

PLANNING OPTIONS FOR HOUSING AN AGEING  
POPULATION IN NAIROBI. A CASE STUDY OF KIBERA  
DIVISION. //

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Thesis submitted in partial fulfillment for the requirements of the  
Master of Arts (Planning) in the University of Nairobi

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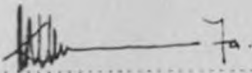
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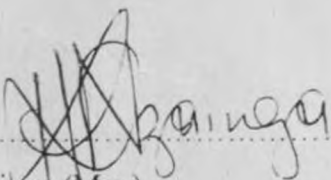
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Signed  .....

Kenneth Mwaita Mwangodi, B.A.

(Candidate)

This thesis has been submitted for examination with my approval as the University examiner.

Signed  .....

Hellen Nzaiinga (Mrs.)

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Hellen Nzainga (Mrs.)

## DEDICATION

To my parents, an elderly pair, whose inspiration and support kept alive the fire for the ceaseless search for knowledge and truth about the aging population.

To my wife Evelyn Samba and my daughters Manga and Saghe, who bore with me at their inconvenience, the many hours of no fatherly touch.



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## ABSTRACT:

This is a research study on the planning options for housing the ageing population in Kibera Division of Nairobi. The "graying" population as they are referred to, is a phenomenon that has received little attention from development planners. The reality of the population ageing has been proved in several demographic studies to be increasing and increasing at a higher rate. Whereas now there is a total of 37,401 persons in Nairobi over age 60 as per the 1999 census, this is projected to increase to approximately 2 million by the year 2020. This unprecedented increase of the aged in the population is exposing the older people to many hardships especially in the urban areas. These include socio-economic changes like the increase in the numbers dependant on the elderly, limited employment opportunities, difficulty in accruing credit e.t.c.; deterioration of cultural values and morals, the breakdown of family cohesion, drug abuse and prostitution; perennial man made and natural disasters like tribal clashes, political incitement as seen in the recent tenant/landlord standoff in Kibera - Nairobi and the deadly HIV-AIDS scourge, among others. Quite startling is the fact that all these changes are finding governments, the private sector, NGOs, the society, the family and the individual in general, completely unaware and unprepared to deal with the problems facing the aged (G.O.K., 2001).

The study used multi-stage sampling to reach this cadre of persons aged 60 years and above in Kibera Division. The methodology besides using primary data also included secondary sources to arrive at the present demographic statistics and trends in Kibera Division. The special needs of the elderly were evident by the living conditions/standards of the increasing number of the elderly in the areas of residence within Kibera Division as analyzed from the data collected through various data collection methods (field survey observations, household and institutional questionnaires, focus group discussions and interviews). Kibera

Division was a fitting study area because among other reasons it includes low income populace living in the Kibera slums, middle income residents of the Langata residential estates and the high income Karen residents. The varied needs for elderly persons was thus wholly covered and proposals made to alleviate their different problems as they contend with physical, institutional and systematic barriers. These hinder their everyday activities and their participation in urban life.

It is evident from this that the elderly (who epitomise what the situation will be as the population continues ageing) have not been catered for within our housing development plans and so the research proposes or makes recommendations to alleviate their plight and enhance their well being. The study describes housing as more than a roof over the head: it entails adequate space, ventilation, security, basic services, secure tenure, location with respect to employment opportunities and public amenities, structural stability and durability, and favorable environmental quality. All these should be affordable. The dwelling should also promote social interaction and economic advancement. Housing should therefore be seen not only in physical terms, but also in terms of what it does to the elderly population economically, socially, psychologically and environmentally.

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## LIST OF ABBREVIATIONS AND ACRONYMS

ADC	Area Development Committee
CA	Central Authority
CAP	Community Action Planning
CBD	Central Business District
CBO	Community Based Organization
CBS	Central Bureau of Statistics
CDC	Constituency Development Committee
CDD	Community Development Department
DDO	District Development Office
DDP	District Development Plans
DFDP	District Physical Development Plan
DFRD	District Focus For Rural Development
DO	District Officer
DRA	Dandora Residents Association
EA	Executive Authority
GoK	Government of Kenya
GOPP	Goal Oriented Project Planning
GTZ	German technical Cooperation
HDD	Community Development Division
IMF	International Monetary Fund
IPA	Interim Planning Authority
ITRS	International Trunk Road System
Karengata	Karen Langata District Association
KDHS	Kenya Population and Health Survey
KIP	Kenya Institute of Planning
KLDA	Karen/ Langata District Association

LA	Local Authority
LADP	Local Authority Development Plan
LDCs	Least developed countries
MDCs	Most developed countries
MFP	Ministry of Finance and Planning
MLS	Ministry of Lands and Settlement
NCC	Nairobi City Council
NDP	National Development Plan
NGO	Non Governmental Organization
NMGS	Nairobi Metropolitan Growth Strategy
NTRS	National Trunk Road System
PDP	Part Development Plan
PPA	Physical Planning Act
PPRA	Physical Planners Registration Act
PPRB	Physical Planners Registration Board
PR	Preparatory Authority
RAP	Rapid Assessment Procedure
RAS	Residents' Association
RRA	Rapid Rural Appraisal
SIDAREC	Slum Information and Development Resource Centre
SSC	Site and Service Schemes
Sub-DPC	Sub District Development Committee
TPS	Town Planning Schemes
UCAT	Urban Community Assistance Team
UNCHS	United Nation Centre For Human Settlement (Habitat)
UNDP	United Nation Development program
UNECA	United Nations Economic Commission for Africa
UNEP	United Nation Environmental Programme
UNICEF	United Nation International Children Fund
WAC	Welfare Advisory Committee
WB	World Bank

WHO	World Health Organization
WPDC	Ward Planning and Development Committee

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background to the Problem:

Population ageing refers to the increasing proportion of old people within a population. This process is related to continuing falls in birth and death rates and increased life expectancy that inevitably leads to a growth in the proportion of the elderly people in the total population (Kalache, 1991). The United Nations (1991) define older persons as those aged 60 years and above. This was adopted in this study to allow comparison of statistics with research that has been done on the aged. The world population aged 60 years and above is increasing rapidly, bringing developing countries (and especially in their urban context) face to face with the reality of an increasingly ageing population. These dynamics affect the age/sex structure of the country, and has a major impact on public finances, economic growth, social aspirations and the general living standards of Governments, the society, the household and the individual. These phenomena of an increasing number of older persons in the total population trigger the need for new thinking, organization, roles, and relationships for individuals, families, neighbourhoods, society and nations.

This increase in the number of older persons can be seen where statistics show that in 1959, there were 200 million persons aged 60 and above in the world (8% of the world's total). By 2020 a six-fold increase is expected to 1.2 billion people (14% of the world's total) (U.N., 1991). Current projections indicate that from 1980 – 2020 about 75% of the additional increase in the global older persons population will occur in developing countries. It is evident from demographic statistics that the proportion of the older people within the Kenyan population is increasing. The Center for International Research, Washington U.S.A. figure that the ranks of the age 60 and above in Kenya grew by approximately 440,000 persons between 1969 and 1989. They posted an increase of more than one million in the next 6 years, and the same institute postulates a 2 million increase from 2005 to 2020. HelpAge (Kenya),



(1998) indicate some social-economic trends affecting Kenya's elderly in recent years that can be summarized as follows:

- Average life expectancy rose from 44 years in 1962 to 56 years in 1997.
- 6 percent of Kenyans migrated from rural areas to cities in 1997; urban dwellers up from 5 percent of population in 1948 to 22 percent in 1997.
- 4 million Kenyans are 65 or older, one-seventh of population; expected to rise to 15 million by 2020.
- 20 percent of elderly Kenyans need some sort of aid.

Urbanization is clearly a dominant factor in global demographic transition towards an ageing population. It also raises a number of challenges and opportunities that further impact on the ageing population. For example, urbanization plays an important role in generating pockets of elderly people where, for instance, studies have shown that the emigrants are mainly the active age groups of between 20 and 45 years (from rural areas to cities) leading to pockets of the older people left behind in the rural areas (Kalache, 1993; ESCAP, 1995). But in more recent years in Kenya, less and less older people have been returning to the rural home after retirement and/or ageing in the urban areas (Obudho, 1997). Obunga (1987) also alludes to the emerging situation of paramount city dwellers who have little or no real relationships with the rural areas over the passage of time. At the household level, the net effect of urbanization is an increase in average real income. For individuals and the household, urban areas offer better opportunities of income generation, through both formal employment and informal sector activities. Expectation of higher incomes is one of the main factors underlying rural to urban migration in Kenya. They are also attracted by the provision of retail, transport, social and administrative services. This has important consequences for economic activity, the provision of health and social services and so will substantially and disproportionately affect populations (U.N., 1995). In addition, the process creates uneven development, geographically displayed by informal settlements (slums) where many of the rural migrants take up permanent residence and eventually age. These informal settlements are characterized by substandard housing, inadequate services and lack of sanitation.

Urbanization generally contributes to the lowering of population fertility and mortality rates and reduced average family sizes. Evidence from census reports suggests that the rate of fertility is declining with increased urbanization. This is largely the result of behavioral and lifestyle changes, which characterizes urbanization, including better access to health and educational services; higher age at first marriage and increased female employment. Urban families, it seems, also tend to have fewer children because of higher living costs in urban areas and the inability to sustain larger families in limited urban spaces (U.N.C.H.S. (Habitat), 1994). The population statistics in Kenya as at 1999 reveal that there were about 28,808,658 persons living in the country. The population growth rate is estimated at 1.59 whereby the birth rate is given as 30.8 births per a population of 1000 persons and the death rate is given as 14.58 deaths per population of 1000 persons. The net migration rate is put at -0.34 per a population of 1000 persons. The infant mortality rate is estimated at 59.07 deaths per 1000 live births. The life expectancy at birth for the entire population is 47.02 years. Total fertility rate declined from 6.7 children per woman for the period 1984 - 1989 to 5.4 children per woman in 1993. The crude death rate declined from 14/1000 to 12/1000 between 1979 and 1993. All these processes inevitably lead to a growth in the proportion of the elderly people in the total urban population. The aged are no lesser citizens compared to the other age groups, hence their special needs and aspirations, especially given that their proportion is rapidly increasing in our society, should be addressed.

Another mortality factor of enormous potential import to future planning decisions is the incidence of HIV/AIDS, which may hasten population ageing because the disease disproportionately affects younger adult age groups. Over the past few years the incidence of HIV/AIDS in Kenya has been on the increase, particularly in major urban centres such as Nairobi, Mombasa, Eldoret, and Nakuru. The city of Nairobi recorded 2,542 cases (1,664 male and 878 female) as per the Kenya Demographic and Health Survey, (1999). The peak ages for HIV/AIDS cases is 25 to 29 for females and 30 to 40 for males. Konde-Lule (1995) argues that urbanization has

allowed acceptability of a female making a living as a prostitute or bar maid. Exposure to new diseases, particularly S.T.D.'s were a part of new urban conditions, as urban centres are increasingly unable to provide the jobs, basic needs and services. About 75% of all HIV/AIDS cases occur among people in the most economically active age group of 20 to 45 years. The deaths of these individuals constitute a serious economic and social tragedy in the lives of surviving family, friends and employers. Official statistics show that as of January 1999 there were 526 HIV positive men and 185 women over 60 years old in Kenya (Okatcha, 1999). A lot has been discussed on the effects of the HIV/AIDS pandemic on the sexually active age groups. Unfortunately, very little has been done to explore its effects on older people (KDHS, 1999). In the over 50 years old range, there were 3153 cases, 3.9% of the total cases reported by January 1999. These figures show that the older people are gradually succumbing. HIV/AIDS has, and will continue to have a huge impact on older people in Kenya. Older people play a major role by caring for people affected by HIV/AIDS and then bringing up orphaned children. Their finances are depleted and there is also an emotional impact of changing family structure, let alone the risk of being infected themselves.

In recent years, the burgeoning African urban areas have been confronted by such problems as poverty and increasing difficulty of securing employment in labour markets. This is more so for the elderly population, where the study found out that the dimensions of poverty go beyond frailty or physical weakness due to old age, to include material and emotional neglect by family. Even the capacity of younger generations to assist their older relatives is severely impaired. Other aspects of vulnerability profoundly interconnected with ageing include powerlessness and low self-esteem. Income poverty for the aged in Kibera Division was also associated with poor health, inadequate or inaccessible health services, large number of dependants, landlessness, limited skill or capital to invest in productive activity and limited access and entitlement to pensions. The distinguishing characteristics of this poverty for the aged includes widespread open unemployment and underemployment as well as excessive stress on already over-extended social services (housing, transport, and

other public utilities) and pollution (UN Economic Commission for Africa, 1989). The urbanization experience of the African continent has consequently been relatively traumatic. Unlike in the more developed countries of Western Europe, the continent's urbanisation pace has been comparatively more rapid. The rate of growth of the urban population in Africa is the highest in the world. For example, between 1980 and 1985, the average annual growth rate was 5.04% compared with 3.51% for the less developed regions as a whole and 3.10% for South Asia. Ominously, these rapid rates of city growth are being accompanied by an "urbanization of poverty" with the forecast of over half the world's absolute poor living in urban areas by the year 2000 (World Bank 1989). The fundamental challenge of urbanization therefore is not to contain urban growth but how to marshal human, financial and technical resources to meet the needs of such growth. Moreover, in contrast with the European urbanisation's history, which evolved in close association with rapid urban industrial expansion, Africa's urbanisation process has emanated within an economic environment typified by depression.

**Table 1: Nairobi's Intercensal Growth Rate:**

YEARS	1969 - 1979	1979 - 1989	1989 - 1999
GROWTH RATES	4.9%	4.7%	4.8%

(Source: National Population Census Report, 1999.)

Nairobi has one of the worlds' highest urban growth rates. In many ways, the challenges to the aged as posed by the rapid urbanisation are most severe as the existing institutional structures and urban fabric are least prepared to meet them. Only the elderly persons previously working in formal employment benefit from old age pension schemes like the NSSF, for example. The Central and Local government in Nairobi is operating in conditions of extreme budgetary pressure on already strained infrastructure and other social service systems, and as will be seen in Chapter Four of this study most of their disbursements go towards recurrent expenditure and not development expenditure. Drastic reductions in investment in public health in Kenya for example, is due to a policy focus on efficiency and cost



saving advocated by donor agencies such as the World Bank and other pressures. The local authority in Nairobi lacks the finances, the planning capacity, the political will and is a haven of corruption, in many instances. The effects of this is reflected in human misery experienced where an ever increasing number of Kenya's urban dwellers now live in slum and squatter settlements. The slum villages of Kibera are now home to approximately 800,000 persons (Mazingara, 2001). The study recorded that other elderly citizens living in more affluent residential areas are not spared, they experience peculiar needs of isolation, lack of good governance and service provision by statutory bodies, no day-care centres nor home nursing facilities, elitist recreational clubs etc.

Modern change has brought many families and individuals into urban areas of developing economies (like Nairobi) into situations entirely unknown in traditional lifestyles. Several studies of the aged in Kenya have suggested that traditional patterns of family support of the aged are eroding, largely due to migration and changing societal values (Ward,1984; Parker,1987; Ocholla-Ayayo,1991; HelpAge International, 1998). The Kenyan National Report to the 1982 World Assembly on Ageing noted that while the traditional agrarian economy was conducive to family cohesion and stability, the shifting locus of production to plantations, mines and factories seen in urban areas has meant that family members are often physically separated, and family cohesion is thereby lacking (UNDIESA, 1985). In Africa, modernization has forced families to go directly or indirectly into commercial enterprises thus detaching them from the land and family set-ups to which many are mystically bound. In addition many find themselves being thrust into situations where corporate existence has no meaning. Individuals are therefore cut off and pulled out of the context of corporate mortality, customs and traditional solidarity (Mbithi, 1969; Ocholla-Ayayo, 1991; UNESCO, 1986).

A survey of rural elderly in Kenya found that 91% of respondents felt that their children did not do as much for them as they had done for their own parents. A large majority of the elderly respondents were reported to be living in poverty, and half of

these attributed their condition to neglect by their immediate family (AARP, 1986). The family unit today is experiencing stresses and strains; shortages and difficulties with all practical problems of social change; and deserves more practical attention and solutions.

These are the challenges due to the rapid rate of urbanization which the ageing population need to contend with, that are further constrained by their special needs.

This study focusses on the improved design of the built environment to accommodate the needs of the elderly and ageing population; and on policy research – identifying ways in which changes to the urban environment can be accomplished to enhance their well being. It also consolidates effective policy strategies that have been successfully applied elsewhere to see if they would work in Kenya. There is a dearth of practical knowledge regarding strategies for the ageing population for entire cities, with their mosaic of neighbourhoods, networks of infrastructure and clusters of urban services such as health, educational, social, civic and finances. These strategies should also be sustainable. Kaplan (1999) argues that sustainability, in terms of its applicability to development interventions, is more about achieving the ability to keep moving, changing, and improving one's "response-ability" to inevitably shifting circumstances. The study sees the challenge of an ageing population in this light. Many years of designing the physical urban environment has ignored social aspects of various categories of people (urban residents), including the ageing population. Physical planning of the urban areas must accommodate the needs of the elderly. Physical form of the urban centers also determines social behavior of the urban resident. The quality of the physical environment has huge importance on people's lives (Greed, 1999). Hence need for new thinking, where planning will integrate the needs of all persons including the ageing population. Kibera Division of Nairobi experiences rapid dynamism in increase in informal and formal settlements, destruction of the once lush Ngong forest around Karen/Langata and increased population. The plight of the elderly is in their own hands through advocacy, and that of other stakeholders in the areas of residence. There is thus need to have in place deliberate interventions that would

improve the welfare and cushion the effect of the burgeoning numbers of the aged in Nairobi in the near future, while enabling them to exploit their potential and enjoy their rights.

## **1.2 Statement of the Problem:**

Except on the advent of a mortal catastrophe, Kenya and especially Nairobi, has an ageing population as seen from the age/sex demographic statistics and dynamics shown in the background to the problem. The overall population growth rate in Kenya has been increasing since 1962, but has been accompanied by an even faster acceleration of urban growth, reaching 7.9% in the 80's decade, such that the share of urban population in the total population increased from 7.8% in 1962 to 20% in 1989. The reality of the population ageing has also been proved in several demographic studies to be increasing and increasing at a higher rate, to reach a total of 37,401 persons in Nairobi over age 60 in the 1999 census. This unprecedented increase of the aged in the population is exposing the older people to many hardships especially in the urban areas. These include socio-economic changes like the increase in the numbers dependant on the elderly; limited employment opportunities; difficulty in accruing credit; deterioration of cultural values and morals; the breakdown of family cohesion; drug abuse and prostitution; perennial man made and natural disasters like tribal clashes; political incitement as seen in the recent tenant/landlord standoff in Kibera - Nairobi and the deadly HIV-AIDS scourge, among others. Quite startling is the fact that all these changes are finding governments, the private sector, NGOs, the society, the family and the individual completely unaware and unprepared to deal with them (G.O.K., 2001).

The challenges facing urban managers in Kenya and Nairobi in particular, are numerous and include demographic pressure, inadequate infrastructure, inadequate capacity and resources for service delivery and planning, conflicting interests between groups, the contradicting priorities of economic development, ecological sustainability and community quality of life (Davis and Rakodi, 1993). The urban managers are therefore unable to deliver services and develop social facilities. The elderly are forced to contend with these challenges and constraints which when

manifested in the rapid urbanization and modernization has brought problems of insufficient and inadequate housing, unemployment, poor earning, limited saving and spending, alcoholism, drug abuse, prostitution and corruption. Whilst the cycle of poverty is hard to break for anyone, the challenges are even greater for older people as society tends to ignore their needs and often fails to recognize their potential thus making it harder for them to change their situation. Older people typically become the poorest members of society (ILO, 1997).

As seen earlier, current population trends in Kenya show an increasing proportion of the old people (aged) in the rapidly changing urban areas. Old people have special needs that are not catered and/or provided for in planning for urban growth and development. There is, however, limited understanding of both the coping and adaptive strategies of the aged under conditions of rapid urbanization. This study intends to identify effective solutions that can be differently modelled to serve the low income elderly, middle-income and high income through improving their housing situation. The models towards improving the quality of life for the ageing population through planning, management and development of housing will target the areas of residence as the spatial planning unit. Its overriding goal will be to explore how improvements to housing the aged can make a long term contribution to the broader development agenda, e.g. by generating sustainable livelihoods, improving their living environment, empowering men and women, or reducing their vulnerability. The study at a more practical level addresses the issue of how the aged can enhance their housing assets, and what other stakeholders can do to enable that.

### **1.3 Research Purpose:**

The research purpose is to determine the implications of the ageing population in the urban areas of Kenya in order to lay strategies to improve their living standards. It is hoped that this study will facilitate provision of housing for the ageing population in the urban settlements, meeting the basic requirements of tenurial security, structural stability, infrastructure support and convenient access to employment, community services and urban facilities. The capacities to meet the special needs of the ageing



population in the urban areas can be effectively achieved through the improvement of social facilities, infrastructure, housing and economic activities (the structure and fabric of urban centres) and facilitated through capacity building and appropriate technology.

To achieve this, the study will seek answers for current problems to the elderly population in Kibera Division of Nairobi City as guided by the following research questions:

- ❖ What are the demographic statistics and dynamics of the ageing population in Kibera Division?
- ❖ What are the special characteristics and needs of the ageing population in Kibera Division?
- ❖ What institutions, policies and programs exist and how responsive are they to the advent of an ageing population?
- ❖ Is it possible to plan for the sustainable housing for an ageing population?

#### **1.4 Specific Objectives:**

- ❖ To examine the magnitude and trends of the ageing population in Kibera Division.
- ❖ To identify the special characteristics and needs of the aged in Kibera Division.
- ❖ To examine the coping strategies and adaptive mechanism of the urban institutional framework and fabric to the advent of an ageing population in Kibera Division.
- ❖ To make recommendations on housing development planning for the ageing population in Kibera Division.

#### **1.5 Hypothesis:**

Urban planning, management and housing development in Kenya has not significantly taken care of the special needs of the elderly population resident in it, for their well being.

## 1.6 Significance of the Study:

There are several reasons to justify the study of population ageing in Kenya and especially in Nairobi as its largest urban center:

The study will first focus on the demographic dynamics and statistics of ageing. The U.N. (1996) estimates there were approximately 200 million persons aged sixty years and above. Their number had increased to 350 million in 1975 and same UN (1996) projected the number of the elderly would increase to 1,100 million by the year 2025. Current demographic projections indicate that from 1980-2020 about 75% of the additional increase in the global elderly population will occur in developing countries with a considerable proportion of them, exceeding 40% by the year 2000, living in urban areas. This demographic trends have significant effects on society. The achievement of sustained development requires that a proper balance be preserved between social, economic and environmental factors and changes in population growth, distribution and structure.

The study secondly tries to establish the relationship between urbanization and ageing. In many ways, the challenges posed by rapid urbanization are most severe in Nairobi where the existing institutional structures and urban fabric are least prepared to meet them. Studies have proved that the aged are increasingly remaining in these urban areas regardless of the strife caused by changing societal values (Obudho, 1981; Otiose – Ayayo, 1989; and Obunga, 1997). There is thus need for new urban institutional framework, an understanding of the urban fabric and successful strategies made available in these urban areas of developing countries, where an increasing portion of the ageing population inevitably end up.

This study reiterates the widely recognised notion that little is known about the aged in the Kenyan community. It is thus hoped that the research findings of this study will provide vital information on the ageing population and will inform the government and other agencies on their strengths and weaknesses, and help the other institutions update the existing policies and programs for the older persons in Kenya.

This research has very significant social importance. The tradition of urban development planning promotes the interests of the general public or of a particular disadvantaged group within the city. The role of the aged in an urbanizing society is addressed, a significant academic, planning and social interest to the welfare of society. Thus the study adds to social interest on the inevitably ageing population and informs scholars on challenges that go with it.

Another concrete planning interest that can justify the study on the ageing population is the fact that the study took inventory of all resources and services available to the elderly, be they social, economic, environmental or value, and proposes that they are adequately allocated, distributed and located to benefit this vulnerable group of the population. This is of great socio-economic importance as accessibility to benefits of housing options for the aging population through the spatial context will be addressed. Again all physical developments and designs also aim at making the peoples functional activities conducive to their welfare. The study will also seek to optimally allocate and use (utilize) the resource of the ageing population as a complete system in itself.

As would be seen in the Theoretical frame work, this study is based on the theory of "Social Town Planning" (among other theoretical underpinnings) that postulates the fact that planning emanated from the outcry for social justice after the Industrial revolution and the World wars when Town and country planning was based on physical shape and development. Keeble (1952) argues that planning then was design based, and neglected the vulnerable and disadvantaged groups. This justifies study of the ageing population as a vulnerable group for social justice.

The study reflects on the need for National policy on the aged. Population ageing leads to major economic, social and cultural concerns for the policy makers, for instance, it leads to a decrease in the number of people in working age to support greater numbers of elderly dependants. In countries like Kenya where development has been uneven and where there are competing demands for the meagre resources

(such as alleviation of poverty and hunger, unemployment and mass literacy), the ageing population and related problems could be low in the list of national priorities (Treas and Logue 1986). Although population ageing is becoming obvious just by looking at the changes in demographic structure, changes in policies (when they occur) tend to be piecemeal and ad hoc with little attempt to integrate different agencies and departments. There is thus need for new roles and organization through the policy framework, a major significance of this study.

Not least in significance, this study has sought to respond to the challenge of an ageing population by setting up a vision for sustainable housing development and its implementation at the local level, in the residential areas where they live. This is another major significance of this study.

### 1.7 Scope of the Study:

To gain a detailed understanding of the aged, the study focused on those persons 60 years of age and above in tandem with the UN (1991) definition of the elderly. The study used the residence as the spatial unit of analysis, where the aging population live. The study provides suggestions for easing existing difficulties confronting the elderly and also suggestions to improve the living conditions in the future for those who live their lives to old age in Kibera Division.

The themes through which this study has made a relevant contribution to the ageing population are:

- **The environment:** to improve where the elderly live and sustainability of housing the elderly population, particularly the low income housing.
- **Markets:** to enable elderly men and women to participate more actively and on better terms in the areas of housing, employment, access to infrastructure and social services and other facilities.
- **Reform:** to tackle inappropriate structures, processes and barriers that prevent access by elderly men and women to housing and other facilities.

- **Partnerships and alliances:** that require to be strengthened and empowered in order to achieve pro-aged changes in housing programs and policies.
- **Advocacy:** to make a case for improving the livelihoods of the elderly men and women through housing.

The study also focussed on "theme champions", the various agencies with direct and indirect contacts with the aged and housing in Nairobi. These included all relevant Government ministries; quasi-government bodies; the U.N. and other International bodies; NGO's; CBO'S; among other institutions.

For the purpose of the study, secondary data was used to understand the similarities and differences in the ageing process in the developed and developing countries through a review of the current literature. Analogies were drawn with the experience of ageing in the developed world to test the appropriateness of current models of care in old age for example. The study explored the need to radically alter Western models or alternatives for the ageing population to those of African context, relevant to the National and Nairobi regional economy and hence appropriate to our situation in coping with and adapting to the reality of an ageing population.

This study reviewed the state of our knowledge of the situation of older people in Kenya and especially Nairobi. It examined the impact which existing social and economic development policies have had on older people struggling to overcome poverty - information that is scantily available.

### **1.8 Limitations of the Study:**

At the time of the study, there was neither national nor Nairobi region profile on the aged hence the study has little supporting information. The deficiencies, particularly in relation to data and information on the ageing population that would be beneficial to the study, are thus noted. Primary data collected in the field survey and analysis of secondary data from other areas and relating them to Kibera Division was largely used in this study. These limitations, however, will not undermine the study as to the



need to have in place deliberate interventions that would cushion the effect of the advent of the increased numbers of aged in future, while enabling them to exploit their potential and enjoy their rights.

### 1.9 Assumptions:

- ◆ That there is political will and support for the introduction of, and implementation of a movement that takes into account more fully the needs of the diversity of human beings who live in our towns and cities i.e. a society for all ages.
- ◆ Future Population dynamics of Kenya will not include any mortal catastrophe.
- ◆ The welfare of the future Kenyan society is threatened if the existing urbanization and urbanism is not streamlined through effective planning.

### 1.10 Key Terms and Concepts:

- **Population ageing:** refers to the increasing proportion of old people within a population, as related to fertility and mortality rates.
- **Demographic transition:** that trend of population characteristic changing towards a relative proliferation of the aged with time due to many reasons but especially related to fertility and mortality rates.
- **Epidemiological translation:** changes in the pattern of disease e.g. through the control of infectious and parasitic diseases that were major contributors to the early mortality.
- **Gender Longevity:** sex differential in survival means that women outlive men and they therefore numerically predominant in older populations.
- **Theory of risk transition:** postulates that development and growth of economies comes with numerous risks placed upon them by the import of foreign technologies or ideas adopted from the developed world.
- **Coping:** To face or encounter and to find necessary expedients to overcome problems and difficulties (often used with weighty problems of public policy).

- **Adaptive:** The continuing process through which the organization of groups is modified to meet the requirements of the social and physical environment.
- **Urbanization:** A process involving a continuous concentration of populations into towns and cities.
- **The rate of urban population growth:** is the change in the size of population living in urban areas between specified time period.
- **Special needs:** If people of similar characteristics are not in receipt of a service, then they are in need.
- **Barrier free or accessible environments:** When elderly or disabled people are, without assistance, able to approach, enter, pass to and from and make use of an area and its facilities.

## CHAPTER ONE: PART TWO: RESEARCH METHODOLOGY:

### 1. Data Needs:

The study utilized both primary and secondary data and evolved an analytical framework that explains how lack of planning of housing for the aged in the rapidly evolving urban areas in Kenya has impacted on the increasing proportion of the aged with their special needs and coping mechanisms and adaptive strategies.

For the first objective, namely "To examine the magnitude and trends of the ageing population in Kenya's urban areas" the data needs are:

Data Needs	Form of Data Needed	Use of the Data in Planning
1. Population totals	Total figures	Determine requirements in utilities
2. Age/sex composition of the population	Frequency distribution in age groups	Determine requirements for the special needs of the aged by sex
3. Past demographic statistics on population growth	Population totals and frequency distributions	-DITTO-
4. Fertility trends	Fertility rates	-DITTO-

5. Mortality trends	Mortality rates	-DITTO-
6. Life expectancy	Life expectancy averages over the years	-DITTO-
7. Longevity	Male/female averages over the years	-DITTO-

The second objective of the study is "To identify the special housing needs of the aged in Nairobi", and the data needs are:

Data Needs	Form of Data Needed	Use of the Data in Planning
1. Food	- Types Amounts Accessibility parameters	-Determine adequate supplies and sound nutrition. -Undertake public health campaigns against tobacco, alcohol, drug abuse -ensure barrier free access to markets
2. Shelter	- Form (size,type) - Availability - Affordability - Adaptation standards	Promote a continuum of housing and shelter arrangements from independent living to various degrees of assisted living for the vulnerable aged.
3. Medical/Health care	Accessibility Affordability Adaptation	.Broad continuum to treat from the vulnerable to the healthier .Coordination between health and social services .Adaptation for barrier free access
4. Clothing	Availability and Affordability	Promote self-care Adaptation to barrier free markets
5. Income/Employment	-Availability -adaptability	-Prohibit age discrimination -Harmonize with family



	-flexibility	responsibilities and adapt work to changing individual capabilities and needs -Encourage flexible retirement age -Barrier free access and working environment
6. Company/Dignity	-Institutions of family and other social networks -Exchanges and collaborations -physical constraints	-Exchange of knowledge, experiences and insights -For economic support and care -For diffuse linkages (love, recognition, emotional support)
7. Security	Fundamental right	-Redress in case of abuse of rights -Reduce the possibility of accidents
8. Clean Water	Accessibility	Determine utility requirements and barrier free access
9.Social structures and services	-Types available -Accessibility	-Determine requirements of utilities and infrastructure -Explore potential of appropriate technology to support people in their social needs -Adaptation to barrier free access
8. Rights	All human rights	-Promote and protect the full enjoyment of all human rights and fundamental freedoms throughout the life cycle -Equal enjoyment of economic social, and cultural

		<b>rights</b> -Protect the vulnerable against abuse and violence -Facilitate participation in decision making
9. Education and training	-Affordable access to basic education -Adult education -Teaching and training methods and content	Provide lifelong learning and continuing vocational training adapted to changing individual capabilities and needs.
10. Enabling environment, recognition and self help (self reliance)	-Financial environment -Social security system -Appropriate technology -Roles of older persons -Solidarity and exchanges between generations	-Support realistic and positive images of different ages -Support multigenerational exchanges and collaborations -System where physical, mental, social, spiritual, and environmental factors determine well being.

The third objective of the study is " To understand the coping mechanisms and adaptive strategies of 'the urban institutional framework and urban fabric to the advent of an aging population in Kenya's urban areas". The data needs will include:

Data Needs	Form of Data Needed	Use of the Data in Planning
1. Existing policy and/or Government position	Policy papers, existing laws and by-laws, sessional papers, working papers, development plans, regulation codes, resolutions	Determine adequacy of Institutional framework towards the concept of ageing and the elderly people.
2. Urbanization of poverty	Land, shelter, employment, services, e.t.c. needs.	-DITTO-
3. Charitable organizations	Types	-DITTO-
4. Programs for the aged	Types	-DITTO-
5. Types of age-care activities	Number and capacity	-DITTO-

6. Traditional forms of care/supportive systems	Ways	-DITTO-
7. Private sector initiatives	Kind	-DITTO-
8. Towards a society of all ages	International campaigns, charters and forums	-DITTO-

### 11. Secondary and Primary Sources of Data:

Review of secondary data gave the research an overview of the nature of the research problem at the wider global level and in Kenya (especially Nairobi). Secondary data was from reading material in libraries – The University library; DURP library; HABRI; IDS; IPS; UN Gigiri; Kenya National Library, World Bank Library and other sources like journals, research reports, books, and other written works. This was mainly in the International, National and Nairobi (local) level on relevant aspects like population, urbanization; there implication on the aged and socio-economic variables related to the study. Policy issues were studied from perusing policy papers and legislation from the relevant Government Ministry (e.g. Ministry of Culture and Social services.)

For the purpose of the study, secondary data was also used to understand the similarities and differences in the ageing process in the developed and developing world through a review of current literature. Analogies were drawn from the experience of ageing in the developed world to test the appropriateness of current models of initiatives for the elderly in Kenya and especially Nairobi. Desk research also generated information on the District profile, the administrative boundaries and the social and economic profiles of the City of Nairobi, and specifically on Kibera Division. Demographic statistics were gathered from population census report (1969-1999) and particular issues of the Economic survey and Central Bank of Kenya reports. Report from selected civic bodies (e.g. HelpAge International and HelpAge Kenya); Church based organizations and other service providers like the homes for the elderly were reviewed to get first hand information from the elderly on how they benefit from such institutions.

Primary research through a field survey was used to obtain information about the present status of the aged in Kibera Division; the impact of rapid urbanisation of Nairobi on the elderly; the existing policy guidelines and personal experiences shared directly with the elderly in Nairobi. More primary data was obtained from the relevant Government ministries, like the Ministry of Culture and Social Services, Ministry of Lands and Settlement, Ministry of Works and Housing; quasi government organizations like the National Housing Corporation and Housing Finance Company of Kenya; the mainstream NGOs and CBOs and other relevant agencies through specific research questions. Data gathered was analysed for information related to the research objectives namely: the magnitude and trends of ageing in Kibera Division; the challenges facing the aged; and the coping mechanisms and adaptive strategies used for, and by the aged in urban areas of Kenya before proposing housing models that would improve the standard of living of the ageing population Kibera Division.

Nairobi City as represented by Kibera Division has been purposively chosen as the study area of this research because of a number of reasons:

- First, the City is characterized by unique characteristics being the capital of Kenya and hence the administrative, economic, industrial, social, and political center of the country. Majority elderly population have thus been pulled to the city where they reside. It is a good site to find the elderly population. For example, opportunities for economic growth exist especially in the informal sector given the ready market, that can be exploited to raise the well being of the elderly population. Nairobi is also the receptacle of talent and constitute concentrated human resource base, especially attractive to the well educated and skilled elderly persons.
- Secondly, the demographic statistics of Nairobi simulate population structure reminiscent of developed countries with its characteristic high growth rate amid reduced fertility and mortality rates, meaning the society is ageing. Again a crop of urbanites is being born in the city of Nairobi with no rural ties of affinity and consanguinity, and progressively more persons remain in Nairobi to old age.

- Nairobi as an urban center constitutes a point of contact with the outside world where the elderly can borrow initiatives from. They are also agents and points of diffusion of social change, especially to their immediate hinterlands.
- Nairobi city environment also portrays negative effects of the rapid rate of urbanization, with most unemployment, slum development; breakdown of traditional social roles of the family and community and attitude change toward the elderly happening here. On the other hand, Nairobi also allows a more representative population where different income groups of the ageing population are to be found making it a fitting study area.
- Being the capital city of Kenya, the role of the central government and its ministries, and that of mainstream NGOs and CBOs is mostly felt here. Nairobi is thus the loci of political and economic power. These are the institutions having an effect on the aged in society.

#### **111. Target Population:**

The target population was the entire cadre of the aged in Nairobi as a sum of persons over 60 years of age (both male and female). It was impossible to study the lot of elderly persons in this research being very many, estimated at 37,400 in Nairobi during the Kenya Population Census, 1999. Therefore the study defined an experimentally accessible population (also called Survey population) with the actual sample as the general population of Kibera Division, estimated at 286,739 persons in the 1999 population census covering an area of 223.4 square kilometers. Therefore, Kibera division exhibits an average population density of 1,284 persons per square kilometers, a relatively low density due to the vast area of the division covered by the Nairobi National park. Specific areas such as Laini Saba within the informal settlements have very high population density of 68,030 persons per square kilometers as per the 1999 census. This sample was representative of the target population (persons over 60 years of age) as the population can be trusted to classify themselves correctly by age, hence they can be screened from a general population. This study submits that it is those in the middle age bracket of 35 to 55 who will be in the elderly ages of over 60 by the year 2025 or earlier. To get a representative



accessible Kibera Division sample for an ageing population, the study applied 'multi-stage cluster' and 'purposive' sampling.

#### **IV. Sampling Design.**

The multi-stage sampling method was considered ideal because the study found the aged population to be a very heterogeneous group, the only similar characteristic being they are persons over the age of sixty. The aged population was also found to be relatively large in total numbers as seen earlier, and they are scattered over the whole geographic area of study in no defined spread, that is, they cannot be found in one spatial area of Kibera Division as such. The residential area was seen as an ideal place to sample this targeted group as they have to be living somewhere. The sampling procedure was achieved thus:

Using cluster sampling, Nairobi city (and Province) is first divided into its Divisional administrative units, and assigned compass direction names for each cluster, such that:

<u>Division:</u>	<u>Cluster name by direction:</u>
Kasarani	North
Embakasi	East
Kibera	South
Dagoretti and Westlands	West
Makadara, Central and Pumwani	Central

Secondly, using random sampling giving each of the five clusters above equal chance of being chosen, random sampling was applied to pick the South cluster, representing Kibera division as the sample area.

Thirdly, stratified sampling was applied to the South cluster chosen. Using the Nairobi City Council zoning plan covering Kibera Division, three residential zones were discerned namely the high density, middle density and low density residential areas in Kibera Division, namely: Karen representing the low-density residential area; Langata representing middle-density residential area; and Kibera the high-density residential area.



## V. Sample Size:

This being a Planning research related to social science, the following formular was used to determine the sample size;

$n = Z^2 pq/d$  where, n - desired sample size (if the target population is greater than 10,000).

Z - standard normal deviate at the required confidence Level.

q - 1- p

p - proportion of the target population estimated to have characteristics being measured.

d - the level of statistical significance set.

$n = Z^2 pq/d$	$Z^2 - (1.96 \times 1.96)$	= 3.8416
	Nairobi Population	= 2,143,254
	Nairobi Population over 60 years	= 37,400
	Kibera division total population	= 296,739
	Kibera popu. Est. Over 60 years	= 5018
	p - Proportion est. to be aged	= 0.0175
	d - Level of significance set	= 0.05. (0.05x0.05)=0.0025
	q - (1 - p) = 1 - 0.0175	= 0.9825

Sample size = n = 26

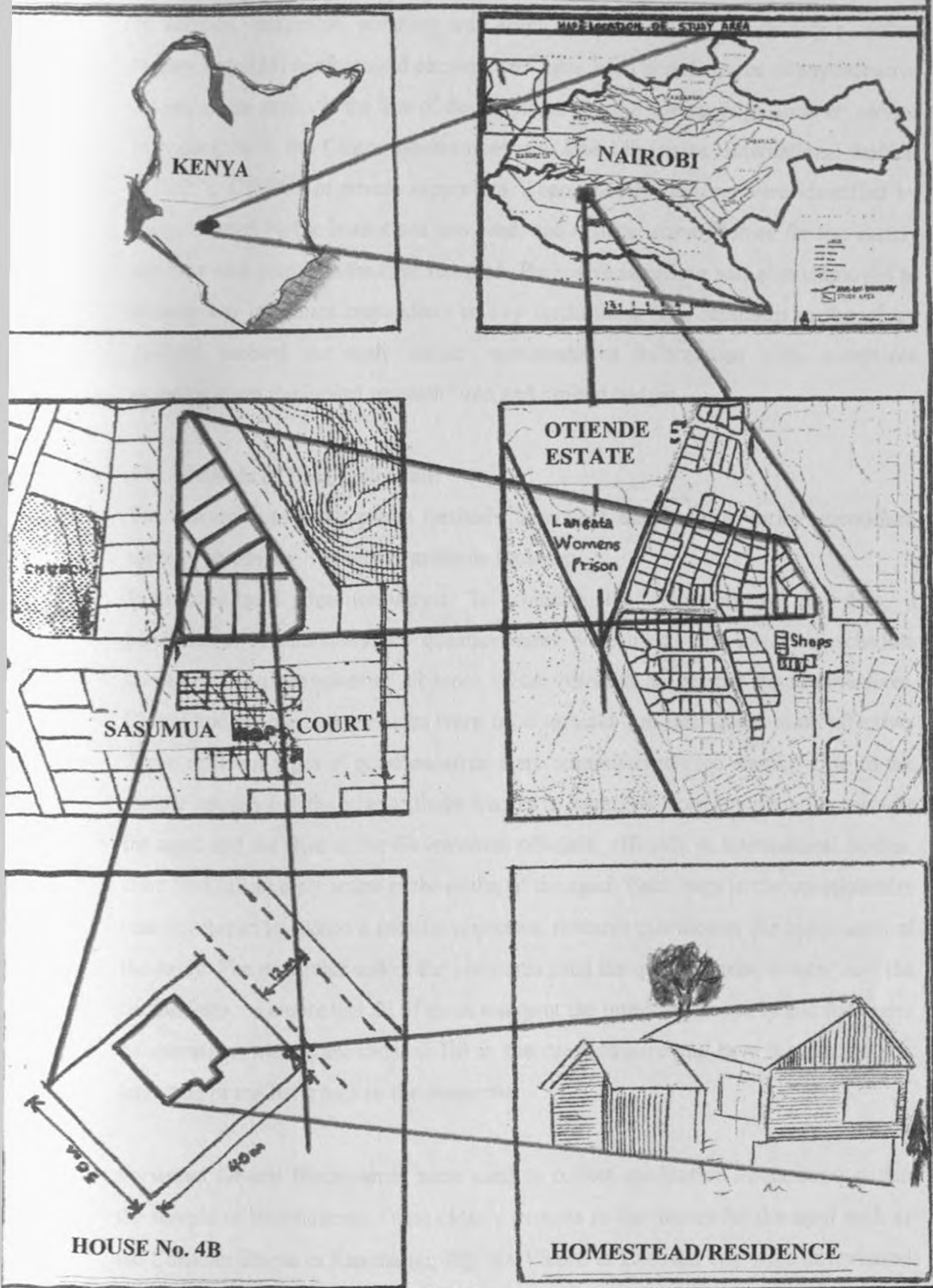
From each of the stratum chosen in the study, the representative number of the households was made equal. As such, twenty six (26) households were chosen to represent each of the low density, middle density and high density strata's, bringing to a total of seventy eight (78) households. These households were chosen at random to cover the widest possible spatial area of Kibera Division and as many residential estates and villages across each strata as possible. In the low density high income spatial strata of Karen, 10 distinct areas were identified in which 2 or 3 households were randomly chosen. The estates were namely Bomas of Kenya, Upper Matasia, Hardy Estate, Karen C, Karen Shopping Center, Banda, Westwood Park, Parkview, Bogani and Park Grande. In the middle income Langata residential area the

following estates were identified where 1 to 3 households were randomly chosen, namely: Dam, Uhuru Gardens, Julia Ojiambo, Onyonka, Rubia, Southlands, Ngei, Moi, Otiende, Jambo, Camp David and Customs. Within the high density low income slum villages of Kibera 2 to 3 households were randomly chosen in the 13 villages namely; Lindi, Laini Saba, Kisumu Ndogo, Gatwekera, Raila, Soweto, Mashimoni, Silanga, Makina and Gatekera.

It should be noted that this study has recognized the further advantage of using the three residential zones (low, middle, and high density areas), which is a widely acceptable assumption that they represent the high income, middle income and low-income groups respectively. The more affluent people live in low-density residential areas, the middle income in middle density and the low income in high-density areas. This allowed for further research to be undertaken in the three strata's as the needs of the ageing population from each of them varies as well as their coping mechanisms and adoptive strategies.

Figure 1 illustrates the sampling design used to reach the households to be interviewed using multi-stage sampling.

Figure 1: Sample Design



Source: Researchers Own, 2002

In addition, 'purposive' sampling was employed in the study to identify a further twenty six (26) number aged persons who have been beneficiaries of any initiative by any of the actors in the line of development for the ageing population or service providers, be it the Central government, the line Ministries, International bodies, N.G.O.'s, C.B.O.'s or private supporters. These elderly persons were identified by being referred by the Institutions involved, and visiting some Homes for the elderly and Day care centers in the field research. Purposive sampling was also employed to identify key informant respondents in key institutions. The sampling methodology outlined enabled the study collect representative information with acceptable accuracy given the limited research time and limited budget.

#### **VI. Methods of Data Collection:**

The research used four major methods to collect data on the earlier mentioned specific objectives. The survey methods included:

**Interviews and Questionnaires:** To enhance the reliability of the data, a combination of interviews and questionnaires were used. The interview schedule contained questions covering all areas of the research as per the stated objectives. Closed and open ended questions were used to make the instrument more effective. Three different types of questionnaires were administered (see annex). One to the sample households, the other to those who have benefited from any initiative towards the aged and the third to the Government officials, officials in International bodies, civic bodies and other actors in the realm of the aged. Each item in the questionnaire was developed to address a specific objective, research question or the hypotheses of the study. The researcher and/or the assistants used the questionnaire to interview the respondents, to ensure that all of them interpret the questions properly and for easier co-operation, while some chose to fill in the questionnaire and have it collected at a later date or mailed it back to the researcher.

**Focussed Group Discussions:** were used to collect qualitative information within the sample of beneficiaries. These elderly persons in the homes for the aged such as the Cheshire Home in Kariobangi, Mji wa Wazee in Huruma etc, were interviewed

on topics including the respondents perception on the nature, challenges and constraints inherent in the concept of ageing in the Nairobi environment, and also to record their suggested solutions.

**Key Informant Interviews:** were used to collect data from the personnel of the Governments, umbrella organizations and all other stakeholders. Key informant interviews were undertaken using both structured and unstructured interview schedules to allow the interviewer to introduce supplementary questions and be able to probe the respondents to get complete responses, hence make it possible to obtain data required to meet specific objectives of the study. It also allowed the researcher and the assistants to ask the same questions.

**Observation:** Was used in observing occurrences that were deemed necessary in drawing conclusions. Non-verbal behavior was observed and recorded and the validity of the respondents answers was assessed. Counter questions were used when deemed necessary to explain occurrences. Information gained through this method was used to augment the data obtained from interviews. Observations were carried out concurrently with the other techniques of data collection. Other issues observed were photographed and/or sketched.

#### **VII. Techniques of Data Analysis:**

The analysis of data was both statistical and descriptive from interpretations of the secondary and primary data collected. The units of observation in this study were the individual elderly persons themselves, whether as married couples, within the family, social grouping, working environment or relevant organization. It is from these that the study obtained the data required. Each of the individual elderly person in the sample was a unit of observation because the required data was obtained from them. The unit of observation was therefore also the unit of analysis as the final results were related to the whole sample, here the whole proportion of persons who are elderly in the population of Kibera Division. The results relate to the individual who provided the information. The findings from the sample were used for



generalizations that applied to the whole ageing population under study in Nairobi City.

### 3.2 Data Analysis and Interpretation

The data was analysed as either qualitative or quantitative data. Qualitative data included the respondent's perceptions, subjective reasons/rationale for the coded questions and responses from open ended questionnaires. The study made use of numbers or descriptions to rate or rank the subjective and intangible components in the research through the use of the Likert scale. This method was used to compare issues that had subjective measures on a range of good-fair-poor for example. The quantitative data collected was coded and manipulated using the Statistical Program for Social Sciences (SPSS), Excel and other computer packages.

### 3.3 Ethical Considerations

The study was given ethical clearance by the Kenya National Commission on Science, Technology and Innovation (NACOSTI) and the National Council for Science and Technology (NCST). The study was also given ethical clearance by the Kenya National Commission on Human Rights (KNCHR) and the Kenya National Commission on Gender and Equality (KNCGE).

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## **CHAPTER TWO: LITERATURE REVIEW:**

### **2.1 Introduction To The Literature Review:**

The theory of demographic transition was originally developed nearly a half-century ago, and ironically its explanatory and predictive power has come into increasing scientific doubt at the very time that it is achieving its greatest acceptance by non-scientists. In scientific circles, only modest claims are now made for transition theory as an explanation of the very demographic experiences for which the theory was originally drawn - those of 19<sup>th</sup>, Century Europe. It is notably lacking in such components of theories as a specifiable and measurable mechanism of "causation" and a definite time scale. The theory's general explanatory difficulties are compounded by very substantial differences between developing countries and 19<sup>th</sup>.century Europe in certain of the socio-economic and demographic variables central to the theory. These variables differ as they affect the "natural and timely" fertility decline, situations now may favor prompt and rapid fertility declines. There are also differences in the levels and rates of development between modern developing countries and those of Europe at the time (Teitelbaum, 1974).

### **2.2 Theoretical Framework:**

The study is conceptually based on a few related theoretical underpinnings:

To explain the growth of the world's human population over the ages, demographers have identified three great population surges, each following technological revolutions that dramatically increased the number of people of the world (Pearce, 1998):

- ◆ The first revolution was the invention of tool making, which occurred gradually around the world between a million and 100,000 years ago.
- ◆ The second revolution was the invention of farming from around the end of the last ice age 10,000 years ago. Agriculture raised the world's population from less than 10 million to about 150 million at the time of Christ and 350 million a thousand years ago.

- ◆ By early 19<sup>th</sup> Century the third great technological revolution, the Industrial revolution, was under way in Europe, and its progress around the world continues today. The third revolution has already raised the world's population to around 6 billion; six times what it was at the start of the 19<sup>th</sup> Century; three times what it was in the 1930's and almost twice what it was in the 1960's. The key features of this revolution have been advances in food production allowing more people to be fed; and new methods of controlling diseases that have allowed people to live longer. Demographers describe this progress with a model called the "demographic transition".

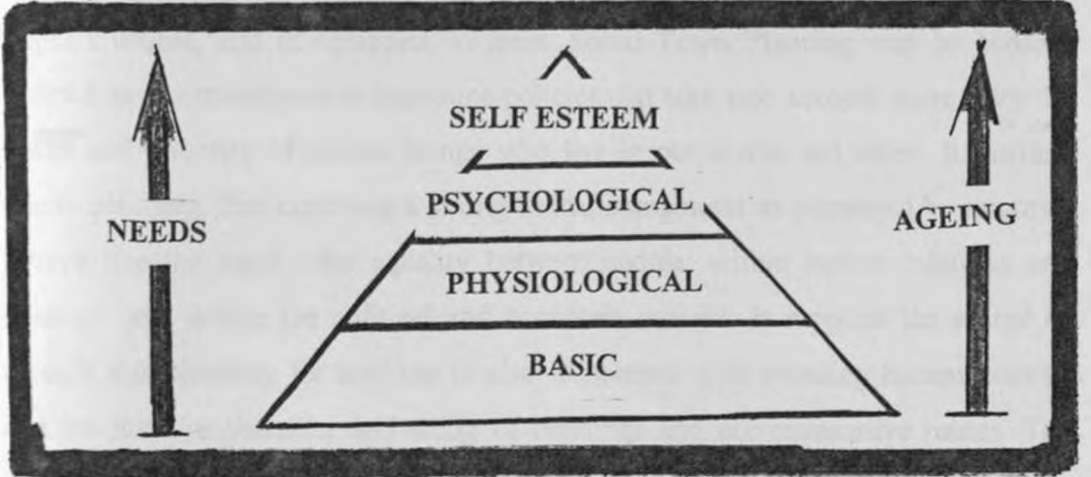
Hence at high levels of generality, the basic causal structure of transition theory appears sound. When the process of development is carried to the levels achieved in Europe and some parts of Latin America, it appears to be sufficient to establish the preconditions of natality decline. The substantially different socio-economic and demographic characteristics of modern developing countries leave little doubt that their patterns of fertility and mortality declines differ markedly from those of Europe. The falls in fertility and mortality rate and improved life expectancy have been described as a "secular shift" in ageing, which Laslett (1984) says has faced the developed countries and is likely to be inherited by the developing countries. The dilemma of the developing world is to have reached the secular shift in ageing without the per-capita resources required to provide a reasonable quality of life for the elderly population. Thus the urbanization process in the African continent, for example, has consequently been traumatic. Unlike in the more developed countries, the urbanization pace has been comparatively more rapid. The fundamental challenges of urbanization in LDC's is containing urban growth, and how to marshal human, financial and technical resources to meet this growth.

This study agrees with the argument of some researchers who view modernization in urbanization as having a damaging effect on the status and well being of the elderly with urbanization permeated by much greater complexity vis-a-vis the elderly (Fisher, 1977; Robeldo, 1985; Cowgill, 1986; Logue, 1990). These modernization

theorists suggested that factors such as increased social mobility through the process of urbanization and social change have impacted negatively upon the lives of the elderly. An example is how traditional family cohesion has broken down such that the elderly are no longer cared for within the family unit.

The 1960's saw an upsurge in the "planning for the people" slogan aimed at equitable distribution of resources to diminish inequalities between people. Dennis (1970) argues that plans would be a failure to the people whose welfare it is concerned with if it fails to address social aspects such as defined by Marslow's (1972) "hierarchy of needs". In Marslow's theory, basic psychological needs are at the foundation of the pyramid and psychological and social needs are in the rising tiers of the hierarchy. At the top of the hierarchy is self-actualization, where an individual lives a positive life, coping with problems, learning new things and adopting to and facing the future with hope. Although Marslow's theory was first conceived in relation to learning, the needs identified can be related to the lives of the ageing population in urban areas (Smith and Reavey, 1997). The research has concluded that the ageing population have special needs they wish to prioritize, for example, housing at the base of the pyramid, intergration in family or society in the middle tiers and self actualization like being allowed and able to contribute to societal and personal development in the highest tiers.

**Figure 2: Marslow's Hierarchy of Needs Related to the Special Needs of the Elderly.**



Source: Marslow, 1972

This research also alludes to the "activity theory" as proposed by Lemmon (1972) and Longino and Kart (1982) in studying the coping mechanisms of the elderly. The theory asserts that the older people will be happier if they continue to be active. Here satisfaction depends on "validation of self concept" through active participation in roles, or substitutes of roles lost due to ageing. The study reflects on how elderly persons continue to be engaged in economic activity well into old age, and get depressed when they are ignored in roles they can contribute to.

These are the theoretical underpinnings that enabled this research study to understand the implication of our type of urbanization on the elderly population. The theoretical underpinnings also explain the elderly are no lesser citizens when compared with other age groups.

To lead to proposed recommendations to raise the standards of living of the elderly in urban areas, the study was conceptually based on the theory of "social town planning" as postulated by Greed (1999). Nowadays it may be argued that there is not one "town planning" but many new "plannings", each with its own agenda, devotees and priorities, including, for example, environmental planning; urban design planning; urban renewal planning; e.t.c . (Greed 1996; Greed and Roberts, 1998). One of the most dynamic, changing and controversial of the "plannings" is what may be broadly termed "Social Town Planning". There has been a proliferation of demands and policy proposals to meet the needs of minority interests and community groups, which the present scope and nature of statutory town planning appears unable, and ill equipped, to meet. Social Town Planning may be broadly defined as any movement to introduce policies that take into account more fully the needs and diversity of human beings who live in our towns and cities. It justifies equity planning, that combines a strong spatial component as pioneered by minority groups like the aged - the equality between people; within human relations and dealings; and within the political and economic context. It supports the school of thought that planning for land use is also concerned with planning human activity, and not just the character and siting of buildings and communicative routes. The



theory also upholds sustainability as a key consideration, where it was used in the study to conserve the stock of natural assets, to avoid damaging regenerative capacity of ecosystems, to achieve greater social and economic equality and equity and to avoid imposing risks and costs to future generations by not having plans in place to cater for the ageing population.

This study on the "Planning options for housing the elderly in Nairobi" as based in Kibera division is hinged on the "Goal - directed" planning theory. The fundamental strengths of this planning theory are its social and advocacy planning tenets, and how it criticizes "procedural" planning concepts that totally ignores the diversity of the population that should be planned for. The general planning method so far used in Nairobi lays prescriptive emphasis on organizational structure and decision making methods which promote rational decision making and rationalizes societal action as attached to the promotion of specific values. The study postulates the promotion of opportunities for all to achieve the conditions of life they seek. It also emphasizes a model of interest which proposes that society is composed of different groups with different interests. These various "clients" of planning must therefore be identified and their interests made explicit

The study agrees with Gans (1968) argument that urban planning must be done by careful research and discussion with the groups concerned. The study also supports Davidoff (1965) who challenges the ability of Government agencies to do this adequately, and proposes that all groups should have access to independent planning expertise to "advocate" their interests. They both adopt a pluralist model of social organization, although Davidoff is more explicitly concerned with linking technical expertise to a model of participatory democracy and both recognize that pluralist competition is currently unequal between the advantaged and disadvantaged. Consequently compensatory action is necessary (important) to help the disadvantaged. Social planning is thus about directing power and resources to the "have-nots" in order to reduce poverty and inequality mainly based on a class-conflict model of society (Townsend, 1975). This compares well to the existing

inequality noted in Kibera Division, namely the high income Karen residents, middleincome Langata residents and low income Kibera slum villagers.

The options this study proposed for housing the ageing population in Kibera Division are hinged on the definition of housing as defined by the house, basic requirements of tenurial security, structural stability and conduciveness, infrastructure support and convenient access to employment, community services and urban facilities. The models "design" of the house include artifacts that may help the elderly to go about their daily life, and how that house and its occupants relate in the wider spatial context. In this the study is informed by the theory of the "Residence" as postulated by Kemeny, 1991.

Kemeny argues that there appears to be two prevailing ways of viewing and treating urban growth to arrive at a theory of housing:

(a) One approach views the city purely in terms of its market value and land purely as a commodity. The price of land and property taxes must be maximized at every opportunity in order to sustain municipal finances. This approach dismisses the urban poor, their informal economy and their residences as low-value occupiers of urban space.

(b) The second approach, which can be viewed as people-oriented, looks at the city in terms of its use-value, a place to live and produce. It tries to safeguard the traditional social fabric and the residential and economic activities of the informal sector. This approach favours the elderly in Kibera Division.

As a result of the growing reliance on the formal economic structure of the city, planning instruments such as building codes, redevelopment schemes, zoning ordinances and land-use regulations tend to further the objectives of large-scale influential businesses rather than those of poor and disadvantaged households. The demand for urban space created by market forces has an important impact on the traditional residential-cum-working environments inhabited by the poor. It particularly affects the elderly who earn a large portion of their income in the informal sector. Removed from their traditional locations, their employment



opportunities disrupted, and, their transport costs increased, the urban elderly poor in developing countries are often impoverished by the very policies intended to benefit them.

What is the basis of housing studies in this theory? Kemeny explains housing studies as clearly being about housing. But this tells as little. Housing, after all, in its simplest and crudest sense, is the bricks and mortar or other building materials that comprise the constructions within which people live. But as a field within the social sciences, housing research equally clearly involves the examination of the social, political, economic cultural and other institutions and relationships that constitute the provision and utilization of dwellings. A broader concern is desirable; one which embraces locational factors and ties housing studies into macro issues of the nature of social structure. To this end, Kemeny gives two major dimensions of housing that combine to give it a uniquely important place in the analysis of social structure. These are its major spatial effects on the social organization of urban areas and its high cost as a percentage of total household expenditure.

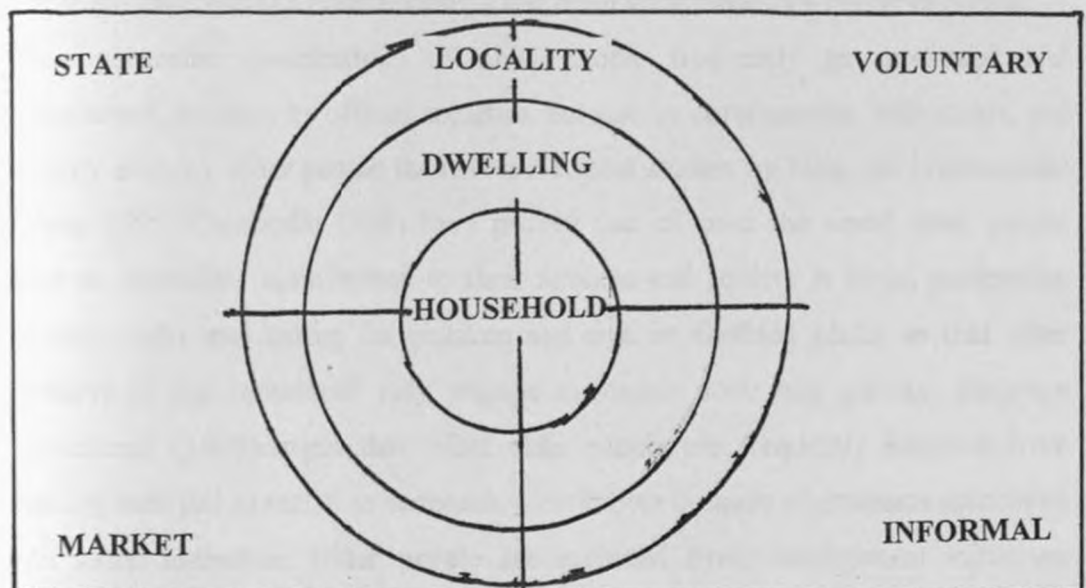
Understanding the theoretical - as against the practical - implications of this and organizing research in those terms can start at the concept of "Residence". Housing is not just about dwelling, nor even just about the households that live in them. Nor is it limited to the interaction between households and dwellings in, for example, the home. It also includes the wider social implications of housing. Kemeny says a case should therefore be made out for reconceptualizing housing in terms of "residence" to capture its broader social issues. "Residence" as a concept directs attention to the dwelling as home, but within its locational context. According to Kemeny (1991), the central feature of a focus upon residence as the basis of housing studies must be its clear social structural orientation. It embeds housing issues in their locational and wider social contexts, thereby shifting the emphasis away from the bricks and mortar implications of "housing" towards social dimensions. It highlights the social organization of housing, both in terms of location and its form, and the interplay between these. It includes issues of urban form, limitations which it places on

restructuring, the relationship between housing and welfare, and the gamut of institutional and organizational arrangement that impinge directly and indirectly on issues of residence. It also constitutes an intermediate, meso, level between large scale macro societal processes and individual level micro interaction. This is the definition of housing this study wants to model for the ageing population of Kibera Division.

Residence can schematically be conceived thus: At the center is the household, which is within the dwelling, which is in a locality. These in turn are nested in an institutional structure (the state, voluntary, informal, and market forces). This analytical concept can also be moved in general terms from the social to the spatial dimension and from the individual to the collective level (or vice versa), and back again. This illustrates what the study proposes for housing the ageing population in a spatial context.

It is on these theoretical frameworks that this study of "Planning options for Housing the ageing population in Nairobi" is grounded, as represented by a study of Kibera Division.

**Figure 3: Schematic Presentation of the Theory of Residence:**



Source: Kemeny, 1991

### 2.3 Needs of the Ageing Population:

Population ageing in Kenya and other developing countries is linked to levels of activity and productivity. As these are perceived to decline as the individual advances in age, so the contribution of a person is perceived to decline. The World Bank (1994) observes that the implications of ageing tend to be seen in terms of the "burden" placed on more active and younger people. Income poverty for the ageing population may be associated with poor health, and or frailty, inadequate or inaccessible with services, lack of family or community support, large number of dependants, landless-ness, limited skill or capital to invest in productive activity, and low status (HelpAge International 1998). Older people wherever they live, are often considered economically and socially non-productive. Helpage International, (1999) in addition, say that the old are stereotyped as being a problem, a burden, useless, powerless, passive, less able to learn and adopt new things, mentally slower and ill. This stigmatizes them leading to self-destruction, and neglect by society.

The "Appropriate Technology" publication of June 1999, suggests another need for the ageing population from the perspective which views older people as inactive recipients of support, care, and where they are available, pensions – ignores important aspects of older people's lives. The fact is that the majority of people wish to, and do remain active well into old age, and that even frail or disabled older people are able to make contributions – and often view these as a matter of course.

These particular contributions of older people frequently go unnoticed and unaccounted, not only by official statistics, but also by communities, individuals, and possibly even by older people themselves. Recent studies by HelpAge International (Ghana 1995; Cambodia 1998) have proved that all over the world older people make an invisible contribution to their families and society at large, performing domestic tasks and caring for children and sick or disabled adults so that other members of the household may engage in visible economic activity. HelpAge International (1999) argue that infact older people are frequently hindered from reaching their full potential as economic contributors because of problems associated with social exclusion. Older people are excluded from development initiatives

because of their perceived inability to participate. Credit schemes in particular frequently exclude older people because they commonly fall outside the general criteria of a "good credit risk". Older women in particular face difficulties, as they are more likely to have worked only in family environment, and therefore have no experience of managing a business or finances. Helpage Kenya (1998) argue that in Nairobi, lack of access to credit, subsidies and employment limits the productivity of older persons, due to low incomes, savings and collateral. Credit markets in Nairobi operate age neutral policies which leads to the exclusion of older people, as confirmed in the field survey of Kibera Division, where majority slum dwellers felt incapacitated to save or access credit.

Smith and Reavey (1997) confirm that the basic needs in old age of a person are essentially the same as for an individual of any age:- secure housing, financial security, good health, availability of essential commodities and services, harmonious relationship with family and neighbours, and activities that can be engaged in that provide a sense of self-worth. In a research project involving 1,500 older people in Tanzania, Forrester (1998) established that the quantity of these basic needs is variable and how they will be met differs from culture to culture. In some societies, aged individuals have minimal demands and expectations and these can frequently be met within the joint family. But the family institution is at risk of being dysfunctional; in every community there are old and frail people; others have no children and are of poor health, who are unable to work and dependant on neighbours or institutions (Kalache, 1999). The field research in Nairobi recorded examples of such-like occurrences from elderly persons being assisted with food, health services and counseling in Institutions for the aged , for example Kibera Day-care Center, Kariobangi Cheshire Homes, Mji wa Wazee in Huruma etc.



**Plate 1: A Dependant Elderly Person Being Assisted at the Kariobangi  
Cheshire Home for the Aged.**



Source: Cheshire Homes in Kenya, 2000

In other societies, older individuals have much higher expectations and demands and these can be met only with the assistance of the broader society. Within the Karengata Association, the individual elderly persons tackle issues like service provision by the NCC. Forrester (1998) maintains that significant social, demographic and cultural changes, as well as scientific and technical advances, are occurring around the world which will substantially affect the aged of today and will affect the aged of tomorrow even more so. How an aged individual lives today and will live tomorrow depends very much on the local culture, traditions and policies of their society. Not only are there substantial nation-to-nation differences, there are also significant differences in urban and rural areas within regions and between different groups within any area. The field study recorded differences in lifestyles for the three income group resident in Kibera Division, with the historical racial segregation that led to Europeans living privileged lives in Karen very distinctive.

### **2.3 The Demographic Transition and the Reality of Population Ageing:**

Population ageing will become an almost universal feature of every society in the 21<sup>st</sup> century (HelpAge International, 1990). At the heart of this global revolution is the growth in numbers and proportions of the aged, and the world wide transition from high death and birth rates to low mortality and fertility and rise in life expectancy (HelpAge International, 1999). The world population reached 6.1 billion at mid 2000 and is projected to grow to 9.3 billion by 2050, using the medium variant. In that variant, total fertility at the world level is expected to decline from 2.82 children per woman in the 1995 - 2000 period to 2.15 children per woman in 2045 - 2050, and the expectation of life at birth is projected to increase from 65 years to 76 years over the same period (UN, 2001). In 1959 there were 200 million persons aged 60 years and over in the world (8% of the total); by 2025 a six-fold increase is expected to 1.2 billion people (14% of the total) (UN 1991). In 1960 half of the elderly population lived in developing countries; by early next century this will rise to more than three-quarters. Current projections indicate that from 1980-2020 about 75% of the additional increase in the global elderly population will occur in developing countries. Population in developing countries over that period is expected to increase by 45%; their elderly population will increase by more than 80% (Ibid). Globally, the proportion of population that is over 60 is growing faster than that of the population as a whole. In 2050, the percentage of people over 60 will exceed those under 15 and the gap will continue for the next 100 years (UN Population Division, 1996). The world population of people over 60 increased by more than 12 million in 1995. 80% of the increase occurred in developing countries. 61% of the global population of people over 60 years of age live in developing countries now; that will be 70% by 2025 (HelpAge International, 1999). Again the rate of growth of older population is highest in developing countries. The OAU. Report (1999) indicates that the number of people over 60 in Africa will more than double by 2020 and its share of people over 80 will increase from 3% to 6% of the global population.

An increasing number of people born throughout the world will survive the childhood diseases and disabilities that ravaged their predecessors (ILO, 1997). By



2025, worldwide life expectancy will reach 73 years – a 50% improvement on the 1955 average of only 48 years (UNCHS Habitat, 1998). In developing countries overall life expectancy is low, but for those who reach 60, the prospect for additional years of life is good. Life expectancy at birth in Kenya is high. Within sub-Saharan Africa, Kenya's current level of 61 years (59 years for males and 63 years for females) is exceeded only in South Africa. Women who reach age 60 in Kenya can expect to live another 17 years while men who reach this age can look forward to an additional 15.5 years of life (Source: US. Bureau of the Census, 1989).

Reliable information on patterns of morbidity and mortality among older population is lacking. New research initiatives will be needed to determine if Kenya is experiencing the current trends observed in most developing regions of the world, wherein the prevalence of communicable diseases among the elderly is lessening while the incidence of chronic conditions rises. Another mortality factor of enormous potential import to future planning decisions is the incidence of HIV-AIDS, which may hasten population ageing because the disease disproportionately affects younger adult age groups (US. Bureau of Census, 1989). Mortality from causes other than AIDS was assumed to decline upto 2010. According to the analytical report of the Kenya Population Census, 1989 the validity of this assumption has been questioned, and on various grounds: Health services, it is said, have been deteriorating in many parts of the country, and even the health programs have been faltering; malaria has been on the increase; poverty and unemployment have also been increasing among some sections of the population; and the HIV/AIDS epidemic may exacerbate the spread of other infectious diseases such as tuberculosis even among those uninfected with HIV/AIDS. But there are counter arguments: Education of mothers, which is one of the most powerful determinants of child mortality, has continued to improve in Kenya; decline in fertility and increased use of contraception for child spacing can be expected to promote further declines in child mortality; and steady diffusion of knowledge on elementary health-care practices among other developments.

There is another way of looking at the phenomena of "an ageing population" apart from the increasing number of people over 60 years of age in our society. As the world fertility continues to decline and life expectancy rises, the population of the world will age faster in the next fifty years than during the past half century. An increase in the median age - the age that divides the population into two equal halves - is used as an indicator of the shift of the population age distribution towards older ages. This is known as population ageing. Over the last half century, the median age for the world increased 3 years, from 23.6 years in 1950 to 26.5 years in 2000. Over the next 50 years, the median age is expected to rise by 10 years, reaching 36.2 years in 2050 (UN; 1996).

**Table 2: Median Age by Major Area and Major Development Group, 1950, 2000 and 2050 (Median Variant).**

	<u>Median age (years)</u>		
	1950	2000	2050
WORLD.....	23.6	26.5	36.2
More developed regions.....	28.6	37.4	46.4
Less developed regions.....	21.4	24.3	35.0
Least developed countries.....	19.5	18.2	26.5
Africa.....	19.0	18.4	27.4
Asia.....	22.0	26.2	38.3
Europe.....	29.2	37.7	49.5
Latin America and the Caribbean....	20.1	24.4	37.8
North America.....	29.8	35.6	41.0
Oceania.....	27.9	30.9	38.1

Source: UN Population Division, 1996.

At the same time the proportion of children (persons aged 0 - 14) has declined from 34% in 1950 to 30% in 2000, just as the proportion of older persons (those aged 60 and above) has increased from 8% to 10%. Over the next 50 years the proportion of children is expected to drop by a third, reaching 21% in 2050, whereas the

proportion of older persons will likely double, reaching 21%. Though population ageing has been considerably slower in LDC's where fertility is still relatively high, a period of more rapid ageing lies ahead. By 2050, the proportion of older persons in LDC's will rise to 19% whereas the proportion of children is expected to decline to 22%. The median age that had barely changed during 1950 - 2000 (passing from 21.4 years to 24.3 years) is projected to increase by 10 years, to reach 35 years in 2050. Thus by mid century, the LDC's will likely have an age structure similar to that of today's more developed regions. Africa remains the major area with the youngest population. However, the proportion of children is expected to decline from 43% in 2000 to 28% in 2050, and the proportion of older persons will likely double from 5% to 10% over the next 50 years (UN, 2001).

#### Population Structure

Table 3 below shows population statistics by age and sex in Kenya as at 1999 that indicate that there were about 28,808,658 persons living in the country. Of these, the structure is given as: -

**Table 3: Kenya: Population Totals by Age and Sex, 1999.**

Age	Number of male	Number of Female
0 to 14 years	6,244,321	6,104,181
15 to 64 years	7,845,083	7,826,442
65 years and above	343,449	445,182

**Source: CBS, 2001.**

The population growth rate is estimated at 1.59 whereby the birth rate is given as 30.8 births per population of 1000 persons and the death rate is given as 14.58 deaths per population of 1000 persons. The net migration rate is put at - 0.34 per population of 1000 persons. From the same source, CBS (2001) the sex ratio for the country of Kenya were shown to be: -

**Table 4: Kenya: Sex Ratios, 1999.**

Age	Male	Female
At birth	1.03	1
Under 15 years	1.02	1
15 to 64 years	1.00	1
65 years and above	0.77	1
Total population	1.00	1

**Source: CBS, 2001.**

The infant mortality rate is estimated at 59.07 deaths per 1000 live births. The life expectancy at birth for the entire population is 47.02 years ( CBS, 2001).

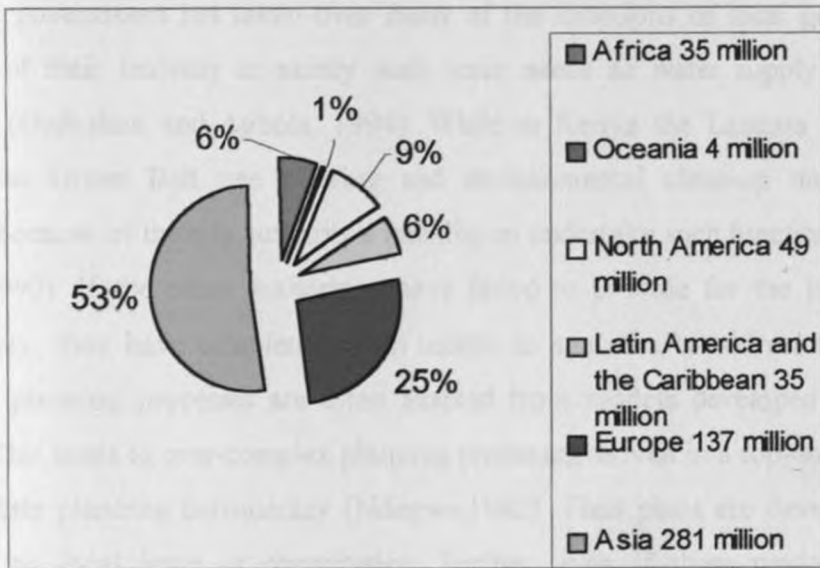
There are three population manifestations upon development and growth, which if not watched closely, may cause poverty to a country within a short span of time. They are: a) population size and its doubling time. b) population growth rate. c) its age distribution (Henin 1981, Rougue 1959, Ominde 1984, Farowq 1985). Thus both the issues affecting the ageing as individuals and those relating to the ageing of the population should be considered (UN, 1999). Although the elderly share many problems and needs with the rest of the population, certain issues reflect the specific characteristics and requirements of this group in health and nutrition, housing and environment, the family, social welfare, income security and employment, and education.

#### **2.4 Urbanisation and an Ageing Population:**

Within many countries, many of the largest migrations have been from rural to urban areas. This has the effect of creating an imbalance as more of the older people are left in the rural areas. But over the next 30 years, demographers expect that for the first time most of the world's inhabitants will live in urban areas (Pearce, 1998), including the elderly. People are "pushed" from the countryside by the mechanisation of farming and environmental decline, and "pulled" to cities by jobs in new

industries and government investment in services such as schools, hospitals and roads, which are often concentrated in cities. As seen earlier these developments lead to an increasingly ageing population through later marriage, women in employment, access to better family planning techniques, smaller family sizes etc that characterize urban lifestyle.

**Figure 4 : Distribution of World Population Over 60 by Region.**



**Source: UN Population Division, 1996.**

After a generation of very rapid growth, however, the growth of cities has slowed in the past decade. A 1996 UN. conference on the world's living places, Habitat II, heard how many services have collapsed, causing gridlock, air pollution, crime and urban squalor, with the elderly, among other vulnerable groups, forced to live there. Many of these cities' inhabitants live in giant shanty towns for example, Kibera slums that is home to approximately 800,000 persons (Mazingira 2001).

It is not surprising that cities frequently receive a disproportionate share of government attention and planning activities. It is not clear, however, that such planning processes take full account of: (a) the socio-economic and political context within which planning activities occur, (b) the capacity of the state bureaucracies to



plan and implement, or (c) the uncertainties and dynamics of the long-range processes of restructuring within regions and urban settlement systems (Rakodi, 1992; El-Shakhs, 1992). The reality shows clearly that existing urban planning structures and processes in Africa are generally inadequate to deal with the scale of the urban problems confronting cities. Part of this has to do with shortages of adequate fiscal resources and trained urban planners, and rigid, unresponsive bureaucratic planning delivery systems. In Kinshasa, as Piermay (1994) shows, the state apparatus and the city's managerial structures have all but collapsed. In Lagos, the state government has taken over many of the functions of local governments because of their inability to satisfy such basic needs as water supply and waste disposal (Onibokun and Agbola, 1994). While in Kenya the Langata community started the Green Belt tree planting and environmental clean-up movement in Nairobi because of the city authority's inability to undertake such functions (M'Rabu et al., 1990). If the urban authorities have failed to provide for the larger urban community, they have completely been unable to specifically address the elderly. Existing planning processes are often adapted from models developed outside of Africa. This leads to over-complex planning processes, driven in a top-down manner by the state planning bureaucracy (Ndegwa, 1982). Thus plans are developed with little or no local input or consultation. Further, even if these models were in themselves adequate as planning exercises, their implementation is generally beyond the resources and delivery capacity of the existing planning structures. Governments' ability to enforce rules and regulations is generally very weak in Africa, particularly when they relate to unrealistic standards or activities that go against the grain of market forces (Richardson, 1980). Plans are often not respected even by those government bureaucrats and politicians who approved them in the first place (El-Shakhs, 1994). In addition, projects are frequently abandoned or radically changed before they are given a chance to mature. Much of the problem lies in the often undemocratic nature of the state itself. This leads to favouritism, nepotism, biased allocation of resources, distorted priorities, and stifling of local initiative and innovation. The elderly have been completely ignored.

The foregoing trend is compounded by the lack of objective and reliable statistics and projections, for whole populations but more so for the elderly population. In Lagos, for example, there has not been a reliable headcount since 1963 because the census is too politicized (Onibokun, 1989). Chaotic conditions and the collapse of the state in Zaire make it impossible to find any dependable data since 1984. Similarly, in the mid-1960s, the Greater Cairo Planning Commission's 25-year population projections were dismissed by political leaders as exaggerated and politically inflammatory, and therefore could not be used as a basis for planning and infrastructure development (El-Shakhs, 1971). Such projections were partly based on the assumption that the government was unable to take effective measures towards decentralization, and proved to be close to target 25 years later. Finally, exogenous factors, including climatic variability (drought), oil price fluctuations, fluctuations in the world economy, and external pressures to cut services and urban subsidies, have also contributed to the severity of urban problems, particularly in cities (White, 1989). Reduction in public spending on social services as part of the structural adjustment program enforced by the World Bank and IMF in Kenya is a case in point that adversely affects the elderly e.g. in the breakdown of health services. The burden of care has been shifted back to the family (Poverty Reduction Strategy Paper, 2000 - 2003).

Disproportionate attention - both academic and in terms of policy and resources - is still conventionally lavished on the primate and other largest cities in national settlement systems. This reflects the concentration of political and economic power there, their generally far more complex economic and physical structures, and the sheer scale of urban growth and its attendant resource requirements. There is almost universally a severe inadequacy of public resources relative to need, while in Africa the rate of growth in formal economic employment opportunities has never kept pace with population increase. For reasons of scale, intensity, and visibility, phenomena such as urban unemployment, shelter deficiency, increasing pollution, and inadequate infrastructure, social facilities, and management capacity in large cities still tend to displace concern with smaller urban centres to a significant extent (Stren

and White, 1989; Gilbert and Gugler, 1992; Harris, 1992; Simon, 1992; Devas and Rakodi, 1993; Drakakis-Smith, 1993; Kasarda and Parnell, 1993). An ANNPCAN (1999) study on poverty described the people in Kibera Division as mainly unemployed, and constrained by inadequate shelter, live in inhygienic conditions with inadequate infrastructure, inadequate social facilities and other deficiencies.

The high rate of urbanisation in Kenya has become a major concern to many researchers. Obudho (1995) argues that the concern is due to the fact that the high rate of urbanisation is associated with many socio-economic and environmental problems. The biggest problem is poverty out of employment being unable to keep up with the pace of urbanization. The UNCHS-Habitat (1984) indicate that demand for shelter far outstrips formal supply by public agents, forcing migrants to be squatters on any unoccupied land. The Chief Engineer, Kenya Railways Corporation expressed his fear of catastrophe on the Nairobi/Kibera railway line where settlements have encroached the reserve, oblivious of the danger on event of a derailment (KNA, 2002), for example. Rapid encroachment and degazettement of the Ngong forest is not only an eye-sore but would have serious negative environmental degradation effects (Moi/Otiende Association, 2001). The level of urban poverty is reflected in the number of persons beneath the poverty line in selected urban areas of Kenya shown on Table 5 below.

**Table 5: Urban Poverty by Major Towns in Kenya**

Town	Nairobi	Mombasa	Kisumu	Nakuru
Poor Pop'n	946,699	216,090	134,065	113,674
Non Poor	913,089	333,788	79,097	162,149
Total	1,859,788	549,878	213,162	275,823

Source: Second Report on Poverty in Kenya, Vol, 11 Nov 2000

Urbanisation is regarded as a major vector of change. According to a UNECA (1989) report on "Population Distribution" urban structure and urban fabric has important consequences for agricultural, economic, socio-cultural and other activity. It determines the provision of infrastructure facilities and services such as health and

social services. It is increasingly evident that mass migrations generated by war and political turmoil, such as recently in Rwanda and Somalia, substantially and disproportionately affect population structure in the urban/rural areas (Godfrey and Kaleche 1989; UN 1995). The rapid migration of younger populations to urban areas leads to the isolation and marginalization of elderly people in rural areas (Fourth Kenya National Development Plan – 1979 to 1983). In addition, the process creates uneven development, graphically displayed by informal settlements where many of the rural migrants take-up permanent residence and eventually age. Kibera Division has one of the largest and most densely populated slum development in Africa. Now known by the names of the 13 villages as centers of population concentration, the slum is still growing. During the study, the informal settlements were found to have substandard housing, inadequate services and lack of sanitation. The UNCHS Habitat (1984) explain that informal settlements that increasingly harbour the urban populace, among them the increasing number of elderly, do not have: basic municipal services - water, sanitation, waste collection, storm drainage, street-lighting, paved footpaths, and roads for emergency access. They lack schools and clinics within reach. Safe areas for children to play and places for the community to meet and socialize are taken up by illegal structures. And these slums are worsening. The KDHS (1999) indicated that the average age of slum dwellers is increasing, and the elderly suffer most from increasing dependency levels especially out of the effects of the HIV/AIDS scourge. This study observed visible disparities between the Kibera slums and better-off neighborhoods of Langata and Karen that increased the social tensions in the poorer areas. The NCC (1998) reason that unplanned growth of settlements makes conventional service provision complicated, as no way-leaves are planned and they are in hazardous areas hence illegal.



**Plate 2: Informal Settlements of Kibera.**

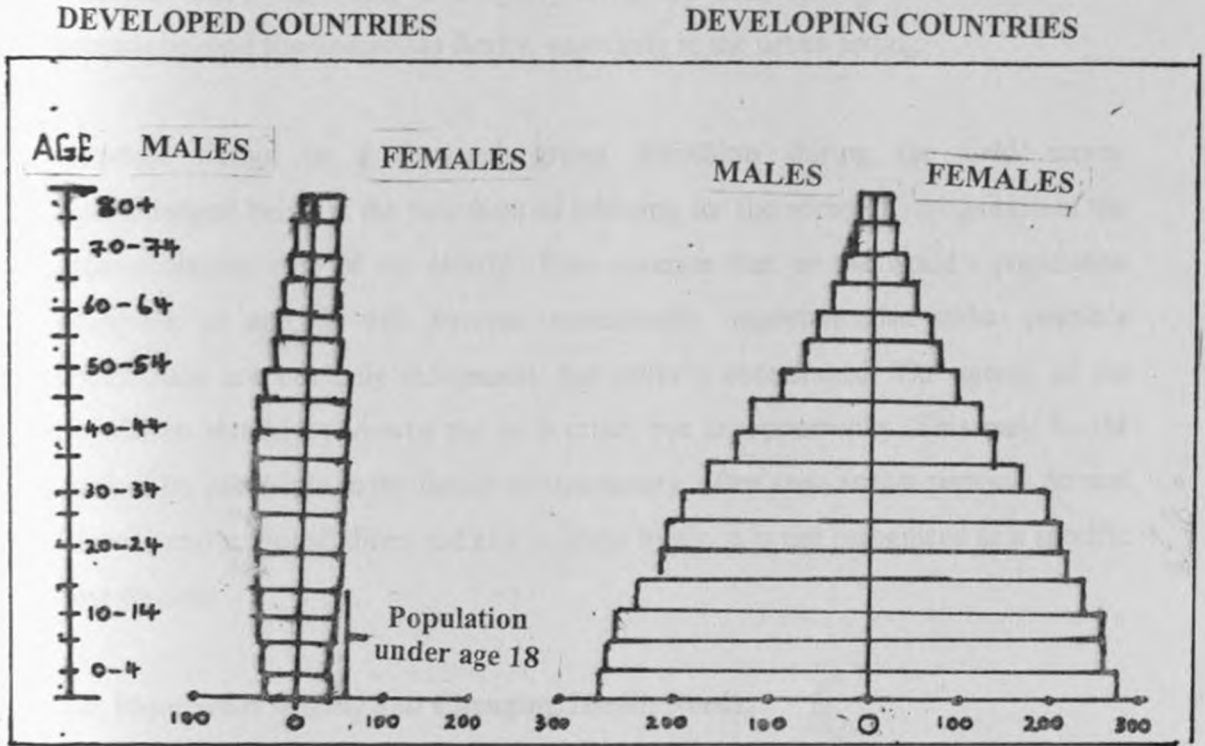


Source: Field Survey, 2002.

Urbanisation, migration and modernisation in addition to ageing are changing the age/sex structure of rural and urban neighbourhoods. The out-migration from rural areas tends to remove the middle age groups. Designing for a “society for all ages” requires that we examine and reconsider current trends towards age segregation (UN, 1999). As argued by Juma (1985) an ageing population not only creates pressure on the nation's social-economic resources, but also makes increasing demand on its shelter services. The growing “top heavier” pyramidal population structure means a larger number of the elderly, with special needs, will need specialized shelter provision. This was based on the theoretical premise that the demographic, shelter and other socio-economical variables are likely to affect their provision jointly or independently.



Figure 3: Population Pyramids of Developed and Developing Countries, by AGE and SEX, 2000.



Source: UN. Population Division, 2000

### 2.5 The Social Context of Ageing:

Are older people a burden or resource? The UNCHS (Habitat) (1998) argue that older community members are a vital source of experience and knowledge. Yet there is a paradox that affects older people all over the world – where in spite of the skills, knowledge and experience which enables them to support their communities, they are all too often seen as a burden to younger people, and as dispensable.

Ocholla-Ayayo, (2000) points out that the relation of the aged in the family should be articulated within the context of social change. Social security is the mechanism that aims to transfer financial and other economic benefits from the working generation to those who cannot work because of age limits, disability or other

dependency status. However, it should be linked closely to the principle of kinship ties; which provides a traditional form of social security. A study by Obunga (1987) revealed that the aged in Kenya prefer to depend on their kinship groups. In societies where the family is a tightly integrated unit, the aged would not be of concern beyond the immediate family, especially in the urban setting.

HelpAge Kenya in a focussed group discussion during the field survey acknowledged being at the fore-front of lobbying for the society's recognition of the socio-economic role of the elderly. They reiterate that as the world's population continues to age, it will become increasingly important that older people's contribution are not only recognized, but actively encouraged. The ageing of the population should be viewed not as a crisis, but an opportunity. This may be the work older people do in the family or community, often seen as that person's normal lifestyle and responsibilities and as it is given freely, it is not recognized as a specific contribution.

## **2.6 Population Ageing and Changing Health Needs:**

HelpAge Ghana (1999) describe common elements in older people's perception of good health as those that relate to the absence of diseases, enough physical strength, mental soundness and social responsibilities. Older people see physical ability as the ability to work and to fulfil ones role in society. At individual level the capacity of old people to earn a living or to participate in a family and community life, as well as a sense of personal well being, are all governed by health status. At a population level, health care provision is the most comprehensive of public services offered by governments. A number of studies in India have shown that the aged have a much greater need for access to public health services owing to higher levels of poverty, fraility and sickness. Key informant interviews with the Kenyatta National and Nairobi Hospital's Public Relations Officer's in the field survey (2002) confirmed lack of specialist Gerontologists and Geriatric medicine not only at public but also private hospitals in Kenya.

Acquired Immune Deficiency Syndrome (AIDS), is a serious public health problem in much of the world, with most of the most affected countries found in sub-Saharan Africa, especially those located in the east, central and southern part of the continent. The AIDS epidemic in Kenya constitutes the greatest public health challenge of our time. Over the past few years the incidence of AIDS in Kenya has been on the increase, particularly in major urban centres such as Nairobi, Mombasa, Eldoret, and Nakuru. The city of Nairobi recorded 2,542 cases (1,664 male and 878 female) as per the Kenya Demographic and Health Survey, 1999. The peak ages for AIDS cases is 25 to 29 for females and 30 to 40 for males. Konde-Lule (1995) argues that urbanization has allowed acceptability of a female making a living as a prostitute or bar maid. Exposure to new diseases, particularly S.T.D.'s were a part of new urban conditions, as urban centres are increasingly unable to provide the jobs, basic needs and services.

About 75% of all AIDS cases occur among people in the most economically active age group of 20 to 45 years. The deaths of these individuals constitute a serious economic and social tragedy in the lives of surviving family, friends and employers. Official statistics show that as of January 1999 there were 526 HIV positive men and 185 women over 60 years old in Kenya (Okatcha, 1999). A lot has been discussed on the effects of the AIDS pandemic on the sexually active age groups. Unfortunately, very little has been done to explore its effects on older people (KDHS, 1999). In the over 50 years old range, there were 3153 cases, 3.9% of the total cases reported by January 1999. These figures show that the older people are gradually succumbing. AIDS has, and will continue to have a huge impact on older people in Kenya. Older people play a major role by caring for people affected by HIV/AIDS and then bringing up orphaned children. Their finances are depleted and there is also an emotional impact of changing family structure, let alone the risk of being infected themselves.

## 2.7 An Ageing Population in Times of Rapid Economic Transformation.

Doctor Indira, Jai Prakash (1998) suggests a more equitable way of considering this asset/liability issue regarding the aged. The disadvantages the aged face for example, lack of access to credit, subsidies, formal employment age limits, reduced physical strength and mental soundness, inaccessibility to credit, less able to learn, dependant hence a burden, inability to save due to their low income, lack of collateral and many others, must be recognised and social system restructured to make them partners in developmental work. In Nairobi for example, credit markets operate age neutral policies which leads to the exclusion of older people. These policies should be explicit and affirmative to serve the interest of different categories, including of older people (HelpAge Kenya Nairobi, 1998).

Several researchers have found that the Kenyan economy has been steered towards investment in sectors involved in international commerce, industrialisation and debt relief, drawing resources away from areas where older person are most economically active, that is informal trade (UNDIESA, 1985). Again reduction of social spending under structural adjustment has shifted the burden of care back to the family (Poverty Reduction Strategy Paper, 2000 – 2003). The Kenyan economy has been on a general decline, again impacting negatively on the whole population and the elderly in particular as a vulnerable group. The country has experienced declining economic shown in Table 6 below:

**Table 6: Kenya's Economic Performance Since Independence.**

Period	1963-1973	1974-79	1980-89	1990-95	1996-99
GDP Growth Rate %	6.6	5.2	4.1	2.5	2.5
GDP Per Capita %	2.6	-	.4	-.3	*

**Source: NDP 1997-2001.**

Major selected challenges faced by the country are therefore, generating employment for the growing labour force, expanding and strengthening private enterprise in urban areas to generate more employment, the enormous foreign debt, the national disaster in HIV/AIDS and increasing and sustaining agricultural production to meet



expanding food needs of the ever growing population to alleviate hunger and malnutrition (Drakakis Smith, 1988). These affect the elderly more than the average person given their special characteristics and needs.

Productivity is broader than paid work; it includes any activity that produces goods and services such as house work, child care, volunteer work, help to family and friends, and acquiring training and skills to enhance the capacity to perform such tasks (Danigelis and McIntosh, 1993; Caro Bass, and Chen, 1993; Herzog and Morgan, 1992). Majority elderly respondents in Kibera Division alluded to being neglected and ignored. They are not involved in development decision making.

Consistent with the person-environment framework, productive older people appear to choose and adjust their behavior and aspirations in order to maintain a sense of competence in a changing environment (Herzog and House, 1991). The living arrangements, neighborhoods, and socio-economic status of adults, as well as their physical capacities, attitudes, skills, and values, all influence their activity patterns (Hooyman, Nacy & Kiyak, 1999). This is a reflection of how important the areas the ageing population reside to their well-being, an important aspect of the residence theory used in this study.

Apart from economic contribution, the older people often have leadership roles such as conflict resolution, cultural, religious and health education (O'Donoghue, 1998). These may be highly visible but are not measured in terms of value to the community. The skills of leadership, diplomacy and financial management, and the vast experience as carer and counsellor that the aged are likely to have acquired are rarely rewarded with a place in public or political life. Cultural taboos, lack of education and the shear pressure of domestic and income earning duties conspire to keep older women out of decision making bodies. The Nubians view the womans place as the house, where in Kibera slums they were found to be passive and sidelined from issues like land ownership.



According to Ngau (1979) little research has as yet been done on the demographic structure of the urban society and on the structure of the residential areas they live in. Yet it is clear that such knowledge is necessary if we are to understand the background to the current acute urban problems such as barriers in the built-up environment, inadequate accessibility and insufficient social facilities, plus social pathology. Such knowledge is particularly useful at this time when third world countries are engaged in importing both technology and expertise. The crucial question is whether theories and models developed on the basis of the experience of the developed countries are applicable to third world situations. The corollary is whether Kenya's ageing population and/or its related socio-economic problems are similar to those faced by the developed countries.

## **2.8 Barriers to the Ageing Population in the Built Urban Environment.**

### **2.81 Types of Barriers to the Ageing Population:**

Cities work well for people who are healthy, able bodied and solvent, but most elderly persons lack one or more of these characteristics hence have to contend with a multitude of barriers that hinder day to day activities and their participation in urban life (UNCHS Habitat, 2000). Yet the elderly are increasingly found in urban areas of developing countries. There are three major types of barriers to the elderly in urban life.

- Physical barriers: Many environments like roads, terminals, malls, houses and others pose enormous physical barriers to elderly people because they cannot see, hear or move as well as others.
- Institutional barriers: These are processes and activities that pose hardship for people like the elderly.
- Systematic barriers: Subtle systematic discrimination is a burden because the needs of the elderly are often intentionally or unintentionally ignored.

### **2.82 Barriers in Land-use Planning Policies:**

Urban planning has traditionally been concerned with the allocation of land for various uses, the control of development and the installation of infrastructure (GOK.,

1992). Increasingly in recent years, as argued by Ndegwa, (2001), it has been recognized that the production of master plans, which attempt to set out the desirable pattern of land uses for periods of 15 or 20 years, are of limited value. This is not to say that planning ahead for the allocation of land to guide population growth and economic activity, and some control over the development of the built environment, is inappropriate, but that in meeting the needs of urban areas, there has been a move away from blueprint planning towards a more action-oriented approach (Safier, 1974; Mattingly, 1988). This has focused on project investment aimed to develop or improve areas for various uses and groups of residents like the elderly (World Bank, 1983) and, even more recently, on improving the institutional and financial capacity for urban management.

Planning for land use is concerned with the character and siting of buildings and communicative routes, as well as with planning for human activity (Dennis, 1970). The driving force for planning is the need for change, the need for improved management or the need for a quite different pattern of land use dictated by changing circumstances (FAO, 1999). The concept of the ageing population in the rapidly evolving urban environment is an emerging phenomenon of planning concern. Urban planning is a key tool for eliminating barriers and for inclusive practices in the development of land and buildings. Urban planning encompasses the official plan, strategies for city development and a body of by-laws and regulations.

This study thus agrees with Ngau's (1979) argument for residential differentiation based on two premises, firstly, that urban societies are differentiated in their socio-economic characteristics and secondly that the differentiation within urban societies results in the spatial separation of various income groups forming social areas. In other words, socio-economic differences translates into spatial differentiation so that persons socially similar tend to form a social group that inhabits a particular area while persons socially distance tend to inhabit different areas. The patterns of residential areas that developed in Kibera Division thus tend to reflect the socio-economic and political forces and differences existing in that society. The

segregation cannot therefore be reflective of age difference. The ageing population will not take to a spatial pattern or be found in specific areas but also conform to the above premise.

### **2.82 Barriers in Housing:**

Three general background factors that must not be forgotten when future housing programs are developed for the elderly population according to the Center for Housing and Environmental Studies of the Cornell University (1961) are:

- The housing requirements of any family or individual are dynamic. This is true for all age groups including the aged. The requirements of a married couple of age 60 are quite different from those of a widower at the same age, and their requirements are, in turn, quite different from aged individuals of 80 and over, when infirmities are apt to have set in.
- The requirements will also change if broad, general elements of the problem change. Wage earners are tending to retire at an early age, hence earnings are likely to be cut off earlier in the future than at present. At the same time the life span continues to increase, hence there will be more aged in our population and more husband - wife couples in the group (widowhood will begin at a later age) - both of which will have a direct bearing on housing needs.
- We must recognize that once a physical structure is built, it tends to be almost permanent. Although alterations always are possible, they are usually extremely costly especially if the basic character of the structure is to be changed.

Throughout Man's history, the need for housing against the natural climatic elements has been one of the basic needs of human survival. The lives of family groups rotated around the central focus of housing. With the passage of time, the range of housing options has widened and the means of assessing its relative qualities has represented an increasingly perplexing task (Duncan, 1971). Housing assessment is complicated by demographic characteristics, social, economic and technology. The desirable characteristic of a house mean different things to different people. Certainly the presence of certain basic facilities such as bathrooms and a wholesome

internal water supply might be sought by all, but the immediate surroundings of a house and its location can be almost as important. These attributes are far much more difficult to quantify and compare for different age groups. While some families have no need for a garden, others highly value them. Peoples income, social custom and traditions affect their priorities in housing. Thus meaningful standards (acceptable/unacceptable living conditions) can only be developed for specific groups such as the elderly at the local level - as adoption of standards for national comparison is difficult.

**Plate 3: Physical Barrier: No Hand Rails on Commercial Building in Uchumi Area Langata.**



Source: Authors Own, 2001

As was stated in the HelpAge (International) report (2000), the ideal housing design should be barrier free. This means that an environment should contain no architectural, design or psychological features that might prevent anyone, able-bodied or impaired, from using the environment to the full extent of his or her abilities. Barrier-free design, added the report, also ensures that as elderly's functional abilities change, they can continue to live in their present residences. In addition, new technologies, such as Environmental Control Devices, (ECDs) and



Integrated Electronic Control Systems (IECS) are giving seniors with disabilities greater control over their home environments, thus increasing their independence. These technologies run the gamut from fairly simple physical devices such as rails, ramps, seat supports, touch-sensitive light switches and photo-sensitive lamps to advanced, integrated systems that permit control over many household objects including lights, appliances, the television, VCR, security systems, intercoms, telephone and thermostats.

**Plate 4: Bathroom Handrails**



**Plate 5: Electronic Wheel-chair**



Source: <http://w.w.w.worldbank.com/barrierfree/article.html.images>

It is essential that successful strategies to eliminate these barriers are available to the elderly in the developing countries where rapid urbanization is in progress. These developing countries can learn to avoid the errors of developed countries as well as learn from the successful initiatives there.

### **2.84 Barriers to Transport for the Aged.**

A clear manifestation of the unmet demand for public transport services is the daily stampede and jostling at most of the city's transport terminals, especially during the rush hours, and the overflowing number of passengers transported by the existing modes of public transport (Aduwo, 1900). The elderly being frail and physically slower than other age groups thus endure the worst of the unmodified sidewalks and pedestrian walkways on streets. We realize that many aged persons with disabilities



have problems using public transportation. The four most common problems include difficulty getting on and off, standing in the vehicle while it is moving, getting to the stop, and waiting at the stop. To make matters worse, many non-housebound elderly with disabilities in Kibera Division have no available public transportation for example in Karen area. And the elderly with disabilities who live in the community need greater availability of specialized services that may include ramps instead of stairs, hand rails, somewhere to put wheel-chairs etc. Local businesses in Kibera Division often did not understand the mobility problems of persons with disabilities, and how to avoid creating accessibility barriers. Even among those elderly without disabilities, some still have some problems using buses, trains or aeroplanes, including boarding and disembarking, moving around the terminal, hearing announcements, and seating on board. Clearly, much remains to be done in making transportation of all kinds more accessible.

The first Kenya National Workshop (1996) on urban mobility concluded that Nairobi's transportation problems are due to neglect of maintenance, inadequate investment, poor management of traffic systems, breakdown of road discipline, and failure to develop an adequate policy and planning framework. Professor Zacharias (1994) in a study of Durban argued that municipal agencies had no systematic response to solving the mobility problems of elderly persons with disabilities, such as modifying sidewalks and streets. Moreover, these agencies were often unsure about how to prioritize the seriousness of such problems, and the same can be said for the Nairobi City Council. By the end of the study, Professor Zacharias hopes to determine how helpful neighbourhoods are to persons with mobility disabilities, how much social support these individuals have, and how such factors impact on their involvement in the community. This study has asked the same questions about the elderly with mobility problems in the informal villages of Kibera, the residential estates of Langata and the Karen residences of Nairobi city.

**Plate 6: Physical Barriers: Undeveloped Pedestrian Walkways in Langata.**



Source: Authors Own, 2001.

The following case study is an example of a successful programme initiated by stakeholders for improving the quality of life for the elderly in human settlements in Finland. Of essence is how they have combined the home design or dwelling place , to the environment, the transportation, institutional framework to enhance the welfare of the elderly person. They created job opportunities and social support for the elderly.

### **Table 7: A City for all: Barrier Free Environment in Finland.**

*The neighbourhood of Marjala in the city of Joensuu in eastern Finland is designed to meet the needs of wheelchair-bound inhabitants. All the homes, connections between the home and all streets, parks, etc. are being planned and built to meet this requirement. Over the past 15 years the City has built special housing for the elderly and disabled. A set of design guidelines require that all dwellings, all shared facilities and all connecting routes allow barrier-free access and mobility. This requirement is applied to even the smallest detail in the neighbourhood so that all streets, pavements, squares, bridges, parks and green areas with their paths and promenades are built to be accessible by all. In order to guarantee the high quality of design the City Council organized a nationwide architectural competition for the master plan for Marjala.*

*International estimates indicate that 18 to 20 percent of the population face difficulties in mobility in the ordinary urban environment. Many neighbourhoods in Finland have been built for the kind of life that people no longer lead. The majority of inhabitants today spend 24 hours a day in the areas where they live. The elderly, unemployed or people working at home and young people are often left without adequate facilities or opportunities for shared or individual activities. The unemployed rate of Joensuu is extremely high (27% in 1995) and has increased within the last few years.*

*Marjala has been built so that people can work, live and enjoy their leisure time within their residential area. Cooperation between the inhabitants and the city employees creates networks, which provide support, increase the inhabitants participation and create jobs within the area.*

## 2.10 Traditional African Architecture and the Aged in Society:

Traditional African Architecture is the architecture of the African peoples that had evolved over time to suit the various communities requirements for daily living as dictated by their cultural traditions and values, technological know how and constraints from the natural environment. In this case the architecture was centered on the people in it. It was, therefore, not only functionally habitable, but was also rich in social content (Kipketer, 1990). Today, more and more architects are turning to vernacular (traditional) architecture for inspiration, not because of the wish to repeat the structures they find, but because it is recognized that these structures obviously satisfied communities psychological needs far better than most modern suburban settlements do (Susan Deneyer, 1978). The huts and the settlements as a whole were healthy and conducive to happiness and wellbeing of the occupants. Jonathan Freedman (1975) defined a healthy building as one being with plenty of activity in front (or inside) it, where people watch each other and get to know each other, and a sense of community and individual can develop.

We may ask ourselves how much did the spatial qualities inherent in the traditional architecture offer in this least tangible yet crucial consideration in planning and designing for the elderly with special needs? There is need to explore the possibilities of traditionally built environment and learn the logic of it. Then we can use this knowledge in the design of towns, settlements and houses within the African context (Blearad, 1974). We do not want to fossilize a traditional pattern in concrete and give it to a family which probably no longer has the same requirements as its predecessors. This would be preserving the wrong aspect of traditional architecture (Deneyer, 1978). The objective of this study therefore, is using distinctive qualities of the traditional African built forms that may be incorporated in modern urban homes for the ageing population towards achievement of contents to give a meaningful substitute to a real home (adapted from Kipketer, 1990). Efforts by the UNCHS (Habitat) Sustainable Cities Program (SCP) that seek re-orientation of the planning practices in this direction should be developed to meaningful, replicable, theoretical and practical paradigms.

In pursuant of this, the study reviewed some parameters common in most of the traditional African (specifically Kenyan) settlements to be used in the analysis of the built environment in which the elderly live in Kibera Division of Nairobi, the area of study of this research. The parameters include:

- ◆ *Spatial Location of a Home*: This is the relation of the home to its neighborhood and the community at large. Isolationism has never worked well for countries and certainly does not work for individuals especially the aged. The way to have a comfortable socio-psychological life is to interact with neighbours, to know other people around you, and to be part of the community. This will very much be determined by the location of the home.
- ◆ *Territoriality*: Clear definition and scaling of spaces towards recognition of the individual and the group in communal public spaces and personal spaces. (Newman, 1963).
- ◆ *Privacy*: The basic function of privacy is protection and maintenance of individuals need for personal autonomy (Proshanky, 1974).
- ◆ *Socialization and personal spaces*: This is the facilitation of the design and planning of appropriate and comfortable social interactions. (Freedman, 1975).
- ◆ *Activity spatial relations*: Not only should there be strong relations in spatial locations of the activities but also between activities and spaces provided for them in such a way that there exists spatial comfort within the space during the activity.
- ◆ *Identity*: The experience of identity, while being an elusive concept is essential to our being sane (Canter, 1975). There should therefore, be physical expression of identity common in all human beings and much more for an old person in a society that is not caring.

## 2.11 Existing Policies and Programs for the Elderly.

**At the Global Stage:** On the world perspective in the years preceding 1982, the UN, was not particularly active in the sphere of ageing. However after the International Conference in Vienna (1982), the UN and its related organisations



became much more active collecting data and initiating research; with several regular publications including "Bulletin on ageing", "Periodical on ageing" etc. and with a trust fund primarily for the use of developing countries. Other UN organisations actively involved directly or indirectly in the work for the elderly include UNICEF, UNESCO, FAO, WHO, ILO, etc.

The UN has passed several resolutions concerning the aged that have been adopted for implementation by the signatory countries, Kenya included:

~ 1982: the World Assembly on Ageing (Vienna, Austria) adopted the International Plan of Action on Ageing. The plan endorsed by the U.N General Assembly, set forth 62 recommendations for action in the areas of: health and population, protection of elderly consumers, housing and environment, family, social welfare, income security and employment, education (as well as data collection, research and training)

~ 1989: Unprecedented in human history, the ageing of populations is changing the shape of families, neighbourhoods and nations giving rise to new kinds of housing, transportation, services, production and consumption patterns. These changes are being explored through the theme – "Towards a society for all ages".

**National Government Policy on the aged:** The growing awareness of ageing issues and the disadvantaged situation of older people in many countries has yet to be translated into policy actions by national governments (HelpAge International, 1999). At present age related policies, particularly in developing countries, are 'population responsive' as opposed to 'population influencing' (Myers 1982). It is possible to identify key areas that policies must cover in order to address fully the needs of the elderly and the consequences of population ageing. One of the main issues that policy must take account of is the change in the dependency ratio. The second is the increasing numbers of elderly people that inevitably leads to an increasing need for the provision of services for them. The urban-rural divide is the third key issue that should be addressed (Sen, Kalache, Coombes, 1993).

The Department of Public Health and Policy in the London School of Hygiene and Tropical Medicine (1993) argue that at all levels of the population, from the local community to the nation state, clearly defined and well-implemented policies are needed to meet the challenge of fast ageing societies. Failing that, the very nature of the problems of elderly people, (long-term, chronic), gradually absorb resources badly needed by other sectors of society. A key issue is political will and prioritization, accompanied by a recognition of the crisis facing many of the elderly in the population in order to ensure equitable distribution of resources between the competing priorities. According to Kalache et al (1993), one difficulty faced with regard to policy is its practical implementation. Many developing countries experience a lack of trained personnel in the social services, low levels of literacy, geographically isolated areas, large and dispersed rural populations, work sectors that are informal and non-waged, ethnic diversity, government instability, and cultural bias against offering equal services to men and women. All of these need to be taken into consideration. Tapia-Videla and Parrish (1982) identify a line of response for those countries which cannot take an additional burden of an ageing population on top of the other social pressures they face; the only alternative for them is a radical shift in their approach, entailing major administrative reorganisation, especially in regard to the distribution of scarce resources.

According to HelpAge Kenya, (2000), the main aim of planning and policy implementation for the ageing population is to provide the resources to enable the ageing members of the society, their families and local communities to experience the best possible levels of wellbeing. Governments must consider the need to reshape policy with respect to educational facilities, housing needs, and the composition of the labour force, whilst also examining the role of the women as carers for older family members and proper ways to assist them (Sen, Kalache, Coombes, 1993). Hampson argues that policy and plan for the elderly is about obtaining basic information about them. It is about existing service limitation and about the needs of the elderly. The government need to train and employ personnel who have knowledge and experience to provide appropriate services and device appropriate

policy; positive programme of preventive means that promote and enrich the involvement of elderly within their communities (Hampson 1985).

Policies addressing the needs of the elderly exclusively are lacking entirely in Kenya. Although the existing ones do not discriminate against the old and tend to incorporate all ages, there is need for affirmative policies biased for the aged. The Social Welfare Department of the Ministry of Culture and Social Services (2000) recognize the socio-economic changes now shaking the Kenyan society, with its concomitant gradual demise of the extended family, old age being neglected and their role in society being reduced to mere dependants. It is, therefore, necessary for the department to plan for provision of limited services to the aged, especially where they are neglected, while at the same time trying to encourage the continuance of what is left within the traditional setup for the care of the aged. Although the department is not directly involved in the provision of homes for the aged, it does, never-theless, provide financial assistance to those NGO's directly involved in programs for the aged. The department still believes that Kenya should not go in whole-sale with the establishment of Homes for the Aged. But rather, that the African traditional ways of caring and catering for the aged, must at all costs, be revived and strengthened (Department of Social Services Policy Guidelines, 1983).

### **Sectoral Policy with Implications on the Elderly in Kenya:**

There are many other policies that make a fundamental impact to the welfare of the ageing population. One very important policy issue is Housing. Noormohammed (1988) contends that the policy norm in the housing sector in Kenya seems to be inaction. The Government has not applied itself to housing as it has done in other sectors such as education, health or infrastructure, as a result most policies are only on paper. The problem seems to be the lack of appropriate policy focus, lack of a single policy document, and generally limited housing accessibility for particular groups (Mitullah, 1994). There is a complete lack of housing policy for the elderly. Because of the lack of a clear housing planning strategy, the city has experienced an unplanned, haphazard pattern of development, leading to settlements containing

incongruous mixtures of activities, an over concentration of employment in the CBD and industrial area, resulting in traffic congestion and environmental pollution, and rapid growth of informal settlements (Ondiege, 1982). And this is where the increasing ageing population have to live. This together with the lack of serviced land for the housing development and the lack of appropriate standards of building by-laws especially for low-cost housing could be a result of poor housing policies and could be alleviated by public policy. It is the public sector that is best equipped to check the inefficiencies in housing supply that are generated by its own policy (Ondiege, 1981).

Another policy issue with a direct significance to the ageing population is, and remains, insecure land tenure. However, ensuring secure tenure for Nairobi's poor is fraught with difficulties, including lack of political will (Agevi, 2000). From the 1960s to the early 1990s, the urban poor were not organized and had no political leverage. Moreover, some policy makers were partisan in that they had a vested interest in the status quo vis-à-vis land ownership - as landlords. However, since the beginning of the 1990s, with the advent of political pluralism and the emergence of new democratic spaces, the poor have been organizing and demanding rights to land and to urban services. Advocacy planning by the elderly is a major conceptual underpinning of this study, especially to improve access and tenure security on land.

To meet the welfare needs of the elderly in Kibera Division, urban planning must address the issue of informal settlements. This is based on the premise that informal settlements can no longer be ignored, and is the home of many elderly persons. In November 2000, the Government of Kenya and UNCHS (Habitat) agreed to pursue a joint slum-upgrading project to confront the issue of informal settlements on a citywide scale and in a systematic manner. Early in the year 2001, a situation analysis of Nairobi's informal settlements was undertaken. The primary aim of the Nairobi Situation Analysis Consultative Report is to document and analyze the conditions on the ground in order to provide the basis for constructive debate and discussion among key stakeholders, especially people living and working in slum



areas (Syagga, 2001). The report is the first and most important input to the Collaborative Nairobi Slum Upgrading Initiative. It is also intended to contribute to other initiatives presently ongoing in Kenya, including the anticipated "Third Nairobi Metropolitan Development and Management Strategy (2001-2030)". There is need to initiate a housing option specifically for the elderly.

Kibera slums villages in the study area is one of the six slums in Nairobi whose upgrading commenced in the year 2000 under a Government of Kenya (GK) and Habitat joint project. According to the Minister of Roads and Public Works, (2001), residents are set to have greater security of tenure. They would also begin to enjoy better infrastructure, social amenities, and other services. This will definitely enhance the welfare of the elderly in the Kibera slums.

#### **Other Support Initiatives:**

There are many other institutions that are concerned with the well-being of the elderly population.

*Voluntary organizations:* It is the policy of the Division of Social Welfare of the Ministry of Culture and Social Services to encourage voluntary organizations to shoulder more responsibility in the provision of social welfare services in the country (GOK,1983). The Division will, therefore, continue to support voluntary organizations by way of grants and training through the Kenya National Council of Social Service. The council will be given all the necessary assistance to enable it to effectively coordinate activities of various NGO's in the country for improved utilization of scarce resources and improved output. This has had no impact on the welfare of the elderly.

*NGOs and CBO's.* This is with regard to curative services provision as well as development of preventive health care. Government can invest in public health education for all ages (including older people themselves). The NGOs and civil society play an important role in advocacy, developing best practice and ensuring that older people can pursue their basic rights. Helpage Kenya has been at the



forefront in advocating for the aged in Kenya. They seek funds to support initiatives like homes and others like at the Kibera day care center. They spearhead awareness creation to our youth through regular school visits programs where they give talks. Helpage Kenya also uses other initiatives like walks, dinners, football matches, music shows, golf tournaments and the adopt-a-granny initiative to generate funds to help the elderly and sensitize the community on their plight.

*Vocational Rehabilitation Programme:* The integration of the disabled person, including those by age, in the society has been practised through mutual social responsibility towards one another, a tradition cherished in most of our societies. In 1964 the Kenya Government set up a committee to study the question of disability and recommend a line of action. The recommendations formed the basis of the Sessional Paper No. 5 of 1968 which laid out the legislative framework for Vocational Rehabilitation Program. Its ultimate aim is full participation and integration into the society of all disabled persons in Kenya, including the disabled aged.

*National Social Security Fund (NSSF):* The NSSF was established in 1965 by an Act of Parliament (Cap 258, Laws of Kenya) in order to administer a provident fund scheme for all workers in Kenya. The major objective of NSSF is the provision of financial security to members in old age. One qualifies for direct benefits under the following conditions:

- Withdrawal: On attainment of 50 years of age and you have retired from regular employment.
- Old age: When you reach the age of 55 years or when you ultimately retire from paid employment, whichever is the latter.
- Invalidity: When you suffer permanent disability rendering you incapable of earning a living or when at 50 years of age you suffer partial incapacity making it difficult for you to continue with your regular occupation.
- Survivor's benefit: This is paid to the survivors or dependants of a deceased member.

- **Emigration grant:** This is paid to a member who is permanently emigrating from Kenya.

The NSSF thus only benefits those who have been in formal employment, leaving out the vast majority of the elderly in Kibera Division whom the study recorded to be self employed in the informal sector. Disbursements of lumpsum funds by the NSSF to the elderly after retirement from formal employment has also been criticized as they are insufficiently trained in financial management. Recently accusations of political interference and mismanagement of the funds for personal gain has eroded trust and confidence by the elderly on this initiative as an old age insurance.

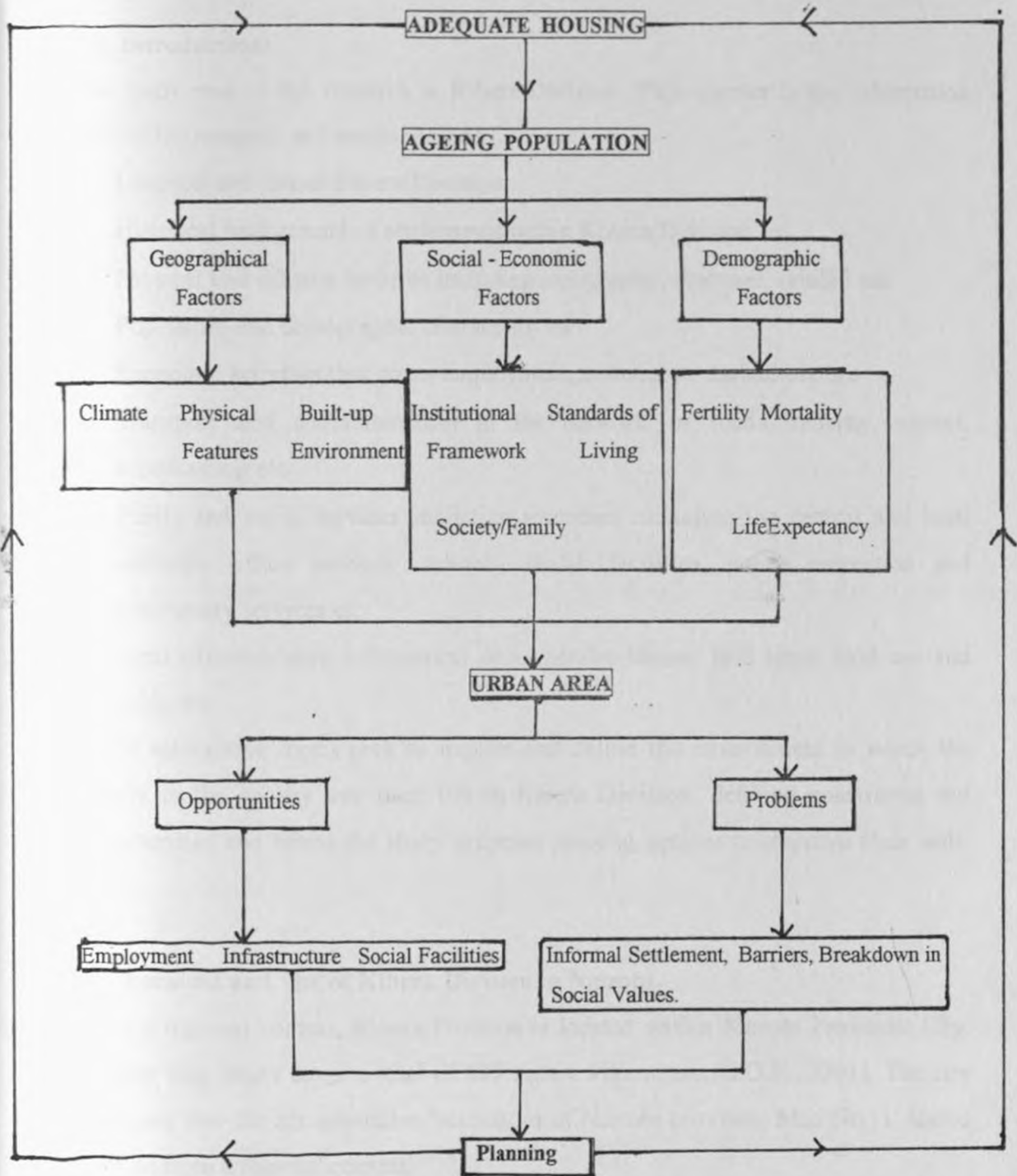
*National Hospital Insurance Fund:* Supports the financing of healthcare services countrywide through access of any of their accredited hospitals countrywide which include government, private, mission and community health providers. NHIF also provides an in-patient cover for the contributor, the spouse and children below the age of 18 years. It also covers children over 18 years with proven evidence of being either handicapped, in school, college or university (including adopted children). NHIF benefit is between kshs.400 and kshs.2000 per day up to 180 days of hospitalization per year. NHIF places no exclusions on the type of ailment that a contributor, his/her spouse or dependent is suffering from. It is possible for the elderly retrenched and retired members (most of whom are aged) to continue accessing NHIF benefits under the Voluntary Contributor Scheme. A little premium of kshs. 60 per month enables the contributor, his/her spouse and dependents to benefit.

*Homes for the Elderly:* Homes for the elderly include the Kariobangi Cheshire Home for the Aged, Mji wa Wazee in Huruma, Holy Cross Parish Nyumba ya Wazee in Dandora and others. They are run by mainly church based organizations, and from focus group discussions with the researcher, they are plagued with many problems and constraints mainly emanating from the fact that majority of the urban elderly persons who are poor live in informal slum developments with their inherent problems. Thus the numbers, poverty situation and environment where these elderly

are located are the main problems. Fund raising for the elderly has not gained much support in Nairobi hence financial problems. Majority persons still assume and insist the elderly should be catered for from within their own family/clan circles. This is a serious attitude problem that constraints the management of the homes for the aged.

*Public and Private Hospitals:* Key informant interviews by this researcher with administrative and medical staff of Kenyatta Referral Hospital and Nairobi Hospital confirmed the unfortunate reality that the field of Gerontology (scientific study of old age and the process of growing old) and Geriatrics (the branch of medicine concerned with the diseases and care of old people) is little developed in Kenya. Elderly patients consult general medicine practitioners and lack specialized attention. This is a priority area for future research to enhance the wellbeing of the elderly in the society. There is a general limitation to elderly health and social carers even in the homes for the elderly and day care centres.

2.12 Conceptual Framework:



## **CHAPTER THREE: STUDY AREA.**

### **3.1 Introduction:**

The study area of this research is Kibera Division. This chapter is the information base of the research and would include:

- Location and size of Kibera Division
- Historical background of settlements within Kibera Division
- Physical and climatic features including topography, drainage, rainfall etc
- Population and demographic characteristics
- Economic activities that cover employment, commerce, agriculture etc
- Transport and communication in the network of roads, railway, airport, broadcasting etc
- Public and social services including amenities including the central and local authority office services, schools, health facilities, police recreation and community services etc
- Land administration information on ownership, leases, land sizes, land use and value etc.

These substantive topics seek to explain and define the environment in which the elderly in the society live their life in Kibera Division, defining constraints and opportunities and where the study proposes housing options to improve their well-being.

### **3.2 Location and Size of Kibera Division in Nairobi.**

From a regional context, Kibera Division is located within Nairobi Province/ City. Nairobi City limits cover a total of 697 square kilometers (G.O.K. 2001). The city limits are also the administrative boundaries of Nairobi province. Map No. 1 shows Nairobi from a regional context.



Map 1: Location of Nairobi from a Regional Context:



Source: <http://www.kenyaweb.com/maps>

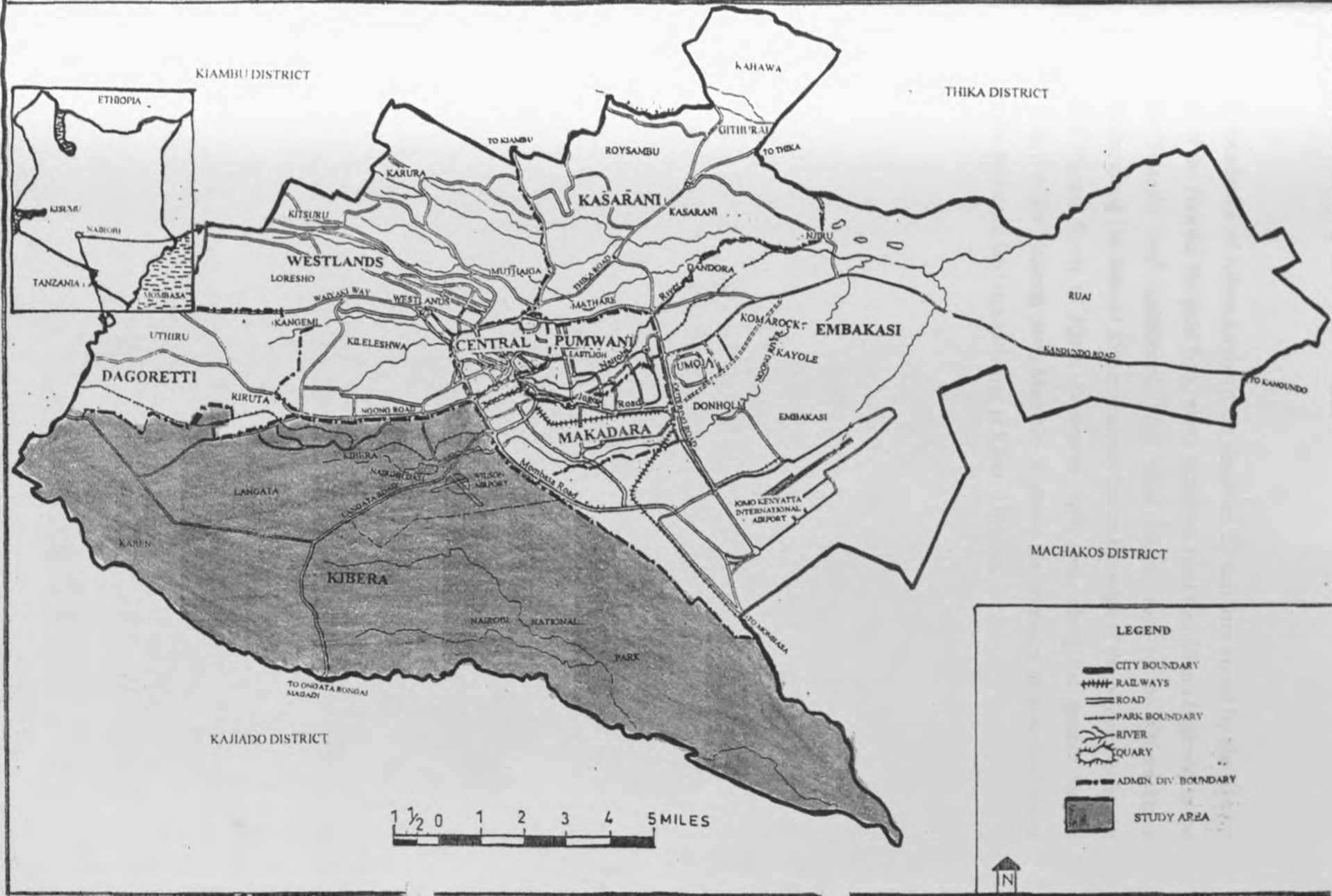
Kibera Division is the South-most located division of the Nairobi administrative boundaries. It is bordered by Dagoretti to the West, Central Division to the North and Embakasi to the West. It borders the Kajiado District to the South. Kibera

2). Kibera Division's unique features include the vast Nairobi National Park covering a substantive part of its Eestern area and the Ngong forest in much of its Western side.

**Map 2: Nairobi Administrative Districts:**

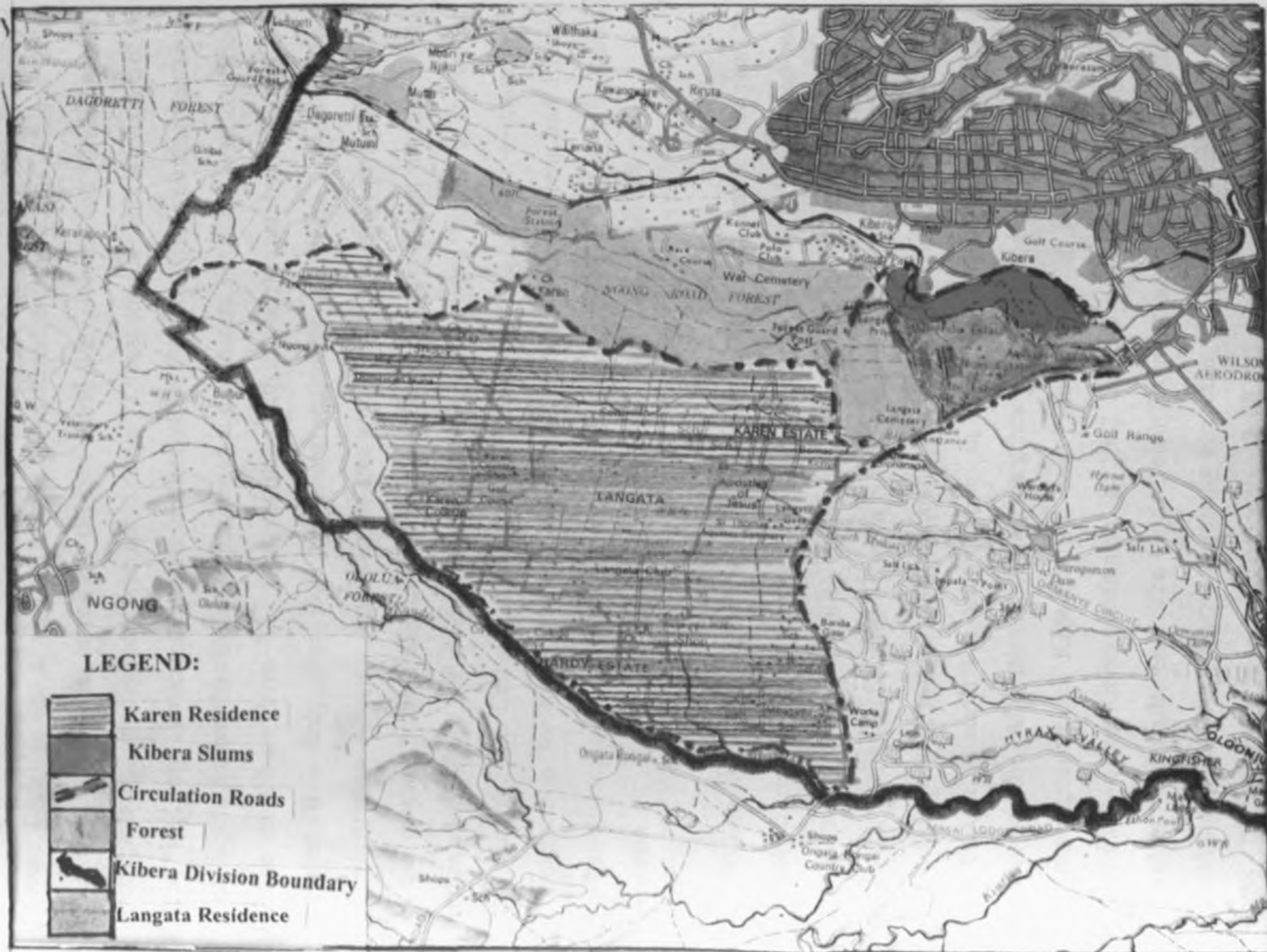


Map 2: Nairobi Administrative Divisions Showing Study Area



The boundaries of Kibera Division are described by that area bound by the Eastern edge of the Nairobi National Park, along Mombasa road then Uhuru Highway to the Haile Selassie road roundabout, West along Ngong road to the Kibera Drive junction, along the Nairobi Kisumu railway line to the edge of the Ngong Forest, the whole Ngong forest to Karen Westwood Park area, along the greater Nairobi boundary to the National park. Map No. 3 shows the boundary as described above and the dominant land-use activities in Kibera Division.

Map 3: Location of Sample Areas of Residence



Source: N.C.C (1973)





### **3.3 Historical Background of the Kibera Division Settlements:**

Historically records show that between 1912 and 1918 the area now covered by Kibera Division was a military reserve administered by the Kings African Rifles (KAR). This land was later after the first world war given to the Nubian soldiers from Sudan of this regiment who could prove 12 years service. This is a record of the first "site only" settlement project undertaken in Nairobi. Water to this settlement was supplied from the chiefs camp, situated at the present site of the District Officers office on Kibera drive. The total population of the settlement by 1917 was 600 persons. It is only after 1928 that these settlement in Kibera subject to civil administration. Any new settlers in the area were required to prove their relationship to the original Nubian ex-servicemen. In 1933, the administration pressed for the removal of Kibera settlements, arguing that the Nubian were "tenants at the will of the crown". The Carter Land Commission recommended gradual eviction with compensation for these settlers. There was a proliferation of Meru and Kikuyu herdsmen employed by the Sudanese, the beginning of tribal infusion in Kibera Division.

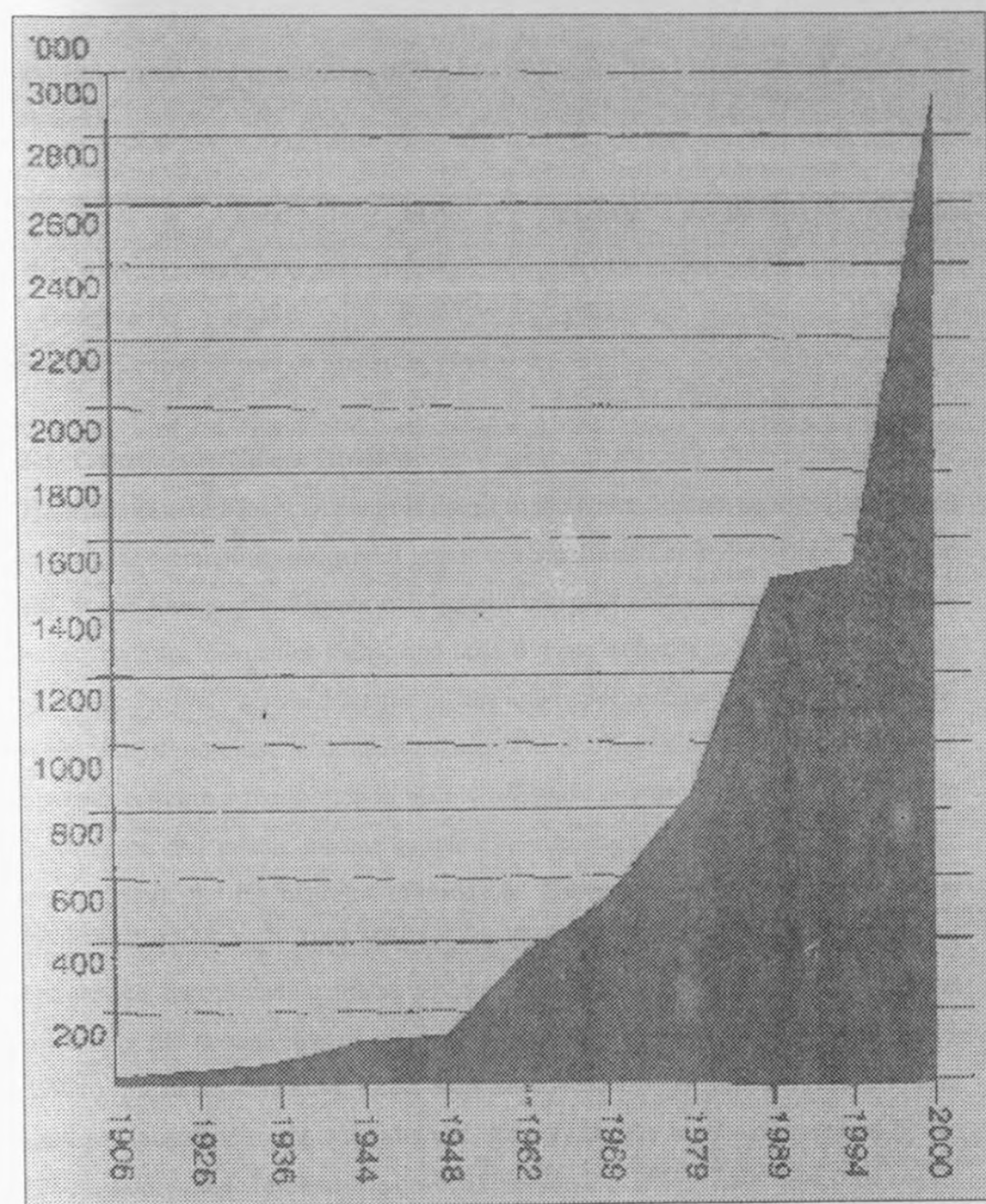
In 1952 the state of emergency was declared. Later there was an influx of workers to Nairobi from the Western regions of Kenya to replace the Kikuyu's who had been sent to "reserves" by the British colonialists. Kibera received a large number of new migrants, settling in the area between Ngong road and the Mutoine River valley. In 1954, the working party on illegal squatters formed by the now operational Nairobi City Council (Nairobi was declared a city in 1950) suggested Kibera for a site and service scheme. After the end of the emergency period a new wave of migration by the now emancipated Kikuyu's was seen, and a wave of house building and cultivation in the Kibera settlement. In 1963 the city boundary was widened to include Kibera settlements. The City's Town Planning authorities then prepared a development plan for Kibera comprising the residential areas. Between 1963 and 1968, the National Housing Corporation built 93 tenant purchase houses, 15 mortgage houses and 130 self help houses in the area, the present day Kibera estate and Fort Jesus. The Ministry of Lands however had ruled that Kibera should be

regarded as state land and that as the original settlers (Nubians) had rights to housing, they would be compensated for demolition and given priority in the allocations. However, the original landlords of Kibera did not accept the offer. The status quo has remained to this day as seen in the same defiant passions rekindled in the recent flare-up of land and rent related clashes seen in the Kibera slums in late 2001. The present day developments of estates was done through piecemeal planning, a trend that has continued to dissipate the Ngong forest. The Kibera slum settlements, the biggest slum development in the country emerged on the banks of Mutoine river, a manifestation of several presumptions that include low cost housing demand outstripping supply, poverty due to the national economic situation, the dearth of employment opportunities and low incomes, inaccessibility to the scarce urban land, a colonial heritage etc.

#### **3.4 Population Growth and Dynamics in Nairobi and Kibera Division:**

The population growth of Kibera Division inevitably corresponds to that increase and demographic trends of the larger Nairobi environment, and transcends all age groups including the elderly. A feature of the post-independence period has been the movement of people from the rural areas to Nairobi. The main sources of short-distance migrants are the districts of Central Province, while long-distance migrants come from the Eastern, Western, and Nyanza Provinces. The 1989 census put the city's population at 1.3 million, 80 per cent of whom are accommodated on 20 per cent of the land.

Figure 6: Nairobi's Population Growth, 1906-2000



(Source: Obudho and Aduwo, 1992)

According to the 1999 Population and Housing Census, Kibera Division apart from the Kibera slums has a population of 25,882 people distributed as shown below:

**Table 8 : Area and population of the rest of Kibera Division (without the slums) by Sex:**

	Total	Male	Female	Density	Area (km
<b>Karen</b>	9,764	5,651	4,113	358	27.3
<b>Langata</b>	16,118	9,585	6,533	362	44.5

Source: Central Bureau of Statistics, 1999.

### 3.4 Transport in Kibera Division.

Transportation in Kibera Division is linked to the wider Nairobi as trips link persons to economic activities, residential areas, to social facilities and services, recreation etc. Today transport in Nairobi can be split into five components: private vehicles, buses, matatus, commuter trains, and taxis. Private vehicles in Kibera Division are almost exclusively reserved for the middle and upper income groups because of the high cost of purchase and maintenance. The KBS, which has over 300 buses, operates commuter transportation mainly oriented towards the part of Nairobi where low-income and middle income people live. Although the fares are quite low they are still high for the majority of residents. The matatu is an African invention. Originally private taxis, they offer regular services with better frequencies than the bus service, thus providing a relatively quick means of transportation to the CBD and increasing the accessibility of many of the outlying areas (Aduwo, 1990; Obudho, 1993b). Recently, commuter trains were introduced by the Kenya Railway to help ease transportation to the sub-urbs and this service has been well received by the Kibera slum village residents (Aduwo, 1990; Obudho 1993). Taxis have little impact on the mass transportation systems in Nairobi, because they have primarily geared themselves to tourists and the rich (Ndegea, 1995). Despite all these urban transportation systems, a lot of trips are still undertaken using non-motorized forms



of transport - walking - even over long distances, for example Kibera slum villages to Industrial area as the center of employment opportunities.

The inherited transport patterns (a colonial legacy), together with the additional travel generated mainly by an increased population, exerted demands on the urban form and its infrastructure that they were ill equipped to meet. These are similarly felt in Kibera Division as well as other parts of the City of Nairobi. A major problem here has been the centralization of the civil service, commerce, and other service activities in the CBD and industrial area, where it is estimated that over 75 per cent of commuters from Kibera Division are employed. Much of the employment in wholesale and retail trade, restaurants and hotels, transport and communications, finance, insurance, real estate, and business services is located within the CBD. The CBD has for a long time been subjected to numerous traffic problems, which are exacerbated by a lack of space in its vicinity. The post-independence period also witnessed a relaxation (not by design) of traffic regulations, parking restrictions, and land-use control. Even more important is the fact that a large percentage of low-income users of public transport now live further away from the CBD. Expansion of the city to the east, south, and north has not been matched by an expansion in transport facilities and services. The annual rate of growth of daily passenger journeys is currently estimated to be almost 6 per cent (table 4.6).

**Table 9: Nairobi: Public Transport demand, 1985,1990, and 2000**

Year	Passenger journeys per day ('000)	Growth rate per annum
1985	676	
1990	873	5.82
2000	1,393	5.95

Source: Obudho (1993)

A clear manifestation of the unmet demand for public transport services, that seriously distresses the elderly, is the daily stampede and jostling at most of the city's transport terminals, especially during the rush hours, and the overflowing number of



passengers transported by the existing modes of public transport. Nairobi's transportation problems are due to neglect of maintenance, inadequate investment, poor management of traffic systems, breakdown of road discipline, and failure to develop an adequate policy and planning framework. The various modes are not designed to allow for the frail elderly persons concerns for hand rails, low stairs, ramps, low seats with safety guard rails and other artifacts. The social etiquette of allowing the elderly seats has been eroded as has many traditional values towards the elderly.

As a general rule, the interconnectional roads are constructed and maintained by the Ministry of Works while the primary and secondary roads are the responsibility of the local authority. Access roads are the responsibility of individual scheme beneficiaries. The footpaths which are located along main roads are maintained by the council. Capital recovery is mainly done by the concerned authority by apportioning costs among the town residents, under the Streets Adoption Act. Standards and quality control begins with the developers who are expected to construct roads to "Adoptive Standards". Separation of street activities to allow for pedestrian walkways, has been totally neglected and often the elderly walk on the motorway, a great accident risk. There are close to 20,000 street lights in Nairobi (NCC,1999), spread along almost 700km. of primary and secondary road network. On current cost estimates, each street light including the pole, the lamp assemblies and cabling, costs in the region of kshs.30,000. In other words the total value of all Nairobi street lights is kshs. 600 million. These would have helped enhance safety by providing light, only majority of them do not work, are switched off or vandalised, increasing the plight of the elderly with reduced sight sensibility. As for the slum villages of Kibera, no roads have been developed as this is an unplanned area, they commute through walking or access the various modes from outlying areas.

### **3.6 Provision of Urban Services in Kibera Division.**

The provision of basic urban services has not kept pace with the rapid growth of the City of Nairobi. The vast majority of the urban poor do not have access to such

services, which are inadequate and not properly maintained. Whereas the urban population has doubled in size during the past decade, infrastructural development has proceeded far more slowly. The result has been an ever-widening gap between the need for and the supply of essential services. This is associated with a rapidly deteriorating quality of life, with particularly adverse impacts on the urban poor who have the poorest access to the existing facilities. Mostly affected are housing, water supply, sewerage, and transport. Access to infrastructure has been dependent on income levels rather than population density, with higher standards of provision in high-income as in Langata and Karen areas than in high-density, low-income areas as in the slum villages of Kibera.

Urban infrastructure services are virtually non-existent in the informal settlements. Residents have no access to electricity. Portable water must be purchased from vendors at prices up to ten times higher than the rate of charged by local authorities. Over 95 per cent of the resident have no access to proper sanitation. People are forced to pay to use a pit latrine shared by approximately 50 people, or use open areas or "flying toilets". The city authorities have long stopped collecting refuse, so garbage lies permanently in stinking heaps, often blocking the drainage channels. The lack of sanitary facilities to dispose of human waste and garbage has led to serious environmental and health hazards, including a higher incidence of diseases like typhoid, cholera and tuberculosis. Corruption is rampant in the informal sector. The vast majority of people living in this sector are tenants who are forced to pay exorbitant rents to local chiefs and wealthy absentee landlords. The local chiefs and their henchmen have created a "Mafia style system" where residents are required to pay a bribe in order to get permission to extend or build a shack.

### **3.61 Housing.**

Racial segregation was promoted by the early European settlers and this resulted essentially in ethnic tripartition of Nairobi, with the Europeans overwhelmingly inhabiting the north-western and western areas of high rents and land values, and the Asians predominating in the north-eastern parts, while Africans were relegated to the

densely populated areas to the east and south. This manifests itself today in the Karen area of Kibera Division that is inhabited by mainly Europeans and a few rich Africans. In Nairobi the main zones of poor housing are in the Dagoretti, Langata (Kibera), Kasarani, and Makadara divisions. Informal settlements occupy 6 per cent of the residential area of Nairobi, but house 55 per cent of the city's population, a total of 750,000 people (Alder, 1994) growing to an estimated 2 million persons by the year 2000 (AMREF, 2000).

Housing demand (or effective demand) expresses the desire for housing supported by the economic ability to satisfy the need. Estimates in Nairobi show housing lags behind the estimated need. Illegal housing built by the people themselves, the urban poor, who vastly experience this housing deficiency, has made up these deficits in Nairobi. Being illegal settlements, the local authority sees no reason to provide infrastructure services. The unauthorized developments often conflict with the development plans and are not in phase with programmed extension of services. The illegal nature and lack of legal land tenure results in buildings erected of the most temporary of materials in order to reduce the loss should the owner be dispossessed or the dwellings demolished. The households in these informal areas have poor access to communal and infrastructural services such as water, sanitation, and solid waste disposal, and are thus exposed to ill-health and disease. Frequent demolitions of temporary dwellings destroy the lives and housing of Nairobi's poor. The shelter problem is intensified by the exorbitantly high rents for single rooms.

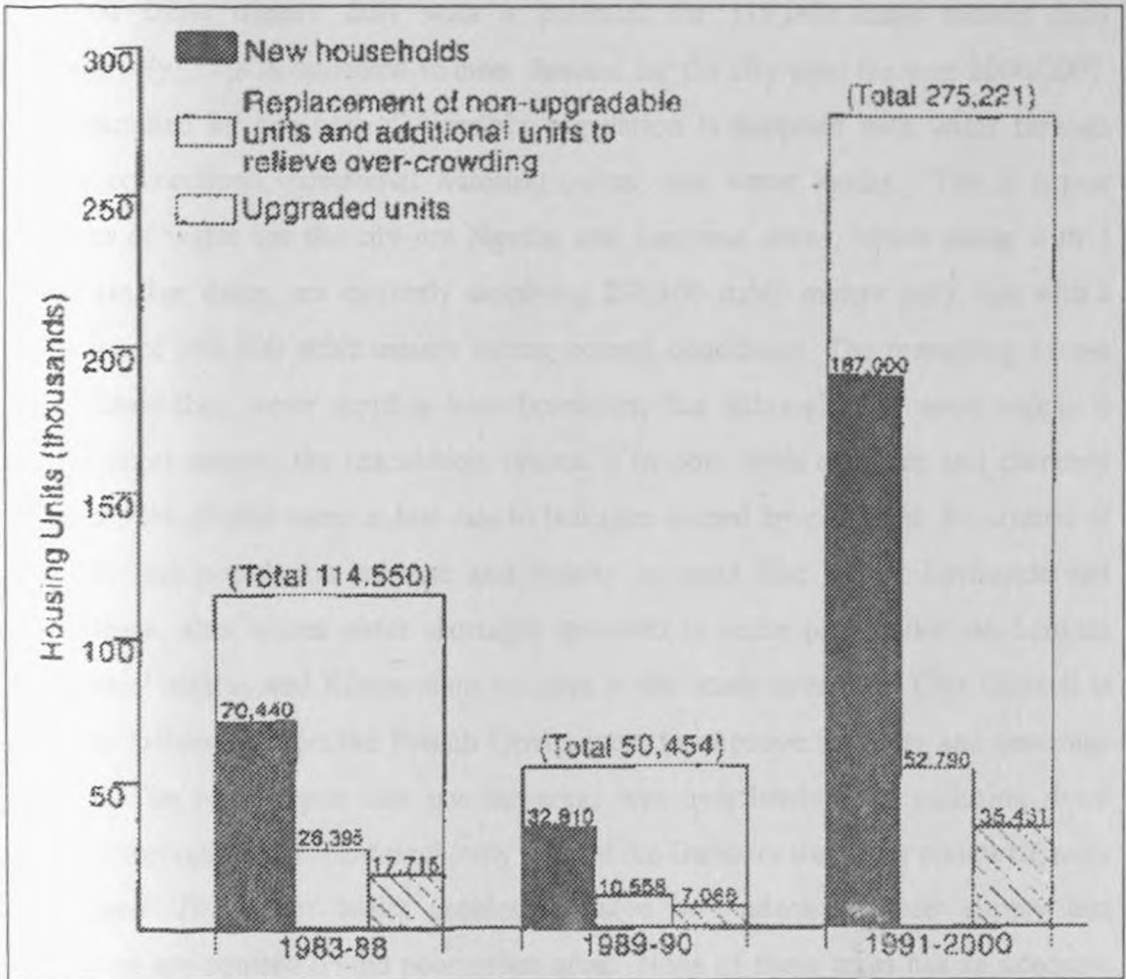
Housing development problems in Nairobi are a result of high rates of urban growth; a lag in the development of the urban infrastructure that supports housing development; the low purchasing power of the majority of urban households; and a lack of appropriate building standards owing to restrictive building by-laws. Constraints on the improvement and supply of housing in Nairobi include the limited supply of serviced land; rapid growth of unserviced peri-urban settlements in urban centres such as Githurai, Ngong, Machakos, and Kikuyu; and serious restrictions on access to formal housing finance, because of the strict lending criteria of financial

institutions. Nairobi is suffering from a shortage of cheap and affordable housing. The public and formal sectors do not build enough houses to cater for the need arising from the increase in population. About 25,000 housing units are required annually (fig. 4.8) but the public and private sectors together have built, at most, 3,000 "standard" housing units per annum in recent years.

The NCC policy is to formulate and adopt realistic and performance-oriented building standards, especially in the area of low-cost housing. In publicly constructed houses, the housing standards are usually followed. Formal private housing schemes also observe the prescribed building standards. However, in private housing, especially in informal settlements but also in middle-income housing areas, standards are not adhered to. The issue of standards is closely linked to affordability. The requirement for standards that are comparatively high has often led those who cannot afford such houses to resort to units that are substandard, but the penalties for not building according to the standards are not enforced. At the policy level, attitudes and approaches to building standards seem to be changing. This has been demonstrated by the Council's use of cheap building materials designed by the University of Nairobi. In addition, the NCC has not tried to interfere with the housing upgrading initiatives, for example the activities of the Undugu Society of Kenya in Kibera slum villages. At the central government level, there is a consensus that the building regulations should be revised.



**Figure 7: Nairobi: Housing Needs, 1983-2000**



(Source: Mazingira Institute, 1993)

### 3.62 Water resources.

Water supply in Kibera Division is invariably connected to the supply system for the whole of Nairobi city. In the past 20 years, the water supply and distribution system of Nairobi has been expanded significantly to meet the growing population demands. The Minister for Local Government (Hon. Sam Ongeri, 1999) says the City of Nairobi has enough water to meet its demand. Its water source capacity is 480, 000 cubic meters a day against a daily demand of 380,000 cubic meters daily (year 2000 gross demand was approx. 371,000 cubic meters daily). The latest water sector projects between 1984 and 1995 resulted in an increase in the total available supply



to Nairobi from 130,000 cubic meters daily to 190,000 cubic meters daily and from 400,000 cubic meters daily with a potential for 519,000 cubic meters daily respectively. This is estimated to meet demand for the city upto the year 2006/2007. An estimated 89 per cent of Nairobi's population is supplied with water through house connections, communal watering points, and water kiosks. The 2 largest sources of water for the city are Ngethu and Sasumua dams, which along with 3 other smaller dams, are currently supplying 274,900 cubic meters daily, but with a capacity of 346,600 cubic meters during normal conditions. The remaining 11 per cent obtain their water supplies from boreholes. But although bulk water supply is not in short supply, the reticulation system is in poor state of repair and currently around 50% of this water is lost due to leakages caused by old pipes. Expansion of the city and population increase and density in areas like Karen, Lavington and Kilileshwa, also means water shortages persisted in some places like the Langata residential estates and Kibera slum villages in the study area. The City Council is seeking assistance from the French Government to improve its water and sewerage system. The NCC report that raw sewerage was overflowing and polluting rivers passing through Nairobi although only 40% of the Dandora treatment plant's capacity was used. The major health problems related to inadequate water supply and sanitation are centred on the poor urban areas. None of these areas has an adequate water supply. Informal settlements are entirely dependent on public water kiosks. Thus residents of the slum villages of Kibera for example, restrict their water purchases to levels that are barely adequate. The city has a growing problem of water supply which has its roots in the original choice of the site. Nairobi was not originally planned to be a large conurbation and the available water resource was sufficient only for a smaller population. To meet the growing demand, water has to be pumped from locations outside the city. However, apart from occasional water shortages, especially during the dry seasons, the basic problem has been one of distribution. Annual expenditure on water and sewerage declined dramatically in real terms between 1981 and 1987 - capital expenditure by 91 per cent and expenditure on maintenance by 68 per cent (Mazingira Institute, 1993) - and the situation has not shown any significant improvement since then. Greater emphasis on leakage control

and management improvements is an urgent necessity, for example, it takes an average of 12 days to repair a leak resulting in losses amounting to over US \$ 50,000 per day in revenue and wasted water (Makuro, 2000).

One of the major indicators of the quality of housing and hence of the standard of living of people resident in them is the main source of their water.

**Table 10: Nairobi Percentage Distribution of Households by Main Source of Water (1999).**

Source	Pond/Dam	Lake/River	Spring	Well/Borehole	Piped
Percentage	0.4	0.3	0.2	1.9	93.7

Source: CBS, 2002.

In its presentation at the recent Freshwater Conference in Bonn, the Water Supply and Sanitation Collaborative Council (WASH) estimated that the people of Kibera pay up to five times for a litre of water than the average American citizen.

### 3.63 Sewerage Systems.

The sewage produced in urban areas consists of waste water, industrial effluent, and storm water, which may enter sewers through faulty or damaged manholes. The inadequate capacity of existing treatment plants results in the disposal of untreated sewage into Nairobi River and other small streams. This poses a health hazard to users of such streams. Approximately 58 per cent of Nairobi's population is served by the existing waterborne sewerage system, which suffers from a number of problems, including poor maintenance, illegal connections, use of toilets for the disposal of garbage, and deliberate blocking of sewage pipes for irrigation. This system, as at 1995, covered an area of about 208 square kilometers with a total length of about 153 km. divided into the southern outfall trunk sewer and the Kibera trunk sewer.

The remainder of the population is served by septic tanks, conservation tanks, or pit latrines, which contribute to the pollution of groundwater and of piped water owing

to seepage into pipes when the pressure is low. There are no foul or storm water connections to the sewerage systems in the slum and squatter areas. Instead, filthy uncared for pit latrines are used. The sanitation problems are compounded by densities in some housing areas that are higher than those for which the sewerage system was originally planned, and the location of some informal housing in areas unsuitable for residential use.

**Table 11: Nairobi Percentage Distribution of Households by Main Type of Human Waste Disposal, 1999.**

Waste system	Main Sewer	Pit latrine	Septic tank/ Cess pool	Bush	Other
%	48	42.3	6.5	1.1	2.1

Source: CBS, 2002

### 3.64. Solid Waste Disposal.

The collection and disposal of solid wastes in Nairobi has become increasingly infrequent. It is estimated that, in 1994, 800-1,000 tonnes of refuse were generated per day, out of which fewer than 200 tonnes were collected. The NCC has the responsibility of collecting and disposing of solid wastes. However, lack of resources, especially vehicles, and the general apathy of residents have led to uncollected waste piling up in several parts of the city. Some private companies now operate, and privatizing waste collection has been considered as a possible remedial measure, but has not yet been adopted as official policy. As Nairobi grows and the volume of refuse increases, the NCC should promote reclamation, re-use, and recycling of materials as a way of reducing the problems. Such activities could create employment for a section of the population as well as being a source of raw materials.

### 3.55 Energy in Nairobi and hence Kibera Division.

**Table 12: Nairobi Percentage Distribution of Household with Main Type of Lighting Fuel, 1989 and 1999.**

	Electricity		Paraffin Lamps		Other	
Year	1989	1999	1989	1999	1989	1999
%	42.5	52.6	54.4	45	3.1	2.4

Source: CBS, 2002

The prevalent source of lighting energy (Table 12) is electricity widely used in the area of study apart from the slum residences of Kibera, where the majority reported inaccessibility being informal developments. Paraffin though was the dominant energy source (Table 13) used for cooking even in the study area, being cheap and easily transported/accessible. These are all indicators of standards of living and are here used to have a feel of what the elderly in society use.

**Table 13: Nairobi Percentage Distribution of Households by Main Type Cooking Fuel; 1989 and 1999:**

	Firewood		Paraffin		Charcoal		Other	
Year	1989	1999	1989	1999	1989	1999	1989	1999
%	2.9	1.8	68.4	75.7	8.7	4.1	20	18.4

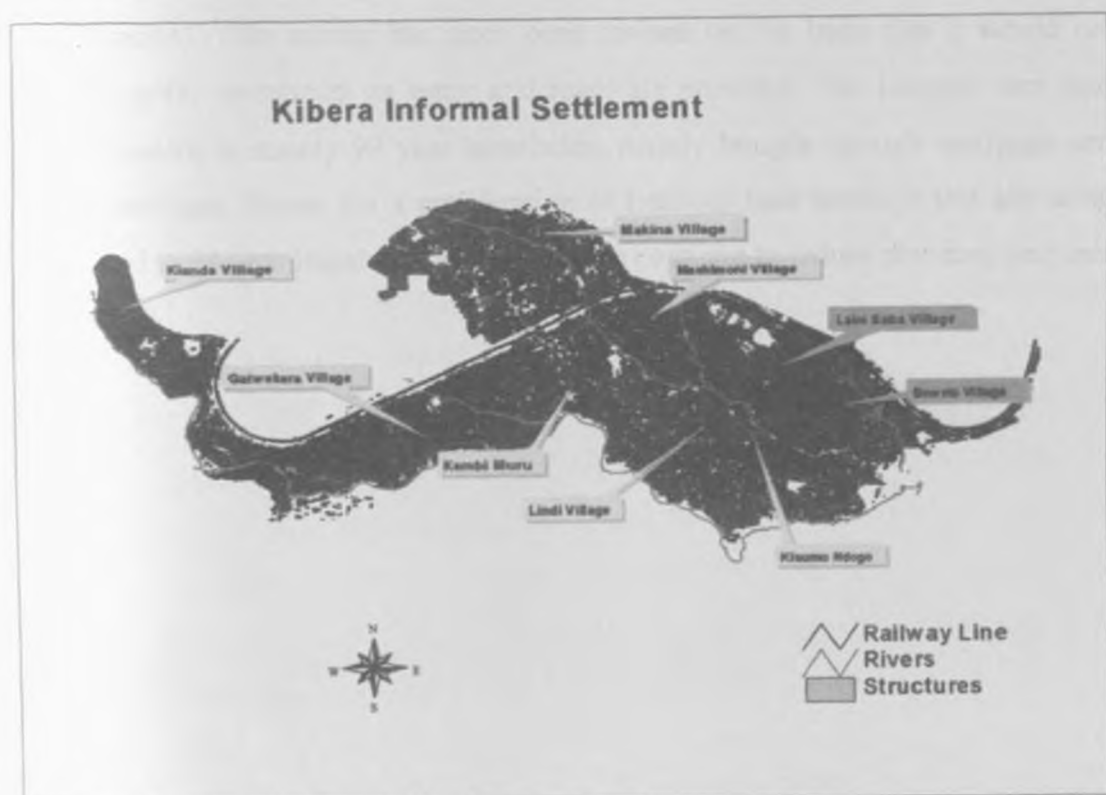
Source: CBS, 2002.

### 3.7 Land Administration:

Historically, the British colonial government declared vast tracts of land in the colony, including land occupied by indigenous Africans, to be crown land, property of Her Majesty, the Queen of England. It also created “native reserves” in which indigenous Africans were forced to live in order that the best arable land could be farmed by white settlers. Unfortunately, the new post – colonial government failed to address the land issue, and millions of Kenyans who have been kept on reserves after

they lost their land to settlers remained landless squatters. Moreover due to poverty in the rural areas, coupled with a dramatic population growth, a large influx of landless people migrated to urban areas in search of jobs. Since the state provides virtually no housing for the poor, over the years and until the present, this population has been forced to build one room shacks on undeveloped government land using temporary materials ranging from plastic, polythene and cardboard to mud and wattle as their only means of shelter. The location of the informal settlements of Kibera are shown on Map 4. They still remain there today but are more extensive and densely developed.

**Map 4: The Slum Villages of Kibera**



Source: Director of Physical Planning, 2002.

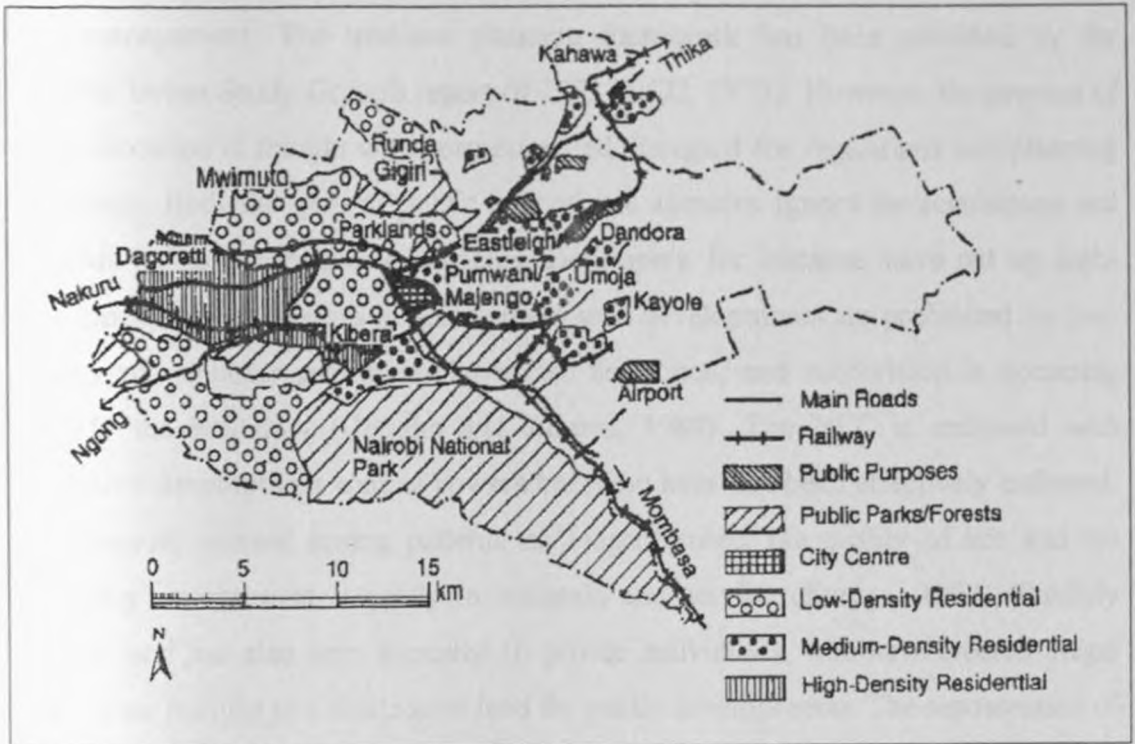
Kibera currently has 13 villages including Makina, Kisumu Ndogo, Gatwekera, Soweto, Kianda, Lindi, Silanga, Mashimoni, Soweto of Laini Saba, Laini Saba, Kambi Muru, Raila Quarry and Kichinjio where nearly 800,000 people live. Yet



Kibera is just one among nearly 100 major and small slums in Nairobi today. and other emerging slum developments like opposite Southlands Estate and Kuwinda in Karen. Like the others in Nairobi, they are severely overcrowded, insecure and unsanitary. An average of 6 people stay in a room that has an average size of 10x10 feet. One-room shanties are sandwiched together so that the densities average 250 units per hectare (versus or compared to an average 25 units in a middle class areas!). The only walkways are narrow dirt paths that frequently flood and are impassable during the rainy seasons.

Karen / Langata forms the South-West part of Kibera Division. It covers an area of approximately 71.18 square kilometers. The area was originally agricultural land until 1979 when the rezoning of the area reduced the minimum plot sizes to 1 hectare (2.471 acres). This zoning has since been revised on the basis that it would not justify capital investment as water and roads are provided. The Langata area land tenure system is mainly 99 year leaseholds, mainly bought through mortgage and tenant purchase. Karen has a proliferation of freehold land holdings that are being converted to 99 year leaseholds as subdivisions continue to reduce plot sizes and user of the land.

**Map 5: The Basic Urban Structure of Present-day Nairobi:**



Source: N.C.C (1973)

Land and property prices in Nairobi reflect the quality of residential neighbourhoods. This pattern has largely developed from the colonial land segregation policies, hence land that was allocated to non-Africans in the western part of Nairobi, (e.g. the Karen area of Kibera Division) is highly valued. The pattern has also been affected by the density of people residing in various areas, with high-density areas showing low prices. The CBD has the highest land prices, because of its intensive commercial use. The industrial areas (light industries) also have high land values. Whereas land in the CBD might, in 1994, have a value of KSh10 million per acre, its price in the light industries area was KSh1 million per acre. The prime residential areas are generally located in the western part of Nairobi, although parts of the northern section of the city have equally high land values. The eastern and northern parts of Nairobi generally have lower land prices. The eastern part of the city is generally flat land with black cotton soils, which are less attractive to residential development than the cooler, hilly areas in the west.

Access to land in Nairobi is controlled by legislation governing its use, allocation, and management. The land-use planning framework has been provided by the Nairobi Urban Study Group's report of 1973 (NCC, 1973). However, the process of land allocation is fraught with corruption and disregard for regulations and planning standards. Both the general public and private agencies ignore the regulations and this has led to irregular developments. Developers, for instance, have put up high-rise blocks and extensions in areas where such developments are prohibited by law. Slums and squatter settlements have also developed, and subdivision is occurring outside the boundary (Obudho and Aduwo, 1989). The NCC is endowed with extensive development control powers but these have not been effectively enforced. As a result, current zoning patterns no longer protect the quality of life and the resulting environment is costly to maintain and service (Karuga, 1993). Publicly owned land has also been allocated to private individuals, who have erected illegal structures, leading to a shortage of land for public developments. The repossession of such land has met with political resistance, as the individuals allocated such land have called on their patrons for support. The Nairobi City Convention held in 1993 recommended a special task force to deal with land use and allocation procedures to help ensure that planned developments follow the legal guidelines (Karuga, 1993).

### **3.8 Recreation and leisure.**

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 centres 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; 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.

## **CHAPTER FOUR: CHALLENGES AND OPPORTUNITIES TO THE AGEING POPULATION IN KIBERA DIVISION:**

### **4.1 Introduction:**

The study in this chapter will address the research question on the special characteristics and needs of the ageing population in Kibera Division. The study findings and analysis are arranged in the following sub-topics as related to the ageing population in Kibera Division:

- Quality of Life of the Elderly
- Income poverty and the aging population
- Access to Services and Social Infrastructure
- Barriers to the Elderly in the Built-up Environment.

### **4.2 The Quality of Life of the Ageing Population:**

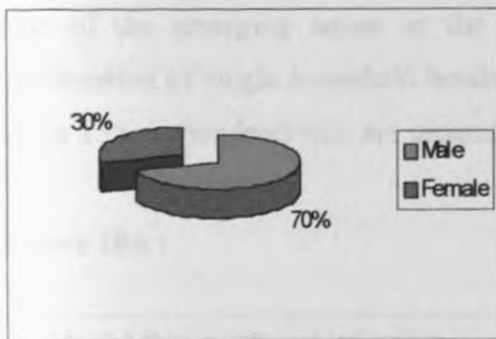
#### **▪ Age Specific Indicators.**

The percentage of "aged" (over 60 years olds) headed households below poverty line is indicative of the extent of poverty among a group with often qualitatively different requirements in terms of poverty interventions. Wage equity by age – the ratio of persons over sixty to those in the working age wage rates for all employed workers, education by age differences, the participation rates, owner occupied housing and asset ownership by age are measures to facilitate equitable distribution of employment opportunities and remuneration and to promote full participation of the aged. They point at structural problems in the labor market which may reflect inadequacies in educational or training opportunities for the aged, discriminatory behavior by employers, or lack of effective legislation and enforcement. It also influences income and labor for participation directly. These also directly affects the earnings of the aged, measures the access of the aged to land tenure rights. It reflects the existence of barriers to the aged in acquisition of assets and property, productive and non-durable goods.

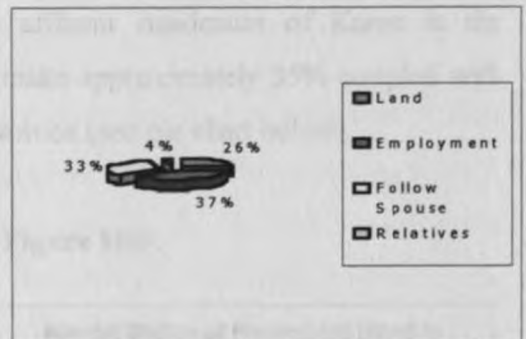


The two extreme areas of Kibera slum villages and the Karen area are compared here. From the field survey, the sex of the ageing population from the slum villages of Kibera is found to be approximately 70% male and 30% female. The predominance of males can be justified by the fact that the main reason why the household heads came to Nairobi was to seek employment and land to build a shelter, both effectively male dominated activities. This is depicted in the chart showing sex of household head vis - a - vis that of reason for coming to Nairobi shown below. Again approximately 67% of the respondents were engaged in economic activity as compared to approximately 33% who were not.

**Figure 8A: Kibera: Sex of Household head**

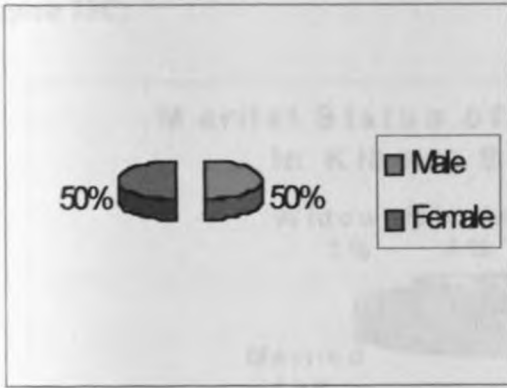


**Figure 8B: Kibera Respondents: Reason Coming to the area**

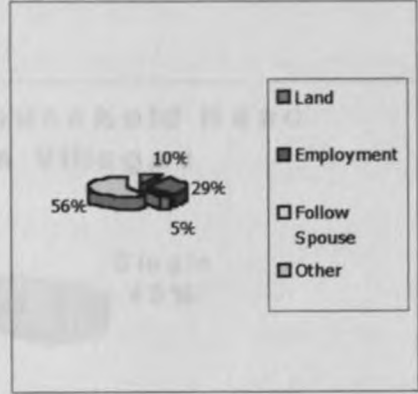


This is in contrast to the field results for the Karen residences that depict a fifty/fifty percent male/female ratio. Here approximately 62% of the respondents are over the official retirement age of 55, and approximately 60% of them came to this area for other reasons like retirement homes, to enjoy the climate etc and only 29% were seeking employment. The Karen respondents reason for coming to the area (pull factors) cannot thus be gender defined as their proportion is the same. This is shown in the charts below.

**Figure 9A: Karen: Sex of Household Head**



**Figure 9B: Karen: Respondents Reasons for Coming to Area.**

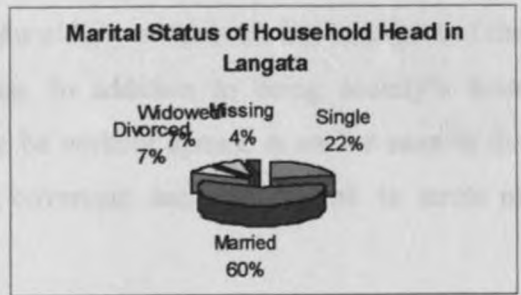
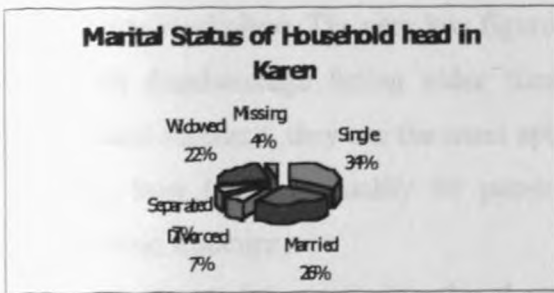


• **Marital Status.**

One of the emerging issues in the more affluent residences of Karen is the proliferation of single household heads that make approximately 35% coupled with about 15% respondents who are separated/divorced (see pie chart below).

**Figure 10A :**

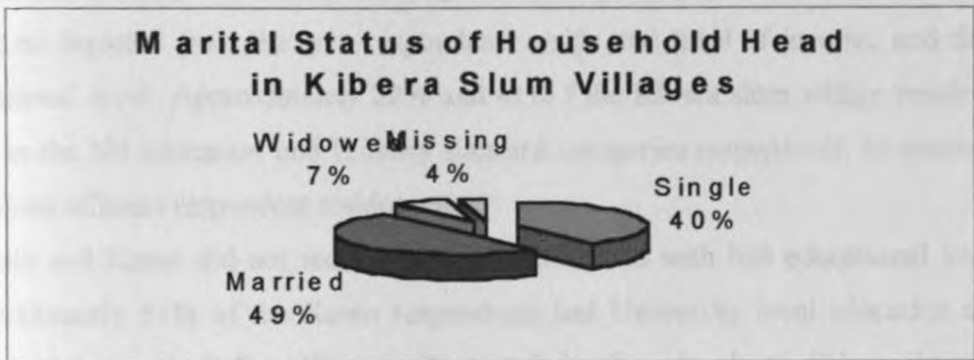
**Figure 10B:**



This can be attributed to the break-down in the traditional societal norms of family cohesion for urban individualism, caused by urban trends especially among those well-to-do. Isolationism and depression sets in also recorded among the Karen resident respondents as will be seen later. This contrasts to the situation in the Kibera slum villages where approximately 70% of the residents were and remained married, maybe to benefit from the additional income that may be accrued from both being

engaged in economic activity. No separation/divorce cases were recorded as seen in the pie chart below.

**Figure 10C:**



▪ **Education and Literacy of the population:**

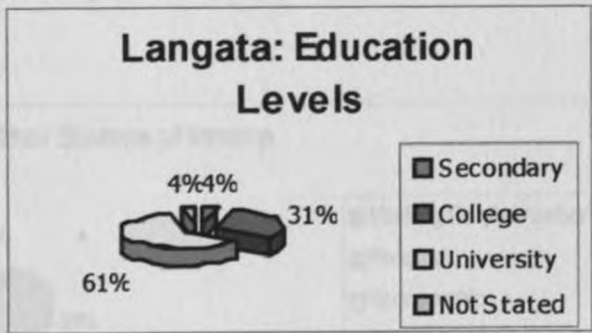
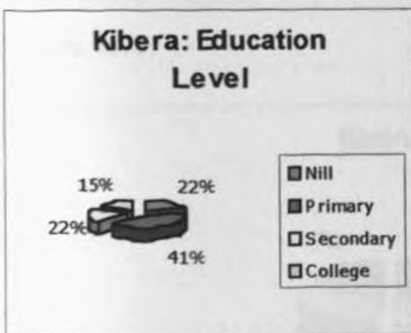
The 1979 census revealed that a small minority of the aged had received formal education instruction. 75% of men aged 55 and over, and 94% of women in this age range reported no educational training. Fewer than 2% of all aged Kenyan's had reached the secondary level of schooling – hence lacking the skills needed in the evolving workplace. The very low figures for elderly women are but one facet of the overall disadvantage facing older females. In addition to being society's least educated segment, they are the most apt to be without spouse as earlier seen in the study; least likely to qualify for pension coverage; and most at risk in terms of economic insecurity.

To provide a picture of educational provision and take up, net enrolment rates, illiteracy rates, pupil-teacher ratios and drop-out rates are used. The field survey revealed low school attendance and high drop-out rates in the poor areas of Kibera and are due to: Need for school-age children to help in home based enterprises; teenage pregnancies; lack of schools and/or discriminatory admissions and policies; prohibitive costs of education, fees, uniforms, books and transports; overcrowded classrooms, poor lighting and ventilation.

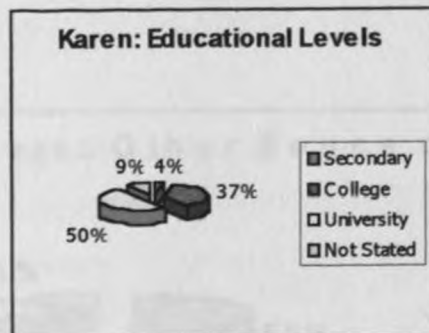
The composition of the different income group levels in terms of education, skills and experience is related to the average income levels. This also reflects the productivity of the work force. The pie charts capture how majority in the high income areas of Karen and middle income areas of Langata have attained high educational standards. There is a strong relationship seen between the standard of living as depicted from the area respondents reside and level of income, and their educational level. Approximately 22% and 41% of the Kibera slum village residents were in the Nil education and Primary standard categories respectively. In contrast, The more affluent respondent residences of Langata and Karen did not record any household head with Nil educational level. Approximately 51% of the Karen respondents had University level education and 37% had been to College. This is illustrated in the pie charts below showing education level of respondents from Karen, Langata and Kibera slum villages.

**Figure 11A:**

**Figure 11B:**



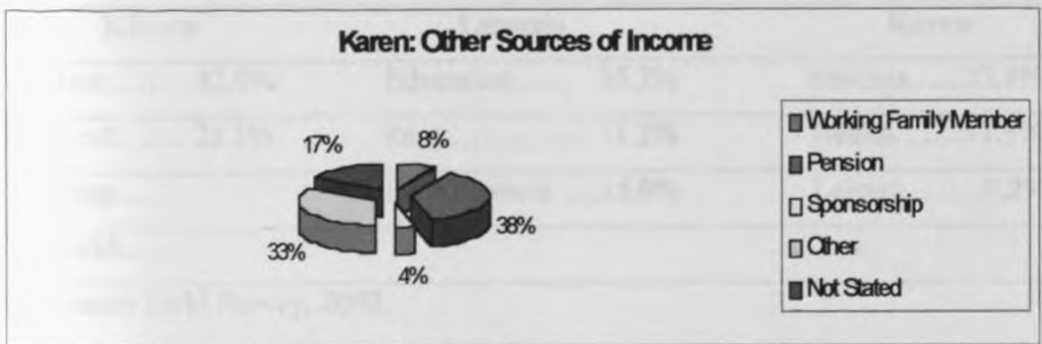
**Figure 11C:**



• **Analysis of Economic Parameters .**

The field survey found approximately 73% of the Karen respondents to be earning over Kshs. 100,000 per month, and the Langata respondents, about 92% earned between Kshs. 50,000 and Kshs. 100,000 per month. This is in sharp contrast with the Kibera slum village dwellers where approximately 63% actually stated they do not earn any monthly income, and approximately 33% earned less than Kshs. 2,000 per month. Thus almost all Kibera slum villagers live below the poverty line given at a dollar per day by the United Nations. The existence of such income disparities means the aged among them live very different lives, with entirely different opportunities and constraints to life, hence requiring different interventions, which this study aims to spell out and justify. An example of the disparity in opportunities open to the different residents can be discerned from the pie charts below showing the different ways the respondents earn any other income.

**Figure 12A:**



**Figure 12B:**

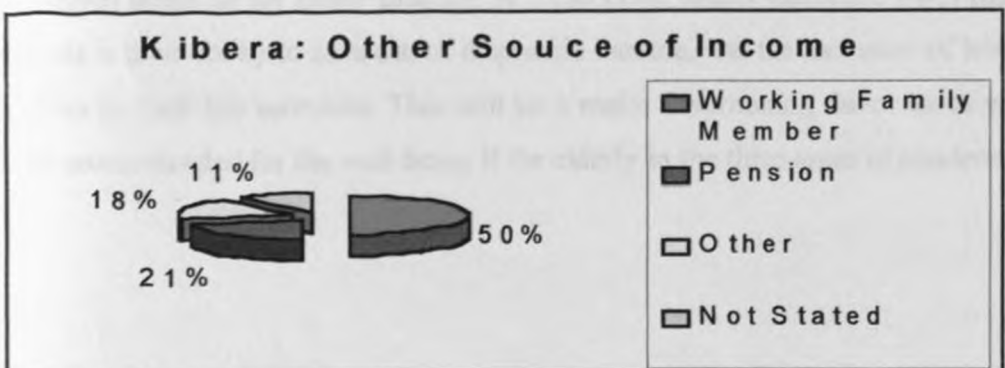
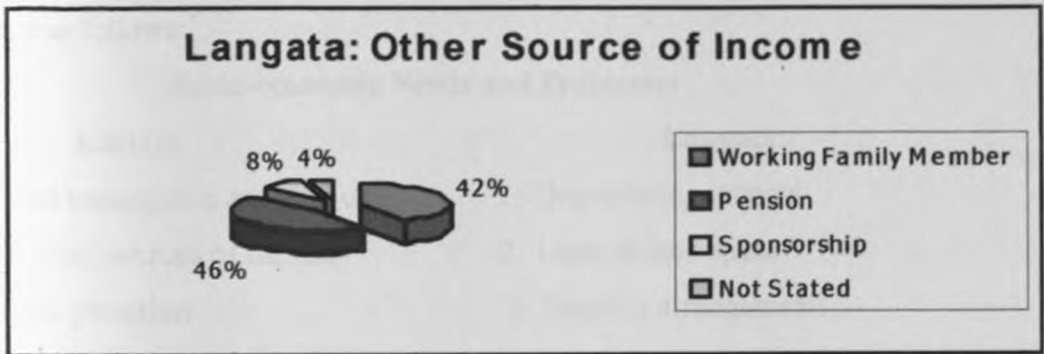




Figure 12C:



• **Expenditure.**

The study analysis of the patterns of expenditure for the respondents in the three residential areas of Kibera slum villages, the Langata estates and Karen residents also showed different priorities and hence amounts spent on various expenditure variables:

**Table 14: Expenditure by Respondents.**

	Kibera	Langata	Karen		
1, Rent.....	42.0%	Education.....	35.2%	Savings.....	23.1%
2, Food.....	23.1%	Rent .....	31.2%	Health.....	11.9%
3, Water.....		Development ....	15.0%	Leisure.....	9.2%
4, Health.....					

Source: Field Survey, 2002.

The Kibera residents first deal with basic needs, whereas Langata residents deem educational needs as the major priority. A remarkable aspect discerned from Karen residents is their ability to save out of disposable income, and the inclusion of leisure activities in their life activities. This will be a major determining factor as to what can be recommended for the well being of the elderly in the three areas of residence.

From the field survey, a list of the main felt socio-economic needs was analyzed and ranked in descending order from the most frequently mentioned by the respondents, and differentiated in the three residential areas of Kibera slum villages, Langata and Karen as follows:

### **Socio-economic Needs and Problems:**

#### **Kibera:**

1. Land tenure, size and land use
2. Limited sources of income
3. Food provision
4. Access to health facilities
5. Few poor congested roads
6. Undeveloped infrastructure
7. Insecurity
8. Moral degradation
9. Illegal activities hence
10. Constant police harassment

#### **Langata:**

1. Depreciating income
2. Lack of land space
3. Security arrangements
4. Police harassment
5. Little development resources
6. Breakdown of social cultural values
7. Neighborhood apathy towards each other
8. Competition and materialism
9. Not involved in development decisions

#### **Karen:**

1. Lack of support systems tailored towards meeting the emotional/psychological needs of the aged.
2. Insecurity being targetted by especially car jackers.
3. Environmental degradation through cutting of trees in the Ngong forest (maybe grabbed)
4. Poor municipal services regardless of rates paid by the residents to the N.C.C.
5. No health facilities nor public transport for especially employees
6. Public servants poorly trained and corruption rampant
7. Elitist community organizations and clubs
8. Chagrined by the influx of lower income cadre of residents due to uncontrolled subdivisions
9. Limited institutional facilities and services for the aged.

### . Household Size and Household Composition.

From the different income group areas of residence, the household size and household composition was analyzed to indicate the pattern and quality of the population, especially when used in combination with indicators of housing units, types and infrastructure of the households. The chart below portrays that larger families with a larger number of children were prevalent in Kibera slum villages, with an average family size of six. Late life security in the family, more hands in seeking the elusive money, limited education and apathy towards family planning were some reasons given by the respondents for the large family sizes. Most families in Langata, approximately 32% of them, had two children while approximately 31% of the Karen residents had no children at all. This can be related to developed country lifestyles, the impact of education and modernization.

Table 15: Number of Children by Residence:

No. of Children:	Percentage of Respondents with No. of Children		
	Kibera	Langata	Karen
a. 0	-	5.0%	31.0%
b. 1	7.5%	19.4%	21.0%
c. 2	10.0%	32.0%	24.0%
d. 3	-	41.0%	8.0%
e. 4	30.0%	1.0%	2.0%
f. 5	18.4%	1.1%	-
g. 6	33.1%	-	-

Source: Field Survey, 2002.

Approximately 36% of the Karen households were also found to have single persons (widow/widower), significantly different from the Langata and Kibera households that had 67% and 72% married respondents living together respectively.

The dependency burden for the different income groups reflects the amount of financial burden on working members of the household to provide food and other

basic essentials for daily living. It is very high in the slum villages of Kibera with modal household sizes of eight (8) persons as compared with Karen that had modal size of three (3).

The percentage of adults who participate in the labor force (labor force participation rate) is analyzed and also used to show the difference in labor market performance among the income group levels.

**Table16: Wage employment in Nairobi for the years 1992 to 2000 .**

	1992	1993	1994	1995	1996	1997	1998	1999	2000
	374,377	375,171	376,112	393,413	400,101	405,913	418,248	420,787	420,633

Source: Statistical Abstract, 2001.

In the year 2000, these were distributed in various industry's as follows:

**Table 17: Wage Employment by Industry in Nairobi - 2000:**

INDUSTRY	No. in Wage Employment
Agriculture and Forestry	7,337
Mining and Quarrying	279
Manufacturing	76,274
Electricity and Water	9,416
Construction	39,102
Whole-sale and Retail trade, Restaurants and Hotels	59,066
Transport and Communication	29,288
Finance, Insurance, Real Estate and Business Services	42,476
Community, Social and Personal Services	157,395
<b>Total</b>	<b>420,633</b>

Source: Statistical Abstract, 2001.

The population of Nairobi at approximately 2.143 million represents 1.3% of the total population of Kenya according to the Statistical Abstract, 2001. From the same

Statistical Abstract, 2001 - the labor force participation rates by sex and age in Kenya are given as follows for the 60 to 64 age group:

**Table 18: Labor force Participation by the Aged by Sex.**

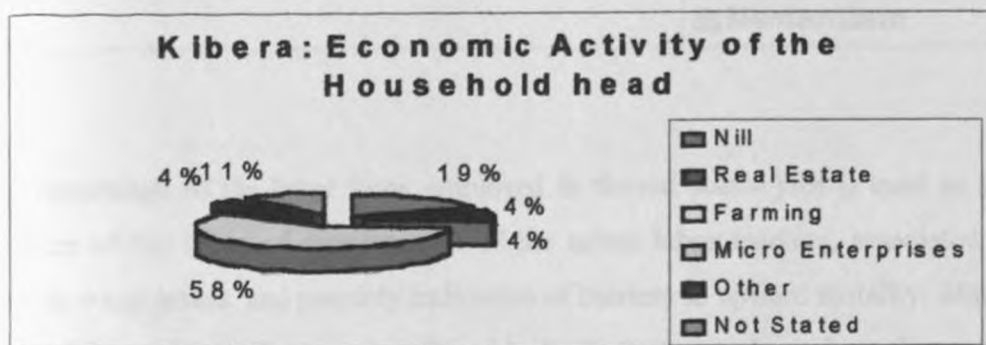
Age Group	Male (%)	Female (%)	Total
60 to 64	85	77.4	80.9

Source: CBS., 2001.

Thus, 85% male and 77.4% female of the approximately 37,400 Nairobi population in the 60 to 64 age bracket can be assumed to be in employment, out of the 420,633 in the various industry's as shown on Table... above.

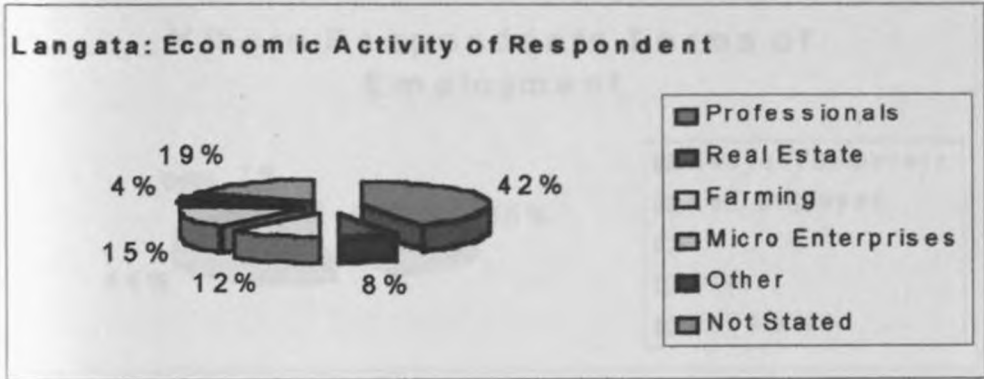
These statistics are further supported by data from the field study showing the percentage in active employment and the status of the employment in the Kibera, Langata and Karen areas. About 50% percent of the ageing population resident in Karen were still involved in active economic activity, approximately 15% as professionals and 19% in real estate. An approximate majority of 40% were self employed.

**Figure 13A:**

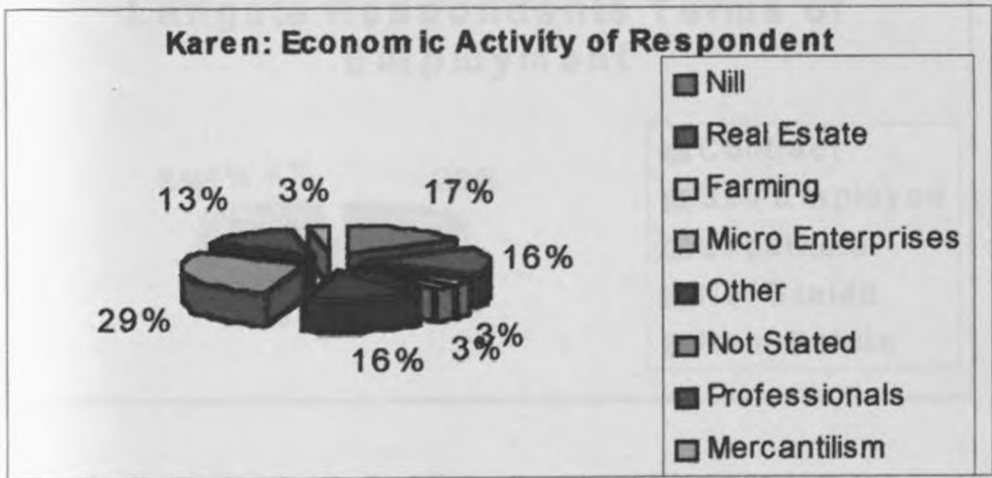




**Figure 13B:**



**Figure 13C:**



The percentage of the labor force employed in formal sector jobs is used as a key measure of the stage of development of the urban labor markets, associated with average wage levels, and possibly indicative of barriers to upward mobility. Majority of the Kibera slum villagers were found to be in temporary/casual employment, as compared to the 67% Langata respondents who were in formal employment and the 70% in Karen who were self employed.

Figure 14A:

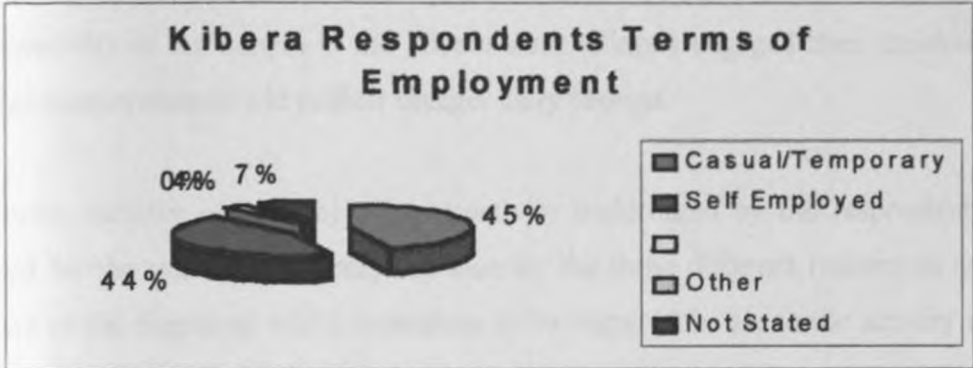


Figure 14B:

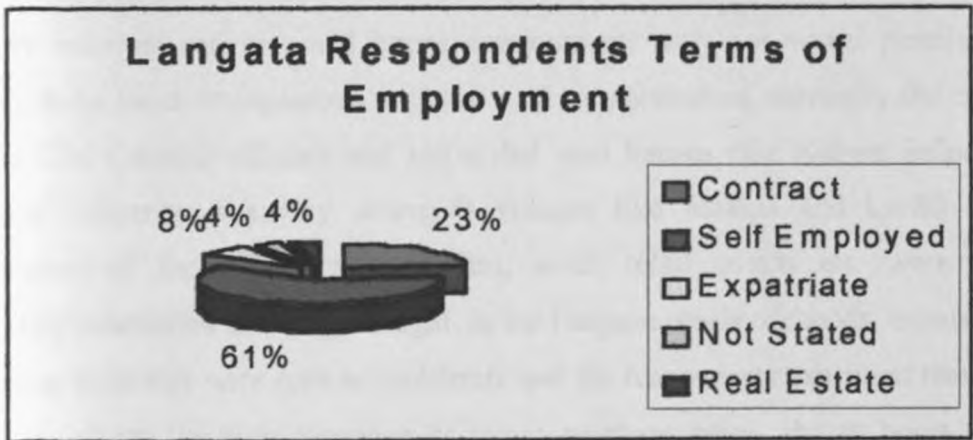
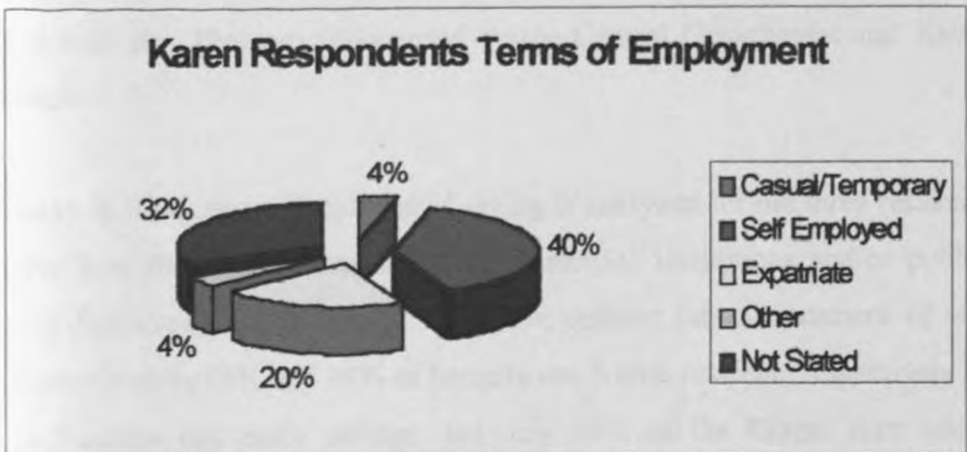


Figure 14C:



Any incidence of child employment recorded or observed is an indirect measure of the inadequacy of educational opportunities, or inadequacy of incomes earned. No incidence of child employment was recorded by the study in Karen and Langata, but 13 respondents in the sample in the Kibera slum villages engaged their children in informal employment to add to their meager daily takings.

The tenure security of the employment activity undertaken by the respondents is analyzed for the whole study area, and also for the three different residences as an indicator of the degree to which incentives to be engaged in economic activity may be suppressed because of inadequate opportunities. In the Kibera slum villages tenure security to economic activity was recorded in the field survey in terms of licences for some kiosks and water selling from the City Council of Nairobi. Majority informal activities and house developments only got verbal permission reported to be loose arrangements with the local administration, especially the chief, Nairobi City Council officials and self-styled land barons (the Nubian influence ancestry influence was very strong in villages like Makina and Lindi). The proliferation of food stalls, petty traders, small retail outlets etc. were thus unofficially sanctioned or outright illegal. In the Langata neighbourhoods, extensions to existing buildings were seen to proliferate and the respondents explained these as a way to off-set the high mortgage or tenant purchase price, and to boost their income. Economic activities incorporated in strategically placed dwellings include hair saloons, retail outlets, butcheries and services like photo-copying, telephone and fax, e-mail etc. They are all licensed by the Central Government and Nairobi City Council.

Accessibility to finances and incidence of saving is analyzed for the three residences to compare how the formal financial sector (financial institutions and/or publicly held equity financing) is providing a supportive context for enhancement of well-being. Approximately 96% and 94% of Langata and Karen residents respectively had access to finances and made savings, but only 16% of the Kibera slum village

respondents were able to save. The most frequent reasons mentioned for this situation in Kibera slum villages were:

- Lack of surplus income to allow saving
- Lack of collateral to support credit
- Fear of unknown bank conditionalities
- Psychologically only accustomed to living from hand to mouth

Security of tenure to land was assessed by this study through the incidence of title deeds by the respondents, and a comparison made for the three residential areas for the reasons for the disparity, and also to discern regulatory impediments if any. This is also related to the access to formal financial resources.

**Kibera:** None of the people owned the land. Squatters on Riparian reserve, Railway reserve, Power way-leave, road reserves and on top of sewer lines. Very hazardous area with steep slopes into the Ngong river. Yet Nubian settlers claim allocation without documentation from the Government of the whole area from Fort Jesus to the Bomas of Kenya. Land later demarcated for the Governments own use to accommodate the former Nairobi West Prison, Langata Barracks, Langata Cemetery etc. and to quasi government institutions like National Housing Corporation who built the estates of Otiende, Moi, Ngei phase one and two etc.; and to private estate developers who built the other estates like Southlands, Onyonka, Rubia Uhuru Gardens etc The Nubians are now marginalized, with the Provincial administration continued intervention in the land, others forced to sell portions and enter illegal leasing arrangements being poor. Majority people now tenants, living in the 13 villages mostly along ethnic lines, through invitation by relatives. Rooms occupy 10x10 feet areas more or less.

**Langata:** Mainly Privately owned residential dwelling houses or maisonnettes on 1/8<sup>th</sup> to 1/4 acre pieces of land. Other subletting from owners or people still paying mortgages. Rents ranging from kshs. 18,000 to kshs.25,000 per month, except for extensions and servant quarters. 82.1% have title documents.

**Karen:** About 75.2 % of the households are in over 5.00 acre pieces of land, mainly privately owned with title documents. Majority houses are one private bungalows and maisonnettes that are owner occupied to 71.1%.

#### **4.3 Access to Services and Social Infrastructure:**

- **Housing:**

Urban poverty manifests itself in various ways. Apart from statistics on household incomes and assets, this study also looked at the number of households living in deficient housing, that lack basic services essential to good health and well-being. Low incomes are the underlying cause of inadequate housing conditions, as seen in the Kibera slum villages, their incapacity to maintain adequately the housing they have, and their lack of access to basic services and amenities - the roads, sanitation and sewerage, the health facilities etc.

Possibly the most important summary measure of the housing market performance is housing affordability. This is measured by the ratio of the median free-market price of a dwelling unit and the median annual household income for each of the three income level groups area of residence. Kibera shows a very low ratio, implying lack of effective demand attributed to limited or insecure property rights, poor housing conditions etc. Despite all this, rent ranges between Ksh250 and Ksh3,000. Rent in the Langata residences range from Kshs. 6000 for the single bedroomed older Otiende Phase Three estate for example, and for servant quarters, to Kshs. 25,000 in Uhuru gardens and other more recently built houses. Some of the more affluent residents have redeveloped the original structures and fetch higher rents and/or enjoy more spacious accommodation. Camp David, Civil Servants and Rubia Estates are examples of Institutional housing in the Langata area. Karen rents had a wider range where rents of Kshs 12,000 to Kshs.75,000 were recorded in the field survey. This compares well with the average monthly income recorded in the survey for the Karen area earlier mentioned in this study.



Figure 15A:

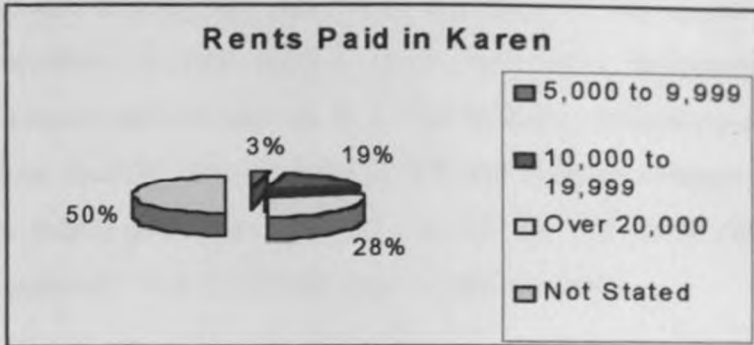


Figure 15B:

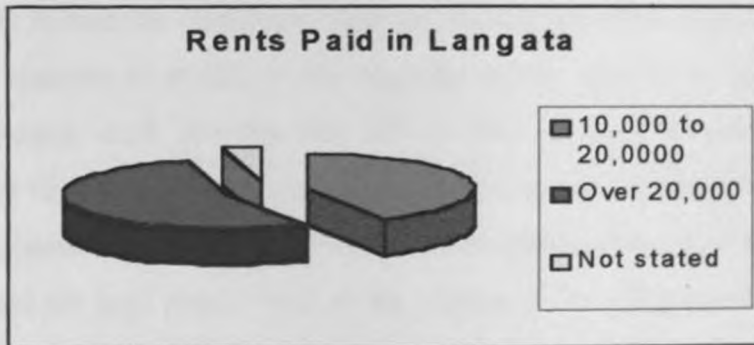
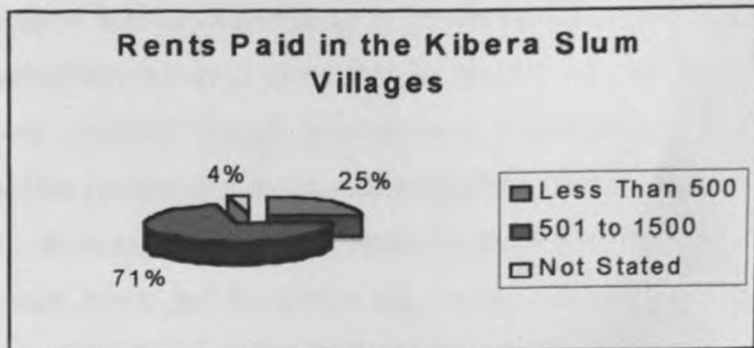


Figure 15C:



Another measure of housing affordability is the ratio of house price to income - the ratio of the median annual rent of a dwelling unit and the median household income of renters. This is also an important measure of affordability, and is low in Kibera, indicating the presence of rent control which may have depressed rates of production, maintenance and investment. It is high in Karen indicating supply side distortions. Median monthly rents of kshs.25,000 and median average salaries of kshs 250,000 per month gives high ratios of 1 to 250 for the Karen residences as compared to the ratios of 1 to 4 for Kibera slum village residents.

Another goal of access to housing is adequate housing for all as indicated by housing production - the net number of units produced (units produced or modified minus units demolished) in both the formal and informal sectors per 1,000 population. This is a traditional measure of ability of the housing supply system to increase and replenish the housing stock, but one that fails to take account of either average household size or the rate of household formation. The survey as par details from a focussed group discussion at the Raila village in Kibera shows that about 6 to 10 new dwellings (rooms) are built every week in the village. The Mugumoini Location Chief also confirms this figures in an interview with the researcher. This does not reflect what was observed in the other older villages like Lindi, Gatwekera, Laini Saba and Silanga in that they are already so congested that there is hardly room for expansion. Increase in number of dwellings is low in Karen, maybe because of the high cost of development materials given that the houses are very large. Only five new dwellings were recorded through observation in Karen as seen from on going developments. Active construction in the area around the Uchumi supermarket in the Langata area was observed, and three new estates in the former forested area next to the Langata Women Prison and the Police dog Section Headquarters. The rate of development in Langata is thus very high, but it was noticed they do little to accommodate the interests of the aged being proliferated with physical barriers.

The goal of adequate housing quality and space is important in analyzing access to housing. This was done in the field survey through calculating the median usable floor area per person to measure the adequacy of living space in dwellings. The assessment looked at overcrowding, quality of the structures, ventilation and lighting and use of space e.g. provision of cooking area. Kibera values are low, a sign of overcrowding where median household sizes of 6 prevailing in the mostly 10 x 10 feet rooms. In these same rooms they have to create room for cooking and placement of household goods.

Another measure is person per room and households per dwelling unit. The Langata estates have spacious three bedroomed houses with a sitting area, dining space, separate kitchen, toilets and bathrooms. With an average 4.5 household size the measure is almost entirely acceptable. The houses in Karen are large 5 to 6 bedroomed mansions, with large sitting lounges, dining areas, twin toilet and bathroom facilities and the measures here cease to make sense as there is abundant space per person. They live lavishly and the study notes the paradox of "an area where few people chase much space and many people chasing little space".

The other measure of adequate housing quality and space is the percentage of dwelling units likely to last twenty years or more given normal maintenance and repair. This indicator is one measure of the quality of housing, particularly of its durability. Permanent structures usually provide better protection from the elements and a higher standard of structural safety, and require a higher level of initial investment. The houses in Karen and Langata are made of permanent material on the walls (stone, bricks), roofs (iron sheet, asbestos, tiles, concrete) and floor (cement, tiles, marble etc) but Kibera slum villages are temporary mud, grass, paper, carton and semi permanent houses of mud and wattle sometimes plastered in cement. They are thus totally inadequate given that they are hardly ever repaired being mainly occupied by poor tenants. There is also the risk of being demolished by the municipal authorities being illegal developments.

Secure housing tenure is also a goal of access to housing, and includes both squatter houses occupying land illegally, and houses constructed without the required building, land-use or land subdivision approvals. This percentage of the total housing stock in the study area which is not in compliance with the current regulations was found to be 100% in Kibera slum villages, and this depresses incentives to invest in housing and indicates difficulty in establishing collateral value for mortgage loans.

- **Water and Sanitation.**

This study undertook to analyse the water situation in Kibera Division as concerns access to adequate supply of water, quality of the water, cost and time issues and gender issues. With the goal being to improve service coverage, the percentage of the households with various means of obtaining water supply is measured. Access to piped water is associated with both better health and time savings associated with less collection time. This has important implications for women and children.

Through a focus group discussion, the survey noted the key water management problems in the slum villages of Kibera as:

- Inadequate water supply infrastructure, hence poor water supply and sanitation
- No clear policy framework nor effective program for meeting the peoples needs, yet the Kibera slum villages have approximately 800,000 persons covering 250ha.
- Delayed and irregular meter readings. Bills issued late and irregularly and water kiosk owners reported being billed for sewerage even though there were no sewer connections within the informal settlements.
- Poor rate of payment to the NCC: Owners cited lack of confidence in meter reading, and irregular billing as reasons for non-payment.
- Numerous illegal connections and leakages were observed in the field survey.

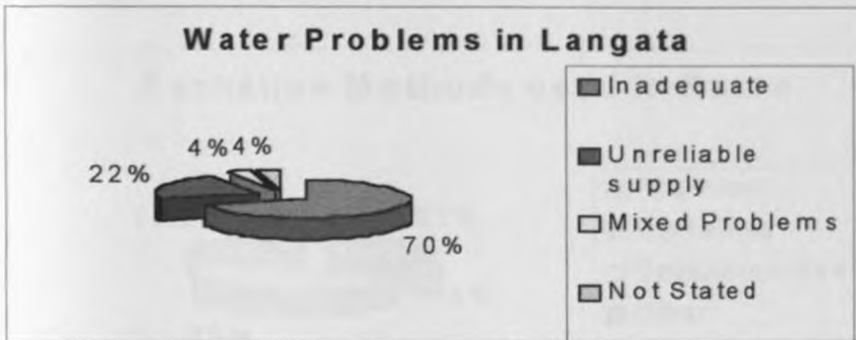
The study findings recorded that on average, each water kiosk sold about 50 jerricans of water a day. The principal customer of individual kiosks were neighbors and tenants. Vendors also buy water from kiosks and sell to neighboring formal

settlements whenever there was widespread water shortage. Water was sold at twice the price recommended by WSD - Kshs 4 per 20 litter jerrican whenever it is available, tariff is kshs 15 per cubic meter and kshs 2.00 per a 20 litre jerrican. During shortages, prices are increased further. Although economic analysis suggests that kiosks may be an unprofitable business venture, this may be discounted by other benefits to resident kiosk owners, such as having water available for domestic use. Non payment of bills and use of family labor by many kiosks also contributes to a better profit margin. Water kiosks also seem to confer added value to other forms of business, such as rental houses and small scale retail shops run alongside these kiosks. The owners were often residents of Kibera, obtaining the operating license from WSD, drawing water from NCC mains with 93% complying with NCC technical standards for pipes (use 1/2 to 3/4 inch pipes). There were few superstructures erected for as many vendors operated from their house windows, with GI water storage tanks and no provision for waste water disposal.

The water supply situation in Langata and Karen: Langata area residents were recorded from the field survey to be approximately 100% dependant on the main water supply from the Nairobi City Council. This was found to be unreliable though, with frequent shortages. As in the larger Nairobi, the study recorded problems in Langata to include water supply deficit and other problems like low pressure in the distribution channels, illegal connections, and lack of maintenance of the distribution channels hence leakages.

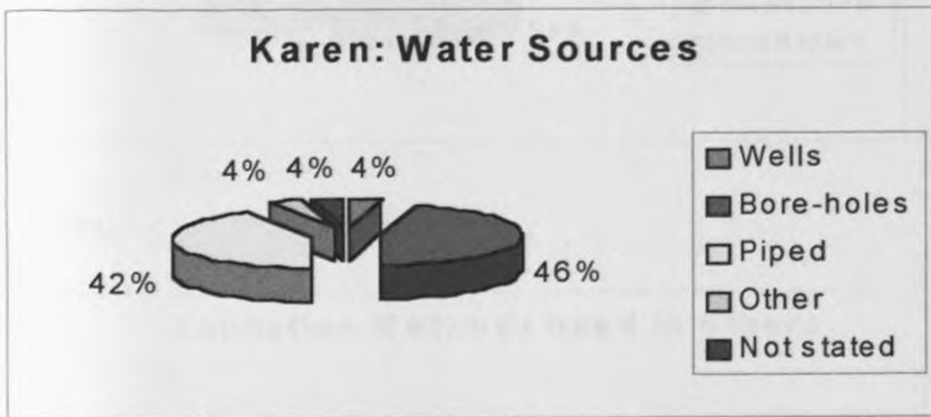


Figure 16A:



Karen residents have only been served from the mains supply of the Nairobi City Council in the last decade, and majority depend on boreholes and shallow wells for their supply as was recorded in the field survey, which the respondents found adequate for their use.

Figure 17:



To ground the research on sanitation in Kibera Division in planning, the study undertook to assess the provision, cost, quality of structures and health aspects and concerns. A preliminary assessment of how population is served by different types of provision for sewerage disposal was done in the field study, and sanitation methods used and their adequacy recorded as such:

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Figure 18A:

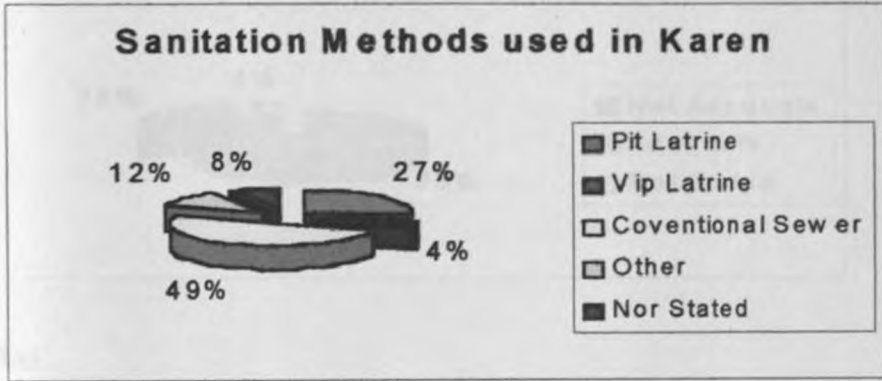


Figure 18B:

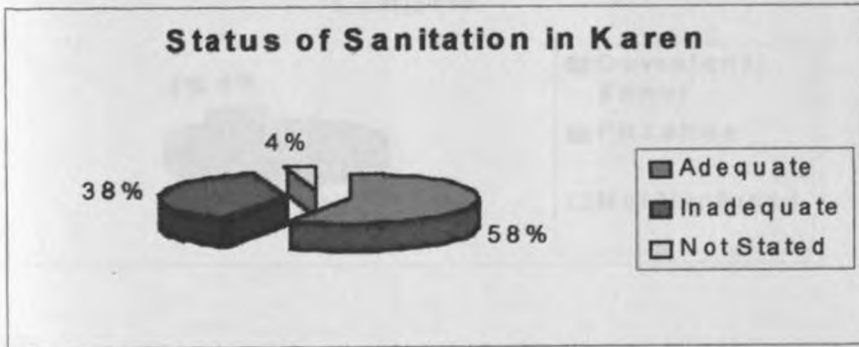


Figure 19A:

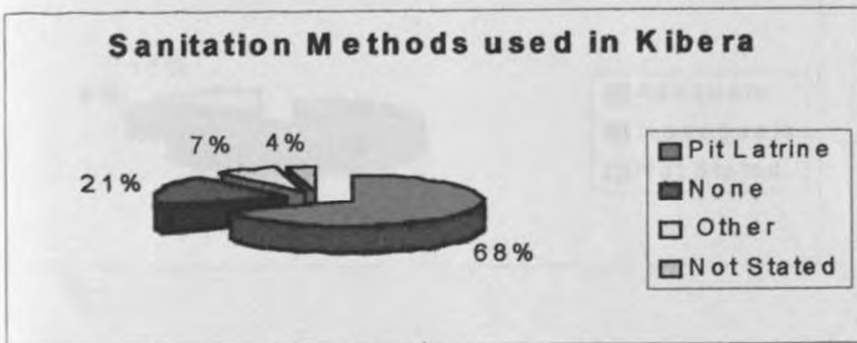


Figure 19B:

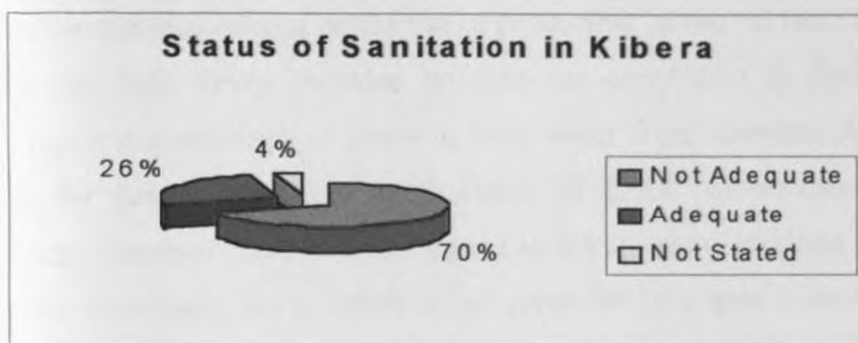


Figure 20A:

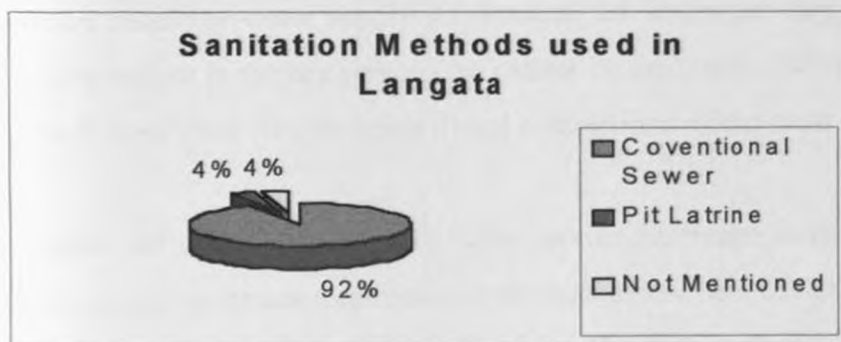
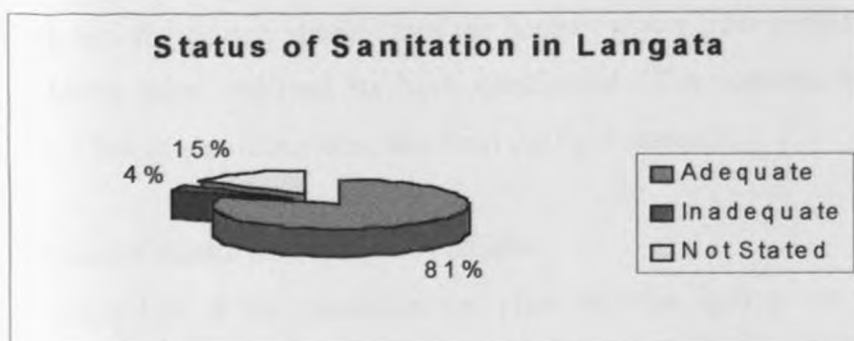


Figure 20B:



The average time spent in fetching water reflects the time constraint imposed on individuals in the household because of inadequate public provision of basic services which has serious implications on the use of productive labour. In the Karen area of residence, the field survey recorded no time use constraints in fetching water. Langata residents complained of hours to fetch water from commercial vendors in Kibera or the slum opposite Southlands estate, all illegal connections to the main supply lines, whenever there is a shortage. The Kibera slum residents recorded an average two hours daily just to fetch water, given the long queues at the water points and unreliable supplies.

Another useful measure of service quality is water supply reliability, the percentage of population receiving water supply on demand, 24 hours per day. The Nairobi supply is intermittent in the dry seasons, so cannot be said to be 100% reliable. It is worst in the Kibera slum villages being illegal connections on the most part.

The reliability of sewerage combined with service coverage indicator provides information on quality of sewerage services through assessment of the percentage of population subjected to periodic flooding/backup. The Kibera slum villages are not covered at all by the conventional sewer, and exhaustion services are expensive being privately supplied. The road network is totally congested and most residences are not connected, and the poverty disables the house owners from maintaining the pit latrines. Many were observed to have overflowed. The conventional sewer to Langata and Karen was found adequate from the field research.

- **Provision of Health Services and facilities.**

A large proportion of the population and especially the aged given their specific health needs have had to depend upon the private sector provision for health care, a primary concern in old-age income security particularly in relation to the rising cost of health care.

Figure 21A:

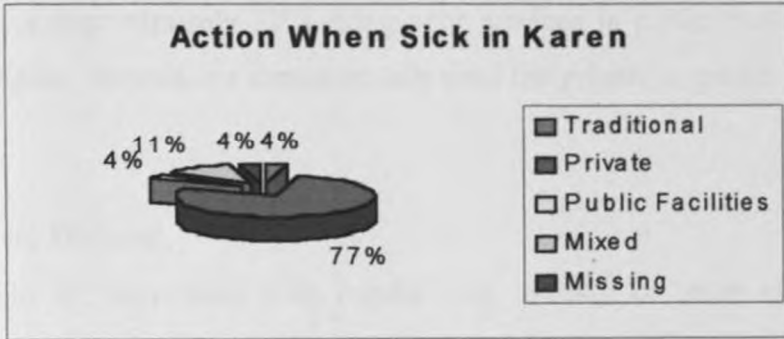


Figure 21B:

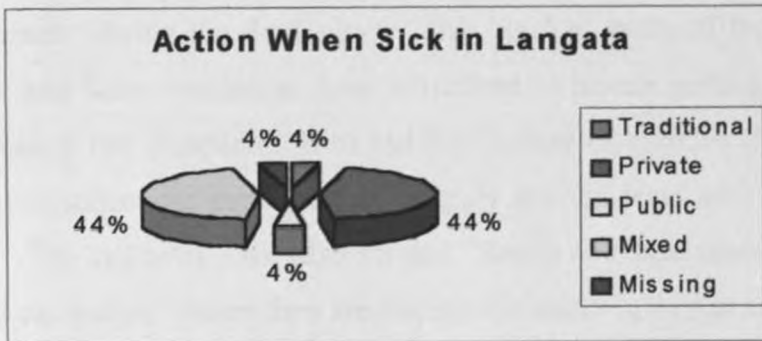
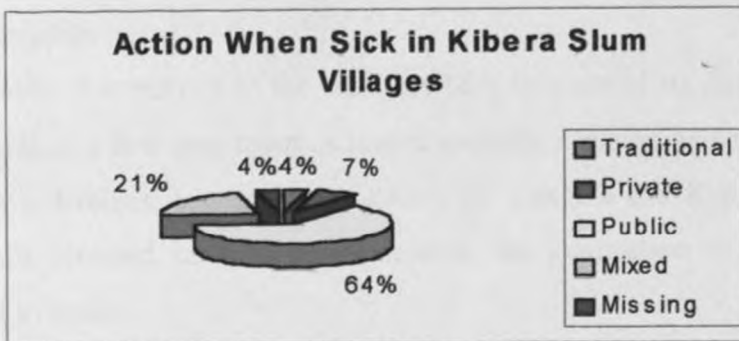


Figure 21C:





A majority of about 64% respondents of the Kibera Slum Village were found to prefer public health facilities, approximately 32% because of cost issues associated with their low income levels. On the other hand a majority of about 77% visited private facilities approximately 53% citing poor services in public facilities as the reason. In Langata, respondents almost equally used the private or public facilities at about 44%.

- **Solid Waste Disposal.**

The percentage of households with regular (e.g. weekly or more often) waste collection is associated with a number of public health benefits, both direct and indirect (e.g. lower likelihood of blockage of drainage systems). Kibera was completely neglected, and mounds of rotting garbage dumped all over were a common observance during the field survey. This blocked many of the makeshift drains. Langata and Karen residences have subscribed to private garbage collection services with mainly two companies, Bins and Roc Refuse Companies. They charge kshs 200 for two collections per week, and supply the residents with "polythene disposal bags". The residents have also formed "Resident Associations" involved with "Clean up campaigns" where they are involved in clearing dumps and methods to create awareness on garbage disposal. They also rehabilitate dumping sites with flower beds for example.

- **Electricity Supply.**

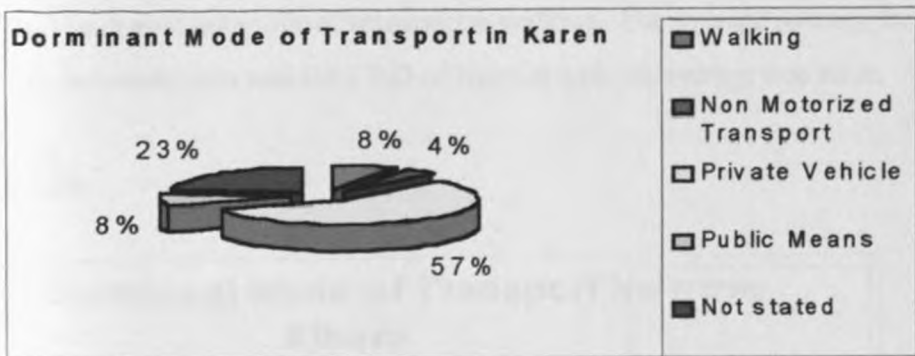
Access to electricity is important to the residents both because of its direct benefits and gaining access is a first step towards tenure security. Defined as percentage of households with a dwelling connection to electricity, Langata and Karen recorded 100% but Kibera returned only 2.9% connection, an implication of the tenure situation alluded to earlier.

#### **4.5 Barriers to the Elderly in the Built-up Environment.**

In this study, access to public transport was used to indicate the degree residents, especially the elderly, are underserved by public transport. The state of pathways,

especially during different seasons and how they support/impe­de income generating activities and social interaction was also analyzed. The study also assessed accessibility of the different residential areas in times of disaster for example fire outbreaks. The access to public transportation here covers the modes, means and terminals as well as the institutions behind provision of transport and management. Karen residents recorded approximately 1% of members of the respondents who rely on public transport for work trips. The Kenya bus service operates a "shuttle service" in the route in "route 24". This is a one hour round service, insufficient for commuters especially being expensive where they charge kshs. 35 for the shortest distance between two bus-stops. The service closes at 7.00 pm which again is too early. The many Tertiary Institutions in Karen thus suffer and so do workers in the homesteads and market outlets who use public means. Through participant observation the researcher noted that this service took care of elderly passengers, allowing them easy access to the vehicles in staircase rails and seat guard rails, allowed only sitting passengers, and was user friendly being comfortable. Matatu route 24 plies the Karen route, but they were observed to be rare and were mainly old rumshuckles hence very slow. The "matatu crew" complained of lack of commuters.

**Figure 22:**



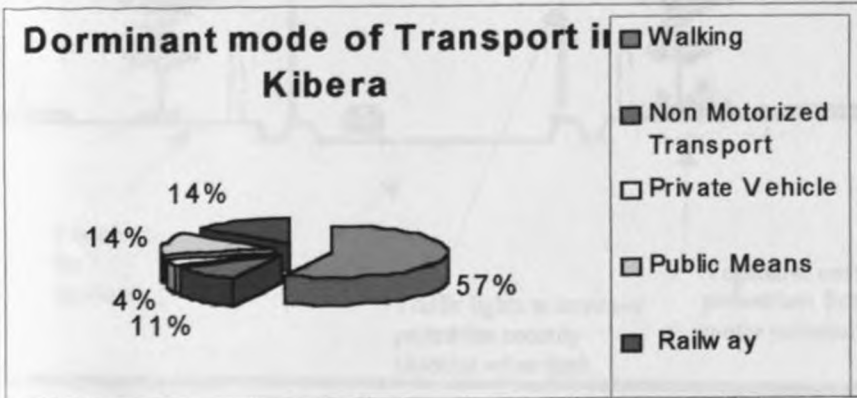
**Plate 7: Typical Road in the Kibera Slums: Multiple use.**



The mode of transport used and average journey time to work indicates the general quality of work journey, combining effects of spatial dispersion, congestion, network density and income level.

**Kibera:** The dominant mode of transport is walking. The average journey to work, mostly to Industrial area and the CBD of Nairobi took on average one hour.

**Figure 22B:**



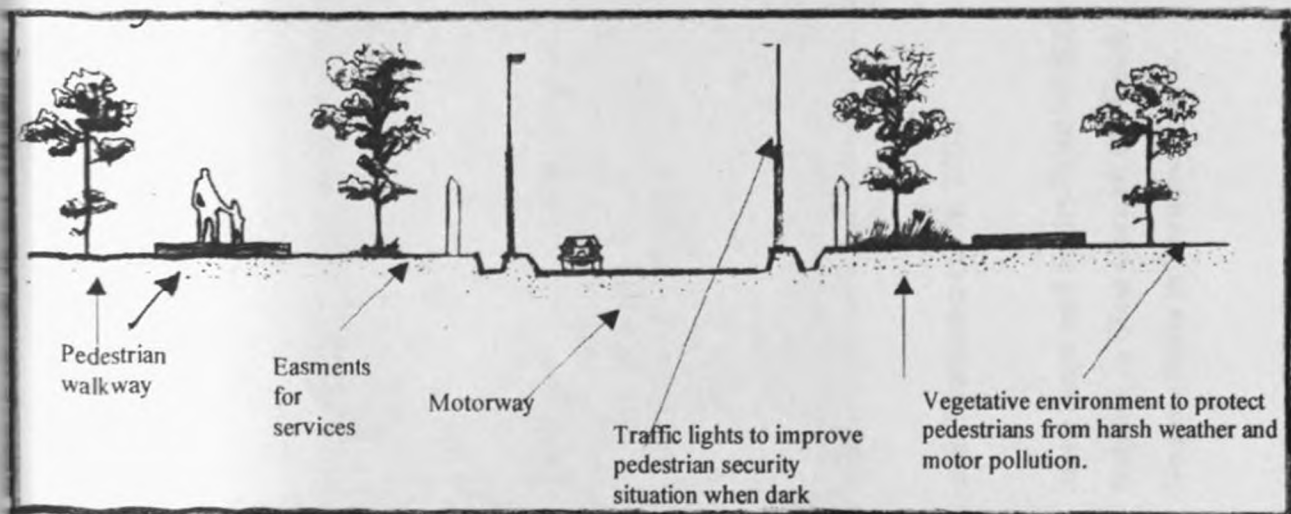
### Illustration of a Multipurpose street in Kibera slums.



SOURCE : RESEARCHERS OWN, 2002.

**Langata:** Public road network was observed to have comprehensively covered the estates in vehicle carriage way. Only the main Lanagata road has dual carriage-way and has pedestrian walk-way, the rest of the roads left without them.' The elderly person commutting on foot for even short distances is forced to walk on the vehicle carriage way which is dangerous.

### Illustration showing developed pedestrian walk-way on Langata road .



Source : Kasuku, 2001

**Plate 8: Typical Shopping Center Showing Many Physical Barriers to the Elderly.: Otiende Shopping Center**



Source: Researchers Own, 2002.

- 1. Steep Slope and Stairs Without Rails.**
- 2. Nothing to Slow Cars on the Road.**
- 3. No Low Seats in Terminal Sheds.**

- 4. Undeveloped Pedestrian Walkways**
- 5. High Road Pavements Impede Pedestrians**
- 6. Nothing in Place to Assist the Elderly.**



#### 4.6 Initiatives for the Elderly in Nairobi and Hence Kibera Division:

**Plate 10: Elderly happy at the Cheshire Home for the Aged.**



**Plate 11: Elderly Residents Socializing at the Cheshire Home for the Aged:**



Source: Cheshire Homes, 2000.

### **Kibera Day Care Center:**

*Kibera Day Care Center is an institution with a difference. Other than being a meeting place, the center provides free recreational, meals and medical facilities for the aging. Through the center, they can now meet their fellow elders and make friends. The center's main objective has been the establishment of a conducive atmosphere through which older people can meet to exchange ideas and information.*

*Established in the midst of the Kibera slums, the center started with six elders, but has grown to serve upto 80 at the moment. The Project Co-ordinator, some volunteers and a few of the elderly persons in a focussed group discussion during the field survey revealed that their greatest motivation towards the project is the current increased needs of the ageing in the Kibera slum villages. The area generally lacks income sources, has poor housing conditions and a general lack of family concern for the elderly, maybe due to the poverty levels hence they are considered a burden. The elderly lamented on their loneliness due to loss of friends and family, fear of death, deteriorating health, idleness hence boredom and their diminishing strength and hence scope of looking for capital to meet their needs. With the help of volunteers who carry out day-to-day activities, the center has been able to:*

- *Set up a place where the elderly can meet, chat and exchange ideas*
- *Provide on average, good nutritional and dietary food supplements through a lunch scheme once a week.*
- *Set up a base for providing free medical care at the center and through frequent home visits*
- *Involve the elderly in income earning activities for self-reliance. For example, Helpage Kenya provided tie and dye facilities for the center, through donations of rolls of cloth and chemicals, and technical assistants to teach the elders. The Ministry of Agriculture, through its Home Economics Department trained some of the elders on how to make energy conserving jikos.*
- *The center has been able to construct rental houses through which it acquires money.*

- Offer counseling services at the center and through home visits.
- Arrange for village cleaning campaigns through a committee set up with the elderly, to improve sanitation, garbage collection as well as opening up blocked drainage.
- Through the Ministry of Education, literacy classes have been introduced, offering the elderly skills in reading, writing and other basics. Church organizations also conduct bible classes for their spiritual nourishment.
- Through donations from UNICEF and HELPAGE Kenya they have benefitted directly in water provision and the water tanks received have enabled them to sell water to other residents as an income earning activity.
- Kitchen gardening has taken root in the compound, growing onions, tomatoes and other vegetables for their own use.

Although the project offering such support for these cadre of vulnerable persons, the Project Co-ordinator laments the dwindling contributions and donations from well wishers amid increased demands. The numbers of the elderly have surmounted their potential, the plight of the elderly in the Kibera slums continues to get worse due to increased congestion, inflation has made their financial outlay impossible, they are unable to secure land documents for their one acre portion of land and always have to live under the threat of encroachment, they are unable to maintain their structures in good habitable standards, without mentioning how they are forced to cope with "flying toilets" from neighboring shacks and such-like litter in their compound. Regardless of all these, they have made ageing more enjoyable for quite a number of people.

#### **4.7 Residence Associations and Groups in Kibera Division.**

Karen Langata District Association (KLDA):

Formed prior to independence in 1954, KLDA represents two upscale Kibera Division residences of Karen and Langata. KLDA is known to many Nairobi residents and Kenyans in general for periodically taking legal action against NCC and other parastatal decisions that it considers to be against the public interests. For example, in 1996 the association halted through a court injunction the now

defunct Kenya Posts and Telecommunications Corporation's decision to hike postal charges. In 1994, fed up with the sloppy and sporadic municipal services from NCC, KLDA initiated a court case against the authority demanding accountability for rates and service charges paid to NCC by her members. The court then allowed KLDA to collect and account for rates within its jurisdiction. The KLDA has offered the following urban infrastructure and services to date: Garbage collection (through Bins, a private company), Maintenance of roads, Maintenance of drains (earth), Collection of rates from residents, Preservation of open spaces and other public utilities, and Development control.

According to the chairman, Mike Mills, KLDA faces the following problems:

- ◆ Lack of adequate finances,
- ◆ Institutional bottlenecks, especially at NCC, and,
- ◆ Lack of cooperation from some private developers

Descriptive analysis of the household questionnaire in all the Kibera slum villages show the dwellers are deprived of a voice to advocate for their rights because the informal settlements are considered illegal within government circles and the structures they live in are substandard. The other reason is that the informal settlement dwellers do not stay in one residence for long as the length of stay is dictated by personal economic circumstances. Hence a tenant would stay in a structure whose quality is commensurate with their current financial status, however temporary. The high turnover of tenants makes it difficult for the people to develop social bonds that would evolve into making good "fences". They thus lack a unifying forum as in the Karengata Association. Nevertheless, a large number of self help associations exist mainly organized in the "merry-go-round" format. Welfare Associations, hinged around tribal affiliations were found in the study, for example, the Abagussii Association, Wanedu Welfare, Luo Union and others. These had very weak financial base being dependent on monthly subscriptions by the members with a very high defaulting rate.



## **CHAPTER FIVE: THE AGEING POPULATION IN KIBERA DIVISION: IMPLICATIONS AND RECOMMENDATIONS.**

### **5.1 Introduction:**

A new approach to urban housing planning is needed—one based on ecological and social sustainability, that recognises that the population is ageing. The long-term plan for Nairobi should enhance the existing decentralised town structure with the creation of a network of village/estate style "residences" based around existing commercial centres linked by high-quality public transport and integrated with the existing open spaces, parks and bushland. The proposed model for Nairobi, as typified in the examples to cover the high income residences of Karen, middle income estates of Langata and the low income slum villages of Kibera would be based on the following supporting principles:

- Urban development should be approved only if it is in accordance with the community's objectives for ecological and social sustainability. The increasing numbers of the elderly in the community are expected to advocate for their own objectives in their living environment.
- Planning frameworks should be based on long-term perspectives, with regular reviews. Plans should foresee the demographic transition towards an ageing population, and renewal and redevelopment plans should ascribe to this.
- Planning frameworks should be developed in consultation with the broad community, while local developments should be planned in consultation with local communities. This would ensure capturing the national aspirations, while allowing for participation of the individual, ensuring even the needs of the vulnerable group (elderly included) are satisfied.

### **5.2 Development Planning for the Ageing Population.**

The prevailing system of planning has been shaped by a technology of giantism, complexity and expense. Master planning, then structural planning for the whole of the City of Nairobi failed because its implementation meant large investments, financial capacity, vast spatial space, whole sectoral approaches to housing,



industry etc. It is past time, according to this study, to put a stop to this system, and devise a technology that moves in the opposite direction - towards smallness, simplicity and cheapness. To strive for smallness means to try and bring organisation and units of production back to a human scale. When things get too large for human comfort, when the worth of the individual - a traditional christian value - is being eroded, it is time to scale down. All planning is aimed at the improved welfare of the individual, as human beings. The needs and aspirations of all the people, more so the elderly in this period of demographic transition should be paramount.

There are many reasons for favouring smallness. Small units of production use small resources - a very important point when concentrated, as large resources are becoming scarce and inaccessible. Small units are ecologically sounder than big ones. In the past, urbanization problems were tackled on a piecemeal basis. Housing was tackled as a sectoral problem by the Government and the local authorities, for example, that needed huge finances, defeating the aspiration to supply low cost housing that would benefit the majority poor. Yet the informal housing sector, driven by the pressure of rapid population increase in the city and hence increased housing demand, provides incrementally more housing than the formal sector. It is in Nairobi with its burgeoning ageing population and lopsided distributions that small is beautiful, as well as economically viable. Planning at the human scale of the small residential or the individual is possible

### **5.3 Social Programs for the Elderly.**

One of the most important issues that arises as a result of an ageing population is the provision of services to the elderly. Basically, service programmes for the elderly can be categorized into formal and informal care.

Traditionally, and to large extent today, the elderly have been cared for by their immediate family or kin members. However, this study has found that with a breakdown of the extended family system, the capacity of the informal system to look after the elderly has been affected. This reduced capacity stems in part from

the resettlement programme where large extended families living either in the same household have been separated and relocated to units in different urban locations. Coupled with this is the tendency of young couples to form nuclear families. The study also revealed that break-up of the extended families, together with the move to form nuclear families, inevitably leads to a shrinkage in family size which reduces the capacity to support the elderly. The lower capacity of the family to care for the elderly is further affected by more women going into the labour force, as seen in the number of female respondents in Kibera Division engaged in economic activities or employment in the study. The increase in female participation in the work-force to improve their family income or for self-fulfilment means a reduction of a traditional source of support for the elderly during the larger part of the day. With the influence of individualistic and western values and the general acceptance of these values by the younger generation as observed in the field survey, the propensity for care of the elderly is expected to be further eroded.

Neighbours and friends have also been important sources of informal care to the elderly. However, the study found that these sources of care seem to be diminishing as people are resettled in new urban residential areas. Not only have the elderly been separated from old and familiar neighbours in their places of origin, they also face an uphill task of making new friends in a different environment. And as recorded in the study, the impartial relationships of neighbours in especially Langata and Karen estranges them even more.

Formal services for the elderly including community-based services and residential care were entirely lacking in the study area, except for Kibera day-care center. The provision of programmes for the elderly is particularly important in view of their rising number in the community, the smaller size of the family and more women entering the labour force as the study recorded in Kibera Division. The family can be greatly disrupted when an elderly member becomes weak and requires regular attention, especially given that they all need to supplement their meager incomes as recorded in especially the slum villages of Kibera.

This study recorded comparatively increased obligations in households with a disabled elderly person. These persons needed to be physically moved, some requiring even wheel-chairs. The design of the houses in Kibera Division did not include movement aids like hand rails or ramps. Some needed personal medical attention. In response to the inability of some families to provide the needed care for disabled elderly persons, various community-based services should be initiated to help them remain independent in the community. Community-based services such as home nursing service, befriending service, senior citizens' and retirees' club, financial assistance, or free meals, counselling and medical attention as seen in Kibera day care centre could be promoted. This is in view of a general movement to encourage the elderly to remain as long as possible in the community where such set-ups should be started. This is necessary to make the service more accessible to the elderly who are less mobile. While existing services should be developed further, other programmes for the elderly should also be explored and developed to provide a broad-based service. New programmes such as meal delivery service, telephone contacts and support for family care-givers could be introduced.

For the institution to run these initiatives, the study recommends community based programmes, for example run by self-help groups to care for the elderly among them. An analysis of such groups in Kibera Division revealed a prevalence of small, financially strapped organizations mainly operating on a merry-go-round basis. The better organized ones had acquired residential developments, but the study revealed that generally their financial positions were weak. This study thus recommends that the initiatives identified for the elderly should be run by these self-help groups, but should be located within the same households they belong to, only the burden and care be seen as one for the whole group. As such, programs of service delivery for the disabled elderly person can be drawn and shared within the group members on a rotational basis. Church based organizations can explore the concept of "home-visits" as part of their evangelism and service provision. The disabled elderly would

thus also be served from their family dwelling. This makes one level of approach that the study recommends.

Nevertheless, this study has concluded that future demands for programmes for the elderly are likely to become more acute. The study of demographic trends in Kibera Division and Nairobi depict a demographic transition towards an ageing population. It is timely for the Government, local authorities, voluntary organizations, the community and the individual to review and monitor future programmes for the elderly. It is also vital to strengthen and support the informal system which provides quality care for the elderly. In working together, society will be better prepared to deal more effectively with our ageing problems in the years ahead.

#### **5.4 Policy for the Elderly.**

It is a widely held view that the time has come for a definitive plan of action to secure the future of the ageing population in Kenya. This study records that there is no national policy or plan for the elderly other than those who are lucky to have been formally employed, as seen in the analysis of the National Social Security Fund. A national policy for the ageing population should be instituted in order for all people to be able to live the rest of their lives, whether with support from their relatives or not, in dignity and independence. Older people should not have the burden of worrying about how they will survive from one day to the next in the later years. In fact, in many societies, the reason that these years are referred to as the "golden years" is that they are some of the most important years of life, when people should be enjoying the fruits of their labour. The implications of some government policies or lack of it enables this study to give the following recommendations:

- The Government has been asked to change the National Social Security Fund into a pension fund for all, so that the ageing, rather than succumbing to poverty, can benefit from it. Apparently, the money awarded in one lumpsum to



the current formally employed beneficiaries ends up not benefitting many in old age.

- Besides that, requests are being made to the Government to come up with clear policy on the ageing even in its budget and other policy documents. Through this, a fund could be set aside, just like for education in providing schools, teachers and facilities, that would cater for the homes and projects of older people
- Compulsory and personal savings accounts could be introduced so that later in life during their frailty, older persons could resort to the funds. Already countries like Singapore have done that and their older citizens live in considerable comfort.
- The retirement age should be raised from the current 55 years of age to 65 years of age. This is because as proved by statistics, by the age of 55 most people in Kenya have not invested much to keep themselves comfortable. In addition, since life expectancy trends show a continued increase, the ageing population is steadily increasing, hence a need to consider older people for employment opportunities. Their economic viability can only be harnessed in increased job opportunities, and should not be seen as an expense to the youth.
- In the past, the Government has tended to relegate the elderly to a mere spectator role. They need to be involved in useful activities and leadership roles given their experiences, and to restore their dignity. Very important to note is that an awareness campaign ought to be launched, to sensitize the public about the elderly in our society. Attitude change is paramount as to how people view the elderly, and their roles in life should be appreciated and restored.

### **5.5 The Proposed Plan for the Ageing Population in the Informal Kibera Slum Villages:**

To respond to the challenges facing the ageing population in the slum villages of Kibera, this study proposes the following housing option, based on the concept of "slum-upgrading" tailored to suit the elderly cadre of the population:



**Institution to Spearhead the Initiatives:** An attempt should be made to include the elderly in the slum villages of Kibera as members of Area Development Committees (A.D.C) , thus increase the role of local community participation in the planning and decision-making process. These elderly persons could bank on their experience and articulate the needs of the elderly in the initiatives to be undertaken. Community participation also ensures the elderly persons among the other slum dwellers feel a sense of ownership of the projects making it more appealing to them and hence more sustainable. It enables them to prioritize their needs and aspirations, and allows implementation that does not disrupt their culture and traditions. This makes the community less resistant and less apathetic to change towards meeting the challenges of an ageing population, increasing the chances of the success of the development initiative.

There should be efforts to promote community based organizations. Support should be provided by local authorities and other agencies, and the administration should express the willingness to allow Area Development Committees and voluntary and community groups to participate in service-delivery activities. This would greatly increase the access to service by the elderly. This should create a conducive environment in which shall operate both the formal and informal sector. The informal housing sub-sector is the domain of the individual, family and local self help groupings, and currently accounts for about 60% - 80% of the housing stock, and is the provider of the housing deficit.

**Land Tenure:** There is need for a Government policy and political will on the issue of land tenure in the slum villages of Kibera. It is proposed that the government broker partnerships with the poor slum dwellers to solve the problem of squatting. The Kibera slum dwellers, more so the elderly among them, need secure tenure - the right to housing and the right to land. Information about the slum villages of Kibera, the land, its location, ownership and use are vital for easy identification of plots or parcels of land, records of owners and vacant land, information that the study found missing from the land authorities. Through

participatory and partnership processes it deserving beneficiaries of the land would be identified, a requirement that the elderly can amicably achieve based on their experience and knowledge. Self-help groups can effectively be empowered to participate in land conveyance alongside private developers. These groups could acquire land, prepare subdivision scheme, with the help of a physical planner, and allocate plots to members.

This research emphasizes that demand for urban housing by the elderly population is not just a demand for a certain amount of physical space. Location is critical because it determines whether or not the elderly people, seen in the study to have special needs, are going to be able to live close to their work, close to their friends, their cultural interests, education and recreation. Location in fact affects the whole lifestyle of the elderly. These important considerations point out the need for public control, if not public possession, of all aspects of land-use to suit the needs of the elderly. The elderly in the slum villages of Kibera need to take control of land they would need. Land banks can be acquired by the Kibera slum village's community through purchasing the land at its current value or through Government allocations, so that long term planning for the ageing population becomes possible. Future public development on such land will cost less because the land was acquired at an earlier time. The essence of the scheme is for the community (residents) to take on the function of supplying land for private developments. It secures the future needs of the resident authority that would supply the land resource for development of housing to suit the elderly.

**Advocacy and Awareness Creation:** Paradoxically as seen in the analysis of resident groups and associations in Kibera Division, the informal settlement dwellers of Kibera have not benefitted from advocacy roles of resident, neighbour associations nor older persons groups, despite being the most deprived segments of the Kibera Division population. Although basic rights are enshrined in our constitution, the study has shown that little effort has been made to address issues that include provision of basic facilities like sanitation and other infrastructure for

slum dwellers who do not have strong lobby groups to advocate for their rights, worse still to satisfy the particular needs of an ageing population. Although these Kibera dwellers are unable to form lobby groups to fight for their rights as residents, they recognise the importance of having regulatory bodies to govern their stay, for example, village committees that address issues of concern and provide the link with government institutions, NGO's and other development institutions. These village committees can provide an entry point for new interventions and approaches to cater for the needs of the elderly population. Majority elders in the slum villages of Kibera thus have leadership roles that can be harnessed to lobby for the rights of their lot and advocate for their own well being. Besides the absence of formal neighbourhood associations in the slum villages of Kibera, they boast of some of the strongest welfare associations in urban areas, in number of members, and especially the elderly persons among them.

**Development of Infrastructure and Social Services:** We must provide enough low-income housing, income supports, and health care services to sustain independent living of the elderly in the slum villages of Kibera. Other infrastructure like roads must be provided and/or widened and better maintained to link the elderly to social facilities and services. For those older adults in the slum villages of Kibera who are homeless, comprehensive outreach health and social services must be made available, as well as special assistance to access existing public assistance programs within Kibera Division and the wider Nairobi city. The spatial unit of planning service provision should be based on the residential spaces (the slum villages of Kibera). This way more efficiency could be achieved in infrastructure servicing, for example in areas of water supply and waste water disposal, refuse collection and disposal, revenue collection and amenity provision and maintenance. Like all people, the elderly people need an adequate income, affordable housing, and affordable health care in order to stay securely housed.

**Informal Sector:** Given the potential growth of the informal sector and the fact that urban services are inaccessible in the slum villages of Kibera, it is prudent to

engage the informal sector in the provision of urban services. The government policy ought to among other things, relax restrictions on informal sector activities. This study proposes that either the local NCC licensing office be allowed to plough back revenue collected within each village or a vote be passed in the Council budget for each of the Kibera slum villages proportionate to what is collected there. Again through the village Development Committees, the collection and disbursement can be streamlined, monitored and evaluated on a constant sustainable basis.

**Planning regulations and building by-laws:** There is need for and importance of, all local authorities to adopt appropriate housing, planning and infrastructure standards. The process for gaining approval of planning and building plan is time consuming and irritating to developers and needs an administrative overhaul. The enforcement of revised and appropriate standards could then be done through community – based organizations with adequate training in the interpretation and implementation of the standards. These would create an enabling environment for the institutions of the individual, family and local groups to exploit their proved potential in enhancing the welfare of the elderly population.

Directly associated with planning regulations and building by-laws is the issue of house design. An analysis of vernacular architecture as enshrined in African tribal /traditional building designs shows that a lot can be borrowed that allows for the privacy of the household head and other members of the family while allowing for the family to live together. The illustration below of the layout of traditional Luhya homestead are compared to a proposed layout plan of what can be adopted in Kibera slum villages as a family "house model". This proposal can be developed further taking into consideration such constraints as space and finances in the Kibera slums situation.



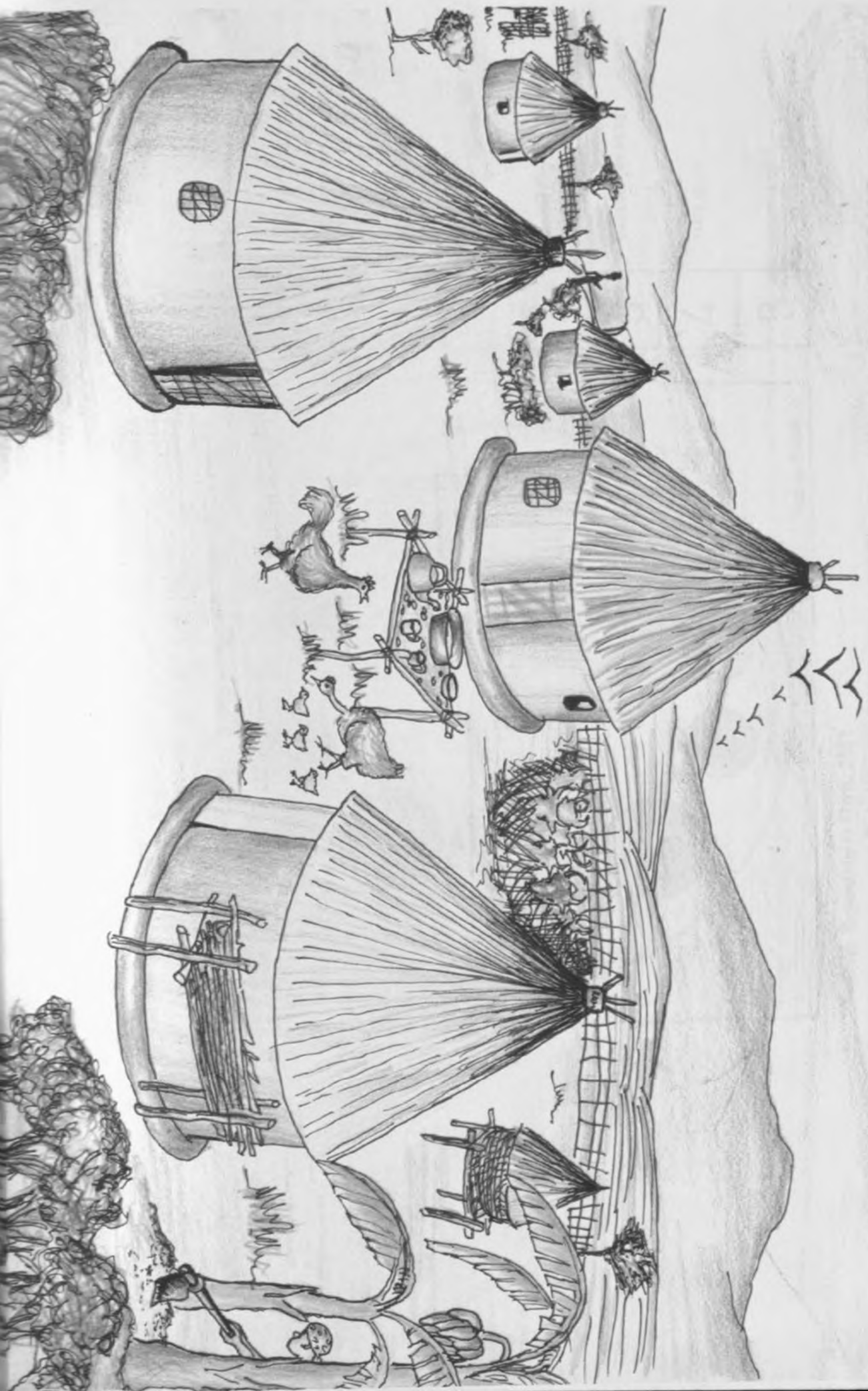
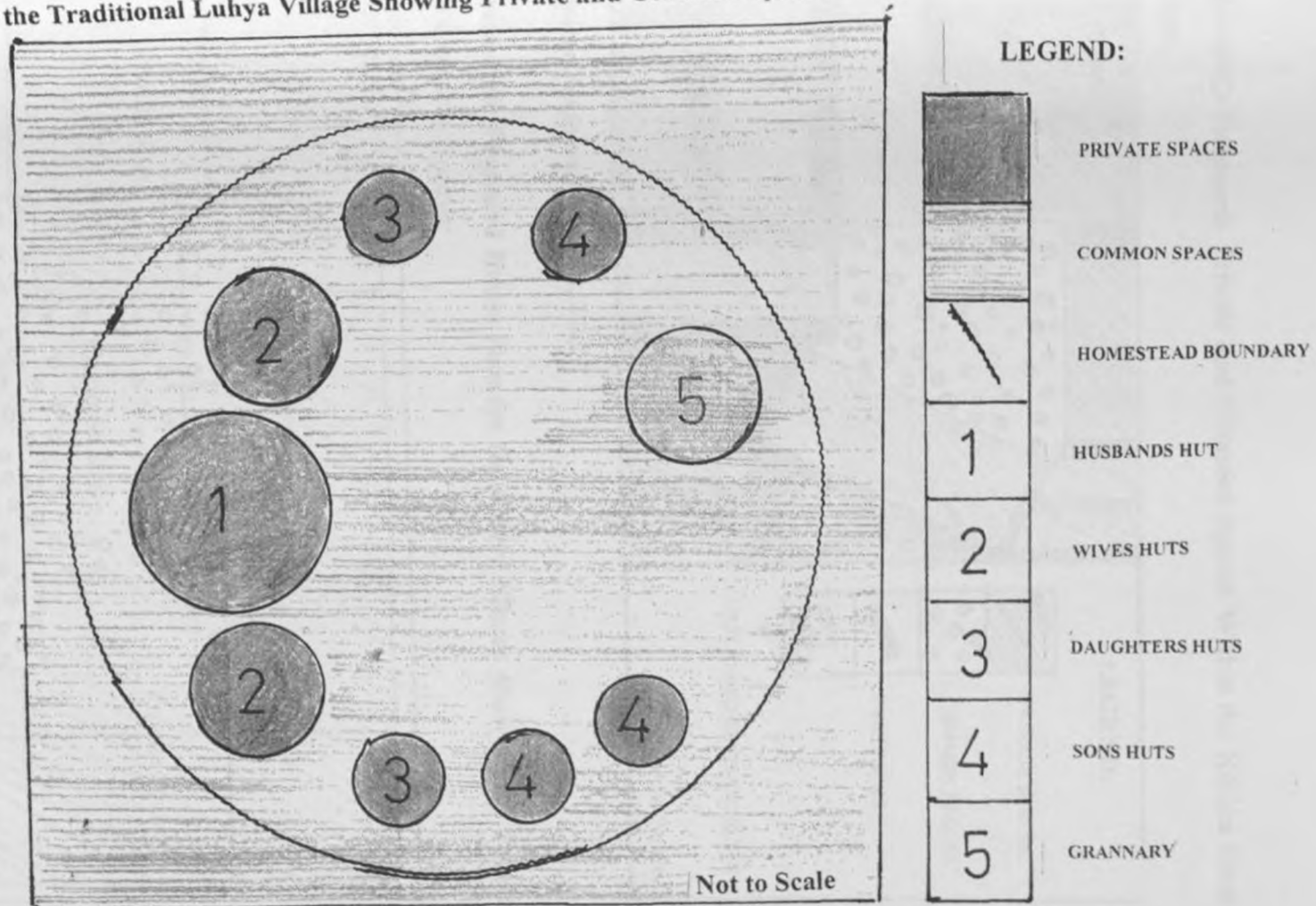


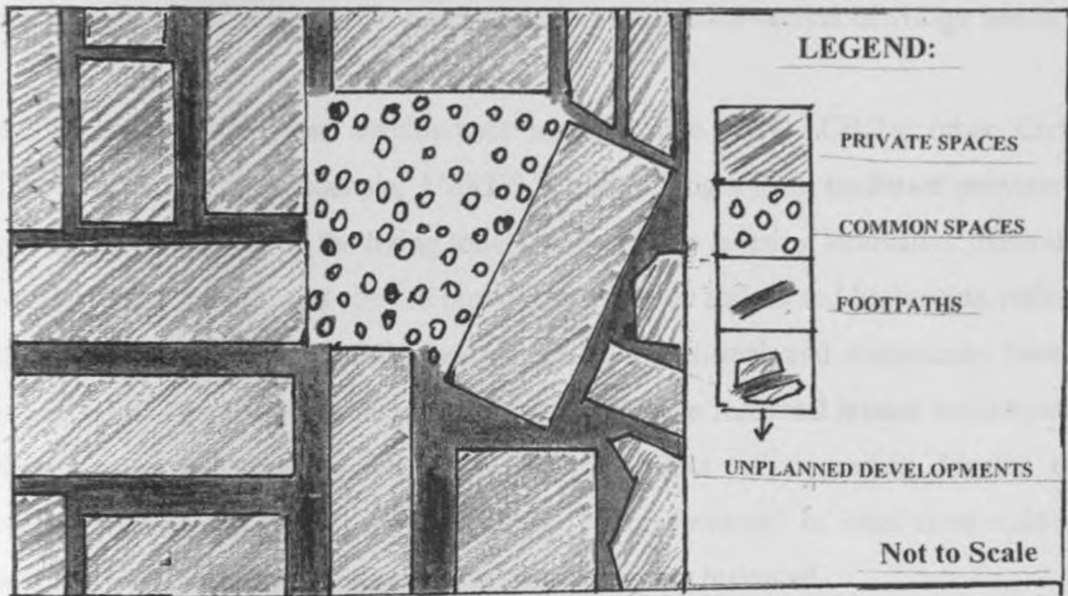


Figure 25A: Layout Plan of the Traditional Luhya Village Showing Private and Common Spaces:



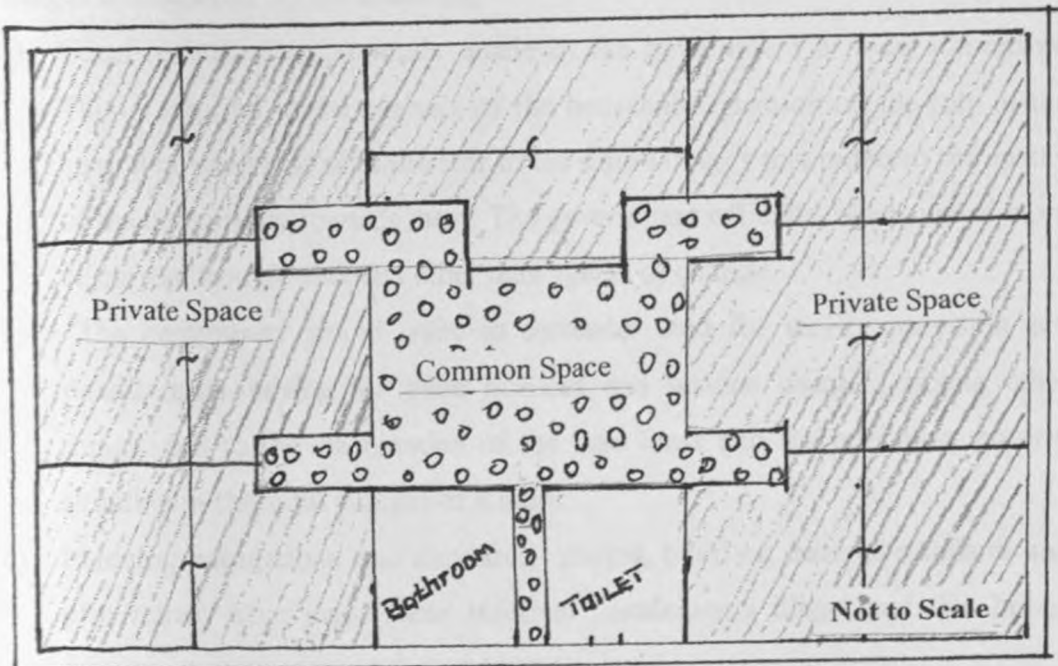
Source: Researchers Own, 2002

**Figure 25C: Proposed Private and Common Spaces Within the Kibera Slum Villages.**



**Source: Researchers Own, 2002**

**Figure 25D: Proposed House Plan for the Kibera Slums Allowing for Private and Common Spaces:**



**Source: Researchers Own, 2002**

**Law and order:** The community vigilante groups could work hand in hand with the police to maintain law and order more effectively since the former understands the villages better. This should proceed with the full involvement of village heads.

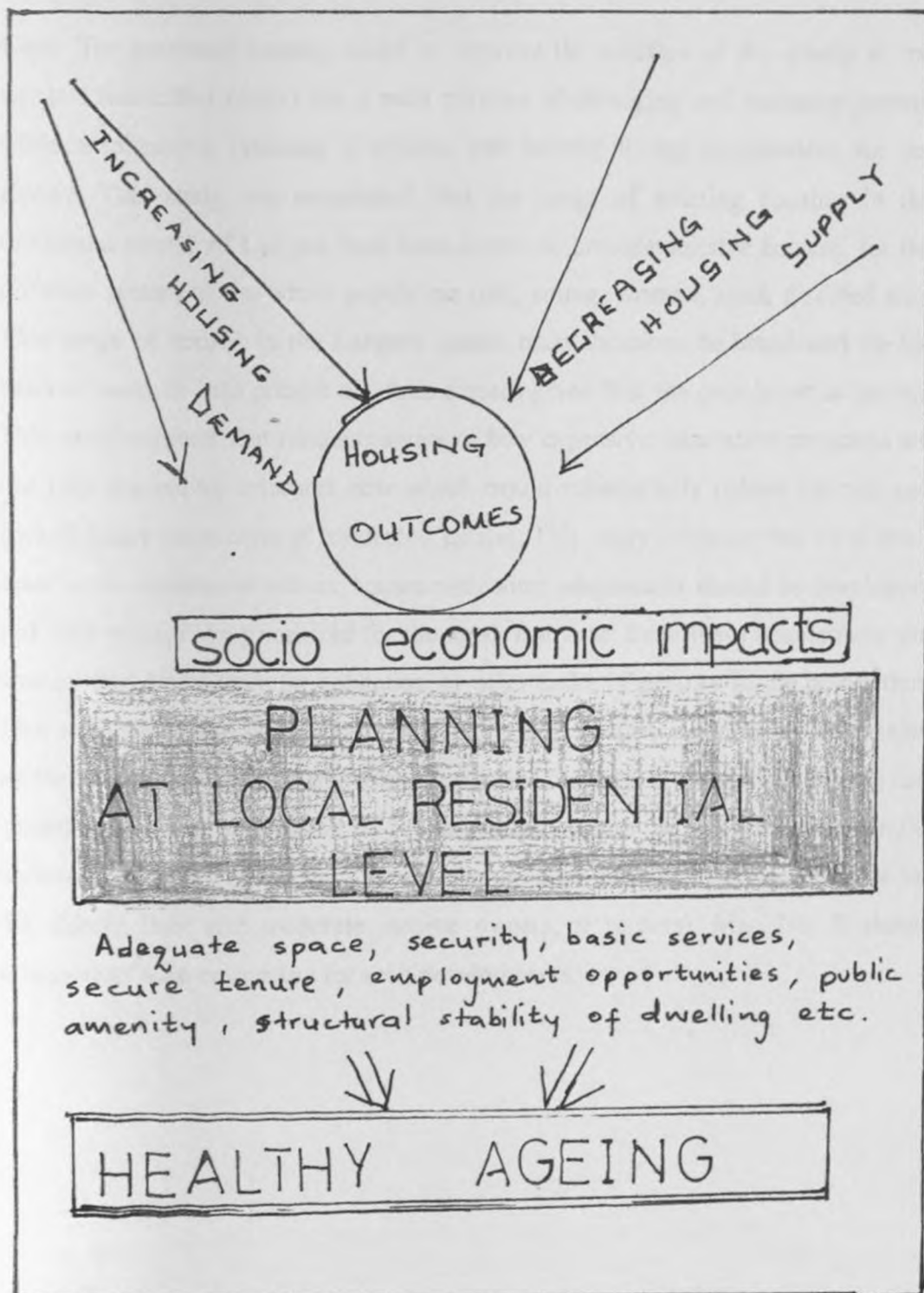
**Partnerships** with other development agencies like NGO's, CBO's, other Civil Organizations etc. For example, AMREF is undertaking a local sanitation provision campaign dubbed "Stop the flying toilets project" that is using innovative methods to raise funds locally, and aims to provide at least 300 toilets and bathrooms within the Kibera slum villages. Effective use of the traditional and community based organizations broadens the range of actors involved in informal human settlements development and management. This has the effect of deepening degrees of responsiveness and participation, including "empowerment" of local communities and more effective coordination of the different actors involved.

#### **Potential Areas of Conflict.**

The adequacy of this model for the ageing population in the Kibera informal slum villages is hampered by the following:-

- (a) Local resistance to proposals made by the government or local authorities. This is implied in the analysis of the household question on the role of the central government administrator in the slum villages that reflected the apathy of the community towards them. The government officials were viewed more of corrupt trouble-shooters other than agents of change.
- (b) The community would resist to surrender land for service provision and would resist paying for trade licences and service charges, among other things, due to the machination of the land lords and the prevailing poverty situation in the slum villages of Kibera.
- (c) Planning regulations and standards, zoning, building material standards and plot ratios, have made these informal settlements illegal and this brings friction at the institutional management level.

Figure 26: The Proposed Working Model for Housing Development for the Ageing Population in the Slum Villages of Kibera.



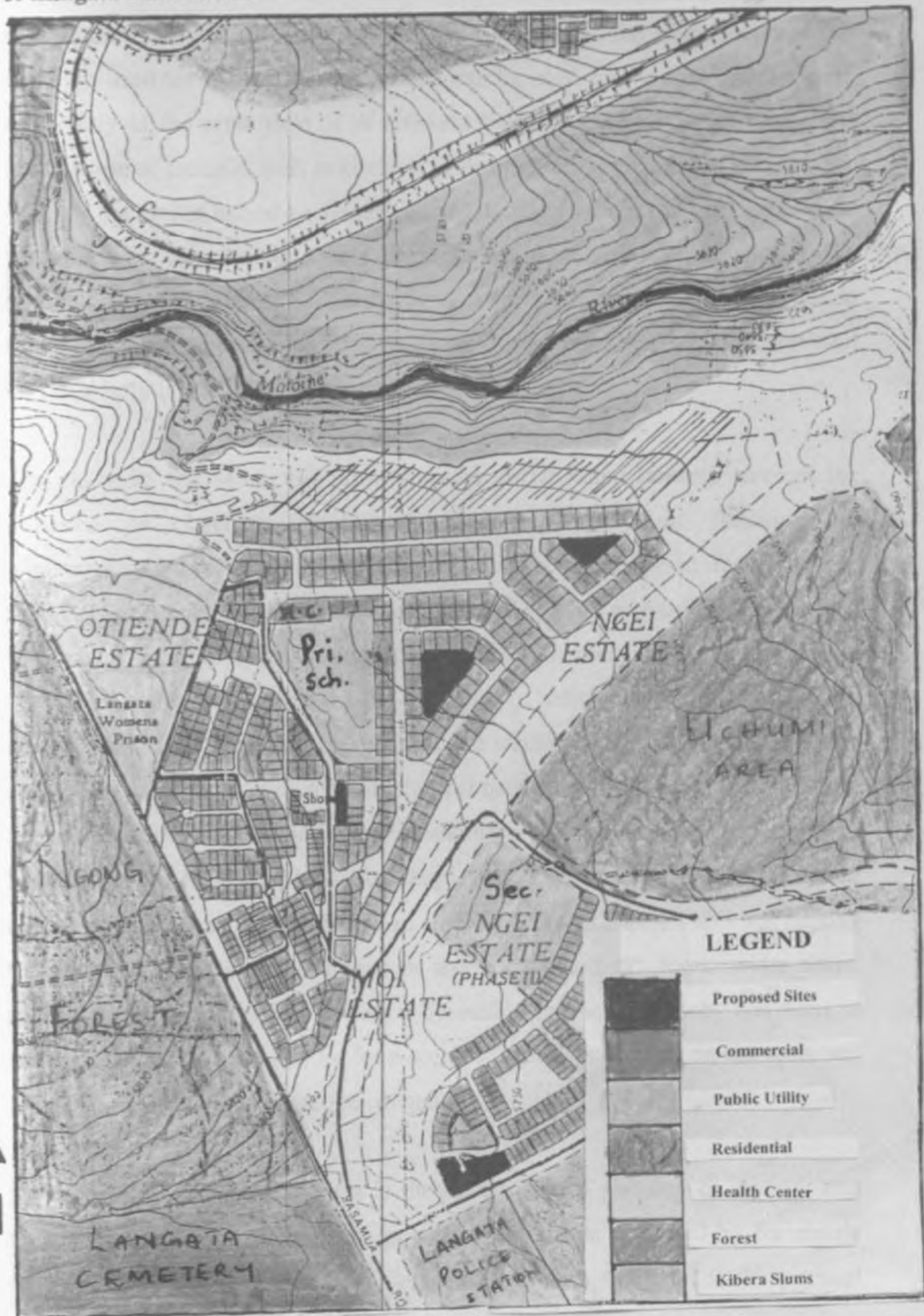
Source: Researchers Own.

## **5.5 Tailoring Developments in the Langata Residential Estates to Suit the Elderly in the Community.**

**Goal:** The proposed housing model to improve the welfare of the elderly in the Langata residential estates has a main purpose of managing and nurturing growth while emphasizing retaining a suitable and healthy living environment for the elderly. This study has established that the range of existing housing in the residential estates of Langata have been unable to provide suitable housing for the different sectors of the whole population (old, young, women, aged, disabled etc). This range of houses in the Langata estates must therefore be broadened on the basis of research into present and future needs given that the population is ageing. This study suggests that residents aware of how expensive renovation programs are can take preventive measures now which would substantially reduce the risk and cost of future renovation of residential estates. This study proposes that on a small scale in the residential estates, houses with some adaptations should be developed, and their acquisition prioritized for the aged. But apart from these adaptations, the houses must be suitable for habitation by other cadre of persons in the population. This study has found out that on a small scale such adaptable houses are acceptable by the community because they result in mutual help and a community feeling and consideration for differences in the style and tempo of life. Identified infill undeveloped plots within the Langata estates could be used to provide houses for the elderly (low and moderate income owners or renters). Map No. 8 shows examples of sites earmarked for such developments.



**Map 8: Proposed Sites for Various Initiatives for the Elderly within a Section of Langata Residences:**



Source: Adapted from Survey of Kenya, 1996.

Another proposal of the study is making use of existing social facilities for multiple purposes including special initiatives for the elderly. This can be done in the estates of Langata to satisfy a wider range of elderly residents. The study proposes that buildings used for particular reasons/users can be used for purposes of service to the elderly at the same time or at different times to ensure cost efficiency and multiple use of facilities such as kitchens while integrating residents of all ages. For example the dining hall of a school like Langata High School can be used to serve warm food for older residents when the school children have finished using it. The swimming pool for Makini School can be used for the therapy of the elderly, and so forth. Thus existing social facilities would serve dual purposes including provision for the elderly in a systemmatized arrangement.

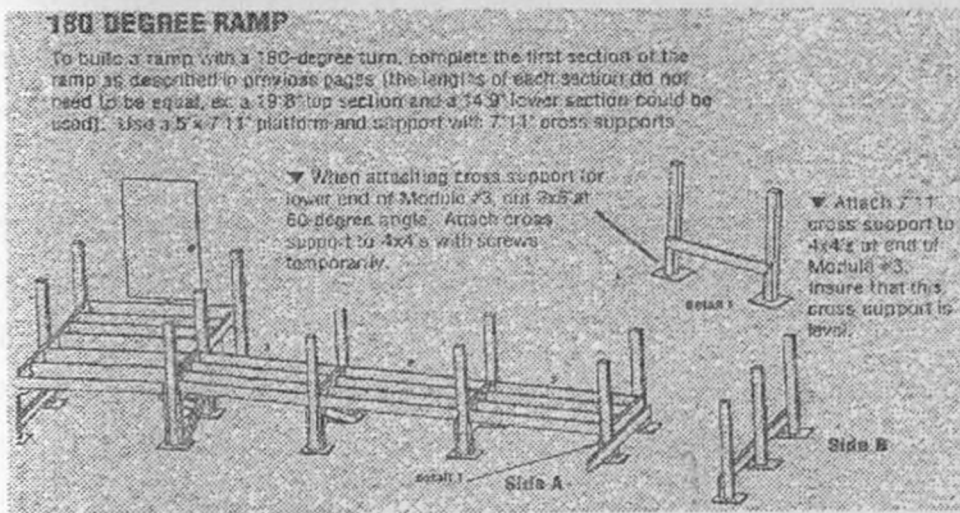
The study in the same vain also proposes estate improvements through the provision of planning activities, improvements on public facilities and infrastructure improvements. Each estate in Langata was observed in the study to have its own needs, therefore, plans are tailor made to suit each estate. The estate is the strategy area, involving residents and relying on their participation to target needed improvements or changes in their estate to satisfy the needs of the elderly among them. The themes for the rehabilitation would thus be site specific. Thus in each of the Langata estates, specific physical barriers to the elderly will become a site project for rehabilitation. Elderly people have difficulty entering and accessing facilities inside buildings, hence buildings should be molded for accessible and quality service to the elderly. They can do this by, for example, additional parking for the elderly and disabled, ramps or elevators, automatic doors, wider doors, accessible toilets, accessible counters, accessible public telephones and seats in waiting areas as the case may be for a specific site. This depends on the space and finance capacities of the residence community.

**Strategy:** Each estate in Langata is the spatial unit of planning or strategy area chosen, and to initiate the process an ad hoc committee is formed by the elderly residents to assist in planning and organization, with the help of the physical

planner and assistance of an urban designer. It is wise to include the councilor at this stage because the field survey confirmed his influential status in matters of development. Later elections for an organized advisory committee to hold monthly meetings can be chosen strategically to take advantage of the various talents, skills and calibre of the residents and hence establish a think tank. This task force with elderly and disabled residents when formed would examine ways in which services could be improved. These estate associations empower elderly residents. The main tasks of the committee will be:

- Articulation of the community's needs
- Expression of preferences in the needs, both these to provide proactive development guidance through establishment of one-stop shops to provide environmental, housing, transportation, urban planning, economic advice and other development initiatives to prospective developers. The task force would hold discussions with residents on how citizens wanted to work with professionals.
- Discussion on the impact of an ageing population, identify ways in which the residential areas already met the needs of people as they age, what could be done to face anticipated needs and what could be done to meet the need in collaboration with other residential areas and other stakeholders like the government.
- Planning and selection of priorities and undertaking research on the application of spatial principles and elements by liaising with research organizations like the University. Review spatial development plans and land development objectives, proposals and ideas
- Development of the application, aligning development control mechanisms with strategic guidance through review of land use control mechanisms. The committee can educate residents about city ordinances and how to properly obtain assistance and cooperation of the authorities and in reporting problems and maintaining the area. This can be done through, for example, inviting the officials from the various institutions as guests to estate forums/meetings (Lands, Physical Planning, NCC, Police, Works, NGO's etc.)

This way estate specific needs like elimination of slums and blight, developing walkways and green ways, improving or creating recreational areas, constructing infill housing with adaptations that suit the elderly, constructing façade improvements or eliminating physical barriers like stairs etc all aimed at improving the living environment for the elderly would be identified. This study recommends adaptation of cheap artifacts made from locally available material such as "wooden ramps", using simple technology to assist frail or disabled elderly persons instead of conventional stair cases.



- ❖ Sidewalks could be developed by estate residents to provide footpaths that serve to access social facilities, shops and market outlets, as well as recreational routes for keep fit, walks or jogging.
- ❖ Community clean ups to clear dumps, and clean surface water drainages can be organized on a regular basis for purpose of hygiene, aesthetic value of the estates and to remove physical barriers to the elderly who need a leisurely walk in the estate to keep fit.
- ❖ Prisoners from the Nairobi West prison and Langata Women prison could be tapped to provide the much needed labor for these development activities to



make the living environment suitable for the elderly. The estate committees for the elderly should take advantage of the community service scheme for inmates now adopted in all prisons. These prisons are within the study area hence the residents should benefit from their services.

- ❖ The model appreciates the great potential in Church based initiatives and emphasizes the elderly through the estate committees could tap the resources that can be provided by churches and CBO's, citizens, businesses etc be it monetary, material, labor or any other resource and cooperate with other estate associations.
- ❖ Resident leadership as well as the resident service specialists identified is an excellent example of using community planning and development resources, and involving residents is critical to the success of the strategy. The elderly with their vast experience can be incorporated to benefit from them plus also enabling them to serve in roles that empower the elderly, which is another objective of this model towards the well-being of the elderly in the estates of Langata.
- ❖ Security provision in policing and neighbourhood watch programs, to enhance the safety of the elderly who as reported in this study were targets of crime in the Langata estates due to their frailty, and accumulated wealth. For example, neighbourhood associations can borrow from the example of the NCBDA. The NCBDA is credited with having started the first community-policing scheme in conjunction with the Kenya Police and a number of donors
- ❖ Within the estate elderly committees, this study recommends development of resident employment agencies that locate job opportunities for the aged. The study suggests that they effect this through connecting elderly professionals with troubled companies who need short term expertise, for example. The residents can also operate sheltered workshops/offices for the elderly and people with disabilities in the informal sector in central places like markets and shopping centres within the residential estates of Langata. Here they can ply their trade in carpentry, welding, mechanics, electronics and other services and small scale or cottage industries.



❖ Health services like health education classes, health counseling, advice to care givers and diet and nutritional advice, home health care, nursing services, medical treatment, therapy, institutionalization can be promoted in the existing NCC Langata Health clinic and the new St. Mary's Mission Hospital particularly for the elderly. Research through Gerontology and access to Geriatrics in these Langata estate health facilities would be an added advantage to the elderly when provided.

**Funding:**

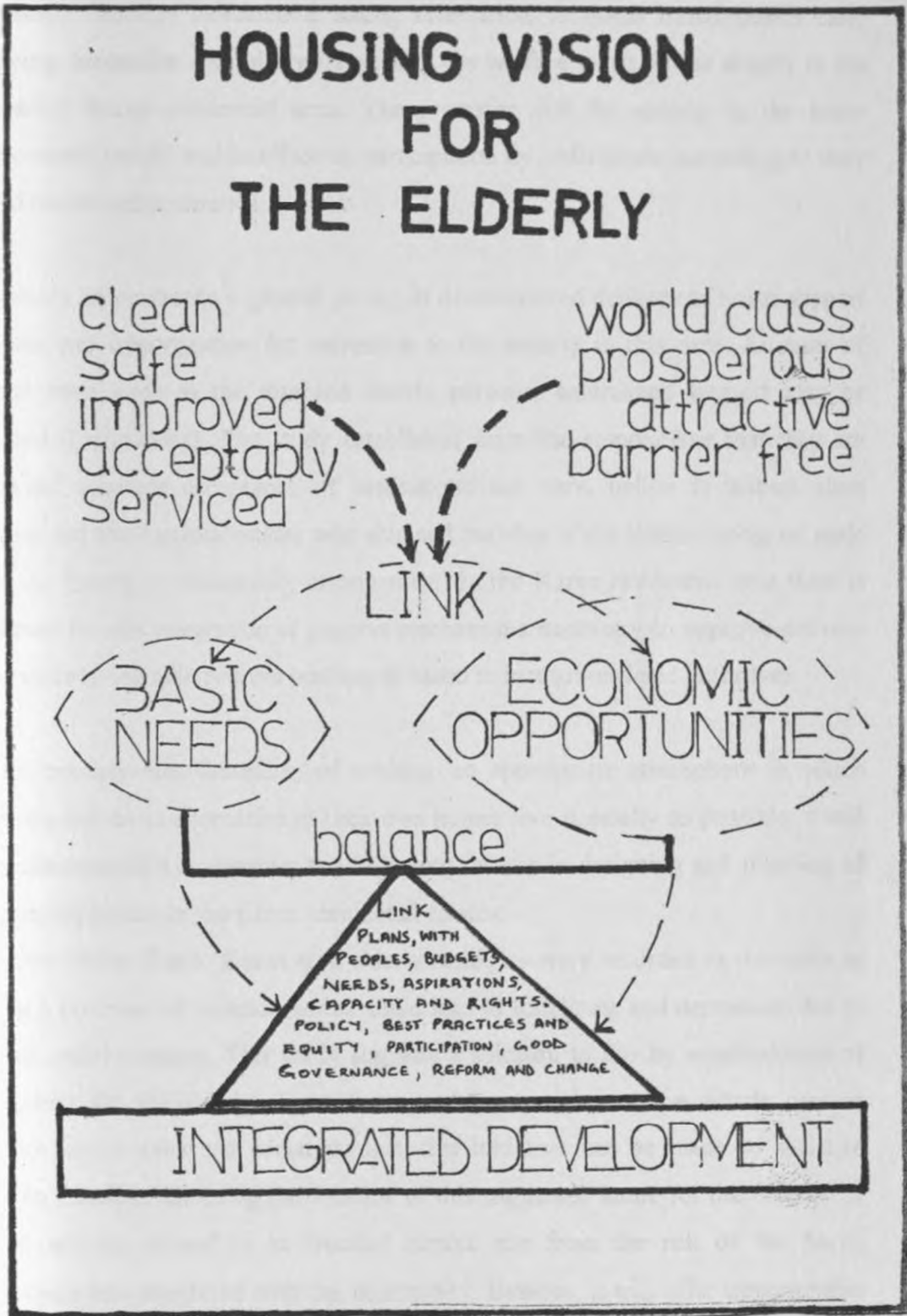
- Local fund raising from all stakeholders, the individuals, families, self help associations, neighbourhood associations, CBO's, NGO'S, International bodies, private enterprises etc.
- Grant applications from donor agencies
- Empowering the elderly as the Government can give them small subsidies such as discounts and tax rebates on disposable income or employment opportunities that hire the elderly at subsidized costs to the employer.
- The growth of Neighbourhood Associations is a recent and growing phenomenon in Nairobi and the study areas of Karen and Langata. The study captured the tenets of these organizations on the example of the Karengata Association and recommend a similar arrangement for the committees of elderly persons within each of the Langata estates earlier mentioned.

Another phenomenon that is increasingly being associated with neighbourhood associations is advocacy. During the 1990's there emerged a trend where politically well-connected people were allocated public land in urban areas. This land had been earmarked for community services like schools, health centres, social halls etc. These "private developers" or "grabbers" as they have come to be known would then put up houses and other structures distorting the general planned user, landscape and putting pressure on existing infrastructure and services. Despite public outcry against these illegal allocations, the Government continued to allocate public land, open spaces and even road reserves to these politically and otherwise

"well-connected" individuals. As a result, most housing estates begun to experience difficulties, children no longer had playing grounds and the strain on services led to frequent breakdowns of sewers, water shortages etc. Residents then realised that they would be more effective in stopping these illegal allocations as a group and not as individuals. Although coming a bit late in the day, advocacy through neighbourhood associations has seen residents physically ejecting these "private developers" from site and reclaiming the allocated land. As these associations become more assertive, even government local authorities have seen the need to begin collaborating and work with them.

Most of these associations have registered great success in lobbying for residents' rights and changing their perceptions of their individual and collective civic responsibilities. Among the associations are, the Nairobi Central Business District (NCBDA) that has undertaken a number of community-based initiatives in conjunction with the Nairobi City Council and the Department of Police. Others are the Karen Langata Association (Karengata) that takes care of the interests of residents of the upmarket Karen and Langata estates in the study area. Karengata is credited with being the first neighbourhood association to successfully compel the Nairobi City Council, through a successful court petition to account for the use of levies paid to it by residents of this area. Other estates in the study area, for example, Moi/Otiende, Akiba, Ngei etc have also formed associations to cater for the welfare of the residents and are increasingly taking charge of responsibilities that had hitherto been provided by the local government authorities. These services include garbage collection, maintenance of infrastructure and security. As residents come together, they have gradually incorporated a welfare component that include funeral and burial arrangement assistance, fundraising for educational and medical expenses and also get together parties hence getting to know each other well and breaking the urban apathy neighbours have towards each other. The associations can thus be used by the elderly persons in the Langata estates through the strategies earlier mentioned to plan for the future housing needs of the ageing population.

Figure 27: Housing Vision for the Elderly in Langata Residences.



Source: Researchers Own.

### **5.7 Model for the Elderly in the Karen Residential Estates:**

The study findings indicated a strong orientation to home based health care, shopping, recreation and leisure in meeting the welfare needs of the elderly in the up-market Karen residential area. The provision for the elderly in the home environment would enable effective participation by individuals according to their varied tastes and preferences.

This study recommends a general policy of decentralized delivery of home support services and opportunities for recreation to the elderly in this area. In cases of special need such as the disabled elderly persons, centralised support may be required (Institutions). The study established from the respondents that they are sensitized towards acceptance of institutionalised care, unlike in Kibera slum villages and the Langata estates who shunned the idea of the elderly being set aside from the family or community arrangement. In the Karen residential area there is thus need for the integration of support mechanisms necessary to improve delivery of services to the elderly from household based to institutionalised initiatives.

In our primary aim therefore, of creating an appropriate atmosphere in which residents can as an alternative to their own homes live normally as possible, it will be recommendable to consider the following factors in designing and planning of old peoples homes in the Karen residential estates:

**Location of the Home:** Karen area elderly residents were recorded in the study as having a problem of isolation which could lead to loneliness and depression due to lack of social contacts. This study suggests a solution to this by establishment of institutions for the elderly. Apart from putting a number of the elderly persons together hence enhanced social contact, this initiative can be made to socialize them by carefully choosing the location of this suggested home for the elderly. It should not be located in an isolated remote site from the rest of the Karen community but integrated with the community. Besides, it will offer opportunities for interaction and engagement in the local community activities, for example, in the church, social gatherings or helping in organizing community activities in the



area. This will help the aged in Karen to feel they are still usefull and not neglected by offering them the much lacking engagement in activities. It will also offer companionship from other age classes as in normal life now that the study recorded a high degree of widowhood, separation and single marital status in the Karen area. A bus stop nearby will make the home more accessible for both visitors and to the old people to reach town. It could also be a nodal point for resting where the aged may gather, and enriched by locating it in a shopping center. Thus this study has identified sites within Karen shopping center, Hardy shopping center and Westwood park area. This way the suggested homes for the elderly will not be segregated but will be just like another home in the neighborhood as it was in a traditional settlement of a clan.

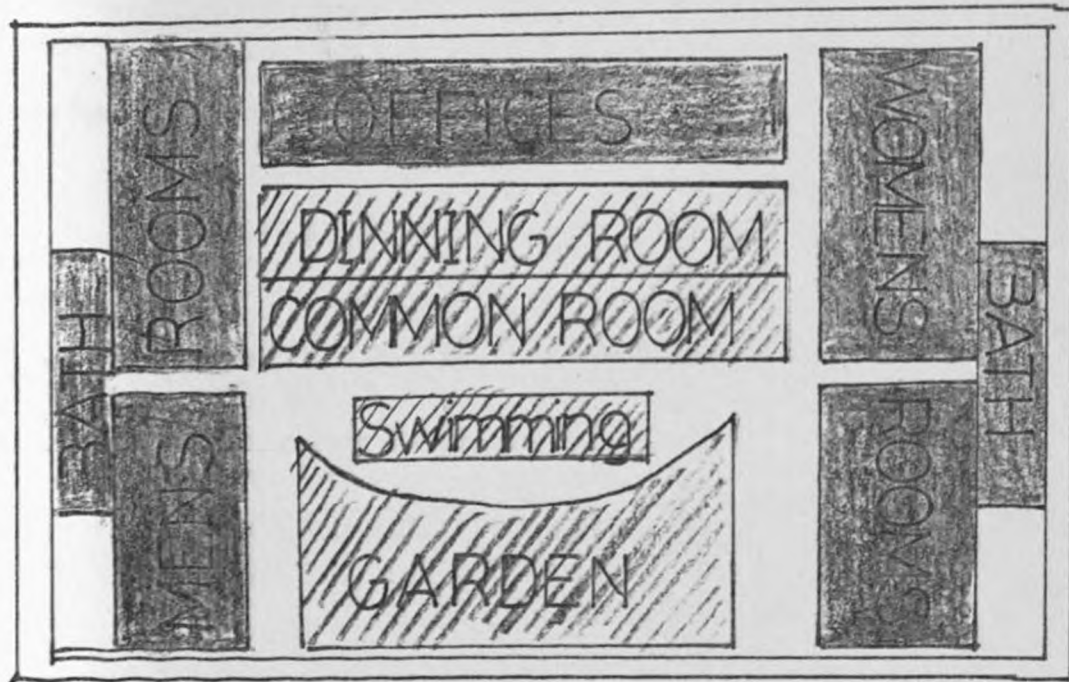
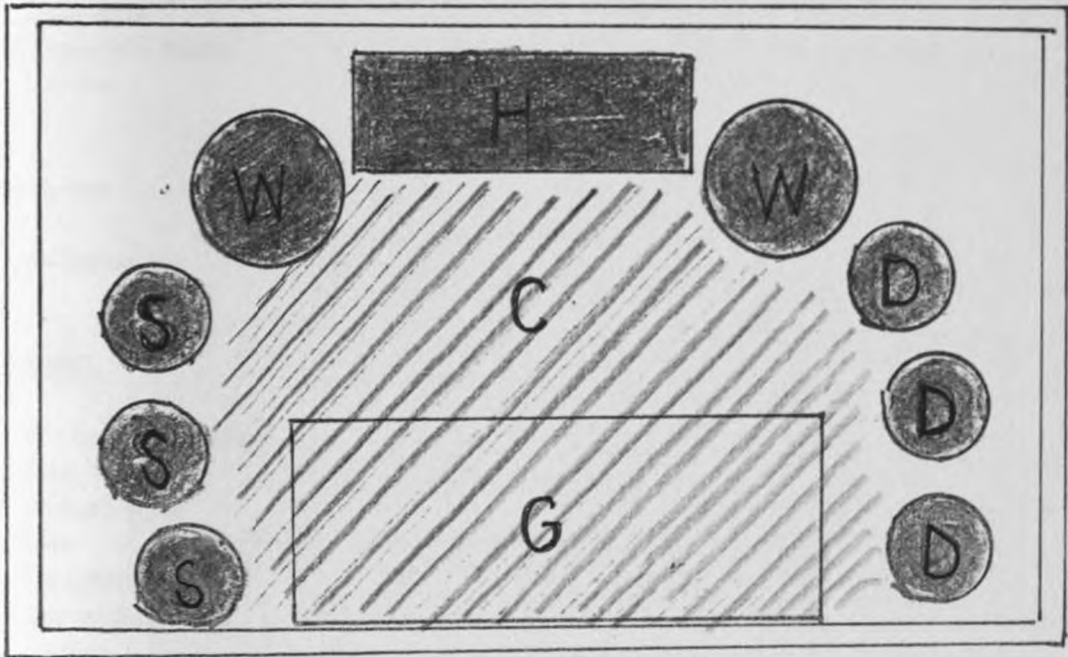
**Territoriality:** A definition of the home compound should be clear to promote a sense of security and safety for the residents, while giving the residents a sense of identity - a home to identify with as being theirs. The total compound should then be divided into smaller colonizable shared spaces. This ensures respect for individual instinct of territorial expression that in older persons is more definitive in their own petty activities than in normal adults. This could be provided in the form of individual spaces, personal gardens or terraces separated by low fences. This gives them a sense of independence, proprietorship and the recognition of the individual. The same principle could be extended to the common rooms, the dining room for example, through articulation in volume variations and furniture arrangement. This smaller territories within a larger space will be comfortable and promote comfortable social interactions among the elderly and privacy. This is especially important in Karen given the diverse racial and ethnic population mix recorded in the study, to remove unnecessary barriers. If the freedom and choice of the individual can be accommodated there would be no friction.

**Socialization as Spatial Organization:** The home should not be so large that it looses a homely atmosphere. As in a traditional Kikuyu home, more courtyards were formed with the growth of the family. This can be accomplished in these proposed homes for the elderly with provision of shared semi-private spaces where



chances of meeting and socializing are high. This arrangement will offer an alternative socially supportive environment to being within a family in a real home.

**Figure 28: Layout Plan of a typical Kikuyu Homestead as Compared to a Proposed Spatial Arrangement of a Home for the Elderly.**



Source: Researchers Own:

**LEGEND:**

- H - Husbands Dwelling
- W1 - First Wife
- W2 - Second Wife
- S - Sons
- D - Daughters
- C - Common Ground
- G - Garden

Private Space

Common Space

**LEGEND:**

- H - Husbands Dwelling
- W1 - First Wife
- W2 - Second Wife
- S - Sons
- D - Daughters
- C - Common Ground
- G - Garden

Private Space

Common Space

At the same time the spaces within the homes for the elderly should be such that the visual spaces allow interaction with whatever activity is happening all around them, hence need for a clear spatial relation between the different activities in the home i.e. exterior and interior spaces should have a strong visual link through low window sills and other openings. The elderly should have a clear view of the flower gardens, the recreational facilities and other indoor and out-door activities.

## **CHAPTER SIX:**

### **6.1 Summary and Conclusions:**

More Nairobi residence communities in 2030 will be truly livable for all age groups. They will be intergenerational and life cycle in nature, offering diverse choices that provide for future needs of all residents in this time of demographic transition towards an elderly population.

This study of planning options for housing an ageing population in Kibera Division adopted the residential area as the spatial unit of collecting and analysing information. The methodology of the study was scientific and allowed choice of representative areas where the elderly reside in Kibera Location, areas which capture the segregated nature of urban society by difference in income level and hence standard of living. This enabled the study to capture the needs and aspirations of the better majority of the elderly, which can henceforth be applicable to those needs and aspirations of the elderly in the whole of Nairobi without prejudice. The models proposed by the study to improve the welfare of the elderly also reflect the needs and aspirations of the different income level groups residing in Kibera Division, that also determine their aculturation, politicization, financial resources, socialization, and general perception of welfare. The study recommends different entry points to reach the elderly in each of the low, middle and high income group residential areas, a strategy deemed fruitful as analyzed from the problems faced and opportunities open to the three groups of elderly persons.

### **6.2 Priority Areas for Research and Development:**

The overall evidence from the literature on ageing in developing countries (Kenya too) suggests that it is only over the past decade that specific studies on the multiple dimensions of ageing have been undertaken. This process should be actively encouraged at all levels: regional, national and local. Methodology appropriate for understanding this cross sectional phenomena is practically needed. This is a priority area for future research and development.

There is little information on the health patterns of the ageing population though longevity has been achieved without total eradication of traditional infectious diseases and parasitic diseases while at the same time the modern man-made and non-communicable diseases are ascendant. Additional research on the prevalence of morbidity among older people and local level studies to enhance our knowledge and enable regional comparisons are requisite. Research and development into appropriate health care system should clearly be a priority for health policy to meet the challenge of the coming decades now that the urban bias and hospital fees have been found inappropriate in Kenya.

Research is required into the changing position of older people within the family – are they a burden or a resource and could family care substitute for community care? Control of resources is related to access to power and status, hence the woman's role in employment, status at work, criteria of valuing women's work at home that traditionally has been taken for granted should be a priority field of research.

Further research into different supports systems for the aged mainly to incorporate both formal and informal, appropriate, low cost model systems of good practice that are both economically feasible and culturally appropriate are desirable. In order to prevent marginalization and isolation of old people through the inexorable forces of urbanization and poverty, the role of education and advocacy becomes critical.



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**APPENDIX 1: Household Questionnaire:**

**UNIVERSITY OF NAIROBI;  
DEPARTMENT OF URBAN AND REGIONAL PLANNING:  
"Planning Options for Housing an Ageing Population: A Case Study of Kibera Division."  
HOUSEHOLD QUESTIONNAIRE :**

**Declaration :** This questionnaire is purely an academic exercise meant to assist Mr. Kenneth Mwaita Mwangodi to fulfil the requirements for attaining a Masters of Arts (Planning) Degree at the faculty of Architecture, Design, and Development (A.D.D.), University of Nairobi as a Thesis research. Your answering of the questions accurately will help produce an accurate plan. The information obtained through the questionnaire and observations will be treated with confidentiality. Thank you in advance.

PROVINCE: NAIROBI  
DIVISION: .....  
LOCATION: .....  
SUB-LOCATION: .....  
DATE: .....  
QUESTIONNAIRE No:.....

**PART A : HOUSEHOLD ISSUES:**

1. Individuals name (optional):                      Age:                      Sex (female/ male ):                      Marital status (single /married / divorced/separated, widowed, other):
  
2. Educational level: 1, None    2, Primary    3, Secondary    4, College    5, University  
6, Other (specify).....

3. Details of spouse and children, fill in the table below:

A, Spouse Name (optional)	Age	Sex (female /male)	Occupation
B, Children Names (optional)	Age	Sex (female/male)	Occupation
1.			
2.			
3.			
4.			
5.			
6.			
7.			

4. Are you a permanent resident of the area ? ( answer Yes or No ) .....
  
5. If NO, where do you come from ?.....
  
6. Reason for your coming to the area;
  - (a) shortage of land in area of origin
  - (b) shortage of employment opportunities
  - (c) to work

- (d) to follow spouse
- (e) ,, ,, relatives here
- (f) other ( specify ).....

**PART B : SOCIO- ECONOMIC SURVEY**

7. Do you own the property you reside on ? Yes / No
- (a) If Yes, what is the size of your piece of land / plot ? .....(acres )
  - (b) Do you have a title document for the piece of land ? Yes / No
  - (c) If No, have you :
    - 1. Rented (c) If rented, how much do you pay in a month?.....
    - 2. Squatted
    - 3. Been invited
    - 4. Institutional
    - 5. Inherited
    - 6. Other (specify )
  - (d) Do you own any piece of land any where (specify)?.....
  - (e) What shelter (see 1. below) problems do you experience (specify).....
- 8a) Do you undertake any economic activity for monetary gain? a) Yes b) No
- b) If Yes, specify the activity you undertake:.....
  - c) What are the terms of your employment? 1, Permanent 2, Casual/Temporary 3. Contract 4. Self-employed 5. Expatriate

9. What is your average income in a month (Tick). 1. Below Kshs. 2000 2. Kshs.2001 to 10,000 3, Kshs.10,001 to Kshs.30,001 4. Kshs.30,001 to Kshs50,000 5. Over Kshs. 50,000

1. Shelter is defined as the house, basic requirements of tenurial security, structural stability, infrastructure support and convenient access to employment, community services and urban facilities.

- 10.a) Do you receive any other income from any other source ? YES / NO
- b) If yes, what is the source and how much do you receive every month ?

SOURCE (Tick)	AMOUNT (kshs. Per month)
Working family member	
Pension	
Sponsorship	
Other (specify )	

- 11a) Do you make any savings? 1. Yes 2. No
- b) Do you experience any problem in saving and/or borrowing(specify):.....

12. How many dependants do you have (specify)?.....

13. How much do you spend on the following expenditure items?

ITEM	EXPENDITURE (Kshs. per month)
House rent	
Education	
Food	
Health	
Water	
Fuel	
Leisure and pleasure	
clothing	

14. What in your opinion are the main felt socio-economic needs or problems faced by the aged of this area?

- (a) lack of land
- (b) „ „ health facilities
- (c) „ „ income
- (d) „ „ schools
- (e) „ „ food
- (f) „ „ security
- (g) „ „ leadership
- (h) „ „ community organizations
- (i) „ „ development resources
- (j) „ „ water
- (k) vagaries of climate
- (l) environmental degradation
- (m) others (specify).....
- .....
- .....

**PART C: HEALTH ISSUES:**

15a) What action do you take when you or a family member falls sick ?

ACTION PREFERRED	WHERE (SPECIFY)
Buy drugs from the pharmacy	
Consult a traditional healer	
Visit a private clinic	
„ a health center	
„ District hospital	
„ Provincial „	
„ Referral „	
No treatment ( specify why )	
Other action taken (specify )	

- (a).....
- (b).....

b) For those who do not visit the local public health center, what is the reason for 15a. above?

REASON	TICK
Too far	
Too costly	
Poor services	
No drugs	
Other reasons (specify): 1;.....	2;.....
3;.....	4;.....

c) Fill in the details as specified for the following Health facilities:

Health facility	Distance (km.)	Mode of Transport	Time taken (min./hrs.)	Cost (kshs.)	1.Private / 2.public
Hospital					
Nursing home					
Health center					
Dispensary					
Clinic					
Herbal clinic					
House visit					

16a) Do you have any special health needs as an elderly person?

1. Disease prevalence 2. Mental soundness 3. Physical strength  
4. Other(specify).....

b) What are the common diseases that you experience (list them in order of frequency)

- 1, 4,  
2, 5,  
3, 6,

c) Do you know about HIV/AIDS? 1. Yes 2. No

d) Which ways of avoiding AIDS do you know? 1. Abstinence 2. There is no way of avoiding it  
3. Condoms 4. Other (specify).....

e) How did you get to know the information at c) and d) above? 1. Radio 2. Relatives  
3. Reading written material 4. Aids awareness campaigns 5. Other  
(specify).....

17. Suggest ways of improving your health situation as the elderly in society.

.....  
.....  
.....  
.....

**PART D: INFRASTRUCTURE FACILITIES:**

18a) What is the source of your water ? Please tick

WATER SOURCE	DISTANCE from your house (metres / kilometres or time spent)
Natural spring	
<b>Bore-hole</b>	
Water tank	
River	
Piped	
Wells	
Bottled water	

b) What are the major problems as far as water is concerned?

Problem	Suggested solution
Inadequate	

Contaminated	
Expensive	
Distance is long	
Unreliable supply	
Management	
Other (specify)	

- a).....  
 b).....

19. Sanitation issues: Fill in as specified for the sanitation method used.

Sanitation method used	Problem faced	Suggested solution
Pit latrine		
VIP latrine		
Conventional sewer		
There is no facility		
Others (specify)		

20. Transport and Communication:

- a) What mode of transport do you prefer?

Mode of Transport	Travel purpose
Walking	
Cycling	
Motor-vehicle	
Animal and animal drawn carts	
Others (specify)	

- b) What special problems are you facing in the transport sector as the aged in this area?

Problem	Suggested solutions
Poor roads	
Inadequate public transport	
Congestion on the roads and in public transport	
Lack of special facilities and/or services for the aged	
Distances inadequately covered by existing network	
Cost	
Poor management	
Other (specify)	

- c) What is the distance and the time taken to the following urban community facilities?

Facility	Distance (meters)	Time taken (minutes)
Telephone		
Post office		
Transport terminal		
Other (specify)		

- a).....  
 b).....  
 c).....

- c) Other infrastructure services available: State their adequacy of accessibility in your opinion (1. Bad 2. Fair 3. Adequate)



Service	Accessibility
Electricity	
Telephone	
Television / No. of channels	
Newspapers	
Tertiary institutions	
Other (specify )	

d) **ENERGY SOURCE:** Tick the source of energy available to you and specify its source.

TYPE OF ENERGY	SOURCE
Fuel wood	
Charcoal	
Paraffin	
Gas	
Electricity	
Other (specify )	

**PART E: COMMUNITY ORGANISATION:**

21a) Are there any community groupings you are involved with in this area ? (tick)

TYPE of grouping	LOCALLY based	EXTERNALLY based (specify where)
Community self help		
Men " "		
Female " "		
Savings and credit		
Non-credit finance orgs.		
Harambee groups		
Religious groups		
Others (specify)		

- a).....  
 b).....

(b) What do you consider are the dominant values of the community (or groups) in the area?

DOMINANT VALUE	RANK BY IMPORTANCE (IN DESCENDING ORDER)
Honesty	
Hard work	
Christian virtues	
Family ties	
Materialism	
Community (public)	
Individualism	
Satiated	
Negative tendencies (hostility to outsiders, crime, dishonesty e.t.c.)	

**PART F: ADMINISTRATION AND GOVERNANCE:**

22(a) Which is the nearest government administrative office in the area ?

OFFICE	WHERE LOCATED	DISTANCE FROM HERE

District Commissioner		
District Officer		
Chief		
Sub- chief		
Village head-man		

(b) Comment about the civic role of the office mentioned at 22(a) above.

.....

(c) How is the security situation in the area ? Suggest ways of making it better.

.....

(d) Mention any other public, private, donor, civic, lobby group, church based, community based, NGO, e.t.c. involved in any initiative towards the elderly in your neighbourhood and how they may be assisted to be sustainable.

Institution	Activity of Concern	Suggestion

(e) Suggest ways to improve the standard of living of the elderly in our community.....

.....

**APPENDIX 2: Institutional Questionnaire:**

**UNIVERSITY OF NAIROBI;  
DEPARTMENT OF URBAN AND REGIONAL PLANNING;  
MASTERS OF ARTS PLANNING 2000 / 2001:  
"THE CHALLENGE OF AN AGEING POPULATION IN INADEQUATELY PLANNED  
URBAN AREAS OF KENYA: A CASE STUDY OF NAIROBI".  
INSTITUTIONAL QUESTIONNAIRE:**

**Declaration:** The information obtained through this questionnaire will be purely for academic purposes and will be treated with confidentiality.

Questionnaire No: .....

Date of interview: .....

UNIVERSITY OF NAIROBI  
ADD LIBRARY

A. Information on the respondent institution:

- a) Name: .....
- b) Status (Please tick) 1. Government body    2. Non-governmental organisation    3. International body    4. Parastatal/Government Corporation/Quasi-Govt. organisation    5. Church based organisation    6. Self-help organisation    7. Private
- c) Year of establishment:.....
- d) Why was your institution started?  
.....  
.....  
.....

B. Nature of your institution's relationship/activity with the ageing population (please specify):

- a) .....
- b) .....
- c) .....
- d) .....

C. What are the important challenges of an ageing population in the urban area of Nairobi.

- a).....
- b).....
- c).....
- d).....

D. What constraints do you face in realizing the objectives of your institution towards the elderly.

- a).....
- b).....
- c).....
- d).....

E. How are you collaborating with other institutions in addressing issues on the aged?

INSTITUTION	LINKAGE

F. Suggest a relevant course of action for the future Kenyan urban situation for an ageing population.

- a).....
- b).....
- c).....
- d).....