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**Challenges Hampering Adoption of Different Housing Models to Access  
Housing by Households in Nairobi County**

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Strategy

### Challenges Hampering Adoption of Different Housing Models to Access Housing by Households in Nairobi County

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#### Abstract

**Purpose:** This study aimed to assess the challenges hindering the adoption of diverse housing models for household access to housing in Nairobi County, Kenya. Utilizing the Public Interest Economic Regulation Theory (PIERT), the Q Theory of Housing Investment, and the Theory of Distributive Justice, the research explores the interplay between government regulations, market forces, and social equity in the context of affordable housing.

**Methodology:** Employing a descriptive research design, the study investigates the impact of housing regulations on housing access through mortgage and cooperative models. The research sample comprises 385 households, CEOs of housing financing organizations, and government officers. By analyzing the usage prevalence of housing models, the study delves into challenges such as high-interest rates, limited mortgage financing access, and insufficient awareness about housing options. The research employs a nuanced approach, considering the competitive dynamics within the housing sector and the need for equitable resource distribution.

**Findings:** The study reveals that the mortgage model is most prevalent (41.4%), followed by the incremental model (28.0%) and cooperative model (23.7%). High-interest rates, restricted mortgage financing access, and inadequate awareness about housing options emerge as significant challenges hampering housing model adoption. Additionally, housing regulations, vital for safety, impact affordability, with 39.2% of respondents acknowledging this influence.

**Unique Contribution to Theory, Practice and Policy:** This study contributes valuable insights to the existing body of knowledge by synthesizing the PIER, Q Theory of Housing Investment, and Theory of Distributive Justice. The study therefore validates these theories by offering a comprehensive understanding of the intricate interplay between regulations, market dynamics, and social equity in the adoption of affordable housing models. The recommendations, including lowering mortgage interest rates, enhancing financing access, promoting awareness about housing models, and fostering collaborative efforts among stakeholders, provide actionable strategies for policymakers, practitioners, and researchers to improve housing access in Nairobi County.

**Keywords:** *Housing Models, Housing Regulations, Mortgage, Cooperative, Affordability*

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## INTRODUCTION

Access to affordable and adequate housing in Nairobi County, akin to many developing regions, grapples with multifaceted challenges stemming from the interplay of urbanization, regulatory frameworks, and housing models. Urbanization, emblematic of economic advancement, has propelled rural-to-urban migration, exerting immense pressure on existing housing resources in Nairobi County. The city, housing a population of 4.3 million, faces the stark reality that over 80% of its residents reside in informal settlements and slums, illuminating a critical shortfall in suitable housing, particularly for low- and middle-income earners (KNBS, 2019).

This surge in urbanization has precipitated challenges such as overcrowding, the proliferation of informal settlements, and a shortage of quality affordable housing. These adversities, compounded by low incomes and the intricate trade-offs between housing, work proximity, and high living costs, compel many households to endure substandard living conditions to remain in close proximity to employment opportunities (Kipkirui & Rotich, 2015). Consequently, the urban poor in Nairobi confront formidable hurdles in accessing safe and adequate housing, emphasizing the urgency of comprehensive interventions.

A pivotal impediment to accessible housing lies in the absence of favorable and adequate regulatory frameworks. While housing models such as mortgage, cooperative, and incremental strategies offer potential solutions, the effective implementation of these models is intricately tied to the regulatory landscape. A notable research gap exists concerning the impact of regulations on housing delivery within these models in Nairobi County, indicating the need for a more nuanced understanding (Giti, K'Akumu & Ondieki 2020)).

The scarcity of suitable housing locations, particularly for low-income households, stands as a significant challenge. Even when housing units are constructed, they often prove financially out of reach due to elevated costs and limited income levels. The absence of long-term loan opportunities, coupled with high interest rates and credit risks, impedes the growth of the mortgage portfolio, restricting access for many aspiring homeowners (World Bank, 2017). These financial challenges further exacerbate the difficulties in implementing housing models aimed at democratizing homeownership.

Housing models such as mortgage, cooperative, and incremental approaches hold promise in addressing these challenges. Mortgage models, providing long-term loans secured by the property, offer a tangible pathway to homeownership. Housing cooperatives, wherein members share ownership and costs, present an alternative communal approach. Incremental housing, allowing flexible construction and remodeling, empowers residents to adapt their homes according to their evolving needs and financial capacities (Darinka, 2018). These models, when supported by appropriate regulations and financial policies, could significantly enhance housing accessibility for Nairobi's residents.

Addressing the housing crisis in Nairobi County necessitates a comprehensive and conceptual approach. Recognizing the challenges hindering the adoption of various housing models involves navigating regulatory barriers, tackling inadequate housing supply, and addressing financial constraints. By centering on policy reforms, fortifying regulatory frameworks, and championing inclusive urban development, Nairobi County can pave the way for accessible and affordable housing, thereby ensuring a superior quality of life for its residents. This study endeavors to explore these challenges through a conceptual lens, providing insights into potential solutions to contribute to the ongoing discourse on housing access in Nairobi County.

## **Statement of the Problem**

By providing living space for households, the living conditions of families are improved and the quality of life is guaranteed. The rapid increase in population and rural-urban migration, especially among low and middle-income households, has presented a substantial challenge for both national and local governments in terms of providing adequate housing. This situation has resulted in limited access to housing, posing a significant problem that needs to be addressed. This has led to the governments all over the world to develop various interventions which include formulation of policies and regulatory frameworks to increase access to housing to their citizens. In most cases, the role of the government in developing country governments in housing provision is that of a direct provider in informal settlements, as opposed to an intermediary role, which is ideal given the legal and regulatory framework. Limited to just a few projects. The disparities in access to housing between individuals with low and high incomes are further exacerbated by this situation (Johnson, 2021).

However, provision of affordable housing has been faced by various challenges. Some of the challenges that are faced in the provision include the high construction cost. This encompasses the expensive materials and labor expenses involved. Other challenges faced in providing affordable housing include the land governance challenges. The land regulations need a review in order to facilitate provision of affordable housing. Studies by De Jorge-Huertas & De Jorge-Moreno (2021), Olanrewaju and Woon (2019), Lateef and Idrus (2020), Giti *et al.* (2020), and Simón-Moreno and Kenna (2019) were carried out to assess the condition for accessing of affordable housing. Although these studies have been significant in identifying the determinants for owning affordable housing, no specific study has been undertaken to assess the effect of housing models on the accessibility of affordable housing in Kenya. Lupala (2010) did research on the impact of macroeconomic policies in Tanzania after the country shifted from socialism to more liberalized economy. The studies surveyed showed that very little research has been done on the interactions between regulations / policies and access to housing in Kenya. There is scanty literature on the role regulations have played in housing delivery in the three housing models in Kenya and therefore, this study focused on the role regulations play in housing access by households in Nairobi County. This research aims to investigate how different housing models, such as mortgage models, cooperative models, incremental models, and housing regulations, impact the ability to access affordable housing in Nairobi County.

## **Objectives of the Study**

To analyze challenges hampering adoption of different housing models to access housing by households in Nairobi County

## **LITERATURE REVIEW**

### **Theoretical Review**

In addressing the challenges obstructing the adoption of affordable housing models in Nairobi County, The Public Interest Economic Regulation Theory (PIERT) was used which underlines the pivotal role of government regulations in fostering housing affordability and ensuring the efficient allocation of resources. By emphasizing the importance of legislative and administrative controls, PIER asserts that governments play a crucial role in rectifying market failures and promoting optimal outcomes.

Concurrently, the Q Theory of Housing Investment offers valuable insights into the relationship between investment decisions and market valuations, particularly concerning existing and new



housing units. This theory illuminates the competitive dynamics within the housing sector, guiding the decisions of builders and developers, thereby influencing housing affordability and accessibility. Moreover, the Theory of Distributive Justice emphasizes the equitable distribution of resources, highlighting the need for government intervention to ensure fair access to housing, particularly for marginalized populations. By comprehensively examining these theories, this study aims to offer nuanced perspectives on the intricate interplay between regulations, market forces, and social equity, providing valuable insights into the challenges faced in the adoption of affordable housing models in Nairobi County.

## **Empirical Review**

### **Mortgage Model**

The mortgage model consists of the process by which a developer builds a home and sells it to all interested parties. Individuals interested in buying a home typically take out loans from financial institutions. In mortgage agreements, the lender retains a lien on the property while the borrower does not have full ownership rights until the mortgage is fully repaid. The lender holds both legal and equitable title to the property and can only exercise their right to seize the property to fulfill the mortgage obligation (Fariás, 2021).

Bidabad (2017) conducted a study to examine the factors influencing the affordability of mortgage prices. The research involved gathering data through semi-structured questionnaires from a sample of individuals associated with three prominent mortgage financing institutions in West Africa. The participants in the study provided ratings on a five-point Likert scale to assess different factors associated with the affordability of mortgages. The survey responses were subsequently analyzed using exploratory factor analysis. The research identified 11 variables that contribute to the affordability of mortgages, which were further grouped into five main components: economic factors, financial factors, characteristics of the property, factors related to development, and geographical factors.

Simón-Moreno and Kenna (2019) investigated the potential role of the EU Charter on Fundamental Rights in promoting a human rights perspective in the regulatory framework of the European Union (EU), specifically focusing on residential mortgage lending. The research aimed to tackle the difficulties arising from the commodification of housing on a global scale and the EU's limited capacity to effectively address emerging housing issues. By building on the existing correlation established by the Court of Justice of the EU (CJEU) between EU consumer law and the EU Charter on Fundamental Rights, the study explored the implications for residential mortgage lending. The primary finding underscored the potential influence of the EU Charter of Fundamental Rights on EU regulatory measures pertaining to mortgage lending, drawing attention to indications of divergence in mortgage law regimes within the EU, particularly regarding the differentiation between home loans and other types of mortgages.

Tajani and Morano (2018) conducted a study aimed at proposing and testing an innovative approach to evaluating the value of mortgage lending. The proposed method aims to enhance and streamline the appraisal process used by industry professionals, departing from the conventional methods typically employed. The methodology involves examining historical property values in 93 major cities across Italy, encompassing both residential and commercial properties, over a significant period spanning from 1967 to 2015. This analysis enables the derivation of reduction coefficients for market value based on the property's location in central, semi-central, or peripheral areas. These coefficients serve as the foundation for assessing the mortgage lending value through derivative appraisal. By effectively addressing the need for a

rational assessment of property risk and ensuring the appropriate contextualization of risk factors associated with local demand and supply, these coefficients eliminate inconsistencies and the risks associated with relying solely on a simple percentage deduction from the market value. Consequently, this method provides a more comprehensive and accurate evaluation of the mortgage lending value.

### **Co-operative Model**

A collaborative approach is another significant model that can be adopted to facilitate access to housing. For example, the state's slums have been consistently cleared, opening the way for infrastructure growth without resettlement plans, proper security and broad political support for housing stagnation (Darinka, 2018). A housing co-operatives is a model in which a group of people registers their group as a housing cooperative as required by the national law (World Bank, 2017). This means that groups of people banding together to maximize service delivery (homeownership) to themselves through the economies of scale can get decent and affordable homeownership. This is a case where all the members of the housing association save money and borrow the remaining funds from a financial institution to purchase land and build a house. In this case, they buy land, build infrastructure, and take out loans to raise their troops.

Darinka (2018) conducted an extensive survey to examine the dynamics of cooperative housing and housing providers in Vienna, Austria, and Lyon, France. The primary objective of the study was to develop an analytical framework that enables a better understanding of the collaborative efforts among multiple stakeholders involved in the co-production of housing. Through the analysis of case studies, the study uncovered key findings. It was observed that both projects were characterized by strong user-led initiatives, with residents actively shaping the vision and principles from the outset. Notably, residents had significant decision-making power in determining the core values driving the projects. The initiatives aimed to foster social integration and affordability by implementing inventive approaches to tenure and revenue distribution, closely aligned with the allocation systems for community-based affordable housing. In these cooperative housing models, existing housing organizations assumed diverse responsibilities as developers, property administrators, landholders, and intermediary lenders. Additionally, they adhered to local government regulations governing the equitable distribution of affordable housing. The collaborations between resident groups and housing providers were forged early on in the projects, with residents taking a proactive approach. This high level of customer participation was consistently demonstrated throughout the projects, particularly in the formulation of guiding principles and the incorporation of architectural design elements.

### **Incremental Model**

The step-by-step home building approach is a widely utilized construction method employed by numerous private residences globally. A variety of terms are used in the literature to describe the method of housing construction, but it essentially has the character of self-construction of housing by households (Jud & Winkler, 2003). We can explore different housing approaches including 'self-help housing,' 'assisted self-help housing,' 'self-managed housing,' and 'incremental housing.' Numerous scholars have emphasized the importance of incremental self-help housing, also referred to as incremental self-managed housing, as a vital strategy for housing development worldwide. Incremental housing refers to a gradual and step-by-step process in which homeowners construct or improve their homes by adding building components as they obtain funding, time, or materials. This approach allows for cost reduction in housing construction, particularly when compared to the construction of complete

apartments by developers. The effective execution of incremental housing depends on the accessibility of adaptable and relatively small short-term loans that can accommodate the intermittent housing requirements of individuals or communities. This approach provides increased financial flexibility and empowers homeowners to actively engage in shaping their living environments. In contrast, traditional mortgage financing necessitates substantial funds to purchase or construct an entire home. Gradual housing development can serve as a significant driver to involve individuals in underprivileged households and communities (social development) and stimulate local businesses (economic development) (Darinka, 2018)

Jain and Paliwal (2016) conducted a survey in India to investigate the adoption of affordable and efficient housing techniques. The study aimed to provide an overview of the housing landscape in the country. The findings indicated the availability of a variety of technology options for different building components, offering cost-effectiveness while maintaining the essential qualities of a well-designed dwelling. On a different note, Green (2017) attributed Japan's achievements to a strategic combination of Total Quality Management (TQM), Just-in-Time (JIT) manufacturing, collaborative teamwork, and efficient supply chain management. According to Green, TQM plays a crucial role by encouraging employees to view themselves as integral parts of a supply chain that involves interactions between suppliers and customers. This approach instills a sense of pride in workers, as they prioritize serving others in the chain rather than solely focusing on their individual tasks.

Kamau (2014) conducted a research study in Nairobi County, Kenya, comparing three homeownership models and assessing their impact on low-income families. The study aimed to determine which of the three models - long-term mortgage, short-term loan, or housing cooperative - is most conducive to promoting homeownership among this demographic. Employing a descriptive study design, the research focused on economically active households residing in Ruai settlement within Nairobi County. Respondents were picked through a simple random sampling method, and collection of data involved surveys comprising a use of both open-ended and closed-ended questions. The result showed that the long-term mortgage model was not viable for low-income homebuyers, and the short-term loan model was also found to be less favorable. Conversely, the housing cooperative model emerged as the most suitable and practical approach for facilitating affordable and suitable housing for low-income households.

## **METHODOLOGY**

This study employed a descriptive research design aimed at providing a comprehensive representation of the current state of housing models and access in Ruai Sub-Location, Ward of Kasarani Subcounty, Nairobi County. The research targeted heads of households in single-family dwellings, as well as CEOs of housing financing organizations and government officers responsible for housing issues. The study population was estimated at 32,745 households, and a simple random sampling technique was applied to select a sample size of 385 heads of households. Primary data was collected through questionnaires administered via drop-and-pick method, interviews with key informants and agency heads, and focused group discussions. In-depth interviews and key informant interviews supplemented the quantitative data, providing a more nuanced understanding of the research problem. A pilot study was conducted to refine research procedures, and data analysis involved descriptive statistics for quantitative data using SPSS version 24, while content analysis was applied to qualitatively analyze the data thematically. The research aimed to uncover insights and propose solutions to the challenges hindering the adoption of housing models in Nairobi County.

## DATA ANALYSIS, FINDINGS AND INTERPRETATION

### Response Rate

**Table 1: Response Rate**

<b>Group</b>	<b>Target Population</b>	<b>Sample Size</b>	<b>Responses</b>	<b>Response Rate (%)</b>
Heads of Households	32,745	385	314	81.6
CEOs and Government Officials	7	7	7	100.0
<b>Total</b>	<b>32,752</b>	<b>392</b>	<b>321</b>	<b>81.9</b>

The response rate for this study, which aimed to assess the influence of housing models and regulations on access to housing in Nairobi County, Kenya, is a critical indicator of the research's success and reliability. Out of the targeted 385 heads of households, 314 individuals responded, resulting in a response rate of 81.6%. This response rate is considered quite respectable and indicates a strong willingness among the sampled population to participate in the research.

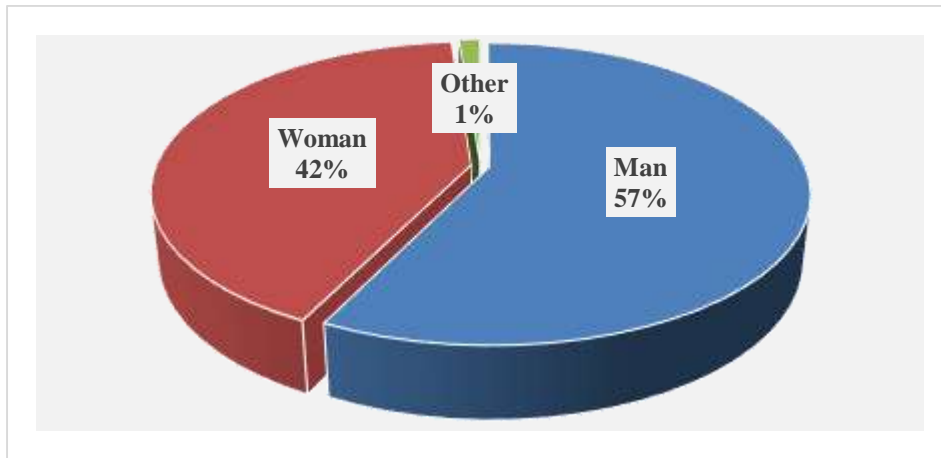
A response rate of 81.6% is particularly noteworthy in a study of this nature, where data collection involves surveying individuals on a topic as personal and significant as housing access. High response rates like this one often reflect the relevance of the research topic to the participants and their communities. In this case, it suggests that housing is a subject of great concern to the residents of Nairobi County, and they are eager to share their experiences and perspectives. Furthermore, the 100% response rate from CEOs and government officials involved in housing financing and regulation demonstrates the stakeholders' commitment to providing insights and expertise for the study.

A robust response rate is essential for the credibility and representativeness of the study's findings. The fact that over four-fifths of the targeted participants chose to engage in the research suggests that the collected data can provide a valuable understanding of housing dynamics in Nairobi County. It also implies that the research results are more likely to accurately reflect the sentiments, challenges, and preferences of the population. However, it's important to acknowledge that non-response bias may still exist, as the 18.4% of household heads who did not participate could have different perspectives or experiences. Nonetheless, with a response rate of 81.6%, this study is well-positioned to yield meaningful insights into the complex interplay between housing models, regulations, and housing access in Nairobi County.

### Demographic Information

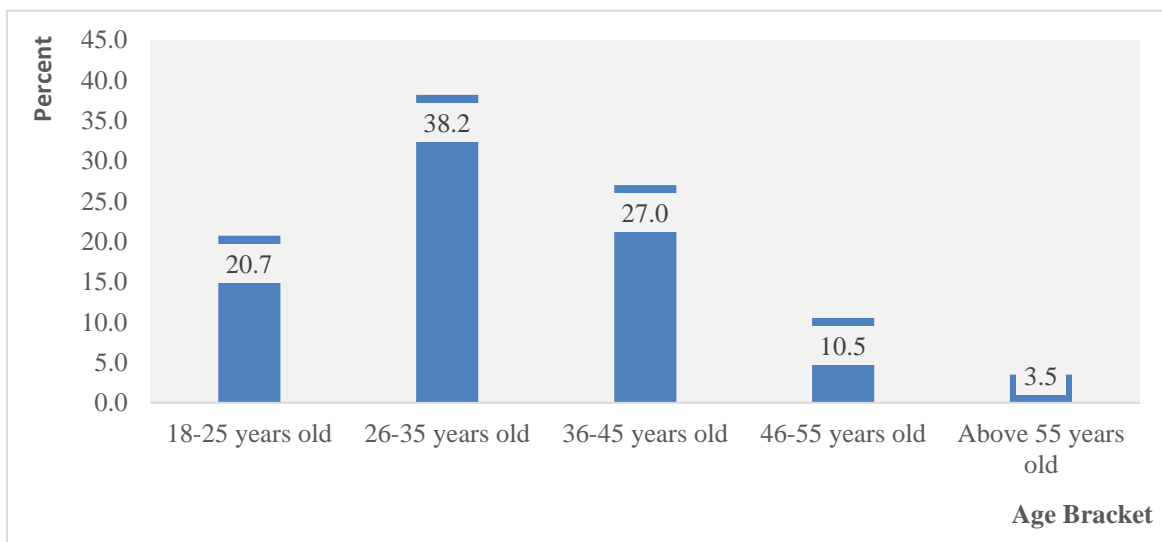
The study sought information on key demographic characteristics of respondent. The aspects sought were gender, age, marital status, and the highest level of education attained. This section presents into the demographic characteristics of the respondents, offering valuable insights into the composition of the research sample. By examining factors such as gender, age, marital status, and education level, this section provides a comprehensive understanding of the profile of individuals participating in the study. These demographic details serve as a crucial backdrop for the subsequent analysis of how housing models and regulations impact housing access in Nairobi County.





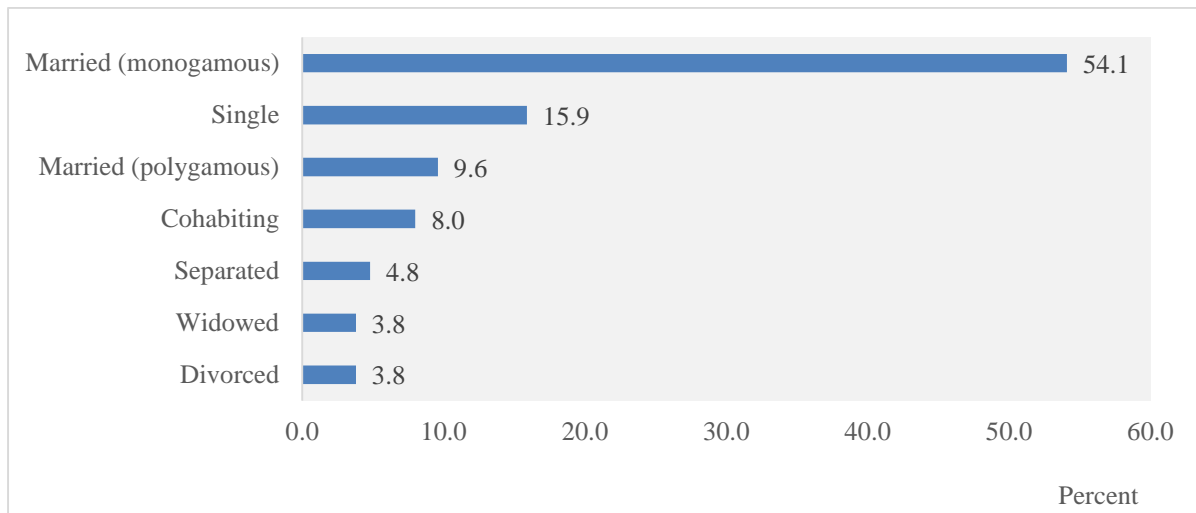
*Figure 1: Gender of the Respondents*

Figure 1 reveals that the majority of the participants were male, with 180 (57.3%) constituting the total sample, while females accounted for 130 (41.4%). A very small proportion, about 4 (1.3%), identified as "Other." These findings indicate a gender imbalance among the respondents, with a notable male majority. It is noteworthy that gender composition can play a crucial role in assessing various aspects of housing models and regulations in Nairobi County, as different genders may have distinct perspectives and experiences when it comes to accessing housing.



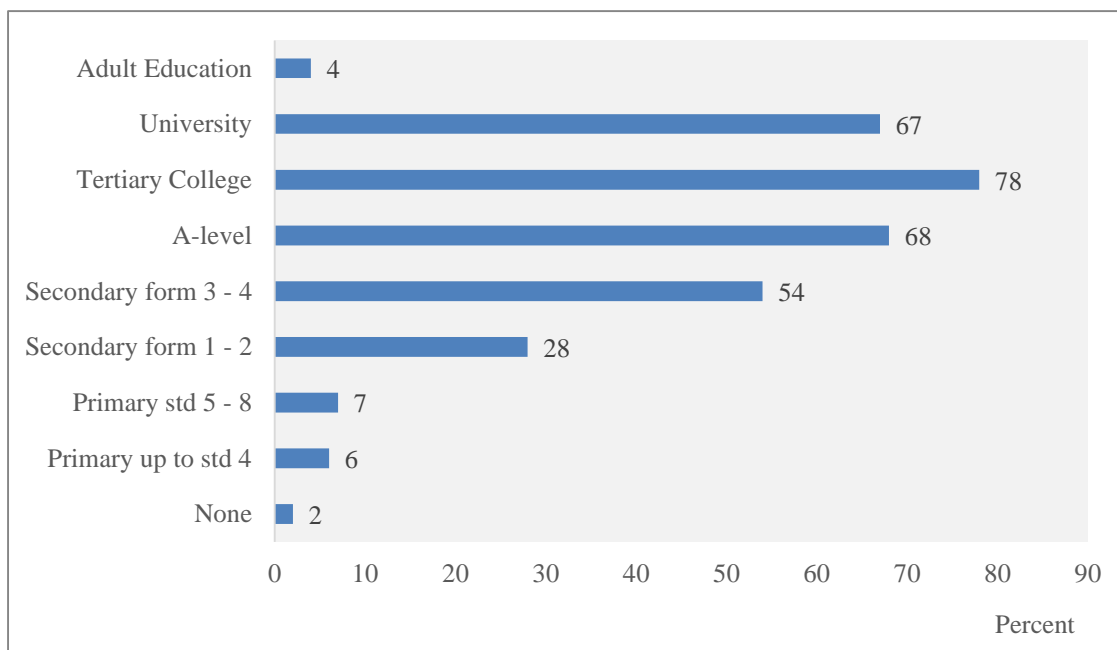
*Figure 2: Age Brackets of the Respondents*

Figure 2 reveals a diverse representation across various age groups. The largest proportion of respondents fell within the age bracket of 26-35 years old, with 120 (38.2%) constituting the total sample. This age group was closely followed by those in the 36-45 years old bracket, which accounted for 85 (27%) of the respondents. These findings highlight the presence of a broad age range within the study's population, indicating that perspectives on housing models and regulations are being gathered from a cross-section of the population with varying life experiences and housing needs.



*Figure 3: Respondents' Marital Status*

The marital status of the respondents was explored to gain insights into the relationship status of individuals participating in the study. Results revealed a diverse representation of marital statuses among the participants. The largest group consisted of respondents who identified as "Married (monogamous)," with 170 (54.1%) constituting the total sample. This was followed by individuals who were "Single," comprising 50 (15.9%) of the respondents. Notably, there were also participants in "Married (polygamous)" relationships (30, 9.6%), "Cohabiting" (25, 8.0%), "Separated" (15, 4.8%), "Divorced" (12, 3.8%), and "Widowed" (12, 3.8%). These findings underscore the varied marital statuses within the study's population, highlighting the importance of considering how different relationship statuses might influence housing preferences, choices, and experiences with housing models and regulations.



*Figure 4: Highest Level of Education Respondents Have Attained*

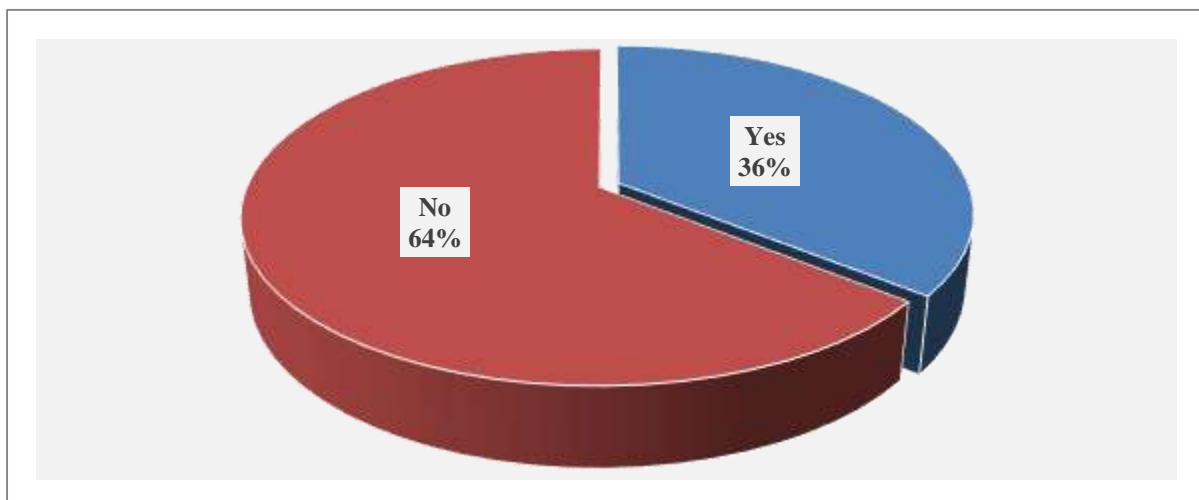
In examining the highest level of education attained by the study's respondents, a significant portion of the participants had completed their secondary education, with 68 (21.7%) having reached the level of A-level education and an additional 67 (21.3%) having attained a university degree. This indicates a substantial presence of individuals with higher educational qualifications within the sample. Moreover, Tertiary College education was also notable, accounting for 78 (24.8%) of the respondents. In contrast, the initial five education levels, including those with only primary education or none at all, collectively accounted for less than 15% of the sample, with None (2, 0.6%), Primary up to std 4 (6, 1.9%), Primary std 5 - 8 (7, 2.2%), Secondary form 1 - 2 (28, 8.9%), and Secondary form 3 - 4 (54, 17.2%) indicating a relatively lower representation in this category.

### **Challenges Hampering Adoption Housing Models**

This section addresses the second research objective which sought to analyze challenges hampering adoption of different housing models to access housing by households in Ruai Sub-County, Nairobi County shedding light on the obstacles faced by residents in their pursuit of homeownership. This section aims to provide a comprehensive understanding of the barriers and difficulties encountered by individuals and households when attempting to access housing through different housing models. By exploring the challenges associated with housing acquisition in Ruai Sub-County, we can gain valuable insights into the factors that influence housing choices and the effectiveness of various housing models. Understanding these challenges is crucial for policymakers, housing stakeholders, and researchers seeking to develop strategies and interventions that address the housing needs of the local population effectively. Through a thorough examination of these challenges, this section aims to contribute to the enhancement of housing policies and practices in the region.

### **Whether Respondents Have Ever Used the Mortgage Model to Acquire or Build a House**

Figure 5 provides insights into the use of the Mortgage Model for acquiring or building homes among respondents in Ruai Sub-County. This data is instrumental in understanding the prevalence of mortgage usage in the local housing market and the factors influencing its adoption.



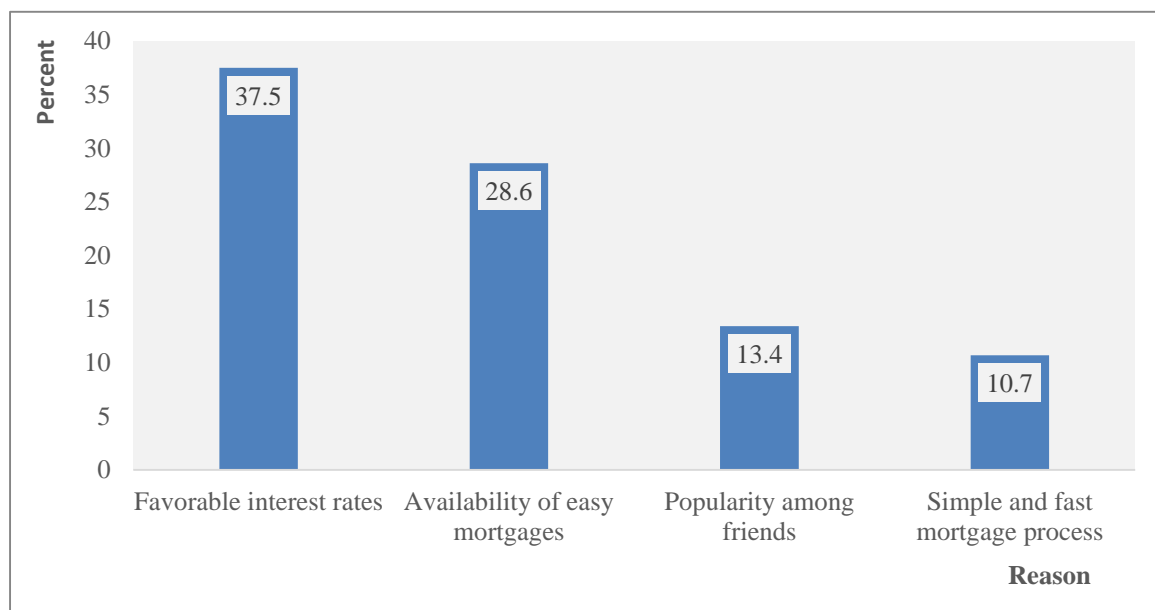
*Figure 5: Whether Respondents Have Ever Used the Mortgage Model to Acquire or Build a House*

Approximately 35.7% of respondents indicated that they have used the Mortgage Model to acquire or build a house. This finding suggests that a significant portion of residents in Ruai Sub-County has experience with mortgage-based homeownership. The adoption of mortgages is indicative of a willingness to leverage long-term financing options, often associated with competitive interest rates and extended repayment periods.

On the other hand, a substantial majority, constituting 64.3% of respondents, reported that they have not used the Mortgage Model for housing acquisition. This may be attributed to various factors, including limited access to mortgage financing, preference for alternative housing models, or financial circumstances that make mortgages less viable. The absence of respondents selecting "I don't know" indicates a high level of awareness among the survey participants regarding their own housing finance experiences, underlining the reliability of the data.

### Reasons for Adopting Mortgage Model for Acquiring or Building a House

Figure 6 offers a comprehensive view of the reasons that motivated respondents in Ruai Sub-County to adopt the mortgage model for acquiring or building their homes. Understanding these motivations is essential for grasping the factors that influence the adoption of mortgages as a housing finance option in the region.



*Figure 6: Reasons for Adopting Mortgage Model for Acquiring or Building a House*

Among respondents who have used the Mortgage Model, the most frequently cited reason, with 37.5%, was the "Favorable interest rates." This finding highlights the importance of competitive interest rates in attracting homeowners to mortgages. Lower interest rates can significantly reduce the long-term cost of homeownership, making it an attractive choice for those looking to optimize their financial investments.

Additionally, 28.6% of respondents mentioned "Availability of easy mortgages" as a key motivator for adopting the Mortgage Model. This suggests that the accessibility of mortgage financing played a pivotal role in their choice. Easy access to mortgages can simplify the path

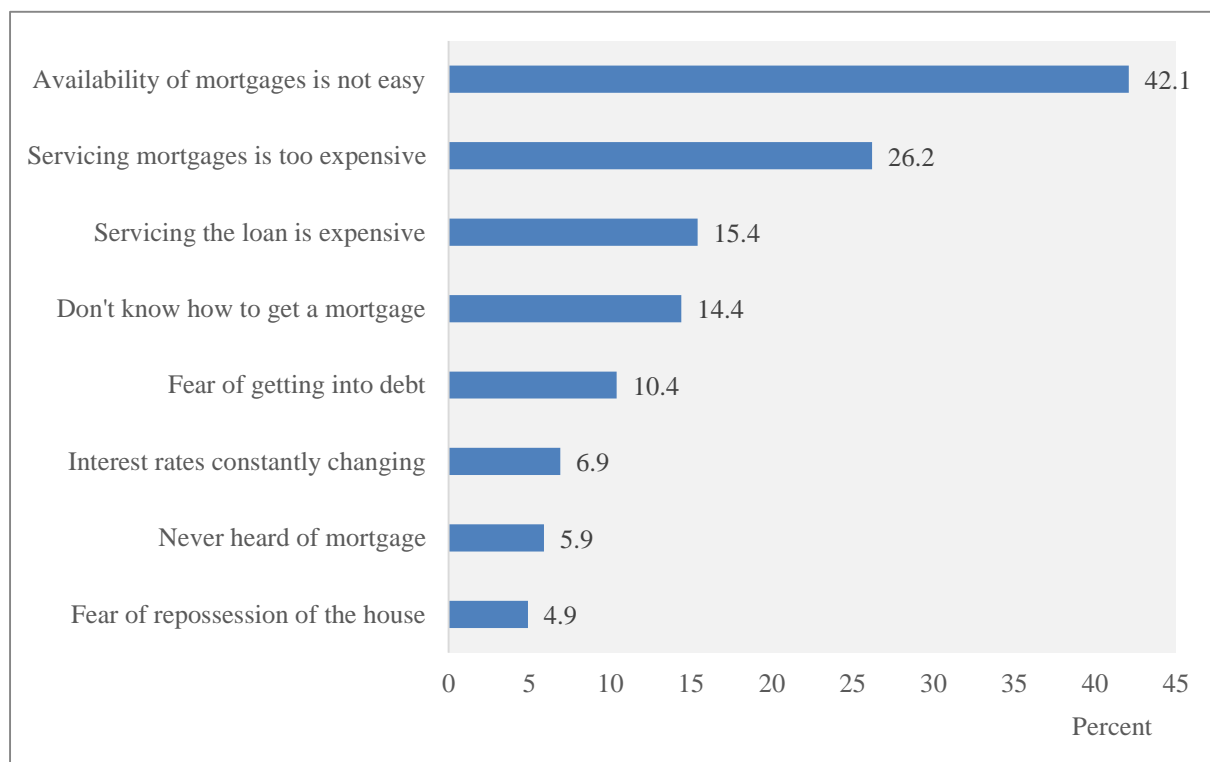


to homeownership and broaden its appeal. A smaller but noteworthy percentage, 13.4%, mentioned "Popularity among friends" as a reason for adopting the Mortgage Model. This indicates the influence of social networks and word-of-mouth recommendations in shaping housing decisions. When friends and acquaintances have positive experiences with mortgages, it can encourage others to explore this housing finance option.

For some respondents, the "Simple and fast mortgage process" was a motivating factor, with 10.7% citing this reason. A streamlined and efficient mortgage process can make the journey to homeownership more convenient and less time-consuming. Lastly, 9.8% of respondents noted the "Cheap cost of mortgage operations" as a reason for their choice. This reflects an awareness of the overall affordability associated with mortgages, encompassing not just interest rates but also various operational costs and fees.

**Reasons for Not Adopting Respondents Who Have Not Used the Mortgage Model for Acquiring or Building a House**

Figure 7 provides valuable insights into the reasons why respondents in Ruai Sub-County have not used the Mortgage Model for acquiring or building a house. Understanding these reasons is essential for comprehending the barriers and challenges that residents face when considering mortgage-based homeownership.



*Figure 7: Reasons for Not Adopting Respondents Who Have Not Used the Mortgage Model for Acquiring or Building a House*

The most commonly cited reason among respondents who have not used the Mortgage Model is the perception that "Availability of mortgages is not easy," with 42.1% mentioning this as a significant barrier. This suggests that a substantial portion of the population feels that accessing

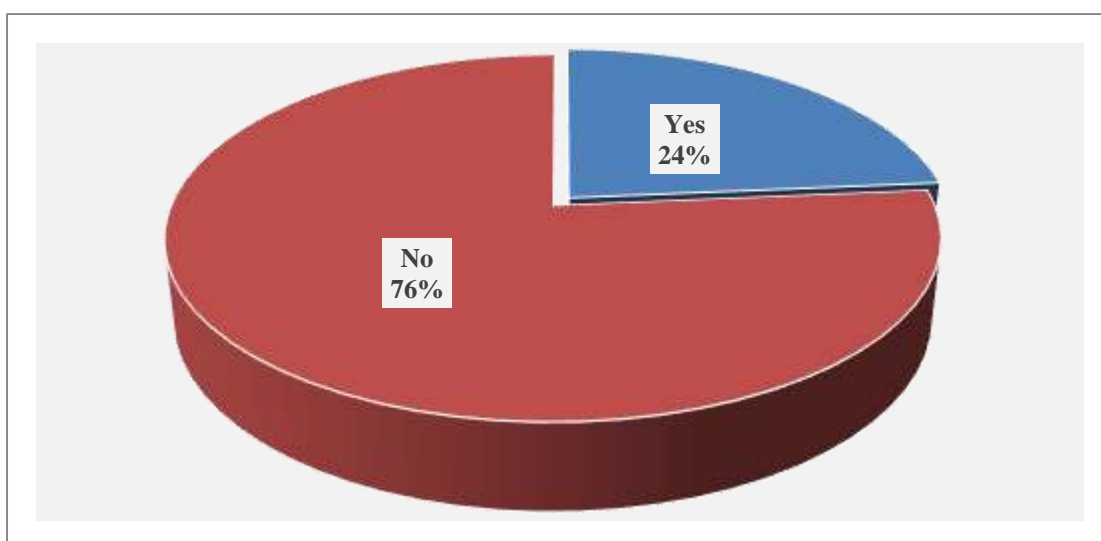
mortgage financing is challenging or not readily available. This perception can deter potential homeowners from exploring this housing finance option. Another notable concern, reported by 26.2% of respondents, is that "Servicing mortgages is too expensive." This financial consideration reflects the apprehension about the costs associated with mortgage repayment, including both interest rates and other related expenses. The perception of high servicing costs can discourage individuals from pursuing mortgages as a housing finance solution.

A significant proportion, 14.4%, indicated that they "Don't know how to get a mortgage." This highlights the importance of financial literacy and education regarding mortgage processes and requirements. Lack of knowledge about the mortgage application process can hinder potential homeowners from taking the necessary steps to secure mortgage financing. Surprisingly, a small percentage of respondents, 5.9%, mentioned that they have "Never heard of a mortgage." This indicates a lack of awareness or exposure to mortgage financing as a homeownership option. Enhancing awareness and education about mortgages may help address this gap. Fear of "Getting into debt" was expressed by 10.4% of respondents. This fear underscores the apprehension some individuals have regarding the long-term financial commitment associated with mortgages. It reflects a cautious approach to debt management and financial risk.

Additionally, 15.4% of respondents mentioned that "Servicing the loan is expensive," which echoes concerns about the ongoing costs associated with mortgage repayment. A smaller but noteworthy percentage, 6.9%, expressed concerns about "Interest rates constantly changing." This indicates a sensitivity to interest rate fluctuations, which can impact the affordability of mortgage payments over time. Lastly, 4.9% mentioned "Fear of repossession of the house" as a concern. This fear may stem from uncertainty about the consequences of defaulting on mortgage payments, including the potential loss of their homes.

### **If They Have Ever Used the Cooperative Model to Acquire or Build a House**

Figure 8 offers findings into the utilization of the Cooperative Model for acquiring or building homes among respondents in Ruai Sub-County. This data provides a deeper understanding of the prevalence of cooperative-based housing finance and the factors that influence its adoption.



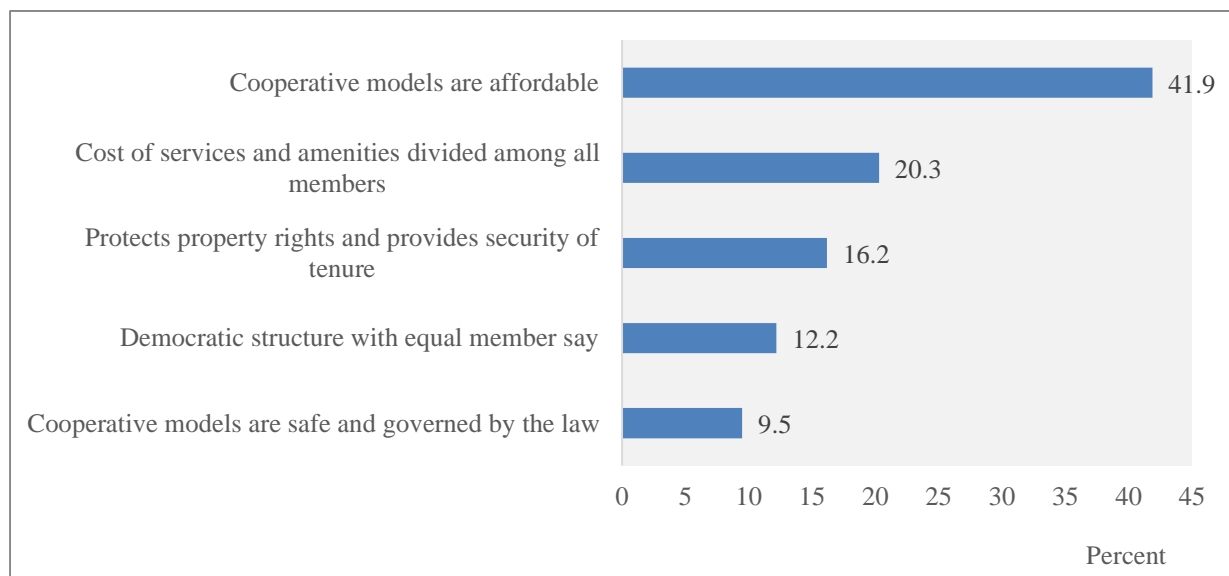
*Figure 8: If They Have Ever Used the Cooperative Model to Acquire or Build a House*

Approximately 23.6% of respondents indicated that they have used the Cooperative Model to acquire or build a house. This finding suggests that a notable portion of the population in Ruai Sub-County has direct experience with cooperative-based housing finance. The adoption of this model reflects a willingness among residents to pool resources and collaborate with others in their community or cooperative society to achieve homeownership.

On the other hand, the majority, constituting 76.4% of respondents, reported that they have not used the Cooperative Model for housing acquisition. This may be attributed to various factors, including limited awareness or access to cooperative-based housing finance, preference for other housing models, or individual financial circumstances. The absence of respondents selecting "I don't know" indicates a high level of awareness among the survey participants regarding their own housing finance experiences, reinforcing the reliability of the data.

### Reasons for Adopting Cooperative Model for Acquiring or Building a House

Figure 9 sheds light on the reasons that motivated respondents in Ruai Sub-County to adopt the Cooperative Model for acquiring or building their homes. Understanding these motivations is crucial for comprehending the advantages and appeal of cooperative-based housing finance in the region.



*Figure 9: Reasons for Adopting Cooperative Model for Acquiring or Building a House*

Among respondents who have used the Cooperative Model, the most commonly cited reason, with 41.9%, was that "Cooperative models are affordable." This suggests that the affordability of cooperative-based housing finance is a significant factor driving its adoption. Cooperative housing allows residents to share the financial burden and resources, making homeownership more attainable for a broader segment of the population.

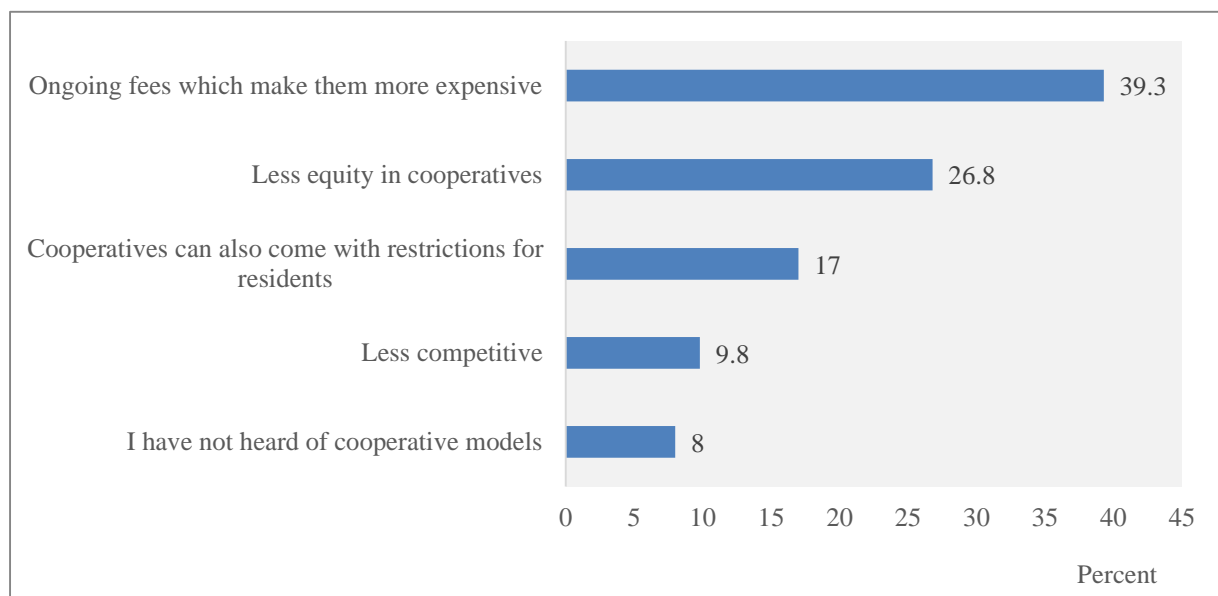
Another important motivation mentioned by 20.3% of respondents is that "The cost of services and amenities is divided among all the members of the society." Cooperative housing often includes shared services and amenities, and the division of these costs among members can lead to cost savings and shared benefits. This collective approach to resource management can make cooperative housing an attractive option. Approximately 16.2% of respondents

highlighted that cooperative models offer "Protection of property rights and provide security of tenure." This underscores the importance of legal and institutional safeguards associated with cooperative housing, which can enhance residents' confidence in their property rights and long-term security.

A smaller but noteworthy percentage, 12.2%, noted that cooperative housing societies have a "Democratic structure with equal member say." This democratic aspect reflects the participatory nature of cooperative housing, where decisions about the functioning and management of the society are made collectively. This inclusivity and member involvement can be an appealing feature for those who value community-driven decision-making. Lastly, 9.5% of respondents mentioned that cooperative models are "Safe and governed by the law." This perception highlights the importance of legal frameworks and governance structures in cooperative housing, which can provide a sense of security and compliance with the law.

### Reasons for Not Adopting Cooperative Model for Acquiring or Building a House

Figure 10 provides valuable insights into the reasons why respondents in Ruai Sub-County have not used the Cooperative Model for acquiring or building a house. Understanding these reasons is crucial for comprehending the barriers and challenges that residents face when considering cooperative-based housing finance.



*Figure 10: Reasons for Not Adopting Cooperative Model for Acquiring or Building a House*

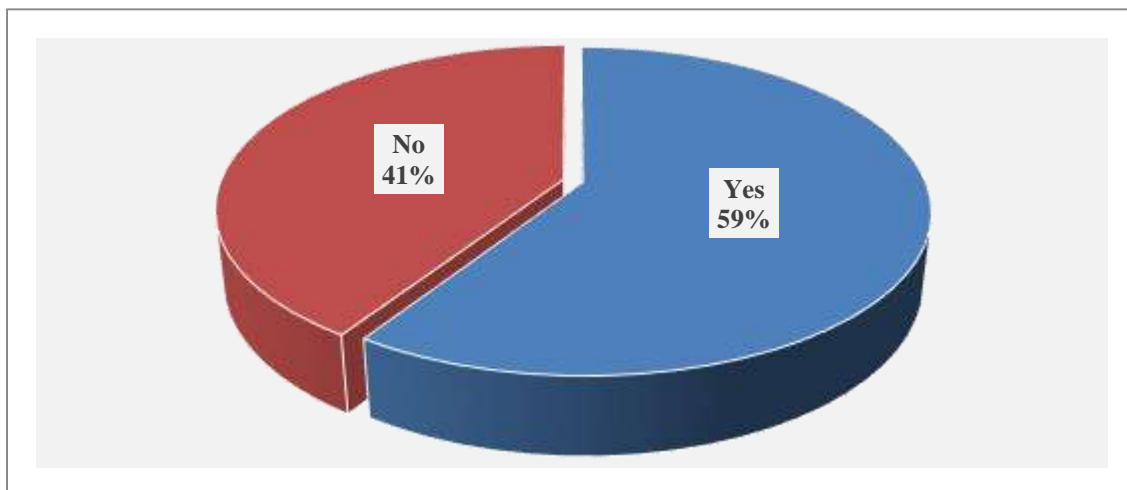
The most frequently cited reason among respondents who have not used the Cooperative Model is the concern about "Ongoing fees which make them more expensive," with 39.3% mentioning this as a significant barrier. This suggests that some individuals perceive cooperative-based housing to be costlier due to ongoing fees or expenses associated with cooperative membership. Approximately 26.8% of respondents mentioned that they perceive "Less equity in cooperatives" as a reason for not adopting this model. This indicates a belief that cooperative housing may provide residents with less ownership or equity in the property compared to other housing options. This perception can deter potential homeowners who value equity accumulation.



A notable portion, 17.0%, expressed concerns about "Cooperatives can also come with restrictions for residents." These results highlight apprehensions related to potential limitations or regulations that may be imposed on residents within cooperative housing communities. These restrictions may not align with the preferences or lifestyle choices of some individuals. A smaller but noteworthy percentage, 9.8%, mentioned that cooperative housing is "Less competitive." This suggests that some respondents perceive cooperative-based housing to be less competitive in terms of value or attractiveness compared to other housing models. Surprisingly, 8.0% of respondents noted that they have "Not heard of cooperative models." This indicates a lack of awareness or exposure to cooperative-based housing finance as an option for homeownership. Enhancing awareness and education about cooperative housing may help address this knowledge gap.

### **If Respondents Have Ever Bought or Built a House in Nairobi County Gradually Through Their Own Savings Over Time**

Figure 11 provides insights into the prevalence of individuals in Ruai Sub-County who have bought or built a house in Nairobi County gradually over time through their own savings. This data offers valuable information about the extent to which residents engage in incremental housing, a method of homeownership that relies on personal savings and step-by-step progress.



*Figure 11: If Respondents Have Ever Bought or Built a House in Nairobi County Gradually Through Their Own Savings Over Time*

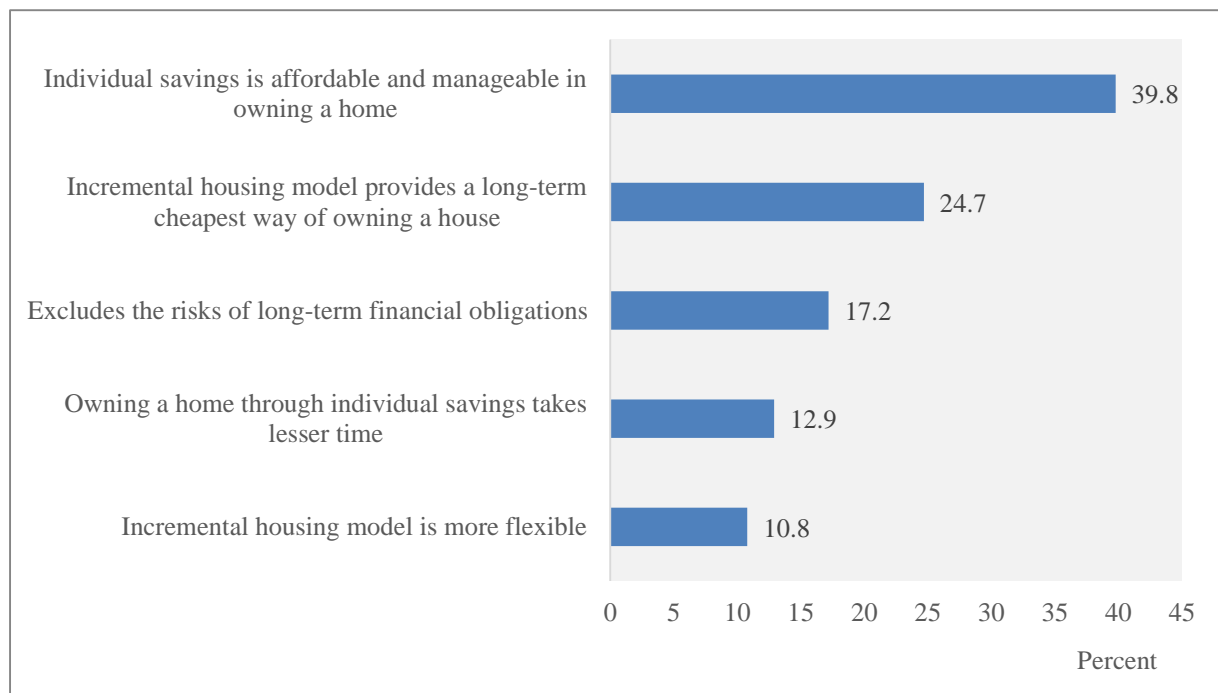
Approximately 59.2% of respondents indicated that they have indeed bought or built a house slowly by saving over time. This finding suggests that a significant majority of residents in the sub-county have pursued incremental housing as a means of acquiring their homes. Incremental housing often entails starting with a basic structure and gradually expanding or improving it as financial resources allow. It reflects a disciplined and patient approach to homeownership, where individuals prioritize savings and long-term goals.

Conversely, 40.8% of respondents reported that they have not engaged in incremental housing. These individuals may have adopted other housing models, such as mortgages, cooperative-based housing, or alternative methods of acquiring their homes. The reasons for not pursuing incremental housing can vary, including differences in financial capacity, access to financing, and personal preferences. The absence of respondents selecting "I don't know" in this question

indicates a high level of self-awareness among survey participants regarding their housing finance experiences. This enhances the reliability of the data.

### Reasons for Adopting the Incremental Model for Acquiring or Building a House

Figure 12 offers perceptions into the reasons that motivated respondents in Ruai Sub-County to adopt the Incremental Model for acquiring or building their homes. Understanding these motivations is crucial for comprehending the advantages and appeal of incremental housing as a housing finance approach in the region.



**Figure 12: Reasons for Adopting the Incremental Model for Acquiring or Building a House**

The most commonly cited reason among respondents who have adopted the Incremental Model, with 39.8%, was that "Individual savings are affordable and manageable in owning a home." This suggests that many residents perceive individual savings as a practical and achievable method for homeownership. The affordability and manageability of this approach align with the financial capacity and preferences of a significant portion of the population.

Approximately 24.7% of respondents noted that the "Incremental housing model provides a long-term cheapest way of owning a house." This highlights the cost-effectiveness of incremental housing, where individuals can gradually build or improve their homes without incurring significant immediate expenses. This long-term perspective may appeal to those who prioritize financial prudence. A smaller but noteworthy percentage, 17.2%, mentioned that incremental housing "Excludes the risks of long-term financial obligations." This perception reflects a preference for avoiding the burden of long-term loans or mortgages and the associated risks. Incremental housing allows individuals to progress toward homeownership without incurring substantial debts.

About 12.9% of respondents highlighted that owning a home through individual savings "Takes lesser time." This suggests that some individuals value the relatively quicker timeline associated with incremental housing compared to other housing finance models, such as mortgages. Lastly, 10.8% of respondents mentioned that the "Incremental housing model is more flexible." This flexibility may pertain to the ability to adapt construction or improvement plans based on changing circumstances or available resources.

The results also align with key informants findings that in Ruai Sub-County, the prevalent housing access model identified was the incremental housing model. This approach allows households to gradually construct or improve their homes over time, primarily utilizing personal savings. This flexible and manageable pathway to homeownership aligns with the financial capacity and preferences of many households in the area, showcasing the adaptability of housing access strategies to local economic conditions and residents' preferences.

The prevalence of the incremental housing model in Ruai Sub-County signifies the adaptability of housing access strategies to local economic conditions and the preferences of residents. It reflects a pragmatic approach adopted by households, aligning with their financial capabilities and the desire for gradual, sustainable homeownership solutions.

However, several challenges were identified across different housing access models. For the mortgage model, stringent eligibility criteria, high interest rates, and limited financial education were identified as barriers for potential borrowers. Cooperative housing models faced challenges related to collective action, effective management, and limited awareness among residents. The incremental model, while popular, encountered hurdles related to land tenure and property rights. These challenges underscored the need for tailored interventions and capacity-building programs to enhance housing accessibility for all residents.

### Reasons for Not Adopting the Incremental Model for Acquiring or Building a House

Figure 13 offers insights into the reasons why respondents in Ruai Sub-County have not used the Incremental Model for acquiring or building a house, shedding light on the barriers and challenges associated with this housing finance approach.

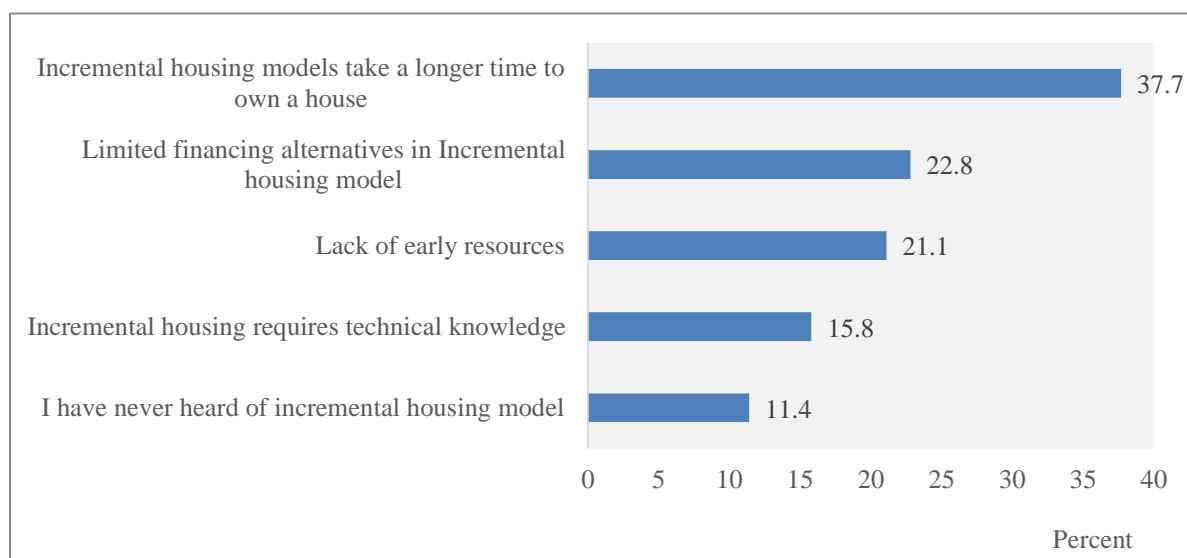


Figure 13: Reasons for Not Adopting the Incremental Model for Acquiring or Building a House

The most frequently cited reason among respondents who have not adopted the Incremental Model is the perception that "Incremental housing models take a longer time to own a house," with 37.7% mentioning this as a significant barrier. This suggests that some individuals may prioritize a faster path to homeownership and perceive incremental housing as a lengthier process compared to other models.

Approximately 22.8% of respondents expressed concerns about "Limited financing alternatives in Incremental housing model." This highlights the importance of having a variety of financing options for housing. Some individuals may feel that incremental housing lacks diversity in terms of financial resources or support. Another noteworthy barrier, mentioned by 15.8% of respondents, is the perception that "Incremental housing requires technical knowledge." This indicates that some individuals may believe that incremental housing involves technical complexities or construction skills beyond their expertise.

Approximately 21.1% of respondents noted "Lack of early resources" as a reason for not adopting incremental housing. This suggests that financial constraints or the absence of initial resources may hinder individuals from embarking on incremental housing projects. Surprisingly, 11.4% of respondents mentioned that they have "Never heard of the incremental housing model." This lack of awareness highlights the importance of disseminating information about incremental housing as an option for homeownership, as awareness can play a crucial role in housing choices.

Key informants also indicated that, for the mortgage model, stringent eligibility criteria, high interest rates, and limited financial education were identified as barriers for potential borrowers. Cooperative housing models faced challenges related to collective action, effective management, and limited awareness among residents. The incremental model, while popular, encountered hurdles related to land tenure and property rights. These challenges underscored the need for tailored interventions and capacity-building programs to enhance housing accessibility for all residents. Other challenges included limited financial literacy among potential borrowers, complex mortgage application processes, limited awareness of cooperative housing models, and challenges in mobilizing sufficient financial resources for housing projects. Addressing these barriers through education, awareness campaigns, and simplified processes was deemed essential to enhance housing access.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusions**

Challenges were identified that hinder the adoption of these housing models, highlighting the need for targeted interventions. For the mortgage model, the high cost of servicing mortgages, the limited availability of mortgages, and concerns about long-term financial obligations are significant barriers. Addressing these challenges could involve measures to make mortgage financing more affordable, improve accessibility, and enhance financial literacy among potential homeowners. In the case of the cooperative model, ongoing fees and restrictions were found to be obstacles. Regulatory adjustments, capacity-building programs, and incentives for cooperative housing could help overcome these challenges. For the incremental model, limited financing alternatives and technical knowledge requirements pose hurdles, indicating the need for financial support mechanisms and educational initiatives.



### **Recommendations**

To address the challenges related to mortgage adoption, financial literacy and education programs should be prioritized. These programs can empower potential homeowners with the knowledge and skills needed to navigate the mortgage process effectively. Financial institutions, housing cooperatives, and government agencies should collaborate to provide workshops, seminars, and educational resources that demystify mortgage financing and its associated costs. Incentives for Cooperative Housing: To promote the cooperative housing model, government agencies and relevant stakeholders should consider offering incentives to cooperative housing societies. These incentives could include tax breaks, reduced regulatory fees, and access to financing at favorable rates. By making cooperative housing more attractive, it can become a viable option for a larger portion of the population.

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