

**A STUDY ON HOUSING PREFERENCES OF LOW-INCOME TENANT HOUSEHOLDS IN
SHAURI-MOYO, NAIROBI KENYA**

By

Proson Kipngeno

THESIS

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

for the degree of

MASTER OF PUBLIC POLICY

2014

**A STUDY ON HOUSING PREFERENCES OF LOW-INCOME TENANT HOUSEHOLDS IN
SHAURI-MOYO, NAIROBI KENYA**

By

Proson Kipngeno

THESIS

Submitted to

KDI School of Public Policy and Management

in partial fulfillment of the requirements

for the degree of

MASTER OF PUBLIC POLICY

2014

Professor Kim, Jeong-Ho

A STUDY ON HOUSING PREFERENCES OF LOW-INCOME TENANT HOUSEHOLDS
IN SHAURI-MOYO, NAIROBI KENYA

By

Proson Kipngeno

THESIS

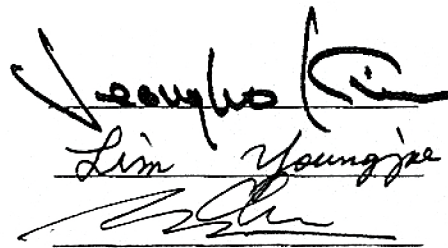
Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
for the degree of MASTER OF
PUBLIC POLICY Committee in

charge:

Professor Jeong-Ho KIM, Supervisor

Professor Young-Jae LIM

Professor Man CHO



Approval as of December, 2014

ABSTRACT

A STUDY ON HOUSING PREFERENCES OF LOW INCOME TENANT HOUSEHOLDS IN SHAURI-MOYO, NAIROBI KENYA

BY

PROSON KIPNGENO

Generally all households in Kenyan urban areas continuously rely on the private market to meet their housing. The increasing freedom to choose where to reside in means enhanced variations in consumption of housing. In order to understand how households make their choices, studying housing preferences of households come in handy. This research looked into both socio-economic and financial aspects of the low income tenant households in Shauri-Moyo estate in Nairobi on their willingness to pay for home ownership. A random survey was used in the study and it revealed that neighborhood and locational attributes have more importance than those relating to dwelling attributes. Additionally, household income, age, education level and others factors have influence on housing priorities and preference. The modal total household income range was found as Ksh.24000 to Ksh. 30000 (1US dollar = approximately 80 ksh) and that the part of income used up on housing vary from 23% to 50%; and this is as expected among the poor. Majority of the rental housing are not affordable. Government interventions such as regulations and subsidies on new construction of housing will promote home ownership among low income group.

ACKNOWLEDGMENT

My heartfelt appreciation goes to the government of the Republic of Korea and the KDI School of Public Policy and Management for giving me financial support to pursue my master's degree studies successfully. I would like also to be grateful to able thesis supervisor Professor Kim Jeongho and committee member Professor Lim Young-jae for guidance and valuable advices. I also thank the entire KDI faculty and my family for valuable support during the course of this study.

MAY ALMIGHTY GOD BLESS YOU ALL!

TABLE OF CONTENTS

LIST OF TABLES.....	III
1.0 Introduction	
1.1 The Background	1
1.2 Scope of Study	2
1.3 Research objectives	3
1.4 Research questions	4
1.5 Methodology	4
2.0 Literature	
2.1 Introduction	6
2.2 The study area	
2.3 Low income household neighborhoods	6
2.4 History of low income neighborhood in Nairobi	7
2.5 Rationale of home-ownership	9
3.0 Data Analysis	
3.1 Introduction	12
3.2 Housing designs and occupancy patterns	12
3.3 Households compositions	15
3.4 Length of residency	17
3.5 Income structure and housing expenditure patterns	
3.5.1 Introduction	17
3.5.2 Household income sources	18
3.5.3 Housing expenditure patterns	19
3.6 Housing Preferences	
3.6.1 Introduction	22
3.6.2 House type	24
3.7 Neighborhood features	25
3.8 Environmental quality	26
3.9 Locational aspects	27
3.10 Community facilities	28
3.11 Preferred residential area	29
4.0 Conclusion.....	30
5.0 Recommendation	32
6.0 Appendix: Design study form	38
7.0 References	42

LIST OF TABLES

Table 3.2 (a):	Household membership.....	13
Table 3.2 (6):	Household head and household characteristics.....	14
Table 3.3:	Household composition.....	15
Table 3.4:	Length of residency.....	17
Table 3.5.2:	Employment status.....	19
Table 3.5.3 (a):	Total household income.....	20
Table 3.5.3 (b):	Household income, expenditure and demand.....	21
Table 3.6:	Household type preferences.....	23
Table 3.8:	Neighborhood preferences.....	26
Table 3.9:	Mode of transportation.....	27

1.0 INTRODUCTION

1.1 The Background

It is evident that majority of cities in developing countries are experiencing rapid urbanization. The urbanization is partly due to expansion is due to both rural to urban migration and natural expansion of urban population. It is evident from the Kenya 2009 population census report that most households (74.9 %) in urban areas are renters while most households in rural areas (87.3%) own their dwellings of which majority were constructed through self-help method. Nairobi city has a percentage of 18% of homeownership as compared to 82% who are renters. Majority of those living in rental housing are low-income households¹ who largely occupy the Eastern part of Nairobi city.

Nairobi city has annual housing demand of 100,000 housing units² while supply is estimated as 20,000 housing units resulting in excess demand of 80,000 housing units. Majority (80%) of new housing units produced target high income group leaving only 20% for lower income. Government has intervened in the last ten years but significant supply of affordable housing has not been registered.

¹ Household is defined here a group of people living and taking meals together

² Housing unit is housing structure and it can be occupied by one household or more. On the other hand a dwelling is a living space that only one household occupies

Government of Kenya is currently reviewing the 2004 Housing Policy document which is expected guide the process of facilitating low income households to live in quality, adequate and affordable housing. The government of Kenya in its 2nd Medium plan (2013 to 2018) has captured number of initiatives geared towards bridging the gap between supply and demand of affordable housing. Some initiatives envisaged include adoption subsidies and regulations.

1.2 Statement of the problem

Rapid urbanization has led to severe shortage of housing units among the low income households. There is low investment in the low income housing because suppliers target of low reward as compared to higher profit margins in the high income market. The cost of housing has become unaffordable to low income households inhibiting from consuming socially desired housing. Housing access by low income earners³ has not been successful though government has put forward measures to address the problem. Lack of detailed study on the likes and dislikes of low income household has led to adoption of inefficient policy interventions that could adequately address housing challenges. This research will study housing preferences of low income households; on their willingness to pay for specific housing attributes, and their priorities and preferences with respect to both housing and neighborhood characteristics.

³ Low income earners means those who earns fifty thousand shillings and below

The study will enable design of good policy interventions to address low homeownership and other housing challenges affecting low income households.

1.3 Research Objectives

It is the major aim of this study to give insight into two aspects of housing preferences: socio-economic and financial aspect of low income tenant households considering their willingness to pay for ownership of housing in the study area (Shauri-Moyo estate); also the study will further delve into the priorities and preferences of the households considering both housing and neighborhood characteristics.

1.4 Research questions

This study would address the above stated objectives by asking the following questions; what are housing preferences of group of low income households in the study area? What are their priorities and preferences in terms of both housing and neighborhood attributes? What policy interventions are required to promote home ownership and to address housing challenges among low income tenant households?

1.5 Methodology

In order to achieve the above stated objectives, the researcher conducted a survey in the study area. The survey was kept small and focused on the target population. Shauri-Moyo Estate is predominantly inhabited by low income as reported in the 2009 Population and Housing Census. There were nine hundred and twenty (920) households and average household size of 5.2 persons per household. The researcher used random sampling to get the required information to answer the researcher questions.

The first step was to obtain household list of Shauri-Moyo Estate which can be obtained from the local administration of the estate. The household list has elements such as total population of the area, total number of population, some breakdowns on the households and house numbers. The list is constantly updated as required by the by-laws of the Nairobi local government.

A total of 102 households were randomly sampled from a population of 920 households and were interviewed as per the design questionnaire. Researcher in collaboration with officers from Nairobi local government developed an interview form and tested in order to efficiently collect desired information (*refer to appendix I*). Each household was assigned a number in a sequential order to ease selection process. The survey was conducted between 1st and 30th May 2014; and was done in the evening after 6p.m so as to meet household's heads. Some re-visits had to be undertaken in cases where head of households could

not be found to ensure that all heads of household was interviewed. The information gathered was analyzed discussed in-depth in the chapter 3 of this study.

2.0 LITERATURE REVIEW

2.1 Introduction

In this chapter, researcher will describe succinctly the study area, and into a number of literature relating to my research topic. It includes but not limited to description of the study area, studies on low income housing, low income neighborhoods, challenges facing low income households and home-ownership.

2.2 The Study area (Shauri-Moyo in Nairobi)

Nairobi is located at 1°17'S 36°49'E and it occupies an area of 648 square kilometers. Shauri-Moyo which is the study area in this research is located in Eastern part of Nairobi approximately 6 km from the city center. It has a population of 4,692 as projected from the 2009 Population and Housing Census. Shauri-Moyo estate has defined boundary with a political representation known as 'ward' which is the smallest unit of political representation in Kenya.

The climate of Shauri-Moyo area is generally the same as that of Nairobi City as a whole. The average temperatures being 29°C with average rainfall of 875mm with a variation range of 500-1500mm. This makes Shauri-Moyo and by extension Nairobi as suitable and attractive for human settlement. In terms of topography, Shauri-Moyo is well drained and it slopes toward a nearby Nairobi river.

The study area is accessible using two major roads: Avenue Eastleigh and Juja road. These roads are flexible paved roads. There is good sewerage system and

fairly adequate water supply in the area.

2.3 Low income household's neighborhoods

Households are spatially settled in urban areas with regard to their socio-economic status, race and ethnicity. Alba and Logan (1991) noted in their research that different factors including socio-economic status influence patterns and shapes of a residential neighborhood in a city. It is obvious that low income earners reside in poor neighborhoods because they are unable to purchase housing units supplied in middle and high income neighborhoods. Glaeser, Kahn and Rappaport (2000) who did a study on urban housing found out that low income people tend to reside closer to the city centers. It has been argued that politics is behind this behavior public services can be favorably supplied to this group.

Spatial separation of households of diverse socio-economic status are believed the major contributing factor for marginalization of poor households (Mayer and Jencks,1989). The poor are excluded from quality public services and community facilities. The scenario is quite common in the city of Nairobi and specifically the study area- Shauri-Moyo. Over-reliance of local property taxes by government to finance public services have contributed to poor neighborhoods. Effluent neighborhoods tend to receive high quality public goods because they can pay for them. Low income neighborhoods are

relatively condemned with poor public services because of their i. Turner and Wolman (2005) have argued that the presence of political boundaries in a city is an indication of recognition of an area as a residential spatial unit bearing distinct features and separate from others. In this regard, spatial residential units bear attributes that would attract specific group of people to respective neighborhoods. For example in this research, the study area (Shauri-Moyo, in Nairobi) is just one of the residential spatial units that have concentration of low income people and is known to attract low income people into its neighborhood.

2.4 History of low income residential neighborhood in Nairobi

Urban segregation in Nairobi has been there and can be traced back to colonial period. It is understood that during the colonial period, before 1963 residents of Nairobi experienced colonial government rolled-out spatial segregation which divided the nation in terms of race. The city development model adopted by colonial government was known as garden city model. The model ensured that the city's growth was in tandem with its economy. With this model urban sprawling was kept at bay, as migration of the Africans into the city was segregated on specific residential areas. Those who had employment in the city's commercial, administration and industrial areas were allocated a place for them to reside on (Stren, 1978). This was achieved by dividing residential settlements based on race and this occasioned settlement of European on the North western and western parts, Asian were settled on the Southern parts while Africans were restricted to reside on the Eastern parts characterized by high population density and poor public services (Salau, 1988).

According to Werlin(1974) Nairobi city retained the cosmopolitan characteristic with distinct and separate residential neighborhoods for European, Asian, and African natives despite Kenya attaining its independence from the colonial government. It was further observed by Akumu and Olima (2007) that, after Kenya attained its independence restriction on natives migrating into the city was lifted and this led to influx of natives into the city. High demand for few

available housing resulted into spatial sorting of people based on their ability to afford desired housing in a specific neighborhood. Low income people have concentrated themselves in the larger part of Eastern region (formerly Africans settlement in the colonial government). The study area in this research -Shauri-Moyo is an outstanding low income neighborhood in Nairobi, with almost 95% households living there as tenants (Nairobi City Council, 2012). The residential area is marked by poor housing stock conditions and poor neighborhood and relatively low quality public service and infrastructure.

2.4 Rationale of home-ownership

In Kenya owning a home is seen as a sign of status and mostly those who own are respected. According to United States National Homeownership Strategy of 1994, it emphasizes the importance of homeownerships. Home ownership has a number of both economic and social benefits that include; strengthening households and making them to be good citizens; give households more control and responsibly within the residential area, and households will have an incentive to promote and contribute to making living environment good.

Goetz and Sydney (1994) in their study pertaining homeownership and low income tenants housing found that residential area occupied by low income individuals result in a decline of neighborhood. They further pointed out policies that promote affordable rent need to be avoided as this would concentrate poverty. Homeowners are less transient as compared to renters and thus have

stake in the residential area. Homeownership would fight moral hazard among the renters; that is behaving badly because in renting there is no incentive to maintain good neighborhood. Landlords do have an incentive to make good their housing units but sometimes not rewarding especially if it is difficult to raise rent to cover the cost. Therefore, owner occupied housing is better off.

Rohe and Webb (1996) did some study using United States National Surveys of Families found that homeownership may provide residential satisfaction and comfort and self-esteem among the home owners. Therefore, promoting homeownership among the low income tenant's households in Shauri-Moyo is not in vain, it will promote healthy living environment and productive population.

3.0 DATA ANALYSIS AND DISCUSSION

3.1 Introduction

It is the objective of the researcher to give some description concerning the population surveyed in Shauri-Moyo, including the occupancy patterns in the housing units and household characteristics of persons living in the study area. This information is vital because it is useful when it comes to comparison purposes concerning the population of the study area and other housing estates. Also, the information will provide necessary background for study of priorities and housing preferences of the survey population.

3.2 Housing density and Occupancy Patterns

The results from the survey indicate that seventy percent (70%) of the let housing units included in this survey have three or less rooms. Table 3.2 (a) summarizes some of the results from the survey. The study found that in average, the average number of persons living in each housing unit is 5.1 (counting sharing relatives and friends); in this case the average number of adults is 2.8 while for children is 2.3 per housing unit. The occupancy rates found in this study is higher than the average for the entire Shauri-Moyo. This is because the study considered only rental dwellings excluding owner occupied housing units.

Table 3.2 (a): Household Composition

No of household members	% of the total	Average no. of rooms occupied
1	9	2.1
2	7	2.6
3	14	2.4
4	18	2.5
5	20	2.2
6	12	2.9
7	11	3.0
8 and more	9	3.0

As expected in this study, there are some socio-economic attributes that would result because of this clustering of households in this study area. The majority of the surveyed households surveyed have four (4) to six (6) household members (see table 3.2 (a)). Also, as expected that there no significant variation size and the number of rooms occupied. It seems there is only a slight tendency for larger households to occupy more number of rooms than smaller households in this case. On the interview form there was a question directed to head of household to give his/her opinion on the number of rooms he/she considered adequate to accommodate housing members; but there was no significant relationship between the household size and he number of rooms desired.

Table 3.2 (b): Household head and household characteristics

(a) Household composition	Proportion (%)
• Single	6
• Single with children	6
• Single with relative/friend and /or children	15
• A couple	7
• A couple with children	40
• A couple with relative/friend and /or children	26

(b) Gender of head of household	Proportion (%)
Male	81
Female	19

(c) Household head education	Proportion (%)
No formal education	3
Primary education (Standard 1 - 8)	25
Secondary education (Form 1- 4)	58
Technical training college	12
University training	2

3.3 Households composition

The tenant household of Shauri-Moyo Estate can be described as middle age, majority are between the ages of 34 and 43 years representing a percentage of 63 % of the total population. The married couples with children are majority with

40%. In terms of education majority of the couples are secondary school leavers (56%) and those who have small children have domestic servants to take care of children as they go for work (refer to table3.3).

Table 3.3: Household composition

(b) Household age (years)	Proportion (%)
19 - 23	5
24 - 28	11
29 - 33	14
34 - 38	30
39 - 43	33
43 and above	7

The study established that few households (6%) are single households; one person households without children and majority of them are males. An equally number of single heads (6%) has children with them. The couples living alone without children or relative comprises 7% compared to those living with their children (40%). The heads of households majorly comprises of male (89%) and over 80% of them have completed secondary education and work in the nearby industrial area.

The proportion of dependent children in the surveyed population is 47%; comprising children belonging to the nuclear family and some relatives. Taking into account only households with children, there is an average of 3.3 children per household; otherwise there are 2.5 children per household on average in survey population. As mentioned earlier, the surveyed population composed of middle age persons and therefore majority (65%). of children are aged between 10 and 17 years. The research found that 80% of total children were attending schools (formal). A total of 45% of these children were in secondary school, 25% were in primary school while 15% were in nursery school.

3.4 Length of Residence

The study found that few of the heads of households in the survey population are recent arrivals in the Shauri-Moyo Estate while majority have resided in the estate for between the rest Nairobi and the majority have lived there between 3 to 16 years. It seems most of the tenants have liked the area and to some extent the types of houses. It is clear from the data that landlords prefer regular turn-over of tenants so as to have an opportunity to increase market rents.

Table 3.4: Length of Residency

Length of residency of the household head in the Shauri-Moyo Estate	Proportion (%)
Less than 2 years	9
2 - 5 years	18
6 - 10 years	37
11 - 15 years	20
16 - 20 years	12
Over 20 years	4

3.5 Income Structure and Housing Expenditure Patterns

3.5.1 Introduction

One of the objectives of the study was to understand financial attributes of the low income tenant household in Shauri-Moyo. The researcher did a careful evaluation of the group's monthly income from diverse sources, and how much they were willing to part with for home ownership. The correlation between total income and housing expenses was crucial in understanding willingness to pay for home-ownership in the study area.

3.5.2 Households income sources

All of the heads of households are employed in one way or the other; the larger part (88%) of the survey population is full time employed. A few (15%) of heads of households are self-employed and they have been living in the area for over 10 years; mostly engaged in trading and commercial activities such as operating retail shops. The survey population revealed that employees in the private sector (44%) are slightly more than those employed by public sector (43%) (*refer to table 3.5.2*)

Table 3.5.2 Employment status

Employment Structure	
Employment status	Percentages
Unemployed	-
Employed in Public sector	41
Employed in private sector	44
Self employed	15

Length of employment	
Less than 1 year	8
1 - 3 years	20
4 - 8 years	38
9 - 13 years	20
14 - 19 years	9
20 years and more	3

3.5.3 Housing expenditure patterns

It emerges that the percentage of housing expenditure decreases as income increases. Since the research targeted only low-income household, there was no much difference in total monthly housing expenditures among different income groups. As expected from the survey the ratio of income spent on housing decreases with an increase in income (See *table 3.5.2*). There was no significant relationship between monthly income and expenditure on basic utilities such water and power. However, as expected the expenditure on water seems to increase with housing size.

Table 3.5.3 (a) Total Household Income

Total Monthly Income (Kenya Shillings)	Percentage total monthly household income	
	Individual (%)	Cumulative (%)
Less than 12,000	6	6
12000 - 18000	11	17
18001 - 24000	19	36
24001 - 30000	21	57
30001 - 36000	23	80
36001 - 42000	11	91
42001 - 48000	7	98
48000 - 54000	2	100

The housing expenditures of the survey population range from Kenya shillings 8,300 to 12,750. The amount is inclusive of expenses of basic utilities such as water and electricity. The modal total household income range is Kshs. 24,000 to Kshs. 30,000 while the portion of income expended on housing varies from 23% to 50%; which is as expected in the low income household group. Generally, the results show that rental housing in Shauri-Moyo is not affordable because a majority of the tenant households spend more than 30% of their income on housing (refer to table 3.5.3 (b)).

Table 3.5.3 (b) Household income, expenditure and willingness to pay for homeownership

Total Monthly Income (Kshs)	Total monthly housing expenditure*		Present monthly rental payments		W.T.P for homeownership
	Average per income group	% income	Average per income group	% income	
Less than 12,000	8300	-	6500	-	6000
12000 - 18000	8700	58	7500	50	7800
18001 - 24000	10750	51	9200	44	9000
24001 - 30000	12400	46	11000	41	10000
30001 - 36000	13870	39	10900	33	11250
36001 - 42000	12480	32	10500	27	12000
42001 - 48000	12600	28	11750	24	12500
48000 - 54000	12750	25	11900	23	13000

Generally all the households show preference of homeownership in Nairobi; they consider it as a good investment and source of security to the household. The respondents are willing to pay for homeownership. The amount they are willing to pay differs between income groups but compares well with the monthly rent.

3.6 Housing Preferences

As expected, researcher had to ensure the survey population gave realistic information. The respondents needed to visualize alternatives of various available house types as well as desirable design features. The approach considered in this study was oral approach specific features of interest were evaluated by the respondents in relation to the situation of present housing. Three choices of housing types were presented to the interviewees: bungalow, maisonette and flat.

Initially, we discussed with interviewees about different surrounding housing estates in Nairobi. Further, we sought their opinion on what they like and dislike about Shauri-Moyo residential area and whether they wish to own a house in the estate. Based on the present houses, researcher discussed what extent they were satisfied with the current house and also how they view the surrounding estates. Thus prepared to think about housing in its different components interviewees were asked which type of house they prefer to buy given choices of different specific options. The choices offered were a bungalow type house, a courtyard type house, a maisonette (two-story terraced house), a flat (a unit in an apartment building) or a house of the respondents own choice not covered by the options provided(See table 3.6(a)).

Table 3.6 (a) Household composition and house type's preferences

		Bungalow	Maisonette	Flat	
Percentage of total		43	16	41	(100)
<u>Household composition</u>					
	%				
Single	6	42	14	44	(100)
Single with children	6	39	15	46	(100)
Single with relative/friend and /or children	15	41	20	39	(100)
A couple	7	48	18	34	(100)
A couple with children	40	40	19	41	(100)
A couple with relative/friend and /or children	26	49	11	40	(100)
<u>Household head education</u>					
No formal education	3	56	20	24	(100)
Primary education (Standard 1 - 8)	25	47	17	36	(100)
Secondary education (Form 1- 4)	58	42	16	42	(100)
Technical college/ university training	14	38	14	48	(100)

3.6.1 Preference on house type

The households surveyed seem fairly satisfied with the type of house (bungalow) they presently live in. As expected majority of households (43%) prefer to purchase bungalow comparable to the one they are living in now (see table 3.4.1 (a)). The other house type that is largely favored by survey population was flat at (41%). There was little interest on Maisonettes may be because the house type is not found in the surrounding neighborhoods, and somehow associated with rich neighborhoods.

Flats appear to be the only attractive alternative to the current housing type for majority of the households, and the reason behind this could be they are relatively cheap compared to bungalows since they can be done as high-rise; and can accommodate more housing units in a given plot. The differentiation in preferences may be to some extent correlated with certain socio-cultural characteristics of each household for example religion, household size, age of children and some degree "status" linked to some house types. Also, a specific house type can appear to be attractive because it is associated to particular neighborhood.

Preference for bungalow seems not associated with the amount household's is willing to pay to own similar house but because survey population are used to that type of house.

In terms of level of education of head household it seems those who have Form four grade and above level education do have more preference of flats compared those with lower level of education.

3.7 Preference on neighborhood features

Not only, housing expenditures and the type of house influenced the choice of preferred housing neighborhood but strongly determined by the quality of specific neighborhood. The three neighborhood attributes were included in the research:

- a)** Quality of environment - cleanliness, security and density
- b)** Locational attributes: neighborhood in relation to place of work and transportation connections and
- c)** The quality of community amenities.

It was one of the goals of the study to understand housing priorities and preferences of the surveyed population with respect to neighborhood attributes. Questions were expressed to allow the respondents show how they value them.

3.8 Environmental quality

Generally, residential character of Shauri-Moyo is positively appreciated as safe and secure, though a lot needs to be done to address some deficiencies. Those who appreciate that the environment is clean, safe and secure are only thirty five percent (35%) compared to those who are locational attributes at forty two

percent (42%) (See table 3.5.1). Since the majority of the households have children with them, there is a need for safe and clean playgrounds and related facilities

The survey population viewed environmental factors as major concerns of complaint about Shauri-Moyo residential estate (40%) and why they prefer alternative housing residential estate. The most common were concerns of security and the need to have the estate light up using high mast lighting system.

Table 3.8 Neighborhood Attributes

Valued characteristic of Shauri-Moyo Residential Estate	
Quality of Environment	
Clean	15
Safe and Secure	10
Very quiet	11
	(35)
Locational quality	
Proximity to working center	31
good transportation connection	11
	(42)
Community amenities	
Good schools	8
good hospitals	6
	(14)
Affordability	
Affordable rent	9
	(9)

3.9 Locational Aspects

With professional, technical and clerical workers prevailing in this population, the majority (60%) of heads of household work in the city center (a distance of six kilometers); the industrial area (5miles away) is the place of work for 23% of heads of households, and only 6% work within the neighborhood. The place of work of the spouses is even more heavily focused on in the City Center. Thus, the quality of public transportation is a factor of major concern. As shown in Table 3.5.3, most households depend on public transportation to go to work.

Table 3.9 Mode of Transportation

Mode	Household Head (%)	Spouse (%)
Bus	64	66
Matatu	18	21
Car	12	10
Walking	4	3
Bicycle	2	0

Generally, the survey population considered transportation network as sufficient and has positively influence the choice of Shauri-Moyo as good residential estate. Majority of head of households (56%) expresses that it spends less than 30 minutes on their trip to and from work place. The only dissatisfaction in this sector is the unreliability of bus services due to poor scheduling leading to long waiting time. The cost of transportation was considered to be relatively high but this was out weighted by positive comments on the same. There was likelihood of

households relocating to better neighborhoods having better transportation and close to place of work if only they could find a house going for the same price.

3.10 Community facilities

We all know that good community facilities contribute to a well-functioning of a residential neighborhood. The current state of these facilities in the study area was reported generally as inadequate by and this was a major dissatisfaction in the survey area. In the study area, community facilities such as public dispensaries, public schools and a market were available but the existing public spaces are in poor state. Public spaces are very untidy and lack basic facilities such as toilets. The survey population mentioned this as important reason that has seen high turnover of tenants in the past. If this neighborhood is provided with quality community facilities residents they will be more satisfied with the neighborhood.

3.11 Preferred residential area

In the survey population, all the tenants show preference to reside in better housing estates in the Eastern part of Nairobi predominantly residing in low income neighborhoods. Taking into consideration the housing expenditure of the surveyed population, their assessment were realistic of the market; only few households give the impression that they would like to acquire housing in

characteristically middle income located in the Western part of Nairobi city. The preference for this neighborhood is due their quality neighborhood and excellent community facilities.

4.0 CONCLUSION

The main objective of the study was to get an insight of housing preferences of low income tenant households residing in Shauri-Moyo estate in Nairobi. The researcher studied both aspects of housing preferences; that is socio-economical and financial aspects of low income tenant households with a view of understanding willingness to pay for home-ownership among the low income group. Further, the study went further to understand priorities and preferences of this group regarding both housing and neighborhood characteristics.

The survey population comprise of youthful married households who have children staying with them attending nearby public schools. The majority of households in the surveyed population stay in two rooms and there are 5.2 persons per housing unit. This means there is overcrowding.

The low income tenant households in the study area pays monthly rent of between Kenya Shillings 6,500 and 10,300 and it seems the prevailing market rent in the area. The rent vary from 50% (for income bracket, Kshs.12,000 to 18,000) to 23% (for income bracket of kshs. 48000 to 54000). The prevailing rent appears to be unaffordable to majority of the tenants.

Households residing in the study area have a desire to own their own homes and they prefer their present neighborhood. However, it is clear that they are only willing to pay lesser contribution for homeownership than what they currently pay as monthly rent. The reason behind this could be because total housing expenditures are taking away a large portion of monthly income and thus crowding out consumption of non housing commodities.

It is clear from the survey population that the quality of environment, presence accessibility to community facilities and locational qualities are enormously vital in the selection and appreciation of a residential neighborhood. The study reaffirms that a clean, safe and sound environment coupled up with provision of excellent community facilities and efficient transportation system results in creation of a stable and comfortable resident-owner community.

The survey population are conscious of the much publicized public supported low-cost housing (which get government subsidies) that are paying significantly lower monthly contribution towards home-ownership as compared to what this group of tenants are currently paying as market rent. This awareness has given the survey population an incentive to own their housing, irrespective of the survey of household characteristics and other factors. There is a potential

among this group and only if it is supported, it will address looming housing shortage among low income people.

5.0 RECOMMENDATION

5.1 Introduction

The survey population are conscious of the much publicized public supported low-cost housing (which get government subsidies) that are paying significantly lower monthly contribution towards home-ownership as compared to what this group of tenants are currently paying as market rent. This awareness has given the target group incentive to own housing units. A well designed financial system can be done having taken their (survey population) willingness to pay into consideration. The researcher recommends a number of interventions that have been proven to produce positive results in promoting home ownership among the low income households.

5.2 Government regulations

Government regulation plays a vital role in promoting development of sustainable community facilities and quality neighborhood. Well-designed regulations on land use can generate benefits such as quality houses and excellent community facilities. Such regulations should facilitate local authorities to provide public services that meet preferences of neighborhood residents. Government need to designed regulations that permit sorting of households into neighborhoods which similar demands for public services.

The sorting can results in efficient taxation and production of public services by the local government.

There are a number of areas in which government regulation can support include method of construction, building materials, attributes of housing units, community facilities and on neighborhood features. Government can regulate the number of housing units per acreage reducing crowding while promoting housing quality, as well as attractive neighborhood.

5.3 Affordability

It is evident from the data that majority of households in Shauri-Moyo live rental housing units that are unaffordable. I concluded that the tenants in the study have income shortage of income that has led to problem of affordability. A housing unit was defined as unaffordable if a household's expenditure amount to more than 30% of the total household income. Housing crisis is worst among these poor renters. Recommended policy interventions (subsidies) are expected to narrow down affordability gap. The policy interventions mentioned will address the link between the high housing expenditures and meager incomes. As discussed below, there are a number of ways to address lack of affordable housing and promotion of home-ownership among low income households..

5.3.1 Subsidies

Policy-makers do support policies and programs that allocate resources towards subsidizing housing expenditure for low income households. Subsidy can be in form of a housing voucher or production program subsidy. Housing voucher can be used to pay part of the rents for quality housing unit but housing voucher is not the best option because it can lead to high rents due to high demands. Subsidy on new constructions (subsidies on supply side) is the better option over housing voucher. This kind of subsidy is expected to revitalize neighborhood in which the constriction is done. It is reasonable to believe that subsidized housing projects make a community of poor housing and households more beautiful.

5.4 Filtering

There is doubt on the ability of some programs that rely on private market to supply housing for low-income households. Researchers such as Baer (1986) pointed that developers tend to supply few non subsidized housing for the poor. Private market is known to supply housing units to poor through a dynamic process called filtering. Filtering is a process where with time houses built for higher income households deteriorate in terms of quality, and are passed down to lower income households. The process is understood to be the long term supplier of housing units to lower income households. It is cheaper to supply housing to low income households through depreciation than by undertaking new construction.

It is understood that some government regulations in housing sector such as quality standards may have negative effect on the supply of housing units for low income households through filtering. Therefore, in order to promote this process government need to clear way for this process to supply low cost housing units to the poor.

5.5 Self-help housing scheme

This program is geared to enable low income individuals afford to own their homes. The target group is those who are unable to purchase quality housing units in the market. In this program households participate in construction and are supervised by skilled construction staff. This will result in reduction of cost associated with labor costs and these savings will enable low income households to own their homes. For this program to succeed, government needs to come up with a nice framework that includes procedures and a fund to be loaned out to target group to finance construction of their modest housing.

5.6 Mixed Housing

The government of Kenya should facilitate provision of low income housing⁴ for the low income households comprising of combination of low low-cost

⁴ Low income housing project means project of not twenty housing units meant for low income households. This is according to Ministry of Housing Kenya

housing units for the low income and some for middle income to be allocated at the prevailing prices in the market. The move is anticipated to encourage the creation of a socio-economically and heterogeneous resident owner inhabitants in Shauri-Moyo, and this may result in creation of a stable and comfortable resident-owner community.

6.0 APPENDIX

SHAURI-MOYO DESIGN STUDY

Note: Interviewer is expected to explain to respondents about the objective of the research and encourage them to be free and honest as possible in answering the questions ask.

Date..... Interview No.....

Name of Interviewer:

(All questions to be addressed to the Head of Household)

PART A: OCCUPANCY PATTERN

House number as in the code book

Name of the household head.....

Number of rooms in the house (exclude bathrooms and kitchen).....

Number of persons living in the house

Adults.....

Children.....

PART B. SOCIO- DEMOGRAPHIC OF HOUSEHOLS

1. Head of household tenure status_____

1. Main tenant

2. Granted the house without paying anything for it-----

2. Head of household age (years)

0. 14 -18

1. 19 - 23

2. 24 -28

3. 29 - 33

4. 34 -38

5 39 -43

- 6. 43 -47
- 7. 48 – 52
- 8. 53 -57
- 9. 58 and above
- 10. Don't know

7. Head of household gender

- 1. Female 2. Male

8. Marital status of household head: _____

- 1. Single 2. Married
- 3. Separated or divorced 4. Widowed

9. The highest level of education attained: _____

- 1. No formal education 2. Completed Primary Education
- 3. Completed secondary education 4. Completed Technical/ vocational College
- 5. Completed university

Current members of the household (do not include servants)

Relationship to HH	Sex	Age	Education-level	occupation
1
2.....
3.....
4.....
5
6

OFFICIAL/EDITORIAL ONLY

- 10.** Total number of male children of age 10 years and above _____
- 11.** Total number of female children of ages 10 years and above _____
- 12.** Number of children schooling in nursery _____
- 13.** Number of children schooling in primary _____
- 14.** Number of children schooling in secondary _____

15. Number of household members who are earning _____

16. Total number of household members _____

17. Type of household composition

1. Single household head
2. Single household head plus children
3. Single household head plus relatives or friends
4. A Couple and other relatives or friends
5. A couple and children
6. A couple
7. Other

18. How long have you lived in Shauri-Moyo estate: _____

- | | |
|------------------|----------------------|
| 0. Born here | 1. Less than 2 years |
| 2. 2 - 5 years | 3. 6 – 10 years |
| 4. 11-15 years | 5. 16-20 years |
| 6. Over 20 years | |

19. How long have you leave in the current house? _____

(Check coding question 18)

20. When did you leave rural area for Nairobi? _____

(Check coding question 18)

PART C. HOUSEHOLD INCOME AND OCCUPATION

21. In terms of employment are you are: _____

0. Not employed
1. Employed (earning wage salary) in Public sector
2. Employed (earning wage salary) in private sector
3. Self- employed

22. Name your occupation and give detail description _____

SELF EMPLOYED ONLY

23. Do you have a business permit? _____

1. Yes 2. NO 3. No, I do not need one

24. Location of place of work: _____

1. Just at Home 4. Town center
2. Within the neighborhood 5. No fixed place
3. Industrial zone 6. Any other: _____

25. How long have you been in the current job (years): _____

26. If the Job: _____

1. Permanent 2. Casual
3. Temporary 4. Seasonal
5. Other

27. What gross amount did you get last month from the job (before tax deduction):

Ksh. _____ (Per month)

28. Do you have other extra income (for example pension, money from relatives) Kshs. _____

EDITORS/OFFICIALS ONLY

29. The total monthly income of household head: Kshs. _____

Per month (Sum amount of question 27 and 28)

Is there any other member of family earning: (check question 15)

Relationship to Household head	Type of Job	Earnings per month	per	Input to household income
1				
2				
3				
4				

EDITORS/ OFFICIALS ONLY

30. The occupation of the spouse _____

31. Monthly income of the spouse in Kshs. _____

32. Total contribution by spouse in Ksh/month _____

33. Contribution by other household members Kshs. _____

34. The total household income in Kenya Shillings per month: _____

(Sum amount of questions 29, 32 and 33)

PART D. HOUSEHOLD'S HOUSING EXPENDITURE AND FINANCING

35. What amount do you pay for rent (exclude other charges such as electricity bills, water and others)

Kshs. _____

36. What amount do you pay for water per month: _____

37. How much do you pay for electricity per month: _____

EDITOR ONLY

38. The total monthly housing expenditure (kshs/month) _____
(Sum amounts in question 35, 36 and 38)

Transport

39.What is your mode of transport to work:

- | | | |
|------------|--|--------------------|
| 1. Walking | 2. A bicycle | 3. Own car |
| 4. Matatu | 5. Bus | 6. Company vehicle |
| 7. Other | 8. Not applicable (not employed or work at home) | |

If spouse is working:

40. How does your spouse go to work: _____
(Refer to coding question 39)

41. If spouse is using matatu or bus: how much are the fare per month
Per month: (25 days x daily costs) _____

42.If using own car what is the number of km driven per day:

- | | |
|--------------------|-------------------|
| 1. Less than 10 km | 5. 10 to 20 km |
| 2. 21 to 30 km | 6. 31 to 40 km |
| 3. 41 to 50 km | 7. 51 to 60km |
| 8. More than 60 km | 9. Not applicable |

43. How long it takes to travel from house to work place:

- | | |
|------------|-------------|
| 1. 15 mins | 5. 120 mins |
| 2. 30 mins | 6. 150mins |
| 3. 60 mins | 7. 180 mins |
| 4. 90 mins | 9. N.A |

44. What are the two main advantages of living in Shauri-Moyo Estate?

45. Second advantage (refer to question 44)_____

46. What are the two main problems with Shauri-Moyo Estate_____

47. Second problem (refer to question 46)_____

48. If you find a house of the same price as the one you are living in now in another neighborhood, would you prefer to live in there:

Name of the neighborhood: _____

49. Why choose that neighborhood (as mentioned in question 45)_____

50. If new houses are built in Shauri-Moyo estate would you like to own house:

1. Prefer to own house there
2. Prefer to rent a house in the estate
3. Prefer to remain your current house

51. Why would you prefer (refer to question 50 and use the codes)_____

If response is no:

52. Why not: (see codebook) _____

53. Did you ever try to get you own house in one of the new housing estates

1. Yes
2. No

If response is yes

54. Which estates (refer to question 48 for coding)

If response is no:

55. Why not: (see codebook)_____

FOR ONLY HOUSEHOLD HEADS WHO PREFER TO OWN A HOUSE

56. What is the maximum amount you are willing to pay per month for house:____
(Exact amount to be coded)

57. Where would you get money (loan) to buy a house: _____

- 0. No loan required
- 1. From friends and/or relatives
- 2. commercial bank
- 3. Housing Finance Corporation of Kenya
- 4. Loan from employer
- 5. Savings and credit cooperatives
- 6. N.A

PART E. HOUSEHOLD HOUSING PREFERENCES

We will ask you questions with regard to your house, living environment as well as your priorities and preference of owning a house.

58. What don't you like about this house you are staying in:_____

- 0. None
- 1. Rooms are small
- 2. Toilet location is bad
- 3. Small kitchen
- 4. No security fence
- 5. Poor wall and ceiling finishes
- 6. Other
- 7. N.a

59. What do you like about this house you are living in:

- 0. None
- 1. It is a self-contained house
- 2. Nice lay-out
- 3. Sizes of rooms are adequate
- 4. Large house
- 5. Other
- 6. N.A

60. How many livable rooms your household is occupying (bedrooms plus living rooms) _____

61. What is the adequate number of rooms do you need to accommodate your household :(bedrooms plus living rooms) _____

62. If you are given a house of the size as your current your, would you prefer:

1. More and larger rooms
2. More but smaller rooms
3. Fewer but larger rooms
4. N.A

63. Where do you do your cooking in this house:_____

1. A kitchen room used by this household only
2. A kitchen room shared with other household
3. Just in the living room
9. N.A

64. What kind of cooking fuel are you using in the house:_____

1. Charcoal
2. Electricity
3. Kerosene
4. Wood
5. Liquefied gas
6. Other

65. Where do you eat with household in the house:_____

1. in the kitchen
2. in the living room or dining room
3. in the bedroom

66. What is your choice between the following types of houses if low income a new housing project is initiated:

1. A maisonette –two-storey row house commonly found in the high income neighborhood in Nairobi
2. A bungalow – type of house that is the same as what is in Shauri-Moyo estate and not storey
3. A flat
4. other

67. Why would you choose this type of house (refer to question 66):_____

68. If you could save approximately on the cost of your house, would you be interested being involved in the building of your own house, either in the actual construction or in acting as your own:

1. Yes 2. No

If response is yes

102. What method of construction would you use:

1. Using a contractor
2. Using household members
3. Using fundi (*where the owner employs and supervises someone with construction skills*)
4. Others

7.0 REFERENCES

- Follain, James, and David Ling. "The Federal Tax Subsidy to Housing and the Reduced Value of the Mortgage Interest Deduction," *National Tax Journal*, 8, 1991, pp. 155-99.
- J.M. Thomas, "Ethnic variation in commuting propensity and unemployment spells: some U.K evidence", *Journal of Urban Economics* 43, 385-400 (1998)
- Turner. S, "Barriers to a better break: Employers discrimination and spatial mismatch in metropolitan Detroit", *Journal of Urban Affairs*, 19, 123-141 (1997)
- J. Vrooman and S. Greenfield, "Are black making it in the suburbs? Some new evidence on intra-metropolitan spatial segmentation", *Journal of Urban Economics* 7, 155-167 (1980)
- H. Wial (1991), "Getting a good job: Mobility in a Segmented Labor Market", *Industrial Relation*, 30(fall), 396-416 (1991)
- W.J. Wilson, "The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy," The University of Chicago Press: Chicago (1987)
- Goodman, Allen. "Demographics of Individual Housing Demand," *Regional Science and Urban Economics*, 23, 1990, pp.83-102.
- B.A. Weinberg, "Black residential centralization and the spatial mismatch hypothesis", *Journal of Urban Economics* 48, 110-134 (2000)
- M. White, "The Measurement of Spatial Segregation". *American Journal of Sociology* 88 1008-1019 (1983)
- J. Yinger, "Measuring racial discrimination with fair housing audits", *American Economic Review* 76, 396-416 (1986)

- C. Rapaport, "Housing demand and commuting choice: An empirical analysis", *Journal of Urban Economics*, 42, 243-260, (1997)
- Glaeser, Edward, and Bruce Sacerdote. "The Social Consequences of Housing," *Journal of Housing Economics*, 9, 2000, pp. 1-23.
- Shilling, James, C.F. Sirmans, and Jonathan Dombrow. "Measuring Depreciation in Single-Family Rental and Owner-Occupied Housing," *Journal of Housing Economics*, 1, 1991, pp. 368-83.
- Smith, D.A. (2006), *Housing the World's Poor, The four essential roles of government*, *Harvard International Review*.
- Ha, S. K. (2002) " The urban poor, rental accommodations, and housing policy in Korea" , *Cities*, 19(3): 195-203
- Jones, P. S. (2003) "Urban Regeneration's poisoned Chalice: Is There and impasse in (community) Participation-based Policy?", *Urban Studies* 40(3): 581-601
- Obudho, R.A. and Aduwo, G.O. (1989) "Slum and squatter settlements in urban centers of Kenya: Towards a Planning Strategy", *Netherlands Journal of Housing and Environmental Research*, 4(1) pp. 17 – 29.
- Reardon, S. F., & Bischoff, K. (2011). Income Inequality and Income Segregation. *American Journal of Sociology*, 116(4), 1092-1153.
- Samaratunga, T. (2009). *Rapid population growth and affordable housing in Colombo city*. Paper presented at the PIA International Planning Conference, Darwin Australia.
- Obudho, R.A. (1987a); "Shelter and Services of the Poor in Nairobi, Kenya", Paper presented at Expert Group Meeting on Shelter and Services for the poor in Metropolitan Areas, Nagoya, Japan, 12 – 16 January.
- Republic of Kenya (2001); 1999 Population and Housing Census; Volume 1. CBS, Nairobi.
- Jencks, C., & Mayer, S. (1990). The social consequences of growing up in a poor neighborhood. In L. E. Lynn, Jr. & M. G. H. McGeary (Eds.), *Inner-city poverty in the United States* (pp. 111-186). Washington, DC: National Academy Press.

Logan, J. R. (2011). *Separate and Unequal: The Neighborhood Gap for Blacks, Hispanics and Asians in Metropolitan America*: Brown University.

Stren, R. (1978); *Housing the Urban Poor in Africa: Policy, Political and Bureaucracy in Mombasa*. Los Angeles, University of California.