

THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS IN SLUM AND
SQUATTER

SETTLEMENT UPGRADING: A CASE STUDY OF UNDUGU SOCIETY OF
KENYA IN

KITUI VILLAGE

BY

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UNIVERSITY OF NAIROBI
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A THESIS SUBMITTED IN 'PART' FULFILMENT FOR THE DEGREE
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DECLARATION

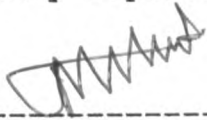
This thesis is my original work and has not been presented for a degree in any other University.

signed -----

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This thesis has been submitted for examination with my approval as a University supervisor.

signed : -----

DR . J. M. KIAMBA

JUNE, 1992

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DEDICATION

For their inspiration this work is dedicated to my husband **Mutua Mailu** and our children **Munyao** and **Kalekye**

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All errors and shortcomings found in this work are my full responsibility.

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ABSTRACT

Housing is a basic human need and most governments have attempted to house their subjects. Yet housing efforts of the low-income group of people have been wrought with many problems. Non-Governmental organizations have now come in to help in an attempt to house the low-income group of people.

The broad objective of this thesis is to find out whether the Undugu housing model can be used in solving the housing problem of the low-income in Nairobi. The specific objectives are to find out the working's of the Undugu settlement programme with specific reference to Kitui village and to describe and analyze the housing situation in the village.

Findings from the study suggest that the Undugu model is very successful although gradual. Due to the use of cost sharing, community participation and self-help most of the residents are now housed in dwelling units, which are more decent than what they were used to. Public utilities such as water have been improved by three additional water kiosks built in the village. Eleven toilets are now in the process of being completed.

Among the major recommendations that have been put forward in this thesis is that the Undugu model be adopted and especially the use of cost sharing and community participation. However it is recommended that the government take an active part in aiding the low-income groups resident in squatter areas by acquiring land. It is also recommended that land already bought by the government be allocated to Non-governmental organizations already working with slum/squatter communities. All this will go towards the enhancement of land security of the slum/squatter residents.

Further research on the harmonization of slums/squatter settlements upgrading and the general urban environment is recommended.

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CHAPTER ONE

1.1

INTRODUCTION

This chapter introduces the magnitude of the housing problem so as to bring the subject of study into perspective. It outlines the research problem, as the need to look at strategies employed by non-governmental organisations in slum/squatter upgrading settlements. Hence it looks at a case study of Undugu Society of Kenya. The reasons why such a study needs to be done are explained and the scope of the study outlined. Research methodology is described and the operational definition of terms used in the research explained.

HOUSING

Housing conditions for the low-income majority in most third world countries have progressively worsened. High population growth rates and urbanization trends have been among the contributing factors. Statistics available indicate that urban areas in the 1970's accommodated about 760 million people, an additional 411 million people in the 1980's and it is estimated that by the year 2000 Africa's urban population will have trebled (UNCHS Habitat 1987). Wakely P. (1976), Mabongunje et al (1978) and Obudho (1988) all allude to the fact

that the high population rates continue contributing to problems of housing the low-income group.

Consequently slums and squatter settlements have been on the increase. In Bogota they form 60 percent Santo Domingo 72 percent, while in East Asia they account for 67 percent in Calcutta and 60 percent in Ankara. In Africa they account for 90 percent in Addis Ababa, 61 percent in Accra, 50 percent in Monrovia and 33 percent in Nairobi. Although Nairobi's figures is comparatively low, it should be noted that by 1985 out of Nairobi's estimated population of 1.2 million about 110,000 unauthorised dwellings housed 40 percent of the city's population. Nairobi's largest squatter settlement, Mathare Valley grew from 4000 inhabitants in 1964 to more than 50,000 in 1971 and 100,000 people in 1987 (ibid).

Governments of the world have not been complacent about the situation explained in the preceding paragraph. There have been many various approaches advanced with the main aim being to house the poorest of the poor in the urban centres. Roof loan schemes, site and service schemes and very recently slum and squatter settlement upgrading have been attempted in the spirit of house provision for the particular group of people. Many studies have

also been done on the policies associated with housing. They have revealed that the house standard specifications have been a hindrance to provision of low-income housing. Mabongunje et al (1978), Wakely (1976), Syagga (1987), Rodwin et al 1987) and Smith and Syagga (1990) have all found out the need to change the housing policies as they relate to housing the low-income group.

1.2 PROBLEM STATEMENT

The Kenyan Government efforts have been mainly through site and service schemes and squatter upgrading. However these programmes have not been as successful as they have been intended. Although it is true that they have added to the housing stock in the country; for instance the United States Agency for International Development (USAID)/Kenya Government project, has contributed 4406 housing units (Ondiege & Syagga 1990). These additional housing stocks in the country have ended up being in the hands of the well to do. A study on squatter upgrading areas in Migosi - Kisumu revealed that the targeted income groups to be housed was not met. 82 percent of these residents were tenants belonging to a higher income group (Mitulla 1984). (UNCHS Habitat 1987) also argues that site and service schemes have not met the targeted group.

Upgrading of squatter settlements also does not seem to have improved this housing much. Mulinge (1986) in his study of Kawangware found out that although upgrading went a long way in the raising of level of services in the area, what was accomplished is still inadequate. Footpaths were not upgraded, drainage within the built-up environment still remains a problem and garbage collection has continued to be neglected.

In the site and service schemes problems of land transfer have emerged. The land allocated to the poor is more often found to end in the hands of the wealthy persons who are usually able to meet their housing needs in the formal market place. (Ondiege et al 1989) concur with this. Their study on the first urban project revealed that most of the houses developed for the low-income groups in Dandora phase II, evolved into middle income private housing after allocation. (UNCHS Habitat 1987) also revealed the same trend as concerns Thika's Makongeni site and service scheme.

Other organisations and especially non-governmental organisations such as the Undugu Society of Kenya (USK), National Christian Council of Kenya (NCCCK) National Cooperative Housing Union (NACHU), and others still support especially squatter upgrading where they are involved. This

time they are using the squatter upgrading programme with a view of solving the identified problems associated with the programme so far.

The above reason has therefore necessitated the need for a research using Undugu Society of Kenya as a case study. The study will seek especially to find out the workings of the Undugu Society of Kenya with specific reference to Kitui village. It will also describe and analyze the housing situation in the village and formulate policy proposals and recommendations for this programme.

1.3 OBJECTIVES

The broad objective of the study is to find out whether the U.S.K. model can be used in solving the housing problem of the poor in Kenya and especially in Nairobi.

The specific objectives are:

1. To find out the workings of the Undugu settlement programme with specific reference to Kitui village.
2. To describe and analyze the housing situation in Kitui village.
3. To formulate, on the basis of the above objectives, policy proposals and recommendations for this programme as a

strategy towards solving low-income group housing programme.

1.4 ASSUMPTIONS

1. Low-income group will continue relying on low-income houses for shelter.
2. Low-income group obtain their dwellings through the process of self-help building.
3. Inappropriate housing policies are a major cause of low-income group housing programme.

1.5 JUSTIFICATION

On the basis of documented works on other non-governmental organisations, these, appear to succeed more in housing the low-income group. For instance in Sorsogon in the Phillipines the centre for housing and human ecology, an NGO based in Legaspi has been able to obtain water, sanitation and other services Sina (1990). In Zambia, Kavu housing and construction cooperative has already housed 500 families formally squatters with the assistance of the Catholic Secretariat and the University. Sina (1988). In Nairobi, Kenya - the Kariobangi Housing and Settlement Co-operative (KHSC) has been able to pool its resources together to buy land on which they squatted.(Sina 1990)

Most of these documented works on NGO's have, however, not been subjected to critical analysis of their operations. It is only projects which the government of Kenya has collaborated with international agencies in implementing, that have been given this analysis. For instance, the first, second and third urban projects which have been implemented in towns such as among others Nairobi, Mombasa, Nakuru and Kisumu. These studies of urban projects have also concentrated more on the analysis of performance of the site and service schemes which in many cases have failed to meet the target group. The area of squatter upgrading has almost been given a 'black-out'. (Mitulla 1988) concurs with the same view by observing that lessons from upgrading have been scanty. It is only the Kawangware case which is available if we exclude marginal upgrading cases such as Mathare where only toilets were provided. On the other hand, Baba Dogo upgrading scheme never took off due to the land tenure complications (ibid).

This study will therefore be an attempt to fill the above noted gap by providing information which will not only be a documentation of the works of the Undugu Society of Kenya but will also provide information as it relates to the description and analysis of the housing situation in Kitui village.

The study will also provide data on how non-governmental organisations (NGOs) can be utilized in the provision of housing for the low-income and how they can be improved on.

More specifically U.S.K. has been chosen as an NGO for study because it has been involved in the efforts of housing the low-income group in squatter upgrading areas. It has operated in various settlements within Nairobi such as Mukuru, Pumwani and Kibera. Above all it has been involved in efforts geared towards solving the low income housing problem which is among the most pressing in the country (Kenya) currently.

1.6

SCOPE

The research focuses on the description and analysis of housing in the urban low-income settlement of Kitui village - Nairobi: Reference has been made to other infrastructural facilities as and when there is some relationship on the housing situation in the study area.

First the research addresses itself to the conceptual background of housing with particular reference to slums/squatter upgrading. It looks at the problems that are experienced in poor housing conditions, the solutions that have been taken to arrest the situation, the outcome of these

solutions and the recent involvement of non-governmental organisations in slums/squatter settlements.

The process of urbanisation in Nairobi is traced and the evolving of slums/squatter settlements brought out. The present economic situation in Nairobi is articulated and the government policies on housing in relation to the slums/squatter settlements appraised.

The socio-economic characteristics of Kitui village residents are analyzed so that a clearer perspective of the context in which the study has been undertaken can emerge. The prevailing state of the houses and the associated infrastructure and amenities is analyzed.

Variables that describe and analyze the housing situation have been looked into together with and the operations of the U.S.K. in Kitui village. These variables are such as the housing structures, the method of construction used, number of rooms per structure, facility provisions in the house, among others. On the basis of these then the Undugu model is analyzed and proposals/ recommendations are then suggested.

1.7 ORGANIZATION OF THE THESIS

This section summarizes the format of presentation of the research work. Chapter one

introduces the research work and highlights the research assumptions, the scope of the work and the research methodology.

Chapter two lays down the conceptual background to the research problem. The chapter starts off by outlining the importance of shelter. It further gives a picture of shelter provision performance. Here several policies and strategies are reviewed and related to the problems that are faced in housing the low-income group.

Recent approaches in housing the low-income group are discussed with the role of Non-governmental organizations dominating the discussion towards the end. The last section in the chapter narrows down to the Undugu Society of Kenya where its' aims and objectives are outlined.

Chapter three presents the background to the study area. The historical development of Nairobi, its growth and urbanization are traced. Urban housing in Kenya is discussed and the origin and extent of various types of informal settlements presented. The historical background of the Kitui village is traced and a brief introduction of the Undugu Society of Kenya (U.S.K) in Kitui village described.

Finally the government policy on housing is reviewed and discussed from the time of

independence to present day. The economic status of the residents of Nairobi is then appraised to give a total picture of the economic standing of these people.

Chapter four analyses the workings of the U.S.K in Kitui village . It also analyses the housing situation taking into consideration the involvement of U.S.K. in the village. Finally an assessment of the Undugu model is made .

Chapter five summarizes the major findings of the research and on the basis of these , makes recommendations and conclusions.

1.8 RESEARCH METHODOLOGY

First of all a reconnaissance survey of Kitui village was done. This village constitutes the study area. It is located about three kilometres from the central business district (CBD) downstream along Nairobi river. It is one among three villages working together with the Undugu Society of Kenya (U.S.K.). The other two villages are Kanuku and Kinyango.

Due to the unavailability of any map or aerial photograph showing the pattern and nature of the housing layout, it was found necessary to administer a sampling technique to Kitui village which is the oldest among the three village and

was 5 then every tenth house, after the 5th would be selected for questionnaire administration. This means that the 15th, 25th house and so on would be selected.

1.9 SOURCE OF DATA/DATA COLLECTION

Data was obtained from two main sources namely primary and secondary sources. Primary data was obtained from the household questionnaire administered in Kitui. The questionnaire was designed in such a way to gauge community's perception of the U.S.K. programme in terms of its workings and housing realized as a combined effort between them and provide input at the recommendation stage. In order to gauge community perception variables like community organisation and participation and self-help were assessed. To assess housing variables like materials used, the community's satisfaction with these materials, room space, land tenure, location were assessed. Affordability of the community in relation to housing units and their priorities were also assessed among others. The overall rating of the Undugu Society of Kenya (U.S.K.) programme was established.

Two separate questionnaires were administered. One to the officers of the Undugu Society and the

other to the village committee chairman. Formal interviews were also held with these officers and informal ones with the residents of the village.

Secondary data was collected from published and unpublished literature obtained from various libraries. Libraries of great help were the Mazingira and Housing Research and Development Unit (HRDU).

1.10 DATA ANALYSIS

Data collected on the above factors was analyzed using descriptive statistical techniques which include the computation of frequencies, percentages, means and use of tables. Maps and photographs are also used for the spatial dimension of the phenomenon in discussion.

1.11 OPERATIONAL DEFINITION

There are some terms used in the study which require some definition. These terms have been defined below:

Informal Housing Approach

This refers to those houses built of non-durable materials specifically mud and wattle walling and G.C.I. roofing. These houses also do not meet any standard specifications of building.

Low-income Group

This refers to those earning a monthly income of less than KSh.2000/-. This is also the stated low-income group of people categorised by the statistical abstract of 1988.

Non-Governmental Organisation

These are organisations which are neither part of the state nor working in private profit. They are found within the community sector and act as support organisations that provide services to others from community based organisations.

Site and Service Schemes

This is where a public authority prepares an overall development plan for an area of housing which includes the definition of the plots, design and layout of the roads, provision of schools, health centres, open space, local industry, playing fields and sewerage and water reticulation. Once the overall layout is approved the authority lets contracts for the construction of the roads, the setting out of the plots, the construction of the wet cores (toilets and showers) together with a kitchen and occasionally one room and or a store and the provision of a sewer and water supply.

Slums and Squatter Settlements

There is still debate over slums and squatter definition. For purposes of the study they will

refer to those areas with an ambiguous legal status regarding land occupation. They are to a large extent built by the inhabitants themselves using their own means and are usually poorly equipped with public utilities and community services. Their usual image is of a poor under serviced overcrowded and dilapidated settlement consisting of make-shift improvised housing area. Their location is often but not always further from the city centre than in the case of slums.

Formal Squatter Upgrading Schemes

These involve the examination of a public authority of an existing illegal or unauthorised housing development with the objective of preparing proposals that will enable access roads to be provided, plots to be demarcated to enable house owners to have legal registered plot, a supply of wholesale water to be made available, an efficient means of excreta disposal, sites for schools, health centres and open space to be provided, dangerous houses to be removed unsatisfactory houses to be improved, the minimum number of existing sound or reparable dwellings to be demolished, construction of the roads provision of water supplies and sewerage disposal facilities and community facilities.

Housing situation

This refers to the current condition of the houses in Kitui village.

First, second and third urban projects

These are housing projects targeted for the low-income. The first project was the Dandora Project which was initiated in 1975 with world bank assistance. It comprised 6000 serviced plots.

The second urban project comprised 9000 serviced plots in Kayole and Mathare north in Nairobi, 1700 serviced sites and 1200 upgrading plots and 500 serviced sites in Migosi, Manyatta and Nyalenda/Pandpieri in Kisumu.

The third urban project covers Eldoret, Kitale, Nakuru, Nyeri and Thika .It comprises 2441 plots. These are Racetrack site (743 plots) and Pangani site (300 plots) in Nakuru, Kiawara/Shauri Yako site (257 plots) and Kingongo site (59 plots) in Nyeri and Kipkaren site (512 plots) and old Uganda road area (570 plots) in Eldoret.

1.12

SUMMARY

We have seen that the problem being addressed to in this chapter is the role of the NGOs'in squatter upgrading. The researcher is concerned with workings of the Undugu Society of Kenya.The researcher also wants to describe and analyze the housing situation in Kitui village.

The main reasons which have necessitated the study are that Undugu Society of Kenya is among the prominent NGOs' which have been involved in the informal shelter delivery. The study has concentrated on Kitui village because it was the first to have been dealt with by the U.S.K..It also portrays housing characteristics different from the nearby Kanuku and Kinyango villages which are also U.S.K. beneficiaries.

CHAPTER TWO

CONCEPTUAL BACKGROUND

2.1 INTRODUCTION

This chapter builds up the case for study of slums and squatter settlements with special reference to Undugu Society of Kenya. It looks briefly at the importance of shelter and the problems associated with poor housing in general. It also looks at the performance of housing provision in the urban areas in various parts of the world before narrowing down to Kenya.

The chapter also looks in detail at the attempts that have been made in solving the housing problem, it provides an overview of the non-governmental organisations (NGOs) in slum and squatter upgrading and eventually looks at the Undugu Society of Kenya. (U.S.K.) broadly as an organisation.

2.2 SHELTER IMPORTANCE

Shelter needs constitute one of the most fundamental of man's existential requisites. Along with water and food, shelter is essential for man's survival on this earth. Man has need for shelter to protect himself from the natural elements .

(Peattie 1986) argues that housing is in one of its aspects the dwelling unit, the behaviour setting

within which the household members live and which they pay for in order to carry out daily life.

It is also for the users a position of access to the urban economy since expenditures on housing can be seen as a kind of 'cover charge' entitling those who pay it to be among the resources of the city. For the low-income people, housing is not only a part of the consumption percentage but also part of a productive capital. It helps them sustain trade and manufacturing activities through constituting the space to store and transform goods (ibid).

2.3 SHELTER PROVISION PERFORMANCE

Despite the importance of shelter, most governments of the world and especially those in the developing countries, have been unable to house especially their low-income subjects. (Wakely 1976) further comments that most of the cities and towns of the third world have public sector programmes intended to assist the poorer citizens with their housing but only one or two of these have been successful mainly Hongkong and Singapore.

For the other countries production of new dwellings has been slow and fraught with difficulties and constraints such, as competing landuses in urban areas and high standards setting in the provision of housing stock among others.

Consequently house prices have escalated to very high levels beyond the low-income group's capacity to own or even rent them.

These have had causal effects in that informal settlements in the name of slums and squatter settlements have been on the increase. For example in the case of Mexico City, 40% of the population is housed in informal settlements. In Egypt, 77% of additions of the housing stock between 1966 and 1976 was supplied by the informal sector (UNCHS, Habitat 1986).

Similar estimates in other countries indicate an informal sector share in housing at comparable levels. (Renaud 1984) reports for Tunisia from 1975 to 1980, a share of 53% of all new dwellings as informal sector construction. Table 2-1, is a further illustration of the formal settlements housing the bulk of the urban populations in the selected cities.

Table 2-1

Estimates of the Percentage of City Populations in Informal Settlements in 1980

City Settlements	Total Population (000)	Informal Settlements (No. 000s)	%
1. Addis Ababa	1,668	1,418	85
2. Luanda	959	671	70
3. Dar-es-Salaam	1,075	645	60
4. Bogota	5,493	3,241	59
5. Ankara	2,164	1,104	51
6. Lusaka	791	396	50
7. Tunis	1,046	471	45
8. Manila	5,664	2,666	40
9. Mexico City	15,032	6,013	40
10. Karachi	5,005	1,852	37
11. Caracas	3,093	1,052	34
12. Lima	4,682	1,545	33
Sao Paulo	13,541	4,333	33

Source: United Nations Patterns of Urban and Rural Growth, Population Studies 68 (1980) New York Table 48 in Global Report on Human Settlements 1986 UNCHS

Habitat (1987).

Nairobi has also experienced the same trend with the formal sector accounting for between 60-80% of the total housing stock of 40,000 units produced in the recent times. (Agevi and Yahya 1987). Table 2-2 is a further illustration of this for a better perspective of the shelter provision by the informal sector.

Table 2-2

Formal Housing Production by Sector 1982-86

Year	1982	1983	1984	1985	1986	Annual	
						Total	R
Public sector	5,978	3,043	5,049	2,007	958	17,035	3,407
Private sector	2,083	981	646	578	911	5,199	1,039.8
Total Number of new households	8,053	4,024	5,695	2,585	1,869	22,226	4,445.2
New dwelling units as % of new households	37.400 21.5		40.400 10.0	43.600 12.1	-	-	-

Source: Urban Housing Survey in Agevi E and Yahyas Development of the Construction Industry for Low-income Shelter and infrastructure UNCHS (Habitat) 1987.

The growth of slums/squatter settlements through production by the informal sector has resulted mainly to poor living conditions. The

inhabitants of these dwellings are as such subjected to unsatisfactory protection against elements such as rain, wind, sun, heat and cold. They are also faced with dangers posed by the environment such as noise, fire, disease or even eviction. Overcrowding causing stress, aggression, accidents and promoting the spread of diseases.

2.4 PROBLEMS FACED IN HOUSING THE LOW-INCOME

An overview of various housing policies and strategies employed in an effort of housing the low-income group may suggest why the slums squatter settlements have been on the increase. An example of one housing policy which is critical to provision of low-income housing is that which relates to minimum standards expected from a completed dwelling unit. Most countries and especially those in the third world have not yet revised the minimum standards expected from a completed dwelling unit. Mabongunje (1978) advances that most of the formal standards and criteria applied to shelter provision in Africa, Asia and Latin America are clearly recognisable extensions of similar normative requirements in Britain, Spain, France and Portugal in the 19th century and early 20th century.

Consequently this policy has had adverse effects on the provision of housing meant for the low-income Syagga (1987) concurs with this view by observing that at the root of housing problems in many developing countries, is the concept of minimum standards which are irrelevant and inconsistent with housing affordable to the people.

Rodwin (1987) further strengthens the above observation by arguing that in the developing countries the prevailing standards have not been a conscious choice but a reflection of inherited colonial standards of ways of thinking. High standards are demanded as evidence of modernization and economic progress.

Adder (1986) alludes to this by correcting that even if there was a desire to use more appropriate materials and reduce levels of service, bye-laws do not allow it. Yet the relaxation of the standards required in housing provision would enhance the housing stock meant for the low-income group since, these would be affordable. Wakely (1976) agrees with this observation albeit he puts it in different words. He says that officially acceptable standards often appear to account for the seeming hopelessness of any attempt to solve activity's living problems. The official standards he argues are impossible to achieve with the

they were chased or looking for other areas in which to squat. Welin(1973) lends support to this by pointing out that in most cases, slums/squatter settlements come up almost as soon as the older ones are demolished. According to Haldane (1971) slum clearance only leads to vastly swelling the demand, decreasing the supply and allowing greater exploitation to exist in those few areas which somehow have escaped destruction through political intervention or other means.

Slum clearance policy as such has only aggravated the housing problem. For instance in India in spite of the continued expenditure on slum clearing, these have persistently increased. In 1961 there were 100,000 families living in slums in Madras, in 1972 there were 200,000 and in 1981 there were 300,000 families UNCHS Habitat (1977).

The experience in Kenya is not any different. According to Mitulla (1988) the informal housing experienced a lot of demolition before 1974. The City Council kept destroying the unplanned settlements and thereby reducing the available housing stock but despite this, new ones kept coming. This is evident through the demolition of slums which took place in Nairobi from the period between May 1990 and early 1991.

available public resources and to this extent seem arbitrary and unrealistic. Turner (1971) also agrees with this observation.

A study by Smith and Syagga (1990) on Umoja phase II home ownership project in Nairobi, revealed that the setting of minimum standards for housing was a hindrance to provision of housing units. Under the home ownership project, they argue that more housing units could have been cheaper and affordable if the standards of the infrastructure could have been lower than they are now without necessarily affecting the quality of life.

Roof loan scheme is a strategy which aimed to meet housing shortage for the low-income. Although the scheme was found to be successful in Nigeria, Ghana and Bolivia it was not encouraged for reasons which are not clear. Abrams (1964) on this issue comments that although he recommended to the United Nations (U.N. Report) 1959 the creation of an initial revolving fund of a million dollars for loans to help workers develop the land and build, the plan was flatly rejected by the Agency for International Development (I.A.D.).

Slum clearance policy has also experienced problems. Regardless of the efforts, made to clear slum dwellers from these places, they always end up going either back to the original place from which

they were chased or looking for other areas in which to squat. Welin(1973) lends support to this by pointing out that in most cases, slums/squatter settlements come up almost as soon as the older ones are demolished. According to Haldane (1971) slum clearance only leads to vastly swelling the demand, decreasing the supply and allowing greater exploitation to exist in those few areas which somehow have escaped destruction through political intervention or other means.

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Site and service schemes, another strategy for the low-income has also not fared as expected. Peattie (1982) argues that given the high rates to investment in housing, sites and service schemes raise the temptation of the well to do members of the society to obtain them. Okpala (1986) says that although many African governments adapted this strategy namely Malawi, Zambia, Tanzania and Kenya with volumes varying widely with the largest magnitude in Eastern and Southern African countries - Kenya, Tanzania, Zambia and Sudan; little impact on the housing provision has been made. In none of the countries that adapted this strategy does it ascent for more than 5-10 percentage of total urban low-income housing (ibid) Table no.2-3 illustrates this.

Table 2-3

Site and Service Schemes in some African Countries.

Country/ Project	Total No. of plots & service	Percentage of Plots in site & service	Percentage of Plots in slum/ squatter upgrading	Percentage of plots with communal water & non borne	Percentage of plots with individual water & water borne sewerage
Botswana 1	2,800	64		100	-
Botswana 2	6,734	41		96	4
Ivorycoast	8,835	43		-	100
Kenya 1	6,000	100		-	100
Kenya 2	23,147	76		11	89
Senegal	15,600	100		87	13
Tanzania 1	19,400	92		92	8
Tanzania 2	34,788	59	41	100	-
Burkinafaso	11,306	11	89	100	-
Zambia 1	28,851	41	59	89	11
Zambia 2	47,747	N.A.	N.A.	N.A.	N.A.
Egypt	9,823	47	53	49	51
Morocco	9,330	10	90	34	66

Source: Linn (1979) "Policies for efficient and equitable growth of cities in developing centres". World Bank Staff working paper No. 342 pp. 298 in Okpala (1986).

Site and service schemes also face the problems of affordability. For instance UNCHS Habitat (1987) reports that the vast majority of these schemes are compounded by problems of land transfer. The land allocated to the poor is sold to wealthy persons who are usually unable to meet their housing needs in the formal market place. The serviced plots are frequently objects of speculation and provide opportunities for the better-off to increase the size of their land holdings.

Mitulla (1988) argues that experience in several projects in Kenya based on studies by Stamp (1981), Temple F and N (1980), Stren, R. (1977) and Mitulla, (1984) have shown that such programmes hardly reach the majority of the low-income groups which they claim to focus on. In this case a great majority who end up in such projects do not fall within the target group.

Ondiege and others (1989) lend support to the above when they say that most of the houses developed for low income groups evolve into middle income private housing after allocation and thereafter are subject to ruling market forces. Consequently the houses become occupied by higher income groups while the poor remain in squalid housing. They further advance that in Dandora about 75% of the household are renters which indicates that this type of high standard housing is an investment good that requires no subsidy. Thus most of the publicly sponsored projects end up being rented out for profit or sold out to non-target groups at high profits.

A report on a case study of site and service schemes in Kenya by the UNCHS Habitat(1987) clearly puts the problem into context. It advances that allocations are believed to have a bias towards higher income groups as a result of various

forms of intervention by special people. This is further strengthened by the Kenya low cost housing by study report of 1983 which says:

"The most significant aspect of corruption in low-cost housing is the question of allocation of plots usually when sites and services plots are advertised the influential (councillors, Mps, businessmen/women civil servants etc) find poor relatives and or friends who qualify for allocation. These usually get allocated plots. Soon, after the person allocated then goes to a lawyer with the influential where they enter a legal contract transferring the plot to the influential or his friends....."

U.N.C.H.R(1987 pp71).

From the quotation it can be seen that the low-income group of people also collude with the rich to get allocated the plots which they later give to the well off. May be this is done after the low-income group person has been promised something. It appears then that the income of the low-income groups of people is the major cause of failure most of the policies and strategies geared towards low-income housing provision. This is also the most critical issue which needs to be addressed because it is

incomes which determine the type of dwelling to be occupied. Wakely (1976) supports this view by arguing that there is a limited proportion of income that any family can devote to shelter over the other necessities of subsistence, food and clothing. That the rent proportion directly determines the value of accommodation which a household can afford. Consequently households below the poverty line need to invest increasingly large proportions of their meagre incomes to join the established housing market.

In the past decades especially in the 70's the approaches that were being used in order to tackle the financial problem were not very helpful. Existing conventional methods of financing

seem to discriminate against the low-income group. A report by the UN (1978) says that conventional financing schemes, even those that may be prepared to lead to low income households are generally designed to finance in a single operation the construction and or purchase of a complete house or finished core. However the combined price of land and a completed dwelling is so high relative to the financial capacity of low income households that they are effectively priced out of the market.

The rates of interest in the developing countries are also very high to the oligopolistic

nature of the economy. For instance the high rate of interest on even a small 20 year mortgage are sufficient to discourage participation by low-income groups(ibid)

There are also very many social constraints which emerge as the low-income enter deals with conventional financing institutions. As UN (1978) puts it, a certain degree of literacy and permanency of literacy is necessary for fulfilling the role of a borrower. Most studies conducted on the socio economic characteristics of slum and squatter dwellers, reveal the inability of slum dwellers, to reach such levels of literacy partly due to financial weaknesses. Hence this means that the low-income group are unable to enter deals with these conventional financing institutions because of their lack of literacy.

In table 2-4 particular aspects of the problem of conventional financing institutions or current government sponsored programmes are shown in the column on the left and contrasted with the respective points of view of low-income families as indicated in the right hand column.

Table 2-4
 Limitations of Conventional Housing Institutions.

High Eligibility Criteria	Constraints Inherent to lower income groups
1. an adequate income at a specified minimum	1. an income usually below 2000
2. Regular saving at a specified minimum rate	2. intermittent saving at a very low rate and often not deposited
3. Regular employment and place of residence	3. intermittent employment frequent changes in residence
4. Collateral in the form of conventional marketable assets	4. small assets of a form rarely acceptable to conventional institutions
5. Large loans for completed dwellings	
6. High down payments and ratios of down payments to total house price	
7. Maturity of 25 years	
8. Interest at the market rate	

Source: United Nations (1978) "Non-Conventional Financing of Housing for Low-income Households" New York page 25.

An example of the constraints is evident in the recently built Kibera and Pumwani low cost high rise buildings. A double roomed house self contained goes for KSh.235,000 and Sh.161,800 for a single roomed self contained house. This means that potential occupants will have to pay or are paying a mortgage to the tune of about KSh.3,000 per month. Yet this amount even surpasses their monthly incomes placed at Kshs.2000.

Still elaborating on institutional constraints, Ondiege, Syagga and Gatabaki (1989) note that no beneficiary has acquired a registered title acceptable by the banks in Kenya from either the first and the second urban projects.

Malombe (1981) further gives an overall assessment on the financial institutions in Kenya. Based on her study of housing finance agencies in Nairobi with special reference to the role in low income housing, she found out that the terms laid down by the conventional housing finance agencies, for acquiring finance for housing, are not suitable for these low-income groups. The terms are too high and the agencies have ended up channelling their finances to middle and high income groups.

Gatabaki's study (1985) on cooperative housing development reveals that only the middle and the higher income cooperatives of housing have been successful. Low income housing cooperatives have been less successful. Since 1965 when the first African housing cooperative was registered in Kenya, the 52 housing cooperatives had only managed to put up 600 housing units by the end of 1981 and 100 out of these were not complete.

Gatabaki's study (ibid) further conforms to the views of earlier literature cited that the low

income groups need financial assistance if they are to gain access to homeownership in urban areas.

2.5 RECENT APPROACHES IN HOUSING THE LOW INCOME

However, since the early '80's interest has been given to slums and squatter upgrading (SSU). The initiation of the global shelter strategy in 1987 has encouraged a move towards the acceptance that slums and squatter settlements are a reality and that most governments best direct efforts at providing housing for the people, can only be of symbolic value. It cannot actually solve the problem. (UNCHS Habitat 1986).

Johal (1988) concurs with the above when he says that it is only in the understanding of the dynamics of the formal sector shelter delivery process and crafting policies to assist and strengthen it that will, not only lead to a worked improvement in human settlements shelter conditions in Africa but also to an improvement of employment and income levels.

World wide trend is now channelled more than ever before, towards the acceptance that the people are best placed to provide their own housing; that the most effective level of government action in the housing sphere is an indirect one of providing access to the necessary resources and on the

provision of infrastructures at levels and tunes which match people's preferences and demands.

It is in this same vein that the World Bank committed the Kenya Government to allow squatter settlements in place and improve them. The government in response to this has undertaken the second and third urban projects UNCHS, Habitat (1987).

Performance of the above urban projects which are a combination of site and service schemes (SS), squatter upgrading (SU), servicing of private land including joint venture and housing units/plots seem outdone in their basic aim of targeting the low-income group. Once more finances appear to be crucial.

Ondiege Syagga and Gatabaki (1989) argue that if costs are to be fully recovered (since these are World Bank sponsored projects and bearing in mind that these costs have to take into account buying of land costs which were not catered for in the World Bank project), the final costs will eventually be passed to the beneficiaries. Consequently those in residence must have incomes far above the allottees so as to afford the rents being requested. Alternatively, if the repayments of the resource costs appear too high tendency will be that those who cannot afford will sell. They

conclude that it may be misleading to assume that in all the three towns the projects are affordable by household earning up to KSh.2,000/- who predominantly belong to low income groups in the urban areas.

Therefore the question still remains as to whether with coming years the residents of the second and third housing projects and especially those in squatter upgrading will afford to live in these houses or will be forced by circumstances to sell their plots. Although evidence based on data from Eldoret indicates that the targeted group is being met, it should be borne in mind that in other areas falling under the same third urban project like Thika and Nairobi they portray the tendency of the high income group settling in them.

Ondiege, Syagga and Gatabaki (1989) also allude to this by explaining that the squatter settlements were less attractive to speculators or absentee landlords in Eldoret perhaps because many people opt to invest in farm land, rather than in houses in town. Otherwise in Kiandutu, Thika and Bondeni Nakuru the tendency is towards people acquiring plots in squatter areas merely for speculative or political control purposes rather than being genuine squatters (ibid).

The preceding situation therefore presents a bleak future about SSU but with the simultaneous trend being experienced of non-governmental organisations participating more in the shelter delivery for the low income, a lot is to be expected basing this on the observation that NGOs seem to be more successful than various government's efforts to providing housing for the low-income even though they use the same strategy of squatter/slum SSU. UNCHS Habitat (1990) concurs with this observation. Hence for this reason an overview of the various NGOs is made in the following section.

2.6 AN OVERVIEW OF NGOS' IN SLUM AND SQUATTER UPGRADING

Since the occurrence of the global NGO forum which took place in Nairobi from 1-4th April 1987 and which discussed the potential of NGOs - further cooperation between the third world countries, limelight has been thrown towards this direction. As noted earlier, this is because of the continued success of NGOs in projects that they have been involved in all over the world.

This success has been attributed to NGOs proved ability to work together with the poor. They have shown that they can cooperate as effective intermediaries between governments and popular

organisations and they have demonstrated their ability to manage the highly participating projects to which governments have found their agencies unsuited. For instance, experiences in Sri Lanka and the state of Kerchar India have shown that NGOs and community based organisations can become intermediaries between government and the community and they can undertake projects within the poor (UNCHS Habitat 1990).

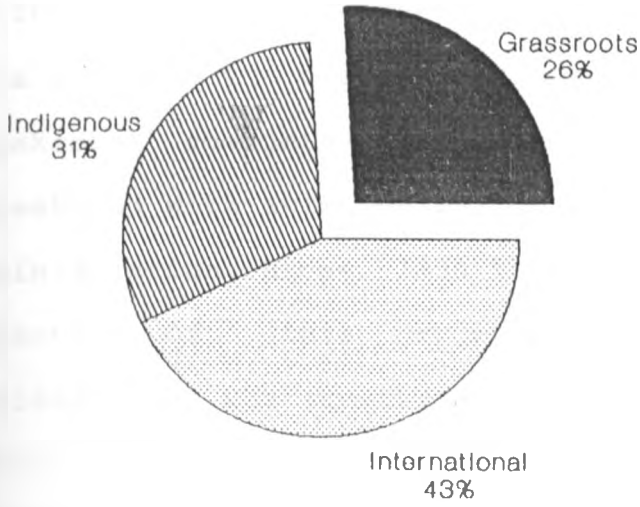
UNCHS Habitat (ibid) further argues that the NGOs flexibility in their workings is another reason behind their success. The (NGOs) adoption of enabling policies of housing the low-income group which involves the recognition of these people's initiatives and the capacities to attack and solve their own problems, not forgetting their incapacibilities of improvements which the individual, the family or even the slum or squatter community cannot handle alone because they involve the society outside the marginal areas, has led to NGOs success.

NGOs activities have also supported grass root groups. For example a report released by the United Nations (U.N.) in 1991 illustrates that NGO associated projects in fiscal year 1990 continued involving more grass roots groups (42%) and

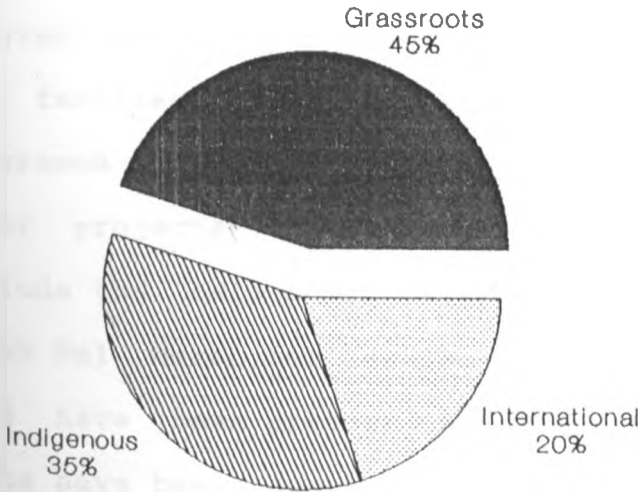
indigenous intermediary NGOs(36%) than international NGOs(22%).

The World Bank has also supported and continued supporting local NGOs so that grassroots knowledge and expertise can be brought to the design and implementation of projects. International NGOs have strongly supported this initiative by the bank. Figure 2-1 illustrates further bank-NGO.

BANK NGO OPERATIONAL COLLABORATION Fiscal Years 1973 to 1990



Fiscal YR. 88 to 90



Source: UN Report, 1990.

Examples of the successes of NGOs are many and especially those concerned with human settlements. In Thailand, the Samakeetan New self help community is a response to the urgent needs of squatters in Samakeetan community who are currently being threatened with eviction by the Bangkok metropolitan administration, whose land they are occupying. The objective of this project is to provide some assistance to the squatters to enable them to buy a piece of land through their own initiative and through mutual help effort.

In Indonesia, the yayasan Panka Bakti an NGO represents the local initiatives of two slums in Jakarta Kampung Sewah and Pal Merah which had been singled out for clearance by the government. About 873 families (3648 people) participate in the programme of the Yayasan Panka Bakti. Some of its major projects in various stages of progress include the relocation of 200 families of Kampung Sewah Pal Merah for which 13,800 square metres of land have been prepared in four locations and 84 units have been completed and the relocation of 461 families of Kampung Sewah - Tanjung Duren after having identified around 50,500 square metres of land in two locations in West Java.

In Nigeria the Olaleye - Iponri squatter settlement revealed that NGO involvement helped

reduce the economic costs of housing the squatters. Secondly the residents way of life was not disrupted by displacement and politically the Nigerian government won the support of the Olaleye-Iponri residents.

In Kenya, evidence is available to illustrate the success of NGOs. National Christian Council of Kenya (NCCCK) has led the promotion of improvement in human settlements conditions for low-income families through its urban community improvement programme. It operates throughout Kenya and has several programmes ranging from services for refugees to family life education. The village and peri-urban improvement project which concerns itself with improving the quality of life of low-income urban communities, provides workshops for exploring innovative use of local affordable building material using appropriate technology and traditional skills. It also helps communities gain access to other resources such as income to start income generating activities. Digest, (1989).

Kariobangi Housing Settlement Cooperative (KHSC) has managed to buy a site on which they squatted through savings and negotiations with the land owner. Now they have a legal title. Since then the programme has pursued a vigorous programme of self-help community development which has included

construction of a nursery school, office and storage area, two commercial structures for rent and two model houses (Digest 1990).

In general therefore most of the literature on NGOs portrays various achievements. Nostrand (1982), Yeung (1983), Digest 1987, Sina 1986 and Adebusoje (1988). UNCHS Habitat (1990) and Kunguru & Mwiraria (1991). It would be of importance therefore to find out whether the Undugu Society of Kenya (U.S.K.) which has been chosen as a case study has apart from its operations in Kitui village brought about housing improvement in a bid to alleviate the housing problem among Kitui residents.

2.7 UNDUGU SOCIETY OF KENYA

Undugu Society of Kenya is a non-government organisation engaged in community development activities in Nairobi's informal settlements. Undugu was established in 1973 with the main objective of assisting street children. It was first registered in 1975 as the Undugu Youth Centres. This name changed in 1978 and attained the current name Undugu Society of Kenya when the organisation was registered as a non-governmental body under the societies act.

Overall its objectives are:

1. To enhance the socio-economic status of people in low income areas through an integrated approach to community and small scale business development;
2. To enhance the sense of responsibility of people in low income areas for their own development;
3. To provide non-financial assistance to other organisations that are involved in similar activities;
4. To progressively reduce the organisations dependency on donor funds.

Among the projects and services that U.S.K. involves itself are:

- (a) Parking boys programme
- (b) Basic education programme
- (c) Community health programme
- (d) Sponsorship
- (e) Youth group activities
- (f) Low cost housing
- (g) Women's programme
- (h) Basic skills
- (i) Export unit
- (j) Informal sector programme
- (k) Business advisory programme

- (l) Katagi agricultural project
- (m) Technical upgrading among others

Undugu is spread over the different low income settlements in Nairobi which include Pumwani, Kiberia, Mathare, Muthurwa, Kariobangi and Katangi settlement in Machakos District.

Kitui village is an informal settlement in Pumwani area. The community resident here, has cooperated together with the U.S.K. in a bid to better its housing condition. It is in this village then, that the study will focus on.

2.8

SUMMARY

Shelter is important as every human being needs a structure to live in .The chapter has shown that despite the strategies and policies that have been formulated for the benefit of housing the low-income, they have been wrought with various problems.

Policies such as those which state the minimum standards of housing that should be met ,slum clearance and strategies such as site and service schemes have been compounded by various problems .

Institutional constraints, ' affordability, failure to meet the targeted group and general poverty of these people (targeted group) have all

made the provision of housing, a difficult task to accomplish.

However, recent approaches have now been geared towards the creation of an enabling environment within which housing provision for the low-income can be made possible. Outstanding achievement has been demonstrated by various NGOs such as the Kariobangi Housing cooperative (KHSC).

Undugu Society of Kenya (U.S.K) as an NGO has also been actively involved in the informal shelter delivery for the low-income. It operates in Pumwani Kibera, Mathare, Muthurwa and Kariobangi all in Nairobi. Hence the reason why it has been chosen.

CHAPTER THREE

BACKGROUND TO THE STUDY AREA

3.1 INTRODUCTION

This chapter deals with the study area. It starts by laying down the background to the study area by looking at the historical development of Nairobi. Simultaneously it also traces Nairobi's growth and urbanization. The origin and extent of informal settlements is discussed. This discussion is relevant because the study area falls in this category of settlements.

The study area is described, followed by appraisals of the government policy on housing, the planning standards in existence and the general economic status of Nairobi residents. These appraisals have been considered in this section in order to emphasize the context in which the study area is.

3.2 DEVELOPMENT OF NAIROBI

The site on which the City of Nairobi has grown was chosen for its suitability as a railway depot situated roughly halfway between Mombasa and Kisumu. The railway company moved its headquarters from Mombasa to Nairobi in 1899 and was joined in the same year by the government administration of Ukamba Province which until then had its office in Machakos (Etherton 1982).

By 1905 government and railroad administration offices were established in district areas of the city of Nairobi. A year after the original railway depot and camp had mushroomed to a town of 11,000 people living and working in district areas within a 1.5 mile radius of the government offices. The layout which formed inside this first municipal boundary was in future to direct the subsequent growth of the city.

Since the depot was sited on the southern and eastern parts of the city as a result of the gradient the area was carried out for depot purposes. However separate housing areas originated as Indian railway workers huts (coolies landhies), the Washermens' (dhobie) quarters and the housing associated with the Indian Bazaar. European housing occupied mainly the wooded ridges of fertile red soil to the north and west of the railway centre. These therefore set the pattern for the future city centre.

There were relatively few Africans working on the construction of the railway and there is no mention of the accommodation in the town at that time.

Plague had broken out twice in the bazaar areas before 1906 and once more in 1912. Consequently the Simpson report firmly advised that separate

quarters for Europeans, Asiatics and Africans be established. However the British Government refused to enact a legislative in relation to segregation although they argued that natural affinity would keep together, different races, in separate quarters.

Another major review of the town's structure and development was made by a local government commission led by Justice Feetham in 1928. Neither the municipal boundary nor the overall disposition of the zones established within it was altered in the master plan for a colonial capital prepared in 1947. During the next 15 years Nairobi developed along the lines prescribed by the 1947 masterplan.

The period after Kenya's Independence 1962-1963 saw an increase in the population to 266,800 consequently the new independent government extended the 1927 boundary to cover an area of approximately 266 square miles. The new city boundary followed the outline of the old extra provincial district except in the case of the large European coffee estates subdivided between the Kikuyu reserve and the northern edge of the city. Dagoretti, the low-density suburbs of Karen and Langata and the Nairobi National Park were now included within the boundary.

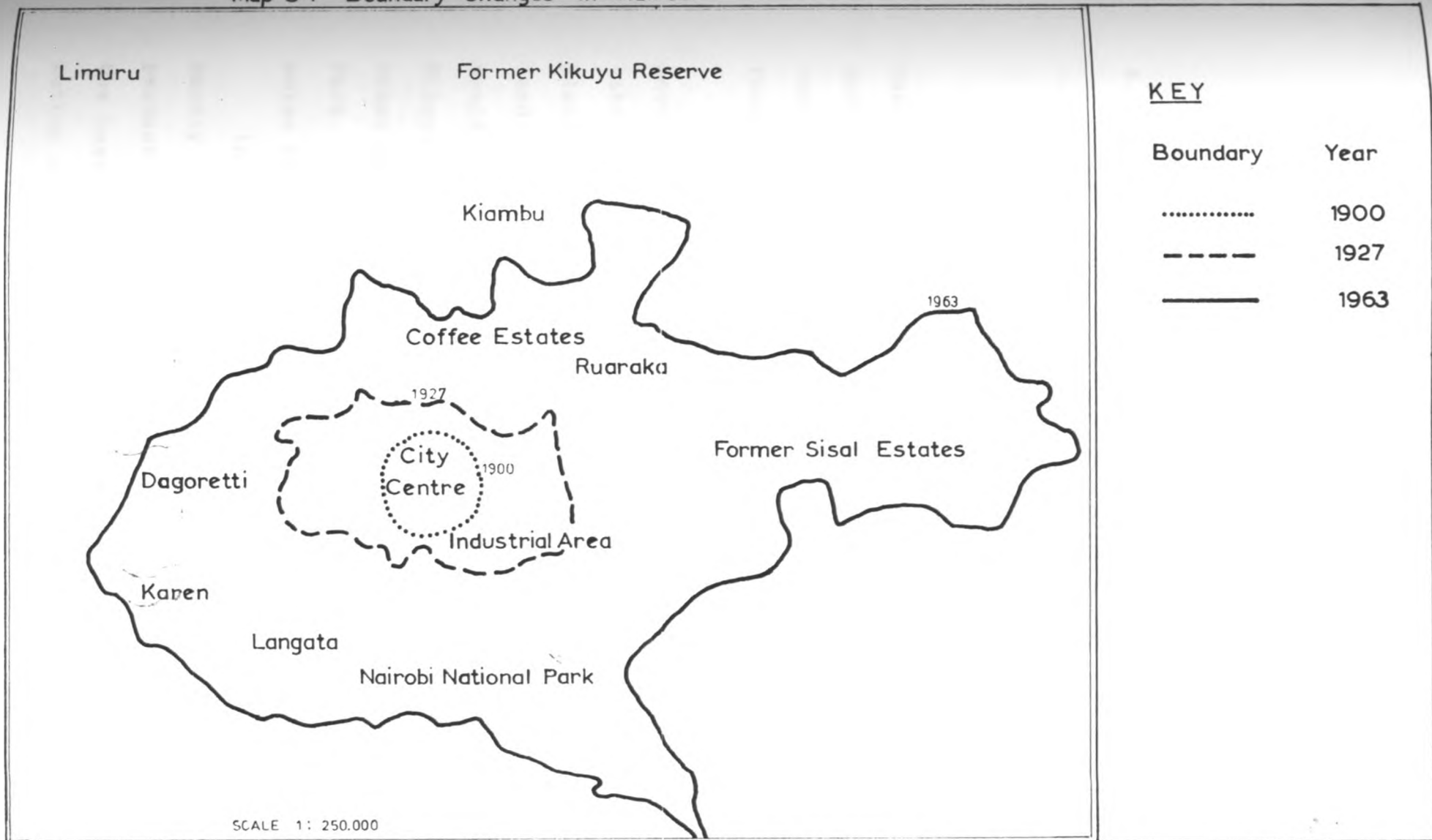
However Dagoretti was exempted from taxes and from building and planning regulations as a way of political concession to the Kikuyu ethnic group. They had been adversely affected by the events leading to Kenya's Independence. Map 3-1 illustrates boundary changes in Nairobi.

By 1967 the urbanization process was almost reaching its climax with shortages in the provision of water, housing, traffic congestion as a result of shortage in roads and streets system in Nairobi.

The Nairobi Urban Study Group (NUSG) was thus formed so that it could study all those important economic, social and physical variables on a comprehensive basis and compile Nairobi's urban information system. The study group therefore emerged with the following recommendations:

1. The direction across the Nairobi region towards which the metropolis was to expand and towards which the future city boundary extensions were to take place.
2. Infrastructural adjustments that would be required to accomplish the physical planning and development objectives.
3. The proposed physical layout of the city through its various stages of developmental accretion in the proposed growth direction and

Map 3-1 Boundary Changes in Nairobi



the detailed method of implementing the proposed physical plan.

4. The socio-economic development plan for the city and the policy measures to be used in its implementation including the methods of financing the required development.

The above guidelines were therefore to help in the development of the city (Nairobi) to the year 2000 A.D. subject to revisions and modifications by the permanent council planning staff to meet any future circumstances and needs.

The NUSG further recommended that urban development accretion would not be permitted to take place to the north and west on the Kikuyu plateau in order to preserve the rich agricultural land. Instead they recommended that urban growth would be channelled across the lower plains of the Kikuyu plateau and the Athi plains towards Thika. Urban development would avoid the Nairobi National Park, Jomo Kenyatta International Airport and its noise belt.

In essence expansion was expected to take place partly within the city's built-up area where 50 percent remained underdeveloped but specifically to the rest of Nairobi on a 20 square miles of black cotton sisal and ranching land.

3.3 URBAN HOUSING

This section entails that we look at the historical development of housing based on racial lines since people of different races lived separately during the period prior to independence. The situation has not changed much after independence. Upper Nairobi still remains an exclusive area because of the expensive nature of land here. It is occupied mainly by transient European expatriates but also by some wealthy Africans, Indians and a significant African domestic servant population accommodated separately on quarters meant for servants built on each residential house.

New housing estates and flats have been built in the area in the past years because the area has an advantage of being near the city centre and is supplied with mains water. Muthaiga is still the most exclusive housing area in Nairobi, favoured by officials of foreign embassies and international organisations. Karen and Langata are other areas of prestige housing. Other areas which have emerged are such as Riara ridge, and Runda all very exclusive housing areas.

Housing for the Indian community has separated into more distinct income groups. Parklands remains the area for the high income level.

Eastleigh is occupied to a small extent by the poorer Indians since many plots formerly owned by these group of Indians (poorer) have been bought by African landlords. Those who sold these plots have moved to other areas such as Pangani, and Ngara . Nairobi South and West were built before independence for more prosperous Indian artisans living close to their work places in the industrial area. A much higher proportion of Africans are now living in both neighbourhoods.

Housing for Africans was in the form of a native location demarcated at Pumwani area. This area was opened to Africans in 1922. Earlier in 1912 the ex-solders of the first world war had founded a settlement in Kibera. 170 units were built in Shauri Moyo to house those who had their homes demolished at Pangani.

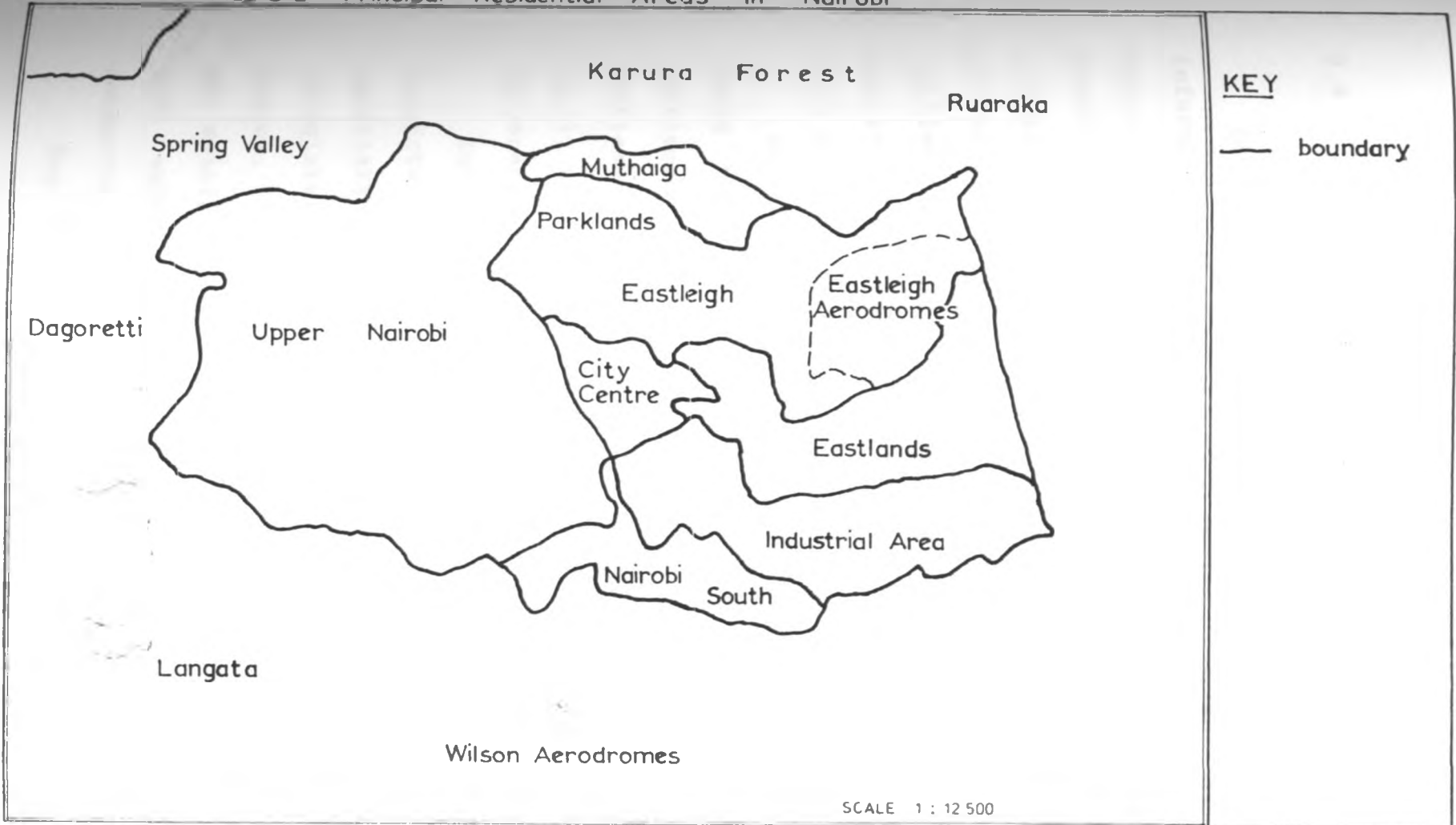
By 1939 the railway administration had provided 1,633 married quarters for Africans and it was building additional units and hoped to complete a further 600 during 1939. Ziwani and Kaloleni estates were built in the period close to 1939 and the Starehe houses were extended. In Makongeni area the railway company had built 170 blocks including some 1,700 rooms.

Bahati, Gorofani and Mbotela were planned towards the end of the 1940s while more areas were

serviced and made available to employers to built for their employees. In the late 1950's efforts were concentrated on the Ofafa developments. By 1959 Ofafa Maringo had 1400 flats, 2386 flats in Jericho by 1963 and 500 flats in Jerusalem by 1969.

All these areas are currently occupied by a vast majority of Kenyans of African origin. Other areas with similar population settlements are Dandora, Kariobangi in the eastern parts of Nairobi, Kahawa West, Githurai in the north eastern parts of the city and others. Map No.3-2 illustrates principal residential areas.

Map 3-2 Principal Residential Areas in Nairobi



3.4 ORIGIN AND EXTENT OF VARIOUS TYPES OF INFORMAL SETTLEMENTS

Other residential areas of importance are the informal settlements which are found within Nairobi. Most of these settlements have a historical background behind them and as such it is necessary to look at their types, origins and extent. As noted in the previous chapters formal settlements house a substantial population of people in Nairobi and it is therefore important to look at these formal settlements.

As early as the 1960s a discernible distinction could be seen emerging from the informal settlements. At least four types of these settlements were categorised as semi permanent rural, semi permanent urban, temporary urban and temporary and semi- permanent infill.

Semi-permanent rural informal settlements are characterised by the tenure system being registered squatters who are eligible for resettlement, unregistered squatters or traditional tenant status. Population density is also high. Buildings are mainly rural but with a slight difference in that water is obtained from established mains connection.

Employment and commercial activities are characterised in these settlements by wage

employment outside the settlements, a lot of self-employment and a variety of shops and service commerce in the form of cafes, bars, shoe repairs and others. Examples of these settlements are Ruaraka, Kariobangi South, Kahawa, and Kasarani.

Temporary urban type of settlement are characterised by a land tenure system of un-registered squatters and illegal development on public and private land. The layout of buildings is disorderly and buildings are constructed of scrap materials. These are located within the central areas within 3 kilometre radius and along river valleys. In most cases there are no public utilities while employment activities are dependent on wage, casual and self employment. Commercial activities are in the form of shift shops although few. Examples of these are Kaburini, Muthurwa, Kinyango and Kitui villages. The latter is the study area.

Temporary and semi-permanent infills are illegal developments on public and private land either by squatters or by plot owners. Buildings are constructed with scrap materials and form a rectangular plan. These are in many cases attached to or within the courtyards of existing housing in specific areas of Nairobi mainly within 3 kilometre radius for example Eastleigh.

There are also public traditional mud and wattle circular huts with thatched roofs and illustrating a traditional layout of buildings with 'shambas'. They are located in former scheduled' areas.(These are the areas which had been set aside for European farming and were referred to as 'scheduled' by the colonial government). The settlements can also be located in former reserves (areas carved out for Africans in the colonial period) or in the peripheral areas of Nairobi outside 3 kilometre radius from the city centre. They have public utilities in the form of pit latrines and water being obtained from nearby springs/wells or permanent buildings. Major employment and activities of the residents are subsistence farming, selling in local markets and in a few established 'shops' within the housing area. Examples are Kibera and Dagoretti.

Semi permanent urban settlements are characterised by land tenure systems of registered and unregistered squatters on private and publicly owned land. There can also be illegal development by legal owner in the form of growing number of land- buying and house building cooperatives and companies offering plots to share holder and rented rooms to non-member tenants.

The settlement has an informal village layout with dwellings mainly of a rectangular plan. Mud and wattle with some scrap materials and corrugated iron roofs are used for construction. They are located in peripheral areas of Nairobi outside one and a half kilometre radius from city centre. These are also extensions of emergency villages in former reserves. Public utilities are almost similar to those found in semi-permanent utilities. They are dependent on the facilities found in the surrounding area. Employment is in the form of casual, wage and self employment while commercial activities are in the form of shops in the surrounding area.

Currently there are many changes in these informal settlements and the information given should not be construed to be the present one. However the information given should serve as a basis for better understanding of the beginnings of existence of informal settlements.

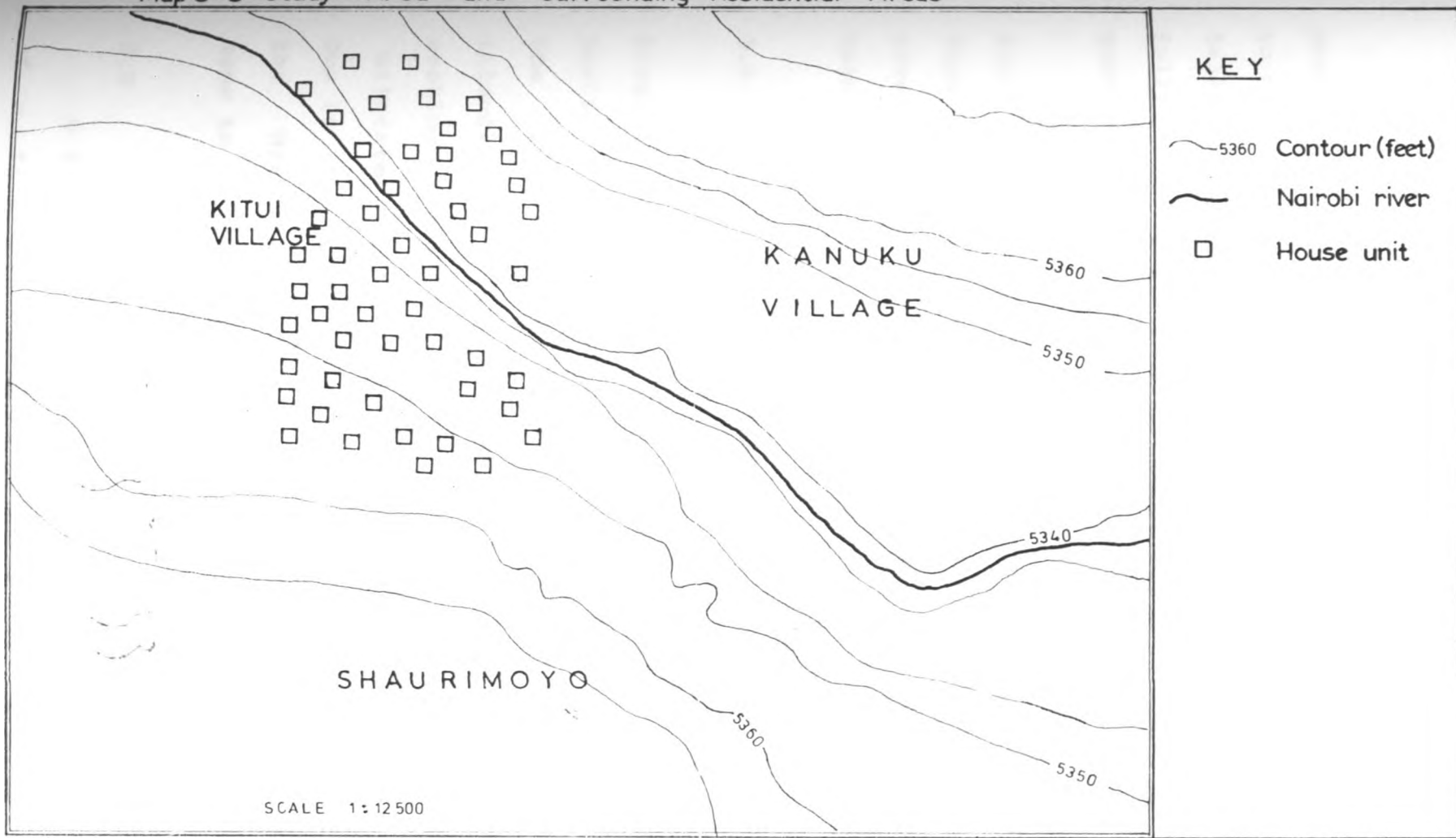
3.5 THE STUDY AREA

Kitui village falls among the informal settlements of temporary urban type of settlements described previously. It is a squatter/slum settlement located about three kilometres from the central business district downstream along Nairobi

river. It is found in existence with Kanuku and Kinyango villages all of which cover about 4 hectares.

The area where these villages sprawl can be divided into the eastern area which is the actual Kitui settlement village which is also adjacent to Majengo. It is opposite the new Pumwani low- cost high rise buildings and has some parts sprawling adjacent the Nairobi river. The western area is what comprises Kanuku and Kinyango villages and are sprawling besides Biafra estate and sloping towards the banks of the Nairobi river. Other residential areas bordering these villages are Bondeni, Gorofani, Kamukunji to the east Shauri Moyo to the south, Pumwani to the north and Eastleigh section 3 to the west. Map 3-3 illustrates study area and surrounding residential areas.

Map 3-3 Study Area and Surrounding Residential Areas



The topography of the area is such that the ground rises from about 5340 feet along the river to over 5365 feet. Part of the settlement actually falls within the river floodplain while the rest falls in the steep part of the river valley within a ground slop of 1 in 95 (Mairura 1988).

Kerichwa valley tuffs underline the area. Soils are basically the black cotton soils which thin off to form a murram soil with a shallow clay cover in Kanuku and Kinyango. The soil along the main floodplain is mainly swampy alluvial (ibid).

3.6 HISTORICAL BACKGROUND

Kitui refers to an old man by the name of Kivulai whose origin was Kitui district in the Eastern Province of Kenya. He is said to have been the first to squat in the area. Other squatters intending to build in the area would do so after seeking permission of 'Mzee' Kivulai who would then 'allocate' them an area where they would build. Due to the continued reference to Mzee Kivulai as the Mzee from Kitui, the village area eventually came to be known as Kitui village.

3.7 UNDUGU'S INVOLVEMENT IN KITUI

U.S.K. came to the village in 1983 as a result of a fire which razed down about 150 housing

structures made of plastic paper and cartons. Causal effects which were experienced as a consequence of the fire such as, sleeping out in the cold, diseases, misery and utter hopelessness brought in the Undugu Society of Kenya (U.S.K.). However mention must be made here that it is the residents of Kitui village who actually approached the U.S.K. for help. The society argues that this is the only effective way in which they can handle the problems of the low-income group. They expect the community resident in the village to identify its needs before it can approach them. Their policy is not to identify the peoples' needs.

3.8 GOVERNMENT POLICY ON HOUSING

There is need to look at the National policy as it relates to the informal settlements and see whether the government of Kenya has been complacent with the situation or it has been attempting to bring about changes.

As early as 1965 period the government of Kenya was aware of the need for a sound programme for the provision of adequate housing as an essential part of social and economic development. In the 1966/70 development plan, it was stipulated that in order to meet housing needs and to stimulate the growth of the economy, an expanded programme for

housing would be given high priority with financial contributions increasing from Kenya Pounds 453,000 in 1965/66 period to Kenya Pounds 1.7 million.

It was also stipulated that a national housing authority would be set, which would take over the functions of the central housing board and the management of the housing fund. It was said that the authority would be the government's instrument for developing and executing housing policy both in the urban and rural areas. Among the functions of the National Housing Authority (NHA) slum clearance would be executed to avert towns from turning into slums and centres of ill health and evil social conditions. Instead the government of Kenya (GoK) would give loans through NHA to enable the existing low income housing to be improved.

In the 1970/74 development plan it was realized that instead of housing situation improving in the 66/70 planning period, it had deteriorated. It was noted that a short fall of 7500 urban dwellings a year was met by individual families themselves. This they did by squatting on public and private land and building with whatever poor form of material that was within their means. These were usually fashioned of mud, wattle, cardboard and tin.

The GoK also realised that there was an imperative need to accelerate the creation of inexpensive urban housing for the low income groups, so that they may find shelter of an acceptable standard at a monthly cost within their means.

The Housing Research and Development Unit (HRDU) was created to investigate practical problems of construction, site, organisation, financing of housing and the saving, pattern of the urban household and their social formations. Its basic objective was to discover approaches and techniques which would bring housing costs within the reach of most of the people. Site and service schemes were given preference in the plan period. The GoK outlined that if no alternatives were available, the lowest-income families would build the temporary houses. However this activity would be channelled to proper self-help schemes on serviced sites, lest the task of removing them or providing them with services later on become a grave problem.

It (GoK) would also appoint an officer in the Ministry of Housing to guide and control development of prototypes houses which would be cost discipline. Site and service schemes were

also to be studied to see how best they were to be organized and executed.

Although finances continued to be a constraint the government allocated Kenya Pounds 53 million for both public and private housing. Emphasis was still placed on urban housing with the government allocating it 85 percent of its total expenditure to this sector in housing. These was expected to be implemented through the NHC.

In the 1974/78 development plan the government emphasized on housing standards. The government argued that well planned housing of a minimum standard when combined with social and other services, affords dignity, a sense of security and proper status in society for the individual. For this reason, high priority was placed on the improvement of housing standards.

It therefore promulgated in its plan that as one of its objectives it would ensure that housing design and construction would conform to government standards and that each housing units constructed in the urban areas would have at least two rooms plus its own kitchen and toilet. It would also ensure that no additional un-authorized housing settlements would be erected, that slums would be removed when satisfactory alternative housing has

been found and sub-standard urban housing would be improved.

Hence in it's urban housing programme during this plan period, it was governed by the estimated housing requirements in relation to different income levels and the amounts that can be reasonably spent on housing, the amounts of funds available, the minimum building and accommodation standards and the priority for urban housing to counteract over crowding and unacceptable environmental conditions.

It was planned that 35,135 housing units would be built specifically for the low-income. This sector therefore was allocated Kenya Pounds 14.3 million . However the implementing institutions were the National Housing Corporation, and the local authority. It has already been seen in the conceptual background how some institutions constraint the low-income group, especially in terms of advancing finances in the form of loans. As such therefore, in the 1970/74, available statistics indicate that 25,000 urban units were not achieved as a result of incomplete, insufficient low-cost housing units.

The 1979/83 development plan, outlined that whenever possible, all site and service schemes would be located near industrial areas to minimize

travel costs to and from places of employment. That they would also include a spectrum of small scale informal income earning opportunities. This would be for the benefit of the low-income earner in order to enhance his earnings.

Squatter upgrading was made mention of during this plan period. That a programme relying on squatter upgrading would be used specifically to improve the standards of dwelling units in slum areas. However additional squatter housing would be discouraged within the city boundaries although no squatter settlement would be demolished without the provision of alternative accommodation.

The 1984/88 development plan still continued with the promotion of site and service schemes and squatter upgrading along the lines stipulated by the GoK. Of great significance in this period, GoK said the new low cost building by study recommendations would be implemented by initiating the necessary legislation to permit construction of low-cost housing within urban centres using non-conventional but functionally locally produced building materials.

The current development plan 1989/93 focuses its direction towards the insecurity of land tenure as it relates to slum creation. It outlines that the land commission will address the problem. It

also notes that the public health act and the local government adoptive by laws which have been a major constraint to the housing development will be reviewed to bring them in line with the current demand for housing in urban areas.

Throughout its development plans, GoK does not seem to have solved the housing problem. In the current development plan 89/93 GoK notes that there is a serious shortage of housing in urban centres. This is well explained by various studies discussed earlier on in chapter 2 which illustrate the constraints faced by programmes intended for the low-income such as site and service schemes.

Although GoK has realized that planning standards in housing are a constraint, it has been slow in legalizing the adoption of lower standards. The reason behind the GoK dragging its feet in the legalization of lower standards is really difficult to understand. As Agevi puts it, the authorities concerned tend to develop cold feet when called upon to put into practice modified or relaxed building standards.

The following section will therefore look at the building by laws in order to understand what the standards specify and require.

3.9. PLANNING STANDARDS

In Kenya, the building code comprises grade 1 and 2 by-laws of the local government orders. Since grade 2 by-laws cover lower quality structures and most informal areas can only be granted a grade 2 status, only these are considered in this section.

Based on grade 2 housing by laws, planning and design standards are presented in table no.3-1.

Table no.3-1

1. The Plot	
Minimum area	260 m ² * * *
Maximum plot coverage	33 * * (1)
Minimum space around buildings	
. to front boundary	1.50 m *
. to side and rear boundary	1.50 m *
. distance from pit-latrines to habitable room	4.50 m * * * (1)
2. Room dimensions	
. Minimum area	7 m ²
. Minimum area/person	3.50 m ²
. Minimum width	1.98 m ²
. Minimum height	2.10 m ²
3. Lighting and ventilation	
. Minimum area of windows	1/10 th of floor area
. Minimum area of opening parts	1/20 th of floor area
. Permanent vents of habitable rooms, W.C. bathrooms and kitchens	
	1/100 th of floor area
Construction	
1. Foundations	
Damp proof course	adequate to support land mentioned
2. Floors	
. Level above ground land	0.5 m
. Materials specified	Compact earth or concrete or other approved material
3. Walls	
. Materials (load bearing walls)	Mud and wattle acceptable. capable of carrying roof
4. Roofs	
. Materials for roof covering	Corrugated iron aluminium or other permanent materials or shingles.

Key: * By-law can be waived by Council

* * * * * Commissioner of Lands

* * * In exceptional circumstances the council may reduce this distance on the advice of the medical officer of health or chief health inspector.
(1) approved amendment.

In the light of these housing standards it is important to look at the current economic capabilities of the residents of Nairobi.

3.10 ECONOMIC STATUS

General economic situation does not appear well.

For instance, in the 1970s there were fluctuations in the growth of wage employment although this improved in the following decade. Its average growth rate was placed at 18 percent per annum Odada et al (1990). Recorded self-employment grew by an average of 27.7 percent and accounted for 15 percent of total employment.

Although the above improvement boosted the economy of the country at large, it was but only in the low-income group sector and the change did not alter their lifestyles much. Their incomes may have improved but they are still minimal and cannot support decent houses. According to the current socio-economic profile, the decade of the 1980's was a turbulent one in that although earnings per employee grew by a rate of 17 percent in the 1980/81 period they progressively declined to 3.7 percent growth rate during the 1982/83 period.

On the whole average real earnings increased only nominally due to inflationary pressures. The sectors with the average wage earnings per employee were in order of importance finance, insurance, real estate and business services, transport and communications, wholesale trade, retail trade, restaurants, hotels and manufacturing (Odada et al 1990).

These increases give an insight into the problems of the low-income earner/low-income group of people. This is because their major employers were close to bottom in the preceding paragraph given above. Ondiege et al (1990) found out the major employer of the low-income group, especially that resident in slums and squatter settlement areas, is permanent employment. Therefore nominal increases of the low income earner may not have helped much in improving their housing.

3.11 SUMMARY

In this chapter the background to the study area has been traced. The historical development, growth and urbanization process of Nairobi have also been traced. Both the latter have been found to have developed at a first growth rate placed at 7 percent Obudho(1988).

Urban housing has been described since independence. This has been based along racial lines because housing in the colonial period was so arranged. The situation has not changed much. Residential areas formerly occupied by Europeans are still occupied by the same populations. Additional changes are the sparse populations of kenyans of African origin in areas such as Muthaiga, Kileleshwa, Loresho and Riverside. However a vast

majority of the populations are mainly resident in the eastern parts of Nairobi.

Informal settlements have also been discussed with their origins and types being described. Most of these settlements started as early as colonial period.

The government policy on housing has been appraised from the time of independence to present day. The policy now addresses itself to the upgrading of squatter settlements and has been reviewing grade II by laws in an attempt to legalize lower standards.

Planning standards still in existence have been outlined. The economic status of Nairobi residents has been outlined in order to give a picture of the expectations of the government and the ability of its' subjects.

CHAPTER FOUR

UNDUGUS' ROLE AND THE HOUSING SITUATION IN KITUI VILLAGE

4.1 INTRODUCTION

It is necessary before looking at the objectives set out in the study, to understand the socio-economic characteristics of Kitui village community. This is important because it lays down the background context in which the Undugu Society of Kenya operates. Hence this chapter begins off by analyzing socio-economic variables such as, household composition, ages of household members, their places of origin, length of residence in the village, education levels, their employment and incomes.

The section following this, analyses the workings of the Undugu Society of Kenya in Kitui village housing. Emphasis has been placed on community participation and self-help because these are the strategies that Undugu used to bring about the existent housing situation.

The housing situation is simultaneously described and analyzed in detail. In this subsection variables such as the housing structures, number of rooms per structure, facilities provided in the houses materials and method of construction have been analyzed. Housing tenancy, overall condition of the houses and the land tenure system,

have also been analyzed. Public utilities and community facilities have also been given reference where necessary.

The sub-section also has findings on the community perception of the role of U.S.K. in Kitui village. Variables used to analyze this are the materials used to built the houses, the plan of the houses, location and the present land tenureship. Although the variable 'location' has been used to gauge the community's perception, it was not used to assess the Undugu role. This is because the Undugu Society had little to do with the original location of the squatter settlement .

4.2. SOCIO ECONOMIC CHARACTERISTICS

4.2.1 HOUSEHOLD COMPOSITION

Household composition is important as it enables one to understand the various needs of the household members. It also gives an insight into the housing requirements.

According to the urban housing survey of 1983, Nairobi's average household size in 1983 and the estimates up to the year 2000 is 3.45. Ondiege and Syagga's survey of low and middle income neighbourhoods found the average to be 3.59 persons. In this study , the survey revealed an average household size of 4.5 persons. This compares quite

well with the average household size in other slum areas like Mukuru with 3.89 and Korogocho with 4.55 persons. This therefore means that overcrowding in the houses is experienced.

Over half of the households are headed by females who account for 66 percent . The male headed households account for 34 percent. This also compares well with other similar slum areas where it has been found that women occur as a majority. The U.S.K. bulletin of 1988 also attests to this. It quotes a 75 percent occurrence of female headed households in the three villages (Kitui, Kanuku and Kinyango) in Pumwani.

This indicates that the tendency to find poor households in the village is high .This argument is based on some studies which indicate that women headed households are poorer than male headed ones. For instance Ondiege, Syagga and Gatabaki's study on access by women and the urban poor to land and credit found out that most women headed households were poorer than those headed by men.

4.2.2. AGE

The mean age of the household heads was found to be 30.8 years with a range falling between 18-60 years. However, if grouped in classes the 20-24 age group was leading with 26 percent accounting

for it. 22 percent accounted for the 25-29 age group. These statistics are comparable to the 28.6 percent for 20-24 age group and 21 percent for 25-29 age group for Kawangware squatter upgrading. This could be a reflection of a high number of them being tenants who might be migrants to the city and are lowly paid wage earners. Slums are some of the areas which offer cheap and affordable housing.

This 25-29 age group falls in the most productive category of the population (if well utilized). Therefore if the society must benefit from this group, housing provision for these people should be intensified. Table 4- 1: Illustrates Household Heads Age Distribution (%)

Table 4-1 Households Age Distribution.

Age-Group	Percentage	no.of Respondent
15-19	6	3
20-24	26	13
25-29	22	11
30-34	12	6
35-39	16	8
40-44	2	1
45-49	8	4
50++	8	4
total	100	50

Source:Field survey,1991

4.2.3 PLACE OF ORIGIN/ETHNIC GROUP

The place of origin of a given person explains in a way the possible circumstances that could have led to their opting to live in a given area.

A survey done in Mathare Valley by the City Council found out that the city had a magnetic pull the closer the peoples home were to it. Etherton (1982). In the Mathare study, most of the household heads were of Kikuyu ethnic group and came from the places nearer Nairobi.

In this study, majority of the people originate from Eastern Province with Kamba's accounting for 56 percent of the total. Kikuyu's account for 28 percent while Luos and Luhya's account for 8 percent each. This trend could also be explained by the observation made by Etherton that those people with their home areas nearer Nairobi, in this case, Kikuyus and Kambas are much more pulled than others.

However it would be expected that the Kikuyus top in the majority but this is not so. This could be explained by the historical development of Kitui Village explained earlier.

In total 98 percent of all these people originate from rural backgrounds probably because of the high percentage of rural populations in the country. These are placed at 80 percent (CBS Population Projection 1980-2000). Rural-urban drift

also comes into play in that populations formally rural are now seeking new avenues and opportunities in the urban centres. For instance urban population growth rates in Kenya were estimated to be between 5-7 percent by 1988 (Obudho 1988).

4.2.4 LENGTH OF RESIDENCE

The period of stay in an area may also suggest whether one is comfortable with his/her residence. In the study it was found that 86 percent of the population have spent more than 2 years in the village while only 14 percent have spent less than 1 year in the village. This could imply that the village is used to a every small extent as a stabilizing area from where residents move to better places. Otherwise it would appear that the majority are there to stay with an average stay period of 9.1 years. This means further that there is a great probability of Kitui residents continuing to rely on the village for housing.

4.2.5. EMPLOYMENT AND INCOME

Income is one major factor influencing the ability to pay rent and the eventual settling down of an individual in a selected residential area. The survey revealed that 62 percent were not employed and hence a high rate of unemployment.

This number has even decreased given the 80 percent unemployed figure quoted by Kairi in 1988 for all the three villages (Kitui, Kanuku, Kinyango). Only 38 percent of Kitui residents are employed and of this only 4 percent are employed in the formal sector.

The category of respondents who are employed was found to have an income varying from KSh. 200 to 4000 per month. The average monthly income was found to be KSh.458. When categorised in various classes 15.8 percent were found to be earning less than KSh.500 per month, 21 percent were earning between 501-800 per month, 31.6 percent between 801-1100 and another 31.6 percent between 1101-4000. Table No.4-2: Illustrates the preceding figures

Table no. 4-2 Income Levels in Kitui Village.

Income in kshs/month	no.of respondents	percentage (%)
200-500	3	15.8
501-800	4	21.0
801-1100	6	31.6
1101-4000	6	31.6
Total	19	100.0

Source: Field Survey, 1991

Those who were practising other income generating activities were found to be only 8 percent and were mainly involved in selling of

groceries, clothes and performing manual work whenever available. Their income was varying greatly between KSh.100-1000 per month. This means that the average rents of Kitui houses must remain as low as possible, to allow the current residents to continue depending on the village for housing.

4.2.6 EDUCATION

As Ondiege and Syagga (1990) put it, formal education levels in principle hold out the promise of equality of opportunity and finally the increased social equality. In table 4-3 levels of formal education of the household heads are shown. 58 percent of all household heads have attained formal education. 16 percent do not have formal education. Of the 58 percent with primary level education, 14 percent fall in the standard 1-4 level and 44 percent in the standard 5-7 level. Only 26 percent have reached secondary level of education with 12 percent having reached between form 1-2 level. The rest 14 percent of this falls in the form 3-4 level of education.

Table No.4-3 Education of Household Heads.

Education level	No.of respondents	Percentage
below primary school(no education)	8	16
primary school	29	58
secondary education form 1-2	6	12
secondary education form 3-4	7	14
Total	50	100

Source: Field Survey, 1991

It can be observed therefore that the majority, 70 percent have lower levels of education ranging from primary school to form II level of education. It can be argued therefore that these lower levels of education may explain to a large extent the lower average income levels observed in the preceding sub-section. This also has causal effects in that residents of Kitui village have less access to permanent employment and the incomes are relatively lower.

Hence both the living standards and their children will be affected - the children will have limited access to formal education and employment now and in the future. It also means that the community has to continue relying on low-income

houses such as the ones found in Kitui village .It also follows that their children too will need to rely on similar dwellings. Table 4-4 illustrates level of education of household members.

Education levels of Household Members

Education level	No.of respondents	Percentage(%)
Below primary school	87	26.77
Primary school std.1-4	44	13.54
Primary school Std.5-7	116	35.69
secondary school Form1-2	45	13.85
secondary school form 3-4	33	10.15
Total	325	100

Source: Field Survey, 1991

4.3 ROLE OF THE UNDUGU SOCIETY OF KENYA (U.S.K) IN KITUI VILLAGE HOUSING

As mentioned earlier in chapter three, Undugu Society of Kenya (U.S.K) does not invite itself in areas which may be considered needy. Instead U.S.K. waits until their assistance is sought by the needy, so that they can come in and help.

In the case of Kitui village, U.S.K. officials were called upon by the victims of fire to come and help them erect new dwelling units. The village

residents organised and elected a committee comprising of residents of the village. There is not a definite number of the committee members but currently the village committee is made up of 18 members. U.S.K. consulted with the village committee and agreed that the U.S.K. would contribute part of the building material and transportation of the same from Karura forest. Two social workers whose background was traced to the village were chosen to provide assistance in supervision and general administration where necessary.

It was also decided that the village committee would be charged with the following responsibilities:

- a) Measurement and allocation of plot areas to fire victims.
- b) Allocation of donated building materials to the fire victims.
- c) Grouping of victims into manageable groups for the provision of unskilled labour.

Consequently the village committee measured plots of 12 feet by 10 feet. The committee also divided people into groups of 10-15, each group being led by one or two of them. Materials were thus collected by the various groups and building activities started.

Of importance to note here is that the U.S.K. capitalized on cost sharing, community participation and self help.

4.3.1. COST SHARING

Cost sharing can be defined as the dividing of expenses between two parties. For instance an institution charged with the responsibility of providing a service such as housing, may decide to divide the expected expenses accruing from providing the service, between itself and the beneficiaries of the service.

However finances among the low income group have been found to be a major constraint. As we saw earlier in chapter two, most of the government institutions charged with shelter delivery for the low-income use conventional methods which are not easily met by the low-income group. For instance, in Singapore contributions to the Central Provident Funds (CPF) takes the form of payroll deductions of 23 percent matched by employers contributors of 22 percent bringing in a total of 45 percent of monthly wages. Contributors are eventually allowed to withdraw up to 80 percent of the accumulative balance for downpayment of a dwelling unit.

The method as described already cuts off the low income person. In the study, it is clear that

a majority 68 percent are unemployed and as such therefore do not have a regular income which can be subjected to monthly deductions with a view of eventually buying a dwelling unit. As a result therefore all the effects of especially the formal sector in housing provision have met with failure because the root cause has always been the poverty of low-income people. U.N.C.H.S. (Habitat) 1989 observes that it is unlikely that the formal housing production system will ever produce shelter that can be afforded by the lowest income groups.

In the case study, Undugu Society of Kenya (U.S.K.) has dealt with the problem of finances by providing some of the materials for use in building, their transportation and overall supervision and administration of the building. On cost sharing 76 percent of beneficiaries contributed unskilled labour while the assisting agency contributed building materials in the form of gum-poles, roofing nails one door, two windows and galvanised corrugated iron sheets. The break down is shown in table 4-5.

Table 4-5

Contribution of Beneficiaries and Donor Agency
Towards House Construction.

Donor Agency (U.S.K.)	Amount	Percentage of contribution
Poles, roofing nails	2548.00	
1 door, 2 window	280.00	
75.6		
Transport supervision	172.00	
and administration	410.00	
Beneficiaries (Kitui community)		
Unskilled labour	1100.00	
24.4		
<hr/> Total	<hr/> 4510.00	

Source: Wambui Kairi (1988) 'Appropriate Low Cost Housing for the Urban Poor. The Undugu experience.

This approach was found to be very successful because 92 percent of the houses were roofed with G.C.I. while the number of dwelling units to be constructed exceeded the 150 units which were supposed to have been built to house the fire victims. 500 dwelling units were instead constructed.

Abrams (1964) lends support to the Undugu model when he argues that where mutual aid still functions, the average family, if helped will manage to make or put up some sort of shelter. U.N. (1978) further advances along the same lines although differently by saying that the

achievements of the low income in housing provision should be recognized and that a financing scheme or agency should supplement these efforts and capitalize on the resources of the poor.

4.3.2. COMMUNITY PARTICIPATION AND SELF-HELP

Community participation and self-help was another strategy used by the Undugu Society of Kenya to provide housing in the village. It is necessary then to define the term community participation.

Sheng (1990) defines participation as that which assures an activity in which the community takes part and the involvement at least one party usually a government agency or an NGO. He further defines community participation as the involvement by the community as a whole as well as by its individual members. It is used to indicate community self reliance or self-help. Self-help in this case being an activity which is usually undertaken by the community on its own.

Benzi (1975) sees community participation (CP) in terms of granting individuals or groups of people a voice in planning decisions and service delivery. Syagga and Ondiege (1989) see CP as a means through which project results may be improved. All along, the argument being advanced by the various definitions mentioned, is the involvement of the community in project from which they are to benefit.

Some studies done have demonstrated the remarkable achievements of CP. It has been found to contribute towards reduction of costs, provide employment, develop peoples skills and enhance the positive development of the project at hand. Importance of CP can be seen in various examples. In Srilanka the social and economic development centre (SEDEC) involved people in its project of sinking wells and repair work on a water reservoir by relying on the peoples labour. Out of this experience which saw the reduction in costs from US\$ 14,362 to US\$ 2,308, these same people organised themselves once more towards contribution of unskilled labour which realized the final construction of dwelling units under the Kottikewala housing project. U.N.C.H.S. (Habitat)(1987).

Other examples on the accomplishments of CP are found in many works such as UNCHS Habitat(1984), (1987), SINA(1986),(1988), (1990) Syagga et al (1989) among others. Similarly the research revealed success story trend. 84 percent of the interviewed respondents said they would not have achieved what they did when left on their own. 60 percent of the beneficiaries of CP said that they managed to achieve shelter and better standards of living while the rest achieved among others, benefits in the form of food and beddings.

Self help building emerged as another strong component incorporated in the shelter model of U.S.K. According to table No.4-6 76 percent of the respondents liked the idea while 24 percent did not. However 62 percent of the respondents still maintained that they would go for a project incorporating self help if faced with an option. They advanced reasons for favouring self help as being affordability. This was the major reason as it accounted for 83.8 percent.

Table 4-6: Respondents Views on Self-Help Building.

	No.of respondents	Percentage(%)
Respondents who like self help building	38	76%
Respondents who do not like self help building	12	24%

Source: Field Survey, 1991._

Those who did not favour self help building reasoned that houses produced are usually of poor quality and incorporate poor plans. The approach of self help building is also financially committing and for this reason the it was not liked. This latter reason accounted for almost half of the

respondents with 47.4 percent advancing it. This is significant because it still brings to light the fact that the low-income, people do not like being tied, down to projects which will mean monthly contributions because regular monthly incomes are in most cases non-existent. Table no.4-7 is a further illustration of the reasons why self-help building was or was not favoured.

Table 4-7 Reasons Why Self-Help Was or Was not Favoured.

Reasons why self-help was favoured	Reasons why self-help was not favoured
1.Affordability 83.8%	1.poor quality of houses (31.6%)
2.others 16.2%	2.poor plans (10.5%)
	3.Financially committing (47.4%)
	4.Others (10.5%)

Source:Field survey, 1991

From the preceding evidence, it can be argued that where community participation, self-help building and cost sharing are incorporated, there are more chances of success being achieved. At least the study has illustrated that cost sharing is very appropriate in the case of the low-income people and especially where unskilled labour is required and not financial commitments. 92 percent

of the respondents contributed unskilled labour while the same percentage received roofing materials among others and have constructed dwellings with G.C.I. Community participation has emerged as an important tool in the informal shelter delivery model of U.S.K. 84 percent of the household benefitted from the approach with 60 percent of the 84 percent acknowledging that they would not have achieved shelter without the use of community participation.

Self help building played an important role in providing affordable dwelling units. 83.8 percent acknowledged the benefits of self help building by saying that self help building had made shelter provision affordable since the process of building was relatively cheap. This finding is in conformity with Agevi (1988). When he says that if well organised self help building groups can offer the missing links between the public and private financial institutions. However Undugu's operations have not been so smooth as such. The officials of this agency (U.S.K.) mainly complained of lack of cooperation from the Nairobi City Commission especially in the provision of a sewage system. All that the agency requires, is that the NCC bring in its expertise in the provision of the sewer while the community and the agency pay for the

bill. The N.C.C. has not complied to this arrangement.

'Politics' have also had their negative share of influence in the village. As shall be illustrated in the coming sub sectors, the major reason why housing improvement and therefore the Undugu model has taken long is attributed to the intervention of prominent influential persons in the village who have disrupted the smooth operations of U.S.K. This resulted to U.S.K. pulling out in the period about 1984 only to come back in the early 1989 - 1990 period.

4.4. HOUSING SITUATION

As mentioned in chapter three, the Undugu Society of Kenya (U.S.K.) came into Kitui village as a result of a fire which had broken out. These residents houses and belongings had been gutted down by the fire and had to start all over again from house building. U.S.K. coming into the area therefore found it totally lacking in both housing and other accompanying public amenities such as toilets, water points, community halls, among others.

Hence this subsection deals with the description and analysis of housing in Kitui village together with related infrastructure in order to illustrate the housing situation.

4.4.1. MATERIALS AND METHOD OF HOUSE CONSTRUCTION

Most roof covering was of G.C.I. iron sheets. 92 percent accounted for this. 8 percent accounted for various types of scrap material for roofing such as flattened tins. Materials used for the floor were of compacted earth mixed with cement screed or just compacted earth alone. Houses found to have floors of the latter type accounted for 76 percent while those with compacted earth mixed with cement screed accounted for 24 percent.

The walls were mainly of mud and wattle. Table 4-8 illustrates that 94 percent of the structures had mud and wattle walls. 6 percent of the structures had mud and wattle walls which were cemented.

Table 4-8: Wall Types Found in Kitui Village.

Wall type	percentage
mud and wattle	94
mud ,wattle and cemented walls	6

Source: Field survey, 1991

The type of construction used to built these walls is a traditional one where vertical gum poles are spaced about a certain distance apart and then wedged firmly into holes in the ground. Wattlestrips or 'fitos' are nailed horizontally on

both sides of the vertical poles. The space between them is then filled (occasionally) with stone rubble before plastering both sides of the framework with mud.

The roof is made of corrugated iron sheets nailed to gum pole rafters and purlins.

Window openings are made by omitting the mud from a suitable area of the wattle framework between the vertical poles. The horizontal poles are left running across the openings so as to provide enhanced security. The window opening is closed by a solid

wooden shutter. Both windows and doors are ledged and braced timber panels hung in a simple frame.

4.4.2. HOUSING STRUCTURES

It was observed in the field that most of the structures were of a single storey except for one unique case. These structures have flat roofs and are arranged in such a way that there are at least two external walls to each room.

4.4.3 NUMBER OF ROOMS PER STRUCTURE

The number of rooms in each structure did not vary much since the range was from 1-4 rooms per structure. 76 percent of the structures were one roomed while only 4 percent were four roomed. Table 4-9 illustrates the number of rooms per structure.

Table 4-9 Number of Rooms per Structure.

Rooms	percentage
1	76
2	18
3	2
4	4

Source: Field survey, 1991

Since most of the houses were one-roomed, most of the residents expressed the view that the rooms did not meet their needs. 62 percent of them thought that they were not adequate. Only 38 percent found them adequate. This is explained by the large family sizes in the village which average at 5.

The U.S.K. had wanted initially to demarcate plot sizes into reasonable sizes of about 10 feet by 12 feet but there came in a lot of political wrangling at the time of plot allocation. U.S.K. were demoralised and abandoned the whole idea. Hence this is why the rooms were demarcated into lesser dimensions of about 3 metres by 3 metres to accommodate more people.

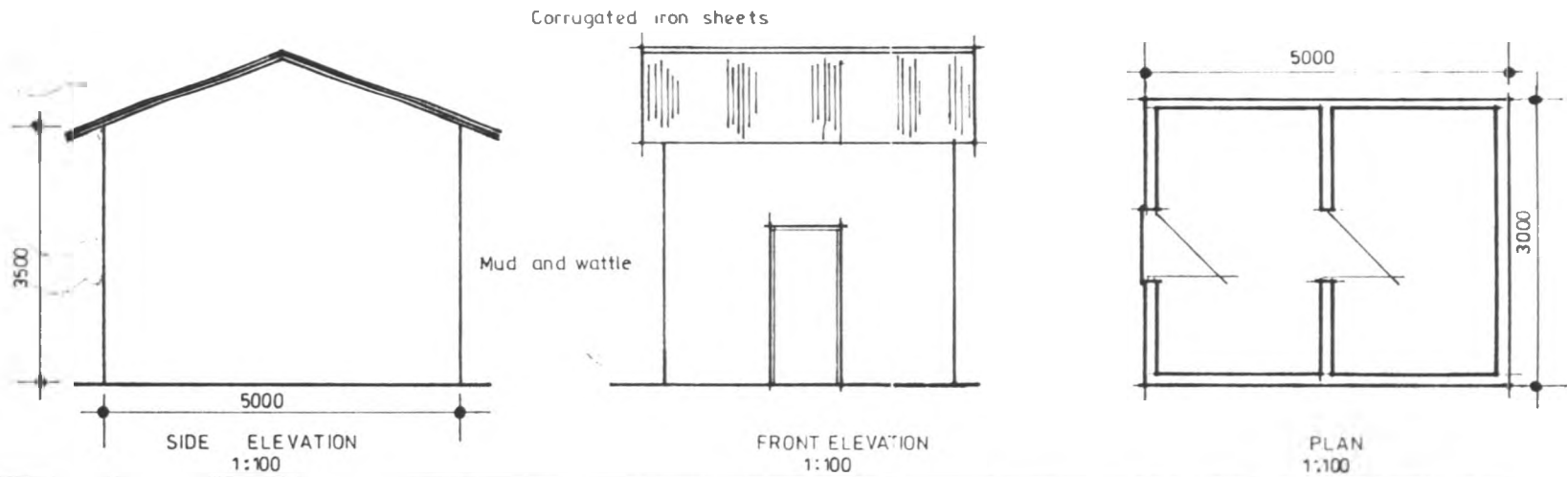
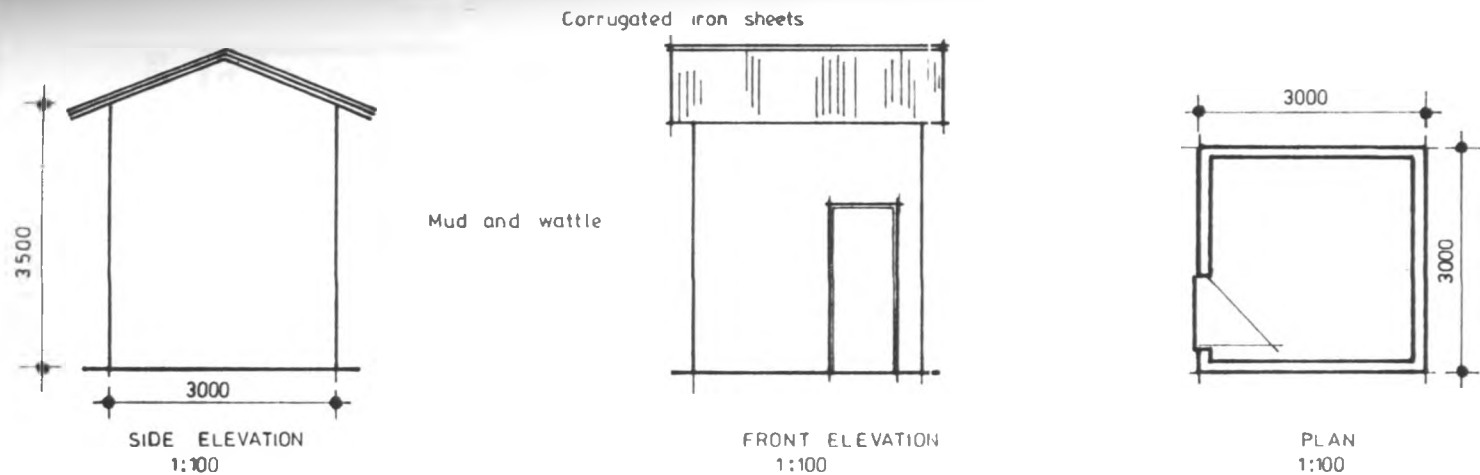
The aspect of subletting was not very prominent and this again can be explained by the inadequacy of the rooms to meet the needs of the residents. Only 7 percent of the people in Kitui village were subletting. The rates charged were varying from KSh.100-200 hence the houses can be said not to be

serving a multiple role of providing both dwelling place and an income generating source.

4.4.4. FACILITY PROVISION IN HOUSES

There were very few cases of other facility provision in the houses. Only 2 percent of the houses had kitchens in them. 4 percent had bathrooms while the rest 94 percent lacked these facilities like kitchens and bathrooms. Mention must be made here that, where facilities like kitchens and bathrooms were found they were not built to any standard as such. Instead these were just spaces left which could be converted into these facilities. Figure 4-1 illustrates the type of houses in the village.

Fig. 4-1 Typical House Construction



4.4.5. HOUSING TENANCY

The current urban housing survey in Kenya indicated that in Nairobi 66 percent of households are renters while 29 percent are owner occupiers. This therefore means that many of the urban dwellers in Kenya do not own their own houses. The same was found to apply in Kitui village where the majority are tenants paying an average rent of KSh.260/-. However rents range from KSh.150 to 450 per month. This range was found not to be dependent on the number of rooms occupied by a tenant. Rather they were haphazard. This is because the majority who rented one roomed structures, 76 percent were paying varied rents of KSh.150, 250, 350 and 450. Hence there was no constant rent value. Table 10 illustrates the type of tenure.

Table 4-10 Tenure in Kitui Village.

Type of ownership	No. of respondents	Percentage
Owner Occupier	17	34
Tenant	33	66
total	50	100

Source: Field survey, 1991

In table 4-11 54.5 percent of the tenants expressed the view that the rent paid for the dwelling units was affordable while 45.5 percent

thought that the rent was above their affordability. However 76 percent of the owner occupiers said that building process was affordable while 24 percent thought not so. See table 4-11 which illustrates the level of tenants affordability.

Table 4-11 Tenants Level of Rent Affordability.

	NO.of Respondents	Percentage (%)
Affordable	18	54.5
not affordable	15	45.5
total	33	100

Source:Field survey,1991

4.4.6 OVERALL CONDITION OF THE HOUSES

The total condition of the houses was assessed using three categories of good, satisfactory and bad. A house was found good if little or no maintenance was required. Satisfactory referred to those houses that were improvable by repairing and finally bad referred to those which were beyond repair or not improvable. Table 4-12 illustrates that 18 percent of the houses were in good condition; 40% in satisfactory condition and 42 percent in bad condition. Plate 4-1 illustrates typical houses in village.



Typical houses in Kitui Village



Table 4-12 Level of House Conditions in Kitui
Village.

Condition of houses	Percentage
Good	18
Satisfactory	42
Bad	40

Source: Field survey, 1991

4.5. LAND TENURE

Land is an important variable as it can determine whether development can occur in a given area. A study done by Shackland Cox Partners in Jamaica in 1977 found out that the inducement necessary to promote self building activity is security of tenure rather than a mere form of tenure. Agevi et al (1988) also found out in the study of Gikomba squatter settlement, that these squatters were unable to make improvements on their shelters due to insecurity of tenure. It can therefore be inferred that security of tenure promotes improvement of housing and maintenance of the same.

In the case study, the land on which Kitui village is located was found to be under temporary occupation licence status. This is attributed to the workings of the U.S.K. in the village which saw the coming together of the area chief, district

officer and the village committee among others to deliberate on the security of the land.

However earlier statistics discussed in the overall conditions of the houses illustrate that at least 42 percent of the houses are in need of repair while 40 percent are beyond repair. This could be attributed to the high percentage of tenants in the village who may view maintenance of the houses as a responsibility of the landlord. Mairura (1988) argues that the landlord is not willing to bring about improvements because of the low income returns from the housing structures and the lack of land tenure which can make such an investment unattractive.

Field observations further illustrate that the modest open storm water drains within the village were poorly maintained with many of these blocked with garbage.

Residents of Kitui village also expressed their dissatisfaction with the (T.O.L.) type of land security. 44 percent of these were not satisfied with it and as such these people cannot be expected to make any major improvements whether with the aid of U.S.K. or without it .

4.6. PROVISION OF PUBLIC UTILITIES

4.6.1. WATER

Water has been provided through cost sharing process which has realized three water kiosks. These are operated by the women's group whose members comprise residents of Kitui village.

A jerrican of 20 litres sells at KSh.1/-. The study found out through discussions with residents, that water was accessible to the residents of Kitui village in terms of distance. However they complained that costs of water were very high. This tallies with Mairura's study of (1988) based on Kanuku and Kinyango villages neighbouring Kitui village. In his study on 'development of water and sanitation infrastructure' he found out that the major problem was expressed as the high costs of water. Plate 4-2 illustrates some of the water points manned by individuals in the village.



4-2 Some of the water points
manned by individuals resident
in the village



4.6.2. TOILETS

Although toilets are part and parcel of housing, in Kitui village these have taken too long to be constructed. Housing was and has been the major priority of these people. Land which had been set aside for toilets was therefore reallocated by the village committee to people to built houses.

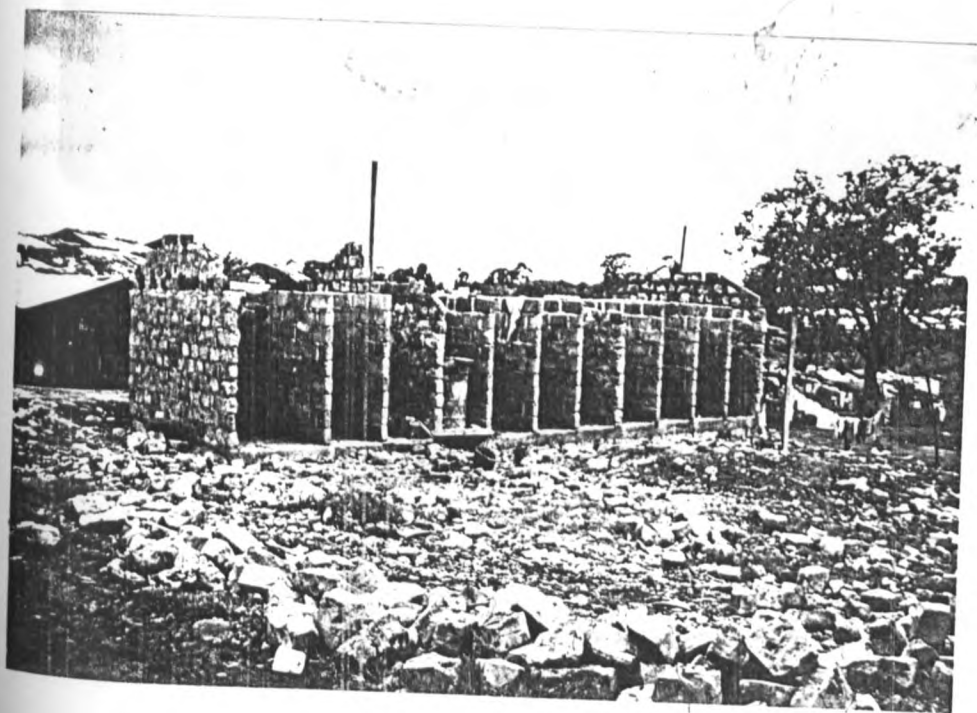
The Undugu society of Kenya was not involved in the latter reallocation as a result of the political wrangling which was mentioned earlier on. This wrangling resulted to U.S.K. withdrawal for some time. The period in which they had withdrawn their operations in Kitui village coupled with the lack of space for toilets has resulted to the lack of this facility.

Currently the U.S.K. together with the residents of Kitui have embarked on building of pit latrines. Eleven of these are now in the process of being completed.

Nairobi city commission is also preparing to start building a toilet. Already sand and stones have been brought to the new site where the toilet will be constructed. Plates 4-3, 4-4 and 4-5 illustrates the toilet situation in the village.



4-3 Toilets used in the area



4-4 Toilets under construction

4-5 Material for building the proposed Nairobi City Commission (NCC) toilet. It will be built some distance opposite the house



4.6.3. GARBAGE DISPOSAL

Garbage disposal facilities are not provided. From observation in the field, garbage was seen to be collected in heaps which were located in most cases behind the dwelling units and near the banks of the river. In some cases garbage was even thrown in the river.

4.7. COMMUNITY FACILITIES

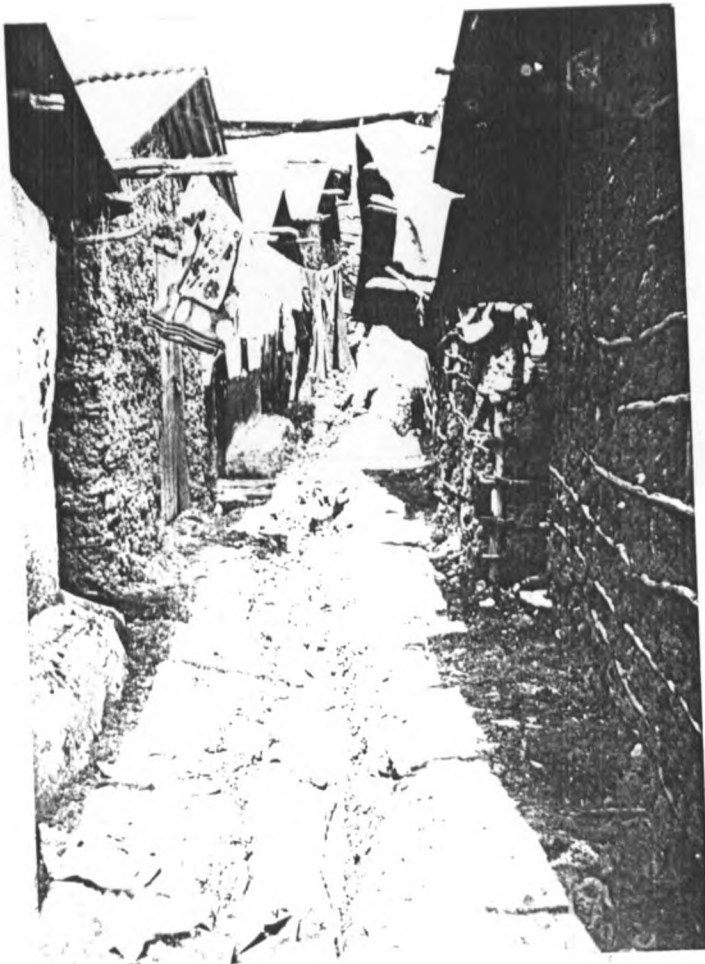
There is only one community hall in the village which operates as a nursery school during the day. In the evening it operates as an adult classroom and also as a place for social gatherings and for games.

Currently U.S.K. is building a primary school within the village to cater for the children of Kitui residents. The school will only cater for children in classes 1-4 who are the youngest and require to travel shorter distances.

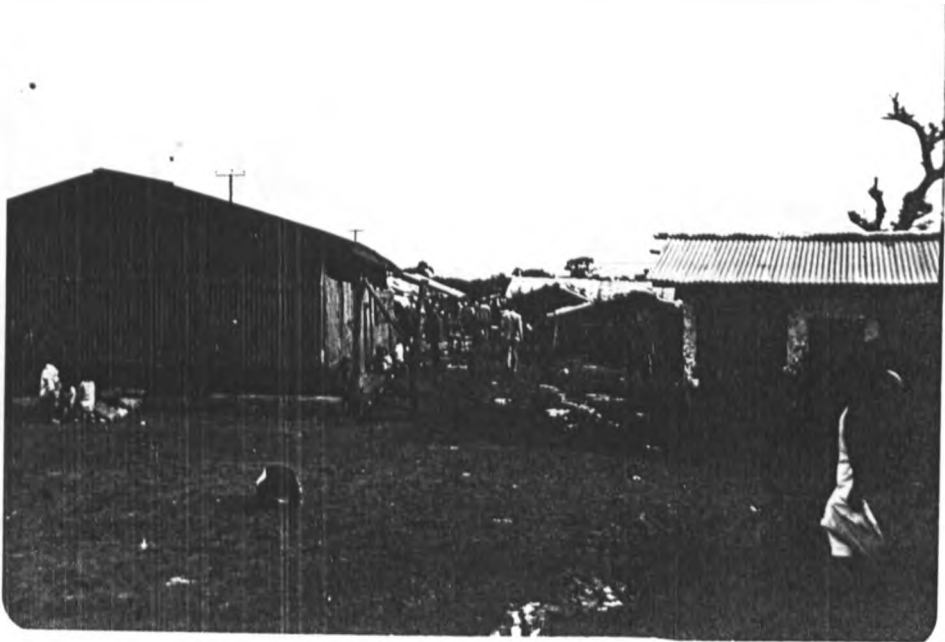
Apart from the outlined facilities, other facilities are not communal as such. Shops are in the form of makeshift structures outside the housing structures. Questions were asked about the facility that was most preferred. 42 percent of the respondents preferred water, 46 percent toilets, 6 percent garbage disposal and the rest 4 percent preferred electricity. Table 4-13 illustrates facility ranking by Kitui residents. Toilets and

water ranked highest in the order of priority mainly because these are the most basic of all basic necessities and are inadequate in their provision in Kitui. See plates illustrating some of the available community facilities.

4-6 Drainage system in the village



4-7 The community hall-The green and blue
iron corrugated building on the left



Drainage system in the village.

4-8 The new primary school under construction



4-9 Other activities which have come up as a result of individual initiative.



Table 4-13 Facility Ranking by Kitui Residents.

Rank	Facility	Percentage
1	water	42
2	toilets	46
3	garbage disposal	6
4	electricity	4

Source:Field survey,1991

4.8 SATISFACTION WITH SOME FACTORS INFLUENCING HOUSING

In this subsection four factors which have an influence on housing were looked into. Materials used to build the houses, the plan of the houses, location and present land tenureship status. In essence, the views of the residents of Kitui were sort in order to find out whether the improvements made by U.S.K. in way of assisting housing as a whole were significant.

It must be mentioned though that the above was in a way constrained by the large percentage of tenants relative to the owner occupiers and therefore these could not be used as a yardstick to measure as such. However it would still be interesting to note the views of the tenants, after all they are the ones now resident in the village.

Table 4-14 illustrates that the majority of the respondents were satisfied with location of the

village. U.S.K. did not have much to do with this factors since its coming into the village had been preceded by location of the village in the area.

Table 4-14: Level of Satisfaction with Some Factors Influencing Housing.

Factors	Satisfied	Not satisfied
Land tenureship	56%	44%
Location	72%	28%
House plan	48%	52%
building material	38%	62%

Source: Field survey, 1991

There was a slight difference in the percentage of people who were either satisfied or dissatisfied with the houseplan. This could be explained by the fact that the people resident in the village were more concerned with shelter first before they could start thinking of other needs. As it was demonstrated earlier in the sub section on toilets, spaces allocated for these were taken over to built houses. As such the house plan was not so important. To most of the residents, the need to just have shelter above their heads was paramount.

The difference between those satisfied with land tenureship and those not, was also not very big. 56 percent of the people were satisfied with the land tenureship status. This is explained by

the temporary occupation licence which although gives some security over some time, it is not permanent.

There was however a very big difference between those satisfied with materials used for building. 62 percent were not satisfied. This is rather unique because studies done on building material for the low income have illustrated that these people do not mind lower quality of building materials such as mud and wattle.

Majale (1985) on his study on 'settlement upgrading, towards solving the housing problem of the lower income groups in Nairobi', found out that these people were content with living in dwellings built of materials using traditional construction.

This is rather critical and compounds the housing problem. If the low income people in the study do not like building material used by the U.S.K. model then one wonders what they would like. A question also arises as to whether these people can afford to have a choice in the type of materials to be used in building, if initially they do not have the economic bargaining power to go for what they want.

Although we may argue in this section that the high percentage of tenants may have influenced the satisfaction rate, the tenants themselves are in no

better economic situation. The average income in the area was found to be KSh.458/-. Hence their economic power to bargain is really not there. They should accept whatever effort is being made to house them. It is for this reason that it shall be argued in the section on the housing situation that these type of materials be concentrated on in order to provide relatively cheaper and affordable houses.

4.9. OVERALL ASSESSMENT OF HOUSING

Tremendous improvements in housing can therefore be said to have taken place. This is because looking at the housing structures, they are better off than the carton structures, and igloo structures which characterised Kitui village before the assistance of U.S.K. was realized. They also provide the much needed shelter and above all the housing structures are affordable both to tenants and owner occupiers with 54.5 percent and 83.8 percent accounting for these, respectively.

Materials used to build the houses although referred to as non-durable materials in Kenya's planning standards of housing, they are durable to some extent. Kairi (1988) places their durability at 15 years and argues that this length of stay/durability can be greatly improved by plastering the mud and wattle walls with a thin layer of cement.

Method of construction as noted earlier is of traditional type. The method has been used since time immemorial by our forefathers and can be expected to serve Kitui village residents with minimal failure as demonstrated in rural housing.

The Undugu Society of Kenya model therefore has definite methods which can be borrowed and built on to improve the housing provision of the low income. A majority of Kitui residents - 84 percent expressed the view that the Undugu Programme was very successful and this can be attributed to the already mentioned factors such as affordability, use of community participation and self-help building and others. It was the opinion of 40 percent of the residents, that the Undugu programme work towards improving the infrastructural facility provision. 28 percent desired the quality of material used in building the houses to be improved while a negligible 4 percent desired improvements in the maintenance of the overall area where the houses are found.

However it must be mentioned here that in seeking the opinion of the residents on housing improvements, most of the residents interviewed gave the researcher the impression that the U.S.K. was the main actor in the improvements sought. They did not perceive themselves as the other major

actor whose role is not to wait to have the improvements made but to get ahead with them. Maybe this was as a result of the high percentage of the tenants who see themselves as beneficiaries of what landlords put up for them as houses and not as developers of these.

4.10. SUMMARY

This chapter set out to find out the working's/operations of the Undugu Society of Kenya in Kitui village housing. It also set out to describe and analyze the housing situation in the village.

It has been found out that U.S.K. mainly capitalizes on cost sharing, community participation and self-help. These strategies are successful as they were rated so by the community in Kitui village.

On housing the community has also benefitted. 92 percent of the houses are roofed with galvanized corrugated iron sheets. 76 percent of the owner occupiers found the building process affordable whereas 54.5 percent of the tenants also find the rents affordable.

Public utilities have been improved. Three water kiosks have been built with the aid of U.S.K. to sell water to the community. However according to

the community water charges of a shilling per 20 litre container were high.

11 toilets are in the process of being completed. Currently the community rely's on toilets suspended over the Nairobi river which flows nearby.

Community facilities are few. There is a community hall which serves as a nursery school and gym room. Currently there is another primary school under construction. It is expected that the school will serve class 1-4 pupils.

CHAPTER FIVE

SUMMARY OF FINDINGS RECOMMENDATIONS AND CONCLUSIONS

This final chapter makes a summary of the findings of the study and on the basis of these makes policy proposals where appropriate. Recommendations are also made. Finally conclusions are made in relation to the overall study.

5.1 SUMMARY OF FINDINGS

The study focused on the Undugu housing model and specifically sought to find out the workings of the Undugu society of Kenya and describe and analyze the housing situation as it in Kitui village. The study has emerged with the findings that the workings of the Undugu Society of Kenya (U.S.K.); which encompass cost-sharing community participation and self help building, have been very useful.

5.ROLE.OF UNDUGU SOCIETY OF KENYA IN KITUI VILLAGE

5.2.1 COST SHARING

Through cost-sharing the financial constraints of Kitui residents relating to housing have been alleviated to a great extent. Through this method of house building, a house was produced by the combined efforts of both U.S.K. and the

beneficiaries-that is Kitui residents, at an affordable rate of KSh.4268/- 54.5 percent of tenants and 76 percent of owner occupiers expressed the view that these houses are affordable.

In cost sharing, U.S.K. provided building materials and personnel to aid in the supervision and overall administration of the housing construction work. The beneficiaries contributed the required necessary manual unskilled labour. This method was very successful. 92 percent of the beneficiaries have built with materials donated by the U.S.K. Over 500 houses have now been built exceeding the 150 houses which were to be built to house the fire victims.

5.2.2. COMMUNITY PARTICIPATION

The use of community participation by the U.S.K. has also demonstrated success. Progress was realised in terms of the completion of the house structures. Its having worked with the village committee enhanced the cohesiveness of the residents of Kitui village. This is demonstrated by the continued working together of Kitui residents through community organisation in an attempt to provide toilets and a primary school which will also double as a community hall.

Felt needs of Kitui residents were taken into considerations. This is illustrated by the construction of dwelling units which the residents had ranked as their first priority. Their second priority is in toilets and progress is being made towards completion still using the cost-sharing strategy.

Kitui residents are also satisfied with the use of community participation. 84 percent of these respondents benefitted from the use of this. These benefits they said were, in the form of shelter, better standards of living, food and beddings. 60 percent of the respondents achieved shelter which is among the most important needs. Of the beneficiaries of community participation 90 percent argued that the benefits they reaped from community participation could not have been achieved without it.

Self-help idea was also well utilised by the U.S.K. in its workings. Kitui respondents were very enthusiastic about the use of this. 62 percent of these acknowledged that they would go for self help building any time because the method ensures that the eventual production of a house is affordable. Owner occupiers were the most enthusiastic about the self help method. 83.8 percent of these favoured the method any time of

the day because it ensures that the eventual production of a dwelling unit is affordable.

5.3. HOUSING SITUATION

Improvements made by the combined efforts of U.S.K. and the community at Kitui village are commendable. U.S.K. came into the village at the invitation of the fire victims at Kitui village. Instead of putting up the type of houses initially there prior to the fire - these were made of cartons or even bring blankets and food as is usual, U.S.K. embarked on total improvement of the houses.

Due to the building materials and assistance accorded to the residents of Kitui, almost all the houses are constructed of better walling and roofing materials. 92 percent of the houses are roofed with corrugated iron sheets while 94 percent of the houses have walls made of mud and wattle. The construction method adopted was found to be sound as it takes after the traditional building method which has been used since time immemorial by our fore fathers. 94 percent of the houses have adopted the traditional method of house construction and over half of these houses, 58 percent are in satisfactory condition.

Of major significance is that the Undugu housing model has targeted the low-income group of people. although the tenant population is highest in the village accounting for 66 percent of these, overall average monthly income was found to be KSh.458/- and as such belonging to the low income group of people. Hence the U.S.K. model was targeting the low income group of people who were not necessarily owner occupiers.

However the study found out that there were some short comings on the housing improvements made from the residents point of view. Average number of rooms per dwelling unit was one with 76 percent accounting for this. 62 percent of the respondents expressed the opinion that the one roomed dwelling units were inadequate. Only a negligible 7 percent of the houses were being sublet, meaning that the dwelling units were serving basically as a form of shelter and not as a source of income generation. This is very significant because it illustrates that although residents of Kitui village are in a dire need of a source of income because of the high rate of unemployment among them(66 percent) only 7 percent benefit from subletting as an income generating source.

Another problem noted was that 62 percent of the respondents did not like the material that has been used to build the dwelling units. This percentage is very significant because it illustrates that the majority of these people wish to have better construction materials than mud and wattle. However the question which arises is whether these residents of low income category can afford other building materials apart from the ones they dislike. It would appear then that these people are not aware, that they are supposed to pay for the better building materials or services that they would prefer.

Public utilities were facing various problems. Although water is available at five individual water points and at three water kiosks maintained by a Kitui residents women group, costs of water were high. Informal discussions held with the community brought out the main problem as being, the high costs of water.

Toilets are still in the process of being completed and hence it is expected that there are health hazards associated with the peoples present areas of answering calls which are located over the Nairobi river.

There is one multipurpose community hall used as a nursery school, adult classroom and as a gym

at various intervals of the day.

Other community facilities such as garbage disposal are lacking and these are thrown any how anywhere and especially near the frontage of the dwelling units.

Mention must be made here that the shortcomings experienced in the Undugu Housing model especially in the provision of toilets, water and even housing; cannot be explained in isolation of the total socio-economic and political environment. U.S.K. was the only agency operating in the village as early as 1983 and during this period of time, something sinister happened which the Undugu officials were not ready to explain. They were referring to it as political wrangling. This wrangling which saw the subsequent quitting of U.S.K. from Kitui village for sometime and the general uncooperative attitude displayed by the Nairobi City Commission towards aiding in the provision of a sewer system illustrated that the U.S.K. is faced by constraints from politics and institutions like N.C.C.

5.4. POLICY RECOMMENDATIONS

In view of these findings it is recommended that:-

1. Cost sharing

The Undugu housing model's use of cost-sharing, community participation and self-help should be borrowed by the government since it has been seen to work well and is affordable. The government however should take up the larger part of the costs to be incurred in housing these people. It is a humble modest strategy of housing the low income group but it solves the problem.

2. Enhancement of income generating activities

Upgrading of slum/squatter areas should ensure that there is space left for extension of the dwelling unit. This additional unit can then be used as a source of income generation through subletting. This would enhance household incomes which were very low placed at KSh.458/-. It would also assist the unemployed.

3. Provision of public utilities

When upgrading is taking place, both houses/dwellings and the toilets should be upgraded simultaneously. This is because these are facilities which go together and as such the completion of these should come together to avert potential health hazards emanating from lack of

sanitary facilities and the potential social evils emanating from lack of dwelling places.

4. Education of the low income group

The community's identification of its own felt needs is not enough to keep a project such as in this case housing sustained. Money is also required to maintain the dwelling unit from time to time. Hence the community resident in slum/squatter settlements should be educated on the importance of economic implications of improved housing and the facilities that go with it. This will help the government and the nation at large since people will be in a position to understand the rationale behind production of houses using some materials such as mud and wattle and be comfortable.

5. Upgraded settlements should maintain the Traditional look of rural houses.

It is important that the upgrading process that takes place in slum/squatter settlement area should allow the upgraded dwellings to maintain a traditional look of the rural house. This will ensure that the higher income groups of people stay away from these houses since the traditional look is in most cases, fortunately or unfortunately associated with backwardness by the elite.

6. Land

The government should consider forfeiting her land which is already occupied by squatters/slum dwellers to the same and acquire that which is privately owned. This will ensure that the community resident in this settlements are able to make appropriate improvements in the dwellings because of the land tenureship status which is permanent.

7. Facilitation of land registration

Commissioner of lands should ensure that all the local cadastral and property registration are updated in order to show all land transactions made. This will facilitate quicker land acquisition by the government.

8. Allocation of land to Non-governmental Organizations

Land acquired by the government can then be allocated to the local non-governmental organisations (NGOs). These local NGOs must have worked within slum/squatter environment for a period of not less than 5 years and still be working with the same (this period should not be rigid .It is meant to ensure that an NGO has interest in the promotion of shelter for the low income group). The

local NGOs must also be reputable and be seen to be making improvements. Only on this basis should land be allocated to local NGOs.

9. Random supervision of house tenureship

These local NGOs should then be in charge of constant supervision of tenureship of houses. This will help in checking the occurrence of absentee landlords who may have gone to squat elsewhere in another public land/private land.

10. Review of grade 2 building by laws

The government should hasten to make the building by laws more flexible in order to allow dwelling unit affordable to the low income people. Overall this strategy will check the development of other slums/squatter settlements.

Materials which have been defined as permanent should be redefined to incorporate other relatively cheaper materials of house construction. These materials which should be incorporated are such as mud and wattle.

5.5. CONCLUSION

We have looked at the problems associated with housing programmes intended for the low income in the conceptual background. We have also looked at the workings/operations of U.S.K., described and analyzed the housing situation which has arisen as a result of the combined effort between U.S.K. and the community at Kitui village.

From the analysis certain conclusions have been arrived at. These include the fact that NGOs play a significant role in the improvement of housing. However despite this significant role there are major constraints and especially from institutions such as the Nairobi City Council which should be concerned with the fate of low income people. Tenureship of land is also a problem which affects the housing conditions of houses.

The recommendations made here offer a great challenge to the government and more so in these times of financial difficulties. For example the recommendation that suggests that government acquire land to allocate to the low-income is quite costly.

The recommendation that suggests that the low-income settlements maintain a traditional look may not be received well. Therefore further research should be done to establish how well the suggested

settlements can be harmonized with the urban environment.

It is hoped that the recommendations of this study will promote the low-income housing and especially upgrading of squatter settlements. That if implemented they will go a long way in promoting the general housing sector which relates to the low income people.

APPENDIX

APPENDIX 1

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APPENDIX 2

ROLE OF NGO'S IN SLUM AND SQUATTER SETTLEMNT UPGRADING
A CASE STUDY OF UNDUGU SOCIETY OF KENYA

(This information is confidential and will be used
ONLY for the purpose of thesis writing).

HOUSEHOLD QUESTIONNAIRE

1. Name of interviewer -----
2. Name of interviewee-----
3. Questionnaire number-----
4. Date -----

I RESPONDENT

- 5 male-----female-----
- 6 Head of household yes-----No-----
- 7 If no relationship to household-----

II HEAD OF HOUSEHOLDS CHARACTERISTICS

8. Age-----
9. Education level-----
10. Ethnic group-----
11. Original home-----/rural or urban based
12. Length of stay in Nairobi-----
13. Length of stay in Kitui village-----

14. Any intentions to move-----

15. If any give reasons-----

III HOUSEHOLD COMPOSITION

16. Adults=Males-----Females-----

17. Children less than 3 years Girls-----
Boys-----

18. Children between 6-12 years

IV CHILDRENS EDUCATION

19. no. in nursery school-----

20. no. in primary school -----

21. no. in secondary school-----

V INCOME

22. Employed yes-----no-----

23. Where informal-----
formal-----

24. income per month-----

25. employed in any other income generating
activities-yes/no-----

26. income of major activity.....

27. Mode of transport to work

a). Foot.....

b). Public transport.....

VI SELF BUILT/RENTED

28. is the house self-built or rented (if rented go to 35)

29. If self-built was it affordable

a). yes.....

b). no.....

30. What problems did you encounter in house construction.....

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

31. How did you solve them?
.....

.....
32. How much do you pay per month?
.....

.....

33. Is it affordable

a). yes.....

b). no

34. How many rooms does the house have (all to answer the question).....

.....

35. Do they meet your needs a). yes....

b). no

36. Do you sublet a). yes
b). no
37. At how
38. How many people live in the house?.....

VII GENERAL CONDITIONS OF THE HOUSE

39. Roofing a). tiles
b). Galvanized corrugated iron sheets (G.C.I)
c). Grass
40. Walling a). mud
b). Wattle
c). cement
41. Floor a). cement
b). earth
42. Facilities in the house
a). Kitchen
b). bathroom
c). Toilet
43. Total condition of the house
a). good
b). bad
c). satisfactory

VIII PUBLIC UTILITIES

44. Which facility should be given priority
a). water
b). toilet
c). garbage disposal

- d). roads
- e). electricity
- f). community facilities

IX TYPE OF PLAN

45. Did you like the plan of the house as was provided by the U.S.K a). yes
 b). no

46. If yes why ?

 If no why ?

X SATISFACTION

47. Are you satisfied with the following ?
 a). material used to construct your house yes/no
 b). location of the house
 yes/ no
 c). space standards
 yes /no
 d). land tenureship
 yes /no

XI ASSESSMENT OF PROGRAMME

48. Have housing conditions improved since the U.S.K programme came in yes / no

49. How do you rate it a). successful
 b). not successful

50. What additonal change would you like the programme to undertake ?

.....

XII SELF-HELP BASIS

51. Do you like te idea of building on self-help basis

yes / no

52. If faced with an option would you still prefe tp build on self-help basis yes /no

53. If yes why ?.....

54. If no why?.....

XIII COMMUNITY ORGANIZATION

55. What has the community organization helped you achieve ?.....

.....

56. Would you have achieved the same without community organization ?

.....

.....

.....

.....

