THE NATURE AND DETERMINANTS OF RESIDENTIAL MOBILITY IN KISII TOWN AND ITS IMPLICATIONS FOR HOUSING POLICY

BY

JOHN-SUIT MOGENI NTABO

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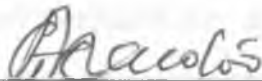
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ABSTRACT

The study is concerned with changes in residences by households that take place within an urban centre. Many of these relocations take place in the same neighbourhood or on the same block. However, longer moves determine most of the growth or decline of population in different parts of the urban centre and virtually all the changes in relative income levels and social concentrations.

This study has synthesized the subject under three headings. *First, who moves?* What are the social characteristics of the movers? Is it possible to predict the mobility rates for various categories of population?. Second, *why do they move?* What socio-psychological and economic factors cause a given household to move? Here the emphasis is on the decision making unit, the family (household). Finally the almost completely neglected question, but one of greatest concern to students of urban spatial structure; *where do they move* ? Are there spatial regularities in the relocation process ?.

Residential mobility was categorized into two sections, the first one was concerned with aspects of the household's housing demand and secondly, aspects of housing supplied in motivating residential mobility. Dividing the two groups of reasons behind residential mobility was not an easy task. Because the decision to move was determined by an amalgamation of factors. A household considering moving to a larger or smaller dwelling due to a change in its size, may do nothing about it until a change in the cost of travel to work tips the balance in favour of a move. Household characteristics and housing factors have been considered in determining the forces behind residential mobility.

Chi-Square tests of the variables responsible for residential mobility in Kisii urban centre indicates that both housing demand and supply factors have influenced residential mobility. Analysis of variance indicates that there are no spatial variations in residential mobility between the three residential areas.

It is apparent that virtually all the elements that enter into location decisions reflect individual decisions and evaluation of needs and opportunities, which are shaped in turn by the values and habits of various subcultures. Households with similar social characteristics but different lifestyles preferred widely different housing and neighbourhood conditions. Even such a basic element as size of house was perceived differently; some households preferred large units and others a small number of rooms. Location preferences were tied to the background or to the role aspirations of the household.

Other important aspects of locational behaviour have been ignored in this study and will require investigation. For instance, the possibility of moving employment location rather than residential location is one alternative available to an individual faced with increased transport costs, as is the possibility of changing to a cheaper mode of travel. A study of the probability of someone making these choices rather than move residence could complement an analysis of residential mobility based on demand and supply factors and provide a much greater understanding of the complex interaction involved in location decision making.

DEDICATION

Dedicated to my parents Samuel Ntabo and   Teresa Nyaberi.   Thank
you for your inspiration and support with deepest   regards and
affection.

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ABBREVIATIONS

CBD   - Central Business District

CBS   - Central Bureau of Statistics

"GLAM" - Residential Ring Surrounding the CBD: Consisting of Good

       morning, Langat, Angwenyi and Mwalimu areas housing. It was

       distinct from the CBD.

GoK   - Government of Kenya

KMC   - Kisii Municipal Council

NHC   - National Housing Corporation

CHAPTER ONE

THE INTRODUCTION

1.1 Introduction

Spatial mobility has been a subject of interest to geographers for generations. There is an extensive literature on migration, and to a smaller extent literature describing intra-metropolitan residential moves (Simmons 1968). Although the general process of migration has been widely studied and several excellent reviews are available, the concepts and findings have limited application to movements within urban areas, since economic opportunity, the main stay of migration theory at the international and inter-regional levels, is largely irrelevant for movements within a commuting area, or for any patterns of intra-urban residential mobility.

A simple yet crucial step in underlining the centrality of the residential mobility phenomenon is to recognise that any economic and social policy that affects intra-urban patterns (e.g. provision of certain infrastructural facilities, industrial location) will directly or indirectly influence the intra-urban residential process. This process, in turn will itself tend to alter the pattern of sectoral and geographic economic activity, income distribution and even population growth. Since all economic policies have direct and indirect effects on the level and growth of urban zones, they all will have a tendency to influence the nature and magnitude of the residential mobility stream. Included among these policies, for example, would be land tenure arrangements, taxation, the geographic distribution of social services, the nature of public investment programmes, the nature of housing policies and the location of new industries.

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Thus, there is a clear need to recognise the central importance of intra-urban residential mobility and to integrate the two-way relationship -between residential mobility and population distribution on one hand and economic variables on the other into a more comprehensive analytical framework designed to improve urban development policy formulation. In addition, we need to better understand not only why people move but also what are the consequences of residential change for urban economic and social development; if all development policies affect and are affected by residential changes, which are the most significant and why? What are the policy options and competing objectives?

1.2 Research Problem

Kisii urban centre's population was estimated to be about 44,000 people in 1989 (and the number is projected to increase to 52,000 by the year 2000) [Kenya 1994]. The high increase of urban population has definitely been a burden to the agencies responsible for providing the necessary infrastructure like water, sewerage and roads. If the development of urban housing and basic services do not increase at the same rate as population growth, then the urban housing situation may get out of hand.

There is a need for this growing urban population to be accommodated in "satisfactory" housing, a kind of "compromise residence" that addresses the housing needs of the various socio-economic groups in the urban centre. Otherwise a lack of provision of the right housing by the Government of Kenya (GoK) or any institution charged with that responsibility may lead to dissatisfaction and eventually change of residence to one that meets a household's housing demands.

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In order to plan for the future population, future housing needs have to be considered. Housing needs are calculated by considering new households, depreciating units and inadequate housing. There is an indication, for example, that demand for housing tends to increase almost proportionately with the increase in household income, 'thus ensuring mobility at the advent of a rise in economic purchasing power'. There is also an indication that housing consumption tends to rise with household size.

The intra-urban residential mobility study was, thus, initiated to avail the required information on the determinants and nature of residential change. This information will facilitate rational policy decisions to be formulated and implemented with a view to improving the urban housing condition and making it more relevant to the housing demands of the urban residents.

The high growth rate of Kisii urban centre of between 6% to 8% per annum (Obudho, 1983) has led to a large population with variable movement probabilities mainly associated with family life for example, marriage and child-rearing, involving a physical need for more space. This has forced households to move to houses that meet their demand. This is important because one of the major problems which has been very elusive to the urban planner is how to house all urban residents decently and this cannot be addressed adequately without inquiring about the characteristics which most urban households look for in a house. This initiative, therefore, goes a long way to help revitalize Government of Kenya policy on urban housing so as to incorporate the missing housing characteristics and do away with factors that affect households' housing consumption negatively. Therefore develop an urban housing programme that will help people attain "normative" housing, which is the key to a successful urban housing policy.

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More importantly is the notion that accessibility to decent urban housing by any urban resident including Kisii urban centre's inhabitants is an important aspect of development which must be considered by the GoK as one of its basic responsibilities.

Dissatisfaction about the present dwelling and positive expectations of a new residence often reinforce the movement desire. This is a classic illustration of the "push-pull" theory of migration. Resistance to movement depends on how long the family has lived at its present address and its income, tenure status and strength of social ties. Once a decision to move has been made, an evaluation of the new housing unit and its neighbourhood must be made. Economics (cost), location and access to services are also considered. The study would determine the need for basic services like water, electricity, educational facilities, medical and security among others to assist revitalize the approach to sectoral planning in the town and come up with 'relevant housing' and zoning policies. These policies, in the longer run will affect the direction of flow of residential migration as they will influence the direction of residential movement

It could also be possible to make some generalisation about the shape of the migration field about Kisii urban centre formed by the destination of intra-urban moves imposed by the needs and preferences of the households, and others by the distribution of different kinds of housing and basic infrastructure.

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1.3 Objectives

The main objectives of this study were to:

(a) examine the housing supply factors which have influenced people to change their residence within the urban centre, thus shed light on any inconsistency that may exist in the relationship between the housing programmes advanced by planners and the demands of the people for whom they are intended;

(b) examine the housing demand factors which have led to people changing their residence and how these could be translated into their housing needs (relevant housing);

(c) determine the spatial patterns formed by the residential movements in the town with a view to establishing the most preferred housing environments and how it can be translated into the spatial planning of the urban centre; and

(d) evaluate the appropriateness of the present housing policies in solving urban housing problems in the urban centre especially in relation to their relevance to the people.

In short, the research problem is to identify the:

(a) main housing characteristics which motivate change of residence. This is expected to reveal the major causes and rates of residential mobility in the town attributable to present housing.

(b) characteristics of the intra-urban residential movers in Kisii urban centre. This is expected to reveal the spatial residential mobility rates caused by the changing household characteristics in the urban centre.

(c)   Origin and destination of the movers in the urban centre in order
       to reveal the spatial residential mobility rates and pattern in
       the urban centre.

1.4 Study Hypotheses

The study tests the following hypotheses:

(a) H_o: The decision to change a residence is not influenced by the
              household characteristics.

       H_1:   Alternative hypothesis.

(b) H_o: The characteristics of housing do not influence the decision of a
              household to change a residence.

       H_1:   Alternative hypothesis.

(c) H_o: The spatial intra-urban residential mobility rates are not uniform
              in the town.

       H_1:   Alternative hypothesis

1.5 Theoretical Framework

The decision whether or not to move from one residence to another   is
viewed as a product of the stress generated by discordance between the
household needs, expectations and aspirations on the one hand and its actual
housing conditions and environmental setting of the neighbourhood on the
other.   The following conceptual model (fig 1.1) illustrates the expected
relationship between these variables and household's residential movement
decision process.

The arrows in fig.1.1 represent a causal relationship between the
household's environment and aspirations and its decision to look   for

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alternative housing. The model gives a picture of how housing policy affects the housing supply characteristics. The quality of the housing triggers off housing demand, if it proves irrelevant. If demand is not fulfilled it creates the need to move and eventually the actual mobility of the household to alternative housing seen as fulfilling their demands. In some sense, the demand aspects of housing should affect the housing supply, as providers of urban housing try to supply housing that reflect the demands of the urban residents.

Figure 1.1: A model of residential mobility
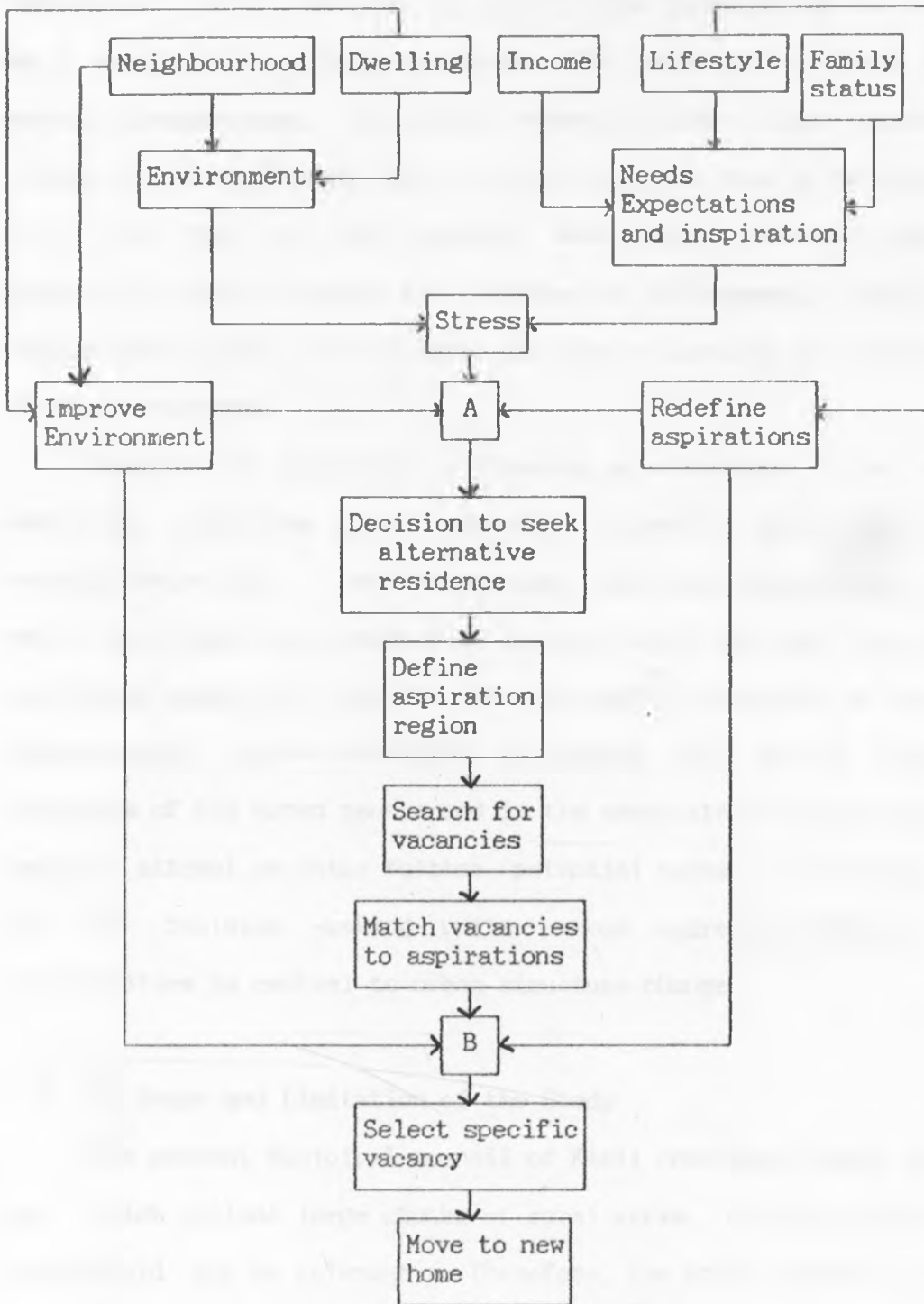
Source: Robson B.T.(1969)

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Whatever the household's expectations and aspirations, the crucial determinant of the decision to move is the intensity of the stress generated as a result of the difference between the household's housing demands and its actual circumstances. The point where torelable stress becomes intolerable strain will be different for each household, but once it is reached (at point A in the fig 1.1) the household must decide between three avenues of behaviour: either improve the residential environment, redefine residential aspirations or take the ultimate decision of seeking and eventually moving to another residence.

Mobility is a product of housing opportunities - the new and vacant dwellings resulting from suburban expansion inner-city renewal and rehabilitation etc. - and the housing needs and expectations of households, which are themselves a product of income, family size and life cycle. Given a sufficient amount of mobility, the residential structure of the town will be substantively altered resulting in changes both of the "objective" social structure of the urban centre and in the associated neighbourhood images which help to attract or deter further potential moves. Households, then, may be seen as decision -making units whose aggregate response to housing opportunities is central to urban structure change.

1.6 The Scope and Limitation of the Study

The present Municipal council of Kisii comprise a total area of about 35 km², which include large chunks of rural areas, which, by the nature of this study could not be relevant. Therefore, the study focused on the urbanised area (UA) which is comprised of the built-up area of the Kisii municipal council, this is the area in need of urban services provided by municipal

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police, fire, sewer, water and solid waste agencies. This in effect included only the Central business district (CBD) and its immediate suburbs.

A questionnaire was used to seek out the history of residential mobility of each interviewee, from the first time he started staying in Kisii urban centre to the present time and the probable reasons why he changed the residence(s).

A number of limitations were encountered during the study, which could have compromised the research findings. Although counter measures were employed. These problems were:

(a) Some people were not willing to give out information and in some cases the responses were not accurate according to the requirements of the research. However the information given was used in collaboration with field observation to check for possible inaccuracies. This information met the stated study objectives.

(b) Some respondents were suspicious of the intentions of the research. This affected the quality of answers, as some respondents could not volunteer information. However, I tried to create rapport and confidence with the respondents who realised that my research was not connected to a future programme which could affect them negatively.

(c) Some household heads were away working at the time the questionnaire was being administered. This required the researcher to keep coming back in order to meet them.

(d) Some respondents were deliberately un co-operative with some ending up asking for payment for information volunteered. I made to understand that my study was not for commercial purposes, as a

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result they were more willing to give information willingly and freely.

(e) Some questionnaires had to be translated into the local vernacular, particularly where the respondents were illiterate or semi-illiterate. Thus ended up explaining on some questions and may have influenced their responses.

(f) Some of the secondary data needed could not be obtained from the libraries or Central Bureau of Statistics. Those available were mostly old and sometimes outdated. This forced the researcher to do projections or make arbitrary boundary changes to the maps on Kisii Municipal Council in order to serve the purpose of this research. This may have influenced the research output. However, the output was adequate and served its purpose well.

1.7 Literature Review

A large quantity of literature is available concerning the decisions of individuals which govern the residential choice and the changes in that choice within an urban area. In the course of time social scientists have occupied themselves with these factors from their own viewpoints and without making any attempt at integration.

Sociologists were mainly interested in the relation between residential mobility and the dynamics of the housing needs of families (Rossi, 1955). Here one might well talk of historical theories (Menchik, 1973) since the emphasis is on such variables as social class, family cycle, size of family, level of education and earnings of members of the household, and the nature of the accommodation and the social level of the neighbourhood.

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Economists consider the behaviour of individuals to be the result of market processes and therefore have paid particular attention to economic preferences and budgeting restrictions, the availability of houses and building sites, and the numerous imperfections that are a feature of the housing market.

Geographers and planners have been interested mainly in the residential choices of households in the broader context of the geographical structure and physical planning of urban areas (Moore, 1973).

There is, however, remarkably little agreement about the primary determinants of locational decisions. One school of thought emphasizes the role of life-cycle factors whilst another stresses the economic constraints. Whichever disciplinary approach is adopted, however, residential migration is generally viewed in two stages: the decision to move, and the choice of a new location. (Speare, Goldstein and Frey, 1974).

The literature on residential mobility suggests numerous factors help to determine the decision to move. Exogenous economic factors such as housing market tightness have been suggested as a restraint on residential mobility (Sabagh, *et al.*, 1969). Other factors like desired neighbourhood environment are beyond the control of some households and therefore cannot be catered by the limited budgetary allocation for housing , thus, they constraint the individual from moving towards an optimal residential and workplace separation. The cost of the journey to work, for example, has been suggested by Richardson (1971) to be associated with the desire to change location while Brown (1975) also found evidence to link the cost of travel with residential choice.

Otherwise, the study of intra-urban development has not advanced substantially from the quasi-theoretical formulations of the Chicago School in the 1920s and subsequent adaptations of these in 1939 and 1964, in 1945 and 1969. Whilst empirical applications or tests of social area analysis abound - some of which are attributed to Sweetsers' factorial ecology (Sweetser 1965) - almost all of these even when they purport to be empirical tests of models of urban development, are static analyses of the internal structure of urban centres at one point in time, only relatively recently has attention been turned to systematic multi-variable analyses of intra-urban change, using data from two or more points in time.

The more surprising, however, is the relative paucity of studies that make the seemingly logical extension from static social area analyses to dynamic intra-urban change applications in the U.S.A. where census tract data have been available for many years. Even of those studies that have attempted change analyses (the great majority of which are North American), few have attempted systematic multi-variate analyses, a number have confined themselves to the study of single-variable changes (non-white population, social class) in distributional patterns over time. Thus Duncan and Duncan (1957) examined the changing spatial distribution of the Negro population in Chicago between 1920 and 1950 in order to test the invasion - succession theory of Burgess.

Taeuber and Taeuber (1965) carried out a similar exercise for ten American urban centres over the period 1950-1960 and Goldstein and Meyer (1961) examined the changes in the census tract distribution of socio-economic status between 1955 and 1960 in Providence, Rhode Island. None of these studies were attempts to examine or measure changes in the major dimensions of intra urban socio-spatial structure but they have contributed to a better

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understanding of changes in residential distribution patterns of minority populations and different social class groups in American cities.

Schmid, McCannel and Van Arsdol (1958) tested longitudinally the social area analysis formulation of Shevky and Bell (1955) by comparing the inter-correlations of census variables selected to operationalize the Shevky-Bell dimensions of socio-economic status and family status at two separate dates (1940 and 1950) for Providence, Rhode Island. This did represent an attempt to compare the independence of two major (theoretical) dimensions of urban socio-spatial structure over time but did not constitute an attempt to measure differences nor an attempt to find whether the component nature of the major dimensions had changed over time.

A somewhat different line of approach was adopted by Brown and Longbrake (1968) to the study of intra-urban process. They were concerned with investigating the socio-economic correlations of intra and inter urban mobility patterns by correlating data on migration patterns in Cedar Rapids (USA) with Intra-urban area scores on five components produced by factorial ecology. These components could be said to represent the major dimensions of intra-urban socio-spatial differentiation (subject of course to the range and limitations of the input data) and the study was devised to ascertain the dynamic relationships between population movement and these major dimensions. Most research has been focused on the determinants of residential mobility, stated reasons for moving, characteristics of the origin and/or definitions of the movers, or combinations of the three aspects. Most researchers have viewed it as an adjustment process propagated by new housing demands by urban households.

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In East Africa and Kenya in particular, researchers have tended to shy away from the processes that have shaped urban housing, instead preferring to focus their attention on static issues of urban housing. However researchers world wide have attempted to study the intra-urban residential mobility process, the following is a brief summary of various studies.

Rossi, (1955:178) in a study of residential mobility in Philadelphia (USA), presented a major theoretical advance in the study of housing behaviour which has not been significantly modified in subsequent research. He organized his interpretation around the concept of the family life cycle and viewed housing needs as directly related to family composition. As family size and space requirements change at various stages of household life cycle so moves are made to find the appropriate qualities of dwelling design and space:

> Housing needs are determined primarily by the composition of the household. Families change as they go through a life cycle of growth and decline... Housing needs change rapidly in [the] early years as space requirements quickly grow and as the family at the same time becomes more sensitive to the social and physical environment provided by the location of the dwelling.   "/

Rossi's reference to sensitivity to the social and physical environment hints at the view that housing needs are the norms for housing. He laid emphasis on the housing demand overlooking the role of housing characteristics in determining the housing behaviour of his sample. The residential change process is, at most, implicit in his study.

Sabagh, Van Arsdol, and Rutler, (1969:90), expanded on Rossi's approach foreshadowing but did not fully develop the perspective when they stated that:

> "The actuation of mobility by life cycle changes depend on...the way in which changes in the family structure are evaluated and related to housing needs."

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They make reference to ideals, aspirations, expectations, and family norms in connection with residential mobility, concepts which address the demand aspects of the household consciously ignoring the role played by the housing supply in motivating residential change. Although these two studies ignore the role of housing in the market, its impact on housing change cannot be overlooked. The present research addresses the role played by the housing supplied in prompting residential mobility as well housing demand aspects.

Goodman (1974) discussed housing adjustment in terms of disequilibria. These disequilibria are induced by changes in family factors such as income and family composition or changes in the place of work within the local labour market that increase the time and money spent commuting. He referred to such disequilibria as "housing stress". Some of his measures of disequilibria are similar to the normative deficits (space, expenditures etc). Like others before him, he focused only on life-cycle and family composition stresses associated with such changes, ignoring other factors which could have influenced change of residence. In residential mobility, different literature show that residential mobility has been influenced by many reasons, apart from life-cycle and family composition which Goodman emphasized in his study. It is imperative that factors like household characteristics should be looked at together with housing factors in order to appreciate the magnitude of residential mobility and factors behind it.

Morris and Winter (1975) presented a model that explicitly defined housing needs as the progression of norms through the life cycle and included the range of cultural norms governing the family's relation to its housing. This study emphasizes behavioral responses (residential mobility, residential alterations, and structural family adaptation) with little attention to the

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possibility that families may also change their norms rather than their housing conditions. In another study Morris and Winter (1976) found a direct relationship between tenure deficit and desire to move. They found that households experiencing a positive tenure deficit (owning the dwelling when they wanted to rent) wanted to move so did families who had a negative tenure deficit (renting when they wanted to own). In addition, families with a negative tenure deficit had reduced housing satisfaction. They interpreted their finding as indicative of two factors. First, there is a lack of strong sanctions for over conformance to housing norms. Second, desire to move arises from other deficits and is not necessarily related to the normative housing deficits analyzed.

Morris (1976) in yet another study found that so few families had positive family tenure deficits that he dropped the variable from the analysis. He analyzed the impact of cultural negative tenure deficits, negative family tenure deficits and combined negative cultural and family tenure deficits. All three types of tenure deficit were found to be related to dissatisfaction and the propensity to move.

Findings from studies of residential mobility and comparisons between present and former residences indicate the importance of a normative tenure deficit in motivating mobility. The motivation occurs either because of a desire for ownership, the lack of alternative behaviours, or the insecurity of rental tenure.

However these studies lack a very important component of residential mobility; housing characteristics in determining residential mobility. This component has been included in the present study to find out its role in motivating residential mobility.

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Zimmer (1973:348) in a study of retrospective mobility, examined the family's move to the present residence. In all cases, the percentage of families who owned their present dwelling was at least double that in the former residence, indicating that:

> "there is a widespread desire to be a home owner and this factor alone accounts for much of the movement within the metropolitan area".

Zimmer's conclusion is supported by Michelson *et al.*, (1973) who found that, among families moving to houses from apartments, the dominant reasons were preference for the tenure and structure type of the new residence. It could perhaps be assumed that the tenure desired was ownership, although it was not explicitly stated. However, the norms for tenure and structure type are closely allied to one another, and operate independently from space norms.

McAllister, Kaiser and Butler (1971), in their study regarding differential mobility among blacks and whites support the hypothesis that renters are more often forced to move than owners. They attributed the high rates of black mobility to the fact that a higher proportion of renters in their sample were black people. When the researchers compared stated reasons for moving, they found that far more blacks than whites (21% versus 5.9%) indicated that they were forced to move, not that they wanted to move. In addition, involuntary mobility was the reason most often given by blacks, and least often stated by whites. It seems safe to assume that involuntary moves were moves by renters.

Most of these studies which have been carried out in North America have tended to emphasize on household factors like race, stage of family life cycle, and the lifestyle of the households concerned. The emphasis on only household factors has robbed the studies an all-encompassing explanation of

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factors influencing residential mobility, because the influence of housing supplied factors were not included.

Lansing and Barth (1964) found that families who live in housing that differed from their preferred form of housing were more likely to desire to move than other families. Included in their study as "deviant" were families who lived in apartments and wanted to live in houses and vice versa. The latter group comprised only 3% of the sample, thus families experiencing a structure - type deviation were predominantly apartment dwellers who wanted a single - family house. Obviously this study focused only on house supply factors. How about house demand factors ? This study addresses this issue.

Gladhart (1973) combined house tenure and structure type into nine categories of various tenure - structure type combinations. He used the need for a single - family dwelling as an independent variable. He hypothesized that as the need for a single-family dwelling increased, families in owner-occupied single-family dwellings would be less likely to move. Families in other classes of tenure - structure type combinations would be more likely to move. His findings largely supported the hypothesis. In an early study, Gladhart (1971:12) used market values of housing services received per room as a proxy for quality of the housing services received and found:

> a prime motive for moving among occupants of low priced housing is the desire to increase the value of services received. As the price of housing rises, the importance of quality as an incentive to mobility diminishes, beyond a certain level, increased quality (increased rent or value per room) is a deterrent to mobility.

Gladhart's studies have taken a sectional approach ignoring other factors which could have played a major role in residential mobility. This study tries to overcome this weakness by taking up as many factors as possible into consideration.

Roistacher (1974) found that an increase in income was the best predictor of an increase in housing expenditures. Further, she found that an increase in income was a good predictor of mobility and a higher income was a good predictor of changing from renting to owning. Relating these three findings tends to support the hypothesis that a rise in income causes actual expenditures to be consistent with income. Hence the family moves to higher quality, more expensive housing and switches from rental to ownership. Roistacher's major weakness is that she did not consider the fact that a family may experience an income change but is hampered from changing its residence by other factors like location of place of work.

Droettboom (1971) found that the perception of the seriousness of crime and violence in the neighbourhood was strongly related to overall neighbourhood dissatisfaction and the desire to move. Such perceptions were poor predictors of actual mobility, however, the majority of the people who wanted to move did not. Among movers, the major portion went to another residence in the same neighbourhood. The author concluded that constraints, in the form of low income and racial discrimination, prevented actual mobility. Kasl and Harberg (1972) also found that the perception of the neighbourhood as unsafe as well as the perception of its poor quality was strongly related to neighbourhood dissatisfaction and the desire to move.

Bell (1958) studied families who moved to suburbs and found that the most important reasons for moving there were related to a desire for the "suburban lifestyle". The emphasis was on the proper environment for raising children and on the activities available in suburban areas. Bell's findings were supported by Gans (1967), who found that families choosing suburbia were drawn there because their chosen life style was available in that setting.

That is, they felt there were fewer neighbourhood and housing deficits in suburban living.

Speare (1974), employing a more complex analysis presented a "satisfaction model of residential mobility". Satisfaction was viewed as an intervening variable between housing and household characteristics and the consideration of moving. Speare's measure of satisfaction was a sum of six individual satisfaction items. Speare then used satisfaction as an intervening variable between selected households and housing characteristics. The characteristics were age of the head, education of the head, duration of residence, tenure, income, crowding, an index of the presence of friends in the area, and type of area (urban or suburban). He found that crowding, age of head, duration of residence, tenure, and the index of neighbourhood friendships all were related to the propensity to move through reduced satisfaction. Only duration of residence and tenure were directly related to wanting to move or actual mobility. He concluded that satisfaction is appropriately viewed as an explanatory variable for the desire to move.

Housing and neighbourhood satisfaction have only recently become the subject of mobility research. While further research is needed, it does seem safe to conclude that the chief cause of the propensity to move is a decline in housing and neighbourhood satisfaction. While much is known about the network of influences on residential mobility, there are many hypotheses yet to be tested. There are probably other household characteristics that influence residential mobility, as well as other deficits that have not been taken into account. Nevertheless, most studies have tried to bring out a clear picture of the relationships between characteristics of the household, normative deficits, and satisfaction that influence the propensity to move and

residential mobility behaviour.

When going through these literature one thing that stand out is their data-oriention and lack of problem-oriention. Some of them lack a theoretical framework on which they could have built their case. And in some cases some of them tend to be more concerned with the description of the data to the detriment of hypotheses testing or generation of new theories. Most of these studies provide some understanding of the significance of residential mobility and its major dimensions, but do not provide much information about the specific dynamics of residential mobility. Even more importantly, residential mobility process is crucial to understanding how urban areas are structure though this process and how the housing market is coping up.

Turner (1967) developed the concept of "self-help" and strongly condemned "instant development" whereby ready-made houses are offered to the urban residents irrespective of their requirements and capabilities. He advocated the concept of "progressive development" or what may be termed owner-occupier-builder kind of housing. He concluded that urban residents need more space and not just standards, they also need a secure tenure which is a prerequisite for the improvements of the dwellings by the occupier. Although Turner's prime attention was on provision of housing for low income people, there is much to be learned from his approach and findings in order to come up with a satisfactory housing policy. However, attention should also be focused on all factors as they affect residential satisfaction, which Turner deliberately left out.

In a later study Turner (1968) again shows the problem of conflicts between government programmes and the demands of the people and calls for re-alignment of institutional norms and action: otherwise, the collective will of

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the people will be wasted. He argued that the mix of the three basic functions of the dwelling environment, location, tenure and amenity depends on the priorities, expectations and the socio-economic conditions of each household. He argued that the very low income people who have just arrived in the urban centre will live in the inner city slums. As they stay in the urban centre longer and acquire some form of secure job they become "the consolidators" and squat on vacant urban land. However, the universal application of this model, particularly in Africa is doubtful and for Kisii urban centre it may not be quite relevant.

In Kenya we have not developed a model of intra-urban residential mobility, which can be utilized in housing provision programmes. This has come about because of limited research and documentation on the housing problem in Kenya. The little that is available has tended to concentrate on Nairobi and Mombasa (Harris 1970, Stren 1970; 1976, Chana and Morrison 1973, Morrison 1974). A few others have tended to compare the situation in major urban centres, particularly Nairobi, Mombasa and Kisumu In actual fact, very little research has been carried out relating housing conditions to residential mobility. The little information available on Kenya emphasize housing demand and supply needs of the major urban areas (Macoloo 1984).

Macoloo [1989] in a paper on the potential significance of stated preference for residential location in Kisumu, found that residents preferred desirable residential district, despite the income levels. He has presented one of the most recent works on residential preferences in a secondary town in Kenya. This information should be used to come up decent and desirable housing which satisfy the residents of the town. However this did not address the process of residential mobility based on the desired residential area.

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The study focused on an ideal situation where all other things are held constant, for example affordability of the stated preferred residential areas.

Muwonge (1982) carried out research on residential mobility among the low income in Nairobi. He traced the history of housing in Nairobi from the inception of the colonial period. He found that within the low income zone in Nairobi, a distinctive pattern of intra-urban residential mobility is evident.

Most of the first time immigrants settled in Nairobi through all residential areas of the city and most especially by way of the intermediate zone. Their next move is towards the city centre or the peripheral zone. On choosing an initial residence area, proximity to place of employment is crucial. His findings discounted Turner's assertion of residential mobility of a fresh migrant from the time he is "a bridgeheader" to the time he becomes a "consolidator". Thus Turner's model on the residential mobility of a freshly arrived migrant in town conflicts with Muwonge's findings, suggesting that this model may not be applicable universally especially in Africa. Also his assertion that housing quality is better at the periphery than at the centre is questionable, unless specific examples/studies confirm the assertion this was a dangerous assumption Muwonge did not prove. In the case of sites and service schemes, Muwonge seemed to agree with Turner that the essential feature of site and service schemes in Nairobi is that families are given greater control over the design of their dwellings, maximizing satisfaction.

Thus in line with Turner's concepts, home owners take more pride in their residences than do tenants, hence site and service schemes can create more attractive and stable neighbourhoods by restricting the need for residential mobility.

In a study that bears close semblance to Muwonge's was Oucho's (1974) study of immigrants in Kisumu, where he observed that younger migrants tend to stay with their spouses in urban centres whereas old people tend to leave their wives in the rural areas. Such information, though generalized, may help housing policy makers in determining house types and sizes most needed. Although this study lacks relevance to the present study, it cannot be ignored summarily, as some aspects of it could help in understanding the impending residential mobility given the understanding of the stage of the family life-cycle of most migrants and therefore project their residential demands.

Omondi (1981) examined an aspect of intra-urban residential mobility in Kisumu. The study gives a good description of how people adjust to both external and internal relocation factors, shedding some light on residential mobility within a Kenyan town.This study identified both endogenous and exogenous factors of the residential environment as motivating residential shifts within Kisumu urban centre.

He focused on factors such as role of religion and ethnicity, which, in my view, may not help regulate the housing policy in Kisumu, because the town has not attracted people from so many ethnic and religious orders to make them distinct in expressing their residential preferences based on these two factors. There is a need to focus on the effects of the housing supply, demands and present housing policies on creating housing dissatisfaction hence residential moves. However this study still forms a very important stepping stone towards realizing the importance of intra-urban residential mobility in the overall housing policy pursued.

In a study carried out in Kisii urban centre, the Department of Physical Planning (1971) came up with findings which can best be described as

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ambiguous. For example they found that the present inhabitants of the town are adequately housed and on the same breadth found a high level of sharing dwellings, sub-letting and boarding houses, which would result in two to three families living in a dwelling designed for one. And in their recommendations, they said that was to be expected and was to be encouraged to some extent. They also suggested that in the long term plan, an attempt was to be made to provide single family units which required prompt and determined action from the local authority. Thus a study of residential mobility assumes even more importance because the identification of the most preferred housing could help in identifying the most relevant housing to be provided both by private developers and for the local authority, the kind of housing to be encouraged. Such an approach could stabilize the local population and which can only be done by having an imperative study of residential mobility within the town by stressing, the housing supply and demand factors and assessing the adequacies and inadequacies of the present housing policy.

As can be adduced from the above assessment, urban residential mobility processes derive from the direct effect of public housing policies and the housing supply and demand curves. The effect of housing policy on urban residential development are expressed in two ways. At the municipal level, policy decisions may have a direct influence, through the provision of public buildings, facilities, and services, or indirectly or regulatory influence through the nature and enforcement of public codes and covenants. The latter include the power to determine capital improvements and servicing policies, assessment and taxation, zoning and building codes, school sites, transportation routes and annexation. These are intermeshed with and influence the development of the urban residential structure.

1.8 Justification of the Study

Residential mobility in any urban centre forms a very important avenue
to understanding the dynamics of the urban social structure of urban centres
such as Kisii town. This becomes even more important since the movement from
one dwelling to another within an urban centre such as Kisii town has an
important bearing on the spatial and socio-economic patterns of the
inhabitants, which has considerable influence on the spatial planning of the
urban centre.

The study has attempted to synthesise the intra-urban residential
mobility in Kisii urban centre, even though the nature of spatial
differentiation of residential attributes is largely the result of the
cumulation of intra-urban moves, the type of data available has caused
research to focus on the static distributions instead of the processes that
generate the urban structure. Yet so many significant urban phenomena for
example the housing market and urban growth operate through the mechanism of
intra-urban residential mobility such that it merits systematic study, in
order to understand the residential attributes, the socio-economic segregation
and the patterns of movement as they affect the process of urban planning.

This could permit the construction of housing which responds to the
housing demand for each sub-population and also to show how housing supplied
is relate to demand for various housing units available in the urban centre,
patterns of flow and the apparent variations in mobility rates for different
areas and socio-economic groups, paying attention to the attributes of housing
supply, and demand.

In order to set up priorities that would result in an optimum housing
environment, we must first understand the effects of the housing variables

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that we can control. These are the housing supply variables (tenure, structure, house size, rent, location, among many others). The housing demand variables
(income, point in life cycle, family size, etc). There is, therefore, an urgent need to review the current residential mobility process in the town and the possible challenges for the future so that this process can be managed, with the goal of making internal management of the town more efficient, especially location decisions which affect infrastructural facilities, sectoral patterns of industrialisation, service activities and management of equitable growth within the town, removing constraints and barriers to family housing adjustment.

Kisii town does have certain characteristics which made it especially suitable for this study. Firstly, it constitutes a functional region composed of the town performing central place functions for a wide hinterland both urban and rural. Thus it presents a reasonable region centred on the town, which has led to distinctive structuring of the town into various income-related residential areas which have provided residential areas where interaction between the housing sector and local residential mobility links can be observed. Secondly, the continuing growth of the town has provided the town with a mix of housing that is reasonably representative of the main types of development that have occurred since independence.

Thirdly, the town's industries have been predominantly light and "clean" and the many small units of production that have been associated with its staple trade has meant that industry has never had a dominating influence over the town's spatial structure. And therefore has not influenced residential mobility negatively, for example moving away from obnoxious industries.

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The town has the advantage (from the view point of this study) of being a town in which the patterns of housing have been the result of forces and relationships within the housing market itself, and where the environment in the broadest sense has not pre-conditioned the social character of areas, in terms of housing for different income groups.

Finally the population size of the town, just about 44,000 people (Kenya 1991) provides a unit large enough to ensure well-developed internal functional segregation without being beyond the resources of a single researcher.

Figure 2.4 shows the town and marks the extent of the built up area and the major residential areas within the town which were covered in the study.

1.9 Operational Definitions

Urbanised Area: This is a definition of the town including only the built-up area of the urban region. It includes only the Central Business District and its immediate suburbs.

Census Tract: Small area into which metropolitan area has been divided for census data reporting purposes. They are designed to be relatively uniform with respect to population characteristics, economic status and living conditions.

Household: A group of person(s) who normally reside together under a single or several roofs within a single compound, answerable to the same head and sharing a common budget.

Structure: A physically separate entity used wholly or partly for dwelling purposes e.g. an apartment building was considered as one structure.

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Low income group:The household with a total monthly income within the range

(0-2,000) Kenya shillings according to official Kenyan

classification.

Middle income group: Household with a total monthly income within

the range (2,001-8,000) Kenya shillings

according to official Kenyan classification.

High income group: Household with a total monthly income of

over 8,000 Kenya shillings according to

official Kenyan classification.

Residential Unit: An accommodation unit containing one or more

households. There can be several residential units in

a structure.

BACKGROUND OF THE STUDY AREA

2.1 Introduction

In order to understand and evaluate the effectiveness of residential mobility it becomes imperative to know how the entire environment in Kisii town has contributed significantly to this phenomenon. This chapter therefore highlights the topographic and human factors that favour or hinder residential mobility.

2.2 Geographical Background

After Kisumu, Kisii is the largest urban centre in Nyanza Province covering an area of 35km² and which, by 1989 had a population of 44,000 people and was projected to grow to 52,000 by the year 2000 [Kenya 1991].

Situated in the Kisii highlands at an altitude of some 1,600 metres above sea level, the town stands in a valley lying in a Northwest/Southeast direction. The valley opens out in the north-west. Enclosing the valley are steep sided hills rising to about 1,800 metres above sea level. To the south-east it is bordered by Nyanchwa hill, to the north by Nyambera hill, to the north-east by Manga ridge and to the east by Bobaracho hill. This physical setting is illustrated well in fig.2.3. This topographical setting, that is, the steep slopes of the hills has been the major constraint on the direction of growth of the urban centre. Even where the slope does not make building impossible it has added to the cost of the provision of infrastructural services and new housing. The valley floor to the north-west of the town is extremely narrow while the river which traverses through the urban centre flows in a steeply sided bed, providing a further barrier to the ease of

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infrastructure development. However, some flatter ground lies to the south and east of the town and the valley widens to provide more building land around the junction with the Kisumu-Migori road. It is noted that the existing layout and development of the urban centre has determined the shape and pattern of the town's expansion.

Kisii urban centre is the service, educational and administrative centre for a well populated and relatively prosperous agricultural area of Kisii, Nyamira and the recently curved out but yet be named districts. The Kisii District together with the new but yet to be named district cover an area of 2,196 km². The main highways from South Nyanza through Kisii to Kericho, and from Kericho to Narok, make Kisii the centre of commercial activity relative to its neighbours. Kisii Municipal Council is responsible for the infrastructure within the municipality. Housing is important not only for the shelter and facilities it provides but for the entire environment surrounding it including accessibility to employment as well as public and community facilities. Provision of infrastructural facilities and services are important because they promote decent housing.

As per the 1989-93 Development Plan period, less than 3 km of township roads were tarmacked and these were worn by heavy traffic and storm water runoff. 12 km of roads within the Central Business District were targeted for upgrading to bitumen standards.

During the 1989-93 Development Plan period the Council encouraged the development of private sector high density housing which were estimated to cost 10 million Kenya shillings. This seems to be the only solution for meeting the town's pressing housing demand with the limited land resources available to the council. At the same time the council was developing site

and service schemes worth 5 million Kenya shillings to meet the need for low
cost housing in the town.   169 sites were being developed at Nyanchwa by the
National Housing Corporation (NHC). Besides the council was also carrying out
a street lighting project aimed at increasing night security along major
streets within the municipality with a view to increasing business confidence
in the town and increase security in nearby residential areas.

In high density, low income areas of Mwembe Tayari, Nubia and Daraja
Mbili, people are living in sub-standard, overcrowded temporary structures and
have poor and overburdened sanitation facilities which have interfered with
residential confidence encouraging demand for better housing. Therefore, in
order to discourage potential residential mobility there is a need for these
residents to be assisted in obtaining material loans to upgrade their houses,
and improvement of the road system and provision of clean water and
introduction of low cost sanitation facilities.   The existing housing
facilities can be divided into the following categories, although the exact
number of people living in these housing areas is not known.   *

   (i) **Low Density:**Found in two areas: one overlooking the golf course beyond
        the district administration complex and the second in the Kisii
        Hotel/Hospital area.
  (ii) **Medium Density:** Found mainly in a ring around the
        commercial centre.
        Other concentrations are found along the major roads
        leading out of the town and on the slopes to the south-
        west of the centre. Some of these houses are government
        or council quarters.

(iii) **High Density**: Found adjacent to the prison, this housing includes Administrative Police lines and county council housing. The second area is the Nubian village and other low cost houses which extend down the north-west boundary. This housing is predominantly made of local materials. Road access to this part is very difficult and infrastructural services are minimal[see fig. 2.4.].

The urban centre's residential areas also can be divided into the following categories based on the income of its inhabitants and subsequently the rent charged.

(i) **Low income**: This residential area includes the Daraja Mbili and Mwembe estates. It is characterised by fairly old houses and housing is predominantly made of local materials. It also falls under the low density and medium density housing areas.

(ii) **Medium income**: This residential area comprise the Nyanchwa and Jogoo residential estates. Some of the houses are single or semi-detached and some of it falls under the low density and medium density housing areas.

(iii) **High income**: This residential area comprise Central Business District and a ring around the commercial centre. The latter comprises of Good morning flats, Langat flats, Angwenyi flats, and Mwalimu area apartments. I have collectively called this area "GLAM". It forms a ring around the Central Business District (CBD) and is characterised by storied buildings. See fig. 2.3 for location of these residential areas in Kisii urban centre.

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2.3 The Urban Housing Situation

2.3.1 General Overview

This section covers the government's past efforts in developing both housing and infrastructural services for the Kisii urban population.

In order to estimate the future urban housing trend and urbanisation in general an understanding of past urbanisation trends in Kisii urban centre is necessary. This is necessary in order to cope with the need and demand for the limited shelter available and to facilitate a better understanding of intra-urban residential mobility in the urban centre and also in formulating effective housing policies.

With a growth rate of 13.9 per cent per annum, Kisii urban centre has one of the fastest growing urban populations in Kenya, when comparing it with the national urban population growth of between 6% to 8% p.a. (Obudho, 1983). Accompanying these increases are pressures on the provision of one of the basic human needs; shelter.

The housing needs for Kisii urban centre are based on population growth, urbanisation, household formation trends and assumptions regarding the future rates of replacement and upgrading of the existing sub-standard stock. According to projected figures, Kisii urban centre had a population of 44,000 people in 1989 (Kenya, 1991) and this is expected to increase to 52,000 by the year 2000.   The number of households in the urban area in 1979 was 5,410, which rose to 9,257 in 1989.   Thus the housing need due to new households in Kisii urban centre between 1979 and 1989 almost doubled in ten year period [Kenya 1979, 1994].

From this data it can be derived that there will be an increasing need for new housing units as the rate of formation of new households increase with

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time. At this rate the task of providing adequate housing will become increasingly more difficult for the agencies charged with that responsibility. Also inevitably some households will have to relocate in order to accommodate new members while the new households will be moving out looking for their own housing. The formulation of strategies for managing the resultant household/population relocation is therefore of paramount importance.

In order to meet the housing needs of Kisii urban residents there is need for an overhaul of existing building by-laws and standards and current housing programmes to reflect their demands.

One of the results of the high rate of new households formation is high rents charged on residential buildings because of shortage of relevant housing. As a result of the high rents, a number of sub-standard units have mushroomed particularly in Daraja Mbili and Nubian village. The low-income people have clustered in the sub-standard housing units after displacement from better dwelling units with better facilities. This has consequently caused a lot of pressure on the low cost type of housing.

On aggregate, a 1983 study found that the low income group spends approximately 18 per cent of their total expenditure on rents, the middle income approximately 18 per cent while the high income group spends 24 per cent (Kenya 1986). This means that the urban rich in Kisii urban centre spend a larger proportion of their income on housing than poor income groups. In other words, as total expenditure increases, the fraction spent on housing rises within Kisii's urban residents. If the government has a desire of improving the housing conditions for the low income groups, this cannot be done effectively without knowing the stratum that constitutes the low income families and their ability to afford the type of housing provided.

With the necessary knowledge, appropriate physical housing design standards should be set. The government fell in this trap of not having the relevant information before embarking on the Dandora site-and-service project which was intended for the poor in the society. Because the target group could not afford the design standard set, they gave out their allocation to higher income groups. This should not be allowed to happen in Kisii urban centre. This study has that purpose in mind.

Table 2.1 shows the population figures for Kisii town since 1948. There was a total of 2,426 persons in 1948 compared with a projected 52,000 by the year 2000. This shows a population increase of about 50,000 in slightly over 50 years.

Table 2.1: Population Figures and Projections of Kisii Town

YEAR	POPULATION
1948	2,426
1962	4,542
1969	6,080
1975*	8,000
1979	29,661
1983*	38,000
1989	44,000
2000*	52,000

* Projected/Estimated
Source: Kenya 1971, 1979, 1994.

The projected figures have been based on a 6.5% and 13% annual growth rate, which are based on a study of the possible distribution of urban growth in Kenya (Kenya 1971, 1983).

2.3.2 Characteristics of Present Housing Stock

The Kenya government has a declared housing policy of providing decent and affordable housing to urban residents with a bias towards low and medium income groups. Housing cannot be defined as "decent" if basic infrastructure services are lacking and amenities are not within easy reach.

The 1983 urban housing survey revealed that there was a total of 2,024 structures in Kisii urban centre; of this total 1,510 are classified as permanent while 514 are classified as semi-permanent/temporary. The problem of prevalence of semi-permanent/temporary structures require quick corrective measures in favour of more permanent, low cost housing to cater for the poor section of the urban population who cannot afford expensive housing.

The distribution of dwellings by type of structure comprise 3,464 houses, 961 Swahilis, 200 Shanties and 728 in the category of "other". For the purpose of this study "other" and "shanties" are treated to mean almost the same thing. In general, houses are the dominant type of dwelling units followed by shanties. The distribution of these types of housing units within the urban centre was uneven. Out of 5,353 dwelling units in Kisii urban centre 2,249 (42 per cent) were six or more years old, 1,881 (35.1 per cent) were twenty years and above. Since the lifespan for most permanent buildings is about forty to sixty years; the implicit message is that unless more permanent dwelling units are put up, the town may find itself in the next few years pre-occupied with the replacement of the aging housing stock, depriving the provision of new housing the capital which could be channelled to it. A proper housing policy therefore becomes a must if this unfortunate situation is to be avoided. A concerted effort in building new dwelling units is, no doubt, needed to increase the housing stock, which must be demand-

reflective, to ensure housing satisfaction.

Renters seem to dominate Kisii urban centre's housing market accounting for 76.25 per cent of units while owner occupier accounts for only 23.75 per cent. One important interpretation from these figures is that most of the Kisii urban centre dwellers do not own the units in which they stay. This situation encourages frequent residential changes since renters are more likely to move than owner occupiers. It is therefore necessary for the government to encourage strategies which will enable deserving urban dwellers to own homes or be at home in rented housing. The site and service, settlement upgrading, tenant purchase schemes, etc. should especially be encouraged only when they satisfy the people they target. However, with the ever increasing housing demand, caused primarily by rural-urban migration and new household formation, any approach to housing development must be comprehensive.

Supply of water and availability of toilet facilities are vital services in any urban centre. The proximity to clean source of water for dwelling units is of paramount importance. It dictates the demand for housing in other locations. Of the estimated 5,353 units in the Kisii urban centre 3,624 had water inside or within 100 metres while 1,729 had source of water beyond 100 metres. Provision of water and good health facilities are basic requirements. The proximity to water source for housing units, play an important role in discouraging residential mobility due to inconvenience of water source being far from housing unit. The general conclusion is that most housing units are well served with water. What is now needed is to increase water accessibility to households by giving them incentives such as water sources near housing units in order to ensure residential satisfaction.

The average distance to nearest medical facility in the urban centre is 2.82 km for a hospital and 1.57 km for a clinic. This shows a marked relationship between the distance to medical facilities and residential mobility rate. The nearness of households to medical facilities lowers the need for residential mobility to look for the same [Kenya 1986].

Despite the housing situation in Kisii urban centre influencing the extent of residential movement, Kenya's housing policy has been a potentially useful instrument for influencing the urban population distribution, more important than the allocation of other types of infrastructure investment. For example, it has had the effect of producing distinctive patterns of residential spatial segregation, differentiated by location, quality, size, type, rent and status which has provided powerful influences over the social distribution of the work force. The state housing policy, has been concerned with a wide range of interventions which in combination with ongoing market changes, have revolutionalised the system of housing tenure and access. These changes have had spatial effects and consequences. The continued spread of owner-occupied sub-urban housing is a direct result of state fiscal policies which stimulate demand for this sector of housing.

Fig 2.1 Location of Study Area in Kenya

Fig 2.2

LOCATION OF KISII TOWN (STUDY AREA) IN KISII DISTRICT
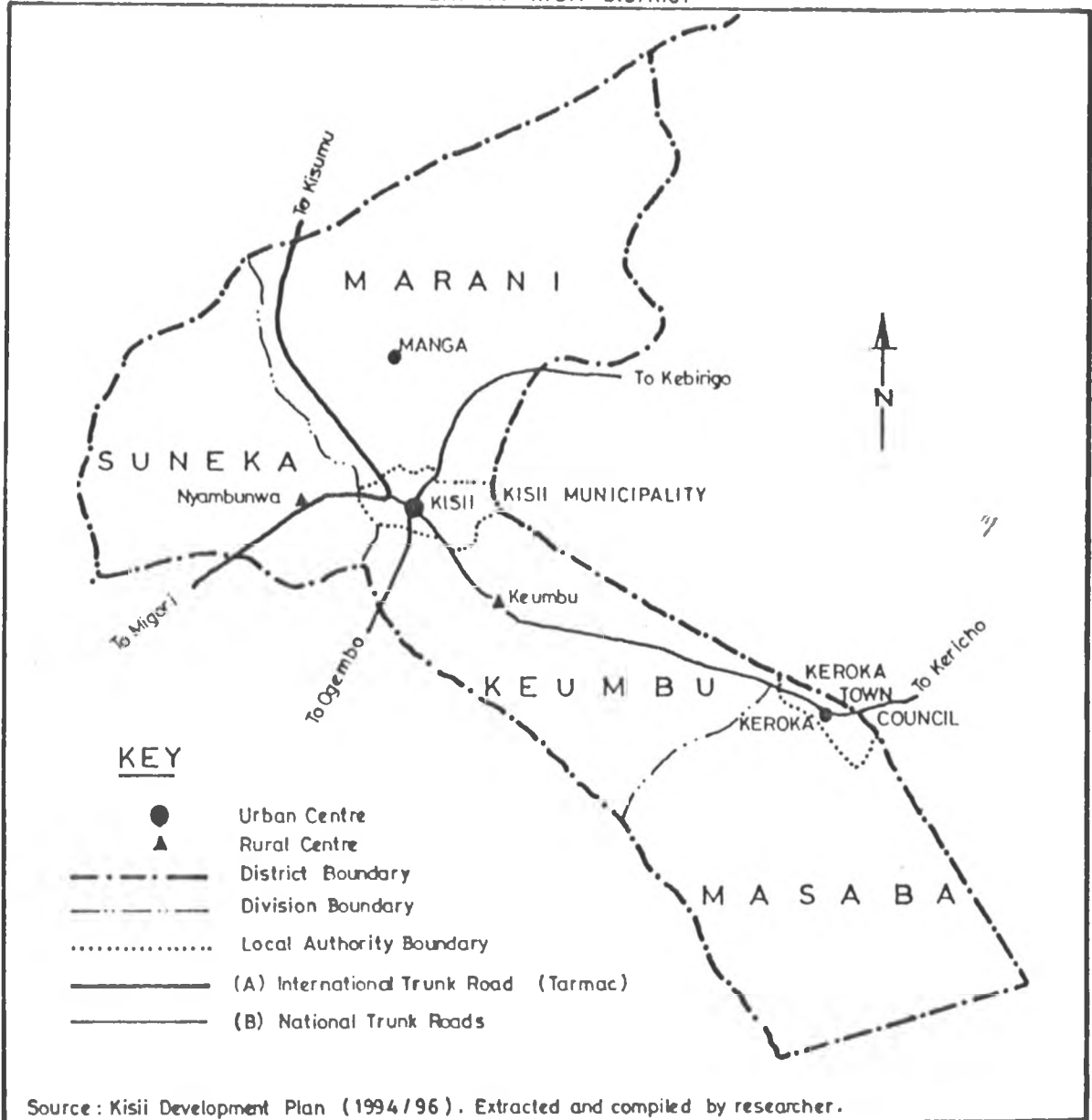
Source: Kisii Development Plan (1994/96). Extracted and compiled by researcher.

Fig 2.3 Physical Relief of Kisii Urban Centre
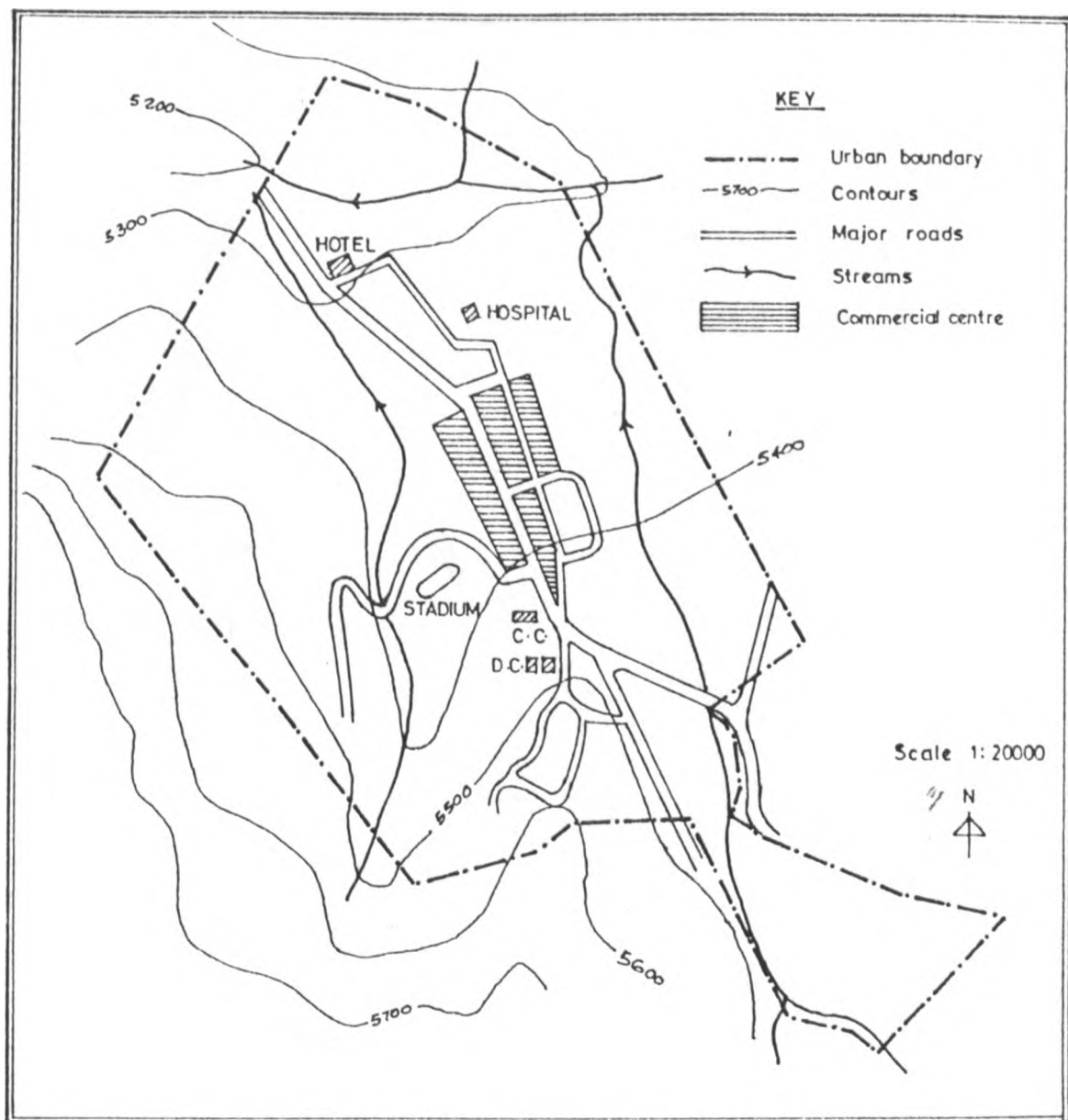
Extracted and Compiled by Researcher

Fig 2.4 Residential Estates in Kisii Urban Centre

KEY

Low density

Medium density

High density

RESIDENTIAL AREAS
1 C B D
2 'GLAM'
3 DARAJA MBILI
4 NYANCHWA
5 MWEMBE TAYARI
6 JOGOO
— urban boundary

scale: 1: 20000

N

HOTEL
HOSPITAL
STADIUM
C·C·
D·C·
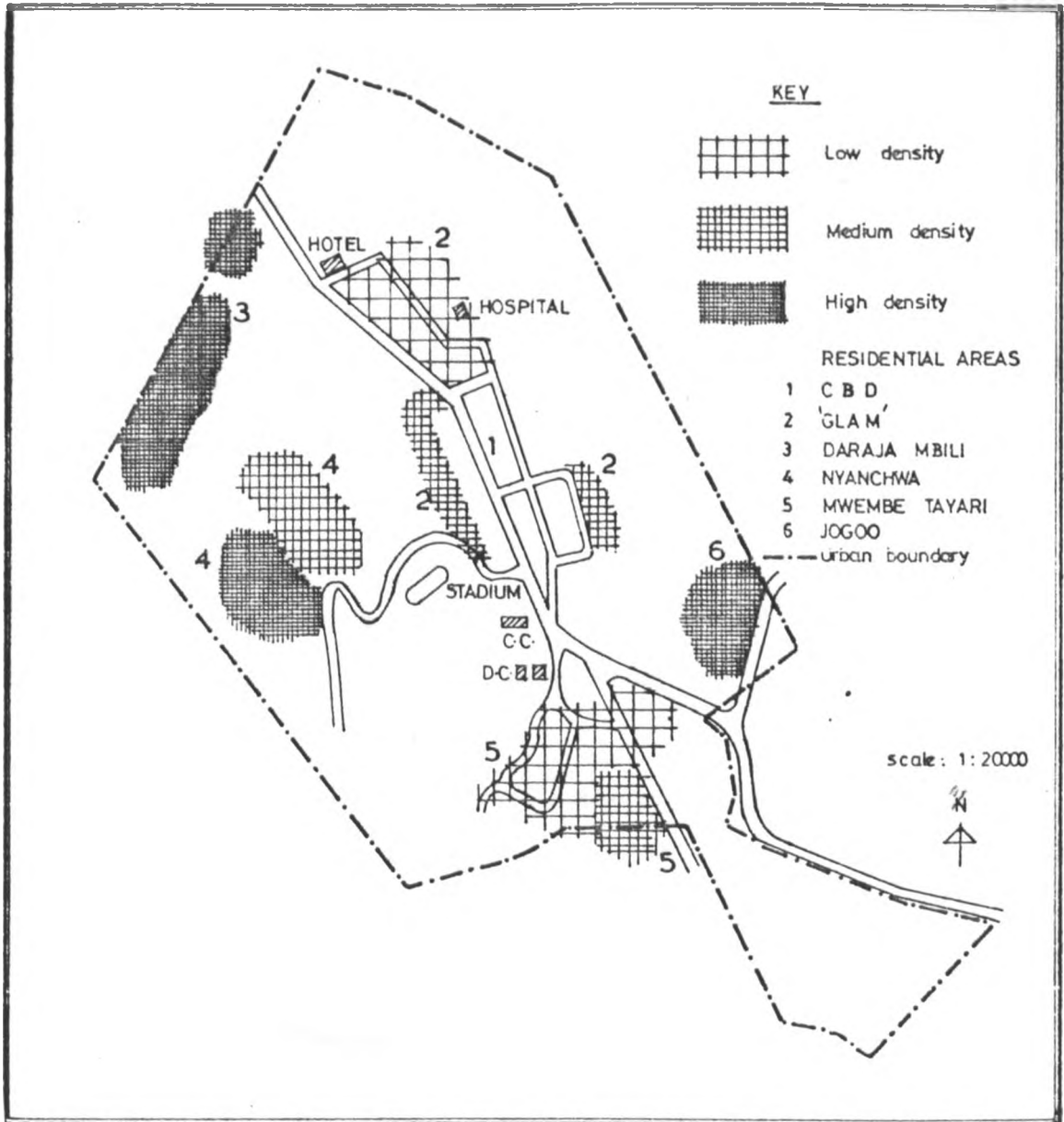
Extracted and Compiled by Reseacher

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a description of study design, implementation and data analysis. Given the uniqueness of housing surveys, various factors were considered before arriving at a carefully planned design.

3.2 Sources and Methods of Collecting Data

Various sources and methods were utilized in acquiring the data as enumerated below.

3.2.1 Information Required

The study required mostly primary information collected from field interviews and observations. The primary information needed can be grouped as follows:

(a) Location of mover's residence, room numbers and/or sizes, dwelling types and house tenureship;

(b) Marital status, income levels and household sizes;

(c) Main reasons for changing from previous residence;

(d) Main reasons for choosing the present residence; and

(e) The base and census maps showing the location of residential areas.

This information was expected to provide answers to the research objectives. It involved field surveys of two kinds:

(a) Interview

All households heads in the selected sample were interviewed. A questionnaire [Appendix iii] was administered with indepth interviews to obtain more complex information about residential and employment histories and place of work of the head of the household since the household first moved to Kisii urban centre. Therefore retrospective data was used i.e. data on former work places, residence of household and household characteristics.

The questionnaires were administered by the researcher and/or assistants where the household heads were led through the questionnaire. This became necessary due to the semi-literacy of some respondents and when it occurred to the researcher that some of the terminologies in the questionnaire were not clear to the respondent and which were very crucial to the study. This helped the interviewer in probing the respondents to give correct answers and also gave the respondent the chance to ask questions about points that were not clear to him.

[b] Observation

This involved observation of some of the salient factors that motivated residential change. These factors were not necessarily pointed out by the respondent.

[c] Secondary Sources

This involved the compilation of data, reports from published and unpublished literature obtained from the University of Nairobi library, C.B.S., Ministry of Works and Housing, Urban housing Survey Reports and Ministry of Lands and Settlement.

3.3 Sample Design and Technique

The sample design adopted for this study was a multistage sampling scheme dictated by the stated study objectives, expected output, reliability and availability of resources.   It was a two stage sample with dwelling structure as the first stage sampling units and households as the second stage sampling units.

3.3.1 Stratification

Stratification was done after defining without ambiguity the boundary of Kisii urban centre and residential areas.   The definition of the urban area boundary was somehow tricky because boundary changes brought rural settings into the administration of Kisii municipal council.   The inclusion of the rural population within the urban boundary could not help answer the objectives of the study. In order to avoid this complication, the built-up areas of the urban centre were considered for the sample. The stratification was theoretically expected to reduce sampling error and hence inçrease sample reliability.

This process involved the grouping the town's six residential areas,namely Central Business District (CBD), "GLAM", Nyanchwa, Jogoo, Mwembe and Daraja Mbili into three homogeneous strata;low-income (Mwembe and Daraja Mbili), Middle-income (Jogoo and Nyanchwa) and upper-income (CBD and 'GLAM'. The grouping was based on the rents charged.

The main favourable characteristics of the residential areas in grouping them together was their location on the ground which was well determined and unambiguously defined.   After this identification a pilot survey was done on all the residential areas to determine the median rents paid per month. On

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the strength of the different rents paid, the residential areas were divided into high, middle and low income residential areas. The high income areas were paying rent amounts of Kshs. 1800 and above, middle income Kshs. 501 – 1799 and low income Kshs. 500 and below. The residential areas were grouped with the objective of achieving homogeneity within each residential group.

Three strata were created, namely: Low income areas comprising Daraja Mbili and Mwembe, middle comprising Nyanchwa and Jogoo, and high income comprising CBD and 'Glam' residential areas. This was carefully done so that the degree of homogeneity in regard to the residents was achieved within each sub-group. The index for categorization was the income of the residents of the estate and subsequent rent charged in such areas. This became necessary because the sub-population so created were also designated as domains of study.

3.3.2 Sample Selection

In order to arrive at a statistically significant sample size required to attain a given level of accuracy in the case of simple random samples. I invoked the central limit theorem to come up with equal sample proportion for each residential strata. The theorem states that the sample mean are approximately normally distributed about the population mean when $n > 30$, whatever the form of the population distribution. Its validity does not depend in the least on the form of the population we are sampling from. Provided our sample size is large enough. The use of the same sampling fraction across the three strata proportional to the number of residential estates was used. Each stratum was assigned a sample fraction of a third of a total sample size of 180 households to be covered.

To achieve an efficient sample selection, one has to have a good sampling frame which is simply defined as a list of sampling units with enough information on their spatial or geographical distribution of housing structures. In the prevailing circumstances, an indirect method of creating a frame through use of the 1989 population census figures proved successful. The issues of target population and sampling units were considered before the sample selection.

From the study objectives two variables stood out as potential units; these were:-

(i) Residential structure

(ii) Households

Residential structures were identified as the most ideal sampling unit because they were the least ambiguous as far as identification was concerned and they provided a reliable base for identification of households.

(a) Primary Selection Units (PSUs)

The primary selection units (PSUs) for the study were the residential structures. The structures were sub-sampled from the residential areas. Care was also taken while creating strata by grouping homogeneous structures which reflected the type of class they fell under. For example the high income area consisted of mostly high rise, self contained residential units. The middle income consisted mostly of single structures and/or semi detached structures which were not necessarily self contained residential units. The low income consisted of mostly single structures and/or semi detached residential structures, were not self-contained, were built of semi-permanent materials and were poorly planned with communal facilities like water taps.

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(b) Secondary Selection Units [SSUs]

The households were the secondary selection units. At the design stage,
no idea existed on the number of households expected from a given number of
structures especially when multi family structures were a common feature. To
determine the number of households in a structure, it therefore became
necessary to list all households in the structure. The lists however
indicated varying numbers of households and hence it became necessary to sub-
sample. The household to be interviewed was determined by the same
randomisation procedure as in simple random-sampling. Stratification enabled
the selection units for interview with known probabilities.

To uphold a near equality between structures and households a sub-
sampling scheme was developed whereby households from multi-family structures
had lower chances of selection than single-family structures. Therefore the
residential structures were numbered and were selected for interview using
random number tables.

3.4 Design of Questionnaire

Data collection for the study was carried on specifically designed
questionnaires [Appendix iii]. The layout and design of the questionnaires
was done such that they would be easily filled by the respondents on their own
if need be. These questionnaires sought to collect information on housing
units and tenant characteristics and mobility rates.

In anticipation of problems in data processing the questionnaire was
mostly pre-coded. In order to test question wording, questionnaires were pre-
tested in the urban centre before the actual interview survey. Questions were
pretested during the pilot survey. Those which were found to be misunderstood

by respondents and those that did not flow smoothly were dropped or modified before drawing up the final questionnaires.

3.5 Data Processing

Data processing was for the purpose of producing results in tabular form. This involved receiving the filled questionnaires, editing, coding, data entry, validation and writing computer programme.

After field edits, the completed questionnaires were forwarded to the researcher who recorded all the questionnaires and checked their completeness. The questionnaires were then edited further and coded before the data was typed into diskettes for analysis.

3.6 Methods of Data Analysis

The study findings were mainly descriptive in nature while the analytical reports shall give information on relationships among a number of housing variables and mobility and household variables and mobility. The analysis was done in both descriptive and quantitative form depending on the nature of the data to be presented.

3.6.1 Qualitative Analysis

This involved proportions and percentages which permitted probability statements to be made from the obtained frequencies. The analysis is in tabular form and summarises the study findings in percentages in data analysis in chapters four and five. Qualitative methods were employed where data obtained was inadequate or unsuitable for a statistical test to be administered. The data is presented in the forms of statistical tables.

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3.6.2 Quantitative Analysis

The variables under study determined the kind of statistical test used in analyzing and presenting the collected data. Thus the following methods were used:

(a) Chi-Square Test

This is an extremely valuable test, since the variables need not to be quantified beyond their expression in a number of categories; i.e. it can be used with ordinal and even nominal data. The method is to test the null hypothesis that the observed results do not differ significantly from those which are to be expected by chance. This method was used to test the first and second hypotheses. The first hypothesis states that the decision to change a residence is not influenced by the household characteristics. The second hypothesis states that the decision to change a residence is not influenced by the characteristics of the housing occupied.

Calculation of x^2

The expected values are calculated for each corresponding observed frequency as the product of the total of the column and the total of the row, divided by the grand total of items. The value of E should not be less than six and grouping of classes is necessary to ensure this.

Chi square is obtained from

$$x^2 = \sum_{i=1} \frac{(O_i - E_i)^2}{E_i}$$

Where O is the observed frequency and E is the expected or theoretical frequency.

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E = is the expected or theoretical frequency which would occur if the postulated null hypothesis really applied to the full. When findings for each category are summed up, they give the total sum of squares of the difference between O and E.

The X^2 values obtained are referred to appropriate tables and read off against the degree of freedom, done by subtracting one from number of occurrences. The values obtained reflect sum of the squares of deviation of observed conditions from expected conditions.

Testing of first Hypothesis

The first hypothesis to be tested and analyzed is that the decision to change a residence is not influenced by the household characteristics i.e. the household's demand for housing as influenced by household's changing characteristics. This hypothesis was tested with a chi-square test statistic to find out whether, or not there are statistically significant differences between the observed and expected reasons for change of residence.

Table 3.1: **Computation of the X^2 value**

Household Demand Factors	Observed Freq.of Moves	Expected Freq.of Moves	O - E	$(O - E)^2$	$\dfrac{(O - E)^2}{E}$
Household size	78	58.25	19.75	390.06	6.7
Family stage	65	58.25	6.75	45.56	0.8
Income	98	58.25	39.75	1580.06	27.1
Place of employment	43	58.25	-15.25	232.56	4.0
Good place for children	54	58.25	-4.25	18.06	0.3
Medical facility	39 ·	58.25	-19.25	370.56	6.4
Education facility	59	58.25	0.75	0.56	0.01
Recreation facility	30	58.25	-28.25	798.06	13.7
	466				59.01

Source: Field Survey 1992

$$X^2 = \frac{390.06}{58.25} + \frac{45.56}{58.25} + \frac{1580.06}{58.25} + \frac{232.56}{58.25} + \frac{18.06}{58.25} + \frac{370.56}{58.25} + \frac{0.56}{58.25} + \frac{789.06}{58.25} = 59$$

The tabulated X^2 = 14.067 with 7 degrees of freedom at 0.5 per cent probability level. The calculated X^2 = 59

Since the calculated value of X^2 is greater than the tabulated critical value, the null hypothesis that the decision to change residence is not influenced by the household characteristics is rejected at the 0.5 significance level.

Therefore, the finding implies that residential household characteristics or in effect household housing demand factors have influenced residential mobility in Kisii urban centre. Now we turn our attention to the second hypothesis.

Testing of the second Hypothesis

The second hypothesis which was tested and analyzed states that the decision to change a residence is not influenced by the characteristics of the housing occupied i.e. in effect the housing supply factors. This hypothesis was tested with a chi-square statistic to find out whether there are statistically significant differences between the observed and expected housing factors responsible for change of residence or not.

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Table 3.2: Computation of the X^2 value

Housing Factors	Observed Freq. of Moves	Expected Freq. of Moves	O – E	$(O - E)^2$	$\dfrac{(O - E)^2}{E}$
Rent	95	48.6	46.4	2153	44.3
Size of dwelling	63	48.6	14.4	207.4	4.3
Dwelling structures	42	48.6	-6.6	43.6	0.9
Tenure	2	48.6	-46.6	2171.6	44.7
Water	37	48.6	-11.6	134.6	2.8
Electricity	35	48.6	-13.6	185.	3.8
Security	68	48.6	19.4	376.4	7.7
Site of dwelling	60	48.6	11.4	130.	2.7
House maintenance	35	48.6	13.6	185.	3.8
Total					115.0

Source: Researcher 1992

$$X^2 = \frac{2153}{48.6} + \frac{207.4}{48.6} + \frac{43.6}{48.6} + \frac{2171.6}{48.6} + \frac{134.6}{48.6} + \frac{185}{48.6} + \frac{376.4}{48.6} + \frac{130}{48.6} + \frac{185}{48.6} = 115$$

The tabulated X^2 = 15.509 the degree of freedom is 9-1 = 8 at 0.05 significance level. The calculated X^2 = 115. Since the calculated value of X^2 is greater than the tabulated critical value, the null hypothesis, that the decision to change residence is not influenced by the household characteristics of the dwelling occupied is rejected. This implies that housing characteristics of the occupied residence influence the residential mobility in Kisii urban centre.

(b) Analysis of Variance

In this section, the third hypothesis, that the spatial intra-urban residential mobility rates are not uniform in the urban centre is undertaken. It implies that there are variations in spatial residential mobility rates between the residential areas in Kisii urban centre.

In order to test the significance of this hypothesis, Analysis of variance provides a convenient and powerful statistical tool. The method is to compare the amount of variance between the samples with that of within the samples. The variance of a sample is the square of the standard deviation, but a best estimate of the population variance is obtained by dividing the sum of the squares of the deviations (n-1), which is the number of degrees of freedom. The practical procedure is to calculate the sum of squares for the total number of cases and to obtain the within sample sum of squares by subtraction of the between sample sum of squares from the total sum of squares. The respective variances are then determined and if the between sample variance significantly exceeds the within sample variance, one may be sure that the samples do not belong to a common population. The calculations worked below.

The procedure for calculating the mobility rates involves; calculating the number of non-movers and movers in each income stratum, namely; low income residential areas, middle income residential areas and high income residential areas; then dividing the number of movers in each residential area in each income area stratum by the total number of respondents in the particular area and the results presented in percentages to enable the calculation for the one-way analysis of variance.

The following tables 3.3, 3.4 and 3.5 presents the number of movers and non-movers per residential area and income strata.

Table 3.3: **Movers and Non-movers per residential area**

Residential Area	Total Respondents		Non-movers		Movers	
	No	%	No	%	No	%
D/Mbili	47		10	21.3	37	78.7
Nyanchwa	32		6	18.8	26	81.2
Mwembe	51		15	29.4	36	70.6
Jogoo	36		9	25	27	75.0
"GLAM"	27		8	29.6	19	70.4
CBD	32		13	40.6	19	59.4

Source: Field Survey 1992

Table 3.4: **Movers and Non-movers per residential strata**

Housing income Area	Total Respondents		Non-movers		Movers	
Low income	98		25	25.5	73.0	74.5
Middle income	68		15	22.0	53.0	78.0
High income	59		21.0	35.6	38.0	64.4

Source: Field Survey 1992

There were two residential areas for each of the three income area strata. The low income strata comprised of Daraja Mbili and Mwembe; the middle income comprised of Nyanchwa and Jogoo and the high income area strata comprised of "GLAM" and the CBD. Table 3.4 presents the results of the total residential movers by strata.

The number of movers per residential area in each stratum is presented both in numbers and percentages. This helped in summarising the data in table 3.5 for analysis. This will enable the comparison in terms of the degree of mobility rates for each residential area.

Data for One-Way Analysis of Variance

Table 3.5 (a): **Mobility Rates in Kisii Urban Centre**

Residential Areas	Mobility Rates in Percentages		
	Low income area	Middle income area	High income area
1	78.7	81.2	70.4
2	70.6	75.	59.4
Sums	149.3	156.2	129.8
Mean (X)	74.65	78.1	64.9
No. of class	2.	2.	2.

Source: Field Survey 1992

K = (Number of samples) = 3

N = (Total number of individuals) = 2 + 2 + 2 = 6

$$\bar{X}_4 \text{ (Grand Mean)} = \frac{149.3 + 156.2 + 129.8}{6} = 72.6$$

The first step is to take an estimated average in order to simplify the calculations. The value of 74.6 is selected and all the numbers in table 3.5 (a) are subtracted from 74.6 as shown in table 3.5 (b). The values of table 3.5 (b) are squared and retabulated (table 3.5 (c)).

Table 3.5 (b) **Retabulation**

Low income	Middle income	High income
4	6.5	-4.3
-4.1	0.3	-15.3
-0.1	6.8	-19.6

Source: Field Survey 1992

Table 3.5 (c) **Squares**

Low income	Middle income	High income
16.00 16.81	42.25 0.09	18.49 234.09
32.81	42.34	252.58

With the results of the tables the requisite calculations may be
performed. It is first necessary to obtain the total sum of the squares,
making an adjustment for the "estimated average" of 74.6. This adjustment or
correction factor is the square of the sum of the sample totals of table 5.5
(b) divided by the total number of items.

$$\text{Correction factor} = \frac{(0.1 + 6.8 + -19.6)^2}{6} = \frac{-12.9^2}{6} = \frac{166.41}{6} = 27.74$$

The total sum of the squares of table 5.5 (c) is given by the sum of the
sample totals of the table less the correction factor.

The total sum of the squares = 32.81 + 42.3 + 252.58 - 27.74 = 300

The "between sample" sum of the squares is calculated from the squares of each
total in 5.5 (b) divided by the number of items in each sample, which is two
and adjusted for the estimated average.

Between sample sum of squares = ½(0.1² + 6.8² + 19.6²)-27.74 =187.47

The "within sample" sum of squares is the difference between total sum of the
squares and the "between sample" sum of the squares.

within sample sum of squares = 300 -187.47 = 112.53

It remains to calculate the number of degrees of freedom associated with the
variances between and within the samples.

d.f for total sum of squares = n-1 = 5

d.f for between sum of squares = n-1 = 2

d.f for within sum of squares = 5-2 = 3

Table 3.5 (d) **Analysis of Variance for Mobility Rates by Residential Areas**

Source of Variation	Sum of Squares	Degrees of Freedom	Variance Estimate
Between sample Within sample	187.47 112.53	2 3	93.74 37.51

Source: Field Survey 1992

$$F = \frac{\text{Greater Variance estimate}}{\text{Lesser Variance estimate}} = \frac{93.74}{37.51} = 2.5$$

The ratio of the greater estimate of the variance to the lesser gives Snedecor's F ratio.

Reference is made to F-distribution table [Appendix ii] which shows that for two degrees of freedom on the greater variance estimate and for three on the lesser estimate the tabulated $F = 9.55$ at the 0.01 level of significance. The calculated value of F is less than this. Therefore, the null hypothesis that there is no significant spatial variation in mobility rates between the residential areas is not rejected. This implies that mobility rates between the residential areas in Kisii urban centre do not vary significantly at 0.01 level.

CHAPTER FOUR

FACTORS AFFECTING RESIDENTIAL MOBILITY

4.1 Introduction

The decision to move can be examined from several points of view.   The social psychologist sees the household as acting under various kinds of stress; the economist views the move as maximizing satisfaction of the household requirements and the human ecologist treats it as an element in a larger pattern of movement or as part of the process of growth and succession. From any point of view, however, the decision to move is complex.   It is concerned on the one hand, with the needs and values of the household (housing demand aspect), which changes over time, and on the other, with the characteristics of the   residential environment, which   encompass home, neighbourhood, and alternative locations (housing supply aspect).   With this in mind the intensity and factors affecting intra-urban movers is analyzed in this chapter and in particular the housing demand and supply.

Before discussing the various factors that have influenced residential mobility profile, figure 4.1 shows and summarises the classification of various household moves according to factors responsible for them.

Figure 4.1: **A classification of reasons for household relocation.**
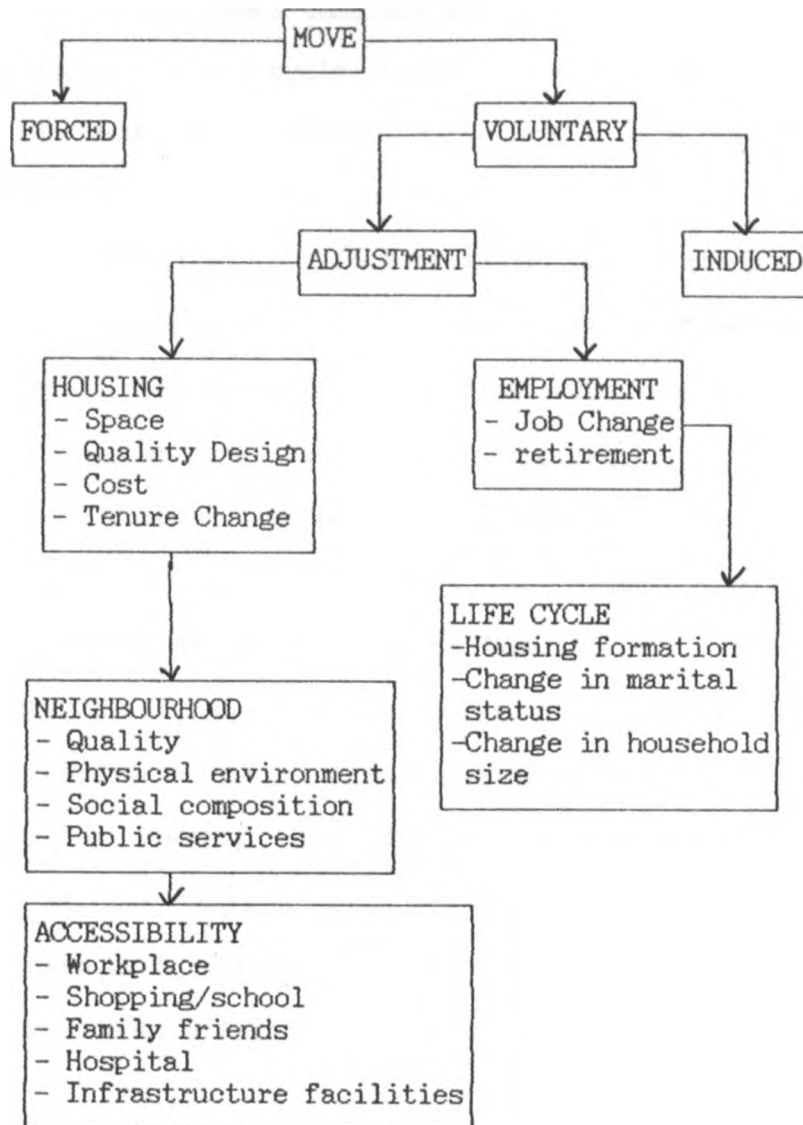
Source: Clark ,Huff,J.O. and Burt,J.E. (1969) fig.2 p.50

The major function of mobility is the process by which families adjust their housing to the housing needs that are generated by the shifts in family composition that accompany life cycle changes, income change etc. Often in combination with the housing adjustment, a household is compelled to change its neighbourhood,for instance to new low density housing.

This residential mobility is a form of individual or group adaptation to perceived changes in the residential environment, a recognition of marginality with respect to a stationary position, and a flow reflecting an appraisal by a potential mover of his present residence as opposed to a number of other potential residences. However, the decision to move is non-programmed.

4.2 Housing Demand Aspect of the Decision to Move

This section looks at the important question of housing demand and how it has generated residential movement in Kisii urban centre. Housing demand is defined simply as housing need generated by changes in household characteristics. At the expense of over simplification details on the following factors have been examined for proper understanding of the effect of housing demand on residential mobility in the urban centre.

4.2.1 Family Status

Family status is a demographic characteristic of the population, and is a component of socio-economic status. This term refers to the age and sex differences of individuals and families and is related to the life cycle. The life cycle refer to the different stages that individuals and families go through [refer to table 4.2].

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The typical family life cycle begins with a brief stage of putting up alone or with friends while searching for employment in town. The first year or two of marriage with the birth of a child, the household's real and perceived needs change considerably (see table 4.2). The crucial factor is not so much space *per se* but the relationship between the size and composition of the household and its perceived space requirements. Because both of these are closely related to the family life-cycle, there is a reason to believe that life-cycle changes which accounted for 36% of residential change in the sampled population provide the foundation for much of the residential relocation within the urban centre. Moreover, the attractions of the family life-cycle as an explanatory variable is considerably reinforced by the relationship with several other frequently cited reasons for moving such as change in family size [46%] and the desire for a change to a better environmental setting for child upbringing which 24% of the respondents cited as a major reason for motivating change of residence (table 4.1).

Of the most frequently cited reasons for moving, it is noted that one of the most important was related to the household's need for dwelling space. In fact more than 43% of the movers cited complaints about too little space due to increased family size as contributing to their desire to move.

Of all households interviewed 36% cited a change in life-cycle as one of the most powerful inducements in changing their residence. This finding is similar to Rossi's (1955) finding of `families adjust(ing) their housing need that is generated by the shifts in the family composition that accompany life cycle changes'.It follows from these observations that a marked residential segregation will emerge as households at similar stages in the life cycle respond in similar ways to their changing circumstances.

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The findings fits conveniently with the results of the many descriptive studies (including factorial ecology studies) which have demonstrated a zonal pattern of family status. The generally accepted sequence of these zones runs from a youthful inner-city zone through successive zones of older and middle-age on the periphery.

Table 4.1: **Housing demand factors responsible for residential mobility in Kisii urban centre.**

DEMAND FACTORS	RESIDENTIAL STRATA							
	LOW INCOME		MIDDLE INCOME		HIGH INCOME		TOTAL OF MOVERS	
	No.	%	No.	%	No.	%	No.	%
Income	32	53	38	63	28	47	98	54
Stage in life	24	40	26	43	15	25	65	36
Family size	21	35	35	58	22	37	78	43
Place of employment	13	22	16	27	25	42	54	30
Rent	2	53	40	67	23	38	95	53
Good environment for child upbringing	21	35	15	25	7	12	43	24

Source: Field Survey 1992

In absolute terms, residential mobility increased with the size of the household. In the aggregate, residential moves were predictable because regular and consistent behaviour was shown by families with similar housing needs. Otherwise, family life-cycle changes formed the basis of movement according to this study [apart from income change [54%] and rent change [43%] } and the need for variable quantities of space at different stages was found to be useful in explaining residential movement in Kisii urban centre.

Overall, family household needs were found to change dramatically in the early movement stages 1-3, then declining gradually through stage 5 (this

situation can be compared to the classifications on table 4.2). Families tended to reach a low ebb in mobility rates at middle age. This could be attributed to grown children leaving the household, so that, space need do not pose as great an issue.

Table 4.2 **A Life-cycle Classification of Households**

STAGE IN LIFE CYCLE	DEFINITION
1. Young male head (no children)	Household headed by single adult no members under 18 years old.
2. Young couple no children	Household headed by recently married couple no members under 18 years old.
3. Young couple young children	Household headed by married couple at least one other member under 6 years old.
4. Young couple older children	Household headed by married couple at least one other member Between 6 and 18 years old.
5. Older couple older children	Household headed by married couple at least one other member under 18 years old.
6. Older couple no children	Household headed by married couple no then member under 18 years old.
7. Older single head no children	Household headed by single person no members under 18 years old.
8. Single head units children	Household headed by single parent at least one other member under 18 years old.
9. All other	Residual category household headed by single persons live with married children and grandchildren

Source: Kevin McCarthy, 1976.

Viable movement probabilities, mainly associated with marriage and child-rearing, involved a physical need for more space, psychological factors were also involved. The desire to stay with the family's social class, other

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members of which were also moving, formed the basis for added pressure for moving.

Generally housing needs generated by life-cycle changes coupled with changes in family size caused considerable residential moves with 36% and 43% of the respondents respectively citing them as the main reasons. This has produced high rates of residential movements in all residential estates of the urban centre (compare with classification in table 4.2). But the reasons for changing residence within the urban centre vary with characteristics of the mover. Generally it was found from the study that life-cycle as a factor is one of the important factors leading people to change their residence.

Although some of the life-cycle adjustments have occurred through inter-town migrations or migration to the rural areas, many people had far more complex life cycles, with several moves at certain stages, such as childhood, maturity and marriage. It was also noted during the study that many dependants accompany the head of the household when moving changing residence; thus the family characteristics, together with those of the individual, were the critical factor.

Life-cycle changes influence on residential mobility was almost the same in low and middle income areas and are higher than in high income, which was 40%, 43% and 15% respectively. This is so, because the early stages of the life-cycle especially
stages 1-3 found that most of the couples were young and their incomes were not so high and the variety of life-styles they were already experiencing gave them more flexibility.

Different types of households [single people or families] had different residential needs,and thus located in specific parts of the urban centre. The

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town reflects these needs in the form of districts demographically distinct from one another. For example a young couple with no children required very little space in their place of residence. A small apartment was sufficient, when the couple had children they required more space and, therefore, had to change their residence and moved into a larger apartment or house. When the couple grew older they no longer required the large amount of space that was needed when their children were at home. Again they desired a new place of residence. Often, as the couple grew older, they progressively advanced up the economic and social ladder so that their needs became oriented towards status and leisure, thus tended to locate in a more prestigious part of the urban centre. What was attractive to one household was not suitable to another.

The area close to the Central business district was very attractive to small families and single individuals because it offers luxurious living in the High rise apartments of the central town. It is close to downtown shopping facilities, business establishments, places of entertainment, and cultural facilities. This area is also in close proximity to medical facilities and rapid-transit routes. This area may be referred to as an area of High family status. This term also refers to the fact that families tended to be small.

These characteristics differ from families who were found in the zones away from the CBD. There was a predominance of single-family dwellings, although lacking amenities available in the CBD. The families tended to be larger, houses were smaller and lacked open spaces, playgrounds, schools and medical facilities among many other amenities. As one travels from the Cental Business District (CBD), the lower the family status. Although this pattern is changing somewhat with the development of high income buildings in suburban areas near rapid-transit routes like the Kisii-Migori road. The general

pattern for the urban centre is High family status near the CBD and decreasing family status towards the outer areas and again increasing in the outer areas in proximity to the rapid-transit routes.

4.2.2 Economic and Social Status

Economic or social status refers to the differences in education, income, and occupation between various heads of the household. These differences created a range of status groups in the urban centre commonly referred to as upper-, middle-, and lower-income households, with different housing demand. In this respect, a household head who changed his social status was also expected to change the location of his residence, since the urban area is strongly differentiated with respect to class.

Income per family was probably the most important determinant of housing demand in Kisii urban centre and the subsequent residential change. In the study survey 54% of all the respondents cited as a reason for changing their residence. This change in their disposable income either increased or decreased. However, the most significant observation was that change in income in some cases took place without altering the relative social class, although they changed their expenditure on housing. When residential mobility is related to income status of the movers, they were highest for the middle-income areas of Nyanchwa and Jogoo, where 63% cited it as one of the a major reasons followed by the low-income areas of Daraja Mbili and Mwembe [53.3%] and 46.6% for the high income areas of CBD and "GLAM".

There was a close association between housing quality and income and a large quantitative response of the former to the latter. Income, housing preference, and choice of residence were positively related since the greater

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the household income the wider was its range of choice of housing type and location and the greater was the likelihood that its preferences were most fully met. The higher a household's income the stronger were its preference for more residential space and for newer housing. This similarity of the magnitude of the income and price elasticities provides fairly strong support for the hypothesis that variation in the proportion of dwelling standard primarily reflect variations in demand.

As the level of income of different households rose or fell, the absolute amount allocated to housing also increased or fell in most cases, such that 54% of all households interviewed claimed that they had to change residence because of change in income [table 4.1]. However, the proportion of the total monthly income allocated to housing and any subsequent movement depended on the income elasticity of demand for mostly better housing or lower quality housing. For instance, the proportion of monthly income/expenditure allocated to housing, was found to decline with a rise in the level of household income except for the lowest income group. Therefore the ability to pay for better, more desirable residential facilities and locations was a major determinant of the distribution of population within Kisii urban centre.

The middle income area comprising Jogoo and Nyanchwa estates had the highest proportion of residential mobility of 63% based on the change of family income factor. The low income areas comprising Mwembe and Daraja Mbili estates had the second highest proportion of residential change of 53% based on change in household income, while the high income area of CBD and "GLAM" showed the lowest figure of about 47%. Details are shown in table 4.1.

The middle-class middle-income families had the highest proportion of changing residence due to income changes because they were often more able to improve their residential need because of the large number of options open to them, both locationally and economically. The poor (low income), on the other hand, had fewer housing opportunities due to financial, locational and informational constraints. The latter problem resulted from greater social ties to the existing community, while the upper class (high income) had the least flexible housing alternatives because of locational ties and a more limited inventory selection.

The high-income group typically had social and economic ties with the CBD. Moving out conflicted with this attachment. Also fewer residential units are being built for the high income group, further constraining the movement option.

As families rise in social class position, they often change their residence to accord with their class destination. This has led to the clustering of neighbourhood of same-price housing [rent charges] which has resulted from the fact that households prefer to live among others of similar economic and social characteristics.

This explains why the high income residents have clustered around the CBD and "GLAM". Because, once districts of higher-income residents were established, higher income residents moved to such areas given that the quality of the residential structure was more preferable than elsewhere and the more attractive surrounding in these districts while the middle-income huddled together in Nyanchwa and Jogoo, and the low-income in the poor quality and small dwelling areas of Mwembe and Daraja Mbili.

There was also a striking association between social mobility and residential mobility propensity, which mean that both the need for more living space as the family increases in size and the need to adjust housing to changes in social status are potent forces inducing families to move. This included the extent to which residential locations were perceived as indicative of social status or instrumental to social mobility, and to which current neighbourhoods were seen as consistent with a new or aspired status.

It was also found that groups of similar occupational status had a similar pattern of residential location; and, as the status level widened, location of residence became increasingly dissimilar. Occupational status, levels had relatively distinct residential locations, which in turn were associated with a pattern of employment location. As a result 46.7% of the respondents in Jogoo were influenced by the location of place of work, mostly at Kisii Bottlers, which is located in the same area, 40% for Daraja, 43.3% for 'GLAM', 40% for CBD, 6.7% for Nyanchwa and 3.3% for Mwembe. Overall place of employment influenced 30% of those interviewed.

Where a household choose to locate itself within the urban centre, was a function of occupational status, Income, place of employment and social taste. The operation or interaction of these factors has produced a strongly segmented pattern of urban residence occupance. As a result in different status households [groups] are found in different areas of the urban centre. Thus, not only is there a social distance between the classes but there is also a physical distance between them. This was accomplished by both voluntary and involuntary separation through residential mobility. The most extreme separation of these social classes tended to be at the upper and lower ends of the social ladder. That is, there are very distinct areas of high-income

residents and of lower-income residents. These two areas of extremes are not found in close proximity to one another. The upper-income occupy the central part of the town while lower-income occupy areas which radiate from the central business area of the town. The separation of the different income residential areas appears in the form of sectors radiating outward from the centre of urban centre where the upper-income settled.

The upper-income residential areas have located within the core and frame of the central business area, where they are able to afford this site for living. The location has the added feature of easy and rapid access to the various facilities concentrated in the downtown area e.g., the golf club near Milimani within the upper-income residential area. On the other hand, the lower-income, less able to compete for the high priced rental housing, have settled in less attractive areas. As a result, this group generally moved and are found in outer areas from the CBD, some near the sewage pond and industrial location. In these areas the lots are small and congested, and the land in some parts is poorly drained therefore land is not expensive and the rental units are relatively cheap.

In addition to reflecting certain living conditions within an area, social indicators also reflected behavioral characteristics about the population, for example, the high income tended to have a smaller family size when compared to the housing space consumed.

For the low economic status the reverse was true. Such differences are very important in pursuing a particular housing policy. Social indicators formed very important tools which explained some of the housing situations found in Kisii urban centre.

Areas of family status have taken the shape of ribbon and concentric ring along the rapid-transit routes especially on Kisii-Migori road and about the CBD. High family status areas are found near the CBD and lower family status areas are found towards the suburbs.

Generally all households have a particular niche in the society which can be seen in relation to other individuals who have similar or dissimilar characteristics. These niches are not static, however, and are changed by an individual.

4.2.3 Access to Place of Work

All households were concerned to some extent with their residential location relative to their place of work. Most people, therefore, choose a residential location because of the income earning opportunities it provided access to, as well as considering the consumption opportunities afforded by the location.

When the interaction between residential change movement and place of work is analyzed, it was found that 30% of the households moved in order to be nearer to their place of work (see table 4.1). The pattern of employment is found to be closer to the pattern of mover destinations than origins. In general, therefore, the residential movement of households and/or population corresponded to the regional distribution of economic opportunity so that factors explaining the general location of productive activity also accounted for the general distribution of residential change profile. This is most notable in Jogoo where the town's industrial area is recently relocating especially with the commissioning of the coca-cola soft drinks factory, the Oil Milling Tegemea Factory and Nyayo Motor Corporation among others.

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As transport costs involving personal movement exhibited a certain regularity in their spatial change from any given point, it was to be expected that residential change pattern in the town was to show spatial regularities associated with the transport factor. This is because travel represents a disutility or loss of satisfaction for households and suggests that households sought to minimise the disutilities of travelling and that their choice of residence was responsive to differences in transport costs incurred in carrying out their activities. However for Kisii town, the minimisation of travel was not a major factor in determining a household's change of residence because the town has not "spread out" to the extent of needing an intra-urban transport service. instead most people are within a walking distance to their places of work.

Therefore, the distribution of jobs/work places has had a considerable influence on the distribution of residential population in the town. Given the place of work of the head of household, a household had to weigh access to work against various possible combinations of accommodation prices and its other needs for urban contact and amenities. To this end, of the 30% who said they had considered access to their area of work as reason for changing their residence, 22% were from the low-income areas of Daraja Mbili and Mwembe, 27% from the middle income areas of Jogoo and Nyanchwa while 42% came from the high income area of the CBD and its surrounding area (GLAM). In effect, it implies that certain residential locations, especially the high income area of the CBD and its surrounding area have an economic advantage in terms of access to work because residential locations near to the workplace enjoy lower walking distances (because Kisii urban centre is not big enough to encourage commuting by vehicles).

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Thus, were we to consider access to place of work as the only factor influencing residential mobility in Kisii urban centre, then we could be able to appreciate the fact that the CBD and its surrounding area house the high income. This is partly explained by the price or rent of accommodation which decrease with increasing distance from the central business district and which is the single most important place of work in Kisii urban centre.

4.3 Housing Supply Aspect of the Decision to Move

Provision of housing in Kisii urban centre has not been confined to erecting shelter over the residents heads. It encompasses the provision of basic amenities which are an integral part of a decent shelter. Housing cannot be defined as "satisfactory", if basic infrastructural services such as water supply and access roads are lacking and if there are no amenities such as health and educational facilities within easy reach, also the quality of structures and ownership have been considered.

This section therefore endeavour to highlight some salient aspects of these housing supply factors as revealed by the study and how they have affected residential mobility.

4.3.1 Housing Tenure

Findings from stated reasons for mobility and comparison between present and former residence indicated the importance of housing tenure in motivating mobility. The motivation occurred because of; desire for housing ownership, the lack of alternative behaviour, or the security of rental tenure. Tenure deficit was expressed only in one direction- that of renters who preferred to own. None of the owners indicated desire to move in order to rent.

Tenure accounted for a negligible 1% of all the household residential movements [table 4.3]. However one of the complaints of the households interviewed was the high rents charged on residential buildings. As a result of the high rents, 14% of those interviewed wanted to move because of the high rent (see table 4.4). There are complimentary explanations why renters exhibited a higher mobility rate. First, the renters deviated from owner occupancy and hence some had to move in order to achieve ownership, in fact 2% moved in order to achieve ownership (see table 4.4). Second, renters as a class could not engage in residential alteration to meet other housing needs (space and quality, for example). Hence mobility was the typical adjustment behaviour open to them. Third, renters' position was less secure, because they tended to have little investment in the home, not only in economic terms, but also in social terms. This contributed to 8% of the households moving because of the bad relationship with their landlords. This resulted in some renters particularly the low-income earners[8%] and middle-income earners [10%] being forced to move which could not have happened to home owners Compared to 5% of households from the high income areas of " Glam" and CBD who indicated that as a reason for moving. This forced residential changes can be attributed to landlord-tenant law which favours the landlord over the tenant.

The renters gave reasons for mobility what they could not alter on the residences. On this list were rent charges of the dwelling and the amount of space it contained. Owners did not indicate dissatisfaction with such factors.

Households who were home owners and single-family dwellings increased with income. This was because the high income earners had stronger preference for the privacy and prestige afforded by home-ownership.

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4.3.2 House Structure

House structure defines the kind of housing the households occupied: whether single and detached or semi-detached, a flat or apartment. Households who lived in housing that differed from their preferred form of housing tended to move to fulfil this desire.

The findings regarding tenure deficits and structure deficits seem to reflect the same phenomenon because of the close correspondence between house tenure type and structure type. The importance of house structure deficit in prompting residential mobility in Kisii urban centre cannot be overemphasized, given that 23.3% of all respondent households gave it as a contributing reason to change residence, with 16.7% of the households moving from flats to single family houses and 12.2% doing vice-versa (table 4.3). The desire for detached or semi-detached houses was given as prominent reason for changing residence.

House structure type was a motivating force for the mobility because residential alteration could not overcome a structure type deficit. Hence mobility was the only behavioral option to those seeking to correct such deficits. There is a possible explanation for this tendency. First; it might be argued that higher-income persons or those of higher occupational status had a stronger preference for single-family dwellings. Given that of all the households who changed their house structure from a flat to a detached house, 8% were from the low income area , 32% from the middle income areas and 30% from the high income areas. This gives credence to the above notion. Comparatively, of those who moved from detached houses to a flat, 5% were from the low income areas, 13% from the middle income areas and 22% from the high income areas. This is because apartments are prominent in "GLAM" residential area.

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Because there is a tendency for the proportion of households who live in detached housing units to be more land-extensive than apartments, an increase in the relative demand for them with increasing economic status (read income) would mean any given higher income persons will tend to live at greater distances from the CBD, than is the case now, and with a general rise in economic status the demand for housing more distant from the CBD will tend to increase. In short the demand for different types of housing has affected both the locational choice of the consumer and the spatial pattern of residential mobility in Kisii urban centre.

4.3.3 Changing Character of Residence and Neighbourhood

Using the state of repair of the dwelling to predict mobility, the study found that the housing unit deterioration and need for frequent repairs have led to residential change or a desire to move. 19% of the respondent households cited housing deterioration for changing residence, while 11% indicated a desire to move due to poor house maintenance (tables 4.3 and 4.4).

Households in middle and high-income areas indicated a higher mobility rate due to poor house maintenance factor. However, it should be noted that moves were mainly to other dwellings in the same area or neighbourhood and that there was only a slight improvement in dwelling unit condition as a result of the move.

Otherwise it seemed that families who moved either achieved improvements in housing quality or maintained the level of quality enjoyed in the previous dwelling. Further, they were responding to increases or decrease in income that caused their expenditure on housing to be inconsistent with their income. Moreover, their housing quality may have become inconsistent with their social

status. Therefore, housing unit deterioration, in effect, led to reduction in housing quality which motivated some families to change dwelling units in Kisii urban centre.

Changes in the neighbourhood composition, especially demographic and social composition, density and quality has generated residence changes. Also related to mobility were presence of several neighbourhood attributes such as, high crime rates and poor quality; schools, medical facilities and recreational facilities.

The perception of the seriousness of crime and violence in the neighbourhood was strongly related to overall neighbourhood dissatisfaction and the eventual move. In fact 38% of all respondent households cited inadequate security as their main reason for moving- low-income areas [23%], middle income areas [37%], and high income areas [53%] (table 4.3]. And 11% wanted to move because of insecurity (table 4.4). This study therefore revealed that the perception of the neighbourhood as unsafe was strongly related to neighbourhood dissatisfaction and the actual movement. This is because neighbourhood satisfaction affects housing satisfaction. It is clear that families were seeking housing and neighbourhood conditions that they feel can satisfy their residential needs adequately. Households in the high density low income areas of Daraja Mbili and Mwembe where 22% of the respondents indicated desire to move, were more likely to move than households in the low density high income [5%] and middle income [7%] areas because they lacked adequate security.

Some changes pushing families from neighbourhoods pertain to the social relationship between a family, its neighbours and the landlord. However, changes in neighbourhood character are related to the urban housing cycle.

Whether or not those physical changes were perceived as sufficient grounds for moving depended on the stage of the family life-cycle as well as other reactions of family members, including their perceptions of how neighbourhood changes affect them.

Supply of water and availability of electricity were also vital in residential mobility. The proximity to clean source of water for dwelling units and electricity were of paramount importance in stabilising household housing satisfaction. This was because provision of water, good health facilities and electricity are basic requirements in an urban household. Twenty one percent cited proximity of water to the dwelling units as influencing their residential change, 19% cited electricity, 33% proximity to educational institution while 22% cited medical facilities' nearness.

In general most housing units need basic facilities in order to become satisfactory to various households. What is needed is to encourage provision of these basic facilities such as water source near housing units. Table 4.3 gives the breakdown of the various factors and how they have influenced residential mobility in the urban centre. Table 4.4 summarizes reasons given for the propensity to move.

Table 4.3: **Housing Supply Factors Responsible for Residential Mobility in Kisii Town.**

Housing Supply factors	Mobility According to Residential Areas							
	Low Income		Middle income		High Income		Total	
	No.	%	No.	%	No.	%		% %
Tenure	2	3	0	0	0	0	2	1
Number of Rooms	12	20	30	50	21	35	63	35
Maintenance	11	18	12	20	12	20	35	19
Location	21	35	21	35	22	37	60	33
Security	4	23	22	37	32	53	68	38
Water	16	27	9	15	12	20	37	21
Electricity	7	12	18	30	10	17	35	19
School	16	27	29	48	14	23	59	33
Medical Facilities	15	25	12	20	12	20	39	22
Recreation	9	15	14	23	7	12	30	17
House Structure	7	12	22	37	13	22	42 ⁹⁄	23
- flat to single	5	8	19	32	6	10	30	17
- single to flat	3	5	8	13	13	22	22	12
Bad relations with landlord	5	8	6	10	3	5	14	8

Source: Field Survey 1992.

It should be acknowledged that the various reasons given for changing a residence in the course of household interviews were not always entirely reliable. Some people had a tendency to rationalise and justify their own decisions, others could not be able to recollect past motivations; and most were inevitably articulating reasons which were simpler and more clear-cut than the complex factors under consideration at the time of the move.

Table 4.4 Residents Dissatisfied with present house (propensity to move) in Kisii Urban Centre

	Would like to move							
	Low income		Middle income		High income		Total	
	No.	%	No.	%	No.	%	No.	%
Would like to move	29	48	13	22	20	33	62	34
Reasons Given								
Family Size	9	15	6	10	11	18	26	14
Security	13	22	4	7	3	5	20	11
Electricity	13	22	7	12	5	8	26	14
Water	12	20	8	13	7	12	27	15
High rent	8	13	7	12	10	17	25	14
Own house	4	7	3	5	3	5	10	6
Near workplace	5	8	3	5	2	3	10	6
Poor maintenance	8	13	6	10	5	8	19	11

Source: Field Survey 1982

Among the housing factors associated with voluntary moves were complaints about dwelling compound space, and repair costs. Environmental factors encompassed complaints about the presence of noxious activities such as factories, noisy children and incidence of garbage. Personal factors were associated with forced moves but some voluntary moves were attributed to personal factors such as a negative reaction to new neighbours.

Important variations in mobility rates and reasons between different population sub-groups and residential estates were noted. It is not surprising, therefore, that moves from different types of neighbourhoods and residential estates tended to be prompted differently by different factors.

A distinction should be made between the choice of residential location by households and the choice of locations to be used for residential purposes

because majority of housing choices were made from existing stock. In addition new households are being formed as population expands, so there are insufficient new houses for all those seeking accommodation at any one time.

Thus most of the decisions regarding the choice of land used for residential purposes were made at some time in the past and the explanations of the choice of that residential location by the present inhabitants may be very different from the explanation of the original situation. In seeking answers to the questions of who lives where and why at the present time, it must be accepted that consumer freedom of choice is largely restricted to the distribution of existing residential locations.

People have chosen to live in a certain part of Kisii urban centre because suits their needs. What a household considered best depended partly upon income, number of children, age, the type of people who lived in the area, the distance from place of work, and other personal preferences. Because of this selection process people are not distributed within the urban area in a random pattern. Their distribution is based upon decisions reflect the niches occupied by the individuals in Kisii urban centre.

In the previous sections we have examined the household's housing demand factors which have influenced residential mobility in the urban centre. The most important factor appears to be cost; as income rises, the ability to rent a larger or more prestigious residence increases. Tied to this cost factor is the availability of housing stock within a certain price or rent range.

The lifestyle factor appears to be one of the most important factors in motivating people to move. A young person who becomes independent tended to move out on his own into some type of residence, upon marriage, another residence is desired and arrival of children again necessitated a move to

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another residence. These changing requirements for space in the place of residence accounted for approximately 46% of the moves.

It is therefore correct to conclude that certain groups had a greater residential mobility than others. Another prime influence on residential was whether a person owned or rented his place of residence. There was greater mobility among renters than owners.

4.4 Decision Making Process

Actual decision making in residential mobility was very important. In other words, the factors the household considered and the steps taken as a result if a household [single person or family] was to change its place of residence. Most of the moves were made on a voluntary basis since this accounted for almost all the moves. In the case of involuntary moves, the options that were open to the household were, of course, reduced considerably.

Moving from one residence to another was a result of complicated decision-making process. It involved two subsections: a decision to seek a new residence and the actual relocation decision. The decision resulted from inputs that caused the household to move. The second decision led to the actual selection of a new residence based upon information about the residential unit and the neighbourhoods throughout the urban area.

In order to reach a decision where to move to, the household evaluated various areas of the town. This evaluation was upon the size of the dwelling unit, cost of the dwelling unit [rent], accessibility to work and shopping, proximity to schools, prestige of the neighbourhood and the socio-economic status of its population composition.

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The household conducted a search which enabled it to evaluate particular housing types and locations. Based on previous experiences the household usually possessed some knowledge of the areas of the urban area where it wanted to relocate. This prior knowledge came from the day-to-day activities of the household and from friends. This was because Kisii urban centre is small enough for a household to scan through or be aware of opportunities and characteristics of the various residential districts. No household indicated getting knowledge about the house or residential district they desired moving to from the media [television, radio, and newspapers], from real-estate agents, or from developers.

Most movements from one place of residence to another were based upon this type of decision-making process carried out by individual households.

The role of the goals and knowledge of the individual household in the decision to move was difficult to evaluate, though environmental perception may be of some assistance. Each social group had a constant propensity to move, which was related to its *threshold of utility*--that is, the degree of differentiation of place utility between where households are living and alternative locations necessary to make them move. Place utility is the measure of attractiveness or unattractiveness of an area relative to alternative locations, as perceived by the individual household decisions maker, and as evaluated according to its particular needs. Thus place utility both initiated relocation and determined the new location. But the theory of search behaviour also explained relocation.

CHAPTER FIVE:

THE NATURE OF RESIDENTIAL MOVEMENT

5.1 Introduction

Once a household had made a decision to move the next fundamental decision was where to move to. The principal determinant of their choice depended upon not only on housing demand conditions (the priorities that the family assigned to different household characteristics) but also on housing supply constraints (the cost, either rent or purchase price, the quality and the quantity of different types of housing in different parts of the town). This initial decision to seek a new dwelling and/or a different living environment and the subsequent decision of where and into what to move to constituted the intra-urban residential mobility process for which this research was set out to establish.

There were several independent spatial dimensions which characterised the geographical pattern of moves in the urban centre under which the spatial structure of moves was looked into, this included the distinctive directional, and sectoral qualities of the process. Also some research effort was devoted to searching for regularities in the residential mobility in the urban centre in the belief that such regularities, if they existed, might help to illuminate the relationship between residential mobility and urban ecology.

5.2 Sectoral Bias of Moves

One of the most consistent finding of this research concerns the distance moved. The majority of moves were found to be relatively short, although the distances involved clearly depended upon to a certain extent on the overall small areal size of the town. This means that most residential

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shifts were within the same tract or at most the adjacent tracts and certainly within the same socio-economic neighbourhood context. The study found out that 54 percent of all residential moves originated and terminated in the same residential area and that 18 percent of the relocations involved shifts within the low income areas 21 percent within the middle income areas and 15 percent within the high income areas.

The most significant regularity in the residential movement pattern relate to the relative socio-economic status of origin and destination areas. It follows from these observations that, while intra-urban mobility may have a significant impact on the spatial expression of social and economic cleavages, the overall degree of residential segregation tends to be maintained or even reinforced by relocation process. It can be safely concluded that the area of the town with which a family was acquainted had obviously tempered with movement. New homes were mainly secured in areas with which the family is already familiar. The lack of knowledge of distant neighbourhoods obviously, could have conditioned the distance variable in favour of a nearby location. Clustering of moves near the old residence then obviously occurred. This maximised the possibility of patronising the same infrastructure as before.

This finding indicates that most of the residential change in Kisii urban centre from the Central Business District (CBD) to the outer suburbs is not in one long-distance move. Where 77 percent moved to outer lying areas comprising low income areas of Daraja mbili and Mwembe and middle income areas of Nyanchwa and Jogoo compared to 23 percent to inner town high income areas of CBD and "Glam", but several short moves which precede any trek to the suburban fringe. This process can appropriately be likened to a musical chairs game, because the exercise is repetitive and rotational in nature as

well as the fact that it is not occurring in isolation but was part of a larger chain of moves.

The best single factor that can be used to predict location of a new residence was the location of former residence. Most moves were short, within familiar territory, reflecting satisfaction with the neighbourhood and the location with respect to the urban structure. For example, of all residential movements 54 percent were within the same income area. Thus most households adjusted their housing without crossing the sectoral boundaries as defined by the location of other income and cultural groups, therefore maintaining the same sort of income environment as they move.

The large number of local moves adjusting housing needs within the same income area, mask long moves which involve a change in the social environment of the mover. The tendency to locate in the same neighbourhood reflect the requirements, voluntarily of being near people of similar interest or access to certain facilities.

The short moves have produced a net spatial change in a random milling about (in a form of musical chairs pattern). The total immigration into the high income areas was 18 percent, 20 percent to the middle income and 9 percent into the low income areas (table 5.1). Most of the movement into these residential areas was generated by the household's concern with the availability of social amenities in the receiving areas and its immediate areas, such that a greater majority prefer to live closer rather than far from the CBD.

Table 5.1: Residential Change Profile in Kisii Town (nature of
residential mobility)

Residential Origin	Residential Destination							
	Low income		Middle income		High income		Total moved	
	No.	%	No.	%	No.	%	No.	%
Low income	29	18	25	15	19	12	73	45
Middle income	8	5	35	21	10	6	53	32
High income	6	4	8	9	24	15	38	23
Total movement	43	26	68	42	53	32	164	
Total moved to	14	9	33	20	29	18	76	46
Moved within	29	18	35	21	24	15	88	54
Total moved from	44	27	18	11	14	9	76	56
Never moved	25	42	15	25	21	35	61	34

Source: Field Survey 1992.

The conclusion from these observations is that the two major controls on
the decision on where to move to in the urban centre are social economic
status, including the ability to pay rents; the picture the household has of
itself and the sort of social group into which it wishes to opt, and life
cycle "status" where the family's needs exercise a strong influence. Both
operate through a nexus of infrastructural and cultural constraints'.

5.3 Directional Bias

Directionally, moves were rarely random. The orientation of the move
typically points outward rather than inward or laterally, considering that 45
percent of all moves were destined for the low income areas of Mwembe and
Daraja Mbili while 32 percent were destined for the middle income areas of
Jogoo and Nyanchwa which lie outside the CBD: only 23 percent of all moves
were destined for the CBD lying high income areas of "GLAM" and town centre
(diagram 5.1 below and table 5.1 above). The rationale for this situation is
that a lateral move would not be preferred because housing similar to that

being vacated by the family may be encountered. Housing towards the downtown is more expensive and newer, but if they moved outward this would mean a newer house but cheap and probably more room.

Daily movement behaviour patterns also reinforced the directional bias of moves. A household operates within a so-called activity space. The extremities are normally the place of residence, and the work and shopping place of the household. Within this region most of the family's routine daily affairs are conducted. This area in turn comprised a portion of the action space of the family, which for a small urban centre like Kisii involved the immediate subdivision/residential area, the CBD and one or two other major activity areas such as the place of work, or a recreation area like Kisii stadium or any other amusement park.

Since one's action space also includes an evaluation component (level of satisfaction) it was expressed three-dimensionally: The length of stay determined the intensity of attachment one had to the particular area. Such that the longer an individual lived in a neighbourhood, the larger the action space and the greater the differentiation an individual perceived among the various components in terms of satisfaction. The action space of families in a given neighbourhood were also quite similar. Shared images, produced by social contact and similar lifestyles, tended to overlap among local residents. The moving process therefore often than not had led to an extension of the range of the family's activity space and the more extensive action space.

The prevailing movements of families interviewed have created a circular pattern in that moves in the town show a scrambled pattern because of lateral moves and inward and outward movement . Although there is an evident general

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outward movement, of the 46 percent of respondent households who moved from one residential area to the other residential area, 27 percent moved to the low income areas while 8.5 percent originated from this area 11 percent moved to the middle income areas, while 20 percent departed from this area. 9 percent moved to the high income areas while 18 percent departed from this area. The reason for this complex pattern is that fewer options were typically available to movers in terms of unit availability and movers themselves were usually more restricted spatially.

Some research effort was devoted to a search for regularities in residential mobility in the urban centre in the belief that such regularities, might help to illuminate the relationships between residential mobility and urban ecology. While it is recognised that there is a general tendency for residential mobility to push outward from high income inner town neighbourhoods to adjacent low income areas reverse flows and cross-currents exist which complicate the issue (table 5.1 above). Of all the residential changes, 9 percent moved to low income areas 18 percent to higher income areas compared to 20 percent to middle income areas. Thus 77 percent of all household movements are oriented towards the outer town areas of the low income and middle income areas of Daraja Mbili, Mwembe, Jogoo and Nyanchwa respectively compared to the 23 percent moving to the CBD oriented high income areas. A mixture of inward and outward movement dominate the pattern of residential spatial mobility, which seem to suppress lateral flows.

The most significant regularities in the residential movement pattern relate to the relative socio-economic status of origin and destination areas. A vast majority of moves — about 54 percent have taken place within residential zones of similar socio-economic characteristics. It follows from

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these observations that, while intra-urban mobility may have a significant impact on the spatial expression of social and economic cleavages, the overall degree of residential segregation tends to be maintained or even reinforced by relocation processes.

Putting together these empirical regularities in an overall spatial context, a three-fold zonal division of the town is presented. The low income zone is characterised by low levels of mobility which accounts for 26% of all movements. The middle income zone is characterised by high levels of mobility, accounting for 42 percent of all residential movements. Between the two is the inner town high income zone which accounts for 32 percent of all residential movement. The predominant movement pattern among all areas is definitely not suburban oriented. Some such movement does occur, but residential movement is complicated by short moves among and between areas in a complex network of feeder and receptor areas. There is no straight forward pattern of central town areas feeding the outer areas. In fact, of all out-moves from the low income areas of Mwembe and Daraja Mbili, none indicated moving to residence outside the town limits. The patterns of movement are vastly different among different residential areas. The pattern of residential movement is related to the extent or degree to which most people in the various income areas are committed to the various life cycles and socio-economic status.

The impression obtained from an examination of the spatial pattern of mobility in the urban centre is of the large numbers of moves in all parts of the urban area. Table 5.1 summarises the aggregate movements in the urban centre. Based on the above information, the following diagram 5.1 shows the general pattern formed by the residential movement in the urban centre.

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Never moved 42%

Moved within 8%

15.2%

4.8%

LOW INCOME

MIDDLE INCOME

Never moved 25%
Moved within 21%

11.6%

3.7%

4.8%

6.1%

HIGH INCOME

Never moved 35%
Moved within 14.6%

SOURCE: RESEARCHER
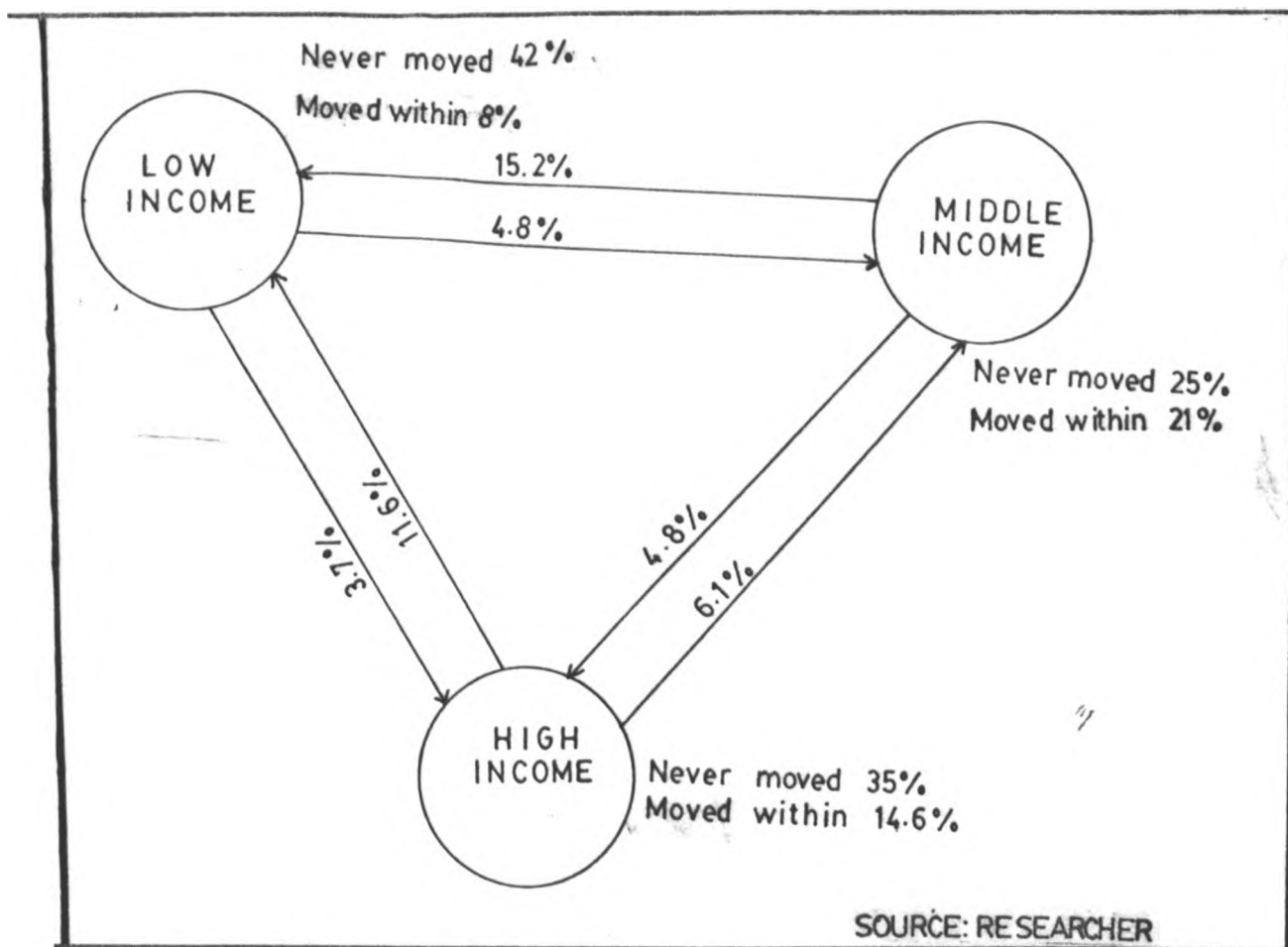
Figure 5.1: Intra and Inter Stratum Residential change in Pattern in Kisii urban centre.

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The impression obtained from this spatial pattern of mobility is the large number of moves in all parts of the urban centre. Flows and counter flows criss cross the urban area. The 54% of all moves taking place within the same income area indicate the tendency to move to familiar territory reflecting both satisfaction with the neighbourhood and location with respect to the urban structure. This indicates that a household is able to satisfy its housing requirements relatively easily.

The tendency of movers to choose destinations nearby has two possible reasons. The household has deliberately selected a nearby location in order to maintain spatial familiarity, social contacts, institutional links or to maintain its access to the town as a whole, while adjusting, for example, housing size or tenure. The lower inter-residential strata moves also suggest that this short intra-residential strata moves reflect imperfections in the housing market, especially since location is relatively unimportant and nearby alternatives were more likely to be evaluated than distant ones. Households were also able to adjust their housing and access costs without crossing the sectoral boundaries, defined by the location of other income and cultural groups. This large number of local moves, adjusting housing within the same income area, overshadow longer moves that may have involved a change in the social environment of the mover.

Households in the high income area tended to move outside their sector. For these households, residential change, requires a substantial change in dwelling or environment to make it worthwhile. Since the high income area is found around the town centre and has the lowest percent destination moves, this considerable evidence indicates that the majority of households prefer to live further from, rather than closer to the Central Business District.

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However, reverse flows and cross-currents exist to complicate the issue for example, there is some orientation of the urban system towards the jobs and shops of the CBD which tend to suppress a strong lateral flow, leaving a mixture of inward and outward moves to complicate the pattern of intra-urban mobility in the urban centre further.

More than half of the moves which were inter-residential were towards the low income, showing some directional bias. While moves from residences in the outer zones (the low and middle income areas) were more likely to end up within the same sector than those from the inner zone (high income). Suggesting that once households have lived in one sector of outer town they are reluctant to leave it for another. The movement is generally random.

Putting together these empirical regularities in an overall spatial context we are presented with a complex network of channels and flows of residential moves between and within the various residential areas in Kisii urban centre. There is no clear-cut movement towards one direction especially towards or outward from the CBD emphasising a particular income area.

In conclusion, then, the destination of an intra-urban move was determined by the interaction of a series of constraints. Some are imposed by the needs and preferences of the household, and others by the distribution of different kinds of housing. Despite the complexity of the decision process, it is possible to make some generalisation about the pattern of the migration field around the point of origin. The most powerful regularity was the tendency to relocate near the origin, producing a migration field that declines in all direction. Superimposed on this is the effect of sectoral variations in income coupled with the barrier imposed by the downtown, which together have distorted the migration field along a sectoral axis.

Generally when households moved they generally tended to relocate in an area of similar socio-economic status. Because areas of similar status are generally found in close proximity to one another, it follows that most moves were relatively short in terms of distance. In addition, most residential districts tended to retain their social economic status in the movement in or out of a large number of households.

As pointed out in the above, residential mobility was governed to some extent by the social characteristics of the urban landscape. Over along period of time the nature of districts will be affected by this mobility. Some of the middle or high income districts may become poor, and some may be lost to other urban land uses. Kisii urban centre landscape changes in some respect as individual households, each making separate decisions, fit into the larger mosaic of human interaction in the urban centre.

CHAPTER SIX

THE IMPLICATION OF RESIDENTIAL MOBILITY FOR URBAN HOUSING POLICY

6.1 Introduction

The study has revealed the housing situation in Kisii urban centre in terms of its relevance and contribution to residential mobility. The situation indicates that mobility occurs on a large scale. This chapter covers the areas where government effort can help develop or redress its approach to providing "decent" housing to the urban population. However the implication for urban housing policy is given in a general form while specific areas or recommendations intended to yield the right kind of housing for the future urban population is addressed in the next chapter.

6.2 Housing Policy Implication

It is possible to draw some wider implications from this study. But first it is necessary to consider the often conflicting aims that together make up "housing policy" in Kenya. If a single objective has to be identified, it would probably be that of providing "a decent home for every family at a price within their means". The government should pursue a wide range of housing policies, aimed at getting rid as quickly as possible of sub-standard housing conditions and providing not just a decent home for every household, but a growing opportunity for choice and a steadily rising standard of quality.

The problem is that each area of policy has evolved in response to a specific need in particular parts of the housing system. The idea of taking policies "together", as part of a co-ordinated policy for housing, is sensible and should be adopted both nationally and locally. One important implication

of this is that the potential for conflict between different housing policies is large. The practical problems of this "potential for conflict" are becoming acute as the nature of policy begins to change.

More attention should be paid to housing quality. This includes not just the condition of housing in relation to statutory standards, but questions of its size, type, location and, above all, suitability for the needs of individual households and increasing recognition that "the housing problem" varies from area to area. There is a consequent need for policies responsive to local problems, but nevertheless consistent with broad regional and national objectives.

The government should widen the role of local authorities. Not only must they press forward with vigour and speed the building of new houses where they are required, and the improvement of older houses, but to assess housing needs comprehensively. Some of the problems have arisen from the absence in the past of necessary information and skills upon which to base informed decisions about the location, quality, design and form of tenure of housing development and the social provisions, which should form an integral part.

Local authorities should be encouraged to make good the present deficiencies. They should also be encouraged to consider particularly how to identify the requirement in the areas of those with needs - such as the elderly, the handicapped, the one-parent family, the single person and, once the need of each group has been assessed, to consider how they could best be met - by new building or by adaptation or conversion, by the housing authority or private development. In the future, when they have assessed all housing needs, in their areas, the government should look to them to adopt policies which will ensure that these needs are met in the most appropriate ways.

These possibilities are speculative, but they point to the need for a new dimension in housing policy - what might be called a "policy for residential mobility". This should be part of what the Government should foresee as a "wider role for local authorities". The limited concept of their role which many local authorities now have mean that the need for, and benefits of residential mobility are completely ignored.

The promotion of mobility is an explicit feature of policy only where overspill, and the provision of housing for economic expansion and key workers are concerned. But is seldom seen as an instrument of policy that is relevant in relation to the total housing stock. It should be, since in general it provides a means by which the needs and preferences of households for different types of housing can be realized - whether that housing is of a different tenure or of a different rent or price.

It is certain that mobility is one of the quickest ways of bringing about change in the housing system. And is an inevitable consequence of slum clearance and new building, in some circumstances, and can also be a cause or a consequence of improvement. It can prevent the successful implementation of certain policies, just as it can help others to succeed. It should be recognized as both a complicating and enabling factor in the housing system, and that it should be a subject with which policy-makers should be concerned.

The first priority for housing may still be the provision of "decent homes". But this requires more than the traditional emphasis on slum clearance and the growing concern for housing environmental improvement. It is essential that the existing stock of houses is used in the best possible way for the benefits of the community as a whole. Mobility is a key to the successful achievement of this objective, just as slum clearance and new

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building are a key to the elimination of bad housing conditions. The urban housing programme should not be primarily designed to do away with differences in income but rather to lessen differences in levels of consumption, which is not the same thing economically but has the same impact in feelings of well-being and in permitting a levelling up in the standards of the lower income groups. To restrict new housing to the low-income groups would, paradoxically increase segregation and the deprivation effect. What is desired, is a better social mix, but in a manner in which the differences are not so apparent.

This is apparently being successfully done in the new city of Jurong Town in Singapore where "executive suites" in high-rise buildings are built within a few hundred yards of high-rise popular housing. Provision should be made for apartments for the well-to-do executives and professionals as well as for those occupying the lower paying jobs. This diminishes segregation, lessens the desire of people rising in the income scale to move within the town, and permits the hidden transfer of excess rents and/or sale values to lower income groups through lower rents.

The government should create conditions in which the bulk of the population is housed in serviced dwellings with good access to income-earning opportunities and urban facilities. Well-conceived and executed policies in the town should include the development and control of serviced land, urban transport, the encouragement of vigorous, competitive construction and construction-material industries, and the provision of long-term credit for housing. Housing construction programs should be tailored to dwelling standards affordable by all the income groups.

The government should realize that the existing public programs, which include public sale and rental dwellings and a small amount of self-built

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housing and co-operatives, are inadequate for existing low-income populations. Consequently, land-servicing schemes should be adopted that use a maximum of self-help in construction as a way of tackling the proliferating squatter problem. These programs should be scheduled to account for a large share of housing expenditures over the coming years.

By making land acquisition procedures costly and by using prohibitively high standards for construction and the ubiquitous bulldozer, the country has often destroyed the existing housing stock and forced families to relocate to equally insecure conditions, usually even further from employment opportunities. The destruction of fixed capital assets has social dimensions, and the reduction in income of the urban households involved curtails their purchasing power. Relocation of families to sites on the urban periphery may permit alternative forms of economic growth - but at a high social cost rarely included in calculating rates of return, which may not make them viable unless they are accompanied with other policy measures like subsidized transport costs. As valuable capital assets are destroyed in this cycle of demolition and re-development, restraint on private sector initiative in housing may worsen the problem.

Planning for housing is not just a question of the allocation of land, it is also a matter of the management of the dwellings over time by which movement of households between dwellings can be constrained or facilitated. A whole range of policies - fiscal, tenure, locational - are all involved, each with different costs and benefits. In this situation, land allocation is just one factor in a couple interrelationship which offers either opportunity and housing choice, or tedious constraints.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This study set out to research on a relatively ignored aspect of migration, intra urban residential mobility process in Kisii urban centre. Which is by its very nature a spatial process. But it is also a very personal and sometimes subjective undertaking. In the aggregate, moves were predictable because regular, consistent behaviour is shown by families with similar needs and resources. The continual striving for upward mobility and status and the rootless nature of modern lifestyles have reinforced the migratory stream in a context of an increasing variety of housing options and lifestyle settings. There were several findings which stemmed from the study as enumerated below.

7.2 Summary and Conclusions

To summarize, then, the destination of an intra-urban move was determined by the interaction of a series of constraints, some were imposed by the needs and preferences of the household, and others by the distribution of different kinds of housing. Despite the complexity of the decision process, it is possible to make some generalizations about the shape of the migration field around the point of origin. The most powerful regularity was the tendency to relocate near the origin, producing a migration field that declined in all directions. Superimposed on this was the effect of sectoral variations in income coupled with the barrier of downtown, which together distorted the migration field along a sectoral axis.

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7.2.1 Housing Characteristics

There was no significant dwelling type change which came about because of residential change. 23% of the respondent households moved in order to change the type of house they occupied; of whom 17% moved from flats to detached houses and 12% doing vice versa. The most notable, though not unexpected feature is the high proportion of dwellings in the flat category in the high income areas of Central Business District and "Glam"and detached and \or semi-detached in the low income and middle income areas.

When considering dwelling sizes it was evident that dwellings where households moved to generally had more rooms than the dwellings they had moved from. This was confirmed by the 35% households who moved to bigger residences, suggesting that there had been significant movement from over crowded dwellings.

It is apparent that the availability of large dwellings released smaller existing dwellings for re-occupation. It may be deduced that the supply of larger dwellings was being increased by new buildings, and the supply of smaller dwellings in Kisii urban centre was also dependent on their availability in the existing stock.

Residents in the present dwellings tended to enjoy more amenities than in their former dwellings. This conclusion is supported by the 21% of the respondent households who moved because of lack of water, 19% because of electricity, 33% because of proximity to educational institutions, 22% because of need for medical facilities and 17% because of need for recreational facilities. When the presence or absence of the basic amenities for use was considered, the contrast between the present and former dwellings is apparent.

Although the local authority has demonstrated the need for more building programmes, it is evident that the programme _in itself_ is not sufficient to result in the elimination of bad housing conditions. Some of the residential changes resulted in the _vacation_ and _re-occupation_ of dwellings which definitely lacked some of the amenities. It is evident that residential mobility by some families from "unsatisfactory" housing to "satisfactory", may not solve their housing needs if the process is not accompanied by provision of basic amenities in the dwellings vacated.

A comparison of rents paid in present and former dwellings indicated a slight decrease in the average rents paid. 53% indicated rent increase or high rents as one of the main reasons for moving. Not unexpectedly, the study confirmed the dominance of non-market influences in the supply and allocation of dwellings in the publicly rented sector. Unlike the private and owner-occupied sectors, movement to public dwellings was influenced not by the ability to pay a certain rent charge for housing, but the public authority's interpretation of housing need.

7.2.2 Household Characteristics

A much higher proportion of households moved as a result of a change in the family life cycle. 36% moved because of a change in life cycle, while 43% indicated the increase or decrease in family size as reason for changing dwellings. Smaller households had greater propensity to move than larger households because of the changing life cycle and size, the latter may have reached their last stage in the family life cycle and therefore are not pressed to move because of changing family housing demands.

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There was a striking relationship between social class of heads of households and changing of dwellings. A high proportion of households with heads in a high social class moved to new dwellings as they climbed even higher in the social ladder. There is evidence of higher income households moving to the more amenities laden areas of down town. About 55% changed residence due to decrease or increase in income, while people with higher and increasing incomes tended to benefit directly from new building programmes in the private sector because they have the financial capability to do so.

7.2.3 The Origin and Destination of Movers

When the origin and destination of movers was considered, the difference between low-income and high-income area is remarkable. 45% of all moves were from the low-income areas, 32% from middle-income areas and 23% from high income areas. Comparatively 26.2% of all moves were to the low-income areas, 42% to the middle-income and 32% to the high-income areas.

This partly reflects the residential characteristics of the movers and partly the uneven distribution of different types of housing within Kisii urban centre. A balance between supply of and demand for "new" housing cannot be met within the boundaries of an individual income-area; indeed, there is no reason why it should be, since income-area boundaries are virtually meaningless in housing market terms.

Despite the availability of dwellings in different income sectors, it is significant that the volume of movement within the same income area is consistently moderate, with 18% having moved within the low-income areas, 21% within the middle income areas and 15% within the high-income areas. This represents 54% of all movements in the sampled households.

7.3 Recommendations

The study revealed that 66% of the households interviewed had changed residence because they were in one way or the other dissatisfied with it. There was no indication that they had found the "right" dwelling by moving. This section gives a number of recommendations intended to yield the right quality and quantity of housing for the urban population.

The scenario needs to be tackled from both fiscal and economic points of view. The former approach is meant to give incentives to would-be developers in the form of lower land rates, easier terms of acquiring loans from financial institutions especially parastatals, and lower capital tax charged. The economic factors should be in the form of external economies e.g. provision of infrastructural and public utilities.

7.3.1 By-Laws and Standards

There are Acts of Parliament and Ordinances which have set the basic standards and requirements to be met when building residential houses in urban centres.   These include Town Planning Ordinance 1931, the Land "Planning Act 1968, the Public Health Act Cap 242, the Building Code (1968) and Local Authority By-Laws.

Another problem is the Rent Restriction Act which may have a negative effect on the poor people which it is intended to safe-guard from being affected.   The Rent Restriction Act 1959 Cap 296 was enacted to protect tenants in low-cost housing.   However, due to the extreme urban housing shortage, some landlords flout this Act and tenants end up receiving minimum protection from it. The few tenants who dare raise objection against arbitrary rent hikes end up being evicted and landlords are not penalised at all.   In

the study 8 percent changed their residence because of bad relations with the landlord in a situation related to that problem

The National Building Code which has set the standards and quality should be revised to make them realistic and attainable. A major short coming of the current standards is that they favour the middle and high income strata leaving out the low income stratum who are the main concern of the housing policy. Excessively high and unrealistic standards for building design and requirements have increased the housing problems instead of reducing it as intended.

There is also need for both the central government and the local authority to reduce standards to take into account the overall housing cost and the class of people it is intended for. The removal of existing constraints will accelerate the attainment and supply of adequate decent, low-cost housing for the low income. Modification of the Building Code should revamp the construction industry and the benefits achieved will result in cheap decent low-cost housing.

Building by-laws have been an impediment to the construction of affordable housing. It is therefore recommended that the implementation of the revised building codes should be immediate so as to facilitate the construction of affordable housing units. Fifty three percent of the households moved because the houses were becoming increasingly unaffordable because of high rents.

7.3.2 Infrastructural Services

Infrastructural services include water-supply, sewerage, roads, electricity, garbage collection and other related infrastructural facilities. They are necessary services which should be provided to all households in the urban centre. Generally, the low-income people do not have the capability to provide the related infrastructure to housing. Such vital services as garbage collection, security and construction of roads cannot be provided by individuals. Kisii Municipal Council should avail such services.

The study revealed that 21 percent of the households moved because of water related problems 19 percent because of lack of electricity. Thirty eight percent moved due to lack of adequate security. Some of the residential areas were built without proper consideration given to the location of such services. For example the provision of water in proximity to housing will discourage mobility for the 21 percent who cited it as motivating it. It is recommended that consideration of these services should be part and parcel of the whole planning process for any upcoming residential estates.

In addition to providing shelter the government should concentrate more on improving services where they are currently inadequate in order to discourage mobility to any new housing being provided with these facilities. Also services should be provided at affordable costs in order not to encourage residential mobility based on high rent-related reasons.

The provision of water within close proximity to housing should be a priority for the local authority. More specifically, there is need to increase water and sanitation in the low-income unplanned settlement areas of Daraja-Mbili. This can initially be achieved by having communal water points to cut on costs.

7.3.3 Public Amenities

Amenities in residential areas include schools, medical facilities and recreational facilities. In the study survey 33 percent moved because of reasons related to educational facilities, 22 percent because of medical facilities and 17 percent because of recreational facilities. The nearness of a residential unit to any amenity discouraged the need for residential change. These facilities should be incorporated in the planning of all housing schemes and be implemented simultaneously with housing development by the implementation agencies and be enforced by the local authority.

7.3.4 Cultural and Social Constraints

Basic values and beliefs have made a lot of difference in the way the people approach the housing problem. For example, a family was unable to stay under the same roof and share other basic facilities like toilets and baths with the grown up children. In fact 43 percent moved due to changes in family size, while 36 percent moved because of stage in family life cycle. The cultural and social values of the ethnic group in the urban centre may thus be a major constraint to the development of modern housing.

In housing development, cultural and social considerations are of paramount importance. To avoid a conflict with these values and the impending residential change, ways of improving the existing and/or provision of new housing should takes cognisance of this problem. For example, in housing provision the household house consumption demands is crucial to successful implementation of the urban housing policies.

Housing development agencies and the local authority should encourage low cost housing. Urban housing policies should enforce this requirement.

7.3.5 Suggestions for Future Research

Other important aspects of locational behaviour have been ignored in this study and will require investigation. For instance, the possibility of moving employment location rather than residential location is one alternative available to an individual faced with increased transport costs, as is the possibility of changing to a cheaper mode of travel. A study of the probability of someone making these choices rather than move residence would complement an analysis of residential mobility and provide a much greater understanding of the complex interaction involved in locational decision making.

The type of data available caused the research to focus on the static distributions and some processes that have generated urban patterns in the urban centre. Yet so many significant urban phenomena- for example, social segregation, the housing market and urban growth- operate through the mechanism of intra-urban mobility which need to be studied so that their contribution to residential change profile is necessary.

The study also revealed that the majority of households are able to "improve" their housing conditions by moving. Mobility has provided an opportunity to obtain "better" housing or housing that is more appropriate for households at different stages in the family status. Only a small proportion of households experience a deterioration in housing conditions on moving and the reasons for this are probably complex.

But what of households who do not or cannot move?   They represent 33.9% of the sampled households. The immobile element in the population is substantial and while the benefits of moving are only too obvious, the needs of immobile households require equally detailed attention.   It cannot

necessarily be assumed that immobility implies "satisfaction". In many cases, it may indicate a lack of opportunity for movement and further study is required to establish whether this is so.

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APPENDICES

APPENDIX   I: Chi-square distribution table

table provides the values of χ_a^2 that correspond to a given upper-tail area α and a specified number of degrees of freedom.

Degrees of Freedom	Upper-Tail Area α					
	.20	.10	.05	.02	.01	.001
1	1.642	2.706	3.841	5.412	6.635	10.827
2	3.219	4.605	5.991	7.824	9.210	13.815
3	4.642	6.251	7.815	9.837	11.345	16.268
4	5.989	7.779	9.488	11.668	13.277	18.465
5	7.289	9.236	11.070	13.388	15.086	20.517
6	8.558	10.645	12.592	15.033	16.812	22.457
7	9.803	12.017	14.067	16.622	18.475	24.322
8	11.030	13.362	15.507	18.168	20.090	26.125
9	12.242	14.684	16.919	19.679	21.666	27.877
10	13.442	15.987	18.307	21.161	23.209	29.588
11	14.631	17.275	19.675	22.618	24.725	31.264
12	15.812	18.549	21.026	24.054	26.217	32.909
13	16.985	19.812	22.362	25.472	27.688	34.528
14	18.151	21.064	23.685	26.873	29.141	36.123
15	19.311	22.307	24.996	28.259	30.578	37.697
16	20.465	23.542	26.296	29.633	32.000	39.252
17	21.615	24.769	27.587	30.995	33.409	40.790
18	22.760	25.989	28.869	32.346	34.805	42.312
19	23.900	27.204	30.144	33.687	36.191	43.820
20	25.038	28.412	31.410	35.020	37.566	45.315
21	26.171	29.615	32.671	36.343	38.932	46.797
22	27.301	30.813	33.924	37.659	40.289	48.268
23	28.429	32.007	35.172	38.968	41.638	49.728
24	29.553	33.196	36.415	40.270	42.980	51.179
25	30.675	34.382	37.652	41.566	44.314	52.620
26	31.795	35.563	38.885	42.856	45.642	54.052
27	32.912	36.741	40.113	44.140	46.963	55.476
28	34.027	37.916	41.337	45.419	48.278	56.893
29	35.139	39.087	42.557	46.693	49.588	58.302
30	36.250	40.256	43.773	47.962	50.892	59.703

$F = \dfrac{\text{"between" var.}}{\text{"within" var.}}$		DEGREES OF FREEDOM - "between" Sample Variance										
		1	2	3	4	5	6	7	8	9	10	∞
Degrees of	1	161	200	216	225	230	234	237	239	241	242	254
Freedom	2	18.5	19.0	19.2	19.2	19.3	19.3	19.4	19.4	19.4	19.4	19.5
"within"	3	10.2	9.5	9.3	9.1	9.0	8.9	8.9	8.9	8.8	8.8	8.5
Sample	4	7.7	6.9	6.6	6.4	6.3	6.2	6.1	6.0	6.0	6.0	5.6
Variance	5	6.6	5.8	5.4	5.2	5.1	5.0	4.9	4.8	4.8	4.7	4.4
	6	6.0	5.1	4.8	4.5	4.4	4.3	4.2	4.2	4.1	4.1	3.7
	7	5.6	4.7	4.4	4.1	4.0	3.9	3.8	3.7	3.7	3.6	3.2
	8	5.3	4.5	4.1	3.8	3.7	3.6	3.5	3.4	3.4	3.4	2.9
	9	5.1	4.3	3.9	3.6	3.5	3.4	3.3	3.2	3.2	3.1	2.7
	10	5.0	4.1	3.7	3.5	3.3	3.2	3.1	3.1	3.0	3.0	2.5
	∞	3.8	3.0	2.6	2.4	2.2	2.1	2.0	1.9	1.9	1.8	1.0

THE NATURE AND DETERMINANTS OF RESIDENTIAL MOBILITY IN KISII TOWN AND ITS IMPLICATION FOR HOUSING POLICY.

SECTION A

Address of Residence

1. Date of interview.............................

2. Sample Number..................................

3. Residential Estate.............................

B Information about household

4. Family status

 [a] Single   [b] Newly married

 [c] Child-bearing [d] Child-rearing

5. If married, how many children do you have..............

6. Do you work ?   [a] Yes   [b] No

7. If yes, what kind of work.............................

8. Where is your place of work............................. ⅋

9. What is your total family income per month in Ksh.........

C Information about present residence

10. What is the structure of your dwelling

    [a] Apartment [in block of houses/flats]

    [b] Single house [detached/semi-detached]

    [c] Other, explain......................................

11. How many rooms are in the dwelling ....

12. What is the house tenure

    [a] Rented

    [b] Personal ownership

[c] Other [explain]....................................

13. If rented, how much do you pay monthly ? Ksh................   14. Are the

following facilities available in the house ?

    [i] Water   [a] Yes   [b] No

    [ii] Electricity   [a] Yes   [b] No

15. How well *maintained is the dwelling [if rented]

    [a] Good   [b] Poor   [c] Fair

    * Maintenance refers to regular painting, repairs etc.

16. How regular does the municipal council collect garbage

    [a] Every day   [b] Every week

    [c] Every fortnight [d] every month

    [e] Other specify

D Choice of Residence and points of Destination

17. [i] Where do your children go to school?.

        [a]..............................

        [b]..............................

        [c]..............................

    [ii] Is it the nearest school ? [a] Yes   [b] No

18. [i] Where do you and your family usually go for medical

attention?

        [a].....................[b].. ....

        [c]................... [d]....................

    [ii] Is it/are they the nearest medical facility/facilities

    [a]Yes   [b] No

19. [i] Where do you and your family usually go for your recreational/leisure

    [a]................... [b]...................

    [c]...................[d]...................

  [ii] Are they the nearest recreational facilities [a]Yes [b]No

20. How often are cases of violence and/or theft reported here ?

    [a] Frequent [b] Not frequent

21. [i] Do you feel more secure here than your former residence?   [a] Yes [b] No

    [ii] why [subject to answer to question 21 above]

    [a]...................

    [b]...................

    [c]...................

    [d]...................

22. [i] Do you feel more satisfied with your housing needs here than in your former residence ?   [a] Yes   [b] No

    [ii] Why ? [subject to answer in question 22 [i] above]
[a].......................

    [b].......................

    [c].......................

    [d].......................

23. How could you rate the general environment in this area in relation to bringing up your family in comparison to your   former residence ?

    [a] Good   [b] Same   [c] Worse

24. [i] Do you still prefer to stay here longer ? [a]Yes   [b] No

    [ii] Why ? [subject to answer in question 24 [i] above]

    [a]...........................

    [b]...........................

    [c]...........................

    [d]...........................

25. [i] Given a chance, which residential area would you prefer   to

live?...........................

    [ii] Why would you prefer this residential area?

    [a]...........................

    [b]...........................

    [c]...........................

    [d]...........................

SECTION B

E Residential Change Profile

26. For how long have you lived in kisii town............

27. List sequentially the residential areas you have lived in Kisii town from
the time you first arrived in the table below:

Estate					
Length of stay					
Tenure					
House structure					
No.of rooms					
Family status					
Family size					
family income					
Place of employment					
House maintenance					
Rent paid					
Water situation					
Electricity situation				⁄	
Garbage collection					
Security status					

28. [i] In your opinion, is it good or bad to change residence?

    [ii] Why? [subject to answer to question 28 [i] above]

Thank you for your cooperation.

Research Assistant...........................

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