

**PROVISION OF RECREATIONAL FACILITIES WITHIN
KASARANI NEIGHBOURHOOD-NAIROBI**

BY:

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B.ED (Tech) Hons. (Moi University)

**A Research Project Submitted in Partial Fulfillment for the Degree of
Masters of Urban Management in the University of Nairobi**

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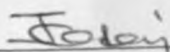
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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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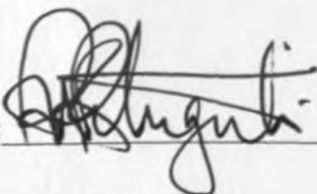
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DEDICATION

To my Parents Mr. & Mrs. Muiga, my husband Njuguna, sisters; Rose, Martha, Jackline, Susan, Molly and brothers; Irungu, Maina, Thomi and Changa. For they opened up the world for me through care, love, patience and understanding

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TABLE OF CONTENT

Declaration.....	ii
Dedication.....	iii
Acknowledgements	iv
List of Tables	vii
List of Graphs	viii
List of Photographs	ix
Appendices.....	x
Abbreviations and Acronyms.....	xi
Abstract	xii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Problem.....	1
1.2 Problem Statement	6
1.3 Objectives of the Study	7
1.4 Justification of the study.....	8
1.5 Assumptions of the Study.....	9
1.6 Scope of the Study	10
1.7 Limitations of the Study	11
1.8 Definition of the Key Terms.....	12
1.9 Structure of the Study.....	15
CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK	17
2.1 Introduction	17
2.2 Necessity of Recreation to Urban Neighbourhoods	17
2.3 Commercial Sports.....	20
2.4 Community Sports Development.....	23
2.5 Recreational Open Space.....	24
2.6 Social Equity in Provision of Recreational Facilities.....	26
2.7 Planning for Recreation.....	27
2.8 Regional Contexts in Planning for Neighbourhood Recreational Facilities	28
2.9 Behavioral Data in Recreational Planning.....	30
2.10 Concept of Urban Neighbourhood	31
2.11 Sustainability of Recreational Facilities in Urban Neighbourhoods	32
2.12 Demand for Recreation facilities in Nairobi City	34
2.13 Proposed Research Needs on Neighbourhood Recreation.....	36
2.14 Community participation.....	36
2.15 Summary of Review of Literature.....	37
2.16 Conceptual Framework	39
CHAPTER THREE: RESEARCH METHODOLOGY	44
3.1 Introduction	44
3.2 Case Study Rationale	44
3.3 Research Design	45
3.4 Target Population.....	46
3.5 Sampling Design.....	46
3.6 Sample Size	46
3.7 Sampling Techniques	47
3.8 Primary Data Collection Methods.....	48
3.9 Primary Data Collection Procedure.....	53
3.10 Secondary Data Collection and Procedure	54

3.11	Data Processing and Analysis.....	56
CHAPTER FOUR: STUDY AREA ANALYSIS		59
4.1	Introduction	59
4.2	Location.....	59
4.3	Historical Development.....	60
4.4	Land Delivery Systems	64
4.5	Physiological Background -Altitude and Topography of the area	65
4.6	Geology and Soils.....	66
4.7	Hydrology and Drainage	67
4.8	Vegetation	69
4.9	Climatology within Kasarani.....	69
4.10	Pollution Levels	72
4.11	Physical Infrastructure of the Neighbourhood	74
4.12	Social Infrastructures	77
4.13	Economic and demographic profile of the study area	80
CHAPTER FIVE: LEVELS OF ACCESS, ADEQUACY AND ROLES PLAYED BY VARIOUS STAKEHOLDERS IN RECREATION FACILITIES PROVISION.....		81
5.1	Access Level to the Available Facilities.....	81
5.2	Level of Adequacy of the Existing Facilities.....	94
5.3	Major Stakeholders in Provision of Recreation Facilities in Kasarani	107
5.4	Summary of the Major Findings and Discussion.....	114
CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION.....		120
6.1	Introduction	120
6.2	Conclusion.....	120
6.3	The Study Recommendations towards a Suitable Provision of Recreation Facilities	123
6.4	Areas for Further Research.....	130
REFERENCES.....		131
APPENDICES		136

LIST OF TABLES

Table: 5.1	Recreational Facilities Made Use of Within the Neighbourhood	82
Table: 5.2	Different Ways in Which Neighbourhoods Residents Spend Leisure Time	83
Table: 5.3	Reasons for Not Engaging in Outdoor leisure activities	84
Table: 5.4	Amount of Money Spent Per Household on Recreation	84
Table: 5.5:	Duration of Time Households Have Been in the Neighborhood	85
Table: 5.6	Places Where Neighbourhood Children Play	88
Table: 5.7	Recreational Facilities Available In Kasarani Neighbourhood	97
Table: 5.8	Facilities Mentioned as is Short Supply or Missing in the Neighbourhood	104
Table: 6.1	Implementation Schedule	129

LIST OF GRAPHS

Graph: 4.1 Average Sunlight Hours per Day	70
Graph: 4.2 Relative Humidity	71
Graph: 4.3 Rainfall Pattern and Amount	71
Graph: 4.4 Average Temperature	72
Graph: 5.1 Frequency of Use of Available Facilities	82

LIST OF PHOTOGRAPHS

Photograph: 4.3 A playing field belonging to a private school	78
Photograph: 5.1 Baby Pudding (back ground) and the competition pool in the foreground. ..	87
Photograph: 5.3 Children playing ground in a private hotel (Sports View Hotel).....	90
Photograph: 5.4 Children climbing structures in a private hotel (Sports View Hotel).....	90
Photograph: 5.5 Main Stadium Parking	95
Photograph: 5.6 Main Stadium Compound near the Gates	100
Photograph: 5.7 Divers Pool at the Kasarani Aquatic Complex	101
Photograph: 5.8 Diver's Pool and Competition Pool the Kasarani Aquatic Complex	102
Photograph: 5.9 A deserted bar at the Kasarani Restaurant	103
Photograph 5.10 A chain of quarry dams	105
Photograph 5.11 Adjoining Spaces to the Dams	105
Photograph 5.12: Gatharaini River Riparian Reserve	106
Photograph 5.13: Roy Sambu Roundabout Open Space	107

APPENDICES

Appendix 1: Interview Schedule For Kasarani Neighbourhood Residents	136
Appendix 2: Interview Schedule For Managers Of Recreational Facilities	139
Appendix 3: Interview Schedule For Customers In Recreation Facilities.....	141
Appendix 4: Questionnaire To Nairobi City Council	145
Appendix 5: Field Observation Checklist	147
Appendix 6: Work Schedule	148
Appendix 7: Project Budget	149
Appendix 8: Map of Nairobi Province Showing the Study Area	
Appendix 9: Satellite Image-2003 Superimposed On Kiambu Map Sheet No.148/2	
Appendix 10: Land Use Map of The Study Area	
Appendix 11: Proposed and Existing Claycity Estate Development Plan	
Appendix 12: Part Development Plan-1984-Ruaraka Market Centre	
Appendix 13: Part Development Plan-1990-Ruaraka Market Centre	
Appendix 14: Menu Sample from Kasarani Restaurant (2009)	

ABBREVIATIONS AND ACRONYMS

CAP	Chapter (In the Laws of Kenya)
KSHs	Kenya Shillings (Kenyan Currency)
CBOs	Community Based Organizations
GIS	Geographical Information Systems
PDP	Part Development Plan
LATF	Local Authority Transfer Fund
LASDAP	Local Authority Service Delivery Action Plan
NCC	Nairobi City Council
UN	United Nations
CDC	Center for Disease Control and Prevention
TV	Television
CCTV	Closed Circuit Television
DSTV	Digital Satellite Television
G.o.K	Government of Kenya
ICIPE	International Centre of Insect Physiology and Ecology
AMSL	Above Mean Sea Level
KISE	Kenya Institute of Special Education
NGO	Non Governmental Organization
KARI	Kenya Agricultural Research Institute
NEMA	National Environmental Management Authority
RCMRD	Regional Centre for Mapping of Resources for Development

ABSTRACT

Provision of recreational facilities in Kasarani has not met both the accessibility and adequacy demands of the residents. The neighborhood population has not been served adequately with accessible, safe, age- appropriate and properly maintained recreational facilities. The urban space is variable and competes stiffly with other land uses which seem to be more profitable to the cost-benefit analyst. The facilities require regular maintenance and initial cost outlay is rather high coupled with poor clientele who cannot afford user charges that guarantees cost recovery. This study is focused on establishing a suitable solution to the recreational facilities deficiency in one of Nairobi's peripheral district called Kasarani, located 12km North of Central Business District. The study aims at finding out the current status of the existing facilities, seeking to know the local needs of the community, identify the gaps in provision of recreational facilities and predicting the future demands in order to come up with a sustainable model. The study utilizes both primary and secondary sources of data. Methodological approach adopted for primary data collection involved, observation and administration of questionnaires to the officials of the Nairobi City Council. Interview schedules were administered to the neighbourhood residents, customers found using the existing facilities as well as the existing facilities managers. In order to recommend a suitable planning model for improving access and adequacy of the recreational facilities, the study begins by systematically assessing the levels of access to the recreational facilities available to the different social groups residing in the neighbourhood.

This is followed by establishing the level of adequacy of the available facilities in accordance to the requirements of the urban recreational facilities planning principles and standards and gauging it against the users stipulated needs. It further explores the roles played by major stakeholders in the provision of recreational facilities in Kasarani neighbourhood. The study found out that the situation of recreational facilities provision is unsuitable. The major stakeholders have failed due to lack of coordination among them as well as poor legal and institutional frameworks. Proper guiding policies are also lacking that would ensure provision of accessible and adequate facilities to all in the neighbourhood..It hence settles down on planning, management and policy recommendations that inculcate both institutional and technical planning approaches. These are envisioned as the most critical components for a suitable planning and management model for recreational facilities provision to an urban neighbourhood.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Problem

Urbanization is the increase in the population of cities in proportion to the region's rural population. The most striking physical indicator of urban growth is the change observed in urban land uses, as the small towns grow to bigger and keeps on expanding spatially and in density. Urbanization concentrates wealth, poverty, markets, demand for goods and services as well as human resources. The 20th century was described by UN World Urbanization Prospects Report (2005) as witnessing a rapid urbanization of the Worlds population. The global proportion of urban population rose dramatically from 13 percent (220 million) in 1900, to 29 percent (491 million) in 1950, to 49 percent (3.2 billion in 2005). It is also projected by the same report that the figure is likely to rise to 60 percent (4.9 billion) by 2030.

Urban population increases due to natural causes like birth and rural urban migration as people move to the urban areas to seek for employment opportunities as cities have a high concentration of employment opportunities compared to rural areas. The increase in urban population results to increase in demand for urban services, goods and facilities.

In less developed world cities like Africa majority of the urban population are poor since the rate of unemployment is rather high. With a poor population that results to low revenue base, the city authorities are constrained in services and infrastructure provision. The meager resources mobilized by the authorities are allocated towards the very basic facilities like healthcare, basic education, housing, in addition to essential services like water supply, sanitation and sewerage. This leaves infrastructure like recreation facilities to score very poorly in the national budgets as well as local authority budgets.

According to the Republic of Kenya (2001) the world's population of older persons aging 60 years and above was estimated to hit 606 million by the year 2000 and the author projected that the number would increase to 1.2 billion by the year 2025. In Kenya those aged 55 years and above constitute 6.9 percent of total population. The youth constitutes 31.8 percent of the total population and it is estimated that 3 million youth are outside the education system. It further states that the Kenya urban population grew from 3.8 million in 1987 to 9.9 million in 1999 constituting 34 percent of total population and the same author projected that it would reach 16 million by the year 2005. The above urban population growth poses major challenges to authorities to provide sustainable urban social services to the growing population. The older persons in urban areas require provision of basic services like housing, access to healthcare, security and recreational services that suit their age. The youth on the other hand requires education, economic empowerment, health care and recreation facilities.

As in the case of many third world cities and towns, Nairobi urban recreation facilities has been given low priority in the spatial planning, development and management. Omondi (1991) states that local authorities have tended to neglect this field. Due to the fact that open space and recreational land use tend to present low appeal to cost benefit analysts who perceive recreational areas as if they pay no direct rates, but rather very expensive to acquire, landscape, manage and maintain. As a result of this perception the urban authorities have emphasized other forms of land uses like residential housing, industrial and commercial uses which offer high returns as land values escalate.

In Republic of Kenya (2001), Kenyan government recognizes the need for recreation among urban residents as it states that recreation is a necessary and motivating force in our lives. A large segment of recreation activity should occur near the home. However, with the current shrinking plot sizes in our housing compounds, this need is not effectively met. In Nairobi the local authority and central government assumes the responsibility of providing daily recreation activities but the current recreation needs have surpassed the capability of the Nairobi City Council to effectively meet this demand. Childhood obesity and their related health problems have been rising at alarming rates. Kenya could be heading to the same phenomenon as America whose statistics cite 10 percent to 20 percent of the children are overweight and could be due to the modern lifestyle The Center for Disease Control and Prevention (CDC) calls childhood obesity an epidemic. Omondi (1991) further commented that, physical activity such as that provided by urban parks is crucial to addressing this problem.

Traditionally, Olympic music and dances serve as recreation in many cultures among others like sports, hobbies, games and tourism. Currently, forms of leisure have increased to; watching TV, playing computer games, listening to music, and watching comedians.

According to Dosio (1982) the choice of hours for recreation is upon the employees who are restricted by the requirements of, and agreement with the employer (working time) and students by school hours. For business people recreation is restricted by the work requirements such as the opening hours or the business based on wishes of customers, laws and customs. In most urban neighbourhoods the weekend is usually a time for recreation, perhaps because in Christian and Muslim cultures the weekend Sabbath is "the day of rest". Holidays are also a common time for recreation though recreation may take place at virtually any time. Recreation commonly occurs during individual's discretionary time.

He further commented that, legal framework guides the form of recreation to be promoted in particular urban neighborhoods. Some recreational activities are made illegal in many jurisdictions because of the perceived immorality of certain forms of leisure or if it poses a threat to the security structures. Those that are considered illegal in the basis of immorality include gambling, some forms of sex, drug use and some forms of dancing (such as belly dance). Some pool table stations were closed down by the provincial administration for security reasons in Nairobi residential neighborhoods.

Quite often one form of leisure activity is viewed as immoral by a culture while other forms are viewed as acceptable in most of the world, For instance, responsible alcohol consumption, a form of recreational drug use is legal and acceptable by most people's moral standards.

He further wrote that recreation should be promoted to enhance well being of urban residents although some individuals view recreation as largely non productive compared to other sectors of urban economy. Recreation contributes to life satisfaction, quality of life, health and well being of an individual. Further it has been discovered that recreation counteracts stress which is a major cause of premature deaths in urban areas. The use of recreation as a diversion may have clinical application to individual with chronic pain and other health impairments. Recreation programs provide participants with a constructive use of their time through access to music, hobbies, craft and exercise equipments. Other benefit of recreation to urban set up is a reduction to health care costs.

In addition to the above benefits, Achola (2006) noted that proper provision of recreation in our urban neighborhoods would create employment to the specialists who would be assigned duties to work in parks and recreational centers, on community projects and activities, networking with instruction budgeting and education of continuing programs thus reduce poverty levels in our urban areas. The recent menace of secondary school riots can be linked with stress in teenager as parents opt to engage children in extra tuition for lack of constructive safe mode of leisure activity.

Recreation will promote talent among the children and youth. Idleness is the cause of juvenile delinquency currently being experienced among the urban youths and consequently reduce curb crime in our urban neighbourhoods

This study is focused on establishing a suitable solution to the recreational facilities deficiency in one of Nairobi's peripheral district called Kasarani located 12 kilometers North of Central Business District.

1.2 Problem Statement

Provision of recreational facilities in Nairobi's peripheral districts like Kasarani has not met both the access and adequate demands of the residents. Despite the fact that Kasarani neighborhood accommodates one of the world's major international stadium; Moi International Sports Complex: Kasarani, the access to this and other recreational facilities and open spaces to the residents is limited. The neighborhood population has not been served adequately with accessible, safe, age- appropriate and properly maintained recreational facilities. The study area is one of the fastest growing residential zones in the periphery of the Nairobi City. According to Obala and Kinyungu (2006), the housing development in the recent peripheral districts for instance Kasarani is through private developers who buy un-serviced parcels of land from Land Buying Companies who are profit geared hence allocate every available parcel of land for house development without regard to social amenities like recreation that go with residential zones.

The problem is made worse by lack of adherence to the Land Planning Act Cap 303 of 1970 that stipulates that, 'any person who carries out development without consent shall be guilty of an offence', the Nairobi City Council is the institution mandated to ensure proper physical planning and development control but according to Maina (1982) the enforcement arm of the local authority is weak and hence, intense land grabbing of the public utility land in most urban neighbourhoods is common.

Research Question

Based on the problem stated, the purpose of this study is to answer whether the provision of recreation facilities in Kasarani is adequate and accessible to all and if not, what is the most suitable model through which this need can be met?

1.3 Objectives of the Study

i) General Objective

The general objective of the study is to develop an integrated management model for the provision of recreational facilities in Kasarani that responds to the aspiration of all age cohorts and income levels. To achieve this, the following specific objectives were formulated:-

ii) Specific Objectives

- a) To determine accessibility levels to urban recreational facilities in Kasarani neighbourhood.

- b) To determine the level of adequacy of the available facilities in accordance to the requirements of the urban recreational facilities planning principles and standards
- c) To find out the roles of major stakeholders in the provision of recreational facilities in Kasarani neighbourhood.
- d) To recommend a suitable provision model for improving access and adequacy of the recreational facilities that may correct the layout deficiencies incurred in the initial planning and development.

1.4 Justification of the study

Despite the fact that provision of recreational facilities and open spaces has been recognized in the Republic of Kenya (2005) as an important tool towards promotion of good health of the communities, national integration, employment creation and crime rate reduction, so far there has not been enough research work and documentation to highlight on the current status of the recreational facilities and open spaces especially in the upcoming peripheral urban districts with particular interest to accessibility of available facilities.

This study is important as it seeks to determine the deficiencies and needs of the community in the area and come up with a planning and management model that would serve as a guide towards provision of urban recreation facilities in urban neighbourhoods.

This research is timely now as Kenya reveals the strategy of Vision 2030 where she hopes to ensure decent and high quality urban livelihoods for her population in the view of the current demographic trends. According to the Republic of Kenya, (2007) Kenya will be predominately urban country by the year 2030. Through adequate provision of recreation facilities at the neighbourhood level together with awareness creation on the benefits of recreation among the urban dwellers, talents can be identified and nurtured early among the youth and children. These talents will enable Kenya as a nation capitalize on her international reputation as an 'athletic superpower'. The government hopes in the Kenya Vision 2030 to open up for top global sports events encouraged by corporate sponsorship. In the same vision 2030, the government is committed to promote music and performance arts to the talented by providing facilities and stricter enforcement of copyright laws. This is envisaged to lead Kenya to be among top developing country destinations of global film producers. These goals if achieved will give recreation a dual benefit of both enhanced quality urban life as well as an economic good for the citizenry.

1.5 Assumptions of the Study

To achieve the objectives of the study, the researcher has formulated the following assumptions:

- a) The local authority will have to play its role of spatial planning and development control if proper urban housing equipped with social amenities in this case recreational facilities is to be realized in Kasarani neighbourhood.

- b) Lack of awareness among the residents on their bargain rights for open spaces has contributed to inadequate provision of these facilities by the private developers.
- c) Recreational facilities have been given low priority in neighbourhood infrastructure provision.

1.6 Scope of the Study

The study concentrated on the following:

- a) In terms of spatial dimension, the study covered; the northern part of the Kasarani location, the area is in the immediate neighborhood of the famous Moi International Sports Complex, to the west, Nairobi-Thika Highway to the north, Gathara-ini River to the east and Haco and Strabag industries to the south. Appendix 3 attached shows a land use map of the study area.
- b) The recreation facilities that engage the residents with both active and passive leisure activities that make use of the outdoor and indoor spaces were captured in the study.
- c) The study focused on neighbourhood recreation facilities that are meant to serve a group of estates in Kasarani namely, Sports View, Clay City and Kasarani estates. Facilities necessary to meet the various needs of different users in the neighbourhood across the age cohorts was assessed. These facilities included outdoor recreation such as; neighbourhood parks, play fields(football, volleyball, netball, tennis courts, athletics, swimming pools and indoor recreation such as boxing, karate, badminton, table tennis, ajua, draughts, body building , darts and

- dancing. The study included a stadium and restaurants, within the study area boundaries although these facilities were meant to serve the entire city population.
- d) The study covered only those recreation activities that do not contradict the laws of Kenya. The illegal recreational activities like illicit brew, hard drugs, prostitution, watching pornography, and gambling, though present, were not covered.
 - e) The study dealt on recreation facilities that serve the social economic classes ranging from the upper low income to upper middle income classes who are the majority in the area.

1.7 Limitations of the Study

- a) The data collection and analysis took a long time as the researcher solicited for personal information and lifestyles from the subjects.
- b) The tedious data collection and analysis required a lot of money to pay enumerators and buy equipments like cameras, scanners, printers, a computer hardware, software, satellite images, part development plans (PDPs) etc.
- c) Some subjects' suspicion rose about the motive of the study as some of the questions were too personal for instance, those touching on income, age, household size and therefore it was difficult to tell whether the respondents gave the correct information or not.
- d) The data collection stage that targeted the resident household heads was a challenge since during the day the subjects were out working and those left in the neighborhood were only home makers and idle youth. This could have lowered the external validity of this study.

- e) Observation and photography along the dam shores and the river riparian reserve was scary due to thick bushes that poses a personal security threat that scared the researcher away from taking a photograph at close range this photograph:17 was taken to show the nature of the landscape.

1.8 Definition of the Key Terms

Recreation: According to Goodman and Freund (1968) the term recreation is defined as, any pursuit engaged in during leisure time (any form of entertainment or rest) after the regular work or school engagements. The term was also defined by Dosio (1982) as use of time in a manner designed for the therapeutic refreshment of ones body or mind. Omondi (1991) similarly defined the term recreation as activities undertaken voluntarily for the purposes of enjoyment and/or physical and mental well being. In this study the term was used to mean any activity or pursuit undertaken out of individual choice when out of their normal regular work or routine job. Both active and passive recreations were covered in this study.

Leisure: According to Goodman and Freund (1968) leisure time is defined as any form of entertainment or rest. Omondi (1991) further defined leisure time as time free from obligations. In this particular study was used to mean idle time or spare time or free time.

Active leisure: These are activities that involve the exertion of physical or mental energy. Low-impact physical activities include walking and jogging, which expend little energy and have little contact or competition. High-impact activities such as kick-boxing and soccer consume much energy and are competitive. Some active leisure activities involve almost no physical activity, but do require a substantial mental effort, such as playing chess or painting a picture. Active leisure and recreation overlap significantly. Wikimedia (2008)

Passive leisure: Activities are those in which a person does not exert any significant physical or mental energy like watching television. Some leisure experts discourage these types of leisure activity, on the ground that they do not provide the benefits offered by active leisure activities. For example, acting in a community drama (an active leisure activity) could build a person's skills or self-confidence. Nevertheless, passive leisure activities are a good way of relaxing for many people. Wikimedia (2008)

Recreational facilities: Omondi (1991, 177) defined recreation facilities as ‘...any development on the land or in buildings and/or any objects intended to encourage or facilitate recreation.’ The term is used in this study to mean those amenities that are made use of during leisure time they include indoors and outdoors amenities.

Open spaces: According to Dosio (1982) the term open space was used in this study to refer to the land left vacant and not developed within and around the residential neighborhood of Kasarani. The land left vacant for the purpose of providing

recreational space/place to the residents. The term will be used to mean or refer to three categories described below where any distinct category will be referred to with an intention of differentiating the functions and segment of the population catered for by each facility. Types of open spaces:

Communal open spaces: According to Dosio (1982). These are spaces left for use by the residents of the neighborhoods especially those that live adjacent to the place. Mostly there are no entry charges or user charges placed on the residents. They are meant for promotion of harmony and integration as well as good health of the community members. They are shared among the community members.

- **Private open spaces:** According to Dosio (1982) the term constitutes those open spaces that individual or a society possesses ownership rights to bar others from accessing. For instance private homes front and backyards, hotels that have open spaces for customers only or the members clubs golf course and sports grounds e.g. Kasarani Sports View Hotel, Augustana College, etc
- **Public Open Spaces:** According to Dosio (1982) open spaces that are accessible to anybody in the city. There are no restrictions on entry and they belong to the local authority or the central government.

Sustainable Planning: According to Goodman and Freund (1968) the term planning has a connotation of a review, evaluation and re-planning in order to improve the environment of the study area. In this study therefore sustainable planning is understood as coming up with a model that will ensure that the Kasarani residents today will be

assured of meeting their recreation needs without denying the future generations an opportunity to meet their own needs using the same model.

1.9 Structure of the Study

The study is organized into six chapters. Chapter one introduces the background of the study problem by specifically presenting the study objectives, study assumptions as well as definition of key terms.

Chapter two focuses on the literature review and conceptual frameworks. Under it, relevant literature pertaining to the study problem has been reviewed with an objective of developing a conceptual model towards provision of suitable recreation facilities.

Chapter three explains in details the procedure that the researcher followed in conducting the study. Pertinent issues discussed in this chapter includes the target population, sample and sampling techniques used, the research design, a description of tools used in data collection, the measurement of variables and techniques to be used in analyzing the collected data.

Chapter four presents the analysis of the study area. It examines some of the attributes of the study area such as location, physiological background, climatology, pollution levels, and historical development of Kasarani in the context of Nairobi city, physical and social in infrastructure, economical and demographic profile. The study is

interested in finding out how each of the above attributes influences the provision of recreation facilities in the study area.

Chapter five presents the survey findings and implications based on the three specific objectives of the study. This is presented in three sub headings each tackling one specific objective as follows: part one discusses on the levels of access to the recreational facilities available in Kasarani covering the different social groups residing in the area. Part two describes the adequacy in terms of size against the population and physical condition of the existing facilities in the neighbourhood. Part three describes the roles played by various stakeholders in the provision and management of neighbourhood recreation facilities in Kasarani neighbourhood. It terminates with a summary of findings and discussion.

Chapter six is on study recommendations and conclusion. The study recommends a suitable model that can be adopted to enhance provision of recreation facilities in the study area. It terminates with a conclusion of the study.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter closely examines the existing literature pertaining to the study as well as presenting an analysis of the information from other researchers and scholars. The researcher embarks on thorough literature review in order to review the gaps that need attention and show how this ties to the objectives of this study. This chapter culminates in to a conceptual framework for the study.

2.2 Necessity of Recreation to Urban Neighbourhoods

Hall (1990) noted that in early 20th century, both American socio experimentation and investigation was dominated by the central perceived problem of the immigrant and his socialization. This was as a result of the immigrant who went overwhelming to the cities after the effective closure of the frontier in 1890. The middle-class feared of submergence and mob rule most acutely felt. In his concern for the city, Hall (1990) urged for the, 'simplest and the most elementary form of association', that he purportedly so it to be the local neighborhood. Similar scenario is evident in Nairobi today. The rate of urban population in African cities is approximately twice that of national population growth. K'Akumu (2007) clearly indicates that the main driver of urban growth in Kasarani is in-migration rather than natural increase. According to Lesetedi (2003) statistics shows that only 25 percent of urban dwellers in African cities were born locally. This indicates that, nearly all adults were born in rural areas.

Kasarani is one of the peripheral districts of Nairobi city which can be taken as a true reflection of national mobility that is driven by rural-urban migration. The enormous flow of migrants to this neighbourhood has led to job seekers out numbering the job opportunities available thus creating a phenomenon that can best be described as an urban inflation where the labour is cheap and rents are high. In a capitalistic urban economy like Nairobi the urban inflation increases the gap between high and low income earners in the neighbourhood. The lower income residents with low purchasing power cannot afford the goods and services offered by the market. Services like recreation scores very low in the household budget. There is therefore the need for urban managers to look for ways of socializing different social-economic groups so that they can live together in harmony as a neighbourhood community. Recreation and sports is one way of promoting integration rather than segregation in our urban neighbourhoods where people from diverse cultural and socio economic backgrounds live side by side. Hall (1990) further, wrote that it is important to know the forces which tend to break up tensions, interests and sentiments in the neighborhoods. The forces that Hall (1990) discussed in America, could in our Kasarani context, be the disparity in income levels that has segregated our urban communities ever since independence and this has created tension, hostility, fear, suspicion and may be also blamed for rising crime rates in our urban neighbourhoods. He concluded that the urban poor neighbourhoods suffer from isolation hence the challenge of the urban management to reconstruct and quicken the life of the city neighborhoods and to bring them to touch with larger interests of the community. By then, the social settlement movement had sprung upon American cities. An attempt was made to renovate evil neighborhoods by

the construction of playgrounds and introduction of supervised sports of various kinds including municipal dances in municipal dancing halls. This attempt by American city authorities converges with Republic of Kenya statement in The Kenya National Youth Policy (2005) where it recognized provision of recreational facilities and open spaces as an important tool towards promotion of good health of the communities, national integration, employment creation and crime rate reduction. It is worth noting that, proper planning for such facilities in conjunction with stable institutional and legal framework is what is required to support and sustain the said provision otherwise the policy statement will remain nothing more than a wish list.

Achola (2006) seems to concur with Hall (1990) as he wrote that economic inequality in society has been the greatest deterrent of active sports. Communities in low income areas have been denied access to sports and sporting facilities. To resolve this, community based sports project can be stimulated by construction or rehabilitation of sports infrastructure whether large or small such as providing space sufficient to make it suitable and safe to play by all members. Therefore open spaces for development of sports infrastructure are important in urban planning. Economic benefits for such facilities are numerous including employment during construction, on-going employment to management of facilities. The facilities can be used for multipurpose including the needs of schools and community groups for cultural purposes and other activities. The two authors wrote from two different backgrounds about the same subject (importance of sporting facility provision in an urban neighbourhood community) and seem to suggest that there is need to provide public recreation facilities

to cater for the poor urban dwellers to meet their recreational needs even when they cannot afford what the market offer. In complete agreement with the two it should be stressed that recreation for urban residents should be treated as a public good together with other essential services that defines a human being. Rich and poor, young and old, elite and illiterate requires play to rejuvenate their lives.

2.3 Commercial Sports

Achola (2006) observes that Africa being an impoverished continent is experiencing a talent drain to oil-rich Arab states and European countries. He retaliated that athletes are downing their value of patriotism and nationalism and hence change nationalities for cash. He argued that this scenario denies poor countries like Kenya not only the world trophies but also the ability to develop their sports industry. He observed that it focuses more on monetary competition among individuals, clubs, and even nations, hence leaving behind the development of the human person which is of more importance. He suggested that, a strategic approach should be developed on sporting arena, and youth ministry system, to foster field-based partnership related to sport in a way that is impact-oriented and cost-effective as well as complementary to technical co-operation projects and broader development goals. This in a special way he saw would enhance supportive structures where youth can turn to for formation of communication spirit and value reference. He further dreaded that contemporary sports to a large extent have been commercialized to a lucrative business controlled by capitalistic market forces of profit maximization.

Achola (2006) asserts that ideas can be criticized as not looking at urban life holistically. Nairobi city is the economic engine of the country. It can be described as a commercial city. Therefore any aspect that promotes urban economic growth should be encouraged but not condemned. He failed to see the many positive aspects of commercial sports in promoting provision of recreation facilities and instead give a negative criticism. Among the positive aspects he overlooked are; the training and development of sporting and athletics as well as musicians, comedians, actors and actress etc as an investment towards human capital formation. Whenever marketable skills are imparted, like any other carrier the professional can seek employment opportunity where he/she finds remuneration and other benefits offered are over and above the transfer earnings. Kenya being a third world economy cannot compete with the above mentioned oil-rich Arab states and European countries' economies in paying rents. It is worth noting that this talent and brain drain phenomenon is not only affecting sports and entertainment industry but other professional bodies too. For instance, Kenyan doctors are relocating to Namibia, accountants to China, nurses to Britain etc. Since this scenario is controlled by the world economic forces which are far beyond our national controls it is better to look at its positive aspects and find ways in which we can reap its numerous advantages. As a form of labour export in form of expatriates our urban youth are able to get well paid jobs and thus reduce the rate of unemployment. While in diaspora, our government encourages them to invest in capital markets and share trading in Nairobi Stock Exchange as well as in real estate industry that increases housing stock among others. The same in diaspora send remittances to their relatives in Kenya thus improving their living standards by increasing their purchasing power of

urban goods and services among the recreational services. When professional sports men leave for 'greener' pastures they create room for the younger upcoming amateurs to develop their skills and gain popularity and this boosts motivation among the youth as they imitate and identify with the winning teams. Commercial sports are popularized through mass media channels which create role models to the urban children.

Commercial sports can more so be praised for popularizing Kenya as a tourist destination. Moreover, advertisements displayed by sponsors during matches promotes sales of our goods and services thus creating employment to goods production industry and advertising materials and services industries. Sponsoring matches, marathons e.g. Lewa marathon by Safaricom, Stanchart marathon by Standard and Chartered Bank among others is part of corporate-social responsibility to the community and should be encouraged as a means of wealth redistribution strategy which in turn will lead to more affordability and awareness to recreational facilities. Heroes who earn Kenya glory internationally should earn recognition like Kipchoge Keino whose a stadium in Eldoret was named after his name together with cash tokens should be encouraged as a way of motivation to the sports professionals and promoting national heritage among others.

In view of the above observation, Achola (2006) would have advocated for the need to reconstruct our institutional and legal frameworks to allow dual citizenship to our sportsmen in diaspora so that they can be free to invest their earned wealth back home as well as promote national heritage.

2.4 Community Sports Development

Pierli and Abeledo (2002) comments that, in developed countries, the input of giant corporation in sports is the key driver in developing sporting facilities, sponsoring teams, paying coaches and players and supplying sporting gear while poor communities, both in developed and developing countries risk the natural death of sport initiative due to financial constraints. This calls for a common framework that combines with the existing national economic planning process that eventually dispatches direct assistance to the community-based sport initiatives. On the other hand, the existing community sport structures must engage methodologies that will encourage players and enhance a sense of determination among them. In agreement to Florist (2006) ideas, community sports need to be developed hand in hand with commercial sports the exorbitant revenue earned through commercial sports, there should be a sustainable instructional framework to channel the resources toward developing community sports to cater for provision of recreation facilities to poor urban neighborhoods by classifying community sports in such areas as a public good. Community sports, if enhanced, will promote talent building among the residents who will develop expertise skills and later join commercial sports industry as experts. This way the urban community will exploit the human talents through recreation.

Florist (2006) warned that urban manager should not be ignorant on the fact that sports can also usher in some of the worst human traits, including violence, corruption, discrimination, hooliganism, excessive nationalism, cheating and drug abuse. The community must be prepared to apply social control methods to curb the vices that go

with sporting promotion and spectator that in many cases are also forms of crime. It is regrettable that these ugly scenes are common at Kasarani Stadium where time to time, spectators turn wild with outburst of violence during matches and sometimes go to an extent of paralyzing traffic flow along Thika road. This gives negative publicity to sports. Florist (2006) warning comments can be relieved by proper instructional and legal frameworks that would ensure that players and spectators observe law and order. The stadium is just a stone throw away from the Kasarani Division Police Headquarters and therefore police can be blamed for failure to maintain law and order.

2.5 Recreational Open Space

Open space was defined by Goodman and Freund (1968) as space which is not used for building or structures in other words it is the counterpart of development. It may be air, water, land located in a “big City” or in remote from urban development. It may be an active recreation area like Coney Island in New York or a vista of the San Francisco Bay from Russian Hill or just a tree lined Suburban Street. It may be publicly or privately owned.

He further stressed whatever use the open spaces are put into, affects the adjoining building development patterns and vice versa. There are basically three major functions which open spaces serve in a urban neighbourhood according to Goodman and Freund (1968). These are; meet positive human needs both physically and psychologically in recreation amenities, enhance and protect the resource base like air, water, soil, plants and in turn animals, and it affect economic development decision like

tourism, development patterns, and employment and real estate values. Although little research is done to determine the positive benefits of open space on human beings there are some indications on the role that open space can play in providing a healthful environment. For instance, the location and design of open space can play an important role in bringing people together as in a neighborhood park, an office or an apartment courtyard, or a clustered subdivisions open area. Likewise, it can create barrier or buffer separating different uses or neighborhoods.

According to Goodman and Freund (1968) there has been a growing interest in recreation, conservation, open space beautification, pollution abatement and a myriad of other ways to improve the quality of the environment since the mid 1950s. As the exploding urban population presses on a limited resource base for its needs and activities, the task of providing a satisfying and stimulating urban environment clearly becomes a greater challenge. In agreement with author's observation above, the urban management challenge is not only caused by sheer increase in the population but the geometrically multiplying demands of this population. Maina (1982) wrote that the recreation need is driven by choices that an individual makes on where, how and when to recreate. The urban manager has to utilize the limited urban open spaces available to meet the varying recreational demands of the diverse urban neighbourhood community.

2.6 Social Equity in Provision of Recreational Facilities

The urban community is clustered according to the levels of incomes (low, middle and high) therefore management challenges take many forms. According to Goodman and Freund (1968) for those who have higher incomes having taken advantage of technological strides of the 20th century who have two cars, a boat, two houses, plenty of free time, the problem is to provide facilities and opportunities so that the benefits of leisure can be maximized and the physical resources effectively utilized. In contrast to this mainstream of affluence are the many areas of urban poverty and depression where both human and physical resources are underutilized. The very basic problems in third world cities are to use the resources to stimulate economic activity, restore human dignity, and truly enhance the quality of life. Between those two extremes there are many gradations of affluence. In all these the critical factors to be considered are the use of open space physical resources, the air, water and land in planning for a satisfying environment. This challenge can be met. Goodman and Freund (1968) noted that despite recent literature and the desperate "going, going, gone" philosophy, there are unused, overlooked and forgotten open spaces even in the most crowded of metropolitan areas. For example within a 50 mile radius of New York, the outdoor Recreation Resource Review Commission found a surprising amount of undeveloped land. With this in mind thus the problem is not always quantitative or absolute loss of land but rather a qualitative one. In support of Goodman and Freund (1968) ideas, the urban manager should look around the neighbourhood to identify the areas where open spaces are serving or can be improved to serve positive recreational functions within Kasarani neighbourhoods.

A study carried out by Rukwaro and Olima (2000) in Clay City Estate which is within the study area revealed that social amenities including playgrounds meeting hall, open space and entertainment centre (sports club) were not provided for by the land developer and residents who are of middle income class have to travel far from the estate to access such basic facilities of housing. This situation leaves one wondering how serious the problem is to the low income earners who cannot afford transport cost and user fees to the private facilities. Ideally, access to the community recreational facilities should not be pegged on the purchasing power of the households.

2.7 Planning for Recreation

Omondi (1991), comments that in Nairobi urban recreation facilities have been given low priority in the spatial planning, development and management. He further suspected that local authorities tend to neglect this field could be due to the fact that open space and recreational land use tend to present low appeal to cost benefit analysts who perceive recreational areas as if they pay no direct rates, but rather very expensive to acquire, landscape, manage and maintain. His ideas tend to converge with those of Goodman and Freund (1968) who comments that open space planning has been limited in its focus and in the resulting programs by then, open space functions had resettled at the bottom of the list of land use elements, with the funds and the lands relegated from the remainders of other activities. They suggest that open spaces should be planned and programmed in conjunction with other urban activities. Further, Goodman and Freund (1968) quotes that the Chicago Planning Department stating that

physical development and design of parks are tied to policies of other community facilities. Data gathered on population, economic activities, and resource capabilities are as useful in the planning for open space systems as they are on planning for transport systems or industrial uses. It is worth noting that, for sustainable planning of recreational open spaces and amenities cannot be undertaken as a single function. It must be integrated with all the other land uses such as economic, social and transportation networks for it to be effective and efficient

According to Birkeland (1994) the accident rate in traditional playground is unacceptable. According to experts, risk taking is an inevitable part of physical development, yet falling on hard surface can cause serious injury. Play gardens, in contrast provide positive outlets for physical challenge with far less risk. Bushes and natural ground cover in thick mulch generally prevent serious injury to children, while the plants usually recover without strain. Also vegetation can be placed strategically to slow children down and therefore reduce speed and collisions.

2.8 Regional Contexts in Planning for Neighbourhood Recreational Facilities

Omondi (1991) comments that an ideally planned city has a hierarchy of recreation areas that range from urban parks to serve entire city population, to district and neighbourhood parks meant to serve a group of estates and individual estates respectively. The facilities should be of adequate size according to Nairobi City Council (1981) that states that a neighbourhood park should be approximate three acres for one thousand population in high density estates, two and half acres for one thousand persons

in low density estate. The facilities should be in good working condition, well maintained, clean and in hygienic condition. Location of the playing grounds according Goodman and Freund (1968) should be suitably located in conjunction with schools and within easy walking distance of age group served and within convenient driving range in low density areas in order to meet the individual needs of the residents.

The facilities should be equitably distributed, carefully planned and well managed to serve the residents. Open space cannot be held confined to a single jurisdiction; instead it should be considered in all levels of planning such as community, regional and state planning. It is indicative of demands that urban population will gladly travel long distance to satisfy their pursuit for recreation. Shortage of recreational facilities in any given locality simply means that users must seek to meet their recreational needs further from home adding to the cost of the services. There will consequently be some areas of deficit and others of "surplus" and the flux of people from one to another will have an impact that dictates a joint approach in planning as Goodman and Freund (1968) further commented that the physical resources are regional in nature for instance water and air are not affected by jurisdictional boundaries, and similarly human desires and needs are not jurisdictionally limited. The services that people require utilize resources found throughout a region or even a state. This interdependence on both the supply and demand side of the picture argues an area wide approach to open space planning. A fluid and kinetic viewpoint is needed to comprehend the interrelationships of needs and services in a given area.

To establish the credibility of this argument a research is needed to investigate how a local neighbourhood (Kasarani) that accommodates a world class stadium (Moi International Sports Complex-Kasarani) meet their recreation needs.

2.9 Behavioral Data in Recreational Planning

Recreation desperately needs the infusion of behavioral data to direct its plans and programs. Taking an example of an observation made in Goodman and Freund (1968) one large metropolitan park system discovered that people were venturing only a few hundred feet from their parked cars in their parks. Investigating the reasons for this, it appeared that fear, not of being raped or mugged behind the laurel bushes but of being in totally strange, alien, and unknown terrain prevented them from freely exploring untapped nature in the inner reaches of the park. Translating such insight into park planning, in this instance, it might follow that linear park systems, rather than large aggregate chunk of parks would be used by more people. This isolated example does not rule out the role of large wilderness like parks in metropolitan areas like the Nairobi National Park, but it does indicate the needs of one specific and large group of users. Planning of parks should involve the residents in order to understand their mind and behavior.

Omondi (1991) suggests that for sustainable provision of urban recreation facilities there should be systematic and continuous analysis of trends in demand for recreation so that, their provision can keep pace with changes in the demography and spatial growth through time. This emphasizes the need of behavioral data to direct recreational

facilities plans and programs. In agreement with this the researcher intended to carry out a research that would establish the specific recreational needs of the Kasarani neighbourhood community.

2.10 Concept of Urban Neighbourhood

Horn (2001) describes the sense of neighbourhood as one of the qualities that define urbanity as a settlement construct of an urbanism as a way of life. According to him the neighbourhood concept is elusive and its definition is influenced by type, lifestyle and contextual ties. He observes that in early modern societies, the neighbourhood was defined by common physical dependences, the need for mutual support and control over behavior and very often by religious institutions he added that in modern society, the neighbourhood became a mechanism in relation to immigration, territorial control and urbanization processes giving rise to the contextual theory. As a result the residential blocks, local schools and churches became the cornerstone of community life. The major threats to urban neighbourhoods according to him are rise of mass society, modernization, increased society interconnectivity and social inclusion policies. He comments that though some authors have questioned the importance of present day neighborhoods referring them as reminders of community without reality of community, the debate about the importance of urban neighbourhoods in urban life is still very relevant as depicted by neighborhood renewal strategies in various parts of the world. He notes that there is growing recognition of the role of local based social and cultural capital and the multiple partition of shared space in late modern societies call for public participation in local area planning and management processes.

He further wrote that influenced by the awakening of neo-traditionalism as paradigm for urban living, a sense of neighbourhood has become the core concept through which the neighbourhood attachment to communality is being evaluated.

Horn (2001) wrote of a study carried out in Pretoria in South Africa as a case of society in transition from apartheid policies framing society in to structural and spatial racial categories to anti-apartheid policies of new democratically elected centralist government, showed that majority of residents are not in the neighbourhood of their choice and most of them perceive neighbourhood as temporary platforms for upward and outward mobility of their residents. Although 79.8 percent of respondents in the Pretoria study viewed their local neighbourhoods as important to their lives, findings of the same study, shows that lack of facilities was perceived as negative neighbourhood characteristic in both the black township and the less affluent white neighbourhood. In view of the above observation, recreation facilities provision in an urban neighbourhood like Kasarani can be used to create a sense of neighbourhood among diverse population living within.

2.11 Sustainability of Recreational Facilities in Urban Neighbourhoods

Kokor (2004) suggested that community participation will enhance sustained yield of common property resources such as public recreation facilities hence the benefits will be spread evenly. He further stresses that if projects are to be sustainable, community self reliance need to be developed by adopting a purposeful effort in a set of actors to increase information, knowledge, technologies and organizational skills of the

Community Based Organizations (CBOs), other residents, and their leaders. This will go along way in ensuring sustainability of recreational facilities and open spaces rather than a mere transfer of authority from Nairobi City Council which so far is charged with provision and management of such facilities to the neighbourhood community. According to Olima (1993) physical land use plans in Kenya are bound to approaches that are dependent on imported planning models and technology. This has lead to adoption of control standards that are completely inappropriate to the local conditions. These approaches have failed in provision of sufficient and sustainable services as well as better spatial and physical arrangements to meet the changing socio economic needs of the urban dwellers. During the World Urban Forum (2002) on the Role of Cities in Sustainable Development, barriers to sustainable urban social development were raised which the researcher needs to address if a sustainable planning model for provision of recreation facilities in an urban neighbourhood is to be achieved. These are; lack of clear definition on the roles and responsibilities between different stakeholders, competing jurisdictions between different spheres of government and entities responsible for provision of public services accompanied by weak fiscal authority and lack of transparency and reliability in inter-governmental transfers.

To enhance sustainability of the provision of social facilities and service in it should be noted that informal sector in Nairobi forms a major portion of the city economy and hence need not to be ignored but recognized and channeled to mainstream economy in order to contribute positively to provision and consumption of recreational facilities.

Sustainability of the services should be focused on social capital and cultural vitality to ensure improved community health and palatable living environment. It should be noted that community participation can bring efficiency gains in planning, management and sustainable use of recreation facilities. This supports the Un Habitat 2001 that notes that community participation in the provision and management of basic services can go along way towards cost recovery and long-term sustainability of services among them urban recreational services.

Community sports should be promoted to develop local talents. Neighbourhood adjoining each other should hold inter-neighborhoods competitions to promote patriotism among the youths. Every community member should be made aware of importance of recreation regardless of gender, age or social-economic status. This would quicken the life of the residents and create more consumption of recreational services and promote community health, reduce stress related ailments, create market for recreational goods and services as well as employment creation.

2.12 Demand for Recreation facilities in Nairobi City

According to Omondi (1991) rapid population growth in Nairobi has a negative effect in recreation provision. This has led to overcrowding in public facilities such as Uhuru Park, Jeevanjee gardens and other neighbourhood parks in the old estates. New estates in Nairobi like, South B, Dandora, Kayole, Rubia, Pioneer, Golden Gate, and Umoja were developed without neighbourhood parks. The existing few neighbourhood parks lack qualities of a good park. He says that a good park should have a corner for toddlers

and pre- school children with features such as low fence hedge or barrier, shade, open area for running and circle games, swings, balance beams and horizontal bars among other major features. The available facilities are not in good workable conditions for instance some playfields are not leveled, are poorly drained and in poor environmental conditions thus making them inaccessible to the residents. The inadequate provision of neighbourhood recreation facilities can also be attributed to the poor physical planning practices where unfavorable policies have been used to officially necessitate subdivisions of original recreational areas for other urban uses. According to Omondi (1991) 39 per cent of the original recreational lands in Nairobi City have officially been turned into other uses. More lands have been encroached into unofficially by the so called land grabbers.

The demand for recreation facilities is enormous Omondi (1991), This is manifested in congestion in the few available facilities, children playing in the on road reserves, and youths turning vacant private plots into play-fields with make shift goal posts. According to Registrar General's Department, a total of 92 sports clubs are registered but have no playing fields. Schools are the hardest hit as a number of schools have not met the minimum space requirement as per the standards while in some cases it is so critical that sporting activities cannot be undertaken due to lack of space.

2.13 Proposed Research Needs on Neighbourhood Recreation

Omondi (1991) wrote that there are unbelievably limited studies on urban recreation. He further notes that most studies on recreation that have hitherto been carried out emphasized on issues relating to needs and requirements of the tourist and high income earners neglecting the middle and low income earners. He did emphasize that urban recreational research must include assessment of demands and supply of recreation facilities, analysis of users by age, activity, level of education, income levels, pricing policy assessment, management and planning standards and possibility of public participation in provision; study of effective use of the facilities and to limits to capacity; design and development of recreation areas as well as a study of peoples attitude towards recreation.

2.14 Community participation

According to Mumro (1992) community participation means, an interactive process between members of the public, individually or in groups and representative of a government agency, with the aim of giving residents a direct voice in decisions that affects them. The community should play the role of watch dog to safe guard their recreational land resources and the government's arm of law and order should support them on this role. This can be enhanced by creating awareness among the neighbourhood community of what land has been ear marked and set apart for community recreational purposes. Access to the community recreational facilities should not be pegged on the purchasing power of he households.

2.15 Summary of Review of Literature

In world cities, especially in developing countries like Kenya, provision of neighbourhood recreation facilities cannot continue being rated as a low priority item in planning as it has been the case in the past. Despite the burning challenge of housing that seem to take over every available space in the periphery of the city, recreation services are as important as any other housing service. As the saying goes, 'work without play makes Jack a dull boy'. More than a century ago, American urban authority renovated evil neighborhoods by construction of playgrounds, supervised sports and municipal dances. Community sport is important in order to promote national integration, neighborhood associations and relieve tensions among the diverse groups in Kasarani neighbourhood. Availability of social amenities presents a positive neighbourhood characteristic. In order to ensure sustainability of the neighbourhood facilities there is need to develop community self reliance by adopting a purposeful effort by stakeholders to increase information, knowledge and organizational skills of community members.

There is need to provide public recreational facilities alongside private ones in order to regulate the private sector provision of recreation services in the neighbourhood to safeguard against consumer exploitation due to lack of competition. Commercial sports should be promoted alongside the community sport for economic empowerment for the youth and the mutual benefit as the community sports will serve as a training ground for sportsmen / sportswomen on the other hand the commercial sports gains can be channeled to fund the community sports.

Diverse recreational activities should be provided for in terms of space, facilities, training and funds. This will go along way in talent building among the residents that can be exploited for the social and economic good of the urban residents.

There is need to plan and program recreational facilities and services together in conjunction with other social infrastructures and services. Recreation is peculiar in that human desire it is not jurisdictionally, limited in the sense that people will recreate where they choose, at the time of choice and in the way they want. This calls for joint approach among the stakeholders with a view of regional planning to avoid imbalance that would cause flux of people as a result of surplus in some areas and deficit in others. Community participation in planning and management of recreational facilities would enhance sustained yield of public recreation facilities. Such planning requires behavioral data to assess the actual needs of the residents.

Open space planning should be integrated with other essential urban social and physical infrastructure like transport, health centers, and educational institution, water and electricity supplies. In planning, recreation should be treated as a public good whose life of all residents can not be said comfortable without this need being served conveniently. The community sports should be recognized and allocated funds in the national budget. The fund should employ trained physical education personnel as extension officers to train the community on sporting and other physical exercise like swimming etc

Goodman and Freund (1968) as a major proponent in this review recommended the following factors as imperative for resourceful recreation facilities: be in good working condition, well maintained, hygienic condition, suitably located, accessible through walking and driving, equitably distributed in the neighbourhood, carefully planned, well managed, included in all levels of planning such as community, regional state planning, adopt area wide approach to planning and engage behavioral data to direct recreational plans and programmes. Omondi (1991) outlined the following as qualities of a good neighbourhood park: include a corner for toddlers and pre-school children with low fence hedge or barriers, shade, open area for running and circles games, swings, balance beams and horizontal bars. He says the current physical condition of the playfields is poor since they are not leveled, are poorly drained, located in poor environment due to pollution and are not accessible to residents.

2.16 Conceptual Framework

Review of literature above revealed that several proponents in neighbourhood recreation literature blame the stakeholders in urban recreation for the prevailing lack of suitable facilities in the urban neighborhoods especially the middle and low income neighborhoods. Omondi (1991) commented that the available facilities are not in good working condition (un maintained) and are congested. This reveals that they have not kept pace with the growing demand by the client population. He further added that in some cases the facilities are physically absent and for this reason the children play in risky areas like road reserves. Olima (2005) associated the unsuitable provision of social services to the continued use of physical land use plans that are bound to

imported planning models and technology. He says this has led to development control standards that are inappropriate to the local conditions. Omondi (1991) perceives the rapid urban population growth as the root cause for the negative effect to recreation provision as it causes over crowding of the existing facilities due to increased demand. For those who cannot access the few available facilities either due to distance or cost limitations end up missing the opportunity to recreate. He further says that as a result of competition from the other urban land uses like housing and commercial activities recreational open space allocation has been given low priority. Goodman and Freund (1968) supports this idea by writing that recreational land use has settled at the bottom of the list of land uses. He emphasized that physical development and design of recreational policies should be tied to policies of other community facilities. Rukwaro and Olima (2000) writing on Clay City Estate (part of the study area) comments that social amenities among them playing grounds, meeting hall open space and entertainment center(sports club) were not provided for by the developers. Several authors seem to agree on community participation in planning and management of recreational facilities as a remedy to the provision and sustainable maintenance of these facilities. Among the major proponent of this ideal is UN Habitat (2002) stating that community participation in provision of basic services leads to cost recovery and long term sustainability of services. Horn (2001) calls for community participation in local area planning and management. Kokor (2001) adds that community participation will enhance sustained yield of common property resources such as recreational facilities hence the benefit will spread evenly.

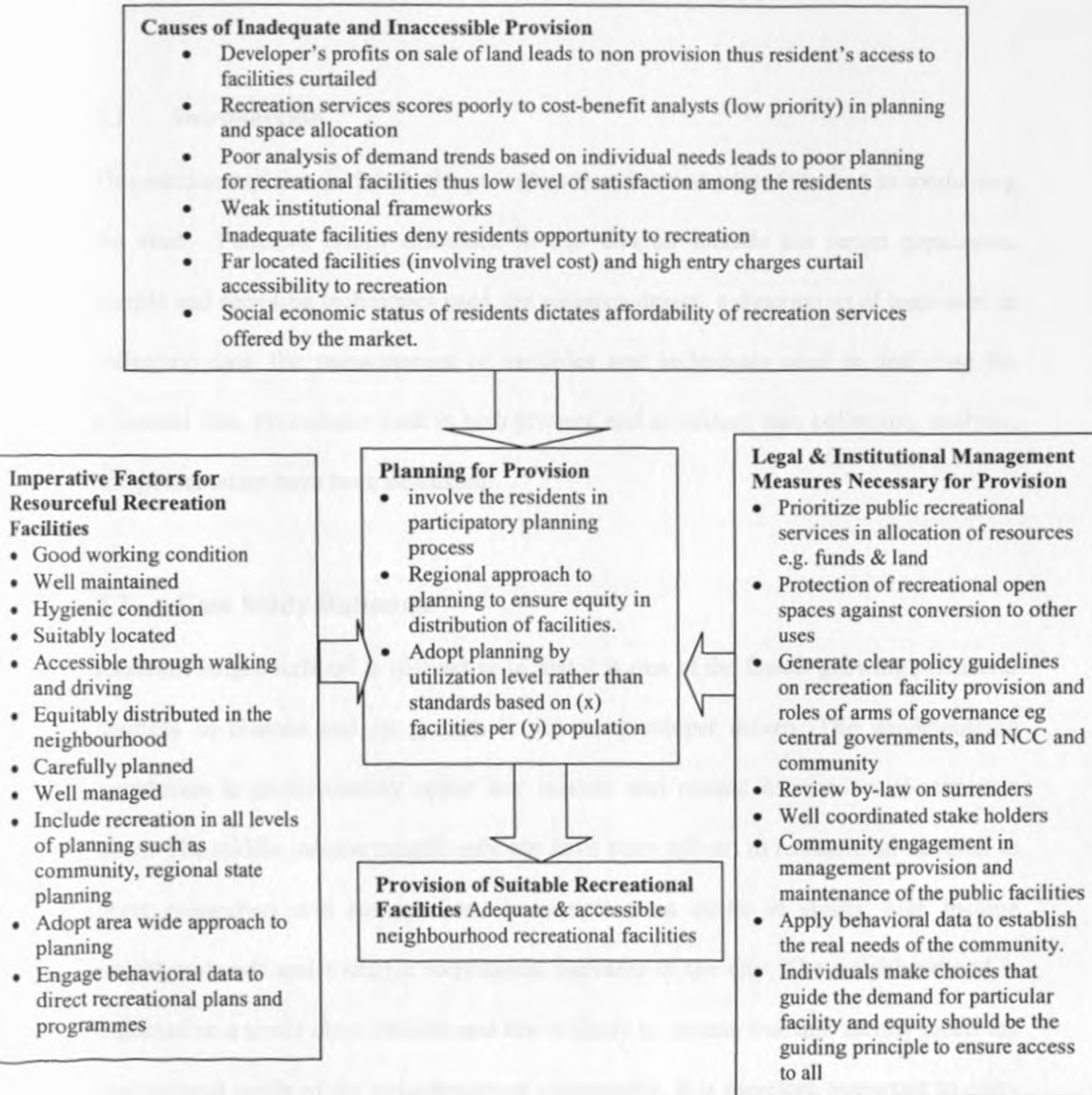
With view of the above review, this study recommends that the private developer cannot be held responsible for non provision since the Nairobi City Council has the legal mandate to provide social services to the residents. The existing planning standards that are based on imported models of ratio of facilities to population should be discarded and a planning model based on utilization levels adopted. Regular analysis of demand and demographic trends should be carried together with spatial change detection in order to keep pace with the population growth.

The neighbourhood community should be involved in planning, management and provision of recreational facilities in order to enhance cost recovery on infrastructure investment and to create a feeling of ownership among the residents who will contribute towards long term sustainability of the facilities without misuse or disuse of the same. Urban recreational policy should be put in place to safeguard loss of recreational space to other land uses and to ensure that the developers do surrender good useful sites for recreational that are centrally located for ease of access.

The policy should guard against conversion of social amenity land to other uses. An area wide approach to recreational planning should be adopted to enhance equity in distribution and facilitate access to all residents by locating them within walk able distance. Goodman and Freund (1968) emphasizes the need to consider regional planning in recreation provision by writing that shortage of the facility one area will cause the client population to travel to areas of surplus thus causing imbalance and congestion to the available facilities. This calls for equitable distribution of such facilities even in small scale regions as estates within a neighbourhood.



Figure 1: Conceptual Framework Model



Source: Survey, 2009

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section explains in details the procedure that the researcher followed in conducting the study. Pertinent issues discussed in this chapter include the target population, sample and sampling techniques used, the research design, a description of tools used in collecting data, the measurement of variables and techniques used in analyzing the collected data. Procedures used in both primary and secondary data collection, analysis, and presentation have been discussed.

3.2 Case Study Rationale

Kasarani neighbourhood is distinctive in that it is one of the fastest growing peripheral districts in Nairobi and its growth is private developer driven. The neighbourhood population is predominately upper low income and middle income social-economic class. The middle income neighbourhoods have been left out in recreational research as most researchers and authors have concentrated on sports in slums, high income neighbourhoods and touristic recreational facilities in the city. The neighbourhood is adjoined to a world class stadium and one is likely to assume that this facility meets the recreational needs of the neighbourhood community. It is therefore important to carry out a study in order to establish the level of access and adequacy to this and other facilities in the neighbourhood.

3.3 Research Design

This study is a social study and hence the researcher used a descriptive type of research design. Triangulation research method was employed where mixed methods of quantitative and qualitative approaches were used to elicit data from the respondents. This ensured that the recreational characteristics of Kasarani neighbourhood community and the physical characteristic of the existing recreational facilities have been described. Since the aim of this research is to obtain complete and accurate information, the procedure used was carefully planned. This involves ability to define clearly whatever is measured as well as finding out adequate methods for data collection along with a clear cut definition of population to be studied. The population was divided into; residential households, private recreational facilities and public recreational facilities. The data was collected through both structured and unstructured interviews aimed at getting in-depth information about management of the existing facilities both public and private in order to understand the attitudes, desires and needs of the residents and users. Interview schedules were used to capture the information. This method of data collection did cross-cut all social cohorts.

Major stakeholders like the physical planning department of NCC who are the custodians of the all public utility land within the city boundaries were probed through a structured questionnaire. The researcher probed for information on allocation procedures, policy guiding the surrendered utility land to the council by the developers,

management of the same, as well as the challenges facing them in execution of this legal and institutional mandate.

3.4 Target Population

Kasarani location according to the 1999 census had population of 53,000. With the current population growth rate of 4.3 percent; the population today is estimated to be approximately 54150 persons. The study covers about a third of Kasarani Location therefore the estimated population is about 18,000 persons.

3.5 Sampling Design

The sample unit of the study was one household in case of the residential community and individual facility / institution in case of existing facilities e.g. school playgrounds, hotels entertainment centers etc.

3.6 Sample Size

The researcher took a minimum sample size of 200 since the population of the neighborhood was expected to be above 1000 as guided by Kothari (2004). This figure was reached after consideration of the finances available for data collection and resources of the self sponsored researcher bearing in mind that interviews and schedules were the main instruments of data collection which ensured that samples could be controlled more effectively as there was reduced chances of missing returns, non-response cases were generally very low. However, the method was relatively more time consuming and hence reason for taking a minimum sample size.

3.7 Sampling Techniques

Non-probability sampling: was employed since there are some major recreation facilities in the area of study that the researcher intended to purposively choose as sample units. The facilities targeted were the institutions of learning and recreational facilities. Appendix 02 is a sample of the questionnaire used as an interview schedule for managers of recreational facilities / learning institutions in Kasarani neighbourhood. Ten schedules were sent to the field covering both public and private facilities. The major facilities management interviewed were; Moi International Sports Complex–Kasarani, Agustana College, Kenya Institute of Special Education (KISE), Kasarani Primary School, St Mary's Sportsview Academy, Kasarani Sports View Hotel, Kioi Pub and Club Monacle.

Probability sampling: The researcher used the stratified sampling method. The reason for using this method is that the study aimed at capturing information from all the diverse built forms e.g. flat houses, bungalows, maisonettes. This way population was divided into several sub population that were individually more homogeneous than the total population each sub-population was called a strata / items from each stratum constituted a sample. The strata will be as follows: Appendix 01 is a sample of an interview schedule for Kasarani neighbourhood residents that were used to solicit information from the resident community. One hundred and fifty schedules were sent to the field and each stratum of population fifty households was randomly interviewed.

The other category of random sample targeted the customers who happened to be at the facility during the time of data collection. Four schedules were allocated to each facility. The total number of schedules sent to the field was forty. Appendix 03: interview schedule for customers in recreation is a sample for the instrument used to solicit for information from facility users.

3.8 Primary Data Collection Methods

Data collection methods and instruments with which the researcher used are as follows:

a) Interviews

Structured and semi-structured and in-depth interviews were employed in this study. Structured interviews involved a set of predetermined questions and of highly standardized techniques of recording. Questions are asked in a rigid procedure laid down in a prescribed order this method was suitable in this descriptive study as it was considered by the researcher as more economical, providing a safe basis for generalization and it required relatively lesser skill on the part of the interviewer.

In some cases semi-structured interviews were used in order to allow greater freedom to ask. In case of need, supplementary questions were asked and at times omitted or changed the sequence where the situation required. This method allowed more freedom in recording responses and included some aspects and excluded others.

For the successful implementation of the interview method the researcher intended to take the following steps.

- i) Carefully selected, trained and briefed the interviewers

- ii) Made occasional field checks to ensure that interviewers were neither cheating nor deviating from instructions given to them.
- iii) Made effort to create friendly atmosphere of trust and confidence so that the respondent could feel at ease.

The data that was collected through questionnaire was from the local authority forward planning and urban design personnel. The questions asked were those relating to what happens to the public utility surrenders that are transferred to the authority by the developers on subdivision approvals. The study aimed at establishing priority given to recreation land use in allocation of public utilities. Details on the nature of the surrendered land requirements were probed to establish whether the authority cares to ensure that the land is physically suitable and its location promises access to the client population and general space organization enhanced.

Question on the policy guidance to ensure maintenance and landscaping of the public open space were also probed. Also the question on the most suitable planning method was asked. Question on who is the custodian of the land so that can be held responsible for its loss was raised in the same questionnaire. Three questionnaires were returned out of four.

b) Schedules

The researcher used schedules (pro forma containing a set of questions). This method was preferred in this particular research because the sample size was low and hence the

need to minimize the chances of non-response cases. The method ensured that the data was collected in time as the enumerators would fill in the schedules real time. Moreover the information was gathered even when the respondents happened to be illiterate. Use of this method minimized the risk of collecting incomplete and wrong information as it is with questionnaires particularly when people were unable to understand the questions properly.

In order to avoid budget constraints, the schedules allowed cheap paper and simple format to be used as opposed to questionnaires that have to be made appealing to the respondent and hence expensive. Schedules were administered by enumerators face to face and this allowed additional information or detailed information to be collected through observation. The researcher developed an appropriate schedule to enable her collect data that addressed the objectives of the study. The schedule contained both structured and semi-structured questions.

The schedule was divided into sections and each section was addressed to one objective of the study. Each schedule had an identification number to track it. The enumerators were properly trained on interpersonal skills, and on the purpose of the study to enable them handle the respondent properly. The respondents were made to understand the purpose of the study in order to cooperate and as part of ethical issues in educational research where the respondent had to be aware of the objectives of the research and also be assured of confidentiality.

The schedule attached as Appendix 01 in this report is a sample of 150 schedules that were used to probe for social economic characteristics of the respondents. This information was important to this study since the researcher needed to understand the parameters that influence access from the resident point of view with regard to affordability and distance convenience. The data also was important as it set light on the demographic structure of the client population in terms of household size, age, level of education, levels of income and gender this data is important as it guides the planner on the demand for recreation facilities. Data on religious background and that on forms of employment influence the choice of time to recreate thus affecting the pick demand periods of the recreation facilities. The other section of the schedule was meant to probe for information on recreation needs starting with awareness, forms of leisure time pursuit preferred and why and involving them in decision making by asking to give ideas on improvement of access.

Appendix 02 show a sample of 10 schedules that were used to probe for data from managers of recreational facilities and learning institutions both private and public .The data collected was based on time of existence of the facility, form of ownership, recreational activities offered, access limitations (user charges /membership fee), utilization level and trend as well as the target market.

The schedule attached as Appendix 03 is a sample of 40 schedules that were used to probe for data from the customers already consuming the services of a particular facility in the neighbourhood. The study probed for data on social economical characteristics in

order to establish whether residents of all social-economic classes do access to these facilities. The data sought in this section is that related to income sources and amount per month, age, religion and level of education .In addition data on purpose of engagement was sought to identify those who engaged as a form of leisure or for competition for commercial/ career interests. Questions on distance covered to access, incidence of usage and frequency were probed to get information on individual needs and hence to scale the level of adequacy of the available facilities. Data on factors leading to choice of a particular facility as well as the key drivers and barrier to choice was sought using the schedule to determine the level of adequacy and access to the particular facilities.

c) Camera

A hand-held camera was used to collect and record data on the state of recreational facilities in the area and different ways in which the residents engaged in leisure activities wherever possible. This instrument was be used to capture and present in-depth information that the researcher needs and cannot be described exhaustively with words only.

d) Observation

Direct observation was done to ascertain the built form status. This involved physical traces of features such as infrastructure and existing land usage in the neighborhood. Through observation the ground truthing was done to update the maps and images

where features on the available maps differed with what was in the ground. The checklist for observation is attached in this report as an Appendix 05.

3.9 Primary Data Collection Procedure

Structured and semi-structured interviews procedure: Once the schedule was ready the researcher pre-tested it. During this process, the researcher was testing the schedule to ascertain that the questions were properly set and solicited for suggestions for the purpose of improving the schedule thereafter. The researcher selected management personnel of two facilities and ten residents from the study area (approximately five percent of each category sample). The subjects involved in the pre test were encouraged to make comments and suggestions concerning instructions, clarity and relevance of the questions.

The researcher administered the schedules with help of enumerators who were specially appointed for the purpose. They went to the respondents, put to them questions from the pro forma in the order the questions were listed and recorded the replies in the space provided in the pro forma. The enumerators explained the aims and objectives of the study and also removed any difficulties which the respondents would experience in understanding the questions. Both structured and unstructured interviews were administered.

Questionnaire: A Questionnaire was used to collect data from the Nairobi City Council (NCC) personnel in forward planning and urban design sections to probe and establish what happens on the surrenders of public utilities that department of city planning

requires on every sub-division of residential development. The researcher was interested in whether they were surrendered initially, if not why? If yes, what happened? Also requirements on the condition of the surrender dealing on fragmentation and consolidation rules were probed. Further the researcher probed to know the challenges facing the NCC with regards to provision of recreational facilities to the neighbourhoods and their day to day management. More so the researcher probed on how the NCC management plans to overcome those challenges so that ease of access and level of adequacy can be improved. In the same questionnaire there were questions on priority given to recreation services in resource allocation, maintenance, legal backing to the planning by-laws. The coordination between NCC, private developers and residential communities and the role of each was probed both in the questionnaire and in an structured interview with the people involved as well as related literature.

The aim was to asses the possibility of community engagement in recreation provision, maintenance and management. The questionnaire was used together with other related literature to detect the weaknesses of the institutional framework of the NCC.

3.10 Secondary Data Collection and Procedure

Secondary data collection involved the systematic identification, location and analysis of documents containing information related to the recreation facilities provision in urban neighbourhoods. Both published and unpublished information were reviewed. The purpose of reviewing secondary data is to get an overview of the theory on the principles of urban recreation provision in the neighborhood context and eventually this culminated in to a sound conceptual framework that envisioned the way forward for

adequate and accessible recreation provision in Kasarani neighborhood. Secondary data sources included past thesis, passed business research reports on the individual facilities, city council management journals, Acts of parliament, development plans, government policy reports, City Council of Nairobi Strategic Plan: 2006-2010, books among others. A Quick bird satellite image of high resolution dated the year 2003 from Regional Centre for Mapping of Resources for Development (RCMRD) was georeferenced using ARC GIS software and was superimposed on a study area map (Kiambu map sheet number 142/2) to show the spatial layout of the study and development change detection for purpose of presenting the spatial growth of the study area it was labeled as Appendix 2. Maps were collected from the following sources; Ministry of Lands, Nairobi City Council and Survey of Kenya.

A soft copy of an image used by the Nairobi City Council Rates Department dated 2007 was digitized to convert it from raster data model format to vector data model format using ARC VIEW software to present the current land uses showing geographical locations of the recreational facilities in the study area and their adjoining land uses as it is on the ground. The resultant map was presented and labeled as Appendix 3 the Study Area Land Use Map. Another map was scanned from a paper authored by Rukwaro and Olima (2002) and digitized to in order to show how a sub division plan was first submitted with public utilities and later re planned and approved with all the utility spaces converted to residential plots. The two plans were printed on the same sheet and labeled as the Appendix 4: Proposed Claycity Estate Development. Part Development Plans dated 1984 and 1990 of the south eastern part of the study area were bought from

the physical planning department of the Ministry of Lands Headquarters were scanned to show the position of the playing fields, the only public primary school in the area, and the land allocated for a community centre which now appears as a Korean Church in Appendices: 3, and 5 attached in this study report.

A thorough study area analysis was carried out on the physical and non-physical characteristics of the area in terms of location, historical development, physical and social infrastructure, economical and demographic profile .The study area analysis was carried out through literature review, internet browsing, area maps analysis, images and field surveys. The objective was to capture general information on the area in order to develop clear understanding and insight of the context of which data was collected.

The study area analysis helps this study make informed recommendation on a suitable planning model for provision of recreation facilities that is appropriate for the particular community and neighbourhood environment. The information gathered on background of the study area culminated into chapter four of this report.

3.11 Data Processing and Analysis

The data, after collection, was processed and analyzed. Data Processing involved editing, coding, classification and tabulation of data to make them amenable to analysis.

The analysis stage involved computation of certain measures together with searching for patterns of relationship that exists among data-groups Kothari (1990).In data editing the researcher scrutinized the row data from the completed schedules to ensure that it is accurate, consistent with other information gathered, uniformly entered and as complete

as possible to facilitate coding and tabulation. The researcher did coding by assigning a numeral to every answer given by the respondent so that responses could be put into a limited number of categories or classes. This process was necessary for efficient analysis and through it the several replies were reduced to a small number of classes which contained the critical information required for analysis. This was followed by data classification stage where the large volume of row data was reduced into homogeneous groups in order to get meaningful relationship since this research is basically a descriptive one. Research contained both descriptive data (literacy, sex) and numerical (age, income). Descriptive characteristics included qualitative phenomenon which could not be measured quantitatively for instance the data collected from the respondents asking them give their own opinion on how both the government and facility management can improve access to facilities to all community members. This data was based on certain attributes. Both simple classification and manifold classification were used in analysis of data in the study. Tabulation was done in order to summarize new data and displaying the same in compact form i.e. in the analysis. The researcher arranged the mass data assembled during classification to some kind of logical order (orderly arrangement of data in columns and rows). Through tabulation the researcher reaped the following advantages:

- i) Conserved space and reduced explanatory and descriptive statement to a minimum.
- ii) Facilitated the summation of items and the detection of errors and omissions.
- iii) Provided a basis for various statistical computations.

Data presentation

The data was presented using tables and descriptive statistics (percentages, bar graph), Descriptive statistics (percentages) was used to analyze data to enable the researcher to describe the distribution of various variables in the study. The data collected through field observation was presented through photographs in order to emphasize the details. The data collected inform of raster data model format images was digitized and presented inform of vector data model format maps with legends and title in order to attach meaning to it and this were labeled as Appendices attached in this report.

CHAPTER FOUR

STUDY AREA ANALYSIS

4.1 Introduction

The previous chapter presented the methodology used in the study. This chapter will concern itself with the analysis of the study area. Characteristics of the area in terms of location, historical development, physical and social infrastructure, economical and demographic profile is given

4.2 Location

Kasarani neighborhood is located in Kasarani location, Kasarani division of Nairobi province. The main urban frames and landmarks within the area of study are; the Moi International Sports Complex – Kasarani, the Kenya Institute of Special Education (KISE), International Centre of Insect Physiology and Ecology (ICIPE), Regional Centre for Mapping of Resources for Development(RCMRD) and Haco industries. The neighborhood borders the Safari Park Hotel, the East African Breweries factory, Queen of Apostles Seminary among Others. The neighborhood is linked to other neighborhoods by elaborate road networks which include the Nairobi-Thika highway and Kasarani road. The residential zones in the area of study are Clay City, Sports View Estate, Kasarani Estate and Kasarani Police Divisional Headquarters. The coordinates locating the area are (36 50'E, 1 10'S) and (37 00 E, 1 15'S).The total study area is 11.8 square kilometers Republic of Kenya (2001). Appendix 1 shows the position of Kasarani neighbourhood in relation to the entire Nairobi Province Map.

4.3 Historical Development

4.3.1 Historical Development of Nairobi City

According to Wikimedia foundation, Inc (2008), Nairobi area as it is today was an essentially uninhabited swamp until a supply depot of the Uganda Railway was built in 1899, which soon became the railway's headquarters. The city was named after a water hole known in Maasai as Ewaso Nyirobi, meaning "cool waters". It was completely rebuilt in the early 1900s after an outbreak of plague and the burning of the original town. The location of the Nairobi railway camp was chosen due to its central position between Mombasa and Kampala. It was also chosen because its network of rivers could supply the camp with water, and its elevation would make it cool enough for residential purposes. Furthermore, at 1,661 meters (5,450 ft) above the sea level the temperatures are too low for the malaria mosquito to survive

In 1905, Nairobi replaced Mombasa as capital of the British protectorate, and the city grew around administration and tourism, initially in the form of big game hunting. As the British colonialists started to explore the region, they started using Nairobi as their first port of call. This prompted the colonial government to build several spectacular grand hotels in the city. The main occupants were British game hunters. Nairobi continued to grow under the British rule, and many Britons settled within the city's suburbs. The continuous expansion of the city began to anger the Maasai community, as the city was devouring their land to the south. It also angered the Kikuyu people, who wanted the land returned to them. In 1919, Nairobi was declared to be a municipality.

In February 1926, a Briton by name Dutton E.A.T. passed through Nairobi on his way to Mount Kenya, and said that, maybe one day Nairobi will be laid out with tarred roads, with avenues of flowering trees, flanked by noble buildings; with open spaces and stately squares; a cathedral worthy of faith and country; museums and galleries of art; theatres and public offices. And it is fair to say that the Government and the Municipality have already bravely tackled the problem and that a town-plan ambitious enough to turn Nairobi into a thing of beauty has been slowly worked out, and much has already been done. But until that plan has borne fruit, Nairobi must remain what she was then. Today Nairobi province is divided into three districts, and seven divisions which share the same boundaries as the constituency boundaries though the names may differ. The seven administrative boundaries are; Central Nairobi, Dagoretti, Embakasi, Kasarani, Kibera, Makadara, Parklands/Westlands and Pumwani. Kasarani division is divided into eight administrative locations namely; Githurai, Kahawa, Kariobangi North, Kasarani, Korogocho, Roysambu and Ruaraka. This study covers the northern part of Kasarani location.

4.3.2 Overview of recreation facilities in Nairobi

The aesthetic and recreational environment has received little attention from planners in Nairobi. Industrial and commercial enterprises have so far received attention at its expense. Urban parks and gardens have been usurped for the development of commercial buildings. The few that remain are not cared for and continue to be threatened by commercial development. Currently, there are only six major open spaces: Uhuru/Central parks, Jamhuri and City parks, one arboretum, and two forest areas.

In addition, there are several public playing fields and sports centre and a number of privately owned parks in various parts of the city. Nairobi also contains the renowned Nairobi National Park and the affiliated Wild Animal Orphanage. The dramatic growth of the city in size, numbers, and complexity has had profound impacts on its open spaces. The impact is manifested basically in the form of overcrowding in some recreational areas such as Uhuru Park, Jevanjee Gardens, and other neighbourhood parks; and the U.S. embassy bombings site of a memorial park that has added to the number of recreational parks within the Nairobi central district. The conversion of existing open spaces to other development purposes, for example the "Uhuru Park saga" where the government wanted to take part of the park for an office complex; open spaces being turned into open-air markets; and illegal usage of these spaces for agriculture and squatter settlements. The importance of open spaces for recreation and environmental protection is given low priority in the development and spatial planning of Nairobi. New neighbourhoods are constructed without open spaces or playgrounds.

4.3.3 Historical Development of Study Area in Context of the Nairobi City

The name Kasarani has been derived from the Gatharaini River and now applies to the area south of Gatharaini River and east of Kamiti Road including the Kentiles and Terracrete properties south of Thika Road. Back in 1951 The Kentiles Limited factory was situated in Kasarani. It was located here due to the large reserves of clay discovered in the area that was estimated to run for over 100 years. In 1960 another firm named Terracrete Limited was set adjacent to the Kentiles factory. The two factories produced clay products like hollow bricks, roof tiles, pipes, window sills etc.

The Kentiles Holding covered 500 acres of land and employed twenty Europeans and five hundred Africans by 1951. The workers of these two firms created the need for housing within the neighbourhood of their work places thereafter attracting other urban services. Although the Kentiles Holding later went into liquidation it is possible that the workers remained in Kasarani and engaged in alternative livelihood strategies. Today the firm operates with trade name as Clay Works Limited.

Today, the population of Kasarani location is approximately, 52,386 persons according to 1999 census. It is one of the Nairobi's informal settlements (Muirigo) as stated by K'Akumu (2007). Housing development in the area is in the nature of self-built form. Already some of the residential houses have been condemned and marked for demolition as they were constructed on government land reserved for expansion of the famous Moi International Sports Complex. Self-built housing became popular in the period 1980s when the government could no longer provide state housing for the growing population especially due to emigrants from rural who came to seek employment. The few site and service schemes targeted for the poor could not cater for demand of housing for the lower middle income population This group of people formed land buying companies that enabled them purchase vacant land that they could develop at their own pace according the their financial capability. Some private developers put rental houses in form of multi storey flats. The high density developments were put way ahead of physical planning .As a result no surrenders were set a side for community halls, public open spaces and many other social amenities as required by Physical Planning Act.

This is what is happening to most peripheral district in Nairobi and it is greatly undermining effective provision of recreational facilities which do not score highly in the cost benefit analysis of the profit geared private developers who have taken over city housing developments with no guided planning principles.

4.4 Land Delivery Systems

The privately developed land within the study area was acquired through neo-customary land delivery systems. As Obala and Kanyungu (2006) describes, organized groups inform of cooperatives, associations and companies contributed money in a common pool to buy a large parcel of land which was sub-divided amongst them according to the number of shares each owned. The owner documents issued initially are in form of share certificates which are upgradeable to full title deeds once official requirements of the planning authority are fully met. Share holder get rights to develop the land immediately after the certificates are issued. Information to this kind of access to land is delivered through social networks where social capital in urban communities is of great importance.

The above form of land delivery system greatly hindered proper procedural planning principles that would have considered essential neighbourhood recreational facilities and open spaces before the developments. When planning authorities follow the developers a lot of communal social facilities are left out since developers are interested in making profits from selling residential and commercial plots as stated by Rukwaro and Olima (2002).

4.5 Physiological Background -Altitude and Topography of the area

The attitude of the study area ranges 1500m to 1620m above sea level. Nairobi sub-catchment area is divided into two physiographic land forms; the western and northern rising between 1905m to 1975m Above Mean Sea Level (AMSL) forming parts of the Kikuyu Plateau. The Eastern and lower parts to the South East are generally low and flat, about 1600m Above Mean Sea Level (AMSL) forming the Athi Plains. It exhibits a low gradient of approximately 2%.

When it rains, much of the land experiences ponding which later culminates into flooding. To the West of the escarpment, very few areas exhibit plateau characteristics. This landscape changes further to the west of Dagoretti, Karen, Kikuyu, Kabete and the northern suburbs of the city center with its undulating valleys, streams and rivers, most of which are perennial. These areas are characterized by sharp gradients and soils of low infiltration rates. The watershed has numerous streams and their tributaries which join the Athi River to the South and East. The rivers and their tributaries form a dendritic pattern (tree branch-like pattern) Nairobi River is one of the main rivers in the area. It originates from Ndindiri swamp in Kikuyu Escarpment. The area of study can generally be said to be well drained; this is indicated by Gatharaini River that flows from northern side to south. The altitude ranges from 1500m to 1620m above sea level. However there are patches of swampy grounds covered by reeds plants on the lower grounds along river tributaries near Nairobi –Thika Highway.

4.6 Geology and Soils

According to G.O.K (1969) a geological survey carried out in the study area indicated that the following rocks were present; Athi tuffs and lake beds, reddish brown tuffs four feet, mauve tuffs 6 to 12 feet, yellow agglomeratic tuffs with light yellow or white powdery ashes and red brown tuffs 9 to 17 feet, yellow tuffs and agglomeratic tuffs with dark grey to black ashes in the west of very variable thickness. Kerichwa Valley deposits and Nairobi stone were present in plenty within Kasarani before were depleted as a result of wasteful quarrying methods used many years ago. G. o. K (1969) Soils present in the area are, red soils, lateritic soils, black cotton soils black soils and clay.

The soils within the study area are generally well drained except the few places with black cotton and clay which are cohesive soils. A well drained soil allows out door games and other forms of children play to take place even during the wet season. Flowers for beautification of the facilities do thrive in such soils as people like relaxing in attractive environments. However the fertile soils like the red soils encourages growth of vegetable matters, grass and shrubs that increases the cost of open space maintenance by regular mowing. If not properly maintained poses the risk of mosquitoes, harbors snakes and rodents that are dangerous to public health of the community.

4.7 Hydrology and Drainage

The Nairobi has numerous tributaries of the Athi River. The rivers originate from Kikuyu highlands and Ngong hills and flow to the south-east. In Nairobi, major storms occur in two seasons, November to December and March to May. They originate from north, moving east and south across the city. The major storms of the 'long rains' (mid-March to May) commence in the early evening. There are two basic types of storms. One type of storm occurs during the night and early morning, and the other starts in the evening. Morning storms which usually start from 00:50hrs to 11:59hrs are more prolonged and less intense than the evening ones, which are usually storms starting 12:00hrs to 23:59 hrs. On average, the main storms last for 522 minutes. They have an average fall of 73mm, and a mean hourly intensity of rainfall of 27.7mm/hr. The evening storms last for 187 minutes on average. During this period, 55mm of the rain falls with an average hourly intensity of 41.1mm/hr. The morning storms seem to follow less well defined paths. According to Muli (2007), the largest and the most intense storm recorded in this watershed was an evening storm which approached from the North.

Air reversals associated with the drainage of cold air from Aberdare Mountains make the evening storms approach the city from North and East He wrote that a major low level air current near the Indian Ocean during the northern summer influences the rainfall patterns inland, making geographical effects in Nairobi important Rainfall data records from National Agricultural Research Institute (KARI) laboratories clearly

indicate that, the central portion of the entire sub-catchment's area experiences storms at short intervals throughout the year, making the central region appear like it is the wettest throughout the year. In this watershed, nearly 50% of the total rainfall occurs in the 10-15% of the total duration, though sometimes in the past, unique storms have pounded the watershed non stop for more than 12 hours.

According to Muli (2008) El Niño and the subsequent heavy rains of 1999 affected the poor populations living in the slums, as some of them are squatters along the flood plains and landslide prone areas. Businesses were seriously interrupted or affected due transport and energy disruption; Kenyans were not adequately prepared for this and had no facilities in place to cushion them against the adverse effects. Floods in Nairobi usually follow the major drainage patterns of the watershed, over loading the existing drainage ways. As the storms recede, the natural and artificial drainage ways are eroded and wasted away, causing land slides and slumps He found out that the rate of erosion increases with the length of the slope. Further accelerated erosion occurs at the edges of tarmac roads without kerbs. The big storms experienced in Nairobi are associated with large raindrops, which can cause dislodgement of sediments on bare surface. These have up to 8 times the erosive capacity of the runoff. Erosion of tarmac roads is literally a "pot hole" menace that results from poor drainage, allowing water to stand on roads for a long time. Engineers refer to this problem as "bath-tub" menace as it makes water not to drain off fast. The area of study is well drained as shown in the attached map Appendix 1 there is Gatharaini River that flows from northern side to south.

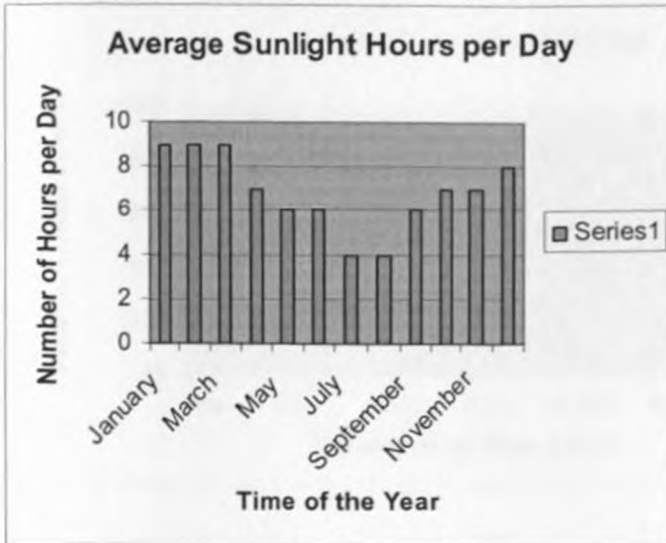
4.8 Vegetation

The vegetation in the area is healthy. The area has a few mature trees, shrubs and grass. At the moment the vegetation cover is poorly maintained the grass is long posing threats of rodents and snakes hindouts which can be dangerous to children playing out in the fields or adults jogging early in the morning or late in the evening. There are patches of reeds in lower grounds bordering Thika road that show signs of poorly drained soils leading to swampy grounds that are not fit for playing grounds unless proper soil drainage is done. Well maintained grass fields can offer good sports grounds and are safe for children playing grounds. Tall trees if planted around the open spaces could absorb vehicular noise and be used to separate land uses. Presence of trees and shrubs if encouraged could offer the most variable carbon sink in this urban neighbourhood that suffers from industrial and vehicular air pollution. This reduces the risk of lung related illness among the resident that would develop from in hailing polluted air during out door games.

4.9 Climatology within Kasarani

Nairobi has a very pleasant weather and is sunny throughout the year. Graph 4.1 shows average sunlight hours per day ranging from a minimum of four to a maximum of nine.

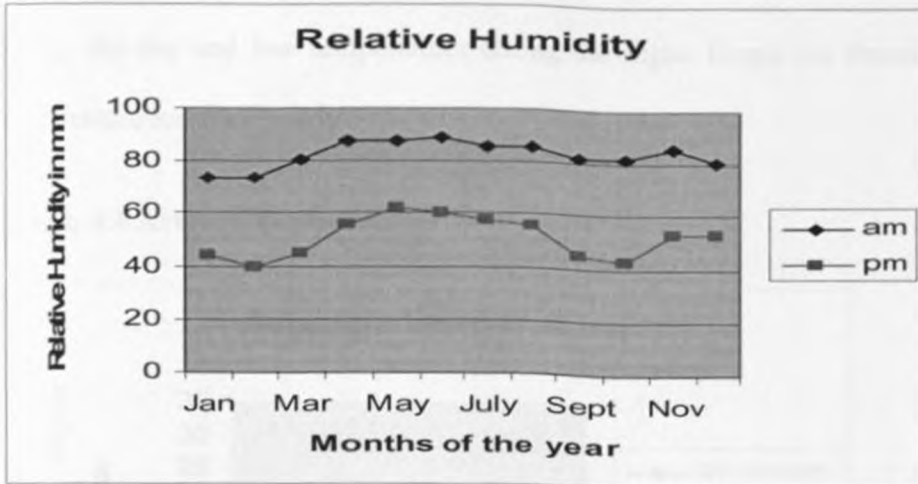
Graph: 4.1 Average Sunlight Hours per Day



Source: Wikipedia, 2009

With its altitude being 1600m above sea level, it is not steaming hot. According to Muli (2007) Nairobi sub-catchment area is situated in the ecological zone five according to climatic characteristics, which is said to be sub-humid. Throughout the year discomfort from heat and humidity is moderate. The annual relative humidity in the morning and afternoon is shown in the Graph 4.2

Graph 4.2 Relative Humidity

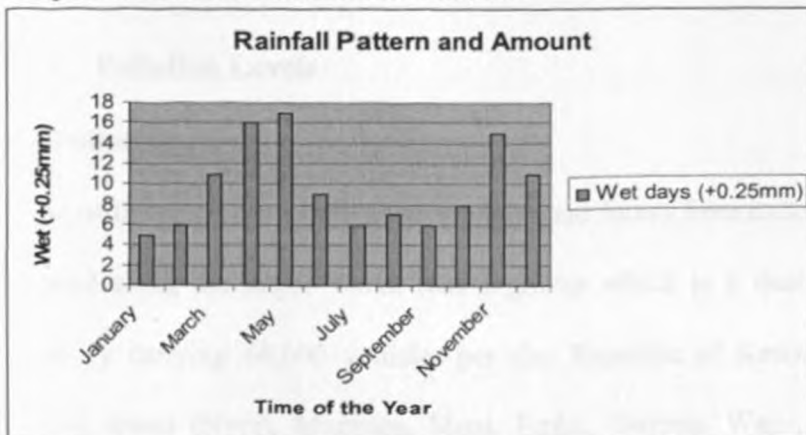


Source: Wikipedia, 2009

The Western and the Northern parts border the high potential highland areas. The annual mean rainfall of Nairobi sub-catchment is 900mm, which is distributed over long rains from mid March to May with the short rains from mid October to mid December.

Graph 4.3 shows the rainfall pattern and amount experienced throughout the year.

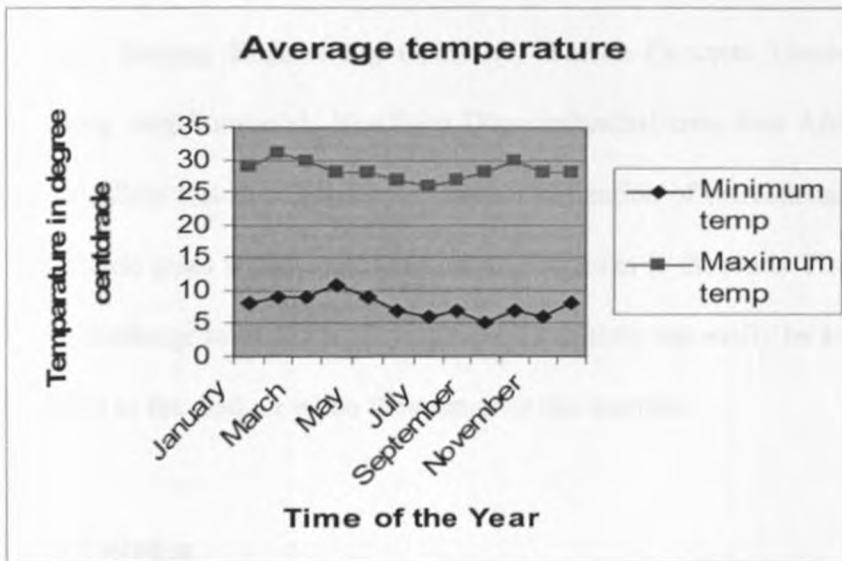
Graph 4.3 Rainfall Pattern and Amount



Source: Wikipedia, 2009

The mean annual temperatures are 23⁰ C. The Nairobi temperature conditions are characterized by a small and a large diurnal range; this is due to high temperatures during the day and low temperatures during the night. Graph 4.4 shows the average temperature recorded yearly.

Graph 4.4 Average Temperature



Source: Wikipedia, 2009

4.10 Pollution Levels

Air Pollution

Some of the pollutants in the neighbourhood are fumes from motor vehicles. Kasarani is situated along the major Thika road highway which is a dual carriage road that is currently carrying 60,000 vehicles per day Republic of Kenya(2007) that connects several towns (Nyeri, Muranga, Meru, Embu, Garissa, Wajir, Thika, Ruiru among others) and provinces (central, Eastern, North Eastern as well as Somalia, Ethiopia,

Sudan borders)with the Nairobi Central Business District. Vehicles from and to all these destinations and origins and more pass by the study area emitting a lot of greenhouse gases and lead that are toxic. There are also other major roads like Kasarani road linking Thika road to Kangundo road. This contributes to vehicular pollution in the study area.

There are also industrial fumes from industries in the neighbourhood like Haco industry, Strabag Engineering Company, Warren Concrete Limited and those from adjoining neighbourhoods like Baba Dogo industrial area, East African Breweries and Central Glass factory. This hinders proper utilization of recreational space as residents inhale toxic gases while jogging or playing adjacent to the roads. The roads also poses a major challenge to children playing near by as they can easily be knocked down if the ball rolls to the road or when they run after one another.

Noise Pollution

Both vehicular transport and industrial production within Kasarani cause noise pollution to the neighbourhood community. The resident have to cope with careless hooting by the public service vehicles that operate for 24 hours thus causing disturbance of sleep and rest. Planting of tall trees with thick canopies along the transport routes would screen out the resultant noise thus allowing effective rest and concentration is the games while playing.

Water Pollution

The Gatharaini River crossing at the eastern side of the study area has been polluted by sewer discharges as it crosses through Zimmerman Estate where the residents discharge the sewer contents into the river. This hinders the recreational engagements that would otherwise take place along the river bed like swimming, nature trails, boating, and recreational fishing.

However, the National Environmental Management Authority (NEMA) has noted this phenomenon thus raising hopes that the situation may improve after the intervention of NEMA.

4.11 Physical Infrastructure of the Neighbourhood

Road Network

The area is well served by two tarmac roads. These are Thika road highway which is a dual carriage that connects several towns (Nyeri, Muranga, Meru Embu, Garissa, Wajir, Thika, Ruiru etc) and provinces (central, Eastern, North Eastern as well as Somalia border) with the Nairobi Central Business District. The other major road is the Kasarani road linking Thika road to Kangundo road. The feeder roads are dry weather roads which are maintained by the residents. Some of them have big potholes while some are quite well maintained as shown in Photograph: 4.1.

Photograph: 4.1 Feeder Road along a Private School Playing Field



Railway Transportation Network

The East African Railway is located about 500m from the study area passing through Dandora, Mwiki, Githurai Kahawa West to Ruiru. It offers commuter services to central business district after every two hours although this has not been effectively communicated through mass media and hence most residents are not aware of this service improvement from twice a day to every two hours.

Sanitation and Sewerage systems

The houses within the study area are not connected to the sewage plant in Ruai belonging to the Nairobi Water and Sewerage Company. They construct conservancy pools and septic tanks that are emptied regularly by the private exhauster tankers. This is what has contributed to surface water pollution as some residents and exhauster tankers operators connect their discharge the soil and waste water to the rivers. This hinders the possibility of recreational usage of the existing rivers in the study area.

Water Supply

The area is well served with treated piped water. The water is drawn from the Nairobi Water and Sewerage Company mains. With such enough water supplies, it is possible to include water games for instance splash, swimming etc in the area.

Electricity Supply

The study area is well supplied with power by The Kenya Power and Lighting Company. This allows for long recreational hours a day. Well lighted community halls are suitable for dancing competitions, drama, performance arts and fashion shows etc.

Solid Waste Management

Solid waste management in the area is done by the private sector. In case of domestic waste, the residents pay directly to the garbage collection firms who collect garbage from their door steps. The garbage is transported to Dandora dump site. The firms are mostly owned by youth groups. Most residents pay on monthly basis. There is substantial amount of solid waste that is not properly disposed from both small groceries and domestic that is seen as heaps of garbage in the available open spaces. However the streets are supposed to be attended to by the Nairobi City Council employees who don't seem to do it regularly. For industrial waste, the firm handles their waste responsibly. While solid waste is not properly managed it leads to misuse of open spaces which should be tendered clean for relaxation and beauty. They tend to look ugly and unsafe for children play as well as adults.

4.12 Social Infrastructures

Educational Institutions

There are several private primary schools in the neighbourhood among them the St. Mary's Sports View Academy shown in photograph: 4.

Photograph: 4. 2 A Private School Within The Study Area



Source: Survey, 2009

There is a public school known as Kasarani Primary School. A private Secondary school has been set up in the area recently known as Kasarani Boys High School. There are two post secondary colleges in the neighbourhood these are the Augustana College and the Kenya Institute of Special Education (KISE).The institutions have playing grounds like one shown in Photograph: 4.3 and recreation facilities for their clients only and are not open to use by the neighbourhood community.

The photograph: 4.3 a playing field belonging to a private school



Source: Survey, 2009

Health care centers

There is one government run dispensary and several private clinics. All the medical units are out patient that means in-patient services are accessed else where.

Sports Facilities

The famous world stadium The Moi International Sports Complex- Kasarani is located in this neighbourhood. This has influenced the naming of the estate adjacent to stadium as the Sports View Estate and a school near by is named St. Mary's Sports View Academy. This is the pride of this neighbourhood. The stadium offers recreational space to the public. The stadium is accessed physically by the residents by foot as the gates are close to the residence. It offers variety of sporting facilities including swimming pools of various depths, football pitch, athletics tracks, gymnasium, basket ball court, open grounds, conference rooms, restaurant, a hotel with accommodation and a poolside

bar. However there are user charges that may be probably excluding some users. Since Kasarani Stadium is a renowned sports ground, the facilities are used by groups for scheduled practice, tournaments, meetings and seminars. This includes teams that play in premier league, sports federations with scheduled matches and companies or organizations for meetings, trainings, etc.

Places of worship

There are several Christian churches in the area showing that majority of the resident are Christians. Surprisingly, there is a Korean church built on the land that was set apart for a community hall in a Part Development Plan dated 1990 from Ministry of lands.

There are no mosques or Hindu temples in the area. Since the majority of the residents are Christians and hence reserve Sundays as their day of rest. This indicates that the peak demand period for recreational facilities is likely to be on Sundays.

Community Halls

There are no community halls in the neighbourhood. Lacking a community hall in the area means that the community is deprived off the right to gather as neighbours and recreate in form of dancing, watching comedians, participate in music and drama, meetings etc lack of this essential recreational facility can be attributed to re-allocation of a community hall site to a Korean church along Kasarani road as shown in the Appendix 13.

4.13 Economic and demographic profile of the study area

The study area according to the Republic of Kenya 1999 Population and Housing Census Volume One has a total population of 19,931 of which male gender constituted 10,359 and female 9,574. The total households were 5,562 with a population density of 1.689. Analysis by the Republic of Kenya 2004 shows that youth defined as those aged between 15 and 30 they form 32 percent of the population. It can therefore be concluded that the neighbourhood constitutes active population. This section of population normally has great desire for recreation. This is a peripheral area of Nairobi city where new housing developments are being put every now and then. The area has not reached its full carrying capacity as more high-rise flats are still coming up in the available vacant plots. Planning for the recreation facilities should be based on projection of the future population when the housing is fully developed and occupied. The planners must be visionary.

Despite the fact that Kasarani neighbourhood is a residential zone, it can be described as a mixed land use where there are commercial activities like manufacturing industries, institutions of high learning, international organizations headquarters banks, an international stadium among other urban land uses. Moreover, there is extensive neighbourhood trade activities like; small shops, mini-supermarkets, butcheries, salons, chemists/pharmacy, food kiosks, hotels, groceries, property management agencies, private health clinics, barber shops, boutiques, furniture dealers, hardware etc. This form of economics shows that Kasarani residents are able consumers of urban services and goods and hence if the private sector is well developed and encouraged, some and more of these investments can go to recreational services and goods in order to diversify economy further as well as improving access to the residents.

CHAPTER FIVE

LEVELS OF ACCESS, ADEQUACY AND ROLES PLAYED BY

VARIOUS STAKEHOLDERS IN RECREATION

FACILITIES PROVISION

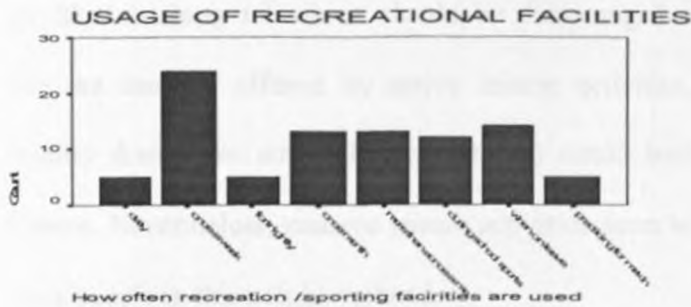
5.1 Access Level to the Available Facilities

Introduction

Accessibility is an important factor to consider in provision of social amenities like sports facilities in order to assess whether it is curtailed by distance, cost, gender disparity, size, etc. This section examines the levels of access to the recreational facilities available in Kasarani to the different social groups residing in the neighbourhood.

Accessibility to Recreational Facilities by the Resident Community

Findings of this study revealed in the Graph 5.1 that majority of the Kasarani neighbourhood residents who are the main subject in this study do not use the recreation facilities weekly. Only 26 percent of the respondents in this study use the facilities weekly. 16 percent only use the facilities while on leave noting that majority of Kenyan workers have less than 30 days annual leave. 5 percent use the facilities while practicing for match competition and hence not for leisure. Only 5 percent of the residents are able to use them daily while others use them only on schools sports day that comes once a year.

Graph: 5.1 Frequency of Use of Available Facilities

Source: Survey, 2009

This shows that majority of the residents do not engage in recreation activities in their idle time that means they miss out benefits of recreation as they are non consumers of recreation services. The facilities utilized in Table 5.1 are private indoor facilities.

Table 5.1 Recreational Facilities Made Use of Within the Neighbourhood

Title	Facility / activity	Percentage of people using the facility/activity
Recreational facilities made use of in the neighbourhood	Table tennis	32
	Gyms	32
	Cycling	13
	Horse riding	1
	Swimming	2
	Weight liftin10	1
	Pool table	15
	Aerobics	2
	Netball pitch	2
	Total	100

Source: Survey, 2009

Table 5.2 shows that there are quite a number of people in this neighbourhood who engage in passive leisure activities despite the leisure experts Dosio (1982) warning that this form of activities which a person does not exert any significant physical or mental energy like watching television should be discouraged on ground that they do not provide the benefits offered by active leisure activities. For example, acting in a community drama (an active leisure activity) could build a person's skills or self-confidence. Nevertheless, passive leisure activities seem to be a good way of relaxing for many people in this neighbourhood.

Table 5.2 Different Ways in Which Neighbourhoods Residents Spend Leisure Time

Leisure Activity	Percent %
Listening music	14
Playing football	19
Reading novel	9
Watching movies	7
Having fun	3
Traveling	2
Playing pool table	4
Playing computer games	5
Taking beer	2
Swimming	2
Story telling	2
Visiting friends	9
Cycling	1
Reading bible	3
Visiting places	1
Exercising	6
Visiting elders and the sick	1
Watching game and music	4
Sporting	2
Boxing lessons	5
Total	100

Source: Survey, 2009

When asked to state the reason why they do not engage in outdoor activities various responses were given such as lack of open fields near by, poor health, non affordability and security concerns. Details of the distribution of the findings are shown in Table 5.3

Table: 5.3 Reasons for Not Engaging in Outdoor leisure activities

	Reason	Percent %
Reasons for not engaging in outdoor games	No open field around	53
	My health does not allow	27
	Expensive to join member clubs	13
	Fear of insecurity	7
	Total	100

Source: Survey, 2009

Allocation of Finance to Recreation in Household Budgets

The research found out that recreation as a need scores very poorly in the rating of the family budget in many households as Table 5.4 presents the survey findings. 52 percent spend less than Ksh 3000, 33 percent spend Ksh10, 000 and only 1 percent of household spend above Ksh10, 000 per month. The study shows that 14 percent of the residents' households do not spend any money on recreation this call for need to introduce minimal charges and sometimes free recreational services in order to improve access to recreational facilities even to the low income earners in the area.

Table 5.4 Amount of Money Spent Per Household on Recreation

	Amount (ksh)	Percent%
How much do you spend recreation per month as a family	none	14
	below 3000	52
	3000-10000	33
	above-10000	1
	Total	100

Source: Survey 2009

Utilization Level of the Recreation Facilities

Kasarani is a relatively new neighbourhood with its development still in progress as new housing developments are still sprouting to date. Most of the households have lived in the neighbourhood for less than ten years as shown in the Table 5.5 This could be the reason why most recreational facilities are relatively new as the study shows that 61 percent were set up not earlier than 5 years ago and only 14 percent are between 6 and 10 years old while only 15 percent are over 10 years in existence.

Table: 5.5: Duration of Time Households Have Been in the Neighborhood

Time in Years	Percent (%)	
Time lived in Kasarani	less than 1 year	11
	1-5 years	50
	6-10	24
	over 10 years	14
	20 and more	1
	Total	100

Source: Survey, 2009

Almost all facilities both public and private in the neighbourhood are accessible to the residents since they do not have membership restrictions and are open to anyone. This shows there is no discrimination on gender, income levels or age cohort although some facilities do not seem to suite some age cohorts on the basis of African morals and standards but they tend to use them for lack of alternative. For instance students (youth) and children were seen dancing late at night clubs, retirees in the vicinity sit and take beer and 'nyama choma' in the same beer halls. This needs to be discouraged by provision of facilities that suite each age cohort with a need to cultivate good morals not

to over expose our children in recreation platforms. There are no member only facilities in the neighbourhood except 8 percent who register for use of steam and sauna facilities in a few private hotels in the area in order to regulate the use of these scarce facilities. This shows that there is no exclusion on use of facilities based on income levels as is the case of private sports clubs in the city like Parklands, Muthaiga among others.

Majority making up 55 percent of the facilities among them sporting grounds swimming pools, boxing, karate floors, pool tables, table tennis, dancing floors, comedians performance platforms, big screens TV/DSTV in pubs are showing an upward trend on the use. Among the facilities managers interviewed on the trend of facility utilization, 15 percent said their facilities are showing stagnant growth, 55 percent upward trend while only 30 percent are on downward trend. The reasons given for the upward trend are; improved customers service, urban dwellers are becoming more aware of the benefits of recreation and sporting and some facilities are located in close proximity to the residents' homes offering such customers location convenience.

Reasons for downward and stagnant trends were attributed to competition from new and newer upcoming facilities resulting to customers drift and consequently, low income turnout. 24 percent of the facilities are currently underutilized either due to reasons stated above or other reasons not captured in the study. 63 percent of the managers felt that their facility were fully utilized thus attaining full carrying capacity and no room to accommodate more customers while only 13 percent were unutilized. The photograph 5 was taken on a Sunday afternoon in hot weather with an aim to capture the utilization

level of the facility during its peak demand period. The baby pudding appeared overcrowded as seen at the background of the photograph: 5.1.

Photograph 5.1 Baby Pudding (back ground) and the competition pool in the foreground.



Source: Survey 2009

Children Recreation Facilities

About 70 percent of the residents interviewed indicated that they are unsatisfied with the way their children spend leisure time. The study discovered that there are no safe playing grounds in the neighbourhood a scenario that has led to children spending most of their leisure time indoors watching TV which is unsuitable for their physical growth and development. Parents when asked to state where their children play they give the following information as expressed in the Table 5.6

Table: 5.6 Places Where Neighbourhood Children Play

	Places of Child Play	Percent%
Where do children play	In the playing fields	16
	Sports view hotel	6
	In the compound	6
	Outside the gate	5
	Inside the house	3
	No children	19
	Kasarani sports centre	4
	In the school	31
	Village market(about 25 km away from the neighbourhood)	1
	Within the estate	5
	They are too young to play	2
	No place to go	2
		Total

Source: Survey, 2009

Most parents making up to 72 percent of the customers in the recreation facilities interviewed indicated that, they consider children playing facilities and safety as a very important factor to consider in choice of a particular recreation facilities. The rest 28 percent of the same category rate it as somehow important meaning that they still consider it important although not given number one priority.

The photograph 5.2 below shows girl children playing alone outside the homestead gate away from the parental surveillance at Clay City Estate. They are playing by the roadside which is also a threat to their safety.

Photograph: 5.2 Children Playing By the Road Side in Clay City Estate



Source: Survey 2009

The photograph 5.3 and 5.4 show a private children facility consisting of climbing structures, swings, slides and merry go round facilities. Being run by private firm there are entry charges at the gate that limit access to only those households that can afford.

Photograph: 5.3 Children playing ground in a private hotel (Sports View Hotel)



Source: Survey, 2009

Photograph: 5.4 Children climbing structures in a private hotel (Sports View Hotel)



Source: Survey, 2009

Facility Location and Space Organization

Location of a facility determines the convenience of getting to and from the place. Facility location is of great importance to the users as the study discovered that 80 percent of the respondents consider location of the facility as an important factor in choose of a particular facility with 52 percent stressing that they consider it very important in deed. Some facilities including the public playing field was located at the edge of the neighbourhood to the extreme southwest corner, sandwiched between three private properties and the other side is the septic tanks. The field is near the low density residential zone in the western side of the neighbourhood. The children from the high density high-rise flats residential zone in the eastern side have to cross the busy 30m Kasarani road and several other 15m access roads to access this important facility. Under utilization of this playing field can be attributed to its poor location. Appendix 3 shows the location of this playing field in relation to the high density residential flats along Kasarani road and on the eastern side of the neighbourhood. Although the government provided this important facility its location greatly limits it accessibility since young children cannot walk there at their convenience due to poor space organization on the urban designer and planner.

Affordability as a factor in accessibility

80 percent of customers in recreation facilities felt that affordability is a very important factor in choosing a recreational facility. However some users feel that affordability highly depends on the quality of service and the satisfaction you get from the facility

usage. Customers are ready to spend more on good recreational services (hire a private facility) rather than cheap poor services offered in a dilapidated condition mostly in public facilities. The research revealed that both public and private facilities are available in the neighbourhood. The research further discovered that the client population of the study area is economically weak as 52 percent of the household spend less than Kshs 3,000 a month while 12 percent spend nothing on recreational pursuits. This implies that the factor of affordability comes in to play in determination of accessibility to the facilities. The urban manager is therefore left with no option but to provide recreational facilities that will be accessible to all residents with minimal user charges and in some cases free of charge in order to cater for the 14 percent who cannot afford anything.

More so the research revealed that only a minority travel outside the neighbourhood to satisfy recreational needs despite the fact that they are well aware of their existence elsewhere. It is likely that the low mobility is as a result of travel costs avoidance. Thus the facilities located far from the neighborhood become inaccessible to the majority of residents. The one limitation that has curtailed the maximum utilization of these facilities by the residents is the higher user charges charged on the private facilities above the affordability of the client population.

Security

Threat to life or property may hinder resident from consuming recreational services. Generally people would wish to recreate in a safe free environment and hence security becomes an important factor in considering access levels of a particular facility. Almost 98% of the recreation consumers consider good security as a very important factor in choice of a particular facility while. 68% would wish use of modern security equipment (CCTV) to enhance security. The residents have witnessed incidents of insecurity and hence the quest for improved security details. Sports stadia consumer awareness and perception study research report, June 2007 revealed that there is rampant insecurity in Kasarani Sports Centre as there have been cases of mugging incidences inside the stadium. More so cars are vandalized at the parking and this really demoralize customers. The respondents gave various suggestions like improved infrastructure like roads and street lights as paramount to enhance access and security.

Personalized Recreational Services

There are no members' only facilities in the neighbourhood except 8 percent who enroll for use of steam and sauna facilities in private hotels. This denies the high income residents access to more personalized services of a member only club reserved for those who can afford as the study revealed that 85 percent of the consumers consider it as an important factor in choice of a recreation facility. The peak time for most facilities is during the weekends 62 percent, 30 percent during public holidays and only 8 percent during weekdays. Most facilities are appropriate for use by adults aged between 18-45 years, of lower-middle income and upper middle income earners regardless of gender.

5.2 Level of Adequacy of the Existing Facilities

Introduction

This section describes the level of adequacy in terms of facility size against the population and physical condition of the existing facilities in the neighbourhood against user expectation. Recreation services are normally driven by choice. People make decision on how, where and when to recreate. For urban managers to determine the level of adequacy, of particular facility, it is important to gauge it against the users stipulated needs. In this particular study the users raised various factors which they consider important for them to choose a particular facility for use satisfactorily.

Maintenance of facilities

Proper maintenance of the a particular recreational facility was considered a very important factor in choice of a facility by 96 percent of the residents as they prefer functional facilities in usable state and not those that exist in name only. Closely related to maintenance, users demand neat facilities to recreate as 95 percent of the households consider cleanliness of amenities as a very import factor in choice of a facility. On contrary one of the public facilities in the neighbourhood (Moi International Sports Complex- Kasarani) which has been recently commercialized. The parking was observed neglected in a very unhygienic condition where grass was not slashed at all as shown in the Photograph 5.5 below.

Photograph: 5.5 Main Stadium Parking



Source: Survey, 2009

Improved Customer Care and Variety of Services

Variety is of great importance in recreation services as customers prefer places with a variety of entertainments within the sporting spots i.e. a gymnasium with aerobic facilities, boxing facilities and other fitness equipments, sauna that is working, availability of kids playing facilities '*nyama choma*' among others.

Ability to host several activities at the same time was rated as a major factor determining the adequacy of a particular facility by 88 percent of the residents. This avoids boredom and for families every individual can engage in an activity of choice without inconveniencing other family members. For instance in the Kasarani Aquatic Complex the parents sit next to the pools looking very bored as the children swim. In addition, 91 percent consider live performances as important in their choice of recreation facility.

80 percent consider availability of trained personnel as a major driver. Good personalized services scored 85 percent and advertisement (33 percent) as major drivers to usage of facilities. Kasarani Aquatic Complex has high preference for people who want to learn swimming because they have a variety of swimming pools that can be used by the experienced swimmers and the learners.

Utilization Level of the Facilities in the Neighbourhood

The table: 5.7 show the variety of neighbourhood facilities that are available in the neighbourhood and their scale expressed in percentage. About 38 percent of the above facilities serve less than 100 customers per week, 59 percent serve between 101-400 customers per week summing up to a total of 97 percent facilities serving only 1000 customers per week against the population of 18,000 persons in the neighbourhood. The study also revealed that only 56 percent of the residents consume recreational services in the neighbourhood which is greatly unacceptable. The peak demand periods of those facilities are (62 percent) weekends and 30 percent during the public holidays.

The lowest demand period is weekdays which registered only 8 percent an indication that recreation facilities are mostly used when residents are spending leisure time (time out of regular work)

Table: 5.7 Recreational Facilities Available In Kasarani Neighbourhood

Facility	Percent (%)
Pool table	16
football	16
Volley ball	8
Swimming	8
Athletics	8
Boxing	8
Karate	8
Table tennis	8
Dancing	4
Drama	8
Comedians	8
Total	100

Source: Survey, 2009

According to the facility management, only 63percent of the facilities are fully utilized 24 percent are under utilized, while 13 percent are unutilized against their target. Regarding the facility utilization trends, the research revealed the following; 15 percent are stagnant, 55 percent show an upward trend while 30 percent show a downward trend. Various reasons given for the above utilization trends are such as competition from new upcoming facilities in the neighbourhood that leads to customers drift and low income as reasons for downward trend. For upward trend, reasons given by the facility management were such as good services, increased awareness of the benefits of recreation, relaxation after hard labour and close proximity to customers' residence. Lifestyle and individual interests are also factors that people consider when choosing recreational facilities.

Facility size

Large facilities have the ability to host several activities at the same time thus they are available for use most of the time. 85 percent of the respondents consider large capacity in choosing recreational/sporting facility as very important driver to usage. Most private facilities in Kasarani are prone to congestion due to their small size against the number of customers during the peak demand periods like weekends and public holidays

The most affected being the swimming pools and children swings and slides. The photograph 10 shows a crowded baby pudding and a shallow swimming pool in the background which need to be expanded in order to improve the hygiene standards. For this reason the facilities become unappealing to people who like exclusive places. Moreover 70 percent of the respondents prefer wide range of services within the large facility reflecting that the customer would wish to have a one-stop-shop facility to avoid moving from place to place to satisfy their various recreational needs.

Physical Condition of the Public facilities Available

On the other hand the public facilities although open for use by the residents are not attractive to them due to the following reasons. The open spaces like the playing field next to Kasarani Primary School is not systematically interconnected with pedestrian trails, the grass is long and untrimmed, bushes that look quite unsafe have not been cleared. Essential equipments like toilets, swings, slides and goal posts are missing amongst other important features of the playing fields.

The photograph 5.5 shows the famous Moi International Sports Complex – Kasarani main stadium which is a major facility in the study area. The research carried out an in-depth study to establish the level of adequacy and access of this particular facility to the residents. From observation, the study exposed that the stadium compound is unhygienic and poorly maintained as presented in the photograph 5.5. The facility is currently being managed by the Sports Stadia Management Board (*stadia*) which is a state corporation whose mission is to develop market and manage sporting and recreational facilities to the satisfaction of stakeholders and to offer consultancy and advisory services in sports and recreational business. The board currently manages Kasarani Sports Complex and Nyayo National Stadium with the objective of maximizing their utilization and exploitation of their commercial value for purposes of attaining financial sustenance. For over twenty years, the management of this sport facility was under the ministry of sports. The facilities were hugely dilapidated and largely under utilized. Public perception was equally negative due to poor service and security concerns. However since its inception, slightly over three years ago, the board has aggressively revived activities and is consistently transforming the management of national sports and vocational facilities

Photograph: 5.6 Main Stadium Compound near the Gates



Source: Survey 2009

The findings from the study indicated that most people use the facilities when they want to relax or when training in various sports such as track events, boxing, soccer and karate. Companies and institutions also rent this place for fun days; end of year party, annual general meetings and also for training and seminars.

General cleanliness of the facility is wanting especially the swimming pools where customers feel the water is not clean due to overcrowding with no regular cleaning. There are no instructors to train residents how to swim or improve their swimming skills as a result some facilities are greatly underutilized like the divers pool and the competition pool.

Photograph 5.6 shows a divers pool at the Kasarani Aquatic Complex taken around 3pm on a Sunday in sunny weather and there were no people using the facility at the moment.

Photograph: 5. 7 Divers Pool at the Kasarani Aquatic Complex



Source: Survey, 2009

Photograph 5.7 shows the competition pool to right side of the photograph and the divers pool to the left side at the Kasarani Aquatic Complex taken around 3pm on a Sunday in sunny weather and there were no one using the two facilities at the moment of data capture.

Photograph: 5.8 (left) Diver's Pool and (right) Competition Pool at the Kasarani Aquatic Complex



Source: Survey, 2009

Being a public place the stadium is prone to congestion and the management has poor riot handling mechanisms that results to insecure of chaos. There is rampant insecurity in the stadium as there are cases reported of mugging incidences inside the stadium. More still the facility is dilapidated with poor water facilities, low quality of equipments, lacks even essential stationery for operations like receipt books over weekends during the peak demand period. There were no menus in the Kasarani restaurant and hence the researcher was given a handwritten menu which is attached in this report as an appendix this show poor public image to the customers.

The services are not competitive enough as there are no varieties for drinks a case in point you find one brand of soda and juices served are only artificial. Could be these are some of the reasons that keeps off customers. The photograph 5.8 below was taken around 3.00 pm on a Sunday when it was supposed to be the peak demand period on recreation in the neighbourhood but unpredictably there was no single customer in the bar.

Photograph: 5.9 A deserted bar at the Kasarani Restaurant



Source: Survey, 2009

Facilities in Short Supply or Missing In the Neighbourhood

Respondents in the study area mentioned the several facilities as either lacking completely or the ones available are not enough for the client population. The table 5.7 below show the facilities mentioned in the study.

Table: 5.8 Facilities Mentioned as is Short Supply or Missing in the Neighbourhood

Facility name/activity	Demand level in percentage
boat riding	21
table tennis	33
volleyball	1
weight lifting	5
watching people	1
football	12
watching movies	7
computer games	3
pool table	1
swimming	5
fields	1
horse/ camel riding	1
playing football	4
seeing rich culture	1
playing golf	3
watching DSTV	1
Total	100

Source: Survey, 2009

The study area lacks a neighbourhood park which is an indispensable component of any comprehensive residential neighbourhood development. There are two rivers crossing the neighbourhood i.e. Gatharani river and Rui Rwaka River. These two rivers offer expansive riparian reserve and especially the Gatharaini River which flows next to a chain dams which were left open as a result of quarrying that took place years ago. The photograph 5.9 shows quarry dams and in the background there is the Gatharaini River.

Photograph 5.10 A chain of quarry dams



Source: Survey 2009

Surrounding the dams there are acacia trees and a few people were seen seated and one.

Photograph 5.11 Adjoining Spaces to the Dams



Source: Survey, 2009

The photograph: 5.11 shown below is the River Gatharaini riparian reserve the space is a strip of 30 meters according to planning regulation it is currently a bush that scares people away for fear of assault. Very few people were seen trailing around this area.

Photograph 5.12: Gatharaini River Riparian Reserve



Source: Survey 2009

The study observed that residents have formed a habit sitting inside the Roy Sambu Roundabout as shown in the Photograph 5.12 during weekends and public holiday. This indicate that the residents have a craving for out-door recreation in natural environment and hence the need to create a park in a safer place. The roundabout is a very risky place since the high speeding traffic along Thika-Nairobi highway sometimes loose control and roll over the roundabout and this can cause loss of life since no retaining wall was erected to safe guard the users from such occurrence. The pedestrians cross the busy highway in order to access the roundabout open space. This is a pending tragedy if a quick action is not taken by the city management.

There are no designated pedestrian crossing points or a flyover provided despite the fact that the city council has encouraged recreational use of this open space. The approval of this facility as a recreational facility by the council is seen by the recent move to promote the user comfort by provision of lawn furniture. Lack of safe crossing mechanisms to the open space greatly hinders the access to the facility by the sick, aged, children and the physically challenged residents and hence inadequate for them.

Photograph 5.13: Roy Sambu Roundabout Open Space



Source: Survey, 2009

5.3 Major Stakeholders in Provision of Recreation Facilities in Kasarani

Introduction

This section describes the roles that major stakeholders play in provision of recreation facilities in the area of study as well as the management of the same that has contributed to the current scenario either positively or negatively. Among the stakeholders discussed are the central government, the resident community and the local authority.

The Role of the Central Government in Provision of Recreation Facilities

The central government used to directly run the Moi International Sports Complex – Kasarani. Recently, about four years ago the government established a management board, known as the ‘Sport Stadia Management Board’ in order to enhance the image of the public facility, and make it competitive and profitable in the city’s liberal recreation market. The facility is one of the public facilities in the neighbourhood that is open to the neighbourhood residents at minimal charges. However the facility is not fully utilized by the client population.

In the view of the research findings, the resident felt that the stadia facility is not professionally run. This was especially so prior to the establishment of the Sports Stadia Management Board. The respondents still feel that the stadia should advertise the management posts and have a private firm do the recruitment to enhance professionalism and avoid political appointment. They felt that the public facility would better if privatized. The research further exposed that employees seem to lack coordination such that they lack information on what happens on the other departments so guest are left hanging and when they ask they do not get assisted. The public relation in his case becomes very weak. The three star restaurants (The Stadia Hotel) lack even the most basic items like; brochures, price list, staff business cards. The researcher was given a handwritten price list for a menu (attached in the appendices) this lowers the image of the facility a great deal.

The central government through the ministry of lands physical planning department allocated land for playing fields in 1984 as shown in the Appendix 12. The same office allocated land for a community centre as shown in the Appendix 13. The community centre was never developed and a Korean Church is what was developed instead. The office did not give data to establish whether the conversion was official or not official.

Loss of Recreational Land to Other Uses

The rapid growth of urban population has severe impact on recreational areas. Legal and illegal conversion of open recreational spaces to other urban land uses has happened both officially and unofficially. Officially, policymakers have necessitated subdivision of original recreational areas for other urban land uses. According to the Nairobi City Council records as quoted in Omondi (1991), 39 per cent of the original recreation land in Nairobi has officially been allocated for other uses. This research exposed that in Kasarani a community centre allocated in the Part Development Plan of 1990 by the Ministry of Lands has been twisted in to a Korean church, a play field into a Pentecostal church and social amenities in initial subdivision in Clay City Estate were later officially converted to residential developments.

It is imperative that if we are to retain the recreational land remaining today no encroachment into these should be allowed.

The Role of the Community in provision of Recreation Facilities

The community seems not to play their role in safeguarding the public facilities against misuse and loss of the same. The study revealed that some open spaces in the area have been converted to other uses. This poses a planning problem to the authority as the community seem to have its own articulated needs like dumping and farming. In Clay city estate in Appendix 11 open spaces proposed in the initial subdivision plans were later re-planned and parcels of land sold out for residential housing in the sub division plan shown as in the same Appendix 11 the same sheet for comparison. The later sub division plan was approved by the local authority and developments took place without the community members raising a voice despite them knowing the original plans. This implies that the voicelessness of the community plays a major role on the non provision of public amenities in the urban neighbourhoods. The community centre space allocated off Kasarani road was also later developed to a Korean church without opposition from the community who were to benefit from the centre.

The Role of the Local Authority in Management of Public Recreation Facilities

The NCC is the only authority mandated to plan for recreation facilities within the city boundaries. In executing its mandate, the NCC requires every developer interested in subdividing a parcel of land for residential development in excess of every 10 acres to surrender 10% of this land to the government for the purpose of providing public utilities in which recreation is part. This by law is enforced with reference to minute 24 of works and town planning committee dated 13/May/1987.

The size of the space allocated to each utility depends on the size of the population projected to reside on the area. The Nairobi City Council Forward Planning Section of City Planning Department, consider the following as the essential utilities for the residential neighbourhood recreation; commercial centre, churches, social hall and schools. The recreation facilities are considered as of medium priority while ranking the use of the public utility space. The space allocated depends on the population projected to reside on that particular neighbourhood.

There seems to be no regulation by the city council planning department to ensure that the developer (private land owner) does not surrender the waste land that he himself/herself consider uneconomical. There are no by-laws stating the minimum size of piece of land surrendered incase the land surrendered is not consolidated together. This gives the developer a loophole to surrender the 10 percent land into fragments of parcels that may be difficult to design for reaction and sometimes the land quality is low as the developer chooses to surrender the sloppy or marshy areas that are of low land value no fetching him/her good profits

The approving authority only ensures that policies and laws of planning are adhered to. They insist that the approval of the sub-division schemes should be done before they are implemented and the proposal is developed but unfortunately the enforcement arm of the authority is weak. On the ground the situation is different. The developers buy the land as a block, subdivide the land and sell it on plan. In some cases they go a step further and erect beacons which the show the prospective buyer's on the ground way

before the sub-division plan is approved. Worse still, development of land take place before the sub division is done and this restricts the forward planning advantages as it turns to be just regulation of what the developer who is not a professional planner or designer intends it to be

The main custodian of the public utility land is the government through the NCC. The local authority's only legal backing is by way of Town Planning minutes. This is a weak legal frame work to be entrusted with the responsibility of safeguarding valuable urban land with the current escalating values.

There are plan by the NCC to engage in a private public partnerships to develop recreational facilities on the surrendered public utility land. The NCC can contribute by offering the land and the private sectors to develop the land. This can only be done through contractual agreements like Build Operate Transfer (BOT). The roles of the played by the NCC management on the recreational facilities and services are:

- i) Ensuring effective governance
- ii) Employment of enough staff to maintain the facilities
- iii) Modernization of landscaping (e.g. improved sanitary places)
- iv) Involvement of private developers and sourcing of funds form foreign donors.

Major Stakeholders Coordination in Recreation Provision

The relationship of the main stakeholders in urban recreation is that the private sector is the main funding agency of the developments in the neighbourhood the Nairobi City Council offers the security, policies and governance which indeed is the firm ground on which the private sector develop or invest. The resident community is the main consumers of the good and services rendered by the private sector and the Nairobi City Council. They also aid the governing body by forwarding proposal especially in the LASDAP process in prioritizing the development projects for allocation of LATF (Local Authority Transfer Funds) that promote participatory governance.

Kasarani neighbourhood has been zoned off as a medium population density zone. This regulation is provided to regulate the developments which are mainly done by private developers. However on the ground, the situation is different as there are many five or more storey high rise flats that have sprung up recently especially on both sides of the Kasarani road and spreading backwards on the eastern part of this road. This shows that the main stakeholders in urban recreation do not coordinate very well. Out of field experience, planners in NCC said would prefer a planning method that is based on utilization levels in recreation than the one used based on standards of population X requiring facilities of size Y. This planning by standards method does not meet the real needs of the community and yet this is the method the institution requires them to use out of the rigid council procedures enforced.

5.4 Summary of the Major Findings and Discussion

In view of the analyses presented in the three preceding sections, the study ultimately concludes that the situation of the recreation of facilities in Kasarani neighbourhood is unsuitable in terms of access levels and adequacy and hence the need to recommend a planning and management model for suitable provision. In this context, the following is a summary of problem areas found to curtail either access or adequacy of the facilities to the resident community in the study area:-

Utilization Levels of Available Facilities

The study revealed that 69 percent of the residents do not engage in recreation activities in their idle time that means they miss out benefits of recreation as they are non consumers of recreation services. Among those who recreate, 52 percent engage in passive leisure activities instead of active leisure activities. The reason cited for not engaging in outdoor active leisure activities are: such as lack of open play fields near by 53 percent, poor health 27 percent, non affordability 13 percent and security concerns 7 percent. Available facilities seem to be overstretched as 63 percent of the managers of recreation facilities in the neighbourhood felt that their facilities were fully utilized thus attaining full carrying capacity and no room to accommodate more customers. This implies that even if the 69 percent of the residents are mobilized to participate actively in the recreational activities there are no enough facilities to serve them adequately. There are no instructors to train residents how to swim or improve their swimming skills as a result some facilities are greatly underutilized like the divers pool and the competition pool at the Kasarani Aquatic Complex

These are no age specific facilities in the neighbourhood and this shortage has led to children, teenagers, young adults and the aged sharing beer halls, dancing floors etc which is not in accordance to African moral structures.

Situation of Children Recreational Facilities in the Study Area

The study revealed that 70 percent of the residents are unsatisfied with the way their children spend leisure time. The study discovered that there are no safe playing grounds in the neighbourhood a scenario that has led to children spending most of their leisure time indoors watching TV which is unsuitable for their physical growth and development. For the hyper active children who cannot be contained in the house end up playing by the roadside or on vacant private plots which they turn to as playgrounds before they are developed away from parental surveillance. The only public playing field in the neighbourhood is located in the furthest south west corner of the neighbourhood making it quite inaccessible to the client children population due to distance. There are inadequate facilities for children to play. The only available playing grounds with well developed structures are in the private facilities which charge users fees in order to access. This becomes inaccessible to many children whose parents/guardians cannot afford.

Planning Issue: Facility Location and Space Organization

Some facilities including the public playing field was located at the edge of the neighbourhood to the extreme southwest corner, sandwiched between three private properties and the other side is the septic tanks. The field is near the low density

residential zone in the western side of the neighbourhood. The children from the high density high-rise flats residential zone in the eastern side have to cross the busy 30m Kasarani road and several other 15m access roads to access this important facility. Under utilization of this playing field can be attributed to its poor location. Although the government provided this important facility its location greatly limits its accessibility since young children cannot walk there at their convenience due to poor space organization on the urban designer and planner. The Roy Sambu roundabout is a very risky place as an open park due to the high speeding traffic along Thika-Nairobi highway and no retaining wall erected to safe guard the users from accidents. Also there are no safe mean of access in and out of the space. This hold back the physically challenged, children, and the aged from accessing the facility thus the principle equity not observed

Affordability as a Determinant of Access

The research revealed that the client population of the study area is economically weak as 52 percent of the household spend less than Ksh 3000 a month while 12 percent spend nothing on recreational pursuits. This implies that the factor of affordability comes in to play in determination of accessibility to the facilities. The research revealed that only a minority of residents travel outside the neighbourhood to satisfy recreational needs despite the fact that they are well aware of their existence else where. It is likely that the low mobility is as a result of avoidance of travel costs. Thus the facilities located far from the neighborhood become inaccessible to the majority of residents.

This research concludes that the higher user charges charged on the private facilities have curtailed the maximum utilization of these facilities by the client population.

Maintenance and hygiene status the of facilities

The study revealed that proper maintenance of recreational facility was considered a very important factor in choice of a facility by 96 percent of the residents as they prefer functional facilities in usable state and not those that exist in name only. Closely related to maintenance, users demand neat facilities to recreate as 95 percent of the households consider cleanliness of amenities as a very import factor in choice of a facility. Most of the public facilities were not well maintained. General cleanliness of the aquatic complex facilities not adequate especially the two shallow swimming pools where customers feel the water is not clean due to overcrowding with no regular cleaning.

Variety as a Determinant in Adequacy Levels

Variety is of great importance in recreation facilities and customers prefer those with a variety of entertainments. Ability to host several activities at the same time was rated as a major factor determining the adequacy of a particular facility by 88 percent of the residents. This avoids boredom since every individual can engage in an activity of choice without inconveniencing other family members during family outings. Other important factors that determine adequacy levels are; presence of live performances, availability of trained personnel, good personalized services and advertisement

Physical Condition of the Available Facilities

Some of the public facilities in the area although are open for use by the residents are not attractive to them due to the following reasons. The playing field next to Kasarani Primary School is not systematically interconnected with pedestrian trails, the grass is long and untrimmed, and bushes have not been cleared. Essential equipments like toilets, swings, slides goal posts are missing amongst other important features of the playing fields.

The study learnt that 85 percent of the respondents consider large capacity in choosing recreational/sporting facility as a very important driver to usage. Reason being that big facilities have the ability to host several activities at the same time thus they are available for use most of the time. Most private facilities in Kasarani like Kasarani Sports view Hotel, Hotel Monacle etc are prone to congestion due to their small size against the number of customers during the peak demand periods like weekends and public holidays The most affected facilities are the swimming pools and children swings and slides

Facilities either Missing or Not Sufficient to Residents

The residents felt that the provision of recreation is inadequate in the following areas. Facilities such as neighborhood park, golf course, community hall for cultural arts and comedian performances, boat, camel and horse riding are completely missing. There are facilities that are there but in short supply these are: table tennis, volley ball, weight lifting, football pitches, swimming pools, and pool tables.

Weakness in Institutional Policy

The deficiency in the maintenance and management of facilities in Kasarani neighbourhood reflects weak institutional framework and lack of clear firm policy. NCC requires 10 per cent surrender of the land to be developed for public amenities before any subdivision plan is approved. The policy is facing several challenges in recreation provision such as in cases high rise flats are developed that thus accommodating more households in a small piece of land and thus the 10 per cent becomes inadequate in size in case of such high density residential zone. More so on clear description on the nature of the 10 per cent surrender land. Sometimes the developer surrenders the land in form of scattered pieces which may not be practically useful for recreation. In most cases, surrenders are poorly located at the corners instead of being more central located for catchment's to offer distance convenience to all residents. Others are on road frontages where children and residents have to cross busy roads to access and are at risk of balls or other play things rolling to the road and children may be tempted to run after balls risking accidents. Others are on the poorest recreational sites like water logged sites or former quarry pits where the developer feel would not make attractive profit in land market and are uneconomical to develop and this is what is surrendered to the government for public amenities.

CHAPTER SIX

RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

This chapter will illuminate strategies towards a suitable planning and management model proposed for adoption in Kasarani and other similar urban neighbourhoods for provision of recreational facilities. It is systematically structured into three sections. The first section presents conclusion of the study, the second section highlights the study recommendations and finally, the third section recommends potential areas for further research.

6.2 Conclusion

This study was carried out in order to meet certain objectives. The main objective was to develop an integrated management model for the provision of recreational facilities in Kasarani that responds to the aspiration of all age cohorts and income levels. This was to be achieved through four other specific objectives as follows; determine accessibility levels to urban recreational facilities in Kasarani neighbourhood, determine the level of adequacy of the available facilities in accordance to the requirements of the urban recreational facilities planning principles and standards, to find out the roles of major stakeholders in the provision of recreational facilities in Kasarani neighbourhood and lastly, recommend a suitable provision model for improving access and adequacy of the recreational facilities that may correct the layout deficiencies incurred in the initial planning and development.

The study adopted various research methods in order to meet the stipulated objectives. In order to meet the first two objectives, that is, establishing the level of access and adequacy, integrated sampling techniques of both probability and non probability were used. Various instruments of data collection among them; interviews, camera and field observation were used to collect and record primary data. The secondary data as collected from existing literature. To establish the roles of major stakeholders in the provision of recreational facilities in Kasarani neighbourhood, data was collected through questionnaires and review of literature.

The study findings revealed that majority of the residents in the study area are limited in access to recreational facilities. Some of the factors that hinder their access are; affordability, security, congestion, absence of particular facilities, poor site organization and lack of personalized services. With regard to level of adequacy of the existing facilities, the study revealed that the facilities especially the public owned and run are poorly maintained. There is poor customer care and limited variety in delivery of services. Most facilities are undersized or in short supply and as a result there is congestion and some residents travel far in search for recreational pursuits. The study further discovered that there is lack of co-ordination among the major stakeholders in recreation provision in the study area. The roles of each stakeholder are not clearly defined with regard to discharging its mandate in provision. Along with this a guiding policy and institutional framework is lacking that would protect recreational land resources from loss to other competing land uses and misuse of the same.

Among the three assumptions of the study, two of them were valid and one was invalid. The first assumption was that the local authority will have to play its role of spatial planning and development control if proper urban housing equipped with social amenities in this case recreational facilities is to be realized in Kasarani neighbourhood. The assumption is invalid according to the study findings that exposed that the local authority by-laws regarding recreation provision has not been enabled with the necessary legal backing to ensure suitable provision. The other two assumptions were proved valid by the study findings.

The assumptions were that, lack of awareness among the resident on their bargain rights for open spaces has contributed to inadequate provision of these facilities by the private developers and that recreational facilities have been given low priority in neighbourhood infrastructure provision by both private developers and the local government. The study revealed that the recreation land use is given medium priority and not the first priority in public amenities provision in urban neighbourhoods. The study further exposed that recreation land resources previously allocated in by Ministry of Lands and in developers surrenders were later converted into other urban uses by either individuals or groups of individuals. The residents do not seem to have raised any opposition to this and this clearly spells the voicelessness of the community members in physical planning matters that affect them directly.

6.3. The Study Recommendations towards a Suitable Provision of Recreation Facilities

This section prescribes strategic recommendations towards a suitable planning model for improving access and adequacy of the recreational facilities that may correct the layout deficiencies incurred in the initial planning and development.

The study recommends the following measures to correct the situation:

- i) There is need to utilize the available land resources in favor of recreation by introducing a nature trail along the Gathara-ini river valley and the quarry dams adjoining the Thika-Nairobi Highway. Along the Rui Rwaka River on the southern side a coordinated system of pedestrian paths and hiking trails should be planned and provided along the designated river valley. This will improve the physical environment and prevent invasion of riparian reserve by slum developers. An urban park that is useful and palatable to the users should be introduced in the area. The park should possess all the qualities of a good park.. There is need also to introduce creative play environment to the neighbourhood in the public open space. The free play areas would serve as a community focal point which would increase their usage and user security. t. The play gardens will reintroduce the idea of nature as being an integral part of human life to the children. Aesthetically the play garden will blend with the built environment. The playfield provided next to Kasarani Primary should be converted to a play garden too in order to serve the residents on the western side of Kasarani road.

- ii) There is need to adopt new approaches to planning based on utilization levels rather than the traditional approach to planning by means of preset standards for community currently being used by the NCC that do not seem to meet the recreational needs of the residents. The NCC should give recreation facilities first priority in allocation of public amenities spaces. This can be done by treating recreation as a basic human need together with health care and basic education in order to improve provision of this service.
- iii) There is need to strengthen the legal and institutional framework that guides provision of recreational public open spaces and facilities through practice of good urban governance. There is need for the local authority to instill co-ordination and cooperation of the interest groups in recreation; these are the resident community, private sector recreation providers, local youth organizations, CBOs, NGOs among others. The institutions in the area and the governing authority should come up with a working partnership to facilitate use of their recreation facilities by the community members. This should be done through a memorandum of understanding between the stakeholders in order to avoid misuse and ensure sufficient maintenance for the good of the client population. The community should be involved in all stages of facility development; conception, planning, construction, financing, management and maintenance. The community should be encouraged in cost sharing for maintenance of the recreational areas. The NCC should consider redeploying some of cleaning NCC staff to the city neighborhoods open space landscaping and maintenance section. This would call for more intense supervision by the enforcement arm of the NCC or alternatively, organize the local community to do it

themselves of course with some incentives. If this comes with an extra cost that the council budget cannot accommodate, a standing charge can be imposed on the land rate fee as open space maintenance fee. Through this, the residents will participate in cost sharing and this will give them the grounds to demand for better services from the authority. This would cultivate the feelings of ownership and consequently evoke increased participation in recreational activities.

- iv) The policy on 10 percent surrender should be reviewed and the following considered in the revision; minimum size required for recreation space should be stated in the by-law in case the surrendered land is fragmented and not consolidated in one piece. The surrendered land should be centrally located in order to be accessible and useful to the neighbourhood community thus being conveniently located to all.
- v) There is need to encourage optimum utilization of the available facilities by employing recreation extension officers. These officers should co-ordinate the community recreation activities, come up with programs to motivate and encourage active participation in active recreation activities by all residents. This can be done through occasional competitions among community members and sometimes inter-neighbourhood competition to promote patriotism and cohesion among community members. Functions like dancing competition, fashion shows, Miss and Mr Kasarani beauty contest, inter neighborhood music and drama festivals can really revive and motivate the resident to participate more. This way recreation will play its vital role of pulling out youth from alcoholism, hard drugs, crime, stresses and

tensions due to kicks of urban life. It will also help to develop local talents. The principle of equity should be enhanced by making the facilities accessible to the genuine poor persons in the neighbourhood by considering free access to public play fields and parks within the neighbourhood. However, where it is absolutely necessary minimal user's charges can be imposed for regular maintenance, watching a hired film, live band or dance session. The authority should ensure that charges are not prohibitive to exclude the poor. Hiring out of social halls for commercial pursuits should be discouraged since the poor can never get an opportunity to use the facility where commercial interest prevails. Security and safety of the resident should be ensured in order to encourage participation in recreational activities. The street lighting should be given priority as part of recreation provision initiative. The police should also offer surveillance patrols whenever there are functions in the community halls to ensure that residents get home safely. The recreation facilities should be equipped with necessary personal hygiene facilities like functional neat toilets, washrooms/change rooms fully furnished with mirrors and lockable doors, waste bins, clean drinking water and proper sanitation. This would greatly encourage the utilization of these facilities and curb environmental pollution as well as enhancing aesthetic value of the neighbourhood. Solid waste management for all sectors that is industrial, commercial and domestic should be made adequate to avoid dumping of waste on the precious open spaces.

- vi) There is need to formulate an urban community based recreation policy and implementation programme that would expand recreational opportunities within urban neighborhoods. The policy should be different from the touristic recreation

policy for it should declare urban recreation as a public good. It should allow all urban residents to have unlimited right to recreation regardless of their economic status, gender or age. The recreation policy should consider promoting social justice and equity. The policy should be created in such a way that it is focused on maximum utilization of existing recreational facilities, safe guard recreational open spaces from conversion to other urban land uses and set a strategy to reclaim the already grabbed open spaces. The strategy requires political goodwill and community support to achieve its objectives. The policy should also aim at expanding and establishing new recreational investment in the neighbourhood to satisfy the local needs. A strong policy framework can only be judged by the legal/political good will it commands. In order to cultivate public confidence in the technical capability and democratic accountability of the planning system in particular and government in general, there is need to reconcile the expectations of the resident community, local authority and private sector in this urban space. The four prescriptive ideas of community planning that the urban management should uphold are: that the problem found in given localities could be effectively tackled if only the inhabitants would see themselves as a 'community' and generate 'community spirit', the plan should be formulated not by the local community alone, but also involving voluntary associations and other unofficial, informal and even private sector organizations; that the community as a whole (i.e. the population at large) should be involved in the making of plans and the physical plans should not be made in isolation, but in conjunction with economic and social plans. The urban government in this case is therefore left with no

option but to strengthen the legal and institution frame works that will allow participatory planning in our urban landscape. The success of Kasarani community planning will heavily depend on the ability to reconstruct the urban community which has been destroyed by features of uneven development dynamic of capitalism with shifting scale and location of labour requirements. The loosening of the chains of traditional norms created new possibilities for both material and personal advancement. Once the community spirit is created, social control will informally be enforced within the group and association is mandatory.

Table: 6.1 Implementation Schedule

S.No	Recommendation	Actors	Time Frame in years
1	Develop nature trails, urban park, creative play gardens in the area	NCC, Private sector, central government, CBOs	10
2	Adopt new approaches to planning based on utilization levels of community facilities and give first priority to recreational facilities	NCC and central government	5
3	Strengthen the legal and institutional frameworks	NCC and central government	5
4	Change policy on public utility land surrenders	NCC and central government	5
5	Encourage maximum utilization of recreation facilities	NCC, Private sector, central government, CBOs	2
6	Formulate community based recreation policy	NCC , central government, CBOs	5

Source: Survey 2009

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6.4 Areas for Further Research

1. This study dwelt on provision of recreational facilities but did not cover in depth the existing management models of the facilities that may have hindered the access and adequacy of the facilities in the study area. There is a need to conduct an exhaustive study on management model that promotes access and raise the level of adequacy of the recreational facilities in the study area.

2. Further research is needed in order to establish whether the poor allocation of finance to recreation service by majority of household budgets in the study area is due to lack of awareness of the benefits or is due to the hard economic times that prevail in the city that leads to more basic human needs like food, shelter and clothing taking the lion share of the households' income.

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APPENDICES

APPENDIX 1: INTERVIEW SCHEDULE FOR KASARANI NEIGHBOURHOOD RESIDENTS

Section I

Social-economic characteristics of the respondents (Hali ya Jamii)

- 1 a) Sex
 - i) Male (Mume)
 - ii) Female Mke)
- b) Religion (Mfuasi wa dini ipi)
 - i) Christian
 - ii) Muslims
 - iii) African traditional
 - iv) Other? Specify
- c) What is your age in years? (Umri wako ni miaka ngapi ?)
 - i) Under 18
 - ii) 18-40
 - iii) 41- 55
 - iv) Over 55
- d) What is your highest level of education?
 - i) None
 - ii) Primary
 - iii) Secondary
 - iv) College or University
- d) Source of income (Ajira)
 - i) Employed – (umeajiriwa)
 - ii) Self-employed (unafanya biashara yako)
 - iii) Other? Specify (njia zingine? eleza)
 - iv) Income earned per month in shillings – (Mapato ya mwezi moja ni shilingi gapi)
 - i) Below – 3000
 - ii) 3001 – 10000
 - iii) 10001 – 30000
 - iv) Over 30000

- e) How long have you been in Kasarani?
- i) Under 1 year
 - ii) 1-5 years
 - iii) 6-10 years
 - iv) Over 10 years
- f) What is your household size respondent included? (mnaishi watu wa ngapi wewe mwenyewe ukinjihesabu?)
- Under 18 years males Female.....
- Over 18 years male..... Female.....

Section II

Recreational facilities need

Awareness of sports sporting and recreation facilities in the neighbourhood

- 2 a) What do you comes in your mind when the word recreation is mentioned to you?
Which recreational places are you aware of in Kasarani neighbourhood?.
- b) How do you spend your leisure time?
(Unatumia aje wakati wako wa mapumziko baada ya kazi yako ya kawaida)
- c) If no outdoor game or sport is cited in answer to (2a) than
Do you play any games?
- i) yes
 - ii) No
- If yes which one.....
- If no. why?
- d). Which recreational facilities do you make use of in this estate?

e) Do you travel outside your estate for recreation?

i) Yes

ii) No

If yes? Where?

f) Which facilities do you go for?

g) How often do you use recreational/ sporting facilities

Daily	01
Once a week	02
Fortnightly	03
Once a month	04
More than once a month	05
During schools sports days	06
When on leave	07
Practicing for match competitions	05
When I want to relax	06
When I am stressed	07
During school holidays	08
Others (specify)	

If no why?

h) Where do your children play?

i) Do you feel satisfied with the way your children spends leisure?

j) How would you want the situation of children recreations facilities improved?

k) How much money do you spend recreation per month as a family.

l) How important are the following factors in choosing a recreational/sporting facility?

Code all mentioned

APPENDIX 2: INTERVIEW SCHEDULE FOR MANAGERS OF RECREATIONAL FACILITIES / INSTITUTIONS IN KASARANI

Name of the institution.....

- 1) Ownership the institution
 - Public (01)
 - Private (02)
- 2) When was the institution set up
 - (i) Under one year
 - (ii) 1-5 years
 - (iii) 6-10 years
 - (iv) Over 10 years
- 3) What recreational facilities do you offer in this institution

<ol style="list-style-type: none"> i) Sporting (volley ball, football, lawn tennis) ii) Water games e g swimming iii) Athlete iv) Boxing v) Karate vi) Pool table 	<ol style="list-style-type: none"> vii) Table tennis viii) Dancing ix) Drama x) Comedians xi) Watching general TV xii) Other specify
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
- 4) On average how many customers do you receive in a week?
- 5) How can you describe the use of these facilities against your target?

<ol style="list-style-type: none"> i) Under utilized ii) Fully utilized 	<ol style="list-style-type: none"> iii) Over utilized iv) Unutilized
-------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------
- 6) How can you judge the trend of use of this facility in your own opinion?

<ol style="list-style-type: none"> i) Stagnant ii) Upward trend iii) Downward trend 	<ol style="list-style-type: none"> iv) No longer in use v) What do you think is the reason for this trend in?
----------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------

- 7) Are these facilities open to use by the general public especially the neighboring community?
- Yes
 - No
- 8) Are there any user fees charged for use of these facilities?
If yes how much --adults----- children-----
If it is a member only facility what Is the criterion of one becoming a member?
At what times of the week is the use of this/these facilities at the peak?
- | | |
|--------------|----------------------|
| i) Week days | iii) Public holidays |
| ii) Weekend | iv) Others specify |

Identifying and Segmentation of target market

- 9) In your opinion, who are users of this particular facility? Probe for, Age income, gender, profession, education, family size, marital status, family size?
- 10) What is their life style Lifestyle?
(Fun-Seeking, Family Stage, Trendy, Hobbies, Status Seeking, Sports Enthusiasts, Conservative, Forms of Entertainment)?
In your opinion, who are users of other sporting facilities? Probe for, Age income, gender, profession, education, family size, marital status, family size?
- 11) What in your own opinion do you think can be done by the management in order to improve accessibility of recreational facilities to more urban community members regardless of levels of income, age and gender?
- 12) What role do you think the government can play to improve accessibility of recreation facilities to more urban community members?

Thank you for taking your time to answer the question we highly appreciate your contribution to this research findings.

APPENDIX 3: INTERVIEW SCHEDULE FOR CUSTOMERS IN RECREATION FACILITIES

Respondent number-----

1a) Sex

- i) Male
- ii) Female

b) Religion

- i) Christian
- ii) Muslim
- iii) African traditional
- iv) Others specify

c) Age in years

- i) Below 18
- ii) 18-40
- iii) 41-55
- iv) Below 55

d) What is the highest level of education?

- i) None
- ii) Primary
- iii) Secondary
- iv) College or university

e) Sources of income

- i) Employed
- ii) Self-employed
- iii) Others
- iv) Other specify

f) Income earned per month in shillings

- i) Less than 3,000
- ii) 3,001 – 10,000
- iii) 10,001 – 30,000
- iv) Above – 30,000

g) Do you engage in reaction as leisure or as a means of earning livelihood or leisure?

- i) Leisure 01
- ii) Livelihood 02

Incidence of usage, frequency

h) When do you use recreational/ sporting facilities? *Mark the response in the indicated code*

Daily	01
Once a week	02
Fortnightly	03
Once a month	04
More than once a month	05
During schools sports days	06
When on leave	07
Practicing for match competitions	05
When I want to relax	06
When I am stressed	07
During school holidays	08
Others (specify)	

i) How much do you spend on recreation per month?

- Less than 500
- 501 -2000
- 2001- 5000
- Above 5000

j) How far do you travel to access this facility

- Less than 5 km
- 5km – 10km
- 10km – 30km
- Over 30km

(Users)- Perceptions /Key drivers and barriers to usage of recreational facilities

k) Which factors are important to you in choosing a recreational/sporting facility?

1) What do you particularly like about this/these facilities?

Mark the response in the indicated code in the cell

	Very important	Somehow important	Neither important nor unimportant	Unimportant	Not important at all
Well maintained facilities	01	02	03	04	05
Clean amenities	01	02	03	04	05
Ability to host several activities at the same time	01	02	03	04	05
Live performances	01	02	03	04	05
Trained personnel	01	02	03	04	05
Good services	01	02	03	04	05
Variety of menus	01	02	03	04	05
Good security	01	02	03	04	05
Idealy located- near town	01	02	03	04	05
A large capacity	01	02	03	04	05
Wide range of recreational/ sporting services	01	02	03	04	05
Security	01	02	03	04	05
Availability of entertainment spots within the stadium	01	02	03	04	05
Availability of kids playing facilities	01	02	03	04	05
Visibility/ advertisements	01	02	03	04	05
Personalised services	01	02	03	04	05
Use of modern security equipments (CCTV cameras)	01	02	03	04	05
Cheap/ affordable	01	02	03	04	05
Place is well known	01	02	03	04	05
Others (specify)					

m) What if anything do you particularly dislike about this/these facilities? *Mark the response*

in the indicated code

Not easily accessible	01
Not well maintained	02
Reasonably cheap to hire	03
Insecurity	04
Facilities are not in use	05
Lack personalized services	06
Poor customer care	07
Are unprofessionally run	08
Frequent breakdown of facilities	09
Poor planning	10
Have discrimination	11
Others (specify)	

In your own opinion, what should be done by the management of this facility in order to improve accessibility to other community members?

o) What would you recommend the government do in order to make recreational facilities more inclusive (accessible) to all community members in this neighborhood?

Mark the response in the indicated code

	Very important	Somehow important	Neither important nor unimportant	Unimportant	Not important at all
Well maintained facilities	01	02	03	04	05
Clean amenities	01	02	03	04	05
Ability to host several activities at the same time	01	02	03	04	05
Live performances	01	02	03	04	05
Trained personnel	01	02	03	04	05
Good services	01	02	03	04	05
Variety of menus	01	02	03	04	05
Good security	01	02	03	04	05
Ideally located- near town	01	02	03	04	05
A large capacity	01	02	03	04	05
Range of recreational services	01	02	03	04	05
Security	01	02	03	04	05
Availability of entertainment spots within the stadium	01	02	03	04	05
Availability of kids playing facilities	01	02	03	04	05
Visibility/ advertisements	01	02	03	04	05
Personalised services	01	02	03	04	05
Use of modern security equipments (CCTV cameras)	01	02	03	04	05
Cheap/ affordable	01	02	03	04	05
Place is well known	01	02	03	04	05
Others (specify)					

Thank you for taking your time to answer the question we highly appreciate your contribution to this research findings.

APPENDIX 4: QUESTIONNAIRE TO NAIROBI CITY COUNCIL

Intention: The Questionnaire is intended to gather information for an academic study for a student pursuing Masters in urban management (MUM) at the University of Nairobi Dept. of Architecture and Building Science.

Student name Juliet G Muiga

Study title: **Towards Provision of Suitable Recreation Facilities in Kasarani-Nairobi**

- 1) What are the requirements on public utilities surrenders on subdivision?
- 2) What priority is given to recreation facilities on these surrenders on subdivisions?
- 3) How do you ensure that the developer (private land) does not surrender the waste land that he considers uneconomical?
- 4) Do you have minimum sizes for the utilities in case the surrenders land is not consolidated?
- 5) Who is the custodian of this land?
- 6) Do you have any legal backing to this by-law?
- 7) What is the policy guiding the landscaping and maintenance of the public recreational open space?
- 8) Is there co-ordination between private developers, Nairobi City Council and residential communities?

- 9) Is there any population density controls guiding the new estates in particular Kasarani bearing in mind that is mainly developed by private developers?(low, medium, high) *tick appropriate.*
- 10) What planning method do you consider useful in neighbourhood recreation facilities? (standards\utilization levels)
- 11) How do you ensure space organization for suitability of the neighbourhood recreation facility to make the safe and accessible to the users?
- 12) Are there plans by the NCC to construct social halls, children play gardens etc. on the surrendered public utility land parcels in Kasarani neighbourhood?
- 13) What arrangement is in place as part of public private partnership initiative in service delivery to enhance recreation facilities provision in Kasarani?
- 14) What role is played by the NCC management on the recreational facilities provision and management?

Thank you for your assistance

APPENDIX 5: FIELD OBSERVATION CHECKLIST

1. Various land uses in the study area:

- Public utilities
- Commercial developments
- Industrial development
- Housing developments
- Recreational facilities

2. Physical conditions of the existing facilities:

- General cleanliness
- Poor maintenance
- Any aspects of overcrowding
- Any aspect of under utilization non utilization of the facilities

3 Any form of expression showing that the residents are craving for recreation facilities not provided eg children playing in odd places, youth turning vacant private land to playing field etc.

APPENDIX 6: WORK SCHEDULE

	DATE	ACTIVITY	OUTPUT
1.	27 TH October 2008	Presentation of concept paper	Seminar
2.	14 th November 2008	Submission of the Research Proposal	
3.	21 st November 2008	Defence of the Proposal	Seminar
4.	22 nd November 2008	Corrections of the arising issues on the proposal with consultation with the tutors	
5.	29 th November 2008	Preparation of the data collection tools and undertaking field work	
		Writing of the preliminary chapters of the report	
6.	2 nd January 2009	End of field work	
		Undertaking data analysis	
7.	20 th January 2009	End of data analysis	
		Writing of preliminary research findings, recommendations and conclusion	
8.	27 th January 2009	Viva voice presentation of the research findings, recommendations and conclusion	Seminar
9.	15 th February 2009	Undertaking corrections arising from the Viva voice presentation and presentation of the first draft to the tutors	
10.	29 th February 2009	Presentation of the second draft of the project report to the tutors	
11.	14 th March 2009	Submission of the Final Research Project to the Department in three copies complete with the signatures of the tutor(s)	
12.	28 th March 2009	Viva voice Presentation of the Research Project for Internal examination	Seminar
13.	29 th April 2009	Undertaking the arising comments	
14	13 th May 2009	Final submission of the Research Project for the External Examination	

Note: the dates indicated are preliminary as some may fall on weekdays

APPENDIX 7: PROJECT BUDGET

PROJECT BUDGET			
Item	Task	cost	Grand total
Stationery	Questionnaires	1,500	
Computer/Printer/Scanner	Printing research materials	50,000	
Digital Camera	Primary data collection and recording	15,000	
Enumerators	Data collection and Coding 5 persons @ K sh. 550 for 4 days	11,000	
Out of pocket	Miscellaneous	10,000	87,500