

**LAND USE PLANNING REGULATIONS AND ITS  
IMPLICATIONS ON URBAN LAND USE**

**CASE STUDY: UMOJA PHASE ONE ESTATE**



**BY**

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**THIS RESEARCH PROJECT PAPER IS SUBMITTED AS PARTIAL  
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# DECLARATION

## DECLARATION BY THE CANDIDATE

I, BARASA WAMALWA CORNELIUS, hereby declare that this is my original work and it has not been presented in any other University.

Signature  \_\_\_\_\_  
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## DECLARATION BY THE SUPERVISOR

This project paper has been submitted for examination with my approval as the University Supervisor.

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Date 13/08/2004

## **DEDICATION**

To my mum, Mary Barasa and father Fred N Barasa and all my brothers and sisters who have all endeavored to see that I have reached this far in my academic cycles.

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The success of this research project paper was achieved as a result of various valuable contributions which were made by various people whom I feel indebted to acknowledge.

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***TO ALL, THANK YOU!***

May God bless you all.

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## **ABSTRACT**

The rationale of land use planning as a public function is to ensure economic efficiency in the use of space and to ensure that the health, safety and general security of the citizens of a country is promoted and secured.

Land use planning regulations in Kenya have failed to influence land development patterns in the rapidly growing urban areas. Kenya's experience reveals lack of official government intervention and established procedures in formulating rules for allocation of land, control, approval and regulation of urban development. Evidence in Kenya shows the inability of land use planning regulations to hinder the occurrence of the problems associated with contemporary land use activities.

This study focuses on land use regulations with reference to Umoja one estate. Umoja one estate was initially targeted for low income earners but currently it has been occupied mainly by middle income earners. The main objective of this study was to find out the reasons behind continuous increase of unplanned developments which have not been approved by the Nairobi City Council.

It is evident that NCC has failed to implement land use planning regulations within its area of jurisdiction. As a result, informal settlements have continued to mushroom due to: inadequate man power, to implement land use planning regulations, inadequate finance, corruption and laxity among the NCC officials, lack of community participation and political interference in the council's activities.

Effective reforms therefore need to be implemented and ways in which land use planning regulations could be made more efficient be examined so as to achieve planned and sustainable urban development.

Field study included interviews and questionnaires which were administered to residents, developers and NCC Planning officials. Visual observations and photographs were also used to give visual aspects of the buildings and other visible activities taking place within the area of study.

# TABLE OF CONTENTS

	<b>Page</b>
Project Title.....	i
Declaration .....	ii
Dedication .....	iii
Acknowledgements .....	iv
Abstract .....	v
Table of Contents .....	vi
List of Tables .....	ix
List of Figures .....	x
List of Plates.....	xi
Abbreviations.....	xii

## CHAPTER ONE: INTRODUCTION

1.1 Introduction.....	1
1.2 Problem Statement.....	2
1.3 Objectives .....	3
1.4 Hypothesis .....	4
1.5 Research Methodology.....	4
1.6 Scope and Area of the Study .....	7
1.7 Significance of the Study .....	7

## **CHAPTER TWO: LITERATURE REVIEW**

2.1	Introduction.....	9
2.2	Planning Regulations.....	10
2.3	Planning Regulations Instruments.....	11
2.4	Factors Contributing to Non Compliance with Planning Regulations.....	29

## **CHAPTER THREE: DATA ANALYSIS AND PRESENTATION.**

3.1	Introduction .....	37
3.2	Historical Background of Umoja Phase One.....	37
3.3	Location of Umoja Phase One .....	38
3.4	Land Utilization in Umoja One.....	38
3.5	Sampling Techniques.....	39
3.6	Data Analysis and Presentation .....	40
3.7	Effects of Non Compliance with Land Use Planning Regulations.....	67

## **CHAPTER FOUR: CONCLUSIONS AND RECOMMENDATIONS**

4.1	Introduction .....	72
4.2	Research Findings .....	72
4.3	Conclusion .....	75
4.4	Testing Hypothesis .....	77
4.5	Recommendations .....	78
4.6	Suggested Area of Further Study.....	81

**BIBLIOGRAPHY.....82**

**APPENDICES.....85**



## **LIST OF TABLES**

3.1 Land Utilization in Umoja One a.....	38
3.2 Period of Stay in Umoja one.....	40
3.3 Type of Housing Occupancy in Umoja One.....	41
3.4 Condition of Drainage System in Umoja One .....	45
3.5 Means of Refuse Disposal.....	46
3.6 Reasons for Denial of Development Permission.....	56

## LIST OF FIGURES

Fig 3-1-Adequacy of Water Supply in Umoja One.....	43
Fig 3-2- Availability of Sanitary Facilities in Extensions.....	50
Fig 3-3- Percentage Applications of Development Permissions.....	55
Fig 3-4- Approval of Development Permission.....	56

## LIST OF PLATES

Plate 3.1 Illegal Developments of Different Types.....	42
Plate 3.2 Dumping of Garbage Inside Drainage System.....	44
Plate 3.3 Building Across Road Blocking the Passage and Through way.....	45
Plate 3.4 Collection of Refuse by Lorry from Private Firm .....	47
Plate 3.5 Building Constructed on Power Line.....	48
Plate3. 6 Kiosk of Temporary Material (wood) Encroaching Road Reserve.....	48
Plate3. 7 Multi-storey Building Built on Land meant for Parking.....	49
Plate3. 8 Three Storey Illegal Extension.....	51
Plate3. 9 Decomposing Heap of Garbage.....	52
Plate3.10 temporary Commercial Building in the Midst of Residential Area .....	53

## **ABBREVIATIONS**

1. NCC-Nairobi City Council
2. USAID- United States Agency International development
3. LATF- Local Authority Transfer Fund
4. Cap- Chapter
5. MBO- Management By Objectives

# CHAPTER ONE

## INTRODUCTION

### **1.1 Introduction**

It is universally accepted that land is a resource for all human development activities. Indeed, all economic and social activities are located on land. Due to ever increasing population and other economic and social activities, demand for land has always exceeded supply especially in urban areas. Since land is inelastic in nature, the physical supply of land is fixed and hence the supply curve of land is highly inelastic. Land therefore is significantly different from all other factors of production which cannot be substituted for another factor (Harvey, 1996).

Land being a limited and scarce resource while demand for it being limitless, planning becomes very vital in guiding the use of land especially in urban areas. For this reason, there is need to put land into its highest and best use in order to maximize satisfaction on the available land; hence the need for planning (Harold, 1993; Kimeu, 1995).

The essence of planning is to create order within human settlements. For people to enjoy their freedoms and rights according to Bair (1979), it is necessary to impose land use controls in order to ensure that weaker members of the society, environmental and social considerations do not suffer at the expense of powerful members of the society due to their anticipated gains. Land use regulations as a planning activity is essential in cutting down possible infringement on the freedom of others in human settlements (Bruton, 1988).

Planning regulations as a planning activity are therefore necessary in cutting down possible infringement on the freedom of others in human settlements. The basis of planning regulations or land use controls is to ensure that developments are controlled taking into the considerations the environment and the community's health and welfare at large (Mwangi (1990).

## **1.2 Problem Statement**

In any urban area, government policy, programs and actions affect the pattern of urban development. Many problems of urban land use in developing countries like Kenya are probably capable of mitigation only through properly administered government intervention.

Many urban areas are growing so rapidly due to natural growth and continuous influx of people into urban centres. This normally creates pressure on the available land and housing hence shifting the demand for both land and housing upwards. Furthermore, extremely high densities of use and people are normally found on inadequately serviced land. This situation has and will always challenge the need for planning regulations (Sullivan, 1990).

Evaluation studies point out that Kenya's development controls and building regulations as they exist are difficult to understand and therefore to enforce (Gitau,1999). The basis of planning regulations is to ensure that all land use activities are controlled by ensuring that developers take into consideration the environmental and community's health and welfare at large. Unfortunately, in the Kenyan case, planning regulations have often been violated. Moreover, the developers, local authorities and central government have rarely been held liable for resultant environmental damage (Mwangi, 1990).

The failure of Commissioner of Lands, local authorities and other government agencies to control land use development activities are exemplified by the illegal subdivisions, unapproved developments among other land use conflicts that have come up which contravenes the existing land use regulations (Gitau,1999). In some cases, individual property owners have extended the boundaries of their plots and encroached on the public land especially road reserves thereby; illegally increasing the density and overloading the existing basic social facilities and utility services.

The initial plan for Umoja phase one estate was a bungalow or low lying single family development. The development was supposed to cover 50% of the plot area. The original

houses therefore were meant to be single family dwellings or one housing unit per plot (Mwangi, 1993). However, the current land use is not in conformity with what was initially planned for by the sponsors of the project who were United States Agency International Development (USAID) together with Nairobi City Council who were the implementers of the project. This is because developers ended up constructing unapproved structures through illegal extensions of existing buildings, all in the name of catering for ever increasing demand of housing imposed by ever increasing population and also for personal gains. Some storey or high-rise buildings can now be witnessed in Umoja phase one estate, while other buildings have been extended sideways contravening site coverage and plot ratio regulations.

As a result of these illegal extensions, more households than what was initially planned for are now being accommodated within this area, thereby contravening density zoning regulations which only required one family per every dwelling unit. A large number of populations resulting from these illegal extensions have exerted pressure on the limited infrastructure and utility services which was initially meant for only 3000 households (family units). Furthermore, these extensions have also taken up most of the open spaces which were meant for parking and recreation purposes.

### **1.3 Objectives**

- i. To establish the deficiencies of land use planning regulations
- ii. To find out the reasons for non compliance with land use planning regulations in Umoja one.
- iii. To find out the effects of non compliance with land use planning regulations with planning regulations in Umoja one.
- iv. To establish factors hindering implementation of planning regulations by NCC.
- v. Recommend possible ways of ensuring that developers comply with planning regulations.

## **1.4 Hypothesis**

Occurrence of unplanned developments in Umoja phase one estate is due to poor implementation of land use planning regulations.

## **1.5 Research Methodology**

The sources of data for this study included both primary and secondary data.

### **1.5.1 Primary data**

Primary data included:

- i) Questionnaires which were administered to the residents, developers and Nairobi City Council.
- ii) Personal visits and visual observations.
- iii) Oral interviews.
- iv) Use of photographs.

#### **a) Questionnaires**

Questionnaires were used so as to minimize the biasness that would result from the personal characteristic of interviewers. Personal interviews are normally characterized with possibilities for bias due to the nature of interaction between the interviewer and respondent.

Questionnaires were also used due to the anonymity they usually provide especially when dealing with sensitive questions, for instance, questions dealing with illegal occupancy of the structures. People in the sample tend to respond to the sensitive questions when they don't have face to face interviews.

Questionnaires were also administered because some questions demanded or required the respondent to consult other documents or people for them to be logically filled, for instance, the questionnaires administered to Nairobi City Council (N.C.C)



However, it was established that some questions asked were not answered due to their ambiguity. Slow response was also experienced and in other cases respondents misplaced the questionnaires which could not be totally traced.

Where there was slow response, more than one follow up was done either through telephone or mobile phone communication and personal visits to the respondents' home. This was done so as to maximize the response rate from the questionnaires.

#### **b) Personal visits and Observations**

The researcher also collected first hand information through careful observations of existing land use activities in Umoja one estate.

Observations were also used so as to reduce the artificiality which in most cases is subjective especially where respondents are not aware of what is exactly being asked. Observations were further used where people were unwilling to express themselves verbally to very sensitive questions.

Through observations, the researcher was also able to validate the verbal interviews and information filled on the questionnaires by comparing them.

#### **c) Oral interviews**

The researcher conducted face to face interviews with various respondents whereby the researcher asked the respondents questions pertinent to the research questions. Both structured and non structured interviews were employed.

In terms of structured interviews, focused interviews were used whereby the N.C.C officials (respondents) were given considerable liberty in expressing their definition of a situation that was presented to them by the researcher and this enabled the researcher to obtain details of personal reactions, specific emotions and the like, from NCC planning officials.

In the case of non structured or non directive interviews, these were mainly applied to the residents and developers in the area of study. With this kind of interviews, the researcher asked questions in a non specified order. This was helpful to the researcher because with little or no direction from the researcher, the respondents were encouraged to relate their experiences , to describe whatever seemed to be significant to them, provide their own definition of their situations and also revealed their opinions and attitudes as they saw fit; in short, probing was encouraged by the researcher.

#### **d) Telephone interviews**

Telephone survey was also conducted by the researcher due to inaccessibility of some respondents as well as high cost of traveling and convenience. The researcher adopted telephone interviews whereby he communicated to the respondents to capture some information, especially with those developers who don't reside within the area of study. This was done mainly through mobile phone communication.

The researcher opted for this method because it was convenient and cost saving. The method was convenient to some residents as well, especially those who were rarely found within their homesteads throughout the week mainly during day times due to their demanding jobs.

#### **e) Photographs**

Photographs were taken so as to capture the existing land use activities in Umoja phase one estate in pictorial form. Photographs were used because they revealed the exiting land use activities in pictorial form which could be easily revealed at the first glance of the photographs.

### **1.5.2 Secondary data**

Secondary data was obtained after reviewing the existing and available literature on planning regulations from text books, journals, published and non published reports and papers, and from media of various kinds including internet.

## **1.6 Scope and Area of Study**

This study focused on Umoja phase one estate because it is one of the areas in which land use regulations have been greatly violated and therefore it makes it appropriate for the study.

Due to dynamic changes, in terms of both demographic and demand for urban space, so many issues or changes have taken place since the last study was done. It is for this reason that the researcher decided to carry out a study in this area so as to capture issues about land use planning regulations and its implication on urban land use.

The study covers the whole area of Umoja one estate. The whole estate was studied due to its homogeneity in initial design and related land use activities which were being carried out throughout in the estate.

The study looked at the existing land use planning regulations used by Nairobi City Council and tried to establish the reasons behind non compliance of these planning regulations by developers. Moreover, the study tried to find out the reasons that hamper plan implementation by Nairobi City Council among other local authorities.

The study further established the consequences of non compliance of these planning regulations and then eventually recommended on possible solutions to the problems hampering land use planning regulations

## **1.7 Significance of the study**

The study is important in Kenya's urban land management policy formulation because both the Central and Local Government relies on land use planning regulations so as to achieve orderly development of planned urban areas which is significant to the country's overall development.

Kenya is currently undergoing the process of land policy formulation so as to come up with realistic land policy which serves the interests of all Kenyans. Some of the crucial

issues which need to be looked at towards formulation of this land policy include land use regulations especially in urban areas among other land related issues. This study therefore may also contribute towards land policy formulation since it has tried to establish the deficiencies of land use regulations, reasons for non compliance with existing land use planning regulations, factors hindering local authorities in implementation of these land use planning regulations and recommendations which are aimed at offering the possible solutions to these deficiencies.

This study will further help the local authorities and central government and other key players related to land use issues to formulate and implement policies that would lead to sustainable planned urban land use development.

The focus on the role of local authorities in policy implementation is in recognition of the importance of these local authorities to national development through provision of basic social services and ensuring orderly development of their areas of jurisdiction. There is therefore need to formulate and institute policy measures that are easily implemented so as to ensure sustainable development with regard to land use planning regulations especially in urban areas.

The study in general provides policy makers in the urban development arena with the information necessary to make informed changes in the regulatory instruments for effective urban land management.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

*“The birth of modern town planning was based upon unhealthy, ugly and badly functioning urban areas which were built without any public control” (Olima, 1993:90)*

The results of unguided growth have made it clear that all too often the private developer fails to consider the interests of the larger community in his attempts to profit from his investments. Numerous community problems have resulted from such actions: poor location and siting of buildings, traffic congestion and unbalanced growth serve as familiar examples (UNCHS, HABITAT, 1996).

Most governments have recognized these problems and through land use planning Departments in both Central and Local Government, have attempted to regulate land development. Their records of success however, are generally less admirable. This is because despite local planning authorities being empowered to control the use and development of land and buildings in the interest of proper and orderly development of their area of jurisdiction, land use in urban areas have witnessed the greatest obstacles in the form of abuse of land use planning regulations: there have been a lot of illegal subdivisions of land and mushrooming of unplanned settlements causing a severe deficiency in existing limited services. The uncoordinated and haphazard developments have manifested themselves in the form of illegal and unapproved commercial and residential developments (Gitau, 1999).

Abuse and misuse of public land uses arises from non-compliance with planning regulations. Informal sector developments have continued to predominate in spite of officially approved urban development plans.

Enforcement of planning regulations on the other hand has been a major drawback in many urban areas. This is mainly due to weak institutional, legal, administrative and financial framework or machinery to implement land use planning regulations. Most urban areas are not also coping up with technological changes, especially in the areas of environmental control (UNCHS, HABITAT, 1999).

## **2.2 Land Use Planning Regulations**

### **2.2.1 Definition**

Planning regulation is the control in the manner in which land is used and developed, mainly in urban areas (Sutcliffe, 1980). In urban planning, the publicizing of the need for observance of planning regulations in land development is an important function that the law performs. The main sources of authority for land use development control in Kenya are the various laws and regulations such as zoning regulations, building codes, by-laws and several statutes usually prepared by the central government, local authorities or their agencies.

### **2.2.2 Objectives of Land Use Planning Regulations**

The main objective of land use planning regulations is to ensure planned and orderly urban development; in particular land use planning regulations aims at: -

- i. providing a good living environment for all by ensuring safety, amenity, accessibility and environmental protection.
- ii. providing a safe, healthy, useable, serviceable, pleasant and easily maintained environment for all residential, commercial, industrial, civil and community land users. It is also aims at preventing disturbance to neighbouring environment particularly the industrial land users.
- iii. ensuring that any conflicting requirements of different land users are reconciled particularly among mixed land users.
- iv. providing orderly and progressive development of land in urban areas and preserve amenities on that land as well as promoting environmental control and socio-economic development ✓
- v. controlling the aggregate allocation of land among other alternative uses.

Olima (1993) also gives justification for control and regulation of land use development as:-

- a) The need to allow for and ensure greater predictability in urban growth and development so as to make more adequate provision of public services
- b) The need to separate industrial from residential areas as a means of protecting public health safety and welfare.
- c) The need to stabilize land uses and to protect property values.
- d) To guard against injurious development to both human and physical environment, by carefully assessing and processing all development applications.

## **2.3 Land Use Planning Regulation Instruments**

### **2.3.1 Zoning Regulations**

Zoning is defined by Keeble (1983) as the demarcation of an urban area by ordinances and establishment of regulations to govern the use of zoned land. Dunkerly (1983), on the other hand, defines zoning as an attempt to organize and systemize the growth of urban areas by setting up categories, classes, zones or districts of land in the community, prescribing the uses to which the building and land may be put and applying uniform restrictions on the shape and placement of buildings in a given zone.

Zoning rests on the constitutional powers of government to restrict and regulate actions which might injure public health, safety, or welfare. Therefore the main objective of this regulation is to limit the adverse spill over effects, promote agglomeration benefits, to specify minimum health and safety requirements and to provide land for public goods and services (Sullivan, 1990).

When adopted by the local authority, zoning ordinance divides the city or town into asset of homogeneous land use parcels for different types and densities of development. Residential, commercial and industrial are the basic land use categories for which zones are determined (Andrews, 1971).

Zoning is the control most frequently employed to regulate the use of land. In its traditional form, its purpose is to ensure a proper amount of land for all activities that must be performed in a contemporary community, to fix the best location for each and to avoid encroachment of incompatible uses. To meet these aims cities and municipalities may regulate the use of land and buildings by restricting areas to industrial, commercial, recreational, residential, agricultural and other purposes. Such uses may be broken down further into sub-classification such as single and multi-family zones for residential areas and more specific types of use for the commercial and manufacturing zones (Dunkerly, 1983).

According to Delafons, (1973) zoning limits the rights of private individuals since it involves the regulation by zones under the police power of such matters as:-

- a) plot sizes or bulk
- b) plot ratios/coverages
- c) building lines/setbacks
- d) buffer zones
- e) way leaves

**a) Plot sizes**

The essence of fixing minimum plot sizes or areas is to prevent overcrowding, to ensure adequate light and ventilation and to facilitate easy movement of people, vehicles and goods. The actual amount of plot will depend on the type of land use activity, recommended densities and plot coverage ratio.

**b) Plot ratio or coverages**

This is the percentage of what the building should cover in relation to the total area of the plot. The essence of fixing plot coverages is to ensure a healthy environment and allow for the expansion and improvement of infrastructural facilities and social amenities.



The suggested plot coverage for residential, industrial, and commercial should not exceed 50%, 75% and 90% respectively as stipulated under physical planning regulations so as to allow for sufficient scope, utilities, services and facilities to the users.

**c) Building lines/set backs**

This refers to the distance between the front and back property lines and the distance from the side property lines respectively to any structure of the property. The rationale behind setting building lines is to achieve visual effects and reserve a certain access area. Set backs can also be placed between buildings for similar reasons.

**d) Buffer zones**

These are zones that separate incompatible land uses and try to prevent conflicts and reduce possible inconveniences. Zones with planted strips of trees, major routes of transportation or the use of natural features such as rivers and wetlands are often used as buffer zones between incompatible land uses.

**e) Way leaves**

These are rights of way over or through land for carrying sewers, drains, water pipes, electricity cables or wires on pylons into, through, over or under any land whatsoever. Such rights are provided under Way leaves Act, Cap 292 of 1962, Laws of Kenya.

### **2.3.2 Types of Zoning**

**a) Nuisance zoning**

Nuisance or externality zoning is the practice of separating land uses that are considered incompatible. Normally industrial areas are separated from residential areas so as to avoid the externalities caused by industrial effluences.

**b) Performance zoning**

Under this kind of zoning, local authorities normally set performance standards for each zone. The local authority sets upper limits of the performance standards on the amount of

noise, glare, odour vibration and smoke emitted by firms. This encourages abatement by giving cleaner firms priority in allocation of building permits.

**c) Cluster zoning**

Also known as density zoning and it involves regulations that concentrate residences in higher density clusters so as to reserve open space in a subdivision development.

**d) Exclusionary zoning**

Exclusionary is also known as large lot zoning because it excludes low-income households. Exclusionary zoning imposes requirements which have the effect of excluding certain classes of persons from living in an area covered by the zoning requirement. For example, a zoning ordinance may provide only for the building of single-family homes on large lots throughout the zone effectively excluding low-income families.

**e) Spot zoning**

This is the most disputed type of zoning and perhaps most undesirable. It gives legal validity to a non-conforming use on a limited number of property owners. For instance commercial activities like 'jua kali' or bars may be allowed in the midst of a residential area.

**f) Special purpose zoning**

This kind of zoning regulates certain areas specifically due to their unique functions, these include zoning in areas like; around an airport to ensure efficient aviation and to safeguard the safety and welfare of the surrounding community. Other examples include parliament, military, hospital and flood plain areas.

**g) Cultural area zoning**

This is aimed at protecting cultural areas from non-compatible uses such as, museums, libraries, theatre and churches may need to be protected.

### **2.3.3 Other Aspects of Zoning Regulations include:**

#### **a) Conditional use**

This is a use which is permitted under zoning ordinance but which must meet certain conditions. When a use is conditional, the zoning ordinance will often require the property owner to file an application with the local authority officials so that they may determine whether the conditions have been met.

#### **b) Non conforming use**

This is the use of existing properties within the area of jurisdiction of the local authority in a manner inconsistent with the zoning ordinance. A use may be non-conforming because: -

- i) the nature or characteristic of the building itself do not conform to the zoning ordinance or;
- ii) the activity going on in the building does not conform to the permitted use e.g. where two storey building is located in an area meant for bungalow or one storey buildings is a non conforming use.

#### **c) Variance**

Variance or special use permit is an exception to the requirements of a zoning ordinance. Most statutes which permit the adoption of zoning ordinances also specify the circumstances under which the variance may be granted. Usually some kind of hardship must be shown to justify the grant of a variance. Examples of these hardships include: -

- a) undersized lot on which a variance is needed to construct any useful structure
- b) an odd shaped lot that cannot satisfy the set back requirements for construction of a residence that would otherwise be permitted in the zone.

### **2.3.4 Building Regulations**

Building regulations limit or define the way new structures are to be built and the materials to be used. They may also be applied to the maintenance and improvement of existing building. They may prohibit the erection of any structure or restrict the style of

architecture, materials and the position of the building on the lot, or its distance from the street, its height or depth (Dunkerly, 1983).

More recently building regulations have included requirements for parks, parking and other amenities as a condition for approval of a subdivision. They may also include controls over the use to which the building may be put as well as minimum conditions, which the dwellings must meet to be regarded as fit for human habitation. They may be in form of building and housing codes legislated at the national or more usually, at the local level as by-laws or other land use control instruments (Bruton (1974).

The main objective of building regulations is that of securing socially acceptable minimum standards. Initially, there were three main reasons for such regulations: fire protection, structural safety and sanitation. Today codes include not only a far wide range of protection but often aesthetic conditions as well (Sutcliffe, 1980).

According to Dunkerly (1983) building regulations are one of the oldest and most common methods of controlling land development. Dunkerly further states that regulations are defined for a specific local, regional, or national area depending on the size of the country, political structure, variations in climate, the local materials used and local standards.

Sutcliffe (1980) extends this argument further by noting that some codes go into great detail while others are more general. He further clarifies his argument by stating that detailed codes have little flexibility of choice and tend to lead to a standardized design while more general specification states the results to be achieved and a standard of performance for each structural member.

Because of technological advancement, regulations now specify the strength of materials and of structural parts as well as standards for plumbing, electricity, elevators, heating and ventilation. Commercial, industrial and public buildings as well as residential buildings are all generally subject to codes (Dunkerly, 1983).

However in developing countries like Kenya, although in principle all buildings are usually subject to codes, in practice, an informal sector has arisen in which neither building nor use regulations are operative. The problem of enforcement is even greater when regulations relate to existing units (Kevin, 1987)

Although building regulations are essential, particularly in areas where private buildings dominate, their limitations should be understood if they are to be useful. Bruton (1988) supports this argument by stating that limitations to these building regulations include over rigidity of design, manipulation by vested interests, forced use of certain materials and a tendency of codes to run behind technology. He further states that the preparation of a good code requires not only local experience but also constant experimenting and testing. Clawson (1960) also brings his voice into this discussion by stating that at times, there is a tendency for one area of jurisdiction to adopt the regulation of another without modification or appropriate evaluation and as a result, enforcement of such codes becomes very difficult or challenging. Similarly, Wingo (1965) supports this discussion by emphasizing that uniform application of regulations in all sections of a country, irrespective of climate and cultural differences can lead to inappropriate development or disregard of the regulations and this will make it impossible for local authorities to enforce the regulations as stipulated because the local authorities will face a lot of resistance from the community.

In the administration of building regulations, the abuse of authority by inspectors encourages illegal construction and bribery. In Kenya, for instance, buildings are supposed to be inspected upon completion, and the developer awarded a certificate of completion before occupancy according to East African Standard, (23.10.2003), but because of inadequacies in the inspection process, a large number of applications for development permission are normally incorrectly certified as meeting the standards.

### **2.3.5 Subdivision Regulations**

Subdivision regulations govern the development of raw land for its zoned purpose in much more detail. Subdivision regulations define standards for layout and lot sizes, street improvement and procedures for assigning private land for public purposes. Subdivisions also provide the essential characteristics of land uses, street patterns and public utilities (Dunkery, 1983).

Sutcliffe (1980), argues that subdivision regulations govern the development of raw land for residential or other purposes. He further notes that subdivision regulation process is usually guided by a set of regulations that spell out developer's responsibility and set minimum standards for lot sizes and layouts, the width of rights of way, amount of parking land and open spaces to be set aside and other requirement in a far much more detail than in the zoning plan. The objective of such detailed controls were established by Dunkerly (1983) as those which ensures that land development take account of community's need for public goods and services of minimum standards required and immediate locational spillover of costs and benefits.

Subdivision of land prior to developments' is one of the most important determinants of neighbourhood patterns. Once the size and shape of the lots have been defined, the essential character of land uses, street patterns and public utilities is determined. Lot sizes and shape also strongly affect the type, size, and quality of structures and the density of population (Wendit, 1969).

Keeble (1983) established that subdivision regulations have been less successful in developing countries. Catanese (1988) joins Keeble's argument by stating that problems encountered include the implementation of the subdivision controls and the vast areas, mostly in the urban fringe, where land is illegally subdivided in order to provide more shelter. Catanese ends his discussion over this issue by reiterating that irregular subdivisions with high densities frequently cause health, fire and other hazards within the built environment.

Along with the above, Mwaniki (1997) reinforces this discussion by stating that subdivision regulations also need to match the plans for major roadways or restrictions on access, contained in local comprehensive plans and it may need to include a variety of facilities prescribed by the planners to serve the wider area around the subdivision.

In his contribution, Arima (1997) noted that the authority of local jurisdiction to approve or disapprove subdivision plans also includes power to exert conditions to the developer in order to ensure that a proposed subdivision project will conform to the planning standards of the community.

A major cause for the increased unapproved constructions e.g. extensions and gradual dilapidations of former planned houses into slums, for instance, Umoja estate are attributable to ineffective development control. The consent for development depends on the land tenure, locality and the fact that the application be submitted in the prescribed manner by the relevant approving authority. Subdivision of land, extensions, building plans, and change of user need approval before development (Gitau, 1996).

In Nairobi, the Nairobi City Council does not approve private developments applying lower standards even where the developments are meant to cater for lower income. The requirements of subdivision that would be approved by NCC according to UNCHS, (Habitat), 2001 include: -

- i) The resultant sub plots should be accessible and adequately served with proper open space and social infrastructure.
- ii) The proposed population density should be in accordance with the available services e.g. water sewers, roads and drainage.
- iii) There should be planned and coordinated development in order to avoid uncontrolled and isolated developments.
- iv) The local authority or central governments should share in the enhanced value that arises from the subdivision.

The regulation and planning of subdivision on the outskirts of cities are widely accepted as essential to development. Proper and timely planning of expansion can preserve the sound structure of the cities/urban areas in the long-term (UNCHS/HABITAT, 2001).

### **2.3.6 Licensing**

The local authorities use licensing mainly for two purposes namely: -

- i) For revenue collection
- ii) To control land use activities

According to Mwangi (1993), license may also refer to permit. Some local authorities control residential growth by limiting the number of building permits issued. By limiting the number of dwellings built per year, a city can control its density rate. This is because developers are supposed to obtain development permission for any development, redevelopment or change of use of building or a site from local authority. This permission may be approved or disapproved.

Local authorities mainly allocate their building permits to those developers who promote their development objectives. If the local authority is interested in high-density housing, it will only allocate permits to a higher density housing project developer so as to realize their goal. Alternatively, the local authority could allocate the permits to the housing project in an area targeted for development (Catanese, 1988).

### **2.3.7 Legislation**

“Public right to control use of private land is equivalent to private right to create problems affecting public interest” (Bair, 1979:255)

Every law represents the decision of the society concerning a particular problem in a particular climate of conditions and ideas; but the decision is rarely unanimous. Mbogua (1994) opens this discussion by arguing that the function of the law is to effectuate the decision, notwithstanding the opposition of dissenting elements in the society. McAuslan (1985) on the other hand states that, many problems of urban land use in developing



countries are probable of mitigation by some form of government intervention through enactment of several statutes to govern land use both in rural and urban areas. This is because land is a scarce resource requiring stewardship by public bodies that can balance short term against long term benefits and balance the claims of one interest group against another (Conyers, 1984).

The following are the main statutes used in Kenya to control urban land use:-

- i) Local Government Act Cap 265, Laws of Kenya.
- ii) Physical Planning Act No.6 of 1996, Laws of Kenya.
- iii) Building Code.
- iv) Public Health Act Cap 242, Laws of Kenya.
- v) By-laws

### **1. Local Government Act Cap 265, Laws of Kenya.**

This is an Act of parliament which provides for establishment of local authorities for the purpose of local government; and for the functions of those authorities as well as for the matters connected therewith or incidental to those authorities.

Subject to this Act, the duty of every urban authority within its area of jurisdiction will have powers to:-

- i) control or prohibit the subdivision or cutting up of land or subdivision of existing building lots into smaller areas.
- ii) control or prohibit all businesses, factories, and workshops which by reason of smoke, smell, noise, vibration or other cause, may be or become a source of danger, discomfort or annoyance to the neighbourhood and to prescribe conditions subject to which such businesses, factories and workshops shall be carried on.

#### ***a) Powers to refuse, grant, renew and/or cancel licenses***

The local authority is empowered under section 165(2) to cancel any license granted by it on the following grounds:

- i) any license which is contrary to the public interest
- ii) any license that the continuation of such license in force would be calculated to cause nuisance or annoyance to persons residing in the neighbourhood.

iii) with respect to any license for the carrying on of any work or trade declared to be offensive to trade.

Under section 166, the municipal, county or town council are given powers subject to other written law to prohibit and control the development and use of land and buildings in the interest of the proper and orderly development of its area.

***b) Provision for protection of sewers and drains***

Section (173) of this Act provides that, any person who without prior consent in writing of the local authority erects or cause to be erected any building over any sewer line, drain, or pipe vested in or constructed under the authority of such local authority; or injures or destroys or causes to be injured or destroyed any works or things in connection therewith, shall be guilty of an offence.

The local authority in which is vested any sewer, drain or pipe may alter, demolish, or otherwise deal with any buildings erected over any such sewer, drains or pipe in contravention with the requirements of this Act as local authority may think fit and the expenses so incurred shall in addition to any fine that may be imposed, be recoverable from the offender.

**2. Physical Planning Act No.6 of 1996, Laws of Kenya**

This is an Act of parliament for the preparation and implementation of physical development plans and connected purposes. This Act applies to all parts of the country and it repealed two separate Acts-Town planning Act and Land Planning Act, Laws of Kenya in order to make one law of planning, give local authorities more say in planning and bring about more detailed regulations in development. The Act is divided into a number of parts and it has five schedules. Part five deals with development controls. In summary:-

- a) Part 1-deals with preliminaries
- b) Part 2- deals with administration
- c) Part 3-deals with physical planning liaison committees.

- d) Part 4-deals with physical development plans.
- e) Part 5-deals with control of development

***a) Control of development***

Development has been defined in this Act as the making of any material change in the use or density of any building or land or subdivision of any land which is classified as Class 'A' development or the erection of such buildings or works in the carrying out of such building operations as the minister may determine from time to time classified as Class 'B' development. The local authorities are given powers under section (29) of this Act to:-

- i) To prohibit or control the use and development of land and buildings in the interest of proper and orderly development of its area.
- ii) To control or prohibit the subdivision of land or existing plots into smaller areas.
- iii) To consider and approve all development applications and grant all development permissions.
- iv) To ensure proper execution and implementation of approved physical development plans.
- v) To formulate by-laws to regulate zoning in respect of use and density of developments.
- vi) To reserve and maintain all the land planned for open spaces, parks, urban forests and green belts in accordance with approved physical plan.

***b) Development applications***

No local authority should grant development permission for any of the development purposes without a certificate of compliance issued to the applicant by the Director or an officer authorized on his behalf; and anyone who contravenes this section is guilty and liable of an offence( section, 30).

When considering the applications for development, the local authority should consider the plans approved by the minister; have regard to health, amenities, and conveniences of the community generally and to the proper planning and density of the development and

land use in the area; have regard to any comments received from Director or officers and in case of leasehold have regard to any special conditions stipulated under the lease (section, 32).

***c) Approval of development application***

The local authority may grant or refuse to grant development applications in accordance to the fifth schedule of this Act with or without conditions and it will have to notify the applicant of the decision taken and shall specify the conditions if any attached to development permission granted, or in the case of refusal to grant permission, the grounds for refusal according to section (33) of this Act.

The Act also requires that an Environmental Impact Assessment (E.I.A) be undertaken where the local authority is of the opinion that the proposal for industrial location, dumping sites, quarries, sewerage treatment and the like will have injurious impact on the environment as stipulated under section (36) of this Act.

***d) Enforcement of the notice***

Where the developer carries out development without the required development permission having been obtained or where the conditions of development permission has not been complied with, the local authority may serve an enforcement notice to the owner, occupier or developer of the land to ensure compliance and in particular such enforcement notice may require the demolition or alteration of any building or works or the discontinuance of any use of land or the construction of any building or the carrying out of any other activities. Where the developer fails to comply with the provisions as stipulated under section (38) of this Act, he or she may face demolition or prosecution.

**3. Public Health Act Cap 242, Laws of Kenya.**

This Act defines the general public health standards that the local authorities must adhere to. This Act provides that, "Every local authority shall appoint one or more competent health inspectors to assist in carrying out the provisions of this Act within its area of jurisdiction"

The local authorities have responsibility of ensuring that the general health standards stipulated under or by the Act are adhered to through specific regulations. The primary duty of the local health inspector is to maintain public health standards. Failure to comply with the standards renders one guilty of an offence and thus subject to a fine (UNCHS, HABITAT, 1999).

Public health standards must also be met in the construction and maintenance of buildings. The Act lists conditions defined as 'nuisances' and injurious to peoples health. The Public Health Act Cap 242, Laws of Kenya, provides that every health authority should take all lawful, necessary and reasonable practicable measures for preventing or causing to be prevented or remedied all conditions liable to injurious or dangerous to health arising from the erection or occupation of unhealthy sites or on sites of insufficient extent or overcrowding or from constructing, or condition or manner of use of any factory or trade premises and to take proceedings against such persons causing or responsible for the continuous of any such condition.

### **2.3.8 Building code/Building By-Laws**

Building code provides control on the construction, alteration and additions to all buildings. Building code provides building by-laws which specifies the standards for space about buildings, building lines, height of buildings, ventilations, circulation of air, size of habitable room, access, parking, electricity and structural safety of the building. It also provides for controls in the installation and modification of all aspects of sewerage system on any land (UNCHS/HABITAT, 1999).

By-law 3(2) of the building code provides that the following operations shall be deemed erection of a building:

- a) the alteration or extension of a building.
- b) the changing of the use or uses to which land or a building is put.
- c) increasing or reducing the number of dwellings in a building.
- d) the carrying out of any drainage work.

- e) the formation or laying out of an access to a plot.

The building by-law further stipulates that any person who builds or causes a building to be erected, in whole or in part, after the approval plans have become invalidated by virtue of this by-law shall be guilty of an offence as stipulated under by-law 9(2). By-law 18(1) further stipulates that inspection should be done by the council before any proceedings in construction and after completion of construction, a certificate of completion should then be issued by the council before any occupancy or use of any given building after final inspection has been made as required under by-law 16(3). Any person who occupies, use or permit the occupation or use of any building before a certificate of completion has been issued by the council in respect thereof shall be guilty of an offence.

#### **2.3.8.1 Siting and Space around the Buildings.**

##### ***a) Side spaces***

A building which is designed either wholly or in part for residential purposes shall be provided on at least one side with an open space of 8 feet or more in width measured from the boundary of the nearest plot fencing as stipulated under building by-law 18(1).

##### ***b) Service areas***

Unless the council otherwise agrees, an approved open area should be left on each plot for the purpose of serving any building thereon and the means of access to such area, shall be of approved dimensions.

##### ***c) Building lines***

The council usually prescribes a building line for any street or part of a street and a person who erects any building other than the boundary wall, fence, gate, step or such like projections from the building, nearer to the street than such building line, shall be guilty of an offence as provided under by-law (29).

##### ***d) Siting of buildings***

All new buildings should be sited on a plot to ensure hygienic and sanitary conditions and avoid any possible nuisance or annoyance to the owners or occupiers of neighbouring plots as provided under by-law (24).

***e) Access of plots***

Every plot should be provided with at least one access from the road. Any access or alteration to an existing access to a plot should be sited and constructed to the satisfaction of council as stipulated under by-law (25).

***f) Obstruction to view***

Nothing in these by-laws shall be deemed to authorize the formation, laying out, or material widening of any means of access or any erection which creates an obstruction to the view of persons using any street used by vehicular traffic, at or near any bend, corner, junction or intersection likely to cause danger to such persons.

***g) Stair cases ventilation and lighting***

All common stairs and common passages should be adequately cross ventilated and for common stairs sufficient natural and artificial lighting should be provided.

**2.3.8.2 Water supply**

The building by-law (143) provides that before a certificate of completion is issued by the council, the plans of a building should show that an approved wholesome water sufficient for the purpose to which the building is to be put will be provided, and the supply so provided should be connected to the fittings and ready for use.

**2.3.8.3. Drainage**

Plans for every building must show satisfactory provision for the drainage unless the council otherwise agrees. Where storey buildings are involved, they should be constructed in a way to allow efficient drainage of that storey building.

**2.3.8.4. Sewers**

According to by-laws (194-198), no person should, without written consent of the council, erect, or cause to be erected any building over a sewer line. The council may cause a building constructed in contravention of this by-law to be altered, pulled down or

otherwise dealt with and may recover a civil debt and any expenses incurred in so doing from the person erecting the same or the owner thereof.

#### **2.3.8.5 Ruinous or dangerous structures**

Where any building appears to be in a ruinous, dangerous or dilapidated condition, the council may require the owner of such buildings to secure, repair, renew or otherwise make safe to the satisfaction of the council, such building or remove the same as stipulated under by-law (243).

#### **2.3.8.6 Domestic servant quarters**

Under by-law (246), any person who except, with the written permission of the council, uses or permits the use of any building or part thereof erected for the specific purpose of housing domestic servants for the accommodation of any person other than such servants employed on the plot by the occupier of a building on the plot, shall be guilty of an offence.

#### **2.3.8.7 Unauthorized buildings and change of use**

By-law (252) of the building code provides that any person who erects or permits erection of a building without first obtaining the approval of the council to plans submitted in accordance with the relevant by-laws shall be guilty of an offence. By-law (256) further stipulates that any person, who shall except with the permission of the council use any building or part thereof to be used otherwise than for the purpose specified in approved plan, shall also be guilty of an offence.

#### **2.3.9 Other By-Laws**

By-laws are ordinances or rules imposed by local authorities on the public in order to control standards and ensure good governance. Some of these by-laws as stipulated under (UNCHS, HABITAT, (1999) include:

- a) Health By-laws
- b) Hawkers and Vendors Adoption By-laws
- c) Shop Licensing By-laws



**a) Health By-laws**

These operate in conjunction with the building by-laws and their main purpose is to ensure health standards of living. They also operate in conjunction with the shop license Act to enforce health, trading and manufacturing standards.

**b) Hawkers and Vendors Adoption By-laws**

Hawkers and vendors are controlled by these by-laws which restricts their areas of operation. Hawkers must obtain a license from a local authority entitling them to sell specified goods in a specified area.

**c) Shop Licensing By-laws**

These provides for the control of licensing of certain trade and businesses carried on, in shops, stores and other places to ensure that all trade and businesses do not infringe the rights of other traders and that the rights of the public are protected by maintaining standards of trading and trading premises. It also sets out license fees for various activities.

**2.4 Factors Contributing to Non-Compliance with Planning Regulations**

The forms in which planning regulations have been drafted, conflicting standards and other substantive requirements, differing procedures for implementation and administration create problems for those who govern and those who are governed (Lai, 1988)

A number of factors contribute to non-compliance of the urban land use planning regulations. These include the following: -

**2.4.1 Restrictive building regulations**

Housing has been identified as a major urban planning problem in Nairobi. The housing deficit continues to rise as the population grows. Mbogua (1994) established that, in 1987 the housing deficit in Kenya was estimated to be 280,000 housing units.

Many building regulations are more or less doomed to failure from the start because of their content and mode of presentation and the way in which they were prepared. It is this which made Waterson (1965) to emphasize the need for planning regulations to be realistic in terms of resources available for implementation and the political and administrative capacity required to support and to implement them. Waterson (1965:44) goes on to state that “good building regulations are realistic and realistic plan or regulation does not set unattainable targets”. This means that those involved in, or affected by the building regulation should also be involved in the preparation stage, partly in order to ensure that building regulations are based on realistic and accurate information and above all to avoid resistance during implementation of the regulations because all those who will be affected by the building regulations will clearly understand what role they are expected to play in the implementation process or how they will be affected by it (Conyers,1982).

#### **2.4.2 Laxity in approving plans**

The law requires that all developers must submit their development proposals to local authorities for approval. This has been reported to take unnecessary long period of time thus delaying developments in most urban areas and as result of this; developers have had to go ahead with their developments with no regard to submitted plans (UNHCS, HABITAT, 1995).

The procedures of obtaining planning permission prior to obtaining lease and carrying out development have been reported to be slow, costly and complicated. Local authorities have been slow in making decisions on development applications. This has been attributed to the complicated procedures the application have to go through and laxity among officers and councilors (Catanese, 1988).

#### **2.4.3 Over centralization of decision making**

Within Kenyan system, both the central and local governments exert considerable influence upon pattern of land use, especially in urban areas, but it is the Central Government which holds the greater power. For instance, although it is the local

authority that lays down development plans, it is the central government that lays down the general policies (Dawson, 1984).

In UNCHS (HABITAT) 1999, it is alleged that a number of these regulations require the minister responsible for urban development i.e. Local Government, to assent to them especially the cases involving appeals or lodged applications by developers when development permission is denied by local authorities or when they are served with the notice to quit. Dawson (1984), further notes that most of the appeals against refusals by planning authorities to permit development or against conditions imposed upon any permission, are also decided at the centre i.e. liaison committee and courts.

There are also ambiguities in the relationship between local authorities, government ministries and agencies. Increasing central control has resulted in a shift of decision-making power from local to the central government. The Acts bestows too much power on the minister, for instance, Minister for local Government and Minister for lands and Settlement who in turn delegates such powers to councils. This has resulted in bureaucratic enforcement procedures that have handicapped urban development and rapid implementation of the projects. The procedures required to meet urban development and planning regulations have as a result been found to be cumbersome and lengthy.

#### **2.4.4 Poor implementation policy**

“The successful implementation of the plan is largely a matter of proper organization and administration” Waterson (1965:339).

Stren (1978) while discussing problems that occur in land use planning and development control in Mombasa noted that the major problems of most local authorities resulted in difficulties of enforcing the regulations. Implementation therefore refers to the whole process of translating trade policy goals or objectives into visible results in the form of specific projects or programmes of action. Implementation process includes all the stages of planning processes including those concerned primarily with plan preparation. In this

context, implementation is concerned with the process of actually carrying out the actions so as to realize the visible outputs from the planning process.

The role of local authorities in the process of plan implementation as suggested by Barret and Fudge (1981) is thus concerned with mobilizing, organizing and managing the resources needed to undertake the actions embodied in the plans. However, implementation of planning regulations has been characterized by failures as noted by UNCHS (Habitat), 1999. Conyers (1982) attributes these failures of plan implementation to: -

- i) Inadequate coordination between officials and others involved directly or indirectly in the planning process.
- ii) Lack of coordination between local authorities and various components of government administrative machinery.
- iii) Bureaucratic, delays and poor execution of projects.
- iv) Ineffective local institutions and staff.
- v) Lack of or inadequate participation by beneficiary population.
- vi) Over centralization of development responsibilities and decision making powers in national ministries (Central Government)
- vii) Lack of skilled expertise required from project inception to implementation.
- viii) Heavy handed and cumbersome central ministerial bureaucracies
- ix) Unrealistic goals.

#### **2.4.5 Political interference**

Political interference is common in the local authorities. Political interference in the urban local authorities systems has limited the local authorities' ability to fully regulate and control urban development. Stren (1978) established that once the council officials prepared the orders for demolition, implementation would be resisted by the elected councilors by either differing or blocking the resolution of the local authority. On the other hand, some developers enjoy political protection and those who can compromise the system develop in direct contravention with existing laws and regulations. Powerful

government officials have also been known to enforce approvals that do not meet the stipulated requirements.

Excessive politicization as noted by UNCHS (HABITAT), 1999 has also interfered with professional conduct of urban affairs and has in turn interfered with the legitimate sources and lines of authority.

There has been lack of adequate political support for the pursuits of the objectives and aims of town planning regulation and development control. This political interference in urban development system has limited the local authorities' power or ability to fully control development (UNCHS, HABITAT, 1999).

#### **2.4.6 Weak financial position.**

Almost all local authorities suffer from weak financial position with a major problem being that the local authorities have poor revenue collection records. Sound financial position of local authorities is crucial for service provision and infrastructure operation. Contradiction inherent in local-central state relations have led to the erosion of local autonomy and enhanced financial; and administrative control by the central government. The lack of local authority power to raise adequate revenue together with their poor revenue collection procedures, has constrained the development of local administrative capacity (UNCHS, HABITAT, 1999).

Inadequate budgetary provisions at the national levels has hand capped the implementation of planning regulations and other plan proposals (UNCHS, HABITAT, 1996).

#### **2.4.7 Poor enforcement machinery**

Although some developers tend to comply with planning regulations, there are many violators. This is because fines levied on offenders are low and affordable hence do not deter them, when compared to gains they make from unplanned developments.

Many planning regulations are not implemented as planned because resources (manpower) are not available in the right quantity, at the right place and at the right time. There is inadequate allocation of manpower through the civil service machinery that may lead to delay in implementation of planning regulations caused by length of time required to fund and fill new positions (Conyers, 1984). In other cases, the main problem may simply be poor management or organization of the implementation process.

The local authorities together with the Central Government also established many laws and regulations, without much attention to human power required to enforce all these regulations. As a result, there has been inadequate manpower to handle all these issues effectively. To make it worse, where there is manpower; most of them do not have the right skills of enforcing these planning regulations.

#### **2.4.8 High professional fees**

High professional fees charged by various professionals: planners, land surveyors and engineers have been identified as a serious hindrance to the development within the legal framework in Kenya. This has discouraged developers to engage these professionals in making building plans. For instance, Mwaniki (1997) notes that the minimum professional fees required for production of titles is approximately three hundred and forty thousand shillings if a developer wants to develop a residential area of say 0.4 hectares in Nairobi.

In addition the Nairobi City Council has other charges like subdivision fee, plot entrance fee, plot subdivision certificate, water and sewerage fee and extra fee for clearance certificate to allow registration of new titles. These charges add up to huge money. As a result, many developers opt to do without the services of these professionals and thus leading to unplanned developments within the areas of jurisdiction of these local authorities (UNCHS, HABITAT, 1999).

#### **2.4.9 Lack of public participation**

Public participation in planning perspective simply means a process where a citizen is able to take part in the formulation and implementation of policies (Davies, 1992). It moves from a point where the planners or local authorities totally ignore the developers and tenants to a point where the developers and tenants have a right to make decision on a whole range of issues. However, poor public participation at the local level has seriously constrained the work of planning and implementation departments in the local authorities. This has been due to lack of enthusiasm and responsibility on the part of urban population about urban planning (Sullivan, 1990).

There is need therefore to employ a bottom up approach with the needs and affordability of the target group being the basis of the regulation to avoid confrontation and resistance of the planning regulations being imposed by the implementing agencies of the local authorities (UNCHS, HABITAT, 2001). In examining the degree of compliance with the required regulations, the extent to which people are aware of the existence of these regulations is important because it partly determines the extent to which people will comply with the planning regulations (UNCHS, HABITAT, 1995). A large number proportion of the people in low income areas are not aware of the regulations (Arima, 1997).

#### **2.4.10 Restrictions in the private sector**

There are too many restrictions in the private sector in terms of involvement of them or contracting and empowering them to enforce some of these land use regulations. The Central and Local Government seems to be rigid to their statutes and hence they don't allow regulatory accommodations and yet they don't have adequate and skilled man power to carry out their duties well especially as regards land use regulations. As a result, some unplanned structures have emerged leading to unplanned zones which were initially well planned (Lai, 1988).

#### **2.4.11 Inappropriate traditional master plan**

Traditional master plan has often relied on rigid regulations using zoning, subdivision and building policies, and standards. Traditional master plan has often been ineffective because too much emphasis is usually put on plan making and too little on plan implementation (UNCHS, HABITAT, 1996).

While regulatory measures of land development have been introduced by these master plans to overcome the 'spill over' effects arising from land development, they may have the effect of forcing up property prices and reducing most households' access to shelter. As a result, illegal developments emerge due to unaffordability factor of many developers to comply with all planning regulations stipulated under master plan. Therefore some of the planning regulations in the traditional master plans have the effects of encouraging progressive deterioration (UNCHS, HABITAT, 1996).



## **CHAPTER THREE**

### **DATA ANALYSIS AND PRESENTATION**

#### **3.1 Introduction**

This chapter is based on research done in Umoja one estate so as to give a better perception of the context under which the study is centred. Umoja one was chosen as the area of study because it is one among other areas in Nairobi where planning regulations have been greatly violated. Indeed, the issue of this area being viewed to be rapidly turning into a slum has been brought forward by all kinds of media ranging from written, visual and audio visual media. It is these violations which made the researcher to find out the reasons behind non compliance with land use planning regulations.

#### **3.2 Historical Background of Umoja phase one estate**

Umoja phase one estate a low income housing project in Nairobi was financed by the Housing Guarantee Program of the United States Agency for International Development (USAID). Construction started in 1975 and resulted in 3000 expandable, one to three roomed housing units designed as self contained bungalows. It was a tenant purchase scheme which was intended for the low income people. The scheme was a comprehensive one in that only specific designs of housing were permitted.

The initial plan of Umoja one estate was courtyard row houses also termed as bungalow or low lying development. The basic house design for each unit had three rooms plus a kitchen. However the project only provided one service plot with a kitchen and one room. Subletting in this phase was not allowed as this would not be in accordance with the projects goals.

In Umoja one, the development was supposed to cover 50% of the plot area. The original houses therefore were meant to be single-family dwelling or one dwelling unit per plot. There was change in this policy in 1980 due to cultural consideration. The new policy stated that if the existing development had not taken 50% of the plot area, the tenant could be allowed to construct domestic servant quarter. The quarters were not to be more than 20% the size of the main house. The quarters were not necessarily for servants

employed by the tenants, they could also be largely be used by young adults who could no longer share the main house with their parents.

### **3.3 Location of Umoja one estate**

Umoja one is located on the east side of Nairobi Central Business District (CBD), 10 kilometres by road from town center on black cotton soil. This estate is located between Moi Drive and Outering Road and it neighbors estates such as Umoja two on the East, Buruburu estate on the west, Komarock's estate on the North and Tena estate on the South. Umoja one is also located in zone 18 according to NCC zoning map.

### **3.4 Land Utilization in Umoja one estate**

The following table shows the initial proposal of land utilization in Umoja one estate meant for various land use activities according to USAID (1980).

**Table 3.1: Land Utilization in Umoja one**

<b>Component</b>	<b>Hectares</b>	<b>% of total acreage</b>
Residential	62.22	43.6
Community facilities	15.25	10.7
Open space	8.20	5.7
Roads	52.35	36.7
Special purposes	4.70	3.3
<b>Total</b>	<b>142.72</b>	<b>100</b>

**Source:** USAID (1980a, Annex 4)

### **3.5 Sampling Techniques**

Umoja phase one has 14 blocks namely: A, C, D, E, F, G, H, J, K,L, M, N, P, and Q. Due to homogeneity in design, and other reasons like limited finance and time, a random sample of 3% of the total population of house holds was taken.

Total population sample was based on the originally planned, designed and developed housing units which were 3000 units on 62.2 hectares of land. The reason for basing this sample on originally designed and built housing units was because the existing or current number of housing units could not be established due to massive illegal and unapproved extensions which are not recorded anywhere by Nairobi City Council.

A total of 123 questionnaires were administered to the residents and 30 to the developers. Questionnaires were also administered to the officials of City Planning and Architecture department in City Hall.

#### **3.5.1 Data collection**

The data for this study was collected from three main groups, namely:

- i. Residents of Umoja phase one estate.
- ii. Developers in Umoja phase one estate.
- iii. Nairobi City Council.

#### **3.5.2 Residents.**

A total number of 123 households were administered with questionnaires. The data on the whole was successful in that out of 123 questionnaires administered, 106 were collected back after being filled or completed which represented 86% of the total administered questionnaires. Success of the collection was attributed to follow up method after administering the questionnaires.

#### **3.5.3 Developers.**

A total of 30 questionnaires were administered to the developers and only 19 were recovered, which represented 63% of the total questionnaires administered. Recovery of

filled questionnaires was not up to date because it was established that some of the developers live outside Umoja one estate and others live outside Nairobi, it was therefore very hard to <sup>get</sup> access some of them. However 63% respondent was regarded as reasonably representative of the developers hence adequate for analysis.

### 3.5.4 Nairobi City Council

The questionnaires were administered to the officials of City Planning and Architecture department.

## 3.6 Data Analysis and Presentation

### 3.6.1 Residents

#### a) Occupancy and housing condition

It was found out that 68% of the residents who responded to the questionnaires had stayed in Umoja one for at least five years. Since majority of the residents had lived in this estate for a period of more than five years, the researcher was convinced that well informed opinion on the questions asked was obtained.

**Table 3.2: Period of stay in Umoja one.**

Period of stay	Frequency	% of the sample population
Less than 1 year	10	9
0-5 years	24	23
Over 5 years	72	68
<b>Total</b>	<b>106</b>	<b>100</b>

Source: Field Survey, 2004.

#### b) Type of Tenure

It was established that 76% of the residents in Umoja one are tenants while 24% are owner occupiers. The percentage for tenants is very high especially in Umoja one estate which was initially meant to accommodate single family owner occupier households.

This implies that most allottees either sold their houses to private investors or let their houses to generate income i.e they have taken housing as an investment good rather than

a consumption good, which is contrary to what was initially intended by Nairobi City Council and the sponsors of the project (USAID). By letting and subletting these housing units it shows that Nairobi City council has not and still is not taking necessary enforcement measures to curb the situation as empowered under several statutes and by-laws which regulate the use of urban land.

**Table 3.3: Type of Housing Occupancy in Umoja one**

Type of tenancy	Frequency	% of sample population
Owner occupancy	25	24
Rental	81	76
<b>Total</b>	<b>106</b>	<b>100%</b>

Source: Field Survey, 2004

### c) Type of Housing

The housing type in Umoja phase one is of varied types .This is mainly because of extensive or massive extensions of initially, uniformly designed bungalow houses. Extensions have been constructed either sideways or upwards. Indeed it was observed that over 80 % of the houses have been extended. Most of these extensions have not been approved as required under several statutes and building by-laws governing urban land use. For instance, section 31-33 of Physical Planning Act No. 6 of 1996 requires the developer to obtain approval of change of user before making any adjustments to the initially designed and approved existing developments. In Umoja one, this has not been done by most of the developers, instead they disregard this requirement due to laxity of NCC.

This confirms that there is poor implementation of planning regulations by Nairobi City Council due to proliferation of illegal developments witnessed in Umoja one as shown below. Most of these illegal developments have been associated with corrupt City Hall officials especially those responsible for inspections and enforcement of planning regulations.

**Plate 3.1: Illegal extensions of original houses**



**Source:** Field Survey, 2004

#### **d) Water Supply and Drainage systems**

In Kenya both the central and local government have the mandate of supplying water to its inhabitants. Despite this mandate, they have carried out this exercise in the reverse of expectations of many urban inhabitants. This is because the coverage and efficiency of clean piped water systems is not only inefficient but has also been deteriorating since 1980's (Syagga and Ondiege, 1990).

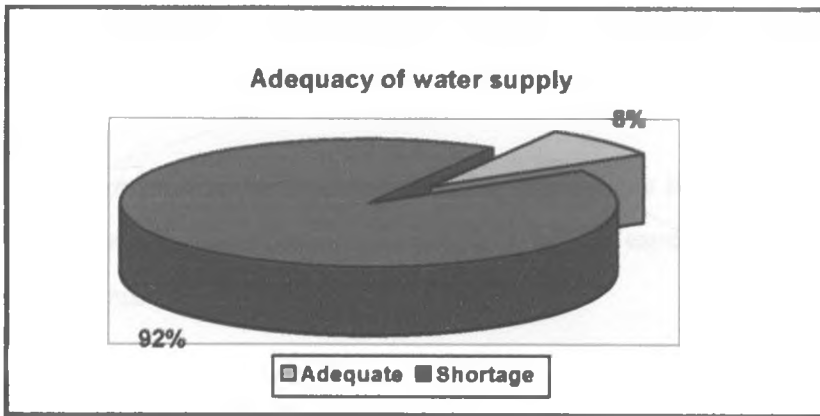
In Umoja one for instance, it was observed and established that most residents experienced various degrees of interruptions in water supply. It was found out that water diversion from some unscrupulous landlords and developers who normally use powerful water pumps to divert water for their own personal gains without regard to other users within the estate was a common feature. These powerful pumps normally reduce pressure of flow of water leading to shortages or very little water flowing out of the taps.

In a survey carried out 92% of the households had experienced shortage of water in one way or another for the past two years within their households.

These diversions were attributed to laxity and corrupt City Council officials. Most of the City Council officials are usually bribed by those who normally divert water, especially the developers. In other circumstances, the City Council officials turn a blind eye on the issue even after the matter has been brought into their attention. This shows the laxity the NCC has in terms of implementation of laid down policies.

Massive diversions by land lords also show that there is a high population within Umoja one area which was not initially catered for. As a result, there is competition for basic limited services which in this case is water.

**Figure 3-1: Adequacy of water supply in Umoja one estate**



**Source:** Field Survey, 2004.

#### **e) Drainage system**

The condition of drainage system in Umoja one estate was not only inadequate but also in pathetic state. The initial storm water drainage systems were cement lined and uncovered.

Most of the drainage system in Umoja one are littered with garbage meaning that they have been converted into dumping sites as shown below. As a consequence of this, most of the drainage systems are not functional instead they are filthy and hence a health hazard to inhabitants. This is because the garbage inside the drains leads to stagnation of water along the drains which normally attracts mosquitoes and flies which are vectors for diseases such as malaria and cholera respectively.

**Plate 3.2: Dumping of garbage long the drainage system.**



**Source:** Field Survey, 2004.

Since one of the core reasons for land use planning regulations is to safeguard health, the above situation normally interferes with people's health especially those households living around the menace.

Drainage systems as well as throughway roads were also observed to have been blocked by illegal structures as shown below. Most of these structures which were seen to have blocked the drainage system as well as through way roads linking other sections of this estate were established that they belonged to politically correct individuals who were either living within or outside Umoja one estate. This scenario portrays that some political forces interfere with normal operations of NCC and this makes it very hard for NCC to implement their policies as expected due to political interferences.



**Plate 3.3:** The building across the road blocking the passage and drainage system.



**Source:** Field Survey, 2004

In this study also, it was established that 100% of the respondents complained that drainage system was inadequate and badly maintained. This can also be attributed to high density population which was not initially designed for in terms of existing services and facilities.

**Table 3.4** The condition of drainage system in Umoja one

<b>Condition of drainage system</b>	<b>frequency</b>	<b>% of the sample population</b>
Adequate	0	0
Inadequate and badly maintained	106	100
<b>Total</b>	<b>106</b>	<b>100</b>

**Source:** Field survey, 2004.

### f) Garbage collection

Urban Housing Survey in Kenya on garbage collection revealed that 65% of the towns needed improvement in garbage collection. Only 35% of the towns collected garbage at least once a week, most of them being smaller towns. The major urban centres have poor records (Syagga and Ondiege, 1990).

In Umoja one, garbage is not collected by NCC, instead households through residents associations have contracted private firms in reaction to laxity of NCC in provision of this service. 92% of the total sample population to whom questionnaires were administered admitted that refuse disposal was done using private firms on weekly basis while 8% admitted that they used open dumping method and none admitted that NCC aided in collection of the refuse.

**Table 3.5: Means of refuse disposal**

<b>Refuse disposal</b>	<b>Frequency</b>	<b>% of sample population</b>
Collection by NCC	0	0
Collection by private firms	98	92
Open dumping	8	8
<b>Total</b>	<b>106</b>	<b>100</b>

**Source:** Field Survey, 2004.

From the results above it can be deduced that NCC has totally failed to cope with demands imposed by ever increasing population in the provision of basic urban services. On the other hand, accumulation of this garbage poses a health risk which is against the aims of planning regulations. The NCC has also kept quiet to those culprits who dump this garbage along the roads and drainage systems. This simply means that the city council is not performing its functions up to the required standards as far as planning regulations are concerned.

**Plate 3.4: Collection of refuse by lorry from private firm**



**Source:** Field Survey, 2004.

The above scenario also shows that where public resources are inadequate, privatization is more likely to succeed. This is witnessed by communities in Umoja one mobilizing themselves through Umoja One Residents Association to keep the environment clean by contracting private firms to be collecting garbage.

**g) Public policy**

The existing services and developments in formal low income settlements continue to deteriorate due to lack of inspections and corruption. This is made worse by continued rising densities in such neighbourhoods which have resulted in illegal extensions of buildings and dilapidated environments and infrastructural facilities (Gitau, 1996).

The increased unplanned and spontaneous settlements in Nairobi are a clear reflection of the growing dilemma of NCC. In Umoja one estate, for instance, it was observed that over 80% of the total developments were illegal extensions.

In Umoja one only 5% of the sample population whom questionnaires were administered agreed to have witnessed demolitions of illegal structures by NCC for the past two years. The buildings which were mainly demolished were those constructed on road reserves or

power lines. This shows that a very small number of illegal buildings have been demolished; or developers taken to court or fined as stipulated by the statutes or by-laws regulating urban land use regarding illegal developments put up by them. Some of the extensions built on power lines were also observed in Umoja one estate as shown below.

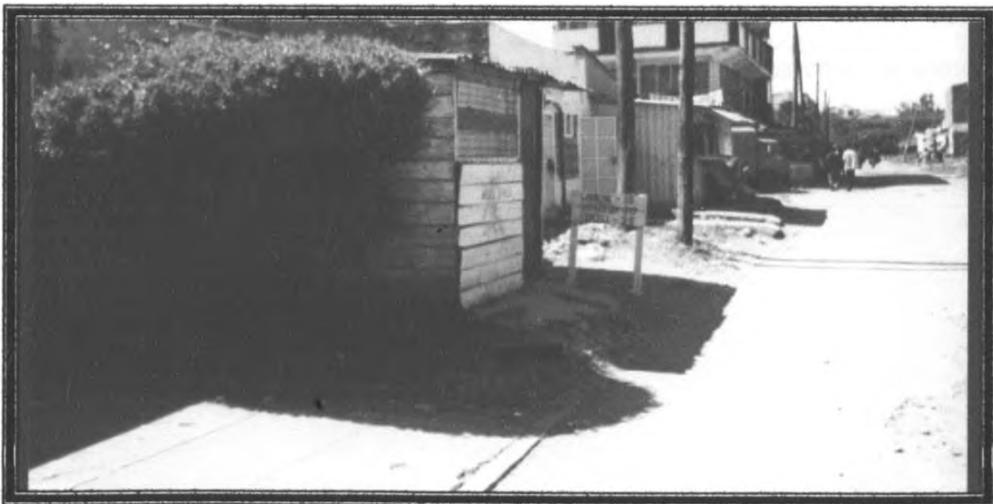
**Plate 3.5: The building marked with X is built on power line.**



**Source:** Field survey, 2004.

In addition other extensions are of temporary materials which are not up to the required standards in relation to building by-laws as shown below.

**Plate 3.6: The kiosk marked X made of temporary material encroaching to road reserve.**



**Source:** Field Survey, 2004.

In some cases, politically correct people have gone all lengths and grabbed land meant for parking and recreation for their own personal gains by erecting in those open spaces commercial buildings as shown below.

**Plate 3.7: Multi-Storey commercial building built on land meant for parking.**



**Source:** Field Survey, 2004

#### **h) Other Neighbourhood Features.**

##### **i) Sanitation**

It was noted that most extensions from the main buildings in Umoja one lacked basic sanitation facilities. Some illegal extensions lacked facilities such as bathroom and toilets meaning that households in extensions shared some of these facilities with the households living in the main house. 46% of the households who live in the extensions admitted that they normally share some basic sanitary facilities with the occupants of the main house, while 54% said that they had basic sanitary facilities within their houses or extensions

**Figure 3-2: Availability of sanitary facilities in extensions**

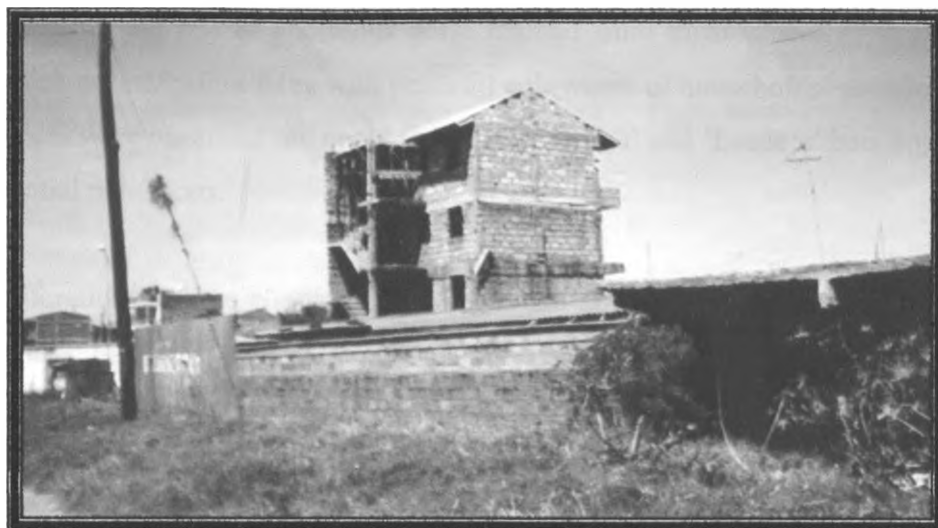


**Source:** Field Survey, 2004.

From the above scenario, it shows that those households who share the basic sanitary facilities lack these facilities within their houses. This exposes the affected households into great health risks. This also contravenes the 'Occupancy Rate' regulations allowed in Kenya which provides that a habitable house should have a kitchen and basic sanitary facilities apart from other rooms required for it to be fit for habitation. All these conditions are as a result of NCC's laxity to ensure that such extensions are not built without approval; or before habitation of such extensions in the case where permission was granted; no inspections are usually done to ensure that the construction of such extensions adhere to what was approved. This is because a new development or change of user of any development is normally approved only after satisfying all requirements including safety and health standards as required under several by-laws of NCC.

NCC is also obliged to give a certificate of completion before any house or change of user (extensions) is inhabited as required under building by-law 16(3). This has not happened to majority of developers in Umoja one as witnessed by some illegal extensions. This merely means that there is poor implementation of building regulations by NCC.

**Plate 3.8: Illegal extensions with three storeys witnessed in Umoja one estate.**



**Source:** Field Survey, 2004.

ii) Condition of adjoining roads

NCC like any other local authority is also obliged to provide and maintain infrastructural services. High population in urban areas resulting from both natural and rural urban migration leads to over use of existing infrastructural services. The rate of deterioration of infrastructural services in most urban centres is so high because the population using these services currently was not initially catered for and this normally leads to over use of existing services in relation to the population needs.

Roads in Umoja one are in pathetic condition i.e they are full of potholes and in most roads tarmac has worn out and only some loose soil has been left. All these problems are associated to NCC's failure to regulate population through density zoning regulations which initially provided for only 3000 households. However, currently, according to Central Bureau of Statistics (CBS) of 1999 census, more than 8000 households now live in Umoja one meaning that both utility services and infrastructural facilities together with recreational facilities are now overused because they are serving the population which is more than what is expected.

iii) Noise and air pollution

It was observed in Umoja one that some bars were located in the midst of the estate .This is a conflicting use due to enormous noise emitted from them especially during night hours which normally interferes with peaceful enjoyment of households' premises. Some of these bars were observed and noted to be 'Millennium' and 'Leaders' bars both owned by influential politicians.

The proliferation of these conflicting land uses can also be said to exist due to political interferences hindering normal operations of NCC, laxity and corruption by NCC officials among other factors. As a result of these, implementation of planning regulations to ensure adherence to laid down regulations becomes very hard on the side of the NCC.

Air pollution from both rotting and decomposing garbage as well as intolerable noise from other commercial activities like 'Jua kali' industries and vehicles was also experienced in Umoja one. This normally affects the health of the residents of in this area due to various nuisances resulting from various land use issues and activities, for instance, decomposing garbage which gives out unpleasant smell which might be a health hazard to the residents.

**Plate 3.9: Decomposing heap of garbage.**



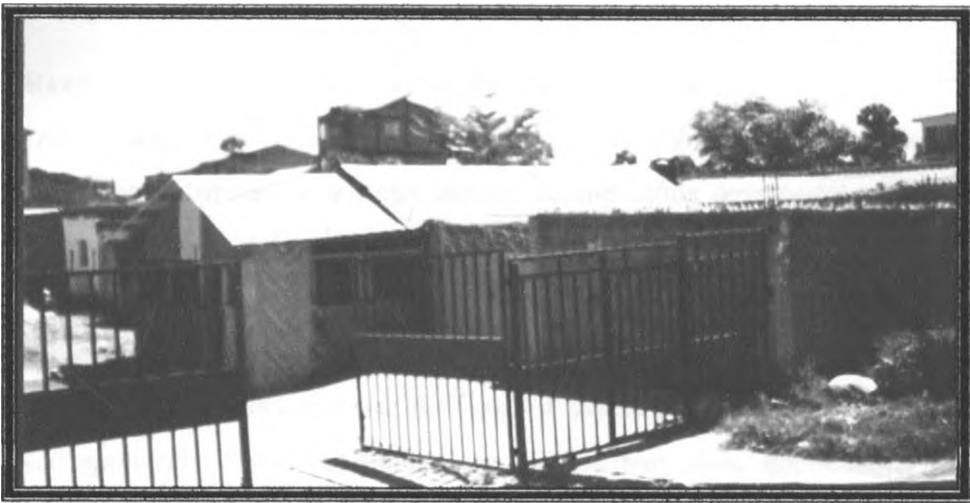
**Source:** Field Survey, 2004.



### **j) Other conflicting land uses**

There are several other land use conflicts which haven't been checked or controlled by NCC in Umoja one. It was observed that some housing units which were meant to be for residential purposes had been converted for commercial purposes. It was also observed that some had been converted into schools while others as retail shops. Some illegal extensions made up of substandard materials were also observed in Umoja one as shown below.

**Plate 3.10:** Temporary structure extending to road reserve in the midst of residential area



**Source:** Field survey, 2004.

The petrol station was also observed to exist in the midst of residential area within Umoja one estate. This poses a great danger to the residents especially in cases of fire outbreak.

The above mentioned conflicting land uses shows some laxity in terms of implementing land use planning regulations so as to ensure conformity with zoning regulations and development plans of NCC. This simply means that NCC is not doing its best to ensure orderly development of its area of jurisdiction; instead it is contributing towards failure of its objectives of ensuring sustainable orderly development through its poor enforcement actions towards ensuring that every development or land use activity conforms to what was initially planned by the council with regard to other related policies of the state.

### **3.6.2 Developers**

Housing has been identified as a major urban planning problem especially in Nairobi whereby over 60% of the population lives in informal settlement. The housing problem continues to rise due to continuous increase in population as a result of natural growth and rural-urban migration in search of employment (UNCHS, HABITAT, 1996).

In reaction towards high demand of housing due to shortages in existing accommodation space, developers in Umoja one have gone all lengths and constructed housing units which don't conform to laid down zoning and building regulations as required by NCC.

#### **3.6.2.1 Reasons for disregard of development applications**

It was established from developers of Umoja one that disregard to development applications were attributed to various factors. Some of the developers alleged that the fees and other charges related to development charges were so high to majority of developers that they were discouraged from seeking the permission for development. On the other hand, other developers claimed that procedures for application of development permission were too lengthy and also the issue of bureaucracy was common which leads to delayed approvals. Some developers complained that some applications lasted for more than a year before approval.

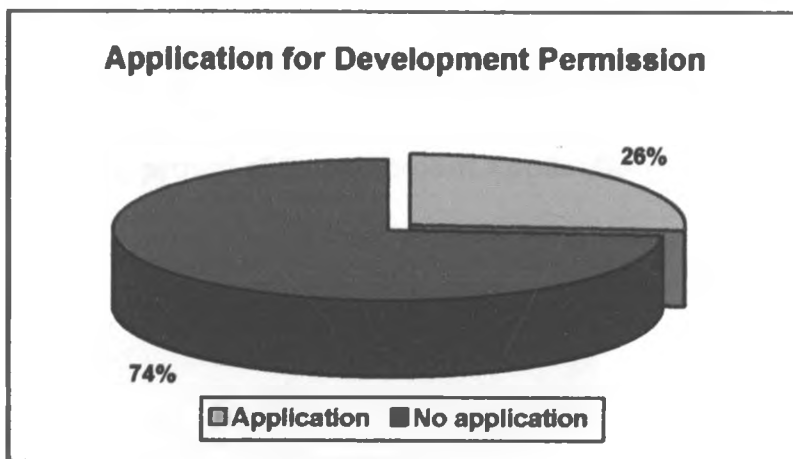
Due to above reasons, most developers developed their houses without reference to land use planning regulations.

The above scenario shows that the institutional machinery of NCC is ineffective due to delay in approval of applications for development permission. It also shows laxity on the part of NCC in terms of work performance. High application fees and other charges related to development permission were also established to be one of the constraints leading to unplanned development. There is need to revise these charges and harmonize them according to people's need and affordability especially the low income earners.

### 3.6.2.2 Application and approval of development permission

It was established that 26% of the developers applied for development permission while 74% of the developers never applied for development permission. Since only 26% applied for development permission, it means that many developments in Umoja one estate are illegal developments which are not recognized by NCC because they don't conform to the laid down land use planning regulations. Proliferation of these unplanned developments simply shows that NCC has not performed its duties well of ensuring planned and sustainable orderly development within its area of jurisdiction.

**Figure 3-3: Percentage of applications for development permission**



Source: Field survey, 2004.

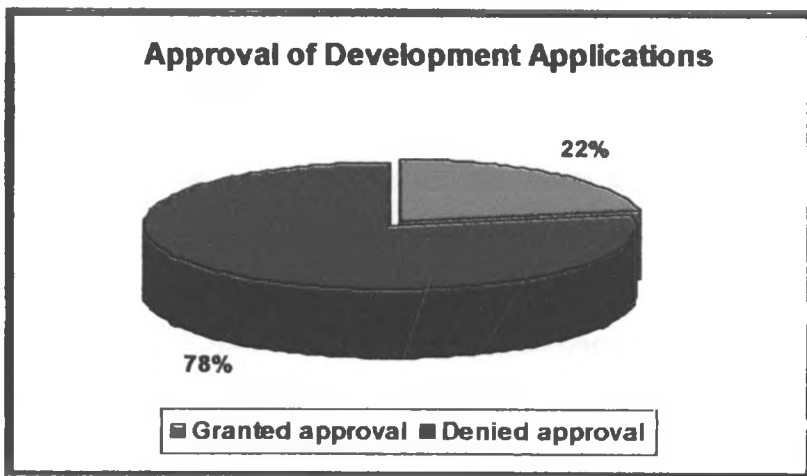
### 3.6.2.3 Implications for denial of development permission

Out of those who applied for development permission, only 22% were granted permission to develop while 78% were denied permission for extensions or change of user. There are various reasons which were advanced by the developers for refusal of approval of their development applications by NCC. 63% of the applicants who were denied development permission was on grounds that their applications could not meet laid down land use planning regulations especially as regards high-rise buildings while 22% were dismissed on grounds that there was insufficient infrastructure and utility services to cater for the proposed development which would result in the increase of population and hence straining the already strained infrastructural and basic sanitary

services. The rest (15%) of the applicants could not establish the reasons for denial of planning regulations.

This scenario shows that very few development applications from the developers meet <sup>the</sup> required standards for approval. This merely means that laid down land use planning regulations are very strict and unrealistic basing on the prevailing poor economic conditions which is characterized by high inflation rates and high levels of unemployment. There is need therefore to regulate some of these regulations so as to encourage more developers to apply for development permission so as to achieve set out government goals in housing policy which advocates for orderly sustainable housing development accessible and affordable by all people.

**Figure 3-4: Approval of Development Applications**



Source: Field survey, 2004.

**Table 3.6: Reasons for denial of development permission**

Reason for denial	Frequency	% of the sample population
Not meet required regulations	12	63
Insufficient services	4	22
No reason	3	15
<b>Total</b>	<b>19</b>	<b>100</b>

Source: Field Survey, 2004.

### **3.6.2.4 Constraints Encountered by Developers during Application for Development Permission.**

#### **1. Bureaucracy**

It was established from developers that there was too much bureaucracy within NCC while applying for development permission because the application forms have to move from one office to another systematically starting from the lowest to the topmost officials. This means a lot of time is spent before the applications are fully approved since they also have to go through full council meeting before the approval is made.

#### **2. Costly procedures**

There are so many various kinds of charges involved before the developer's application is approved. These levies when consolidated together with initial costs of development resulted into a very expensive housing investment to most of the developers. As a result of this, developers normally resort to development of buildings without application for development permission so as to save on total costs for construction. Some of these charges are valuation charges, stamp duty, and registration fee among other charges.

#### **3. Restrictive and high standards planning regulations**

The contents of building code and other by-laws which requires use of costly materials and expensive building or construction technology which are not normally affordable was established to be a hindrance towards application for development permission on the developers side. This normally results in the use of inappropriate materials and poor construction techniques or workmanship which are below minimum required standards as stipulated under building by-laws or building regulations.

#### **4. Corruption**

Land use regulation or code enforcement requires issuance of permits. Although a master plan may set achievable goals, the susceptibility to corruption associated with urban construction can thwart these goals project by project (Conyers, 1982)

It was established from developers in Umoja one estate that most of the City Council officials usually demand bribes from developers so as to excuse them from the axe of demolition. On the other hand developers who don't comply with planning regulations normally plead with the field inspectors and other officials to be spared where demolitions are necessary. It is this plea that normally creates conducive environment for bribery or corruption to take place.

### **3.6.3 Nairobi City Council.**

The main function of local authorities in Kenya is the provision of basic services and ensuring orderly and planned development in their areas of jurisdiction. In this connection, NCC has mandatory responsibility of providing services such as primary education, health and sanitation, water and sewerage, refuse collection and disposal, control of land use, planning and development control and arranging of public housing within its area of jurisdiction covering 684 sq.km (Gitau, 1999).

To provide these services, NCC needs a strong institutional and legal capacity for it to run its affairs efficiently and effectively for the benefit of its inhabitants. However, NCC is characterized by inefficient service provision and poor implementation of laid down policies.

Omamo Commission set up in 1995 showed Governments' awareness of many problems facing its local authorities and NCC in particular. Despite this positive move, the recommendations of the commission have never been implemented (Gitau, 1999). Some of these recommendations included:-

- i) Improving quality of councilors by raising their minimum levels of education so as to enhance the calibre of councilors who should be able to critically analyze issues presented before them for discussion.
- ii) The immediate recruitment of qualified personnel to streamline the management and delivery of services. This would be realized through the creation of central authority to ensure recruitment of staff.

- iii) To financially empower local authorities to enable them perform their duties efficiently and effectively.
- iv) To encourage and achieve active local community participation in the designing and implementation of development plans; grassroots advisory committees should be created as instruments through which local authorities could involve the local people in the determination of their needs (Omamo Commission, 1995:58)

### **3.6.3.1 Compliance with building regulations**

It was established from the officials of NCC that the major land use conflict being experienced in Umoja one estate was mixed land use whereby several developers have set up various types of structures with varied incompatible uses which contravenes the laid down building and zoning regulations.

Some of non compatible land use activities noted by NCC officials were the existence of petrol stations within the residential area in Umoja one and the presence of other commercial activities which stretch along the Moi Drive Road. Most of these activities were not approved.

Existence of bars within the residential area in Umoja one was also noted with concern by the officials of NCC as a major threat to their duties of ensuring peaceful enjoyment of residential areas by inhabitants. The officials also admitted that their efforts were being hampered by the political forces within their <sup>areas</sup> system of operation.

### **3.6.3.2 Causes of land use conflicts**

It was established that illegal developments or unapproved developments were the major cause of land use conflicts. This is because most developers disregard zoning regulations and other development controls and these lead to emerging <sup>up</sup> of unplanned structures. With time, the initially planned area drastically starts changing into an informal settlement which is characterized by mixed forms of land use and unplanned development. The following was established to be the major causes of land use conflicts within the jurisdiction of NCC:-

**a) Political interference**

Political interference was established to be playing a major role towards inducing land use conflicts. For instance, in Umoja one some councilors and members of parliament normally back up some developers to construct or continue occupying illegal developments. Some politicians have also constructed some of these illegal developments for their own personal gains or in other cases they have some vested interests in those illegal properties. Due to these reasons, some of these politicians have gone all lengths to ensure that those illegal developments which don't have the blessings of NCC are retained or even more are constructed in the name of protecting people's interests and human rights to access to shelter.

Political interference therefore has greatly hampered the autonomy of NCC to perform its functions as required.

**b) Shortage of skilled manpower**

It was established from NCC officials that some of the staff members were over worked due to shortage of skilled workers to effectively undertake the work as expected especially with regard to implementing of planning regulations so as to ensure planned and orderly development. Due to shortage of skilled workers and overworking of existing staff, it usually extremely hard to supervise all development works going on within the jurisdiction of NCC which is relatively large. Umoja one is among the many estates which have not been adequately supervised or inspected as evidenced by the proliferation of unapproved developments.

Due to poor inspection or supervisory work, some of the developers usually take that advantage and construct their houses without taking into considerations zoning and building regulations.

**c) Corruption and land grabbing**

Corruption and land grabbing has also been a major draw back in terms of ensuring orderly development of NCC in general. In NCC, corruption has taken the centre stage



whereby applications which don't qualify for approval because they don't meet certain requirements as stipulated under building by-laws and other related land use regulations as required by NCC have at times been approved after bribing some officials within the council.

In other circumstances, some of the NCC officials are bribed by the developers so as not to enforce the regulations as required especially where the developers are found guilty of an offence in terms of violation of planning regulations. For instance where certain structures need to be demolished or altered so as to comply with planning regulations, it was found out that most developers normally bribe field inspectors who in return never report the menace to city council administration. As a result, we have a continuous increase of unplanned developments in Umoja one with varied land use conflicts.

***d) Laxity of NCC officials and general staff***

Laxity among NCC officials has also culminated into land use conflicts in most areas within the jurisdiction of NCC whereby Umoja one estate is one of them. This is because most employees delegated with the authority to ensure adequate implementation of planning regulations normally don't perform their duties up to the required measure. This laxity was established to be attributed to poor remuneration, lack of motivation and lack of work performance measure schemes to guide on how much work a given worker is supposed to undertake for him/her to justify the salary he/she earns; and effective measures to be taken in case any worker fails to perform his/her duties according to the prescribed work performance.

Due to the above deficiencies, unplanned developments continue to be the order of the day in NCC's jurisdiction.

***e) Violation of building regulations***

Site coverage of Umoja one residential was meant to be 50%. The developments to be carried out in each plot were to cover not more than a half of the plot area. The allottee

could only construct servant quarter which was not to be more than 20% of the built area or main house (Mwangi, 1993).

The above control has not been observed in Umoja one. Buildings of more than one storey can be observed in Umoja one. This means that density regulations have not been adhered to due to ever increasing extensions from the main house which has resulted in utilizing all spaces meant for recreation purposes.

The coming up of extensions also leads to two or more families occupying space initially meant for one family.

These illegal extensions have generally led to non compliance with building regulations, and as a result unplanned developments have come up from Umoja one estate which was initially well planned. As a consequence of violation of land use planning regulations by the developers, Umoja one is rapidly turning into an informal settlement.

All the illegal extensions may be attributed to poor implementation of planning regulations whereby the NCC does not take necessary measures to curb the problem of unapproved developments. Corruption has also hampered the implementation of these development regulations due to bribery whereby the NCC officials normally liaise with developers and thus leading to engagement in corrupt practices.

### **3.6.3.3 Enforcement Machinery used by Nairobi City Council**

Some of the enforcement machinery used by NCC was established to be:-

#### ***a) Use of Enforcement Notices***

It was established from NCC officials that where the developer carries out development without development permission or where the development permission has not been complied with, the NCC may serve an enforcement notice to the owner, occupier or developer of the land requiring him or her to ensure compliance.

Where the owner, occupier or developer fails to comply with enforcement notice he or she may face demolitions or prosecutions in the court of law.

***b) Court Action***

It was established also that where the developer attempts to interfere or refuses or fails to comply with enforcement notice, he or she commits an offence and therefore liable to a fine, imprisonment or both as it will be determined by the court of law.

***c) Demolition at Owners Cost***

Where the developer fails to comply with enforcement notice, the council may cause a building constructed in contravention of this requirement to be pulled down or otherwise dealt with as required under the law and may recover a civil debt and any other expenses incurred in so doing from the developer or the owner of the demolished structure.

***d) Fines***

It was found out that fines may also be charged to the developers or owners every day the contravention of laid down land use planning regulations continues after the expiry date of enforcement notice.

The above enforcement machinery has not been put into action effectively by NCC. Due to laxity in enforcing these regulations; unapproved developments have resulted in many areas including Umoja one estate.

**3.6.3.4 Challenges Facing NCC in Implementation of Land use Planning Regulations.**

***a) Weak Financial System***

To provide service to its inhabitants and ensure orderly developments, NCC needs a strong and buoyant revenue base. However, the rampant inefficiency in revenue collection as established from the council officials is the primary cause of the poor financial state of NCC. Apart from corruption, there is lack of standard procedures for the

collection of the rates and other levies. This potential source of income is therefore not fully tapped making the council ~~to be~~ unable to perform its functions efficiently due limited funds collected.

The existing poor financial base, inefficient and highly corrupt management practices and lack of innovative zest on the part of NCC and many other local authorities in Kenya have resulted in declined quality of urban services and thus degraded environment in urban areas coupled with unplanned developments especially in high density areas. This state is likely to continue unless innovative urban management approaches are adopted. Even after establishment of Local Authority Transfer Fund (LATF), delivery of services by NCC has not improved much due to poor urban management approaches.

*He*  
Weak financial system has also hampered employment of more professionals to assist in plan implementation. Due to shortage of these professionals to undertake plan implementation, proliferation of informal settlements is continuously increasing due to inadequate inspection of on going developments as witnessed in Umoja one estate.

#### ***b) Poverty***

It is argued that the growth of unplanned settlements in the city is as a result of poor land use planning coupled with an apparent lack of comprehensive policy to regulate human settlements in Kenya partly due to poverty afflicting a large number of population (Gitau, 1999).

This group of urban low income cannot afford to rent or buy houses taking into considerations all planning regulations..Moreover restrictive building regulations and by-laws, standards and codes; shortage of housing finance for low income group; and restrictive and stringent requirements for development approvals, all condemn the urban low income people.

In Umoja one, majority of the population are low and middle income groups who cannot afford their own housing either by buying or renting formally due to high cost and

rent respectively. For this reason they normally opt for extensions which are normally constructed either sideways or upwards, since they are cheaper than renting the main house or formal house. Due to high demand of these extensions by both low and middle income earners, developers normally get motivated to construct more and more with disregard to planning regulations. For this reasons they utilize every available space so as to maximize returns and pay for their initial cost of investment.

Therefore, poverty will continue challenging planning and implementation of planning regulations in majority of local authorities since it is an ever increasing problem which cannot be easily solved without involving the affected parties.

***c) Lack of skilled and trained staff***

It was established from planning officials that recruitment of staff in NCC is sometimes based on political considerations rather than academic qualifications and actual manpower needs. This often leads to very poor provision of services and policy implementation. Currently NCC has approximately 22,000 workers who seem to be unproductive and unmotivated to discharge their duties effectively.

According to Daily Nation (12.1.1999), Shs.150 million was lost every month due to workers negligence and impropriety e.g. parking and water meters attendants who were not collecting revenue, instead they chose to take bribes. This problem may be associated with NCC's lack of scheme of service to standardize recruitment. This is because it was established that no appropriate record of approved establishment and staff strength in various cadres was in place.

***d) Over centralization of decision making***

In an interview with planning officials in City Hall, it was discovered that Local Government Act Cap 265, Laws of Kenya conferred a lot of powers on the Minister of Local Government in directing and approving various activities of local authorities and in this case NCC.

The planning officers also noted that the problem of plan implementation by NCC can to a reasonable extent be associated with defective Local Government Act Cap 265, Laws of Kenya. This Act gives the minister for Local Government enormous powers which he is supposed to exercise in person. The minister has the powers of hiring, firing or transferring any of the local authorities' officials who are civil servants e.g town clerks or treasurers without <sup>the</sup> councils' approval.

Further, the minister has to approve all local authorities' budgets and major financial transactions. This in effect means that the Central Government control over the city council spans over many of the councils administrative roles ranging from making of by-laws, planning and budgeting resulting in institutional inefficiencies at the council. Where for instance certain workers or council members have been suspended from their duties due to corruption, the minister has the powers of reinstating them without reference to council's decision. This greatly limits the independency of NCC and other local authorities as regards decision making and thus plan implementation.

***e) Poor enforcement of planning regulations***

In the context of planning, enforcement is usually the later stage of planning process. It is concerned with the process of actually carrying out actions and without enforcement; there will be no visible output from the planning process. However these activities will not just happen by themselves just because they are prescribed in the plans, i.e the plans have to be operationalized as noted by McAuslan (1985).

Enforcement according to Mwangi (1994), means or refers to the process of converting resources into goods and services which support behavior change in beneficiary groups.

NCC has very poor enforcement machinery in terms of mobilizing, organizing and managing resources needed to undertake the actions embodied in the plans. This was established to be because of the following reasons:

- i) The NCC does not exactly know what they want to do.

- ii) NCC don't have required resources especially manpower resources which is effective and well trained.
- iii) NCC don't have the ability to assemble, control and manage its resources so as to achieve what it requires due to over centralization of decision making.
- iv) The NCC has poor communication especially to the parties to be affected by their development plans and implementation policies on what is exactly required and at what time.

***f) Inappropriate traditional master plan***

There tends to be too much emphasis on simply writing plans or drawing up of planning regulations without regard to implementation mechanism and appropriateness of those plans or planning policies (Conyers, 1982).

In many developing countries like Kenya, planning was and indeed is still regarded as producing some kind of document on either annual or five yearly basis. This blue print for the future often incorporates totally unrealistic objectives; therefore, it frequently becomes an end in itself rather than becoming a means of achieving orderly development. As a result it is often difficult to enforce or implement these regulations.

The major problems associated with traditional master plan used by both the NCC and other local authorities in Kenya may be summarized as:

- i) The traditional plans place too much emphasis on the plan and not on its implementation
- ii) Excessive rigidity of these master plans

**3.7 Effects of Non Compliance with Land Use Planning Regulations.**

Kenya's experience reveals a lack of adequate guidance and procedures and in formulating decision rules for allocation of land, for the control, approval and regulation of urban development. This is particularly clear when one considers the perceived effectiveness of land use planning in achieving sustainable land development patterns.

Evidence in Kenya shows poor inability of physical planning to hinder the occurrence of the problems associated with contemporary land use planning in Kenya (Olima, 2000).

Some of the effects associated with non compliance of planning regulations in Umoja one estate were established to include:

### **3.7.1 Illegal or unapproved extensions**

The result of poor implementation of planning regulations in urban areas is witnessed by the emergence of uncoordinated development, land use conflicts and proliferation of illegal settlements. Some of the effects of these illegal extensions as established include:

- i. Formerly planned and orderly estates have become haphazard and chaotic
- ii. Aesthetics of the estates have been interfered with due to the use of different plans, substandard materials and poor workmanship
- iii. Land use conflicts have resulted when most of the extensions are used for uses other than what was planned for.

In Umoja one estate, illegal and unapproved developments occur everywhere because of the failure and inability of NCC to enforce its planning regulations so as to ensure orderly development. This problem is also attributed to those officials who are involved in formulating land use planning regulations in the city council for failing to consider the needs of urban low and middle income in formulating land use regulations which reflect their economic capabilities. The rigidity of by-laws has also encouraged the sprouting of illegal settlements in Umoja one in that developers construct without approval of development plans so as to cater for high demand for housing need imposed by both low and middle income people.

### **3.7.2 Incompatible land uses**

Land use conflicts emanate from the poor and ineffective implementation of land use planning regulations.

Conflicts observed in Umoja one arises because of mixed land uses which are non-conforming to what was initially planned by NCC. For instance, bars and petrol stations were observed to be located in the midst of residential area which are very detrimental to



the residents' amenity. Kiosks have also sprung up along the roads. Walk ways have not also been spared because they have been invaded by hawkers of all kinds.

Above all, the major conflict within Umoja one is where the flats have scattered all over the estate in contravention with the initial requirement of low lying houses or bungalows meant for single family. These extensions of all kinds have led to a higher densification of land use which is against the initial intention of NCC.

Incompatible uses have also resulted to nuisance where pollution is experienced in terms of noise, vibrations, smells and dust. These conflicts normally reduce quality of urban environment.

### **3.7.3 Illegal subdivisions**

An example of illegal subdivision in Umoja one is where land owners or initial allottees subdivided their plots in contravention with laid down government subdivision regulations. Such subdivisions often pay little attention to health and fire safety considerations. Since the motive behind their development is to maximize profit, they often have no provision for public amenities such as parks or open spaces. Furthermore, some developers have gone as far as constructing on road reserves leading to narrow roads and also making it hard to service the utility services located on road reserves such as sewer and power lines. These illegal constructions on road reserves which contravenes planning regulations usually leads to traffic congestion.

### **3.7.4 Environmental degradation**

Environmental degradation is the loss of resilience and capacity of self renewal in ecosystems in which human are part (Gitau, 1999).

Stockholm Group of Studies on Natural Resources Management in 1988 stressed the need for all countries both developed and developing to protect environment. In Africa 'The Abudja Declaration' which recommended that African countries should aim at consistency of the development process and environmental sustainability was established

in 1988 (Daily Nation, 14.12.1998). Despite the internal awareness, the formulation of environmental policies and subsequent implementation has not been a central issue of national concern in Kenya (Gitau, 1999).

Many environmental problems are compounded by the continued population growth. It is the high densities of accommodation and the poor housing conditions which promote health hazards and social maladies.

In Umoja one, the estimated households according to 1999 census is that this area has more than 8000 households in relation to the planned population of 3000 households. This means that there has been a population increase. This increased population has exerted pressure on the limited available infrastructural and utility services. Due to inadequacy of these services in relation to the current population, health risks have been experienced and resultant environmental degradation due to garbage dumping, noise from non conforming land uses like bars and 'Jua Kali' activities.

The environmental degradation being experienced in Umoja one is mainly due to ineffective implementation of environmental by-laws by NCC occasioned by lack of interest and awareness, lack of planning and prioritizing on environmental issues. Moreover this environmental degradation can also be attributed to limited land available for development of shelter. Due to shortage of land for development of shelter, it has resulted into settlements that are congested with higher populations thereby further accelerating environmental degradation.

### **3.7.5 Congestion and Inaccessibility .**

Congestion in Umoja one is also a growing menace which need to be addressed by both the Local and Central Government. First, congestion is experienced whereby the housing units meant to accommodate one or single family are presently being shared by more than one household. This normally exerts pressure on the limited utility services and hence poses a great health risk to the inhabitants. This is because congestion in the houses has a direct relationship with the health of inhabitants because communicable diseases easily

spread under such circumstances. This means that occupancy rate and other by-laws as well as statutes related to density regulations have not been adhered to in Umoja one estate.

Secondly, congestion is also experienced in the form of overload of transport mode and especially jams which are experienced during rush hours. These jams are as a result of inadequate infrastructural facilities which are also poorly maintained which usually reduce traffic flow. It is the high populations residing in Umoja one which has resulted in this traffic problems. This is because most of these residents are commuters who need to be transported to town every day where they work, and due to their large numbers, this implies that more vehicles than what was initially designed for will use the available roads so as to cater for their transport needs and thus resulting into long jams during rush hours and accelerated deterioration of roads.

In general congestion being experienced in Umoja one has lead to low living standards than what was initially intended within that area; and on the part of transport system it has lead to increased cost of transport and loss of more productive time during rush hours due to long jams.

## CHAPTER FOUR

### CONCLUSIONS AND RECOMMENDATIONS

#### **4.1 Introduction**

This chapter summarizes the gaps and weaknesses that were identified in the study and proposes strategies that will help towards achieving sustainable urban land development.

#### **4.2 Research Findings:**

##### **4.2.1 Constraints:**

##### **4.2.1.1 At the level of setting the legislative framework and developing regulations** (often mainly at Central Government level)

- ◆ *There are often too many actors involved.* With much bureaucracy and conflicting interests involved, processes of revision become very complex and lengthy. On the other hand, various stakeholders are not allowed to participate in establishing legislation so as to create a feeling of ownership.
- ◆ *The actors involved are often inflexible.* Some of the actors do not want to give in their own priorities, but want others to change theirs instead. For instance, health authorities tend to take a tough stand on regulations to safeguard public health, where perhaps planners might be more lenient to achieve a higher degree of regularized housing.
- ◆ *Words are not matched by deeds.* Whilst policy documents, including the Habitat Agenda, do state that current legislation is inappropriate and thus need revising, little actually happens in practice. To some extent, this is an issue of countries lacking the resources for what may well amount to a complete overhaul of the regulatory framework.
- ◆ *Outdated legal systems.* The legal systems governing urban development were inherited before and during independence. Failure to review or to adapt these

legal systems in the light of actual requirements of existing economic circumstances have led to ever increasing and unmanageable urban land use conflicts. This is because planning regulations in use were not designed for and cannot cope with prevailing economies and means of livelihood in Kenya. Adopted building codes are based on those from developed/industrialized countries with a different physical, climatological and social environment. The codes have often been inappropriate and increased development costs substantially, making it difficult in particular for low-income groups to afford housing built to legal building standards.

- ◆ *Multiplication of regulations from outside local jurisdiction.* The Central Government has expanded scope and intensity of direct control and more often regulate most of the things which are regulated by local authorities, but with varying requirements and demonstrative procedures. This is evidenced from numerous legislations which control urban land use but with varying provisions which usually leads to conflicts during enforcement.
- ◆ *Ineffective institutional coordination.* There are ambiguities in the relationship between local authorities and Central Government Ministries and Agencies. Increased central control has resulted in a shift of decision making power from the Local to Central Government.
- ◆ *Lack of involvement of communities to be affected by the regulations.* Neither the developers nor the residents are usually involved during formulation of land use planning regulations. As result of this, the resultant regulations are usually resisted or ignored by both the developers and the residents which is exemplified by ever increasing illegal development which have not been approved by the respective local authorities.

#### 4.2.1.2 At the level of implementing and enforcing standards and regulations

(mostly at the local level)

- ◆ *Actors at this level get overlooked when standards and regulations are developed or revised.* It often happens that certain specialist ministries or institutions are responsible for establishing regulations, whereas the ministry responsible for local authorities or those authorities themselves are not involved. The result is that the implementing authorities do not really feel ownership of the regulations, find parts of them irrelevant, and sometimes resist their application. There is also an issue about how relevant centrally devised regulations can be in different locations, particularly in large countries like Kenya.
- ◆ *Some actors at this level will resist change for their own benefit.* The process of issuing permits and inspecting building works does offer opportunities for corruption, in fact, these increases with the length and complexity of the system. Any reduction in regulations, standards and procedures is therefore likely to meet some resistance by some officials within some local authorities.
- ◆ *Some actors resist change because they lack knowledge and information.* Few local authority staff involved in approving and controlling urban land use development are aware of all the regulatory tools available. For instance, there is now a tendency for performance standards to replace prescriptive standards; this opens the door for alternative and innovative materials, designs and technologies, which can be more affordable. But these often meet resistance at the local level, simply because the officials involved do not feel confident about their quality due to lack of knowledge, and they therefore stick to the traditional options they know.
- ◆ *Lack of a clear demarcation of responsibility among implementing agencies.* There are a lot of ambiguities in the relationship between local authorities, government ministries and agencies. There are also conflicts that exist between

the Local Government Act and other legislations governing the provision of services associated with sectoral ministries.

- ◆ *Over centralization of functions under the Central Government over the control of Local Authorities.* This denies the local authorities the necessary degree of autonomy. Increasing central control has resulted in a shift of the decision making power from Local to Central Government;

#### **4.2.1.3 At the level of Financial framework**

- ◆ *Small allocation from exchequer.* Central Government is not budgeting sufficient funds to meet its liabilities to Local Authorities in the form of fees, charges and payments -in - lieu of rates; and high Central Government control over the budgetary process, including the cash flow. On the other hand, the Local Authority Transfer Fund (LATF) being granted to all local authorities is not sufficient to help minimize the problems being encountered by most of the local authorities especially in urban areas.
- ◆ *Local Authorities suffer from a poor and inflexible resource base.* The major problem being that they do not have full control over the source and volume of their revenue. Financial weakness of Local Authorities is also reflected in the failure of local expenditures to respond to the growing demands of the population. The local authorities have such potential revenue bases but revenue collection is very poor, such that they are unable to raise sufficient revenue to provide services.

#### **4.3 Conclusions**

From the review of the literature on land use planning regulations and experiences in the field survey, it is evident that the NCC has failed to implement land use planning regulations within its area of jurisdiction. The problem is largely in the degree of compliance with these regulations by the developers. Prevailing forms of urban land use planning regulations have failed to provide orderly and sustainable urban development. As a result, informal settlements have continued to mushroom due to inadequate and

incompetent development control mechanisms, poor and outdated planning standards and planning laws. Consequently, there are problems of overcrowding, inadequate water supply and sanitation, inadequate refuse collection, poor drainage, poor road transport infrastructure and high unemployment levels which are now common within low and middle income areas in Nairobi.

Enforcement of planning regulations in many local authorities has also been affected by inadequate manpower to implement land use planning regulations. The councils are unable to employ adequate qualified manpower especially those related to health issues and to monitor toxic waste dumping as well as sufficient field inspectors to ensure that the on going constructions adhere to land use planning regulations. Other factors affecting implementation of land use regulations include inadequate finance, lack of community participation and political interference in the council's activities. Another problem in enforcing planning regulations is the inability to provide building permits or approve applications in the stipulated time. The current socio-economic conditions and the politics of the day tend to contribute to contravention of land use planning regulations.

It is evident from this study also that the limited management capacity of NCC has resulted in the failure to regulate urban development through implementation of planning regulations. The preparation and enforcement of urban plans has often been based on obsolete planning ordinances which place all planning powers and responsibilities with the Central Government.

Effective reforms therefore need to be implemented and ways in which the land use planning regulations could be made more efficient be examined, so as to achieve planned and sustainable urban development. What must also be recognized is that, the planning and management of urban land depends not only on the development policies but also on the efficiency of institutions and legal instruments that are in place.

There is also need to re-organize the structure and operation of NCC and other local authorities so that it is compatible with local society and economy. This should discard



the often inappropriate foreign models of regulations which still permeate its structures, rules and regulations. Government should also empower local authorities by devolving power from the Central Government and capacity building at the Local Government level. Development initiatives in each locality must be based on a detailed knowledge of local resources and potentials, needs and priorities of local citizens. The fact that each locality within any nation has different potentials and possibilities demands a strong element of "bottom-up" approach to development planning.

#### **4.4 Testing of Hypothesis**

*“Occurrence of unplanned developments in Umoja phase one is due to poor implementation of planning regulations by Nairobi City Council”.*

The results obtained from this study support the hypothesis of this study as stated above, since the research has proven that the illegal or unplanned developments witnessed in Umoja one estate are as result of poor implementation of planning regulations by Nairobi City Council.

Nevertheless, the study also established that the problem of poor implementation of planning regulations cannot only be associated with solely the weaknesses of the NCC but also with the Central Government which normally interfere with normal operations of NCC. Further, political interferences have also played some role towards proliferation of illegal developments as earlier noted.

It can therefore be concluded that the hypothesis of the study was adequate because from the findings most of the illegal developments have resulted due to poor implementation of planning regulations by NCC. However, poor implementation of these land use planning regulations was also attributed to other actors in urban scene involving politicians, developers, residents, and Central Government.

## **4.5 Recommendations**

### ***4.5.1 Autonomy in decision making.***

There is need to carefully scrutinize regulatory framework, reduce the elements decided centrally, and increase local involvement and control, including self-regulation. Ideally, a larger share of the development or revision of regulations should be left to local bodies, but where this is not possible; they should at least be represented when this happens centrally.

### ***4.5.2 Corruption***

Where corruption stands in the way of change, the emerging campaigns for good governance can start to address that. This can be done using appropriate machinery with regard to professional ethics and laid down regulations governing any particular local authority, for instance dismissal and prosecution of the corrupt parties within the local authorities system.

### ***4.5.3 Streamline the land administration system***

To deter future disregard of planning requirements, fines for non compliance with planning regulations need to be raised to reasonable levels. This is necessary because with the current level of fines, most developers can afford to disregard the land use planning regulations and pay the fines and still continue developing the property without regard to land use planning regulations.

### ***4.5.4 Flexible standards***

The requirements and conditions for development in NCC are very rigid and therefore require a more flexible set of standards than what was adopted which were based on western countries experience. These standards should consider the rapid changes in the urban fabric, relate more to local conditions and be easier to implement. There is need therefore to review standards imposed by the by-laws to make them realistic and flexible reflecting socio-economic realities. Flexible standards would encourage adherence to land use regulations by developers.

#### ***4.5.5 Revise and review existing land use regulations***

By-laws, especially those governing land use planning regulations need to be reviewed and made flexible in order to accommodate even those people who cannot afford the high standards currently set. The laws and regulations applied are far too numerous, complex and cumbersome to the majority of the people

In revising planning regulations, the goals set for the use of urban land have to be considered. There is therefore need to enact a more up to date and relevant code of local land use planning which is more efficient, effective and equitable so as to minimize urban land development problems.

The Local Government Act Cap 265, Laws of Kenya needs to be reviewed to give the local authorities autonomy in their operations, including fiscal and policy formulation and implementation autonomy. The Act should reduce the wide ranging powers of minister for local government and minimize central government ministries and departments interventions in the management of councils' affairs.

Local authorities should prepare detailed break down showing purpose, powers and procedures of each enforcement personnel so that each worker understands his or her duties well in terms of enforcement or implementation of land use planning regulations.

#### ***4.5.6 Changes in organization of statutes.***

Conflicting policies and approaches make revision difficult and lengthy and therefore for public convenience, local authorities regulations might well include cross-reference to such other regulations i.e provisions found to be exercised adequately by central government should be eliminated from local authorities' controls so as to eliminate conflicting land use regulations. There is also need to put together into the same general area within the statutes a variety of other enabling provisions which are now widely scattered.

#### ***4.5.7 Staff performance***

There is need for local authorities to ensure that the future staffing plans incorporate training, development, and appraisal of work force. Management By Objectives (MBO) which attempts to relate organizational goals to individuals performance and development though involvement of all levels of management should be adopted by NCC as well as other local authorities. MBO further advocates for performance that relates to outcome of the task rather than the ability of individual to follow orders. It is a satisfying method of working as it allows staff to make a personal contribution and to achieve a greater degree of responsibility.

#### ***4.5.8 Planning regulations should look into the future***

In formulation and enforcement of planning regulations, it is important to avoid repetition of mistakes and abuses of the past. Land use planning regulations implementation should be related to planning objectives for the future so as to maintain the existing well planned and orderly developments from deteriorating due to poor enforcement procedures or guidelines.

#### ***4.5.9 Community participation***

Participative approach should be developed to enable parties to be affected by the land use regulations especially the residents and the developers among other stake holders to be involved actively during formulation and implementation of these regulations. The main reason for involving these parties in plan formulation and implementation is to create awareness in terms of importance of adhering to land use planning regulations and also get suggestions on their part on how they wish the process to be carried out and problems facing them which may lead to non compliance with the proposed regulations. This normally helps those responsible for plan formulation and implementation to come up with realistic land use regulations which can be easily implemented due to their acceptance by the communities to be affected because they were partly involved during formulation stage. The result of community participation is usually planned and orderly sustainable urban development.

#### ***4.5.10 Creation of liaison committees***

Liaison committees should be created between local authorities and various relevant government ministries to improve relations and harmonize various Acts that control urban development.

#### ***4.5.12 Incremental development standards***

It would also be possible to introduce incremental development standards which would vary depending on household affordability.

#### ***4.5.13 Minimize political interference***

There is need to minimize political interference in policy implementation in local authorities and instead encourage politicians to give legal backing to the decisions of the planning authorities arrived at by the council.

### **4.6 Areas of Further Study**

- i) Innovative and alternative ways and means of improving policy implementation by local authorities in Kenya.
- ii) Why community participation is a better alternative for sustainable planned land use development.
- iii) Why Central Government should not intervene in Local Governments operations.

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**APPENDIX ONE**  
**QUESTIONNAIRE TO THE RESIDENTS**

*This is a questionnaire being administered to assist in a study about the analysis of land use planning regulations and their impact on urban land use.*

*(Please tick where necessary)*

**A. Occupation and housing conditions**

1) a. How long have you been living in Umoja one? State \_\_\_\_\_

b. Which physical or social changes have you experienced since you settled in this estate?

- Overcrowding
- Limited infrastructural services ✓
- Rapid deterioration of buildings
- Ever increasing extensions of buildings
- Others, specify \_\_\_\_\_

2) a. Type of Tenure

- Owner-occupier ✓
- Rental
- Others, specify \_\_\_\_\_

b. Type of Housing

- Room apartments
- Bungalows ✓
- Storey building

**B. Water Supply and Drainage system**

3) a. What is your main source of water?

- Piped water from Nairobi City Council
- Wells
- Water vendors
- Others, specify \_\_\_\_\_

b. If piped water, where are the taps located?

- In the house

Within the compound

Public

None

c. Is this water sufficient for all your needs?

Yes

No

If No, state why? \_\_\_\_\_

4) a. How can you describe the condition of drainage system within your neighbourhood?

Adequate

Inadequate

Badly maintained

b. What kind of drainage system do you have in your neighbourhood?

Cement lined and covered

Cement lined and uncovered

Open earth drainage

None

### C. Garbage Collection

a. How does your household dispose of its refuse?

Collected by Nairobi City Council

Collected by private firms

Open dumping

Others, specify \_\_\_\_\_

b. How often is your refuse collected?

Daily

Once a week

Once a month

Never collected

**D. Public Policy**

a. Has there been any demolition by the city council or government agency in your neighbourhood for the past two years? ✓

- Yes
- No
- If yes, for what reasons? State \_\_\_\_\_

b. Have you ever been evicted from your house by Nairobi city council officers?

- No
- Yes, for what reasons? \_\_\_\_\_

c. Who do you think is better placed to improve your well-being? ✓

- Nairobi City Council
- Private agencies
- Self help groups
- Others, specify \_\_\_\_\_

**E. Other Neighbourhood Features**

How can you describe the nature of the problems associated with the following neighbourhood features? ✓

Feature	No problem	Tolerable	Serious
Noise			
Air pollution			
Refuse disposal			
Water supply			
Electricity			
Provision of medical services			
Neighborhood school quality			
Condition of adjoining roads			
Others, state _____			

## APPENDIX TWO

### QUESTIONNAIRE TO THE DEVELOPERS

*This is a questionnaire being administered to assist in a study about the analysis of land use planning regulations and their impact on urban land use.*

**(Please tick where appropriate)**

- 1 What type of housing development have you undertaken in Umoja one?
  - Bungalows
  - Flats
  - Others, specify \_\_\_\_\_
  
- 2 Was your development plan approved by the city council?
  - Yes
  - No
  - If No, why? State \_\_\_\_\_
  
- 3 What problems do you/have you experienced from the city council while applying for approval of development plans?
  - 
  - Too much bureaucracy
  - Corruption
  - Unrealistic planning regulation
  - Takes long to approve
  - Others, specify \_\_\_\_\_
  
- 4 What physical or social problems have you encountered after locating your housing investments in Umoja one?
  - Lack of space for expansion
  - Lack of parking space
  - Pollution
  - Others, specify \_\_\_\_\_

5 In your opinion, what would you advise the city council to do in order to have many developers seeking approval of their development plans before construction?

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Thank you for your time and consideration.

## APPENDIX THREE

### QUESTIONNAIRE TO NAIROBI CITY COUNCIL

*This is a questionnaire being administered to assist in a study about the analysis of land use planning regulations and their impact on urban land use.*

#### SECTION A: CITY PLANNING AND INSPECTORATE DEPARTMENT

##### A Land Use Planning Instruments

1 What tools do you normally use to regulate land use regulations?

- i) \_\_\_\_\_
- ii) \_\_\_\_\_

2 What do you normally take into account while designing the above planning regulations?

- i) \_\_\_\_\_
- ii) \_\_\_\_\_

##### B Compliance with Planning Regulations

a. Which land use conflicts have you experienced in Umoja phase one in relation to your initial plans for the area?

- i) \_\_\_\_\_
- ii) \_\_\_\_\_

b. What might be the likely cause of the above land use conflict?

- i) \_\_\_\_\_
- ii) \_\_\_\_\_

##### C Number of Development Approvals and Refusals

a) What percentage of the total applications for development extensions was granted permission in Umoja one for the past two years? State \_\_\_\_\_

b) What percentage was denied development permission out the total application? State \_\_\_\_\_ -

c) What is the approximate percentage of developers who developed without regard to planning regulations (both who were denied approval and those who never applied)? State \_\_\_\_\_

d) What are you doing so as to combat these land use conflicts (illegal developments)?

##### D Site Coverage

a) Was Umoja phase one meant to be low or high-density zone?

Low density

High density

b) What is the site coverage of Umoja phase one residential area?

50%

75%

90%

**E Enforcement of Land Use Planning Regulations**

a) What are some of your enforcement machinery you use to deal with illegal or unapproved development?

i) \_\_\_\_\_

ii) \_\_\_\_\_

b) What are the major challenges (problems) that you normally experience during enforcement of these planning regulations?

<b>Problem/Challenge</b>	<b>No problem</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
Political interferences				
Lack of skilled and trained staff				
Unrealistic building regulations				
Over centralization of decision making				
Corruption within the system				
Laxity among the staff members				
Weak financial system				
Others, specify _____				