commercial land uses were supposed to be developed through Public Private Partnership arrangement, but only the Bwari Area Council has been the sole developer of the commercial land uses in the urban area. This call for Bwari Area Council to establish enabling environment for the participation Public Private Partnership in the development of the land uses in the urban area.
8) Thestudy also revealed that the implementation of industrial sector of the urban area has been hindered through the absent of basic infrastructures facilities such

as roads, electricity and water within the layout designated for the land use activities. This calls for Bwari Area Council and the FCDA for the provision of these facilities to avoid proliferation of industrial activities in Bwari urban area.

9) The study also revealed that the implementationstage of institutional land uses was due to the fact that there has not been demand for citing of the public institutional land uses in the urban area by the ministry of the Federal Capital Territory Authority. This calls for the FCDA to undertake the decongestion of the FCC by citing most traffic driven land uses in the satellite towns to encourage their development.

10) The study also revealed that the educational land uses seem to be achieving fairly. This was the fact that the land use has a good number of land uses implemented within the highdensity residential area and most of these land uses are developed on converted land not initially meant for the land uses.This also calls for the introduction of indigenous planning regulations to avoid missed use of land in the indigenous areas of the urban area.

11) The study also witnessed that recreational land uses has no implementation indicating that none of the proposal of the plan for the land use has been implemented. This was as a result of the fact that Bwari Area Council has less priority in the implementation of the proposal of the plan for the urban area compare to other land uses. Thiscould also be as a result of none approval of budget for the land use implementation by the Bwari area Council.

12) The study also revealed that only one element for road circulation which is the primary road that has attended full implementation. All other elements have weak

level of implementation. The reason behind thislevel of implementationis of the facts that the rate of Bwariurban expansion is not proportional to the proposal of the plan for the urban area and this call for the establishment of site and services schemes for effective development of the urban areas.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

At the end of the assessment, the study revealed that the implementation of the entire land area designated for development of the land uses is weak. Out of 31,512 of the land uses proposed to be developed in the urban area only 58.53% of the land uses have been implemented. And the 58.53% of the implemented land uses only cover17.02% of the entire land area of the study area. The land area implemented is 1478.00ha out of 6455.011ha proposed for the development of the urban area. This implies that the undeveloped area of land stands at 4977.011ha which represent 82.08% of the proposal. This is not interesting. Couple with the fact that this is 2015 and the third phase of the implementation of the plan is almost elapsing to gives rise to the commencement of the fourth phase which is the last phase of the implementation of the plan. This is clearly an indication that the master plan proposal cannot attend full implementation at the expiring phase of the plan if the pace of the implementation of the plan continues and nothing is done about it.

This brought about the recommendations. The recommendation calls for immediate action if there is need for improvement to be made in the implementation process of the plan.

5.2 RECOMMENDATIONS

5.2.1 Specific Recommendations

Based on the established facts of this study, the following recommendations were given;

The professional bodies and agencies responsible for physical development of Bwari urban area should adhere in the discharge of their professional obligation so as to avert the over-allocation of some of the land uses over others to avoid overconcentration of some of the land uses over others.

There should be frequent approval of budgeting allocation for the agencies responsible for physical development of Bwari urban area by the government to enable them discharge their duties effectively.

Government should create an enabling environment for public private partnership involvement in the development of land uses projects and programmes.

Bwari Area Council government and the FCDA should provide infrastructure services in the urban area to ensure effective development of the land uses in the area.

Bwari Area Council should step up to the quest for the development of recreational sector of the urban area through their budgetary allocation and other subventions. This can guarantee patronage of the recreational activities by the indigene of Bwari urban area

The FCDA should relocate some of the institutional land uses of the FCC to Bwari urban area to decongest the city center and also making maximize use of Bwari land resources for the growths of the urban area.

It was also established by the study that educational land uses have fair level of implementation which most of this land uses implemented are within the high density residential area where there is no conscious planning regulation is applied for the development of the land uses this calls for the introduction of conscious planning regulation for the development of indigenous area of urban areas. And the introduction of indigenous planning regulations should aim at the introduction of indigenous standard for land use development in the area, theintroduction of the standard to be less technical to the original planned area of the urban area, the duration of assessment of local plan for approval should be less cumbersome in time, space and cost and the standards should be design in such a way that cultural diversity of the indigenous people of the urban area is preserves and taken into consideration

5.2.2 General Recommendations

Based on the established fact of the study that some of the land uses have no implementation, weak level of implementation, low level of implementation,fair level of implementation and full implementation. It is recommended that land uses with no implementation, their proposals and the implementation strategies both need to be reviewed if there need for improvement in the implementation process of their proposal in the plan. While land uses with weak level of implementation, either their implementation strategies reviewed or the proposal of the plan land uses in the plan be reviewed. This can guarantee improvement in the implementation process of the plan for the urban area. On the other hand, land uses with low level of implementation, it is recommended that the implementation strategies be strengthened while the proposal of the plan is held constant. While land uses with fair level of implementation, their implementation strategies and the proposals are to be maintained because they are at the right pace of development considering the present phase of the implementation of the plan. The land uses with full implementation don't need any action because they have attended full implementation of their proposal in the plan and there is no need for further implementation of the proposals in the urban area. Any attempt of continue implementation of such land uses can lead to over-concentration of the land uses at the detriment of other land uses in the urban area. This is a situation whereby and low level of implementation.

Whichever level of implementation, proposals of the plan are to be reviewed; the review should take into consideration the following;

1. The basis at which the master plan was established for each of the land uses
2. The various resource endowment of the urban area that can make the land use plan vision achievable
3. Taking into consideration the various land use components of the master plan to see the relationship between them so as to ascertain the possibilities of achieving their proposals
4. To identified the various cultural norms of the area that can stand as sabotage to a successful implementation of plan
5. To reconsider the vision of FCT for the urban area. This is to establish the possibilities of deviation that can cause the current land uses of the plan not succeeding
6. To assess the interrelationship between the urban area and the FCC to ascertained the rate of growth the FCC is exacting to the urban area per annum so as avoid ambiguous plan
7. To strengthen more coordinated link between the urban area and the FCT in order to achieved basic objectives of the land uses of the plan
8. Enlighten the stakeholders on the need to revisit the land use provisions of the plan so as to still strengthen the acceptability of the vision in the urban area

9. To include the land uses for hospitality industries which were review in the research but were not included in the master plan proposals.

To review the implementation strategies for the implementation of the plan, irrespective of the level of implementation this will be undertaken, the review is expected to take into consideration the following:

1) The procedure at which land is allocated for each category of land use
2) The time spend for acquiring title to land for development
3) The cost of land acquisition
4) The Time use for plan approval and approval of development

5.3Contribution to Knowledge

Considering the present stage of implementation of Bwari master plan, if not check or implementation strategies review the overall implementation can failed to meet up to the requirement of plan’s proposals of the urban area just like any other master plan in Nigeria.It is also pertinent to note that factors that used to be responsible for the failure of the implementation of master plan proposal not to meet up to the requirement of the area it is meant for can also be reflected in Bwari urban area if not check while the master plan implementation is still on-going. And the factors ranges from political interference, bureaucratic nature in the plan’s implementation processes or otherwise.

The use of master plan as a means of sustainable development in the developing countries is not attaining to its mandate thereby giving rooms to the use of other strategies such as subject plan, neighborhood, district plan etc.

5.4Suggestions for Further Studies

Assessment of social service provision of Bwari urban area

Appraisal of the stakeholder participation in the physical development of Bwari urban area

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