ANALYSIS OF AFFORDABLE HOUSING MARKET NEEDS IN KENYA: A CASE OF NAIROBI METROPOLITAN AREA

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ABSTRACT

The main objective of the study was to analyze affordable housing market needs in Kenya with specific reference to Nairobi metropolitan area. The study specifically aimed to; determine demographics of people living in Nairobi Metropolitan Area; establish levels of income and expenditure on housing, utilities, transport, entertainment etc; determine rents paid for the various houses; identify Housing Preferences in terms of location, house type, sizes, prices etc and establish Factors that people consider when buying/renting a house. The study employed a descriptive survey research design and the target population comprised of 3200 residents in Nairobi Metropolitan Area. Data collection instruments comprised of online market and physical questionnaires in more than 40 sub-markets in Nairobi Metropolitan and the Nairobi County at large. Stratified random sampling technique was employed to select the 1600 respondents as the sample size for the study. The gathered data was analyzed using descriptive statistics and presented using tables and charts.The study findings indicated that affordable housing market needs in Kenya was determined by people demographic characteristics; level of income and expenditure on housing utilities; transport, entertainment etc; rents paid for the various houses; housing preferences in terms of location, house type, sizes, prices etc and factors that people consider when buying/renting a houses. On housing type and location preference, majority 70% of residents in Nairobi Metropolis earned Kshs 100,000 and below and spent approximately 25% of their income on housing costs. This means that for affordable housing the limit for monthly expenditures should be Kshs 25,000. The study concluded that location and access to and from work place is a key consideration when determining where to buy/rent a house. A 3-bedroom and 2-bedroom units were the most preferred typologies for buyers looking for houses to reside in. Furthermore, detached houses were the most preferred units, followed by apartments. In terms of location, areas in Kiambu County such as Ruiru, Juja, Thika, Kikuyu, Kiambu town were the most sought for and thus presented the best opportunity for investors. The study recommended for the implementation of a better integrated framework that brings together a wider set of comprehensive solutions to addressing the affordable housing market needs problem, with the government at the centre as the driver of the initiative. The government, the Capital Markets Authority, NSSF, Retirement Benefits Authority, Kenya Revenue Authority, private sector finance and development, all have a role to play and the specific solutions need to be wider. The study also recommended for an increase on the Sources of Funding which may Include the Deepening of Capital Markets & Access to Non-Bank Funding – There's need to have a concerted effort to look into ways of deepening the capital markets as a means to raising capital for funding affordable housing development aside from bank

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The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

financing. These alternatives may include REITS, tax relief etc. Strong Government Support should be enhanced, government involvement and commitment is imperative for the realization of affordable housing.

Key Words: *Affordable Housing, Market Needs*

INTRODUCTION

Kenya has an estimated population of 49.7 million people as at 2017, with 26.6% of the population being urban, according to the World Bank. In addition, the World Bank statistics show that Kenya has a relatively high population growth rate at 2.5% annually compared to the global average annual population growth rate of 1.2%. Relative to the global average urbanization rate for the past 10 years of 2.11% p.a as at 2017 and Sub-Sahara's average of 4.19%, Kenya has a higher urbanization rate of 4.45%, mainly driven by migration of individuals to urban areas in search of employment, better facilities and improved living standards (Word Bank,2015).This has resulted in an overall increment in pressure on amenities and services including water, power, sewerage systems, transport, land and housing especially in urban areas. In particular, increased demand for housing has resulted in upward pressure on land and house prices and rents making them unaffordable to several households. As a result, statistics from the World Bank show that approximately 61% of Kenya's urban population resides in informal and squatter settlements which are mostly characterized by poor structural quality of housing (temporary structures), overcrowding, insecurity and inadequate access to clean water and sanitation (KNBS,2013).

Problem Statement

According to the Constitution of Kenya 2010, article 43(1b) provides that every person has the right to accessible and adequate housing and to reasonable standards of sanitation. The Constitution also guarantees every child the right to shelter. According to data from The National Housing Corporation, it is estimated that Kenya has a backlog of 2,000,000 housing units required to sufficiently house the population, with the demand growing by 250,000 units annually, against a housing production of less than 50,000 units annually. This highlights the gravity of the situation and the need for increased efforts to ensure access to adequate housing for every Kenyan. Important to note is that provision of affordable housing should not only be for low-income households but also the expanding middle-class who despite their increasing incomes cannot still afford to own a home especially in urban areas. According to the Kenya National Housing Survey 2012/13 conducted by the Kenya National Bureau of Statistics (KNBS), only 29.5% of urban households in Kenya were home-owners while the other 70.5% were renting their places of residence. This is low compared to developed markets such as South Africa and the United States of America (USA) where home-ownership stands at 53.5% and 63.9%, respectively as at 2017 (KNBS,2013),

Despite efforts by the government and various players in the private sector to increase the housing supply, the fast-growing demand has consistently outweighed the supply of housing. This is not only a challenge in Kenya, but in the entire Sub-Saharan Africa, with several initiatives and strategies proposed for addressing the issue, a key notable problem that persists is the supply of houses that meets affordable housing market needs to the Kenyan population. The main purpose of the study was therefore to analyze affordable housing market needs in Kenya with specific reference to Nairobi metropolitan area. The study specifically aimed to; determine demographics of people living in Nairobi Metropolitan Area; establish levels of income and expenditure on housing, utilities, transport,

entertainment etc; determine rents paid for the various houses; identify Housing Preferences in terms of location, house type, sizes, prices etc and establish factors that people consider when buying/renting a house.

LITERATURE REVIEW

Different institutions have different views and definition on what affordable housing is but most agree that it should meet the needs of low to lower-middle income households in any country's economy. Some of the definitions of Affordable Housing according to various authorities and institutions: According to the Kenya Government Big Four Agenda Blue Print, affordable housing costs between Kshs 800,000.00 to Kshs 5,600,000.00 per unit and will target individuals earning an income of Kshs 150,000 per month or below. According to The Economic Times, affordable housing are units that are reasonably priced for that section of society with the median household income or below, As per the US Department of Housing and Urban Development, the definition of affordable housing is for a household to pay no more than 30% of its annual income on housing, and therefore, households paying more than 30% of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transport and medical care (ROK,2015).

The National Affordable Housing Summit Group of Australia (2012) defines it as housing that is reasonably adequate in standard and location for lower or middle-income households and does not cost so much that a household is unlikely to meet other basic needs on a sustainable basis, According to the latest statistics from the Kenya National Bureau of Statistics (KNBS) on income distribution in the formal sector, 46.3% of employees earn Kshs. 29,999 per month and below and 74.5% earn Kshs 49,999 per month below. Going by the first definition of affordable housing above, the median income level band is Kshs. 30,000-Kshs 49,999 per month, that is, where the 50th percentile lies. Affordable housing would therefore be that which can be afforded by individuals earning Kshs. 49,999 per month and below. These are individuals who can afford to pay rent of Kshs. 15,000 per month and below, assuming a maximum of 30% of their gross income is spent on housing costs. In order to buy a house using a mortgage loan and pay instalments equal to their monthly rent, this individual can afford a house costing not more than Kshs.1,400,000.00. To arrive at this, it can be assumes a 20-year mortgage, at a 13.5% annualized interest rate and pay a 10.0% deposit and use their monthly rent as the mortgage repayments. The best-case scenario would be to assume twice the monthly income where a household has more than 1 income-earner, then the median income household can afford a maximum of Kshs 2.7 million for a house as shown below;

Table 1: Affordable Housing Pricing Determined by Income

Income Level	%	Cumulative distribution	Recommended rent Per income level	Maximum mortgage accessible	Maximum Mortgage (Household)
		%	30% of income	1 Person	2 People
0-9,999	0.90	0.90	3,000	300,000	500,000.00
10,000-14,999	1.70	2.60	4,500	400,000	800,000.00
15000-19,999	7.30	10.00	6,000	500,000	1,000,000.00
20000-24,999	16.40	26.40	75,000	700,000	1,400,000.00
25,000-29,999	19.90	46.30	9,000	800,000	1,600,000.00
30,000-49,999	28.20	74.50	15,000	1,400,000	2,700,000.00
50,000-99,999	22.60	97.10	30,000	2,700,000	5,500,000.00
>100,000	2.90	100.00	>30,000	>2,700,000	>5,500,000

We have considered that some households have more than 1 income earners and assumed a total maximum income of 2 times the level of income.

Source: KNBS /Cytonn/World Bank/ 500,000 Affordable Homes Program

From table 1 above, it was deduced that affordable house for a household earning the median income or below would cost about Kshs.2, 700,000 at maximum. According to Word bank (2015) Kenya has a cumulative housing deficit of 2 million units; increasing housing deficit by 200,000 units per year occasioned by 2.5% per annum growth in population, 4.45% per annum urbanization rate and inadequate supply of 50,000 units annual not able to meet demand occasioned by urbanization. Source: NHC, Ministry of Housing and World Bank. According to the Ministry of Housing, (2012), 83.0% of the existing housing supply is for the high income and upper-middle-income segments, with only 15.0% for the lower-middle and 2.0% for the low-income population. The continued supply for housing in the high income and upper middle segments has resulted in increased competition among developers. On the other hand, housing for the low-middle and low-income has attracted minimal interest from private developers due to the relatively low premiums they accord, and is thus primarily provided by the government and institutions such as SACCOs.

METHODOLOGY

The main objective of the study was to analyze affordable housing market needs in Kenya with specific reference to Nairobi metropolitan area. The study specifically aimed to; determine demographics of people living in Nairobi Metropolitan Area; establish levels of income and expenditure on housing, utilities, transport, entertainment etc; determine rents paid for the various houses; identify Housing Preferences in terms of location, house type, sizes, prices etc and establish Factors that people consider when buying/renting a house. The study employed a descriptive survey research design and the target population comprised of 3200 residents in Nairobi Metropolitan Area. Data collection instruments comprised of online market and physical questionnaires in more than 40 sub-markets in Nairobi Metropolitan and the Nairobi County at large. Stratified random sampling technique was employed to select the 1600 respondents as the sample size for the study. The gathered data was analyzed using descriptive statistics aided by Statistical Package for Social Sciences (SPSS) and presented using tables and charts.

SUMMARY OF FINDINGS

Respondents Marital Status

The study respondents comprised mainly of married persons at 59% of the total respondents while 41% were single.
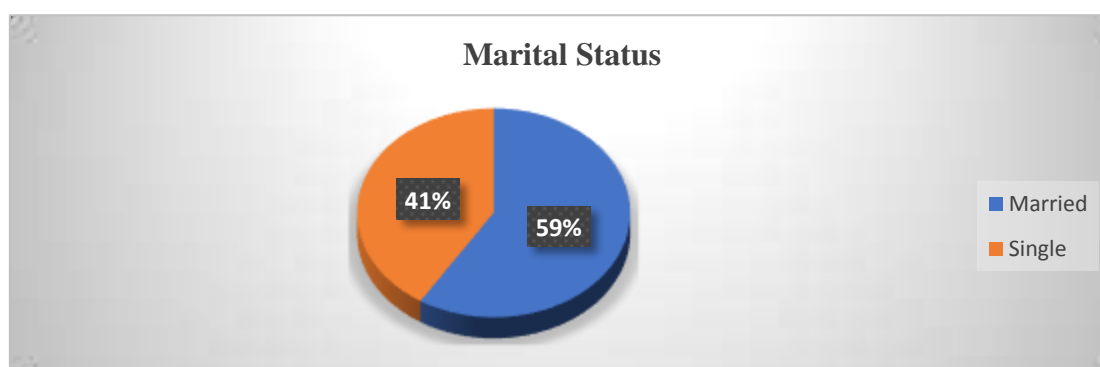

Figure 1: Marital Status
Source: Research Data (2020)

Age

As presented in figure 2 below majority 53% of the respondents were in the 26-35 age bracket while 47% were of the age between 36 and 45 years.
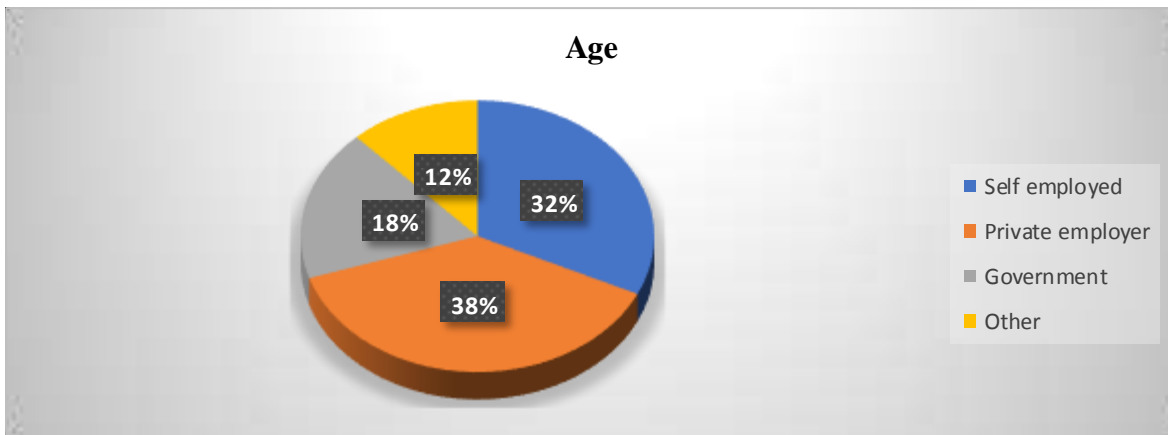

Figure 2: Age
Source; Research Data (2020)

Employment Status

The study asked our respondents on the status of their employment, and that of the spouse for those who were married. Figure 3 showed that majority of the respondents at 26% are self-employed while 38% were employed by a private firms and other organizations and 16% employed by the government. Majority of the households who were 55% had 2 income earners i.e Husband and wife.
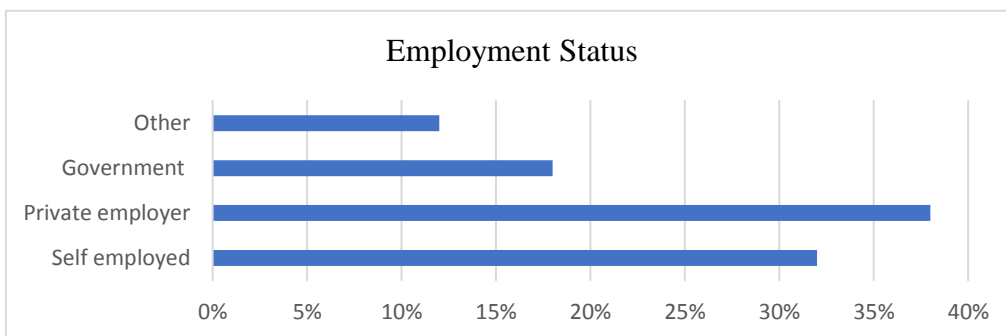

Figure 3: Employment Status
Source; Research Data (2020)

Location of Work Place

The study aimed to determine the respondent's location of work place. This indicated that when considering housing for Nairobi residents, it was important to ensure ease of access to and from their work place. Majority of the respondents relied on public transport to go to work and thus developers needed to pay attention to the availability and cost of public transport when considering locations to put up affordable housing. Figure 4 showed that 48% of the respondents used public service vehicle as means of transport; 21% used personal car;16% walked to their place of work and others 15% relied on motorcycles and bicycles.
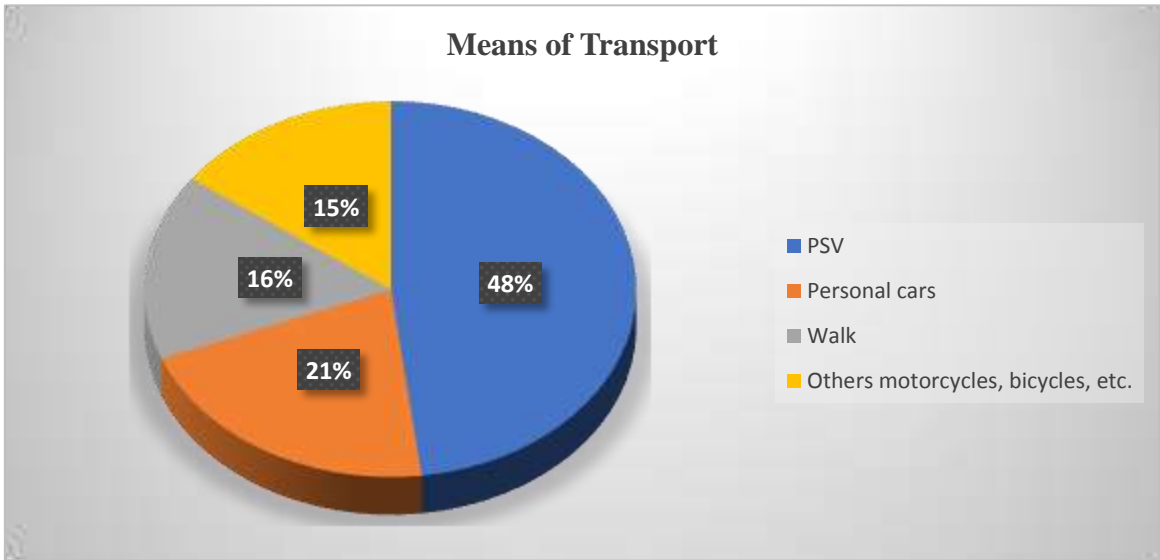
Means of Transport

(Pie chart legend: PSV 48%, Personal cars 21%, Walk 16%, Others motorcycles, bicycles, etc. 15%)

Figure 4: Means of Transport

Source; Research Data (2020)

Household Incomes

The study aimed to determine the house hold incomes. This was consistent to the research on gig workers and KNBS data as presented in figure 5 and figure 6 below:
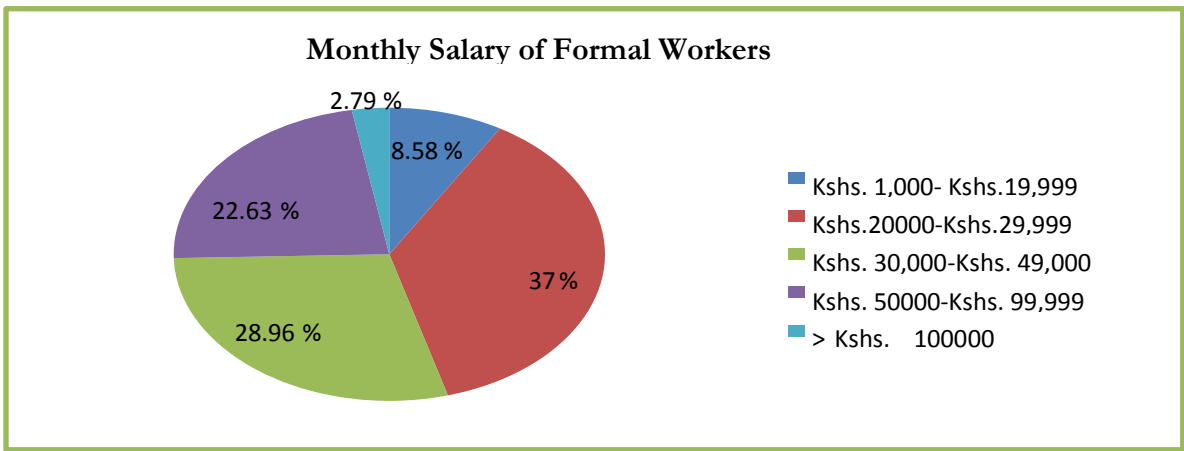

Monthly Salary of Formal Workers

(Pie chart values: 2.79 %, 8.58 %, 37 %, 28.96 %, 22.63 %)

Legend:
- Kshs. 1,000- Kshs.19,999
- Kshs.20000-Kshs.29,999
- Kshs. 30,000-Kshs. 49,000
- Kshs. 50000-Kshs. 99,999
- > Kshs.   100000

Figure 5: Monthly salary of Formal Workers

Source: KNBS/businessdaily.com, Wednesday November 20, 2019; workers earning over Kshs.100, 000 revealed

Monthly Household Income (Informal/Gig Workers)

Income Range	Percentage
> Kshs. 50000	~3%
Kshs. 40000-Kshs. 49,999	~4%
Kshs. 30,000-Kshs. 39,000	~13%
Kshs.20000-Kshs.29,999	~27%
Kshs. 10,000- Kshs.19,999	~38%
< Kshs. 9,999	~15%

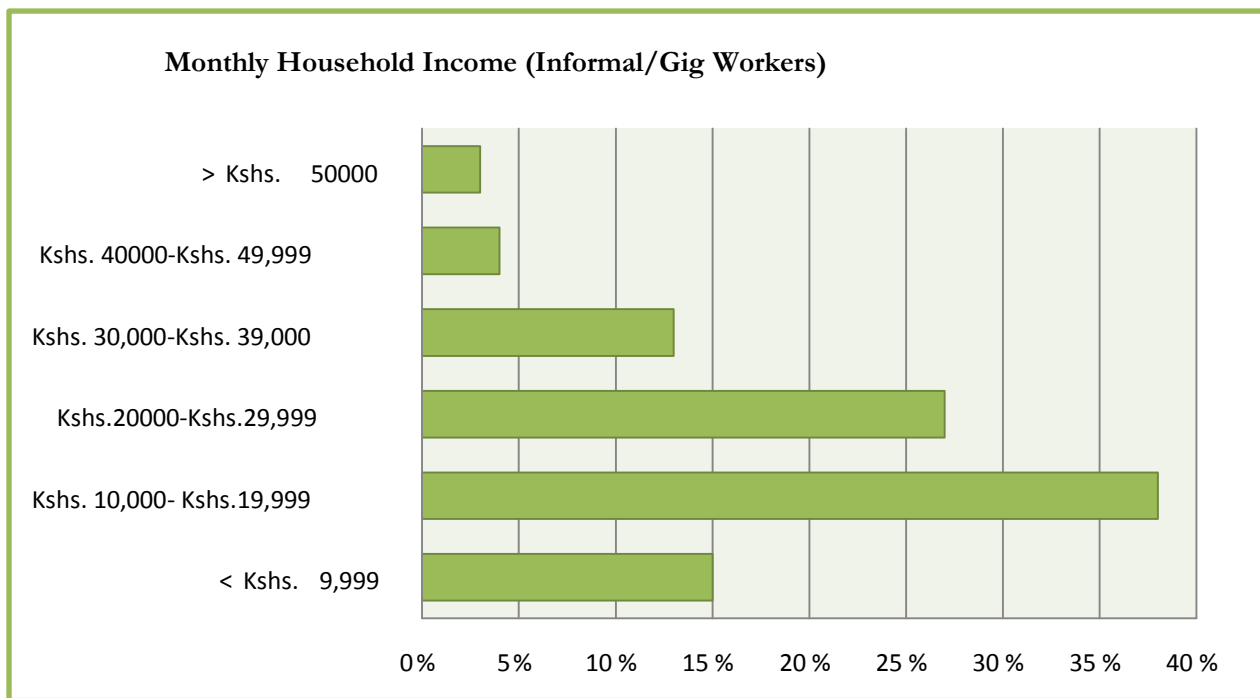*(Bar chart x-axis: 0% to 40%)*

Figure 6: Monthly Household Income (Informal/Gig Worker)

Source: The Gig Economy in East Africa, a Gateway to the Financial Mainstream (September 2020 issue)

Rents Paid

The study found out that most respondents were paying rent of between Kshs 5,000 and Kshs 20,000 per month. For studios, majority at 69.1% were paying between Kshs 5,001 and Kshs 10,000, for 1-bedroom units majority at 42.4% were paying between Kshs 10,001 and Kshs 15,000 per month while for 2-bedroom units majority at 40.1% were paying between Kshs 15,001 and Kshs 20,000 per month. In terms of income and rent paid; Majority of households paying rent of between Kshs 10,000-Kshs 20,000 were earning between Kshs 35,000-Kshs 70,000 per month. Majority of households paying rent of Kshs 20,001-Kshs 30,000 were earning between Kshs 71,000-Kshs 120,000 per month. Majority of households paying rent of Kshs 30,001-Kshs 40,000 were earning between Kshs 120,001-Kshs 160,000 per month. This indicated that the respondents spend an average of approximately 26.71% of their income on rent.

Housing Preference

The Study aimed to identify Housing Preferences for the respondents in terms of location, house type, sizes, prices etc. The study thus asked the respondents on their aspirations for home-ownership. Figure 7 showed that majority 74% of the respondents indicated that they were planning to buy a house in future, and out of these 65% stated they would be buying for residence while the other 35% indicated they would be buying houses as an investment and 5% for other purposes (including as gifts). 30% indicated that they were looking to buy a house within 3-5 years, 55% would do so after more than 5 years and the remaining 15% had the desire but did not present a timeframe.
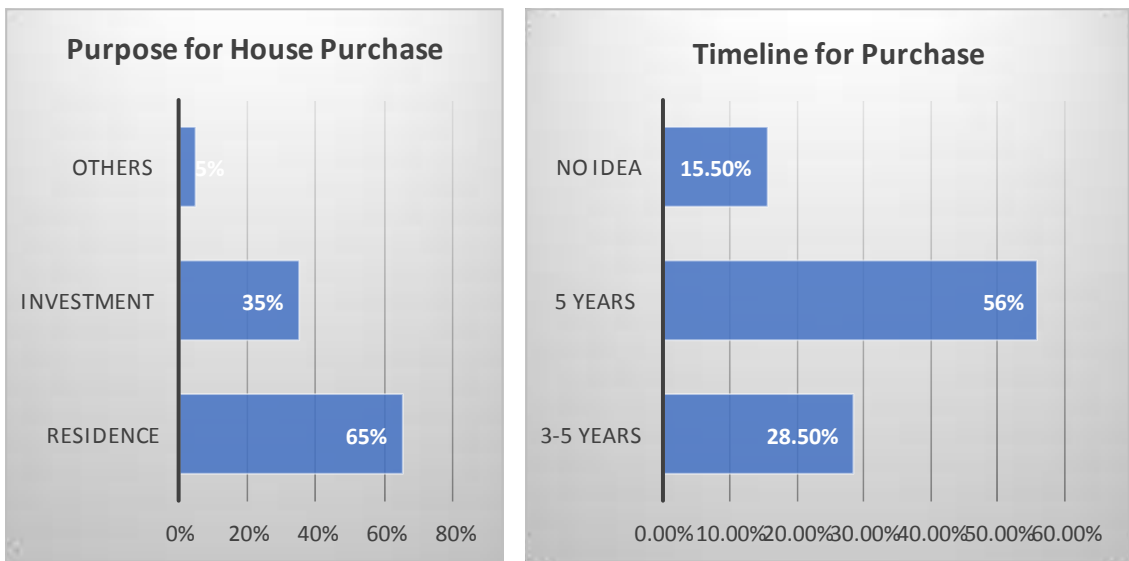
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The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Figure 7: Purpose for house purchase and Timeline for purchase
Source; Research Data (2020)

The study noted that majority 49% of the respondents who did not wish to buy house stated that they either preferred to build, 27% indicated that they owned houses,8% felt that they could not afford to buy a house, while the rest 14% of the respondents had not made decisions regarding home ownership. According to a research by Cytonn Investments and Hass Property Index, it emerged that majority of people were looking to buy 3-bedroom units with the most preferred typologies being detached and apartments at 43% and 38%, respectively.
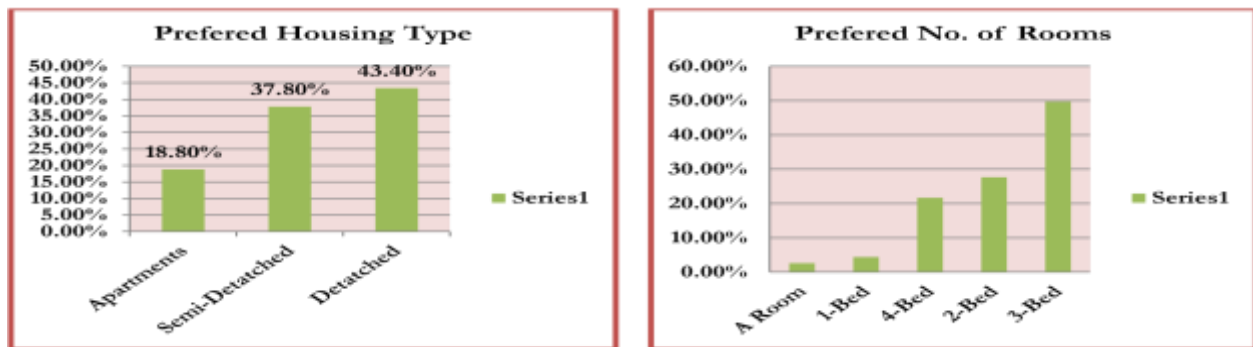

Figure 8: Preferred House Type

Source: Cytonn Research/ Hass Property Index

The study established that respondents who did not wish to buy a house stated that they either preferred to build (49%), already owned a house (27%), felt they could not afford to buy a house (8%) while the rest(14%) had not made decisions regarding home-ownership.

In terms of location, areas in Kiambu and areas along Mombasa Road were cited as the most preferred at 21.7% and 13.5%, respectively. These included areas such as Ruiru, Juja, Thika, Kiambu Town, Kikuyu, Kabete and Limuru in Kiambu County and Athi River, Syokimau and Mlolongo along Mombasa Road.
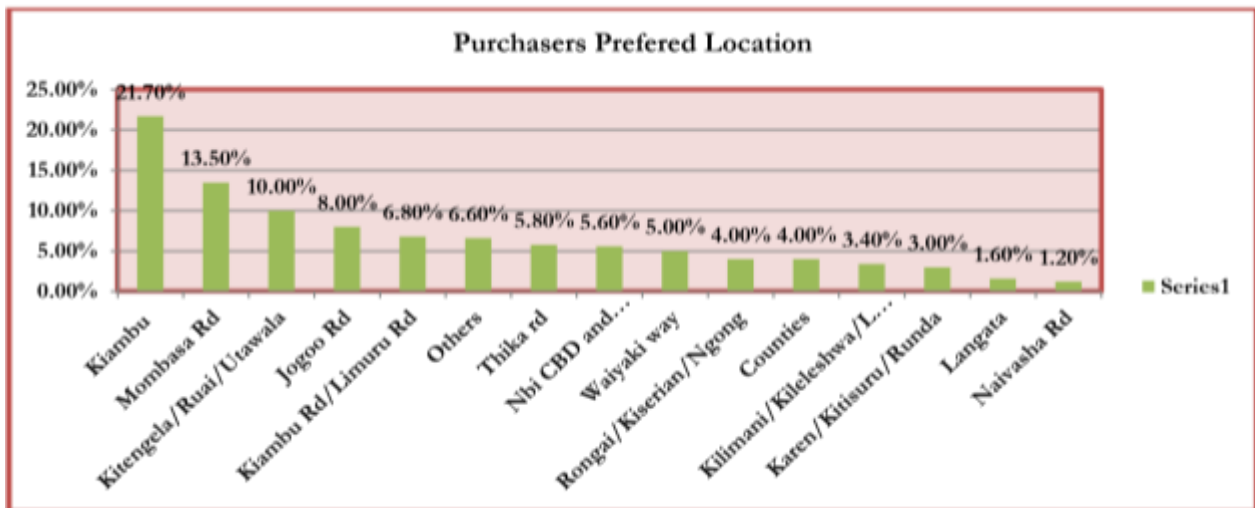
Source: Cytonn Research

Figure 9: Purchasers Preferred Location

Table 2: Preferred Areas for Housing in Kiambu and Mombasa Road

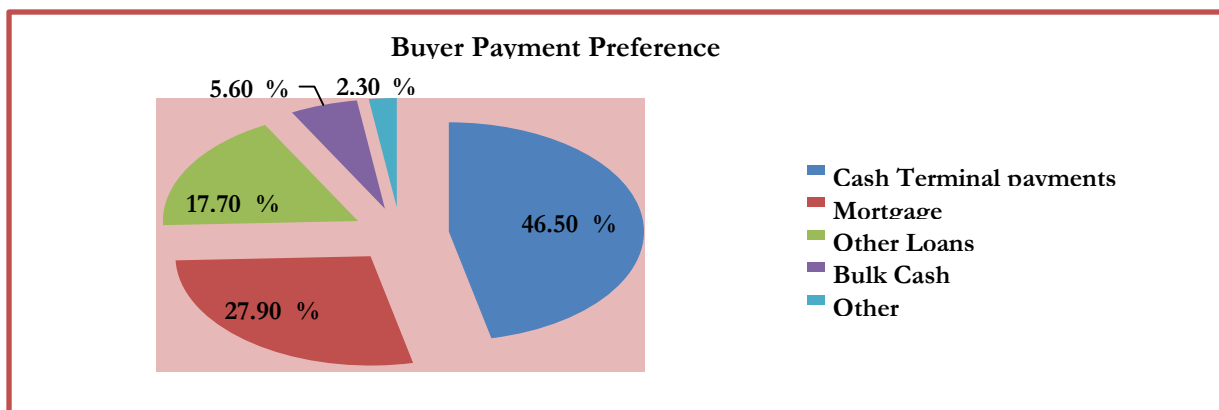|	Preferred Location	Total
Kiambu	Ruiru, Juja, Thika	49
	Kiambu Town	38
	Kikuyu, Limuru, & Kabete	22
Mombasa Rd	Athi River	21
	Syokimau/Mlolongo	38
	Mombasa Road	9

Figure 10: Buyer Payment Preferences

Source; Research Data (2020)

According to Cytonn Research, the most preferred housing purchase method was through cash installments at 46.5% followed by mortgages at 27.9%. When making a decision to buy or rent a house, location and access to their working place is a key consideration for most respondents at 54.2%. Other important considerations are security, availability of utilities and the price of the house. According to a research by Cytonn Investments and Hass Property Index, it emerged that majority of people were looking to buy 3-bedroom units with the most preferred typologies being detached and apartments at 43% and 38%, respectively.
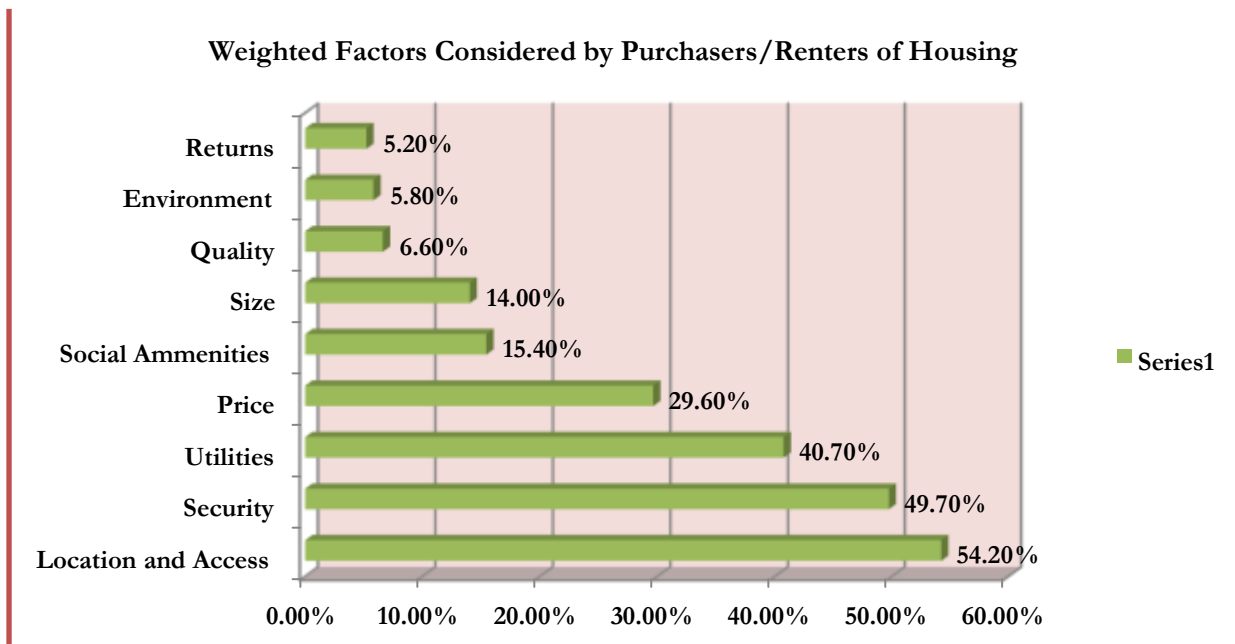
Weighted Factors Considered by Purchasers/Renters of Housing

Factor	Value
Returns	5.20%
Environment	5.80%
Quality	6.60%
Size	14.00%
Social Ammenities	15.40%
Price	29.60%
Utilities	40.70%
Security	49.70%
Location and Access	54.20%

Figure 11: Buyers Payment Preference When Buying a Home
Source: Research Data (2020)

CONCLUSION AND RECOMMENDATIONS

The study concluded that the affordable housing market needs in Kenya with specific reference to Nairobi metropolitan area were determined by people demographic characteristics; level of income and expenditure on housing utilities; transport, entertainment etc; rents paid for the various houses; housing preferences in terms of location, house type, sizes, prices etc and factors that people consider when buying/renting a houses. On housing type and location preference, majority 70% of residents in Nairobi Metropolis earned Kshs 100,000 and below and spend approximately 25% of their income on housing costs. This meant that for affordable housing the limit for monthly expenditures should be Kshs 25,000. Majority of residents in studios paid a rent of Kshs 2,500-Kshs 10,000, majority of residents in 1-bed units paid a rent of Kshs 10,001-15,000, majority of residents in 2-bed units paid a rent of Kshs 15,001-Kshs 20,000 while majority of residents in 3-bed units paid a rent of Kshs 25,001-Kshs 30,000 per month, 50% of residents in Nairobi Metropolis worked in the Nairobi CBD and its environs. Given that location

and access to and from work place is a key consideration when determining where to buy/rent a house. A 3-bedroom and 2-bedroom units were the most preferred typologies for buyers looking for houses to reside in. Furthermore, detached houses were the most preferred units, followed by apartments. In terms of location, areas in Kiambu County such as Ruiru, Juja, Thika, Kikuyu, Kiambu town were the most sought for and thus presented the best opportunity for investors.

The Study gave the following recommendations in order to meet the market needs for affordable housing in Kenya. First, implementation of a better Integrated Framework that brings together a wider set of comprehensive solutions to addressing the problem, with the government at the centre as the driver of the initiative. The government, the Capital Markets Authority, NSSF, Retirement Benefits Authority, Kenya Revenue Authority, private sector finance and development, all have a role to play and the specific solutions need to be wider.

Increase the Sources of Funding which may Include the Deepening of Capital Markets & Access to Non-

Bank Funding – There's need to have a concerted effort to look into ways of deepening the capital markets as a means to raising capital for funding affordable housing development aside from bank financing. These alternatives may include REITS, tax relief etc.

Strong Government Support - Government involvement and commitment is imperative for the realization of affordable housing. This is needed in the following ways: Budgetary Allocation for Housing Through: Guarantees for Offtake - If there are guarantees for offtake of developments especially in Public-Private Partnerships, this will be an incentive to private developers as they will be assured of exit from projects, and hence spur the development of affordable housing: Legislative Reviews- There's need for amendment of laws to allow people to use their pension to guarantee house purchases, so they may not require the deposit, or to access a portion of pension funds for use as down-payment. Currently, Section 38 of the RBA Act of 2009 allows members to attach up to

60.0% of their accumulated benefits as collateral for mortgage but this has not had a significant impact on mortgage uptake.

Efficient Urban Planning – There's need for efficient planning to allow the best use of land in a sustainable manner to cater for the growing population with key considerations on the provision of services such as water, power, garbage and sewage disposal. The study recommended development of the master-plans with a work-play-live environment as it will spur the growth of towns, create employment away from the main urban nodes and will produce fully-integrated communities. Getting Cheaper Materials for the Alternative Building Technology and Adequate Training on the same- There's need to explore cheaper building technology to lower construction costs. Compact House Units- Developers may have to optimize on unit sizes in order to charge lower prices but maintain sustainable revenue margins. This will also lead to higher rental yields per square meter.

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