Habitat for Humanity®

Terwilliger Center for Innovation in Shelter

Research on systemic barriers towards access and usage of housing finance in Kenya

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AMFI

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KENYA MORTGAGE REFINANCE COMPANY

Table of contents

Acknowledgements

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MSC prepared this report based on insights gathered from desk review, secondary research, primary research (field survey qualitative and quantitative analysis), stakeholder interviews, and quality assurance. We interviewed several stakeholders, including representatives of microfinance institutions, SACCOs, banks, FinTechs, wholesale lenders, and investors in Kenya.

We thank all respondents and stakeholders for their views on the status and potential of the housing finance market in Kenya. The critical recommendations provided will help address the challenges that hinder access to affordable housing finance by the low- and middle-income population.

The views expressed in this report reflect the opinions of the authors alone and do not necessarily reflect those of **HFHI** or its development partners.

List of abbreviations

AHP	Affordable Housing Program
AMFI	Association of Microfinance Institutions
CSHSF	Civil Servants Housing Scheme Fund
CAHF	Centre for Affordable Housing Finance in Africa
CBK	Central Bank of Kenya
DITs	Dweller-Initiated Transformations
DFIs	Development Finance Institutions
DPI	Digital Public Infrastructure
EAC	East African Community
FSDA	Financial Sector Deepening Africa
FDGs	Focus Discussion Groups
FSPs	Financial Service Providers
HFHI-TCIS	Habitat for Humanity's Terwilliger Center for Innovation in Shelter
IFC	International Finance Corporation
KAHFP	Kenya Affordable Housing Finance Project
KENSUP	Kenya Slum Upgrading Program
KES	Kenyan Shilling
KIIs	Key Informant Interviews
KIHBS	Kenya Integrated Household Budget Survey
KISIP	Kenya Informal Settlement Improvement Project
KMRC	Kenya Mortgage Refinance Company
MFBs	Microfinance Banks
MFIs	Microfinance Institutions
MI4ID	Market Insights for Innovation and Design
MSC	MicroSave Consulting
MSMEs	Micro, Small and Medium Enterprises
NACHU	National Cooperative Housing Union
NEMA	National Environmental Management Authority
NCA	National Construction Authority
NHC	National Housing Corporation
NHFD	National Housing Development Fund
NSHDF	National Social Housing Development Fund
NSSF	National Social Security Fund
KPDA	Kenya Property Developers Association
ROSCAs	Rotating Credit and Savings Associations
SACCOs	Savings and Credit Cooperative Organizations
SASRA	Sacco Societies Regulatory Authority
SDGs	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
USD	United States Dollar
VAT	Value-Added Tax
VSLAs	Village Savings and Loan Association

List of definitions

Adequate housing Kenya's national housing policy describes adequate housing as Shelter with sufficient privacy; space; accessibility; adequate security; security of tenure; structurally stable; adequate lighting, heating, and ventilation; adequate basic infrastructure; cultural adequacy; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost.

Affordable credit refers to loans provided to individuals or households at favorable terms and conditions that align with their financial capacity. In the context of housing finance, it pertains to accessing credit for purchasing, constructing, or improving housing in a manner that does not impose an excessive burden on the borrower's financial resources. Affordable credit for housing typically involves considerations such as reasonable interest rates, manageable repayment terms, and loan amounts commensurate with the borrower's income and ability to repay.

Affordable financial products for housing refer to financial instruments and services specifically designed to facilitate access to housing finance for individuals and households with limited financial resources. These products aim to make housing finance more affordable and accessible to low- and middle-income individuals by offering favorable terms and conditions.

Affordable Housing is defined in Kenya's housing policy as adequate housing that costs not more than 30% of the household income per month to rent or acquire. It refers to reasonably priced housing within the financial means of a particular income group or population segment. It is typically set to ensure that individuals or families can afford other necessities while maintaining stable housing.

Digital loans refer to bank and non-bank loans provided through digital platforms or online channels, allowing individuals or businesses to borrow money electronically without traditional face-to-face interactions or physical paperwork.

FinTech loans: In this study, we use FinTech loans to refer to digital loans provided by non-bank financial technology companies. Examples of FinTech loans that cater to different financial needs in Kenya include Tala, Zenkah, Zash loan, Pezesha, etc.

Housing finance refers to the financial mechanisms and services that facilitate housing acquisition, construction, improvement, or renovation. It involves the provision of funds or credit to individuals, households, or organizations to purchase, rent, or invest in residential properties.

Housing microfinance refers to providing small-scale financial services, such as loans, savings, and insurance, specifically tailored to support the housing-related needs of low-income individuals and households. It offers affordable and accessible financial solutions to help individuals improve their housing conditions, including incremental housing construction, home improvement, and repairs. Housing microfinance typically targets those who are unable to access traditional housing finance.

Semi-permanent dwelling place: In this study, a semi-permanent dwelling place refers to houses whose primary wall structure is mud, poles, and sticks and then plastered. They typically have various forms of iron sheet roofing; their floors can be tiled or plastered. In terms of longevity, they are more resistant to wear and tear than traditional dwellings, typically not built with concrete. They are more affordable to low-income rural dwellers than permanent structures typically built using backed clay bricks (or quarry stones) and concrete.

Shacks refer to small, crudely constructed, and often temporary dwellings built with basic, cheap, or sometimes free materials. People typically live in these structures in informal settlements or slums, where they endure substandard housing conditions resulting from various socio-economic factors. Builders construct this dwelling place using multiple materials, including scrap iron sheets, scrap wood, or sometimes cardboard. In rural areas with visible dilapidation, one can occasionally find cardboard or straightened metallic drum walls.

Traditional or temporary dwelling place refers to houses or structures built using local or non-permanent materials and construction techniques. The materials used are locally available such as wood, thatch, mud, or cloth.

A permanent dwelling place is a residential property intended to serve as a long-term or permanent residence for an individual or a family. It is a place where people live, typically on a full-time basis, and consider it their primary and stable home. Typically, builders construct this dwelling using bricks, quarry stones, blocks, and cement.

List of figures

List of tables

Executive summary

Kenya is the largest economy in the East African Community of states and the second most populous among the members. The country is considered an attractive investment destination regionally due to its strategic location, vibrant capital markets, relative political stability, favorable investment climate, vibrant private sector, and public initiatives that have sought to improve infrastructure, regional connectivity, and market access.

Housing is crucial in Kenya's quest to improve living standards and grow the economy. The Kenyan national government has prioritized providing affordable housing as one of its pillar projects to ensure that low and middle-income households have access to decent and affordable housing units. Housing is one of the most significant expenses for tenants or the most expensive investment a household will likely ever make, and this is not possible without housing finance. As an asset on the household and lender's balance sheets, it is a fundamental ingredient of a functioning financial sector.

Housing finance plays a critical role in determining the availability, affordability, and quality of housing in the country, as the cost of financial services impacts the final cost of housing for consumers. On the demand side, housing affordability is determined by the relationship between property prices and income levels. Therefore, the cost of financing needs to align with the cost of the property to ensure that housing remains affordable for most of the population. Adequate housing availability is influenced by factors such as production scale, technology applied, construction costs, and property quality. The affordability of housing financial products directly affects the scale and distribution of housing, including self-construction and home purchases. Addressing housing finance challenges is crucial to developing the financial sector and improving housing conditions.

The pressing need for housing in Kenya is evident across all counties, as evidenced by substandard and inadequate housing conditions, including overcrowding and informal settlements. Substandard housing conditions do not meet basic safety standards, structural stability, hygiene, functionality, or adequate space necessary for a safe, healthy, and comfortable living environment. Many Kenyans reside in inadequate temporary shelters or low-quality housing, adversely impacting their overall well-being. Additionally, in rural areas, many individuals face challenges in improving their housing conditions due to limited access to affordable credit. In the form of mortgages, commercial institutions in Kenya, such as banks, SACCOs, and microfinance banks, predominantly provide housing finance. However, low-income earners require greater access to long-term financing options and often encounter unaffordable interest rates, with limited funding alternatives for affordable housing.

The Kenyan government has been pushing for new housing programs since adopting Vision 2030 in 2008. However, government initiatives alone are not enough to create the systemic changes required to meet the growing housing deficit, as official statistics reveal over four million Kenyans live in slums, mainly representing the urban population. Currently, there is an annual housing gap of 250,000 housing units. However, developers primarily target the upper-middle and high-end market segments excluding the low-income segments of the population[1]. Moreover, the incremental housing processes many low-income households use to construct houses should be accounted for in the available data sources. Currently, these processes are often left out of the analysis or data, hindering our ability to assess the entire housing and housing finance market comprehensively.

To address the affordable housing and housing finance challenge, this study aimed to; identify the systemic barriers preventing access and usage of housing finance in Kenya on the supply and demand side. The study used a mixed method approach comprising of desk review, secondary research, and primary research (qualitative and quantitative) design to collect and analyze data to generate evidence to address the study objectives. The total sample size of the study was 680 respondents interviewed from 11 counties: Bungoma, Embu, Kajiado, Kakamega, Kiambu, Kilifi, Kisii, Kisumu, Machakos, Mombasa, Nairobi, Nakuru, Nyeri, and Usain Gishu. The sample consisted of key informant interviews (KIIs) for supply-side respondents, focused discussion groups (FDGs), and in-person demand-side quantitative interviews.

[1] The World Bank

From the survey's sample, 41% of the respondents living in urban areas owned a house. Access to housing finance by residence was as follows; urban areas (8%), peri-urban (12%), and rural (16%). Additionally, findings indicated that 56.2% of the formally employed population had access to housing finance loans compared to only 29.2% for the informally employed population.

The study found that the major barriers to accessing housing finance for low and middle-income households included: high-interest rates, high cost of building materials, and the need for formal documentation and information. Further, the low- and middle-income group informality, lack of collateral, and unstable income sources made them unattractive to financial institutions such as banks and SACCOs, leading to limited access to finance. Land tenure rights and limited access to basic infrastructure and utilities, such as water, sanitation, electricity, road networks, and transportation, also impede housing development and make certain areas less attractive for investment. While Kenya will likely take several years to narrow the housing finance inclusion gap significantly, some strategic interventions can help it create a solid foundation to build an inclusive housing finance system. These include:

- Address the need for incremental building by exploring the development of financing solutions that promote incremental housing development, such as supporting self-built housing.
- Developing solutions such as alternative credit scoring mechanisms, asset registry, and minimal collateral requirements to address the informality challenge.
- Increasing funding for housing finance initiatives, such as providing grants or low-interest loans to financial institutions that provide housing finance.
- Collaborations between the government, private sector, development partners, wholesale lenders, and investors to increase housing finance availability and create a sustainable housing finance system.
- Technical assistance and capacity building to financial institutions, developers, housing support organizations, government agencies, building contractors, and construction workers to address supply-side capacity constraints, including gaps in skills and data/information availability.
- Exploring innovative financing options, such as blended housing finance solutions, that encourage early-stage innovation and long-term sectoral growth.
- Sound policies, such as reforming national housing policies, developing housing finance strategies, and creating an enabling environment.
- Enhance financial literacy and awareness among consumers through financial education programs to increase knowledge of housing finance options among low and middle-income households.
- Develop tailored housing finance products that cater specifically to low- and middle-income households' needs and financial capacity. These include flexible repayment terms, lower interest rates, and minimal requirements.
- Addressing data gaps by developing an open data portal, conducting regular national surveys every 2-3 years, and collaborating with partners such as FinAccess for inclusive housing finance information.
- Implement technology-driven solutions, including blockchain for transparent property transactions, data-driven credit scoring for efficient assessments, and digital platforms for peer-to-peer lending and investor connections.
- Implement cost reduction strategies for improved access to housing finance by prioritizing customer education, leveraging technology for streamlined processes, and exploring innovative financing models to reduce overall costs.

This report is organized into four chapters that present and discuss the research findings. Chapter one explains the background and context of the study, its purpose and objectives, conceptual framework, approach and methodology, and socio-economic characterization of the respondents. Chapter two describes the status of Kenya's housing finance market landscape, housing finance trends, and the policy and regulatory framework. Chapter three covers the systematic barriers to housing finance in Kenya on the supply- and demand side based on empirical analysis. Chapter four concludes on the state of housing finance in Kenya and covers the lessons learned, emerging opportunities and recommendations, and an intervention roadmap for addressing the housing finance gap.

1.0 Introduction

1.1 Project Background and Context

Adequate shelter is one of the most basic human rights, and for the majority of the household, their home (including land) constitutes their most significant financial asset. The term adequate shelter refers to more than basic infrastructure; it includes the availability of land and social amenities, such as water, and sewage facilities, that facilitate human habitation to raise families2. Many Kenyans reside in inadequate and substandard temporary shelters or extremely low-quality housing, affecting the overall well-being of household members. Further, in rural Kenya, much of the population cannot improve their housing conditions, mainly because of the lack of access to affordable credit. Access to finance for housing in Kenya is predominantly provided by commercial institutions, such as banks, and microfinance institutions, in the form of traditional mortgages (World Bank, 2017). This means that people experiencing poverty and those with alternative forms of land tenure have limited access to long-term financing and face unaffordable interest rates, with limited funding alternatives for affordable housing.

Kenya's 2010 Constitution stipulates that every person has a right to accessible, adequate housing and reasonable sanitation standards, with the government mandated to implement housing programs. The Kenyan government has led a welcome push for new affordable housing programs and projects since the adoption of Vision 2030 in 20083. However, government initiatives alone are not enough to create the systemic changes required to meet the growing housing deficit, as official statistics reveal:

- Four million Kenyans live in slums, representing about 46.5% of the country's urban population (Center for Affordable Housing Finance in Africa, 2022)
- Kenya has an annual housing gap of 250,000 housing units. Yet, developers only build 50,000 units, with 49,000 units targeting the upper-middle and high-end market segments, according to the World Bank. This leaves the low-income group greatly undersupplied, with a meager 1,000 units. Moreover, the incremental housing processes many households use to acquire homes are not accounted for in this data.
- The least expensive home formally built by a developer in 2012 cost more than USD 15,000, more than ten times the average annual income of low-income households in Kenya (USD 1,340) Centre for Affordable Housing Finance in Africa (CAHF).

To address the challenges towards housing and housing finance, **Habitat for Humanity International's (HFHI) Terwilliger Centre for Innovation in Shelter (TCIS)**4 has partnered with the **Kenya Mortgage Refinance Company** (**KMRC**) and Association of Microfinance Institutions (**AMFI-K**) on a five-year (2020-2025) memorandum of understanding (MoU) that seeks to position the organization as one of the central players in providing housing finance for low-income households in Kenya. **TCIS** program focus is evolving from direct market intervention to an Integrated Systems Approach to Incremental Housing Processes (ISA2IHP). **HFHI**, as a non-profit organization, supports the low and middle-income segments to access decent housing by working with a broad network of national habitat organizations and other strategic partners, such as corporations, financial service providers, individuals, non-governmental organizations, government agencies, and stakeholders.

1.2 Purpose and Objectives of the Study

1.2.1 PURPOSE OF THE STUDY

This study is essential as housing is a crucial driver in achieving many Sustainable Development Goals and highlights its contribution towards most SDGs. According to FSDA (2021), housing is a central feature of the real economy of any country. It is one of the most significant expenses for tenants or the most expensive investment a household will

[2] Habitat for Humanity Terwilliger Center and Kenya Women Microfinance Bank, 2018
[3] Vision 2030, Government of Kenya
[4] Habitat for Humanity International

likely ever make, and it cannot exist without finance. As an asset that sits on household and lender balance sheets, it is a fundamental ingredient to a functioning financial sector that meets the needs of the country's population in all its breadth. Adequate housing can improve health, education, and nutrition, reduce infant mortality, and provide access to basic amenities. It can also create a sense of place and dignity, build community cohesion, and improve household financial stability. Additionally, it can provide opportunities for the housing industry and is a prerequisite for inclusive, equitable, safe, resilient, and sustainable cities and metropolitans. According to Habitat for Humanity (2021), existing research and analyses on the 17 SDGs with their 169 targets and more reveal that:

- Housing contributes directly or indirectly to achieving most of the SDGs.
- Housing is a platform for household resilience and sustainability, driving the Human Development Index and Multidimensional Poverty Index outcomes in health, education, and standard of living, including indicators in nutrition, child mortality, school enrollment, energy, water, sanitation, and durable and healthy construction.
- Housing can create a sense of place and dignity, building community cohesion and one's social and financial network and assets.
- Adequate and affordable housing multiplies community jobs and incomes and improves household financial stability, often providing opportunities for the home-based industry.
- Housing is a prerequisite for inclusive, equitable, safe, resilient, and sustainable cities.

Access to housing finance is a crucial development component, as adequate and affordable housing is a fundamental human right globally (**Habitat for Humanity Inaternational's Terwilliger Center** and **Kenya Women Microfinance Bank**, 2018). However, in Kenya, systemic barriers make it challenging to access housing finance, particularly for low- and middle-income segments. For example, CBK increased its lending rate from 7-5% to 8.75% in 2022. Consequently, only 11% of Kenyans can afford mortgages, mainly offered by commercial institutions, making it difficult for low- and middle-income earners to enter the housing market. This study attempts to provide a transparent and objective evaluation and characterization of the systemic barriers preventing access and usage of housing finance for low-and-middle income segments in Kenya.

Further, according to the Center for Affordable Housing Finance (CAHF) in Africa (2022), some demand-side barriers to housing finance in Kenya include lack of collateral, poor credit history, information, lack of affordable financing options, lack of formal employment, and low financial literacy and awareness. Negative perceptions and stigmas associated with low-income households and individuals accessing housing finance can also limit their access to these services. These barriers disproportionately affect men and women based on gender (International Finance Corporation, 2019).

On the supply side, financial institutions in Kenya face systemic barriers in providing housing finance to low and middle-income populations. These include a need for adequate funding, high operational costs, and regulatory and policy barriers. Additionally, there is a lack of awareness of the preferences, attitudes, and behavioral biases of low and middle-income segments, limiting their ability to tailor housing finance solutions. Microfinance institutions also play a significant role in housing finance, but their loans may be associated with higher interest rates and more restrictive loan terms (Microfinance Information Exchange 2017). Furthermore, private sector players control the property market, making it challenging to access affordable financing options since their primary objective is maximizing profit by targeting the high net-worth market.

Affordable housing finance is crucial in Kenya, where shortages and poor-quality housing prevail among slums, peri-urban, and rural-based populations. Through Vision 2030, the government's Affordable Housing Program has expanded the housing supply and financing mechanisms, but the gap remains vast. The government pledged to build 500,000 housing units for the lower and middle-income population segments by 2022. The units were to be sold at a price range of USD 6,000 to USD 30,000. Economic survey data shows by the end of 2021, the five-year plan had yielded only 431 units or 0.8% of the affordable houses target. This totaled 2,613 units constructed by the State since 2017. However, there were 3,480 low-cost houses under construction by State as of December 2021. Access to adequate housing can have numerous benefits, including economic growth and job creation. We sought to uncover the systemic barriers to accessing affordable housing finance and develop a roadmap for interventions in Kenya's housing finance sector.

1.2.2 OBJECTIVES OF THE STUDY

The main objective of this consultancy was to conduct market research on the systemic barriers to access and usage of housing finance in Kenya. The specific objectives are to:

- Assess the knowledge, attitudes, social norms, and perceptions of low and middle-income earners towards access and usage of housing finance.
- Assess the policies, regulations, and laws that hinder or support access and usage of housing finance.
- Examine the business characteristics and institutional factors involved when accessing housing finance and the effect on borrowing decisions experience-based assessment of the systemic and administrative barriers)
- Identify housing finance products and solutions currently available in the market and map the players in the sector.
- Determine the needs, challenges, and opportunities demand-side players (low-and middle-income individuals and incremental builders) face in access and usage of housing finance.
- Determine supply-side players' current and future needs (MSMEs and FSPs).
- Identify factors hindering access and usage of housing finance in Kenya.
- Develop a road map of interventions that can be adopted by various stakeholders (government, **KMRC**, **HFHI**, and **AMFI-K**) to create an enabling environment for improving access and usage of housing finance.

1.3 Approach and Methodology

1.3.1 RESEARCH DESIGN

The study used a mixed-methods (qualitative and quantitative) design. The combined use of quantitative and qualitative data collection generally provided a better empirical understanding than a single approach. This integration fostered the triangulation of more comprehensive evidence to address the study objectives.

1.3.1.1 SAMPLING AND SAMPLE SIZE

The study's sample size determination followed statistical methods considering error tolerance and population size. This study applied Slovin's formula for minimum sample size determination to calculate the quantitative survey sample as follows:

$$\boldsymbol{n} = \frac{\boldsymbol{N}}{\boldsymbol{1} + \boldsymbol{N} \cdot \mathrm{e}^{\boldsymbol{2}}}$$

Where:

n – Sample size

N – The total population and in this case, is 22,670,434 from five regions in Kenya (KNBS, 2019)

e – Error tolerance used is 0.05 (95% Confidence)

The calculation becomes:

$$n = \frac{22{,}670{,}434}{1 + (22{,}670{,}434 \cdot 0.05^2)}$$

$$n = 399.993$$

While the suggested sample size for this study was 400 respondents, we ultimately decided to use a larger sample of 680 respondents for several reasons:

- A larger sample size provides more statistical power, allowing us to detect smaller effect sizes and better understand the relationships between variables. This is particularly important when examining complex or subtle phenomena, as it reduces the likelihood of making Type II errors (failing to detect a real effect).
- A larger sample size also results in more precise estimates of population parameters, as it reduces the margin of error associated with our findings. Using 680 respondents, we are more confident that our results accurately reflect the population values.
- A larger sample size allowed us to capture better the studied population's diversity. With 680 respondents, we ensured that our sample included a broader range of perspectives and experiences, which led to more generalizable findings.
- Using a larger initial sample size, we mitigated the impact of such issues and maintained enough respondents for meaningful analysis.
- A larger sample size allowed us to conduct additional subgroup analyses if required. These helped identify differences or trends within specific demographic or subpopulation groups, which may not have been apparent with a smaller sample size.

This sample size is statistically adequate and matches the available resources and timelines. We also resolved to refrain from doing telephone interviews to capitalize on the advantages of in-person interviews.

1.3.1.2 SAMPLE DISTRIBUTION

We gathered data from a diverse sample of individuals in Kenya through survey respondents, key informants, and focused discussion groups (FDGs). The sample was collected from five regions, with at least two counties per region, except for Nairobi. Purposive sampling was used to ensure the representation of diverse demographics, including youth, men, women, low- and middle-income individuals, rural and urban dwellers, people with disabilities, incremental builders, and other relevant groups. The research team designed the sampling method to ensure the respondents were at least 40% female. A robust stakeholder mapping and technical personnel from **HFHI** and partner teams' inputs informed the sampling of supply-side respondents. The total sample size was 680 individuals across the Nairobi Metropolitan area (Nairobi, Kajiado, Machakos, and Kiambu counties), the former Nyanza Province, the former Western Province, the Central Rift Valley Region, Mt. Kenya Region, and the Coastal Region. Figure 1 shows the geographical distribution of the sample, Table 1 shows its categorical distribution, and Table 2 shows the distribution of survey respondents by region.

The demand side survey had a total of 464 survey respondents. The sample encompassed male (47%), female (53%), rural (38%), peri-urban (35%), and urban (26%) dwellers. Furthermore, we conducted FDGs, engaging 100 participants who offered valuable insights. The **Kenya Affordable Housing Program** established income categories to provide a clear framework for classification. On this basis, the income categories from the study sample were as follows:

- Category 1 (48%): respondents earning KES 19,999 (USD 154) and below,
- Category 2 (32%): respondents earning between KES 20,000 (USD 154) and 49,999 (USD 385),
- Category 3 (18%): respondents earning between KES 50,000 (USD 385) and 149,999 (USD 1,154), and
- Category 4 (2%): respondents earning KES 150,000 (USD 1,154) and above.

These categories served as a standardized system to effectively analyze and interpret income levels among the respondents in the study.

Analyzing the distribution of respondents based on their dwelling place, we found that 64% resided in permanent houses, 20% in semi-permanent structures, 13% in traditional or temporary housing, and 3% in shacks. On the supply side, we collected data from three banks, three microfinance banks, seven credit-only microfinance institutions, seven SACCOs, and two wholesale financiers. Intermediaries such as FinTech companies, who play a crucial role in facilitating financial transactions, were represented by one respondent. Builders known as "*fundis*" were included in the study, with 67 participants and 26 participants from MSMEs serving as material suppliers. The overall sample size for the study was 680 individuals, representing a diverse range of stakeholders within the housing finance ecosystem.

According to Word Bank, there are different income ranges and corresponding levels of formal employment in various population segments. These are defined as follows;

Middle to high-income segment	Income range: KES 150,000+ (USD 1,154+) Share of formally employed: <3%
Mortgage gap segment	Income range: KES 50,000 (USD 385)—149, 999 (USD 1,154) Share of formally employed: >22%
Low-cost segment	Income range: KES 20,000 (USD 154)—49,999 (USD 385) Share of formally employed: >71%
Social segment	Income range: KES 0—19,999 ((USD 154) Share of formally employed: >2%

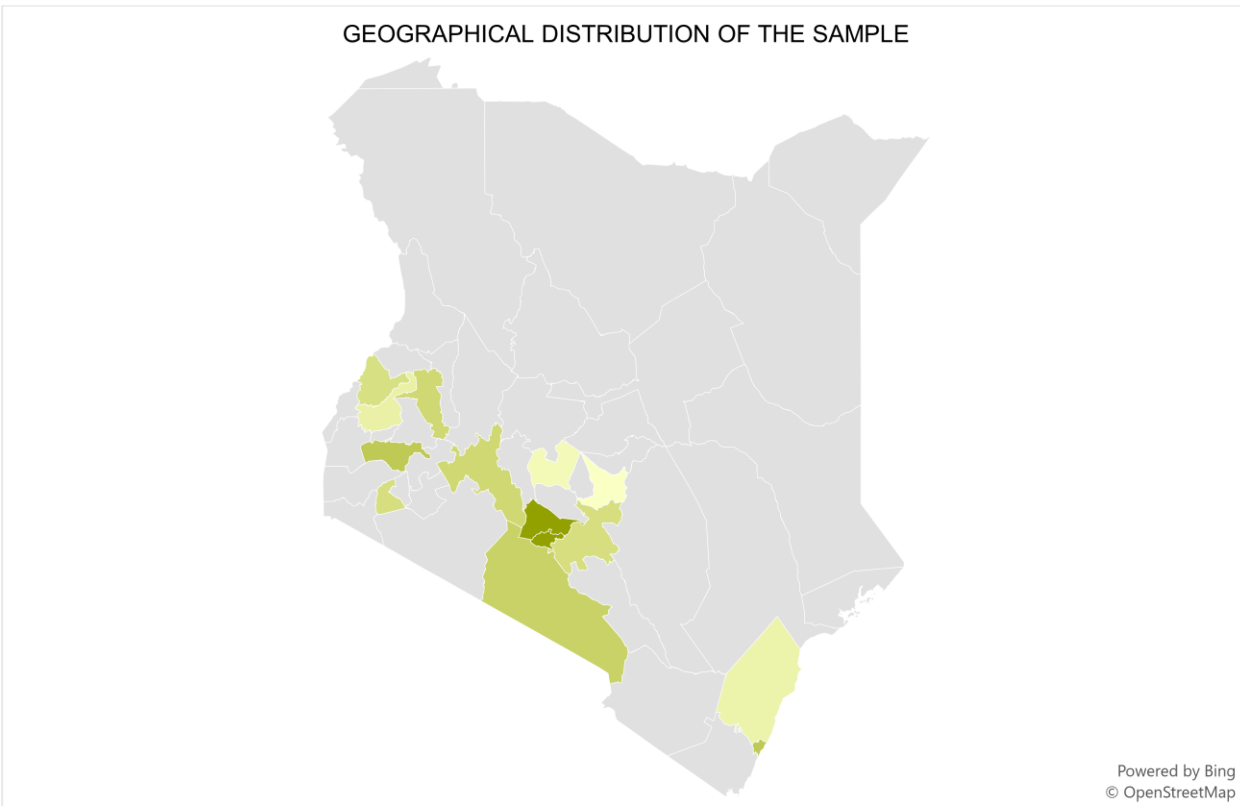


Figure 1: Map of sample distribution across the study geographies

Table 1: Study sample

Respondent categories		Sample size	
Supply-side	Banks	3	22
	Microfinance banks	3	
	Credit-only microfinance institutions	7	
	SACCOs	7	
	Wholesale financiers	2	
Intermediaries	FinTech	1	94
	Fundis (Builders)	67	
	MSMEs (Material suppliers)	26	
Demand side	Survey respondents	464	564
	Focused Discussion Group (total participants)	100	
Total sample		680	

Table 2: Study sample distribution by region

Region	County	Number of respondents
Nairobi metropolitan areas	Nairobi	60
	Kiambu	60
	Kajiado	36
	Machakos	30
Former Nyanza province	Kisumu	40
	Kisii	30
Former Western province	Bungoma	29
	Kakamega	21
Central Rift Valley Region	Nakuru	33
	Uasin Gishu	33
Coastal region	Mombasa	40
	Kilifi	20
Mt. Kenya region	Nyeri	17
	Embu	15
Total		464

1.3.1.3 DATA COLLECTION

We used a structured questionnaire for the demand side survey. The enumerators used the kobo collect mobile app to administer the questionnaire using their mobile phones. The data was relayed to the Kobo toolbox web portal immediately after being uploaded by an enumerator. Research supervisors could monitor the quality of data collected and promptly address any gaps. Using the Kobo tool also ensured data was safe and information was kept private. Enumerators had no access to the data once they had submitted the forms. The enumerators were mainly hired from the research regions to ensure ease of understanding of the questions by the respondents. They could speak the local languages — a feature that enabled them to help the respondents understand the questions better.

For the supply-side stakeholder engagements, the research supervisors administered paper-based semi-structured questionnaires. Most interviews were done in person, while a few were done over video conferencing. Where respondents allowed recording, the team captured the audio to facilitate any need for further references or to capture accurate quotes. However, most of the time, the research supervisors majorly relied on handwritten notes against the prepared questions and prompts.

1.3.1.4 DATA ANALYSIS

The research team applied both qualitative and quantitative data analysis tools and techniques. The team adopted thematic analysis for the qualitative data from the focused discussion groups (FDGs) and key informant interviews (KIIs). The demand-side survey data was primarily analyzed using SPSS version 26 and R for some inferential analysis. The limitation of the approach and methodology is that the proportion of respondents who had received loans was overrepresented in the sample. As a result, some inferences drawn may not be representative of the population (especially the inferential stat results). Most respondents who did not access HF had not applied. This is what the model has shown due to causation.

1.3.2 CONCEPTUAL GROUNDING OF THE STUDY

The conceptual grounding applies two frameworks, MSC's MI4ID approach and a market assessment framework, as explained below:

1.3.2.1 MSC'S MI4ID APPROACH

We applied MSC's **Market Insights for Innovation and Design (MI4ID)** approach to primary market research. To understand the market and identify opportunities to address housing finance barriers. Market insights generally involve defining the research question guiding the market assessment. The goal was to understand the systemic barriers to housing finance deeply. The approach also guided engagement with the supply-side actors in terms of collaboration to build solutions based on the persona profiles of the target clients. The innovation and design phase ensured that based on gathered insights from housing finance actors, recommendations were drawn to guide designing solutions and building concepts to show the applicability of such solutions. Figure 2 provides a schematic representation of the MI4ID.

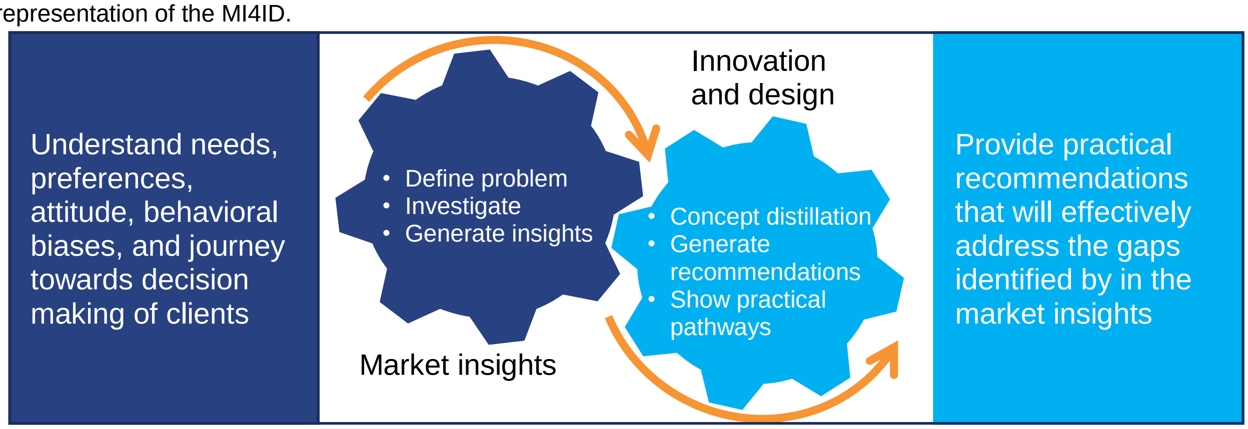


Figure 2: MSC's Market Insights for Innovation and Design (MI4ID) framework

The general research process under the MI4ID included the following:

- Defining the research problem,
- Reviewing literature concepts and theories,
- Identifying the research gaps,
- Developing the research design (including sample procedures and size);
- Collecting qualitative and quantitative data,
- Data analysis synthesis, extrapolations, content analysis, stakeholder analysis, statistical analysis, and
- Designing tailored, context-specific approaches and solutions.

1.3.2.2 MARKET ASSESSMENT FRAMEWORK

The market assessment framework also guided the study where the demand-side assessment considered the current and future housing finance needs, challenges, preferences, perceptions, and aspirations of the customers, social norms, behavioral biases, and customer journeys, including those of micro, small, and medium enterprises (MSMEs) and developers.

The supply-side research considered critical players in providing access to housing finance (government and development agencies, financial service providers, non-financial providers, technology service providers, and private sector players); the financial sector regulatory framework; key donors and investors; products and services for target segments; delivery channels used to reach target segments; and business model and user experience. Using the market analysis framework, we identified the demand-supply gaps and opportunities. Figure 3 gives an overview of the overall guiding technical approach.

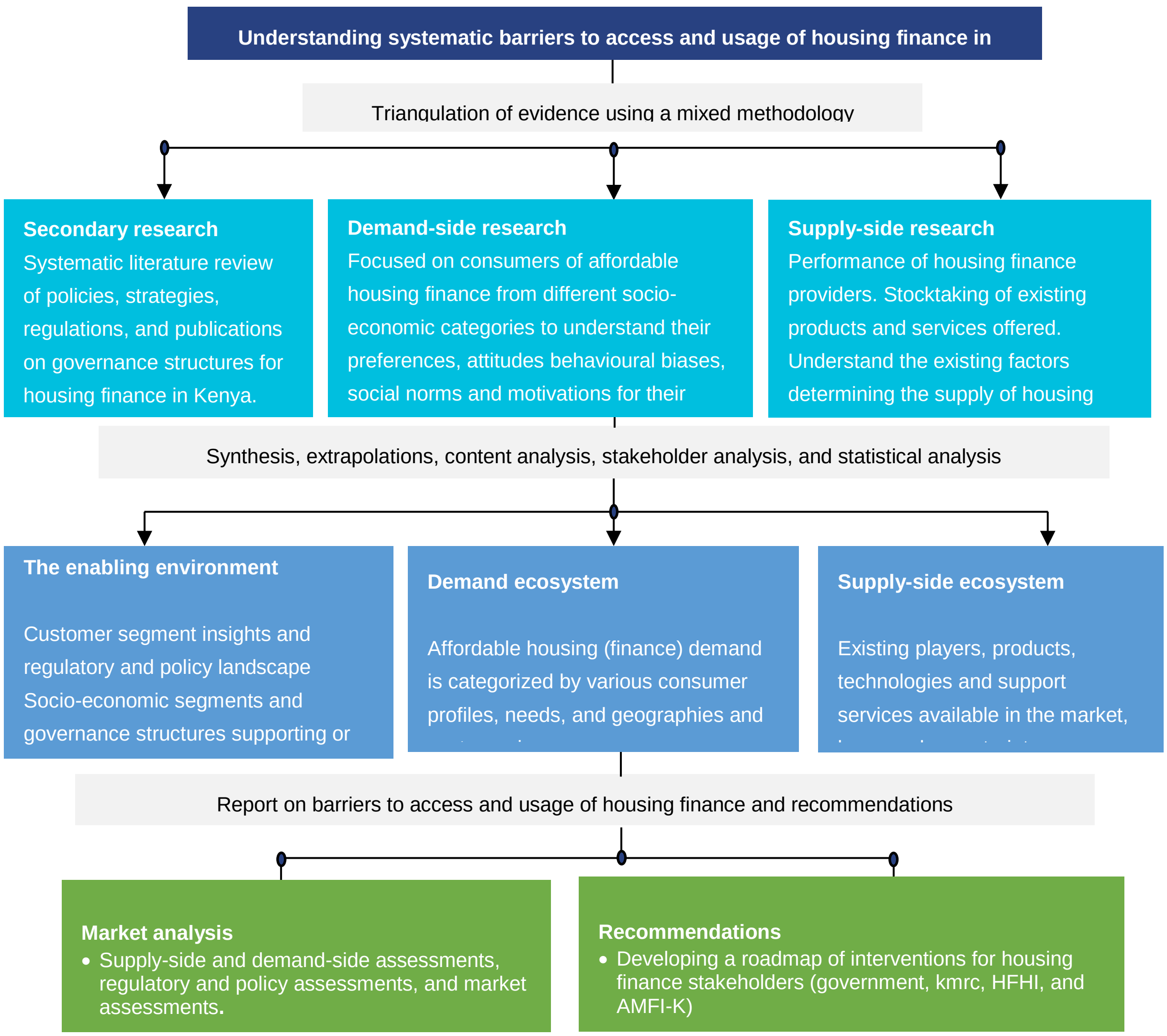


Figure 3: Market Assessment Framework

1.3.3 RESEARCH PROCESS

The research project was divided into four distinct phases that helped to provide structure and guidance. The first phase involved project inception and assessment framework design, which included the development of a draft inception report outlining the study's objectives, methodology, and scope. The research team also conducted an inception meeting with **Terwilliger Center for Innovation in Shelter (TCIS)** and partner organizations, including

Kenya Mortgage Refinance Company (KMRC) and **the Association for Microfinance Institutions in Kenya (AMFI-K)**. Additionally, the team developed a market assessment framework and research tools to guide data collection.

The second phase focused on desk research and stakeholder consultations to gather information and insights about the systemic barriers to access and usage of housing finance products and services among Kenya's low- and middle-income populations. The team conducted desk research and stakeholder consultations based on the market assessment framework (Figure 3) and research tools developed in the first phase.

In the third phase, the team analyzed the data collected in the second phase using qualitative and quantitative methods. The team synthesized the findings and built recommendations based on the analysis. Subsequently, the team developed a draft report summarizing the research findings and recommendations.

Finally, in the fourth phase, the research team organized a validation workshop to review the draft report with key stakeholders, including **HFHI** and partner organizations. The team incorporated feedback from the feedback sessions from **HFHI** and partners to finalize the report. Table 3 provides a summary of the phases and activities of the research.

Table 3: Summary of the research execution process

Phase	Activities
1.	**Project inception and assessment framework design** • Developed a draft inception report • Held an inception meeting with **HFHI** and partners (**TCIS**, **KMRC**, and **AMFI-K**) • Developed a market assessment framework • Developed research tools
2.	**Desk research and stakeholder consultations** • Conducted literature review and desk research • Performed stakeholder and respondent mapping • Planned and executed stakeholder consultations • Conducted data synthesis and develop the market analysis report
3.	**Assessment of systemic barriers** • Data analysis • Synthesized findings and built recommendations • Developed a draft report
4.	**Phase 4: Report finalization** • Rounds of feedback and validation from the HFHI and partner teams • Incorporate feedback and finalize the report

1.4 Socioeconomic characterization of respondents

1.4.1 SOCIOECONOMIC PROFILES OF RESPONDENTS

To gain insight into the socioeconomic characteristics of the study's participants, the research team analyzed various demographic and socioeconomic factors. These factors included age, gender, income, literacy levels, livelihoods, marital status, family size, financial behaviors, and dwelling place characteristics. By carefully examining data on these factors, the team gained a detailed understanding of the participants' socioeconomic backgrounds, providing valuable context for the study's findings.

For this research, urban areas are characterized by high population density and a high concentration of economic activities, with little to no agricultural activities. Rural areas are locations with low population density, undeveloped or natural land, and increased agricultural activity. Peri-urban areas are transitional zones that lie on the outskirts of urban centers. A mix of urban and rural features characterizes these areas. They often experience rapid urbanization due to expanding cities and the conversion of agricultural land into residential or commercial use.

I. GENDER PROFILE

Analysis of the gender distribution data revealed a noteworthy trend: female respondents constituted most of the study's participants, accounting for 53% of respondents for the demand side quantitative survey. This pattern was maintained across all locations, including rural, urban, and peri-urban areas, indicating a significant representation of women as respondents. The study purposed to achieve a gender balance in the overall sample.

Deliberately targeting and achieving higher participation of female respondents in the study benefits the research by providing a more robust gender-based analysis to identify gender-specific barriers and supporting the development of gender-intentional solutions to address these barriers. Despite the reduction in the financial inclusion gender gap from 5.2% in 2019 to 4.2% in 2021[5], women remain on the lower side of the scale. Having more female respondents in the study provides more insights into the excluded.

Chart 1: Gender distribution of respondents

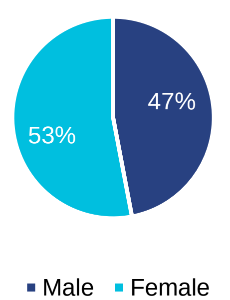


Chart 2: Gender distribution of the respondents by residence

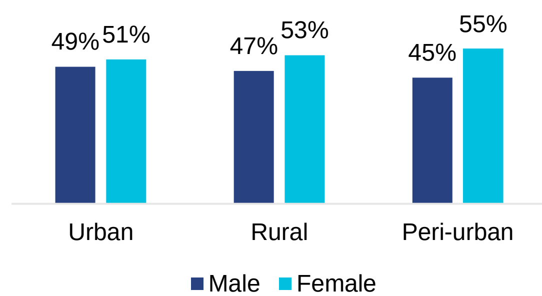
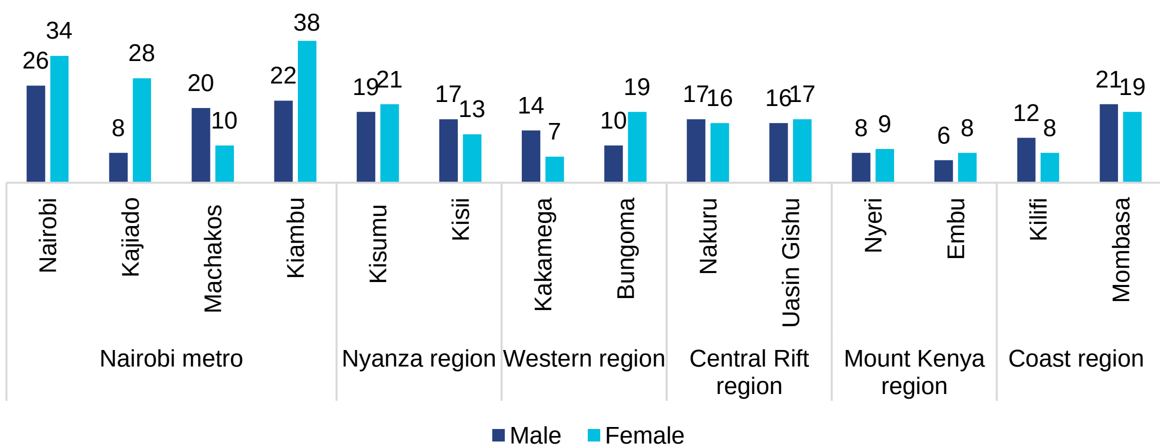


Chart 3: Gender distribution by county (%)



[5] FSD-K, 2022: Putting women at the center of inclusive finance

II. AGE PROFILE

These findings shed light on the age distribution of the respondents and provide insights into the demographics of the areas studied with some cross-tabulations of the average age by residential area and gender.

Chart 4: Average age of respondents in years by residential area

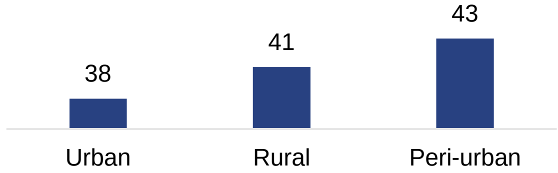


Chart 5: Average age of respondents in years by gender

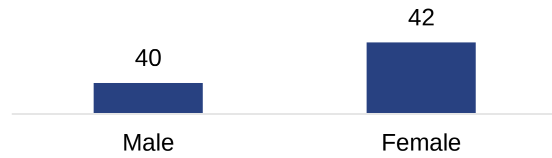


Chart 6: Average age by gender by residence

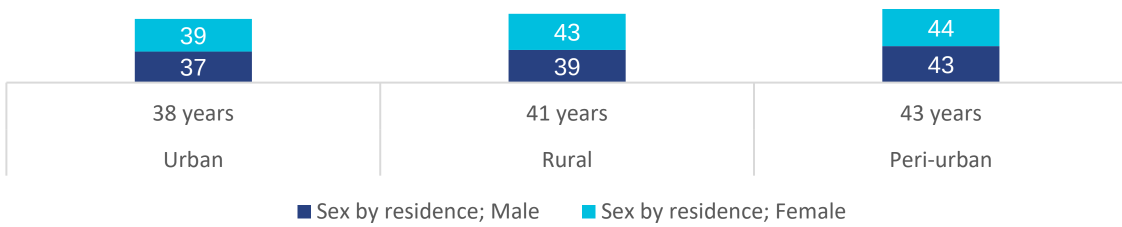
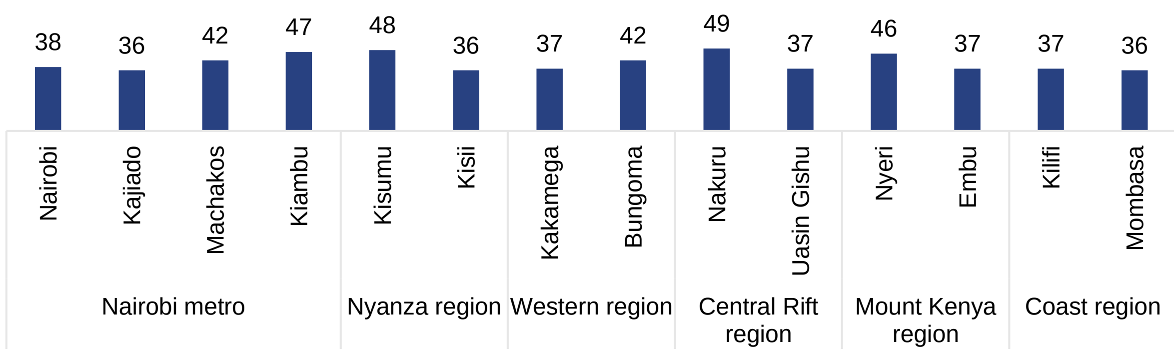


Chart 7: Average age of respondents per County surveyed



The age range of the respondents was broad, spanning from 19 to 93 years old. Mombasa, Kajiado, and Kisii counties had the youngest population, with an average age of 36 (Chart 7). Interestingly, the results show that male respondents had a slightly younger average age of 40 years, while female respondents had an average age of 42 years (Chart 5). Further analysis of population characteristics by location revealed that the urban population had the youngest average age of 38 years, followed by rural areas at 41 years and the peri-urban areas at 43 years (Chart 4).

These results agree with the Kenyan 2019 census, where a majority of the population in urban areas ranges between 20 to 34 years. However, there is a contrast in the rural areas where most of the population is below 15 years old[6]. This was due to the purposive sampling, which targeted households headed by individuals above 18 years. In Kenya, one is a legal adult at 18, permitting them to have a national identity card that is required for house ownership or financial transactions.

[6] 2019 Kenya population and housing census Volume III: Distribution of population by age and sex

III. HOUSE OWNERSHIP

The analysis below represents the status of house ownership, ownership by residence, and gender of the respondents.

Chart 8: House ownership

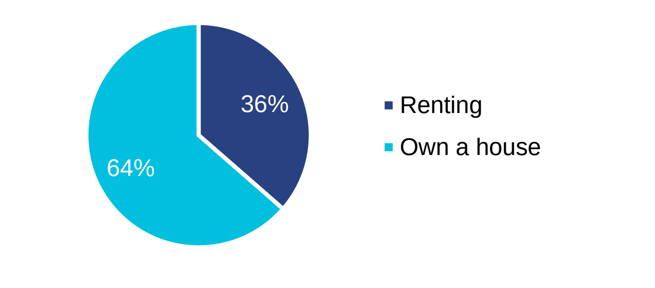


Chart 9: House ownership by gender

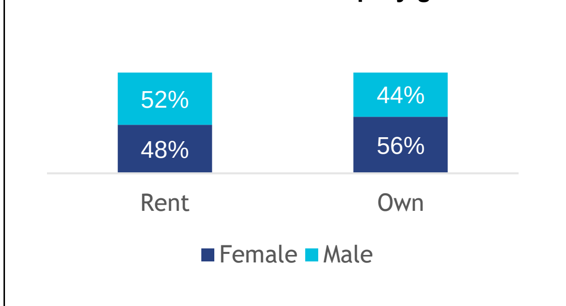


Chart 10: House ownership by residence

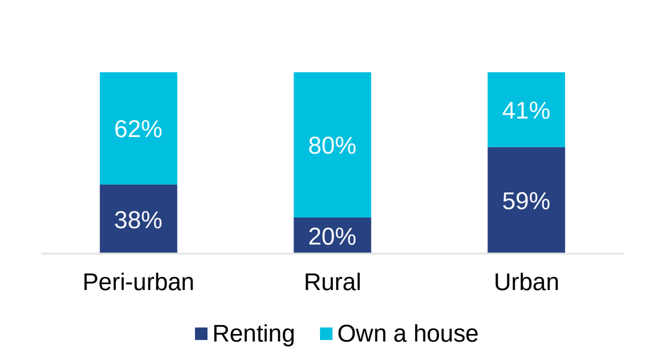
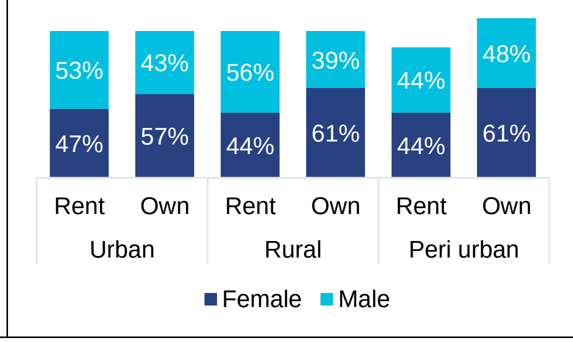
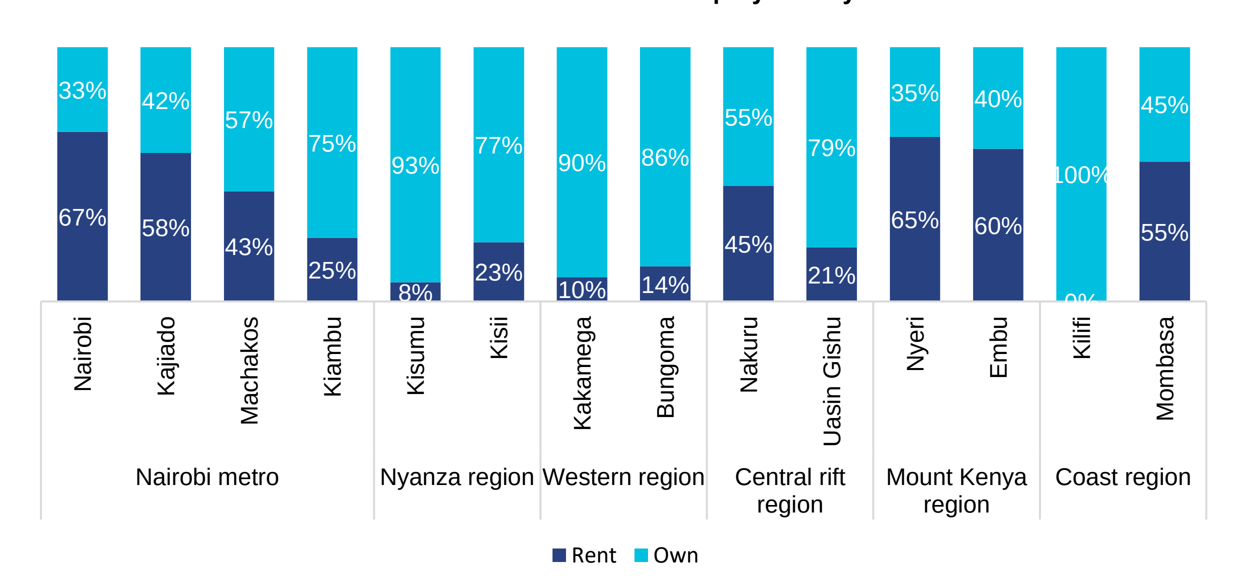


Chart 11: House ownership by gender by residence



Data presented in Chart 8 shows that a majority (64%) of the respondents reported owning the houses they live in. A significantly higher percentage (80%) of the respondents residing in rural areas reported owning their homes.

Chart 12: House ownership by county



In urban areas, renting remains dominant, with 59% of the urban dwellers reporting living in rented houses as illustrated in Chart 10. The increased tendency to own homes in rural areas is attributed to the higher land ownership rate. The current research indicates that out of all the respondents who reported owning the land their house sits on, 49% were from rural areas, while 34% and 16% were from peri-urban and urban areas, respectively (See chart 14).

Furthermore, the survey also found that more female respondents (56%) lived in owned houses than male respondents (44%). The gender difference in ownership of dwelling places held true across urban, peri-urban, and rural landscapes, as illustrated in Chart 11. The seemingly unexpected finding about female home ownership dominance contrasts with land ownership, where men dominate. About 53% of the respondents who reported owning the land their houses sit on are male (See Chart 13). The female dominance in home ownership is likely due to the consideration of joint ownership of marital property in Kenya. Kenya's Land Registration Act[7] and Matrimonial Property Act[8] both recognize spousal entitlement to property, including land and dwelling places. Therefore, any spouse will report owning the property when asked. From the survey data, 67.5% of the respondents were married.

Chart 13: Land ownership by gender

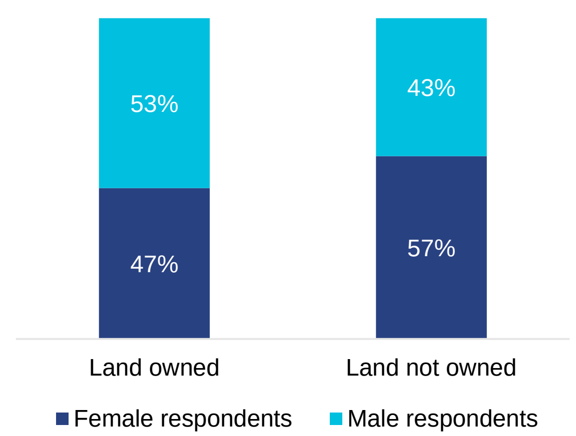
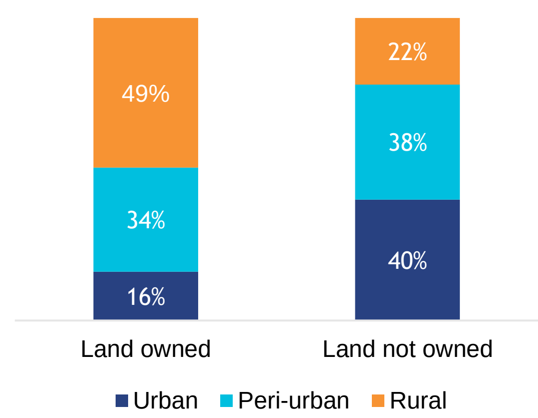


Chart 14: Land ownership by residence



IV. EDUCATIONAL ATTAINMENT

According to the survey results in Chart 15, the respondents displayed considerably high educational attainment, with the highest proportion (44%) attaining some form of tertiary education. About 74% of the respondents have at least a secondary education. Generally, it is easy to assume that such well-educated people are more likely to understand and make sound decisions about financing their home improvement or construction projects. This finding resonates with the results on the ability to read and interpret transaction messages and understand the concept of interest rates. From the survey data, 83.4% of the respondents could correctly calculate loan interest rates or identify the transaction cost in a transaction advice (Short mobile phone message). Chart 16 indicates that urban dwellers have the highest rate of tertiary education (55%), while rural areas have the highest proportion of respondents with only primary education (30%).

Regarding educational attainment by gender, the survey data indicate that the female respondents lag behind their male counterparts. Only 39% of the female respondents have attained tertiary education compared to 50% of the males (See Chart 17). About 29% of the female respondents have no secondary education compared to 23% of males. The lower educational attainment of women is likely to put them at risk of disproportionate access to housing finance. Despite having generally higher access than men in the survey (18.7% for Females versus 16.6% for Males), women remain at a greater risk for exploitative and predatory loans. When presented with a case scenario to

[7] Kenya Land Registration Act
[8] Kenya Matrimonial Property Act

calculate interest rates, 54.5% of the female respondents did not calculate the correct interest rate compared to about 45% of the male respondents. On an exercise to read a transaction message and identify the interest rate, 8.9% of the female respondents who could read could not correctly identify the transaction cost contained in the message; about 3.7% of their male counterparts fall in the same category. It is also worth noting that all the respondents that reported having no formal education were female (3% of the female respondents).

Chart 15: Educational attainment

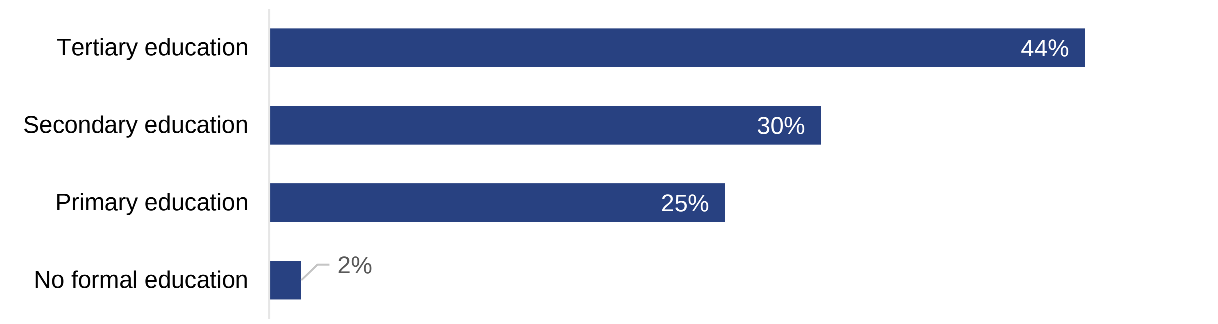


Chart 16: Education by residence

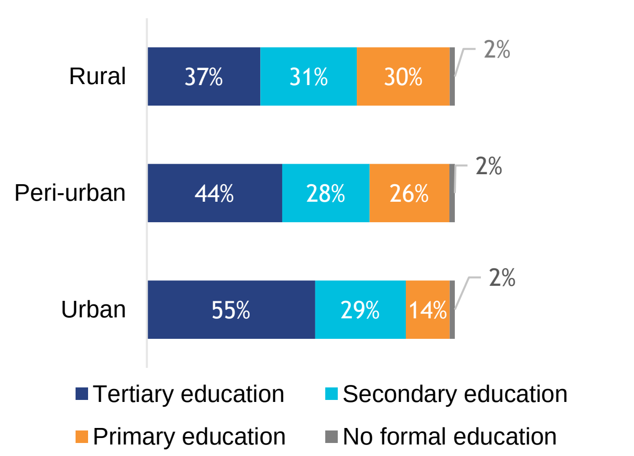
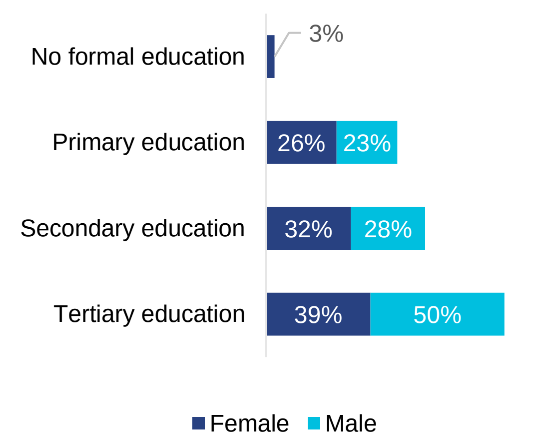


Chart 17: Education by gender

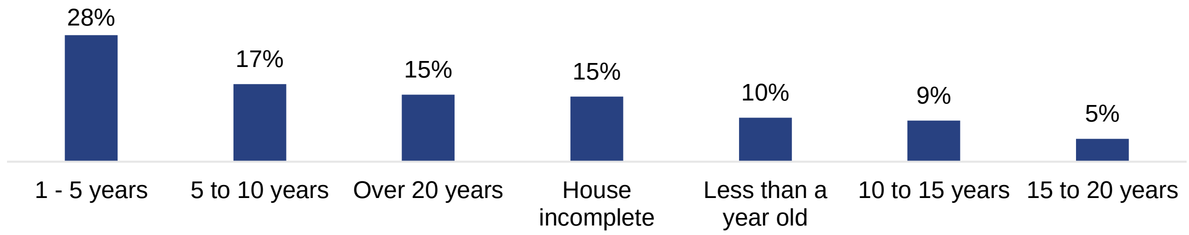


V. DWELLING PLACE (HOUSING)

Out of the respondents that reported owning their houses, about 25% live in recently completed homes or houses under construction. A significant proportion (28%) had just finished their places within the previous five years. In total, respondents who had houses under construction had just completed construction (1 year or less) or completed building within the last five years made up 53% of the sample. This category's dominance indicates a growing home construction trend in the surveyed population. More than half of the respondents fall into these categories, suggesting that many people in the sample have either recently acquired their own houses or are in the process. Chart 18 illustrates this information.

The growing trend of home construction rate signals an increasing need for financing to complete, improve, or renovate houses. The current housing stock is aging and needs replacement, leading to more construction activity. The survey data revealed that over 15% of the respondents' dwelling places were constructed more than 20 years ago (See Chart 18). A more significant percentage (29.5%) of the dwelling places were completed more than 10 years ago. Given that about 38% of the respondents live in houses that are not permanent (with characteristics such as unbaked clay brick walls – 6.2%, wooden walls – 3.9%, mud walls – 16.6%, earthen floor – 13.1%, and showing cracked walls – 15.9%), financing is needed to build new dwelling places or improve or renovate the current ones.

Chart 18: Duration of staying in dwelling place



The research findings in Chart 19 indicate that most (64%) of homeowners resided in permanent structures. Despite this, a significant proportion of respondents (62%) expressed dissatisfaction with their current housing situation (Chart 20). The main reason for dissatisfaction was the size of the houses. Respondents expressed dissatisfaction with the number of rooms across urban and rural areas. On average, the respondents reported being better off having a minimum of 5 rooms. Asked about the number of rooms they currently have in their houses; the average was 3.5. This indicates a gap between the ideal number of rooms respondents would like to have and the number of rooms they currently have, contributing to their dissatisfaction with their current housing situation.

Moreover, the average household size in the survey sample was 5. In the rural areas, this average was 6, 5 in the peri-urban areas, and 4 in the urban areas. The household size average explains why the respondents were unsatisfied with their 3 – 4 rooms.

Table 4: Desired number of rooms versus the current number of rooms

Attributes	Desired number of rooms (Average)	Current number of rooms (Average)
Urban	4.78	3.14
Peri-urban	5.02	3.67
Rural	5.25	3.72

Chart 19: Nature of dwelling place

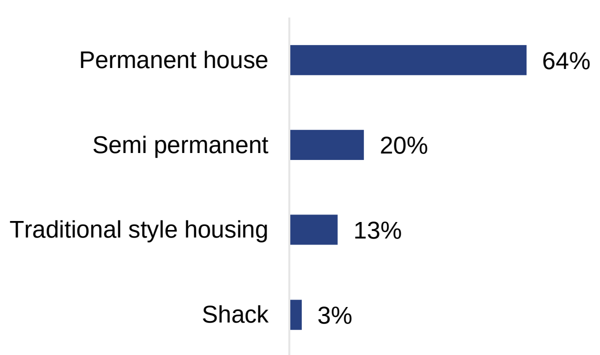


Chart 20: General satisfaction with current dwelling place

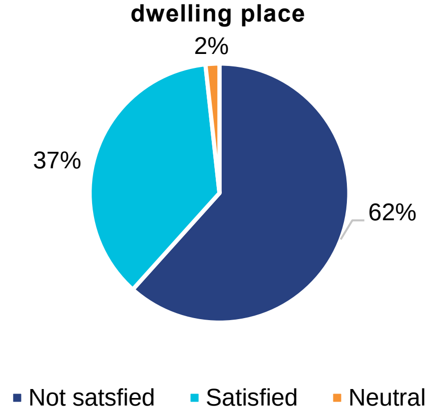
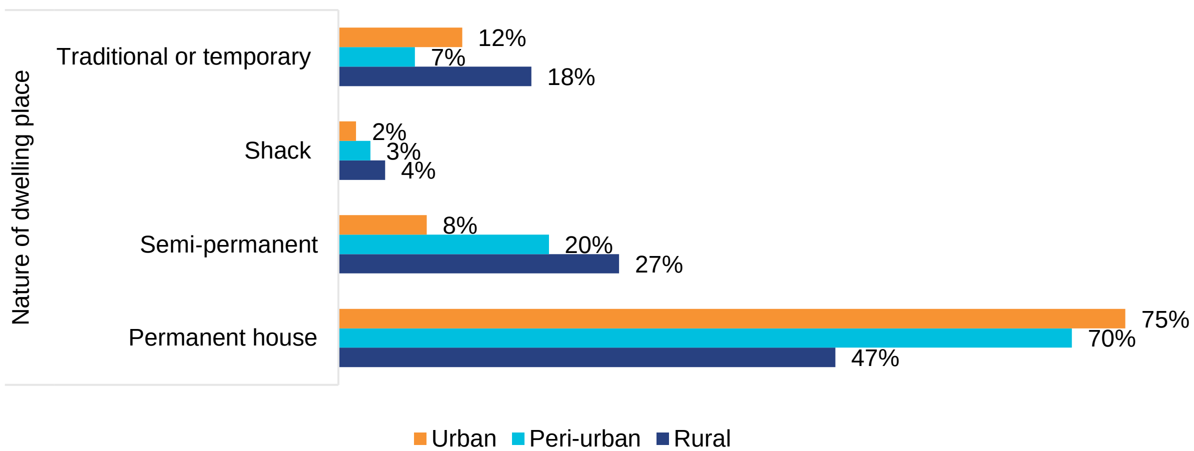


Chart 21: Nature of dwelling place by residence



Other factors that may contribute to dissatisfaction include the quality of construction and fittings, comfort level of the house, security against burglary or intrusion, protection from weather elements, aesthetics of the house and its surroundings, and location near undesirable areas such as busy roads or noisy market areas. In addition to incremental building, needs such as relocation and improvement (and expansion) of housing are crucial, as expressed by the respondents (See Annex 1 for a detailed tabulation of the satisfaction levels).

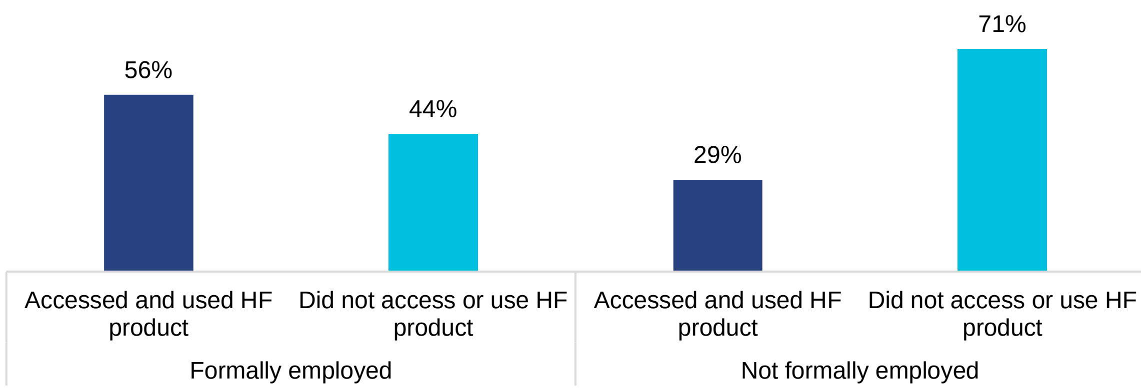
1.4.2 LIVELIHOODS AND INCOME

This section describes the sample in terms of how they make a living (livelihood sources) and how much they earn (income levels). The section also categorizes the income levels and provides a rationale for classifying the survey sample into the Low and Middle-income (LMI) category. It is important to note that the sampling strategy for the study influenced the findings described in this section. For instance, since the survey targeted the low and middle-income segments of the population, it is expected that a significant proportion of the respondents in that segment are not formally employed.

Chart 23 illustrates the broad categorization of the respondents' primary livelihood sources. The other sources of income reported by the respondents include casual work, farming, pension, and remittances from relatives, support organizations, and family and friends. The source of livelihood is a critical factor in access to housing finance because access to financing is often tied to income levels and stability. To qualify for housing loans or mortgages, lenders typically require proof of income and a stable source of income over a certain period.

The respondents who reported having formal employment as their primary source of income (such as salaried jobs) have better chances of accessing housing finance because they have a steady and predictable income that make them more attractive to lenders. Data from the survey (See Chart 22) indicates that only about 29% of those who reported no formal employment could access and use housing finance products and services (specifically, loans for home construction or improvement) compared to about 56% for those who were formally employed. Those who rely on informal sources of income, such as casual work or farming ~~m~~ have a lower rate of access to housing finance products and services due to the perceived higher risk and volatility associated with these income sources. Lenders generally charge higher interest rates for this category and apply more stringent qualification criteria.

Chart 22: Access to housing finance products versus formal employment



Thus, understanding the sources of livelihood for communities is essential in developing effective housing finance policies and interventions that can help address the needs of all population segments, including those with informal or non-traditional sources of income.

Chart 23: Main sources of income (%)

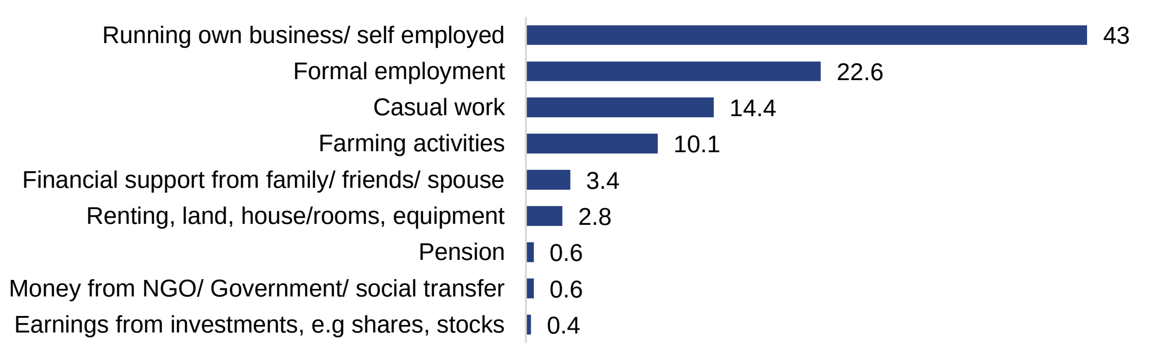


Chart 24: Main sources of income

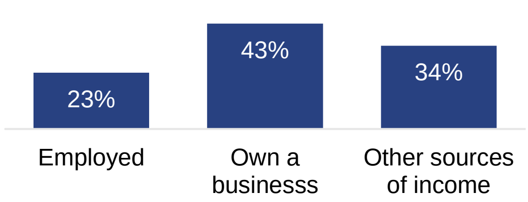
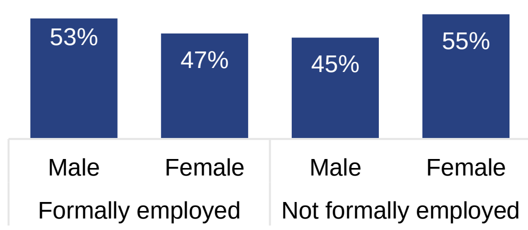


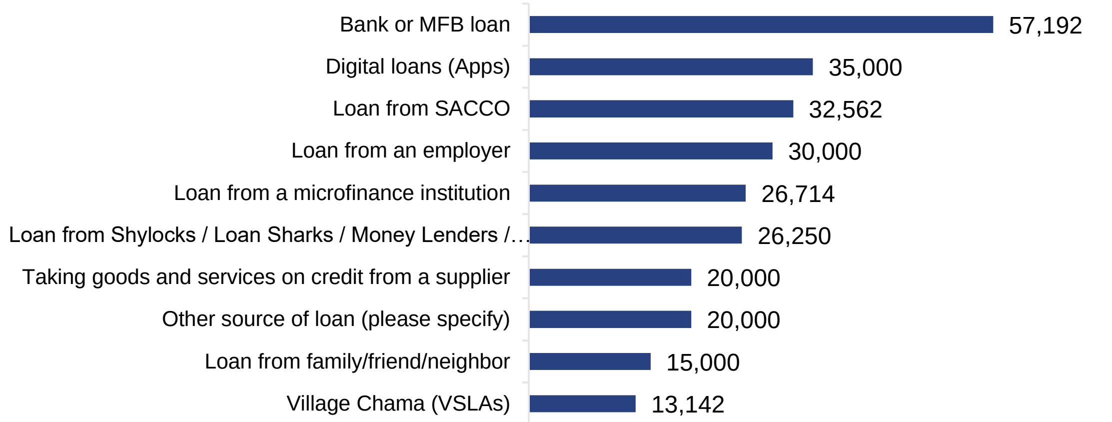
Chart 25: Formal employment by gender



I. FINANCIAL BEHAVIOR

Chart 26 compares the average monthly incomes of respondents with the sources of housing finance loans. The results reveal that higher-income respondents preferred borrowing from banks, digital loans, SACCOs, and employer-provided loans. Those who borrow from the village savings groups have the lowest average monthly income (KES 13,142 or USD 101). Respondents in the median (within the larger LMI segment) income groups mostly borrowed from microfinance institutions and informal sources such as money merchants and 'loan sharks.'

Chart 26: Average income by source of last housing finance loan borrowed



Households with lower average monthly incomes, ranging from KES 13,142 (USD 101) to KES 26,250 (USD 202), were more inclined to access informal loans from village *Chamas* (VSLAs) and shylocks. In contrast, respondents with slightly higher average incomes, within the range of KES 26,714 (USD 205) to KES 32,562 (USD 250), tended to secure loans from relatively accessible formal sources such as microfinance institutions and SACCOs.

The data also indicate that respondents with the highest average income, between KES 35,000 (USD 269) to KES 57,192 (USD 440), predominantly accessed finance from traditional and established sources of credit such as digital lenders and banks or microfinance banks (MFBs). These traditional credit sources are typically more accessible to higher-income earners, who are more likely to be formally employed. It is worth noting that access to credit is closely tied to income levels, with lower-income earners being more likely to seek informal sources of credit. In contrast, higher-income earners have better access to formal credit sources. These findings emphasize the need to enhance financial inclusion and facilitate access to formal credit sources for lower-income earners. The research findings in Chart 27 reveal a disparity in the average income of male and female respondents.

Chart 27: Average income by gender

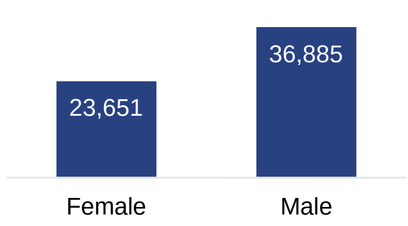
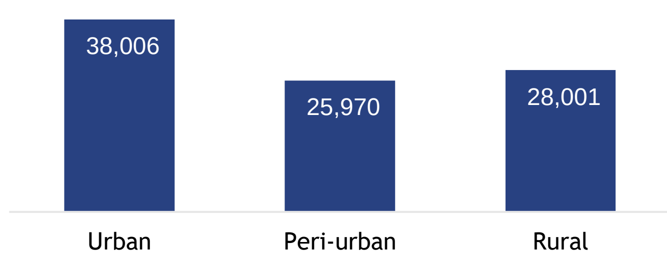


Chart 28: Average income by residence



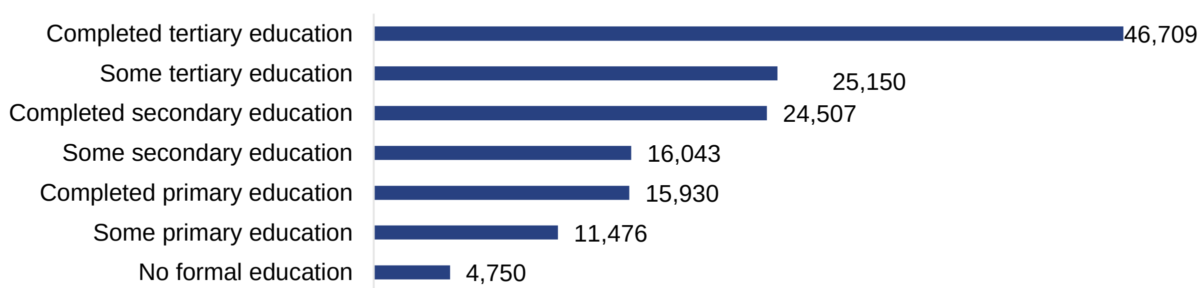
While the average income of female respondents is KES 23,651 (USD 182), male respondents earn a higher amount of KES 36,885 (USD 284).

The implications of this income gap are far-reaching, particularly regarding access to housing finance products and services. Women with lower incomes may face challenges securing formal credit sources, which could restrict their ability to borrow and invest in their future. Data from the survey indicates that female respondents have a lower housing aspiration (value of an ideal house – KES 1,069,819 or USD 8,830)) than male respondents (KES 1,481,039 or USD 11,393). There is a similar trend in loan needs as the female respondents reported that they would borrow an average of KES 1,268,522 (USD 9,758) compared to the male respondents, who reported an average of KES 1,828,065 (USD 14,062).

Chart 29: Male versus female loan needs[9]

Chart 30 shows a significant correlation between education and income. As the level of education increases, the mean income also increases.

Chart 30: Average income by educational attainment



The respondents with no formal education have the lowest mean income of KES 4,750 (USD 37). However, increasing mean income with increasing education levels becomes more evident as we move to higher education levels. Those who completed tertiary education have the highest mean income of KES 46,709 (USD 359).

Overall, the results show that education is a crucial driver of income. The higher the level of education, the higher the mean income, which can have important implications for policy-makers, individuals, and society as a whole. It highlights the need for investment in education, as it can provide a pathway for individuals to improve their economic status and contribute to the development of their communities.

II. INCOME CATEGORIZATION

We categorized income per the Housing Fund Regulations 2018 as follows:

- Category 1 for respondents earning KES 19,999 (USD 154) and below
- Category 2 for respondents earning between KES 20,000 (USD 154) and 49,999 (USD 385).
- Category 3 for respondents earning between KES 50,000 (USD 385) and 149,999 (USD 1,154).
- Category 4 for respondents earning KES 150,000 (USD 1,154) and above.

[9] Loan needs was measured by asking respondents to say how much they would borrow if they were to borrow currently. The housing aspiration information reports what respondents said would be the value of their ideal house.

This study considers Category 4 as high income, Category 3 as middle income, category 2 as lower middle income, and Category 1 as low income.

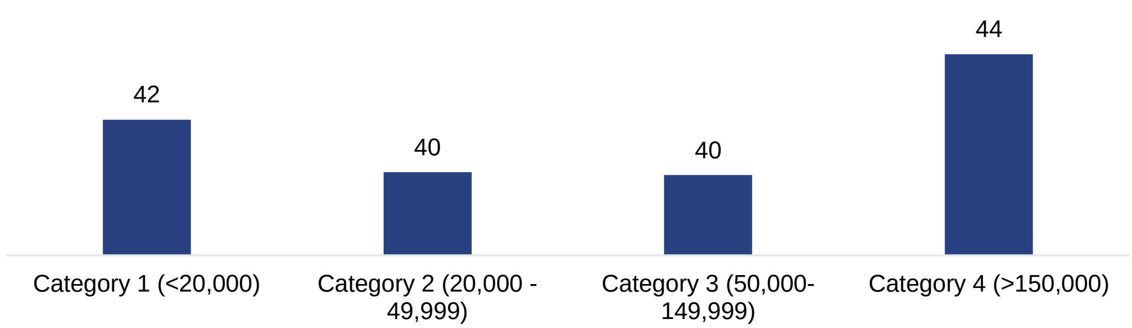
A. INCOME CATEGORIZATION BY THE AGE OF RESPONDENTS

Chart 31 illustrates the average age across the different income categories. Comparing average age by income categories provides crucial insights into the relationship between income and age and how this may impact access to housing finance.

According to the survey data, the average age for those in the lowest income category (less than 20,000) is 42. This suggests that many individuals in this income bracket may have been working for a significant period but have not been able to increase their income significantly over time. This may be due to a lack of access to better job opportunities, limited education or skills, or other factors. As a result, they may face challenges in accessing housing finance due to a lower income level.

In contrast, the average age for those in the highest income category (150,000 and above) is 44.

Chart 31: Income category by age of respondents



B. INCOME CATEGORIZATION BY ABILITY TO BORROW AND ABILITY TO PAY

Based on the survey data, there is an indication that households in higher income categories are generally willing to borrow higher amounts than those in the lower income categories (See Table 5).

Table 5: Income categorization by the ability to borrow and ability to pay

Income Category in KES	Average amount willing to borrow in KES	The average amount they can comfortably pay per month in KES
Category 1 (<20,000)	1,050,067 (USD 8,077)	10,147 (USD 78)
Category 2 (20,000-49,999)	1,565,068 (USD 12,039)	16,730 (USD 129)
Category 3 (50,000-149,999)	2,693,012 (USD 20,715)	48,157 (USD 370)
Category 4 (>150,000)	2,325,000 (USD 17,855)	41,250 (USD 370)

Category 3 reported the highest average amounts they were willing to borrow and pay for at KES 2,693,012 (USD 20,715) and KES 48,157 (USD 370), respectively. Category 4 individuals, while in the higher income category, were willing to borrow and pay for slightly lower amounts at an average of KES 2,325,000 (USD 17,885) and KES 41,250 (USD 317), respectively. The higher willingness to borrow and pay among Category 3 respondents than those in Category 4 indicates higher aspirations in this segment driven by steady and predictable income sources and a decreasing need to borrow when incomes increase[10]. Unsurprisingly, lower income categories (1 and 2) are willing to

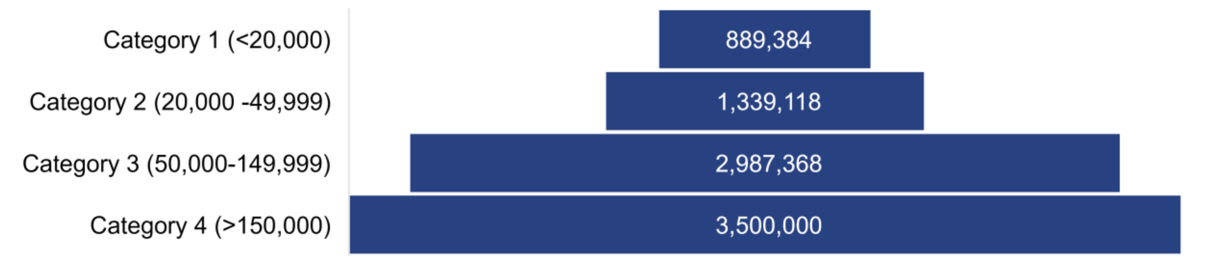
[10] Decreasing need to borrow does not mean high income earners do not borrow. They may borrow fewer loans but of higher ticket size

borrow significantly lower amounts of money. These results broadly indicate that income level affects the amount individuals are willing to borrow and pay. Higher-income individuals are generally more willing to take on larger amounts of debt.

C. INCOME CATEGORIZATION BY THE COST OF THE IDEAL HOUSE

Chart 32 shows a significant difference in the approximate cost of an ideal house across the four income categories. Respondents were asked to estimate how much they were willing to spend to construct their ideal house. The trend shown in Chart 32 is that the cost associated with an ideal house increases with increasing income. This money would mostly come from housing finance loans.

Chart 32: Income category by approximate cost of ideal house



These results suggest that income level is a key determinant of the housing finance credit appetite, with individuals in higher income categories having a higher appetite. A significant rise in the reported cost of an ideal house between Categories 2 and 3 is explained by the larger income range in Category 3.

D. INCOME CATEGORIZATION BY THE AGE OF DWELLING PLACE

Chart 33 shows a consistent trend in the age of dwelling place across the four income categories.

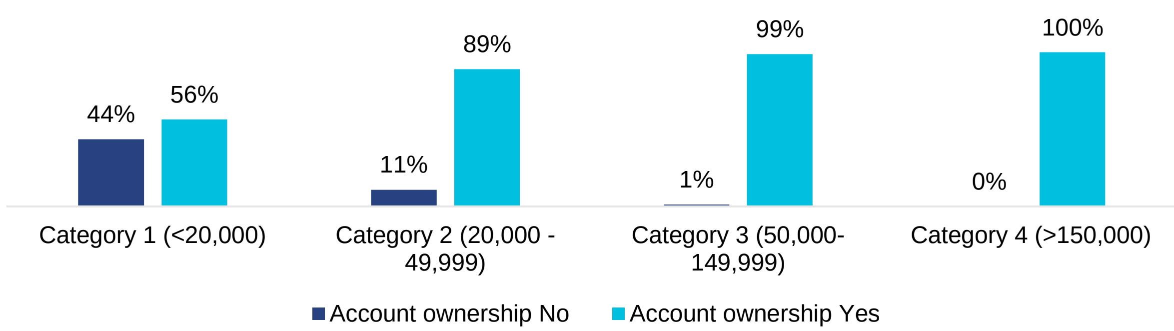
Chart 33: Income category by the age of dwelling place in years

Category 1, representing the lowest income bracket, had the highest average duration of dwelling place at 10 years. This steadily reduces to 4 years for Category 4, representing the highest income bracket. These results show that income level plays a significant role in the age and condition of the dwelling place, with individuals in higher income categories having access to newer and more modern housing options compared to those in lower income categories. This may also indicate the increased mobility afforded by higher income levels.

E. INCOME CATEGORIZATION BY (BANK OR SACCO) ACCOUNT OWNERSHIP

The results in Chart 34 show a trend in account ownership across the four income categories. Category 1, representing the lowest income bracket, had the lowest percentage of account ownership, with only 56% of individuals owning an account. Category 2, representing the middle-income bracket, had a significantly higher percentage of account ownership, with 89% of individuals owning an account. This could be driven by improved demand (higher awareness and utility) and access. These results indicate that income level directly varies with account ownership. Individuals in higher income categories are more likely to own an account than those in lower income categories.

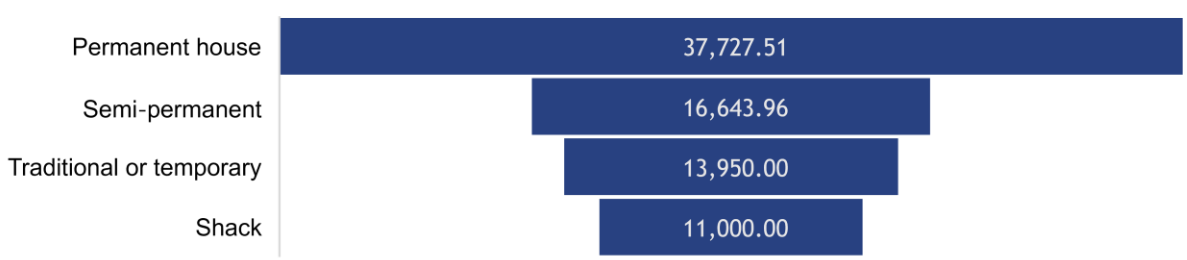
Chart 34: Income category by account ownership



F. INCOME CATEGORIZATION BY NATURE OF THE DWELLING PLACE

The survey results indicate that the proportion of respondents living in permanent houses increased with increasing income. People with permanent houses are considered to have satisfactory shelter, though quality and other specific factors may affect owner satisfaction. The general deduction is that people with permanent houses have a lower need for housing finance compared to those who do not. However, they have a better ability to pay due to their comparatively higher incomes. Chart 35 shows average incomes by nature of dwelling places. In general, the poorer the housing condition, the greater the need for improvement. Therefore, respondents in the Category 1 income bracket are more likely to seek housing finance to improve their shelter.

Chart 35: Income averages by nature of dwelling place



From the data in Chart 35, it is clear that the lowest income groups have the least desirable types of shelter. Traditional houses are most predominant among the income category 1 (18%) and Category 2 (12%) respondents. This type of housing is usually constructed from locally available materials like poles, sticks, and clay. They are often highly susceptible to environmental stresses such as those from weather elements. People living in such houses have limited protection from cold, heat, and sometimes rainfall. There is a similar trend with semi-permanent houses. The higher the income, the lower the proportion of semi-permanent houses. Semi-permanent houses are typically built of mud walls and then plastered. They are less costly to construct but will require significant maintenance. Such maintenance is unaffordable for low-income earners, and many houses get dilapidated within relatively short periods.

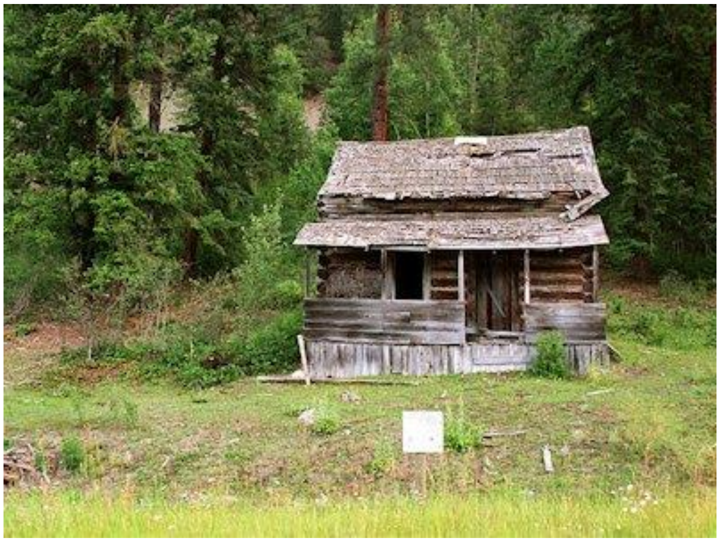
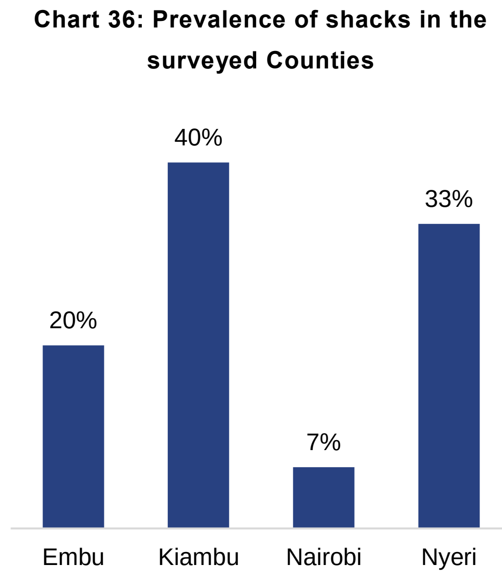
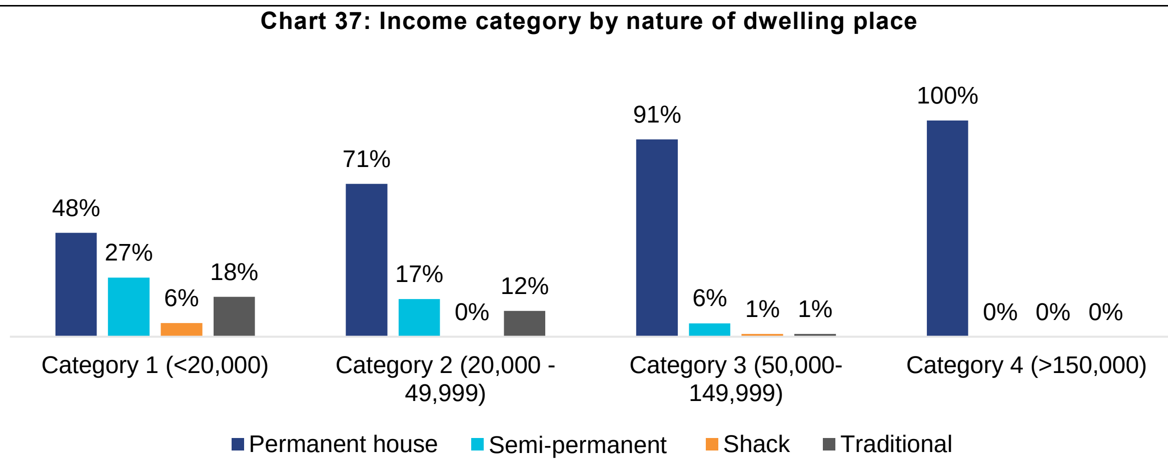


Figure 4: An example of a shack



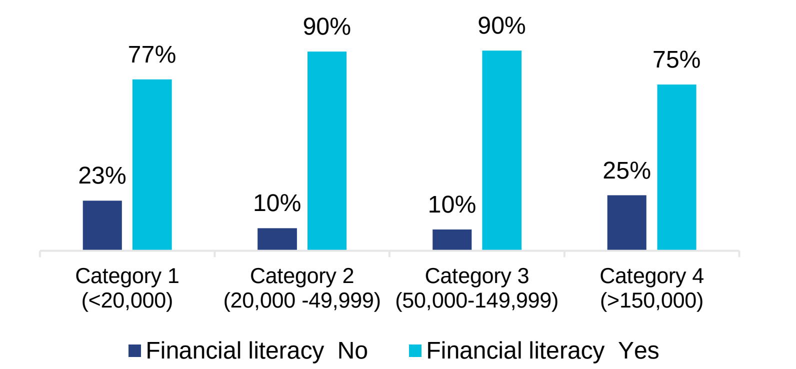
There is also a significant incidence of Shacks among the Category 1 income group. Shacks are some of the least desirable forms of shelter, often constructed at the lowest cost and offering the least level of comfort or protection from weather elements. Shacks present some of the most significant areas of need for home improvement. Because shack dwellers are some of the lowest income earners, they are most likely to seek low-ticket credit facilities to move from the shacks and build at least traditional housing or possibly semi-permanent houses. From the survey, 40% of the respondents who reported living in shacks were from Kiambu County followed by Nyeri County (33%) and Embu County (20%). Nairobi county only reported a 7% Shack prevalence rate, which is unexpected. The study did not focus on the slum areas of Nairobi where the shacks would be expected. Only 4% of the sample was from Kibera slums in Nairobi. Despite being a slum, most dwellings are slightly above the standards of Shacks, and most Shacks in the slums are found in the most insecure parts of the slums that would not be conducive for research.



G. INCOME CATEGORIZATION BY FINANCIAL LITERACY

Financial literacy was analyzed by understanding interest rates and transaction advice. Chart 38 shows the proportions of financially literate individuals within each income category. Financial literacy was measured by understanding interest rates or transaction messages. There is a slight but unexpected drop in the response accuracy to the prompts used as proxy measurements for financial literacy at the highest income levels. About 90% of respondents in Categories 2 and 3 responded correctly to the prompts, while this percentage dropped to 75% in Category 4. The drop in correct responses likely indicates reduced sensitivity to transaction costs and the general cost of credit. When asked about aspects of housing finance product costs of greatest concern, about 35% of the respondents reported that interest rate was the greatest concern. Out of the 35%, only 1.2% were from the income category 4. Discussions with financial service providers also revealed that customers in higher-income groups sometimes benefitted from preferential (lower) interest rates.

Chart 38: Income categorization by financial literacy



This was measured using the following prompt:

Suppose you take a loan of KES10,000 with an interest rate of 10% per year. How much more money would you pay at the end of the year?

Allow the respondent to read the following transaction message, then ask them to mention or identify the amount charged.

H. INCOME CATEGORIZATION BY GENDER OF THE RESPONDENTS

Chart 39 presents data on the gender distribution of income levels within the survey sample. It shows significant differences in the proportion of males and females in each income category.

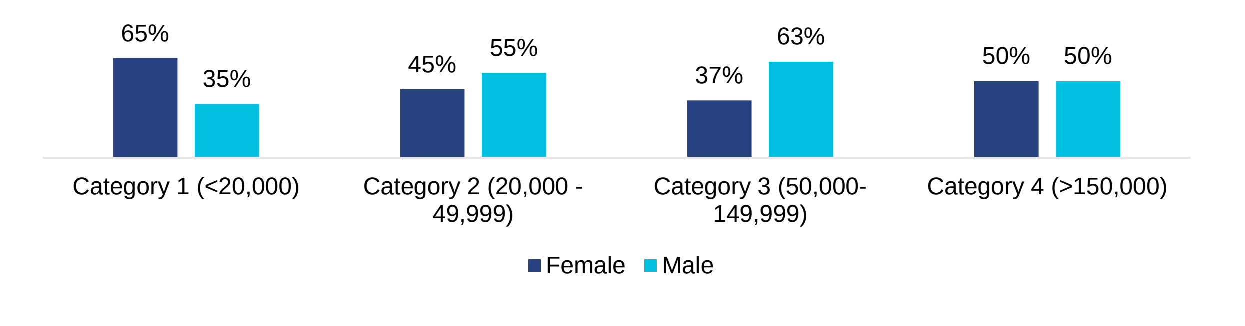
In Category 1, which includes those earning less than KES 20,000 (USD 154), the data shows that females make up a significantly higher proportion (65%) of the population compared to males (35%). This suggests that many low-income females may face challenges in accessing financial resources and may need more support to access affordable housing finance.

In Category 2, which includes those earning between KES 20,000 (USD 154) and KES 49,000 (USD 377), males make up a slightly higher proportion (55%) compared to females (45%). However, the gender distribution becomes more skewed in higher income categories. For example, in Category 3, which includes those earning between KES 50,000 (USD 385) and KES 149,000 (USD 1,146), males make up 63% of the population, while females make up only 37%. In Category 4, which includes those earning KES 150,000 (USD 1,154) and above, the gender distribution is evenly split with 50% males and 50% females.

These findings suggest that underlying factors may disproportionately impact females' income levels and access to higher-paying income-generating activities, resulting in a larger proportion of females in lower-income categories. This could be due to various factors, including unequal access to education and training, cultural norms and biases, and inequality in access to productive resources.

Regarding access to housing finance, these findings suggest that targeted interventions may be needed to address the unique challenges females face in the low- and middle-income population. This could include increasing female financial literacy and education, providing targeted support for female-led businesses, and addressing discriminatory lending practices that may disproportionately impact females.

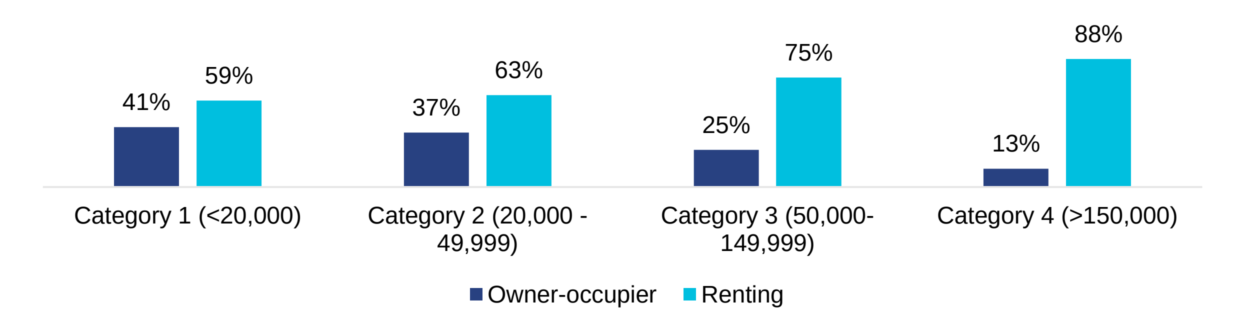
Chart 39: Income categorization by gender



I. INCOME CATEGORIZATION BY HOUSE OWNERSHIP

Chart 40 indicates a significant difference in the distribution of respondents who are homeowners and those who rent their homes across income categories. Generally, the number of respondents renting increases with income level. This is because most of the high-income earners were from the urban samples. Renting is more prevalent in urban areas than in rural and peri-urban areas. Based on Chart 40, it is evident that renting dominates across the different income categories. When people cannot build and occupy their own houses, renting is the next option.

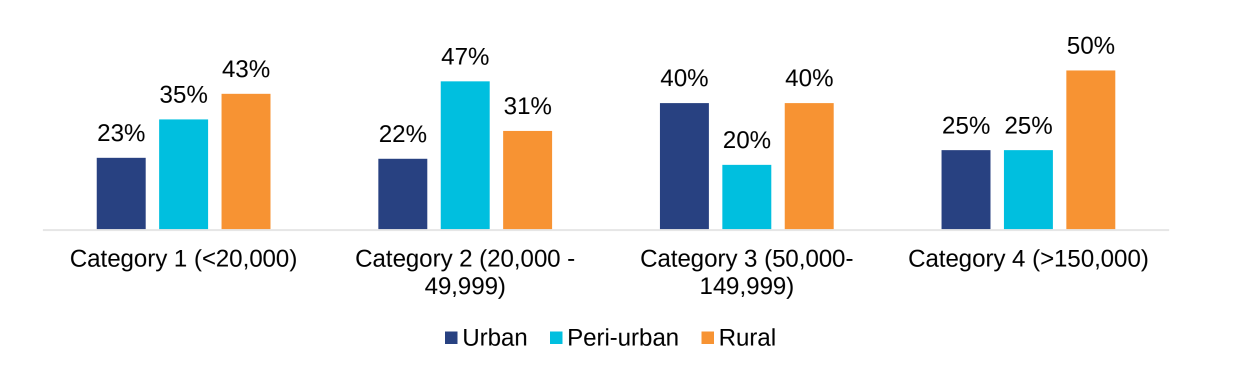
Chart 40: Income categorization by house ownership



J. INCOME CATEGORIZATION BY RESIDENCE

The results in Chart 41 show the distribution of respondents across different locations. The highest proportion of the lowest income category (43%) reside in rural areas.

Chart 41: Income categorization by residence



No consistent trends are observed across the categories. Category 3 has the highest proportion of urban respondents (40%), while Category 4 has the highest proportion of rural respondents (50%). The highest proportion of peri-urban respondents lies in Category 2.

1.4.3 ACCESS TO HOUSING FINANCE

Chart 42 shows that only 35% of respondents had accessed a loan and used it for housing-related expenses. This suggests that a significant portion of the population may face challenges accessing financing for housing-related activities.

Furthermore, the data shows that access to housing finance differs between genders, with slightly more males (19%) accessing housing finance than females (17%). However, it's worth noting that more females (30%) have not accessed housing finance compared to males (34%). Despite data showing differences in percentage access between male and female respondents, the differences are not significant enough to warrant a statistical conclusion about gender disparity in access to housing finance within the survey sample.

The data also show differences in access to housing finance based on rural-urban location. Interestingly, the data indicate that access to housing finance is slightly higher in rural areas (16%) compared to both urban (8%) and peri-urban (12%) areas, as shown in Chart 44. People in the low- and middle-income groups are more likely to afford to build homes in rural areas than in urban areas. Moreover, they are more likely to own land in rural areas than urban and peri-urban areas. Another reason for increased access in rural areas is that banks and SACCOs have made significant efforts to reach the rural population and have developed products that meet their needs. Additionally, low-income and middle-income earners in urban areas access housing finance to support construction projects in adjacent rural areas.

Overall, the data highlights the importance of understanding the barriers to accessing housing finance and developing policies and interventions that address these barriers. This could include increasing financial literacy and education, improving access to credit for marginalized groups, and addressing discrimination in lending practices. Additionally, there may be opportunities to leverage the favorable financing environment in peri-urban areas to develop models that can be replicated in other areas to increase access to housing finance.

Chart 42: General access to housing finance

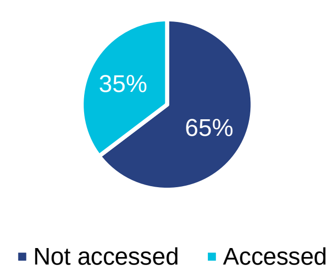


Chart 43: Male vs. female access to housing finance

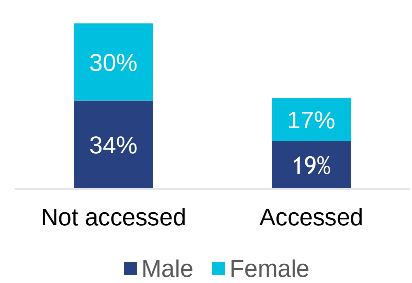


Chart 44: Access to housing finance by residence

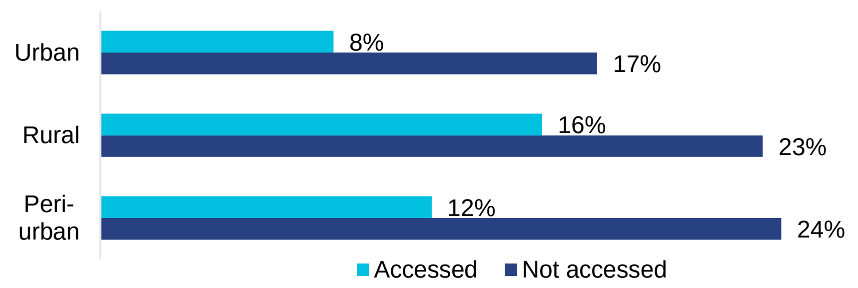


Chart 45: Housing finance access by income category

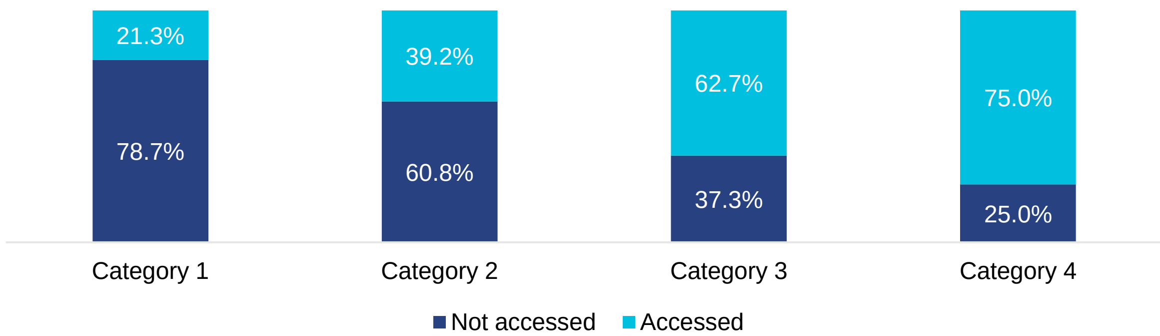


Chart 46: Access to housing finance by formal employment

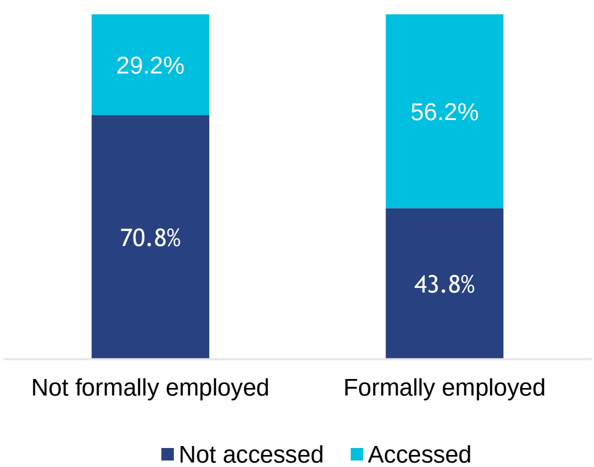
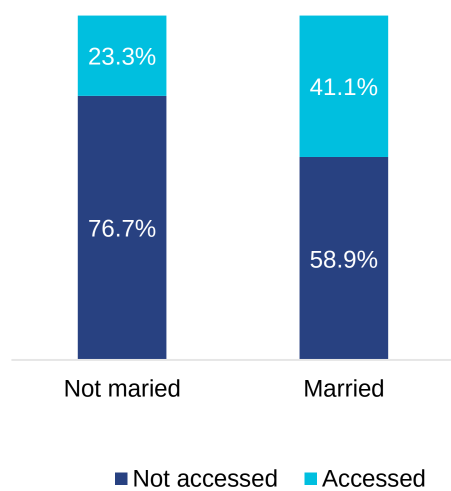


Chart 47: Access to housing finance by marital status



1.4.4 INSIGHTS ON ACCESS AND USAGE OF HOUSING FINANCE FOR MSMES

This section highlights insights on access and usage of housing finance products for the self-employed or individuals running their businesses (herein referred to as MSMEs). Among the respondents surveyed, 43% identified self-employment or running their own business as their primary source of income, while the rest were distributed across various employment categories. Notably, females constituted the majority of this group, accounting for 57% of the respondents (chart 49). This deliberate gender inclusion aimed to shed light on women's unique barriers in accessing and using housing finance.

Chart 50 shows that a significant proportion of these female respondents had obtained at least a secondary education, with 83% demonstrating financial literacy (chart 51). However, despite their financial knowledge, only 18% of this group had borrowed loans to meet their housing finance needs. Interestingly, females were 7% more likely than males to have borrowed loans for housing finance (chart 52).

Chart 48: Gender distribution

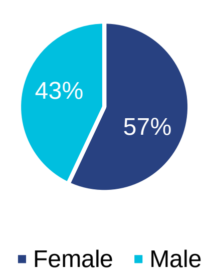


Chart 49: Education level

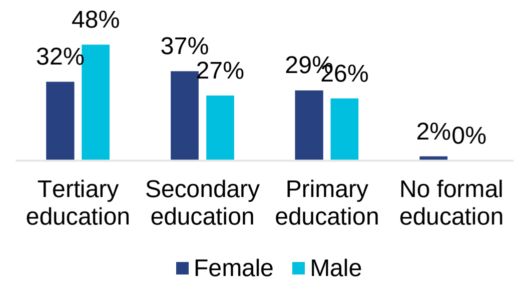


Chart 50: Financial Literacy[11]

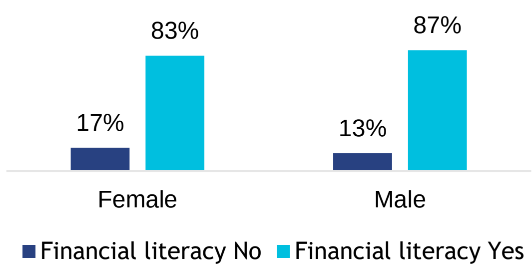
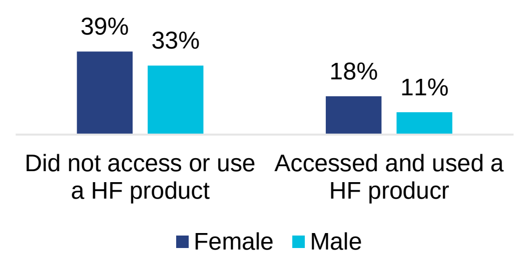


Chart 51: Access to housing finance products vs gender



As shown in chart 53, 46% of the MSME respondents reported owning their own houses, predominantly in peri-urban areas. Notably, a significant majority (94%) of these homeowners had constructed their own houses, indicating a strong sense of self-reliance. However, housing finance products did not facilitate a substantial proportion of these self-constructed houses (chart 55), suggesting limited awareness or access to suitable financing options among MSMEs.

[11] Financial literacy was measured using the following prompts

Suppose you take a loan of KES10,000 with an interest rate of 10% per year. How much more money would you pay at the end of the year?

Allow the respondent to read a sample transaction message, then ask them to mention or identify the amount charged for that transaction.

Chart 52: House ownership by residence

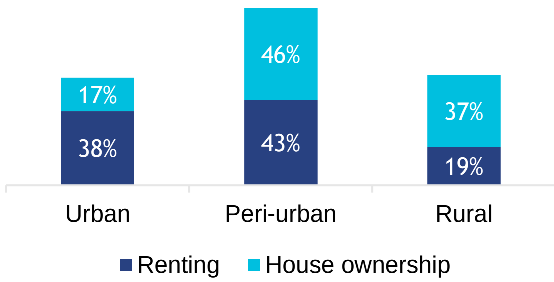


Chart 53: Proportion of built vs self-constructed houses

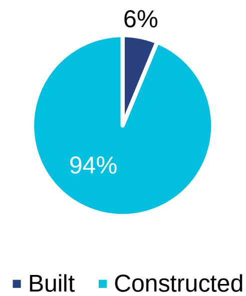


Chart 54: Access to a housing finance product vs. house ownership

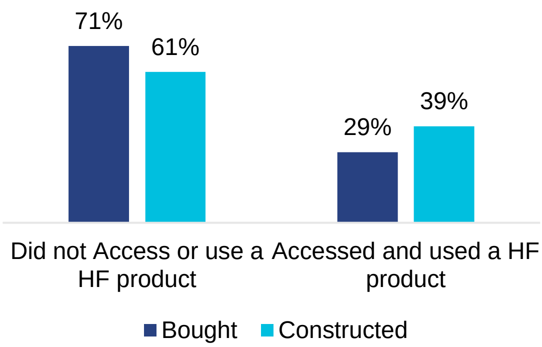
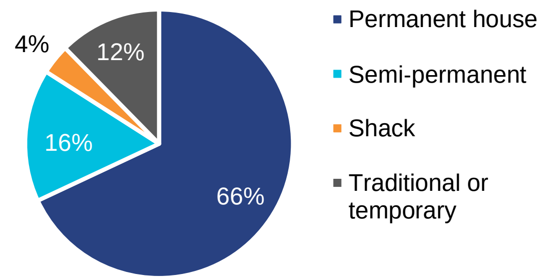
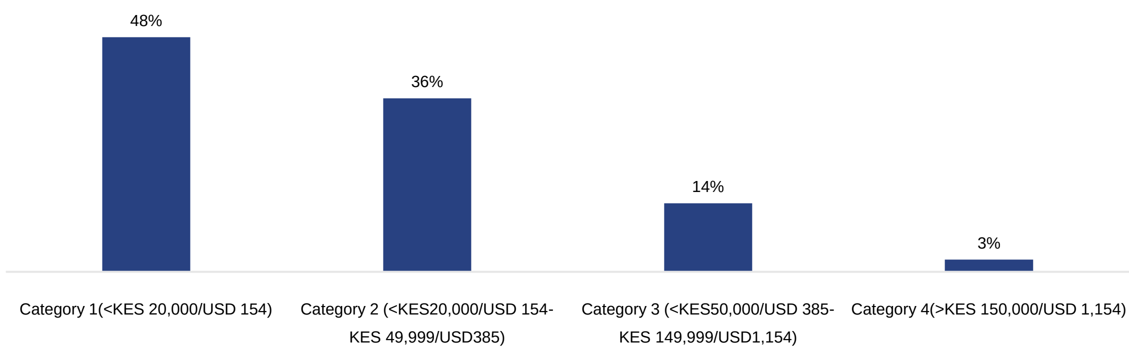


Chart 55: Nature of dwelling place



Furthermore, many MSMEs belonged to the low-income category (Category 1). Additionally, of the owned houses within this group, 63% were categorized as permanent owner-occupied dwellings.

Chart 56: Income categorization



2.0 Status of Kenya's housing finance market landscape

2.1 The Kenyan financial inclusion context and background

Financial inclusion is the ability of individuals and businesses to access useful and affordable financial products and services that meet their needs (transactions, payments, savings, credit, and insurance) and are delivered inclusively and sustainably. Kenya's financial inclusion rate has risen steadily in recent years, from 83% in 2019 to 84% in 2021, largely thanks to the rapid growth of financial technology, particularly in the mobile money and mobile banking sectors.[12] In Africa, the country has become a trailblazer in digital financial services, greatly expanding access to financial services for Kenyans and enabling them to save, pay for services, and take out loans from lending institutions. This has transformed the economy, developing numerous FinTech startups and digital payment platforms and providing new opportunities for financial inclusion and economic growth. With the continued development of these innovative services, Kenya is poised to become a leading global player in the financial technology sector.[13]

Table 6: Financial inclusion in Kenya

Attributes	Financial institution account (% age 15+)	Digital payments (% age 15+)	Mobile money account (% age 15+)	Account ownership, women (% age 15+)	Outstanding housing loan (% as of 2017)
Country data (Overall population)	51	78	69	75	8
Lower-middle income segment	59	38	14	59	5

Source: Global Findex Database, 2022

Financial inclusion in Kenya varies across demographic factors such as age, gender, education, location, wealth, and income. Employed individuals and business owners have greater access to formal financial services and products than non-salaried Kenyans; many people in Kenya, approximately 29%, still rely on informal channels such as groups. In 2021, exclusion rates for women and individuals living in rural areas increased compared to 2019, rising from 11% to 12% and from 14% to 15%, respectively. Generally, factors such as income inequality, age, and location contributed to the heightened exclusion rates in 2021. The increase in the proportion of individuals unable to access financial services from 11% in 2019 to 12% in 2021 may be partly attributed to the COVID-19 pandemic's adverse effects on households' and businesses' incomes and employment.

The urban population had higher access to formal financial services than the rural population, and COVID-19 restrictions on non-cash transactions helped narrow the gap by promoting mobile money adoption in rural areas. However, exclusion rates continued to increase for women and rural residents in 2021, influenced by gender, income inequality, digital literacy, location, and age. Mobile money transactions, thus, played a crucial role in meeting households' cash needs, particularly during times of crisis. The government has been promoting cashless transactions to limit the spread of the virus, further increasing the use of mobile money. Kenya has also made significant strides in increasing access to financial services through microfinance, digital financial services, and recognition of collectives such as the VSLA movement, Rotating Credit and Savings Associations (ROSCAs), Savings and credit cooperatives (SACCOs), commercial banks, mobile moneylenders, and microcredit lenders.

[12] FinAccess – Household survey 2021

[13] Exploring new frontiers in FinTech investments in East Africa

Table 7: County comparison of financial inclusion and exclusion in the study areas

County	% of people financially included	% of people who access through informal channels	% of people financially excluded
Nairobi City	95	2	3
Nyeri	94	2	4
Kiambu	92	2	6
Mombasa	90	2	8
Machakos	90	4	6
Kajiado	89	3	8
Kisumu	88	2	10
Nakuru	88	2	10
Embu	88	6	6
Uasin Gishu	88	1	11
Kisii	81	3	16
Kakamega	80	11	9
Kilifi	74	8	18
Bungoma	74	9	17

Source: Fin Access, 2021

Concerted efforts to develop the digital public infrastructure (DPI), promote financial literacy, improve financial infrastructure, and increase the availability and access to affordable financial products and services can help to reduce exclusion rates and promote economic growth and prosperity for all Kenyans. There is also a need to focus on decentralizing financial services in rural areas to enhance access. Further, there is a need to address issues related to income inequality and age, identified as key factors contributing to exclusion rates. Efforts to improve financial inclusion in Kenya must continue, as it is essential to promote economic growth and prosperity for all Kenyans. By prioritizing collaboration and partnerships, governments (national and county), financial institutions, the private sector, and civil society can create an enabling environment for diversifying financial services, providing equal opportunities for financial inclusion to participate in the country's economic growth.

Overall, the excellence of financial products and services is evaluated based on whether they fulfil clients' needs, the variety of services offered, and the extent to which clients know and understand these financial products. Although the swift adoption of financial technologies and innovations has increased access to financial products and services, it has also raised concerns regarding financial literacy and consumer protection.

2.1.1 DIGITAL FINANCIAL SERVICES

Mobile money services, digital banking, insurance, and credit services have enhanced the use of digital financial services in Kenya. Mobile money usage increased from 68% to 74% between 2021 and March 2022. Kenyan consumers widely use digital payment products for transactions, bill payments, and purchases. The growth of merchant payments and deposits has been substantial. Between 2015 and 2023, the value of loans disbursed by digital mobile lenders in Kenya reached KES 500 billion (USD 3.9 billion). This figure reflects the significant increase in app-based borrowing, with nearly 40% of Kenyans taking out mobile loans daily.

Table 8: Digital Financial Inclusion

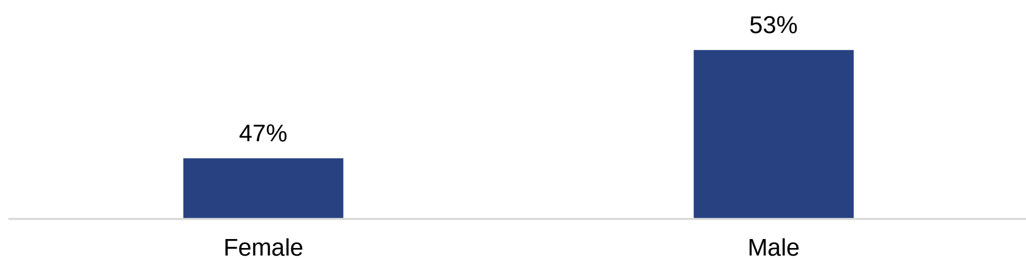
Digital financial inclusion 2017-2021	2021	2020	2019	2018	2017
Mobile subscribers (million)	65	61	54.5	50	43
Mobile penetration (percent)	134	129	114.8	106	94
Number of transactions (KES. Million)	190	181	155	156	140
Value of transactions (Monthly) (KES. Billion)	622	606	383	368	333
The average value of transactions (Daily) (KES. Million)	20,738	20,190	12,764	12,667	11,087
Active Mobile Money Agents	298,272	282,929	224,108	223,931	182,472

Source: CBK, 2021

In Table 8, mobile penetration is above 100% because people may have multiple subscriptions for personal or business reasons. In such cases, both subscriptions would be included in the total mobile subscription count, even though it is just one person. This situation would increase the total number of mobile subscriptions, raising the mobile penetration percentage.

Digital credit has revolutionized the lending industry by using digital data to provide quick loans to clients. Unlike traditional loans that take at least 11 days to process, digital credit offers loans through automated processes based on preset parameters. This accessibility has made it easy for customers to apply for, receive, and repay loans remotely, with low-interest rates and flexible repayment options.

Chart 57: Digital financial access by gender

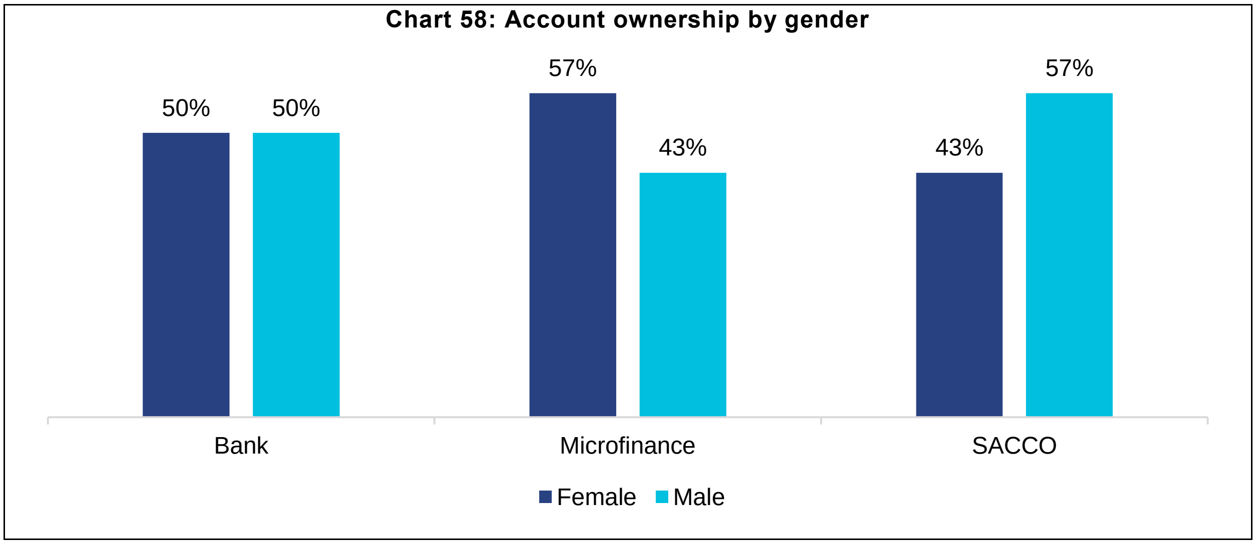


Source: Survey data

Chart 57 shows a slight gender disparity in digital access from our data sample. The fact that male respondents constitute a slightly higher percentage (53%) indicated that, on average, a somewhat more significant proportion of male respondents have access to digital technologies compared to females.

2.1.2 WOMEN AND FINANCIAL INCLUSION

In Kenya, women face significant barriers to accessing financial services, including lower levels of education, lower incomes, and fewer assets than men. Enhancing financial inclusion is crucial in empowering women economically and improving their agency. Financial inclusion is one path to women's economic empowerment and the ability to participate within the more formalized markets and is often conditioned by the extent of access to the financial system. Despite recent efforts to increase financial inclusion for women, including microfinance programs and mobile money services, there is still a long way to go. To encourage women to adopt digital products, promoting transparency in costs, designing and developing simple gender-centric user interfaces, with relevant information that addresses language barriers for women are essential. The government, private sector, and development organizations must continue working together to address women's barriers to financial inclusion and promote financial literacy and access to technology for women[14].



Source: Survey data

Chart 58 above shows equal bank account ownership between female and male respondents, with both genders comprising 50% of account holders. This shows that banks are thriving in targeting both genders equally when acquiring customers. More females (57%) have accounts with microfinance banks than male respondents. This is likely because microfinance banks are more successful in targeting women than men, possibly due to their financial products and services, which may appeal more to women. In contrast, 57% of male respondents have SACCO accounts compared to female respondents, which could mean that products and services offered by SACCOs may be more appealing to men than women.

Women's access to and control over financial resources through financial inclusion enhances their ability to make decisions and manage their finances effectively, thereby achieving financial independence (Annan et al., 2019). In Kenya, women are less likely than men to have access to formal financial services, such as bank accounts and credit. The disparity is due to several factors, including lower literacy levels (numeracy and finances), time poverty due to gender roles, lack of information and knowledge about financial assistance, and cultural and social norms limiting women's access to finance. Despite these challenges, there have been efforts in recent years to increase financial inclusion for women in Kenya. For example, microfinance programs to give women access to credit and launched financial literacy campaigns to educate women about the benefits of financial services.

In 2016, Kenya Commercial Bank (KCB) and Women's World Banking collaborated to empower women-owned MSMEs in Kenya. They aimed to increase the economic empowerment of women-owned MSMEs by providing tailored financial services and support services such as business networking and training.

In addition, mobile money services, such as M-PESA, have made it easier for women to access financial services, even in rural and remote areas. Approximately 7.6 million adults in Kenya utilize informal financial services, including merry-go-rounds and *'Chamas'* (Self-Help Groups). '*Chamas'* has significantly contributed to financial inclusion and women's empowerment, with over 300,000 collectively controlling assets worth billions of USD.[15] A 2021 FinAccess study shows a reduction in the gap between women and men in formal financial access channels from approximately 9% in 2016 to about 4% in 2021. Access through informal channels by women also reduced by 6% in 2021 from about 8% in 2019.[16]

[14] FSD Putting women at the center of inclusive finance.
[15] State of mobile money in Kenya 2022.
[16] 2021 FinAccess Household Survey

Financial institutions in Kenya have developed gender-centric products for women who own formal or informal businesses, which provide advantages such as unsecured loans and higher loan limits. The design of these specialized products acknowledges that female borrowers have a higher repayment rate than male borrowers.[17]

2.2 Understanding the housing finance market in Kenya

2.2.1 STATE OF HOUSING FINANCE MARKET AND DIGITAL TECHNOLOGIES

Access to housing finance is essential to Kenya's economic development and growth. Over the past decade, there have been several trends in housing finance in Kenya, including the emergence of new players, the expansion of mortgage products, and the increasing use of technology in the industry. This sub-section provides a comprehensive understanding of the current state of the housing finance market in Kenya, including its size, structure, and trends.

According to the CBK report, the outstanding value of mortgage loans reached KES 261.8 billion (USD 2 billion), compared to KES 245.1 billion (USD 1.9 billion) in December 2021. This indicates a notable increase of KES 16.7 billion or 6.8%. The surge in value can be attributed to the addition of new mortgage loans granted throughout 2022.[18]

AMFI-Kenya plays a significant role in facilitating small loans, including housing loans, to low-and middle-income individuals. Microfinance institutions, including those affiliated with **AMFI-Kenya**, specialize in tailoring these loans to meet borrowers' specific needs and financial capabilities. By leveraging their expertise and network, **AMFI-Kenya** supports the accessibility of affordable housing finance, enabling individuals to fulfill their housing aspirations within their financial means.

Informal savings groups such as *chamas* or merry-go-rounds are widespread in Kenya. These groups pool members 'savings and provide loans for various purposes, including housing. Informal savings groups can be an alternate source of housing finance for individuals who may not qualify for mortgages and other formal financial loans.

Renting a home is a common alternative to homeownership, where individuals can rent houses, apartments, or other residential properties. Rental housing provides flexibility and does not require a long-term financial commitment.

Some government initiatives provide affordable housing to Kenyan citizens, such as *Boma Yangu*. The initiative seeks to address the issue of inadequate housing and promote homeownership among low- and middle-income individuals. The *Boma Yangu* program offers various incentives and benefits to eligible citizens, such as access to affordable financing, simplified land acquisition processes, and support for infrastructure development. Through this initiative, the government's objective is to enable more Kenyans to own decent and affordable homes.

The Kenyan housing finance market is dominated by commercial banks, which account for approximately 70% of all mortgages. Other players in the market include microfinance institutions, specialized mortgage lenders, and housing cooperatives. Trends in the housing finance market indicate the following:

- **The emergence of new players**: In recent years, there has been an increase in the number of financial service providers in the housing finance market in Kenya. This includes 32 commercial banks, and 11 SACCOs working under **KMRC**, microfinance institutions, and microfinance banks. These new players have increased market competition, leading to lower interest rates and more flexible loan terms for borrowers.
- **Expansion of mortgage products**: The mortgage available in Kenya has also expanded in recent years. Mortgages are now available to low-income earners, self-employed individuals, and those with a limited credit history. This has made it easier for more people to access home financing. As of December 2022, outstanding mortgages in Kenya were KES 261.8 billion (USD 2 billion) compared to KES 245.1 billion (USD 1.9 billion). This shows that more mortgages were granted, leading to a higher overall value of outstanding loans.
- **Increasing use of technology**: Technology has also impacted Kenya's housing finance industry. For example, some lenders now offer digital mortgage applications, which make the process faster and more

[17] Center for Affordable Housing Finance
[18] Bank Supervision Annual Report 2022

convenient for borrowers. Additionally, there has been an increase in the use of mobile money platforms, which allow borrowers to make mortgage payments from their mobile phones.

The mortgage market expansion has allowed banks and non-bank financial institutions (SACCOs, FinTechs, investment groups, ROSCAs, and microfinance institutions) to offer housing loans. According to **AMFI-K**, microfinance banks in Kenya offered 211 housing loans in 2021, while credit-only microfinance institutions offered 203 construction and housing loans in 2021. This has made it easier for people to access finance to buy or build homes. Most homeowners use various financing alternatives, including selling family or personal assets such as land.

The banking sector provides housing finance through mortgages in real estate; it ranks third in the percentage of loans advanced. The value of gross loans offered to the real estate sector grew from KES 448 billion (USD 3.45 billion) in June 2021 to KES 467 billion (USD 3.59 billion) in June 2022, an increase of 4%. Savings and credit cooperatives (SACCOs) also provide a significant amount of credit for housing, with the World Bank estimating that the cooperative sector provides 90% of Kenya's housing capital[19]. SACCOs offer their members unsecured, medium-term loans and the option to leverage their savings or shares to secure loans—additionally, SACCOs aggregate funds for land acquisition and construction financing.

Kenya's housing finance market has also seen the rise of alternative solutions, such as housing microfinance, rental finance, and housing savings and cooperative schemes, designed to reach underserved populations, such as low-income households, and provide them with affordable housing finance.

HFHI supported a program that aimed to enhance MFI's capacity to improve the quality delivery of housing financial services. The project had several objectives, including strengthening the capacity of **AMFI-Kenya** to provide relevant information to member financial institutions, educating clients on housing finance to improve construction practices and housing quality, and promoting housing economic interventions for the low-income population.[20]

There is a need for improved formalization of new investment interests, including an increase in the registration of non-deposit-taking savings and credit cooperatives, housing cooperatives and societies, and microfinance institutions in the banking industry. According to CAHF Africa Housing Finance Year Book 2022, the largest Micro Finance Bank (MFB) in Kenya in 2021 was Faulu MFB, with a market share of approximately 40%[21].

The use of technology in the housing finance sector is increasing, and Kenya has played a significant role in improving access to housing finance and reducing transaction costs for borrowers. The following are some examples of how technology is being used in housing finance in Kenya:

- Mobile banking: Mobile banking has transformed how people access financial services, including housing finance. Mobile banking platforms such as M-Pesa, Airtel Money, and Equitel have made it easier for people to access loans, make payments, and save money. In Kenya, for instance, Equity Bank's Equitel platform offers mortgages and construction loans through its mobile app, enabling customers to apply for loans and track the progress of their applications remotely. M-Pesa has also partnered with Shelter Afrique, KCB, Faulu Kenya, and Jamii Bora Bank to offer loans for housing specifically tailored for low-income earners. Airtel Money has also partnered with Kenya Women Microfinance Bank, Musoni Microfinance, Faulu Kenya, and Juhudi Kilimo to enable low-income earners to access housing loans conveniently.
- Online platforms: Online platforms such as Pezesha and M-Kopa Solar have emerged to provide housing finance solutions to low-income households in Kenya. Pezesha is a peer-to-peer lending platform operating as a digital lending marketplace that connects borrowers with investors and supports MSMEs. The platform has partnered with real estate companies to offer housing finance to low-income households; borrowers can apply for loans, and investors can choose to fund those loans. Pezesha also serves the financial needs of MSMEs in housing finance which struggle to access formal credit from financial institutions. M-Kopa Solar, on the other hand, offers solar-powered home systems on a pay-as-you-go basis, helping low-income households to access affordable and sustainable energy solutions.

[19] The Home Ownership Survey
[20] AMFI-K sector report 2021
[21] Center for Affordable Housing Finance

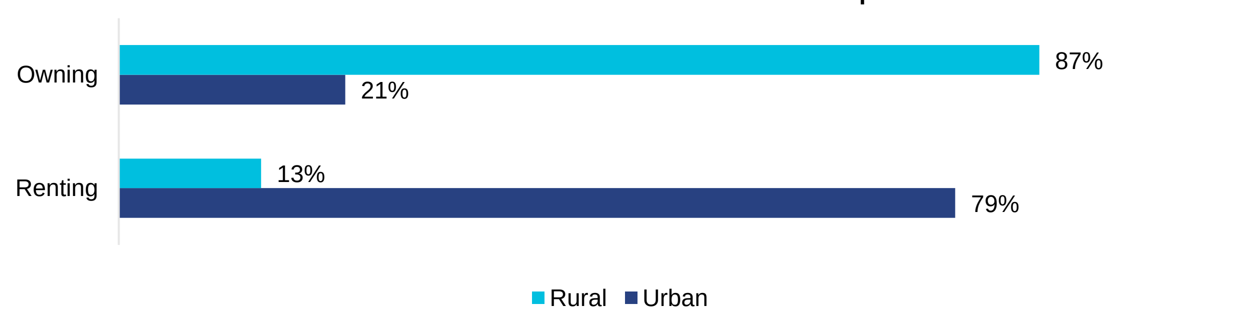
- Automated underwriting: Automated underwriting is a technology-driven approach to mortgage lending that uses algorithms and data analysis to assess credit risk and make lending decisions. In Kenya, several mortgage lenders, including KCB Bank, HF Group, and Family Bank, have implemented automated underwriting systems to speed up the mortgage application process and reduce the cost of underwriting.
- Blockchain technology: Blockchain technology is increasingly used in the housing finance sector to facilitate property transactions and reduce fraud. In Kenya, for instance, Bitland is a blockchain-based platform that enables people to register and transfer property titles[22]. The platform aims to reduce the high costs and complexities associated with property transactions and improve transparency and security.

These examples illustrate how technology plays an increasingly important role in housing finance in Kenya. The use of technology is expected to continue to grow as more companies and organizations recognize its potential to increase access to housing finance and reduce transaction costs for borrowers. However, significant gaps in data persist in the housing finance sector, primarily because institutions are reluctant to share information or because digital and detailed information is not readily accessible to the public. Despite this, the housing finance market in Kenya is evolving and growing, driven by a range of factors, including urbanization, economic growth, and increased access to finance.

2.2.2 HOUSING CONDITIONS AND SUPPLY OF AFFORDABLE AND LOW-COST HOUSING

Many Kenyans live in poor and inadequate housing due to the rapid population growth and urbanization that has outpaced the supply of affordable and decent housing. To address this issue, the Kenyan government has launched the Affordable Housing Programme, which offers housing units priced between KES 1 million (USD 8,484) and KES 6 million (USD 47,513) to low-income residents earning a monthly income of KES 23,670 (USD 201) or less[23]. Despite this initiative, only 3% of the population can comfortably afford a home, indicating the need for further action to promote home ownership[24] and address the significant housing backlog affecting low- and middle-income populations. Kenya's Vision 2030 Third Medium Term Plan (MTP III) recognizes the critical role of affordable housing in achieving inclusive growth and sustainable development.

Chart 59: Distribution of house ownership



Source, **KMRC** monthly research report June 2022

According to Chart 59, the literature review synthesis reveals that most rural dwellers (86%) mostly own their houses, while urban dwellers (78%) have rented their houses.[25] The need for more affordable serviced land in Kenya's urban areas has significantly driven development costs, primarily due to exorbitant prices. The World Bank estimates that only 28% of the Kenyan population is urbanized, and over 60% live in informal settlements. The countrywide estimate suggests that 10 million Kenyans, equivalent to 36% of Nairobi's population, reside in slums. The Homeownership rate in the city is meager, with only 21% of city dwellers owning homes, compared to the national average of 61%.

[22] Land portal African startups bet on blockchain to tackle land fraud
[23] Kenya Mortgage Refinance Company

This rate is significantly lower than in other countries, such as South Africa and Ghana, where urban homeownership rates are 53% and 47%, respectively[26].

2.2.3 CURRENT HOUSING STOCK AND HOUSING SHORTAGE ESTIMATES

Kenya faces a significant housing deficit, with the annual demand for 250,000 units and only 50,000 units supplied, leaving a shortfall of 200,000 units. The deficit has prompted developers to adopt low-cost housing construction methods such as alternative building technologies, which can reduce costs by up to 50%. Although the government supports the delivery of affordable housing, only 12,332 houses were completed in 2019, far below the estimated 200,000 units required annually to address the backlog and new family formation.

Kenya's economic strategy, Vision 2030, also aims to increase cooperatives' contribution to the urban housing stock by 25%. Vision 2030 also commits the government to construct at least 150,000 housing units yearly, but Kenya faces several challenges in achieving this goal. These include limited investment finance, rising construction costs, and low levels of consumer affordability in the housing and demand value chain. For example, to address this issue, the County Government of Nairobi has offered its old estates for renewal and upgrading by private developers.

Pilot programs in Ngara-Park Road and Pangani have resulted in 3,164 affordable units, but the prices still need to be affordable for most urban residents. Nevertheless, the government's affordable housing program has a pipeline of 376 projects at various stages, aiming to provide over 599,000 housing units nationwide. Overall, more efforts are required to address the housing deficit and make housing affordable for all Kenyans tax incentives (tax deductibility for housing loans, contributions to home ownership savings plan, and lower taxation of housing bonds).

2.2.4 HOUSING FINANCE FROM PRIVATE DEVELOPERS, THE PUBLIC SECTOR, AND INDIVIDUALS

Private developers play a crucial role in financing and constructing low-cost housing units in Kenya, offering financing options to homebuyers such as rent-to-own, off-plan purchases, and housing loans. However, high borrowing costs pose a significant challenge for developers. To address this, the government has established the National Housing Corporation and introduced tax incentives) and subsidies to encourage investment in new home construction.

The government also provides affordable housing through policies targeting poverty alleviation, public housing, and rural housing for vulnerable and marginalized groups. Despite efforts to address the housing deficit, demand still outstrips supply, particularly for households in rural areas and slums. The government has committed to enhancing adequate housing through the housing development and human settlement program and increasing funding for housing initiatives in partnership with the private sector.

2.3 Policy and regulatory framework

The policy and regulatory framework governing housing finance in Kenya plays a crucial role in shaping the accessibility and usage of affordable housing finance. This section explores the policy and regulatory framework of the housing finance sector in Kenya.

2.3.1 POLICY FRAMEWORK

Kenya has taken significant governance steps toward improving its housing sector. The Constitution of Kenya recognizes access to adequate housing as a fundamental right. The National Housing Development Fund (NHDF) and the National Housing Corporation (NHC) were established to provide a structured support framework for affordable and decent housing. At the same time, Kenya Vision 2030 emphasized the need to scale up housing services to meet urbanizing demands.

The National Housing Development Fund (NHDF) was established to achieve these goals, and incentives were created to attract investments in the housing sector. However, Kenya's rapid population growth rate has outstripped

[26] Unlocking affordable housing in Kenya calls for a pragmatic approach

the provision of housing services, leading to a persistent housing deficit, especially in rural areas and slums. To address this, the government has renewed its focus on affordable housing under the "Big Four" agenda, which aims to construct 500,000 units by 2022.

Policy reforms aim to reduce the cost of construction and improve access to affordable mortgages. Examples include establishing the **Kenya Mortgage Refinance Company** (**KMRC**) and the National Housing Development Fund (NHDF). These efforts and strengthening the National Housing Corporation and providing free land to investors are crucial to meeting Kenya's housing needs.

Table 9: Policies governing the housing sector in Kenya

Policy	Overview
Kenya Affordable Housing Program[27]	• It aims to create an enabling environment and address challenges of the demand and supply side of the housing sector. • It outlines guidelines for establishing **KMRC** as well as Boma Yangu Portal.
National Housing Policy 2016[28]	• Advocates for access to housing finance, especially in rural areas. It calls for financial institutions to liberalize the borrowing criteria and to enhance rural and peri-urban loan schemes to improve housing in rural areas.
Kenya Vision 2030[29]	• Vision 2030 has three main pillars, which are the social pillar, the economic pillar, and the political pillar. • The social pillar seeks to build a just and cohesive society with social equity in a clean and secure environment by improving the quality of life of all Kenyans through education, health, water and sanitation, environment, housing, and urbanization. • Under the housing and urbanization sector, there is a vision of an adequately and decently housed nation in a sustainable environment. The roadmap to achieve this is through; o increasing the annual production of housing units o improving the affordability and accessibility of housing o enhancing the provision of essential services and infrastructure in urban areas o improving land administration and management o developing and enforcing standards for the construction and maintenance of buildings. • Some of the flagship projects under the housing and urbanization sector include developing 200,000 housing units annually o establishing a secondary mortgage finance corporation o developing a national housing database and a national spatial plan o implementing slum upgrading programs o developing resort cities and metropolitan regions o enacting relevant laws and policies
The Big Four Agenda	• The Big Four Agenda is a development plan by the Kenyan government. It has four priority areas: affordable housing, manufacturing, food security, and universal health coverage. • Under affordable housing, the Big Four Agenda proposes the Affordable Housing Program (AHP), the beneficiaries, proposed locations, and the funding structure.

Kenya's housing sector is mainly governed by the Kenya National Housing Policy 2016, which advocates for access to housing finance, especially in rural areas. It also calls for financial institutions to liberalize the lending criteria and to enhance rural and peri-urban loan schemes to improve housing in rural areas.

[27] Kenya Affordable Housing Program
[28] National Housing Policy for Kenya 2016
[29] Kenya Vision 2030

2.3.2 REGULATORY FRAMEWORK

The **Central Bank of Kenya** (CBK) is the primary regulator of the financial sector in Kenya, regulating banks and deposit-taking microfinance institutions. The CBK has taken initiatives to promote mortgage market development in Kenya, including amending the risk weight for mortgage loans from 50% to 35%. This amendment applies to mortgage lending secured by residential property or occupied by borrowers, freeing up capital for financial institutions to increase their mortgage lending.

The **Sacco Societies Regulatory Authority** (SASRA) regulates the operations of savings and credit cooperatives (SACCOs) in Kenya, including their role in providing housing finance services. The Sacco Societies Act governs the operations of SACCOs in Kenya, and SASRA ensures that these institutions comply with relevant laws and regulations while guiding them on risk management, governance, and other operational issues.

To develop and improve the housing sector, the Kenyan government adopted the Affordable Housing Program 2018 and the **Kenya National Housing Policy** (Table 9). These policies provide a framework for addressing the housing deficit in Kenya, creating an enabling environment for private sector participation, and increasing access to affordable housing finance. The government continues to work with stakeholders in the housing sector to create more favorable policies and regulations that will enhance access to housing finance and help bridge the housing gap in Kenya.

The legal framework for housing finance (Table 10) in Kenya primarily comprises the Banking Act, the Housing Act, the Sacco Societies Act, the Central Bank of Kenya (mortgage refinance companies) regulations, the Land Act, the Land Registration Act, the National building code, the Income tax, and the Physical and Land Use Planning Act.

Table 10: Legal Framework for housing finance in Kenya

Regulation	Framework
Banking Act[30]	• It provides regulations and guidelines for the operations of banks and other financial institutions in Kenya, including loan and credit services. • Financial institutions must have a loan policy outlining loan assessment, grant, and recovery procedures. • Financial institutions must adhere to fair lending principles, transparency, and consumer protection in their lending activities. • Enabled issuance of housing bonds through which commercial banks can mobilize long-term funding for mortgage lending • It was amended to allow mortgage finance companies to advance 40% of deposit liabilities from 25% for purchase, improvement, or land alterations. • The CBK rate was raised from 7.5% to 9.5% as of March 2023.

Table continues on next page

[30] Republic of Kenya (2015) Banking Act Chapter 488

Housing Act of Kenya Cap 117[31]	• Aims to facilitate the creation of housing and human settlements in Kenya • It outlines the functions and powers of the National Housing Corporation (NHC) • It establishes the National Housing Development Fund (NHDF) • The act regulates housing developers and contractors • Establishes a national building code and the Housing Tribunal for hearing housing and human settlements disputes.
Central Bank of Kenya (Mortgage Refinance Companies) Regulations 2019[32]	• It regulates mortgage refinancing companies in Kenya • The regulations give provisions for authorized activities, licensing, governance, risk classification, provision of loans, capital requirements, liquidity management, internal controls, and reporting requirements
Sacco Societies Act 2018[33]	• Governs the operations of savings and credit cooperatives (SACCOs) in Kenya, including their role in providing housing finance services. • The Act sets out the rules and regulations for forming and operating SACCOs. • It provides for the supervision and regulation of these institutions by the Sacco Societies Regulatory Authority (SASRA).
The Finance Act 2022[34]	• The Finance Act 2022 provides incentives for affordable housing investments, including VAT and import duty exemptions and the establishment of the National Housing Development Fund. • Financial sector policies allow regulated entities to invest in the housing sector, with banks limited to 25% of total deposits and insurers limited to 30-50% concentration limit factors. • Savings and credit cooperatives and capital markets also offer investment opportunities. Retirement benefit schemes can invest up to 30% of assets in property or REITs. • Tax incentives such as zero-rated contributions to pension schemes and capital expenditure deductions are available for the private sector.
The Land Act 2012[35]	• Provides for the equitable, efficient, productive, and sustainable use and management of land and land-based resources in Kenya. • States the rights and obligations of parties in contracts for land sale. • It gives the procedures and effects of transferring land ownership. • The act gives the limitations on landholding by non-citizens. • It provides for the regulation of land use and property by national and county governments. • It gives a guideline on resolving disputes relating to land and environmental issues by the Environment and Land Court.
Land Registration Act No. 3 of 2012[36]	• The act provides for revising land registration and cadastral systems in Kenya. • It gives the guidelines for the issuance of certificates of title or leases to land proprietors. • It outlines the procedures and effects of transferring, charging, discharging, and sub-charging land. • The Act establishes the rights and obligations of parties involved in land transactions.

31 Republic of Kenya Revised Edition 2015 Housing Act Chapter 117
32 Central Bank of Kenya (Mortgage Refinance Companies) Regulations 2019
33 Sacco Societies Act 2018
34 The Finance Act, 2022
35 The Land Act, 2012
36 Land Registration Act No. 3 of 2012

The National Building Code 2022[37]	• The act provides guidelines and standards for the design, construction, maintenance, and management of buildings and structures in Kenya. • It gives the requirements and procedures for obtaining building permits and complying with the code and other applicable laws and regulations.
Income Tax Act[38]	• The act provides for deductions for interest on loans used for the purchase or improvement of premises. • It provides personal relief for first-time homeowners • It gives guidelines on withholding tax on interest, rent, premium, and dividends paid to resident persons.
The Physical and Land Use Planning Act, 2019[39]	• This is the primary legislation governing Kenya's planning, use, regulation, and development of land and land-based resources. • It gives guidelines on physical and land use planning institutions, types of physical and land use development plans, preparation and approval of physical and land use development plans, development control and enforcement, development applications and appeals, public participation and access to information, offenses, and penalties.

2.3.3 TAX AND TAX INCENTIVES

Policy measures encourage savings and investment; for instance, contributions to pension schemes as channels of increasing national savings are tax zero-rated. Such savings add to land, building, and property investment funds. There are also tax savings in terms of tax deductions extended to the private sector based on capital expenditure. Taxes and levies charged on individuals and corporates reduce personal savings and investment capacity (Table 11), but tax incentives exist regarding tax deductions that the housing sector enjoys (Table 12).

Table 11: Applicable taxes

Type of tax	Description
Income tax	Corporates (30-37.5%); Individuals (10-30%; developers of low-cost houses 15%; residential rental 10% dividends distribution (5-10%); Withholding Tax- WHT.
Import Taxes	Import duty 25%; imports declaration fee 2.25%; railways development levy 1.5%.
VAT	Value Added Tax 16% on most building materials.
Stamp duty	At 4% or 2 % depending on the location of the home
Other fees	Government valuation fees and NCA and NEMA

Source: Kenya Property Developers Association -KPDA (2018)

[37] The National Building Code, 2022
[38] The Income Tax Act (CAP 470); Revised Edition, 2021
[39] The Physical and Land Use Planning Act, 2019

Table 12: Tax incentives

Target	Category of Incentive	Description
Developers	Industrial Building Deduction	• 5% of the capital expenditure on rental • 25% where the developer provides roads, power, water, and sewerage • 10% on dwelling house
	Residential	• 10% on gross rental income for resident landlords earning KES 144,000 to 10,000,000 p.a.
	Lower Corporation Tax	• 15% (instead of 30%) of the net profits for the construction of at least 100 low-cost houses in a year
	Lower Withholding Tax (WHT)	• 10% WHT for interest on housing development bond from the usual 15% but capped at KES 300,000.
Purchases and tenants	Mortgage relief	• Interest paid on money borrowed to purchase/improve premises is tax-deductible, capped at KES 300,000 p.a., one house, and must be occupied by the taxpayer.
	Contributions to Home Ownership Savings Plan	• Deduction of KES 4,000 p.m. (on taxable pay), limited to 10 years. No WHT on interest earned capped at KES 3 million p.a.
	Exempt from VAT	• Purchase/renting of residential building exempted, but 16% for commercial rent/ purchase
	Exempt from Capital Gain Tax	• Applicable to transfer of residential house where the seller lived in it for at least three years prior.

Source: Kenya Property Developers Association, KPDA (2018)

2.3.4 POLICY AND REGULATORY CHALLENGES.

Kenya has made significant progress in creating an enabling environment for accessing and using housing finance plans. Affordable housing has been at the forefront of government initiatives. The establishment and operationalization of **KMRC** have enabled financial providers to offer housing finance to low- and middle-income earners. However, some limitations in the policy and regulatory framework affect the access to and usage of housing finance in Kenya.

The legal and regulatory framework governing the housing finance sector in Kenya has been identified as one of the primary sources of systemic barriers to access and usage of affordable housing finance in the country. This is due to the lack of clear laws and regulations that govern the sector, leading to confusion and inefficiencies that limit its development. Kenya does not have a housing finance policy yet.

The regulatory environment for housing finance in Kenya is fragmented, with multiple agencies responsible for different aspects of the sector, including the Central Bank of Kenya (CBK), the Capital Markets Authority (CMA), and the National Treasury. This has led to inconsistencies and inefficiencies in the regulatory approach, limiting the sector's development. For example, the CBK has been criticized for setting high capital requirements for mortgage lenders, making it difficult for new entrants to join the market and increasing the cost of borrowing for consumers.

The government has established policies, laws, and regulations that promote affordable housing in Kenya. However, the National Building Code does not provide clear guidelines on the standards for affordable housing, which can make it difficult for developers to know what is required to qualify for financing.

The cost of registering and transferring property in Kenya can be high, which makes it difficult for low- and middle-income earners to access housing finance. This can be particularly challenging for those purchasing affordable homes, as the transaction costs can be a significant percentage of the home's value. In addition, the lengthy and complex process of registering and transferring property can discourage people from investing in affordable housing.

Figure 5 below gives a visual representation of the policy and regulatory framework of the housing finance sector in Kenya. It represents the guiding framework that suppliers of housing finance operate.

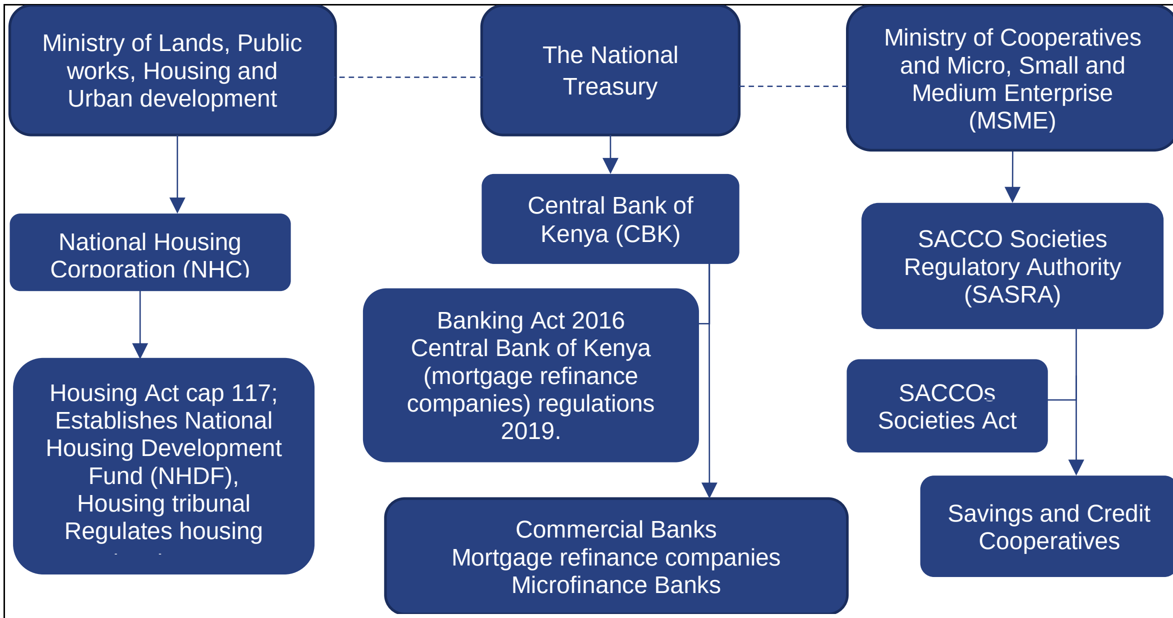


Figure 5: Policy and regulatory framework of housing finance in Kenya

2.4 Housing finance trends in Kenya

Kenya's housing finance sector is experiencing significant changes, mainly driven by rapid population growth and urbanization. The result of this is a growing need for housing, especially among the low to middle-income segment of the population. Unfortunately, many cannot meet their housing needs, creating a significant demand for housing finance in Kenya. In this section, we will analyze Kenya's current housing finance demand and the market players who supply housing finance to meet this demand.

2.4.1 THE DEMAND-SIDE ANALYSIS FOR HOUSING FINANCE

In Kenya, access to affordable housing depends on income, competing expenses, and access to finance. This section presents the drivers of demand for housing finance in Kenya, focusing on low- and middle-income earners.

2.4.1.1 HOUSEHOLD INCOME DISTRIBUTION AND EXPENDITURE PATTERN

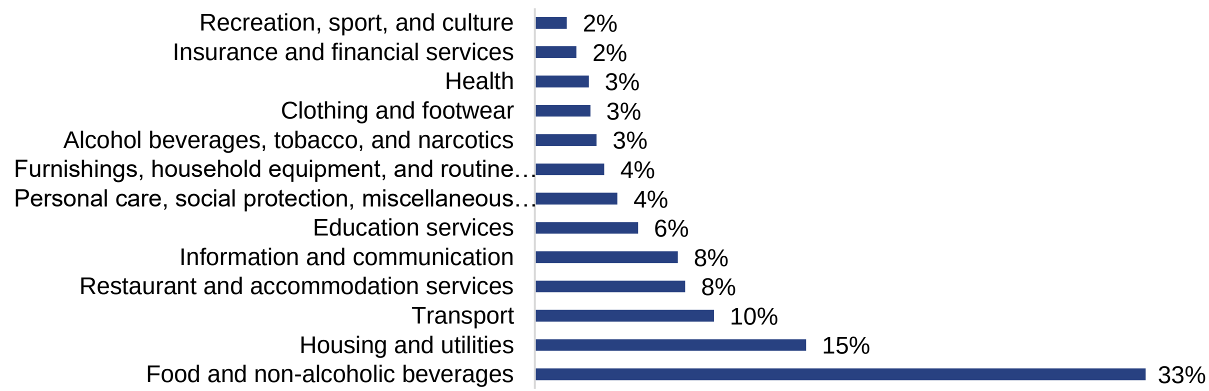
The economic landscape in Kenya reveals a stark reality: a vast majority of Kenyans earn below KES 40,000 (USD 307)[40] and spend approximately 15%[41] of their income on housing. Given that a considerable portion of income is dedicated to housing costs, it indicates that housing affordability is a significant concern for many Kenyans. It further suggests that Kenyans face challenges in finding affordable housing based on their income. Therefore, affordable housing finance options are urgently needed to address the housing crisis in the country. Compounding this issue is that about 83% of the population works in the informal sector, making it difficult for them to access formal sources of credit.

Despite these challenges, there is some hope. A considerable portion of the population, around 83.7%[42], has access to financial services, suggesting that financial institutions can offer tailored housing finance products to meet the unique needs of the Kenyan population[43]. These products can provide regular access to formal sources of credit to

[40] IPSOS SPEC Barometer, 1st QTR 2018
[41] STATISTA 2021 Distribution of household expenditure in Kenya as of 2021, by consumption purpose
[42] FinAccess Household Survey 2021
[43] STATISTA 2020 Total employment in Kenya from 2015 to 2021, by sector

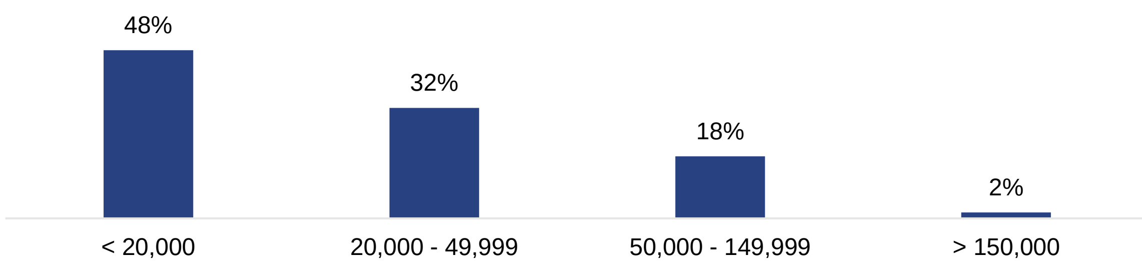
help Kenyans secure affordable housing finance options. Thus, Kenya's high poverty rate and low-income levels require a concerted effort to address the housing crisis and promote economic growth. Providing affordable housing finance options can play a crucial role in this effort, improving living conditions and increasing economic opportunities for Kenyans.

Chart 60: Income expenditure distribution



Source: Statista 2021

Chart 61: Income categorization



Source: Survey data

2.4.1.2 THE HOUSING SYSTEM IN KENYA

Tenure refers to whether households rent or own the houses they occupy. Our survey showed that 64% of respondents owned the houses they lived in. This finding agrees with the Kenya Integrated Household Budget Survey KIHBS 2015/16 that 61.3% of Kenya live in owner-occupied dwellings. However, this trend is inconsistent in urban areas, where 59% of the respondents rent (chart 62). Of those respondents who own homes, 35.3% used loans to buy or construct, and 96% built their houses. Constructing a house took an average of 3.3 years (chart 63).

Chart 62: House ownership by residence

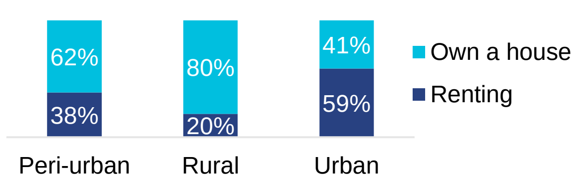
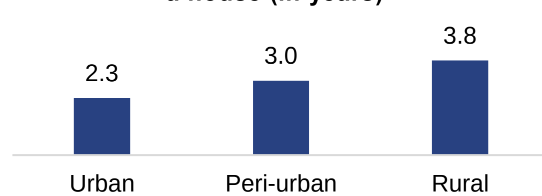


Chart 63: Average time taken to construct a house (in years)



Source: Survey data

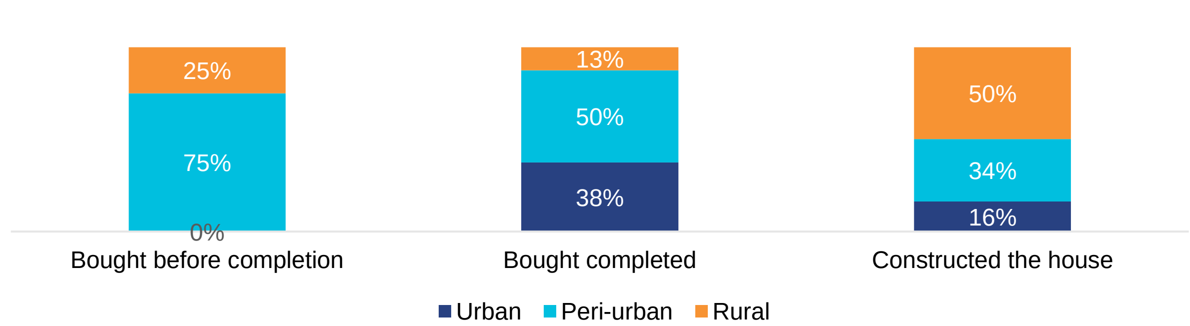
This finding suggests that most Kenyans prioritize building their homes over purchasing them. Generally, the trend in Kenya is for households to own their homes, although the methods vary. Most homes are built gradually over time through savings or microloans. This approach to homeownership highlights the importance of financial inclusion and access to affordable credit, which can facilitate the construction of homes and enhance the living conditions of Kenyans.

2.4.1.3 HOUSING FINANCE DEMAND

Kenya's urban population is growing at an alarming rate of 3.7%, compared to the national population growth rate of 2%[44]. With a deficit of 200,000 housing units annually and 86% of the population earning less than KES 40,000 (USD 307), constructing new homes is unaffordable for most. Only 2% of newly built houses target low- and middle-income families, while informal settlements are home to approximately 6.4 million people[45]. Given these challenges, the high demand for affordable housing and the growing urban population has created a significant demand for housing finance in Kenya. Access to housing finance can help bridge the gap between the demand for affordable housing and the limited supply. However, despite 83.7% of the population having access to finance, only 11% can afford a mortgage[46].

In this context, housing microfinance loans can provide an affordable and sustainable solution for incremental building, where households build their homes gradually from savings. By increasing the supply of affordable housing in the country, housing microfinance loans are critical to meeting the housing demand in Kenya. As indicated by the results in Chart 64, most houses have been constructed instead of bought. Financial service providers should also review mortgages or home loans to reflect the value of land and the cost of buildings now that most people are constructing.

Chart 64: Home ownership distribution



Source: Survey data

2.4.2.1 PRIMARY MORTGAGE LENDERS AND SUPPLIERS OF HOUSING FINANCE

In Kenya, there are various sources of housing finance, including commercial banks, microfinance institutions, and SACCOs. Commercial banks are the primary suppliers of mortgage finance, with 32 of the 38 banks in Kenya offering residential mortgages. The target market for banks includes individuals and households looking to purchase, construct or renovate homes. Banks typically target individuals with a reliable source of income and a good credit history.

In Kenya, SACCOs have become a popular alternative source of housing finance, especially for low and middle-income earners. The World Bank estimated that SACCOs provide 90% of Kenya's affordable housing finance. There

[44] World Bank Data 2021
[45] HFH Country profile Kenya
[46] KMRC report 2022

are currently 176 SACCOs that accept deposits and 183 that do not[47]. SACCOs have expanded their services to include housing finance, offering various loan products to their members. These include:

- Building and construction loans,
- Home purchase loans, and
- Home improvement loans.

SACCOs offer loans to their members in stages, with the disbursed funds meeting specific construction milestones. The structures of these loans are tailored to meet the needs of low and middle-income earners, making them an attractive option for those seeking affordable housing finance.

In addition to SACCOs, there are other innovative approaches to housing finance in Kenya, such as peer-to-peer lending platforms. Community land trusts are non-profit organizations that acquire and hold land to benefit the community, create affordable housing, and preserve community assets. They lease land to individuals or housing cooperatives, who then own the homes but lease the land, allowing for affordable housing not subject to market speculation.

Peer-to-peer lending platforms are online marketplaces that connect borrowers directly with lenders, bypassing traditional financial institutions. These platforms provide an alternative source of housing finance for those who may not qualify for conventional mortgage loans or prefer a more flexible and accessible lending option. Peer-to-peer lending platforms also offer competitive interest rates and repayment terms. An example of this platform is Pezesha.

In conclusion, Kenya's housing market faces significant challenges, including a housing shortage and limited access to affordable housing finance. However, various options for accessing housing finance are available, including traditional mortgage lenders, SACCOs, housing cooperatives, community land trusts, and peer-to-peer lending platforms. By utilizing these various financing options, Kenya can increase the supply of affordable housing and provide opportunities for its citizens to own and build their homes.

2.4.2.2 HOUSING MICROFINANCE (HMF) PRODUCTS

Housing microfinance refers to products consisting of small, non-mortgage-backed loans offered relatively short terms and in succession to support the existing incremental building solutions for low- and middle-income segments. Traditional housing finance products are not affordable to low and middle-income earners in Kenya; hence, they resort to a gradual, incremental building to attain home ownership status. This incremental building has generated demand for HMF in Kenya.

Microfinance institutions offering housing finance in Kenya typically provide small loans to their clients to finance the purchase, construction, or renovation of homes. These loans are micro-mortgages, with repayment terms ranging from several months to a few years. The loans are usually offered at higher interest rates than traditional mortgage loans, reflecting the higher risk of lending to low-income borrowers without collateral or credit history.

As of 2021, the **Association of Microfinance Institutions in Kenya (AMFI-K)** reported 211 housing loans, an outstanding portfolio of KES 216,968,298 (USD 1,668,987), and a PAR of 39.21%. This information was from seven Microfinance Banks (MFBs) that reported their data. For credit-only MFIs, there are 203 housing loans, an outstanding loan portfolio of KES 97 million (746,154), and a PAR of 14.85%. Housing loans include construction loans and micro-housing loans.

2.4.2.3 INVESTORS, DONORS, AND INTERNATIONAL NON-GOVERNMENTAL INSTITUTIONS

Table 13 provides information on investors, donors, and international non-government institutions working to increase access to affordable housing finance in Kenya. The Centre for Affordable Housing Finance (CAHF) is a critical player in this sector, partnering with FSD Kenya to develop the FSD strategy for the affordable housing project. Other organizations mentioned include Financial Sector Deepening (FSD) Kenya, the World Bank, International Finance

[47] List of licensed and authorized SACCO societies in Kenya 2023 (SASRA)

Corporation (IFC), UN-HABITAT, Pan African Housing Fund-Phatisa, African Development Bank (AFDB), and Shelter Afrique.

Table 13: Investors, donors, and international non-governmental institutions

Institution	Contribution to the housing finance sector in Kenya
Centre for Affordable Housing Finance (CAHF)	• Works to increase access to affordable housing finance in Africa. • It does this through understanding housing markets, monitoring housing sector performance, exploring innovation in housing finance, and supporting housing finance market development. • In Kenya, CAHF has partnered with FSD Kenya to develop the FSD strategy for the affordable housing project[48].
Financial Sector Deepening (FSD) Kenya	• It is an independent trust that supports the development of inclusive financial markets in Kenya. In their Affordable Housing Strategy, they have identified two categories for implementation. Investment in incremental housing and informal settlement and investment into an institutional off-taker for formal housing[49]
World Bank	• Approved a USD 250 million loan to support the establishment of **KMRC** • through the Kenya Affordable Housing Finance Project (KAHFP)
IFC	• It is a member of the World Bank Group and provided USD 20 million to the Housing Finance Company of Kenya to encourage the building of eco-friendly homes[50]. Provided essential know-how and technical assistance to **KMRC**[51]. • IFC launched a USD 300 m equity fund in 2015 to deliver 30,000 units in partnership with CITICC across Africa. The expectation was that CITICC would work with local developers and build Africa's developer capacity.
UN-HABITAT – (KENSUP)	• In collaboration with the Government of Kenya, they initiated the Kenya Slum Upgrading Program (KENSUP)[52]. • Has been implementing 30 projects in Kenya[53].
Pan African Housing Fund- Phatisa	• It had a USD 42 million fund that closed in 2014. Delivered only 1,000 of the expected 3,500 units in Kenya, Zambia, and Rwanda6.
AFDB	• Invested USD 100 million to **KMRC** as initial working capital.
Shelter Afrique	• It is a pan-African finance Institution that supports the development of housing and real estate in Africa. It has created an affordable housing calculator only to finance affordable housing projects. • 569 affordable units constructed by Karibu Homes Parktel at a total cost of KES 667 million (USD 5.13 million)[54].
REALL	• REALL innovates and invests in climate-smart affordable homes in Africa and Asia. It has invested USD 15 million in Kenya, of which USD 3 million is recycled funds. It provides bridge capital to finance construction. • It Partnered with National Cooperative Housing Union (NACHU) to construct over 1500 homes55.

These institutions' primary focus is on affordable housing and affordable housing finance. They have invested significant amounts of capital into the affordable housing sector in Kenya, providing funding for projects ranging from incremental housing in informal settlements to eco-friendly homes. They have also provided technical assistance, know-how, and innovative solutions to support the development of the housing finance market in Kenya.

Some of the notable donors and development partners in Kenya's housing finance sector include the World Bank, International Finance Corporation (IFC), African Development Bank (AfDB), United Nations Development Program (UNDP), and the United States Agency for International Development (USAID).

The World Bank has significantly contributed to the Kenyan housing finance sector through various projects such as the Kenya Affordable Housing Finance Project (KAHFP). The project aims to increase access to affordable housing

48 Africa Housing Finance Yearbook 2022
49 Background to the affordable housing strategy for the FSD network in Kenya 2020
50 IFC Press release 2013
51 IFC News 2021
52 Ministry of Land, Public works, Housing and Urban Development KENSUP
53 UN HABITAT
54 Shelter Afrique Affordable Homes 2019
55 REALL: Kenya Impact Summary Brief 2021

finance for Kenyan households, improve the legal and regulatory framework for housing finance, and strengthen the capacity of market actors in the sector. The World Bank also supports the government of Kenya in implementing the Kenya National Housing Policy.

The IFC has also been involved in several housing finance initiatives in Kenya, including providing financial support to housing finance institutions such as Shelter Afrique and Centum Real Estate. The IFC also supports the development of affordable housing projects through its Housing Market Partnership program.

The AfDB provides financial support to housing finance institutions in Kenya through various projects such as the East Africa Affordable Housing Program (EAAHP). The program aims to provide access to affordable housing finance, support the development of affordable housing projects, and improve the enabling environment for housing finance in the East African region.

The UNDP supports the government of Kenya in addressing the housing needs of vulnerable groups such as slum dwellers and persons with disabilities. The organization works to strengthen the capacity of local authorities to deliver affordable housing solutions, improve the living conditions of slum dwellers, and promote sustainable urbanization.

USAID supports the development of the housing finance sector in Kenya through various initiatives such as the Kenya Financial Inclusion for Rural Microenterprises (FIRM) project. The project aims to increase access to financial services for low-income households and microenterprises in rural areas of Kenya, including access to housing finance.

From 2012 to 2018, the Mastercard Foundation collaborated with **Habitat for Humanity's Terwilliger Center for Innovation in Shelter**. They aimed to support financial institutions in Kenya and Uganda in creating housing microfinance products for low- and middle-income earners. The Mastercard Foundation funded the project, while **Habitat for Humanity International** offered technical assistance.

Although development partners have offered support to create access to housing finance, a significant gap still exists. This gap can be attributed to several factors. One possible issue is the complexity and multifaceted nature of the problem itself. Access to housing finance is influenced by various interconnected factors, including policy and regulatory frameworks, institutional capacity, market dynamics, and socioeconomic conditions. Another challenge is that, after the program period, financial institutions are unwilling to continue without financing from development partners.

Donors and development partners are critical in developing Kenya's housing finance sector. Through their financial and technical support, they contribute to creating a conducive environment for providing affordable housing finance and developing affordable housing projects. However, solving the challenge of access to housing finance requires a holistic approach beyond financial investments alone.

2.4.2.4 GOVERNMENT-FUNDED HOUSING SCHEMES AND PROGRAMS

The Kenyan government's affordable housing interventions aim to provide low-income and middle-income earners housing. The goal remains to deliver 250,000 affordable housing units annually, utilizing free or low-cost state-owned land, incentives to private developers, and public-private partnerships. The program has various initiatives implemented through the National Housing Development Fund (NHDF), managed by the National Housing Corporation (NHC).

The National Housing Corporation (NHC) is a statutory body established by parliament created under the Housing Act 2015, section 6 (1), to implement the government's housing policies and programs. NHC offers Tenant Purchase Schemes and mortgage loans to eligible Kenyans to improve access to affordable housing. However, their lending rates at 13% per annum are still higher than the average interest rate of 11.3%.

NHC also manages the **National Housing Development Fund** (NHDF), created under the Housing Act 2015, section 6 (1). The NHDF aims to finance affordable housing units in Kenya and offers tenant purchase schemes to low-income earners. In contrast, middle-income earners can access 3% to 7% low-interest mortgage loans. This initiative aims to increase access to housing finance and help more people own homes.

The funding structure of the Housing Fund is serviced by debt borrowing and public contributions. Debt borrowing includes short-term capital in credit lines from banks and Development Finance Institutions (DFIs). The housing fund will, in the future, also issue Mortgage-Backed Securities (MBS) in the capital markets to raise funds. The MBS will be short-term, medium-term, long-term, and equity investments. Employees are expected to contribute 1.5% of their gross salary to a maximum of KES 5,000 (USD 38) monthly for public contributions. Employers are expected to match this contribution. Informal sector workers can contribute to at least KES 100 (USD 0.77) monthly. The contributions are accumulated in the housing fund and credited to each individual's Housing Fund account. The funds are only accessible after retirement.

The housing fund scheme is only available to first-time home buyers. Those not eligible will have their contributions transferred to their pension fund or refunded as cash after retirement. Those eligible for the housing scheme will access the funds through tenant purchase schemes or mortgages, depending on their income bracket. The income brackets are specified as follows:

- Individuals earning up to KES 19,999 (USD 154) are eligible for social housing;
- Individuals earning between KES 20,000 (USD 154) and KES 49,999 (USD 385) are eligible for low-cost housing;
- Individuals earning between KES 50,000 (USD 385) and KES 149,999 (USD 1,146) are eligible for low-interest mortgages;
- Social and low-cost housing will be acquired through tenant purchase schemes. The low-interest mortgages have interests ranging from 3% to 7%[56].

NHC has developed an online housing portal, Boma Yangu, where all market players interact with the housing fund. Eligible candidates will require a Boma Yangu Profile, regular contributions, and total contributions that amount to at least 2.5% of the value of their desired home. The housing funds aim to provide low-income and middle-income groups with affordable housing.

The Civil Servants Housing Scheme Fund (CSHSF), established in 2004, provides housing loan facilities for civil servants to purchase or construct residential houses. The Kenya Slum Upgrading Program (KENSUP) and the Kenya Informal Settlement Improvement Project (KISIP) are other government-led initiatives to improve the living conditions and security of tenure in slum and informal settlements in Kenya.

The National Union for Housing Cooperatives in Kenya (NACHU) is a cooperative federation established in 1979 to promote the development of housing cooperatives in Kenya. It provides technical assistance, financing, advocacy, and networking to promote the development of housing cooperatives in Kenya.

The Kenya Mortgage Refinancing Company (**KMRC**) is a government-backed mortgage refinance company in Kenya. Its mandate is to provide long-term funds to primary mortgage lenders (Banks, Microfinance Banks, and Saccos) to increase the availability and affordability of home loans to Kenyans. By providing long-term funding to primary mortgage lenders, **KMRC** aims to reduce the cost of mortgage financing and increase the availability of mortgage loans. **KMRC** receives funding from the government, private investors, and development partners and is regulated by the Central Bank of Kenya.

NSSF enables home ownership through Tenant Purchase Schemes[57]. The scheme's homeownership model allows for a 10% deposit of the total cost and other monthly instalments over 15 years. All Kenyans above 18 years old and have stable incomes can buy houses through the scheme. However, priority is given to fund members. NSSF, through the tenant purchase scheme, has delivered several homes and business complexes to the market, including Mountain View, Hazina trade center, Kibera Highrise, Nyayo Embakasi, and Kitisuru estates.

[56] Housing Fund Regulations 2018
[57] Daily Nation Brand Book; NSSF

3.0 Systemic barriers that hinder access to affordable housing

3.1 Mapping of players in the housing finance sector

3.1.1 HOUSING FINANCE PRODUCTS AND SOLUTIONS CURRENTLY AVAILABLE IN THE MARKET AND MAPPING THE PLAYERS IN THE SECTOR (AFFORDABILITY, AWARENESS, AND ACCEPTABILITY)

Kenya's housing finance products and solutions are designed to cater to various needs, including home purchase, construction, renovation, modernization, and addition. The interest rates for these products vary widely, from as low as 8% to as high as 48% per annum, with a maximum loan tenure of 25 years and a minimum tenure of one year. The loan amounts available vary significantly, from as little as KES 5,500 (USD 42.3) to KES 100 million (USD 769,000), depending on the lender.

Banks mainly offer mortgages that target middle to high-income individuals, with interest rates ranging from 9% to 15% per annum. However, several banks (ABSA, Cooperative Bank, Credit Bank, DTB, HFC, KCB, NCBA, and Stanbic) now offer affordable **KMRC**-backed mortgage products with interest rates ranging from 9% to 9.5% per annum, an average loan tenure of 20 years, and a maximum loan amount of KES 8 million (USD 61,538). Stanbic Bank offers the highest loan-to-value ratio at 105%. The overall proportion of non-performing mortgage loans to gross mortgage loans was 11.4% in December 2022.

Table 14: Mortgage lenders and housing finance institutions

Institution	Peer group	Mortgage Outstanding (In millions)	Interest Rate	Product Names
KCB Kenya Ltd	Large	76,327	• CRB rate + 4%	• Home financing, • Home loan • Mortgage
Stanbic Bank Kenya Ltd	Large	31,357	• 9% (Home Loan) • 13.6% to 14.2%	• Home Loan • Equity release • Construction Financing • Vacant land financing
HFC Ltd	Large	24,103	• 9.5% (**KMRC** Loan)	• Construction • Plot purchase • Vuna Hela • Nyumba yangu savings account
Standard Chartered Bank Kenya Ltd	Large	20,170	• 14%	• Construction Mortgage • Home Mortgage • Non-resident Mortgage
ABSA Bank Kenya Ltd	Large	15,768	• 14% • 9.5% (**KMRC** loan)	• Home Loan (Buy a home) • Construction loan (Build a home) • Equity release loan • Buy to let • Re-mortgage
The Co-operative Bank of Kenya Ltd	Large	13,825	• 15%	• Good Home Mortgages (Purchase, construction, equity release)
Equity Bank Kenya Ltd	Large	12,544	• 15% to 19.5%	• Construction Loan • Plot loans • Home/ House loans
NCBA Bank Ltd	Large	11,057	• 9.5% to 10% (**KMRC**) • 15.1%	• NCBA easy build • Home Loans • Plot loans
Family Bank Ltd	Large	5,796	• 13.5%	• Brick by brick • Estate development (for developers) • Company schemes (employed individuals and organized individuals) • Construction loans

Institution	Peer group	Mortgage Outstanding (In millions)	Interest Rate	Product Names
				• Owner-occupier • Plot loans
First Community Bank Ltd	Small	5,690	• 13%	• Plot/land financing • Mortgage Financing • Construction Financing

Source: Bank supervision annual report 2021 and stakeholder engagement

SACCOs offer loans with interest rates ranging from 8% to 12% annually. The maximum loan tenure was 25 years, with maximum loan amounts exceeding KES 10,000,000 (USD 76,923). The highest loan-to-value ratio is 100%. Backed-**KMRC** loans offered by SACCOs had interest rates ranging from 8% to 9.5% (Annex 1). Although **KMRC**-backed products offered by SACCOs are similar with minor differentiations, uptake has been gradual due to low incomes, lack of repayment ability, collateral requirements, and few available housing units in the market.

Table 15: SACCOs offering housing finance products

Institution	Loan ceiling KES	Interest Rate per annum	Product names
Stima Sacco	• 4,000,000 • (Makaazi Poa) 3,000,000 4,000,000 500,000	• 9% • 14.5%	• **KMRC** Mortgage • Makaazi poa • Land Purchase • House Construction or Purchase • Home Improvement
Imarika Sacco	• 4,000,000	• 10%	• Makao Loan, Ujenzi Loan
Unaitas Sacco	• 8,000,000	• 9.5%	• Jenga Loan, Nunua Keja
Kenya National Police Sacco	• 15,000,000 • 8,000,000	• 15% • 9%	• Wezesha individual housing • Makao home loan

Source: Stakeholder engagement

Microfinance banks and non-bank Microfinance institutions have some of the highest interest rates and short loan tenures, with interest rates ranging up to 48% on a reducing balance basis and maximum loan tenure periods as short as six months. However, they also offer loans for the lowest amount, for as little as KES 5,500 (USD 42.3).

Regarding interest rates, microfinance banks and institutions have a wide range, with a minimum of 9% and a maximum of 48% (Annex 1). The repayment periods for their loans vary as well, with a minimum of 6 months and a maximum of 8 years. The maximum loan amount offered by these institutions can reach up to KES 15,000,000 (USD 115,385).

KWFT is the only Microfinance Bank member of **KMRC**, but they have been unable to access the **KMRC** funds because their lending models do not fit. This is because KWFT offers short-term facilities mainly catering to incremental building. However, the **KMRC** lending model promotes long-term facilities catering to outright purchases and one-off construction.

Table 16: Housing microfinance institutions and their products

Institution	Example Providers	Example products
Microfinance Banks	• KWFT Bank • Maisha MFB • Caritas MFB • Century Microfinance	• Nyumba smart loans • Maisha development loan • Rent Milele Loan • Rent Zaidi
Credit only MFI	• Letshego Kenya • Vision Fund • Makao Mashinani • Yehu MSL • ECLOF Microfinance • Jiweze Limited • Bimas Kenya	• Housing Microfinance solutions • Construction loan • Land access loan, incremental housing loan, and housing fundamental infrastructure loan. • Mabati loan • Home Improvement Loan

Source: Stakeholder engagement

The study provides detailed research findings and mapping of products and solutions and players in the sector based on key informant interviews complemented by literature reviews. Critical insights from stakeholder interviews revealed that while the repayment of housing finance products has been reasonable compared to other financial products, default risk is still high due to low incomes and lack of repayment ability. The portfolio-at-risk (PAR) for MFBs was 39%, and for credit-only MFIs was at 14.85%. Despite this, the aspirations and economic value that customers attach to their houses have helped to ensure better repayment rates.

Overall, Kenya's different sources of housing finance provide various options for individuals and households seeking to purchase, construct or renovate homes. However, there is still a significant gap in the supply of affordable housing finance, particularly for low-income earners. This is due to a lack of data in the housing finance sector, information asymmetry, and eligibility criteria. As such, there is a need for more innovative housing finance solutions that can cater to the unique needs of the Kenyan population, especially those in informal settlements.

3.2 Business characteristics and institutional factors determining access and usage of housing finance and the effect on borrowing decision

3.2.1 BUSINESS CHARACTERISTICS

Business characteristics are the distinct attributes that define financial service providers. These characteristics include the institution's size, business model, marketing strategy, and funding structure. They shape how the organization operates and interacts with its clients.

Institutional factors, conversely, pertain to the external environment in which businesses operate. Government policies and industry regulations determine these institutional factors. They create the framework within which financial service providers function and impact their operations and offerings. Institutional factors also shape the broader landscape of housing finance. Government policies, regulations, and industry standards affect the legal and regulatory framework within which financial service providers operate. These factors can influence the affordability, availability, and terms of housing finance, as well as the market competition level.

When accessing housing finance, various factors from both business and institutional perspectives come into play. Business characteristics influence the availability, terms, and accessibility of housing finance products and services. Factors such as the size of the institution, its business model (e.g., commercial bank, microfinance institution), marketing strategy, and funding structure can all influence the types of housing finance options available to individuals and the conditions under which they can access them. By considering both business characteristics and institutional factors, policymakers and stakeholders can better understand and address the barriers and opportunities to access housing finance. This holistic approach enables the development of effective strategies and interventions to promote inclusive and sustainable housing finance markets.

3.2.1.1 THE SIZE OF THE INSTITUTION

The size of financial service providers, including institutions offering housing finance, is a crucial business characteristic that determines access and usage and influences borrowers' decisions. The size of an institution can be assessed based on factors such as capital base, asset base, loan portfolio, and branch network.

Larger institutions with substantial capital and asset bases and a diverse loan portfolio are likely to have a higher risk appetite and capacity to offer a wide range of housing finance products. These institutions have the resources and capabilities to finance more extensive projects, provide more significant loan amounts, and offer more flexible loan terms, such as longer tenures.

Furthermore, a vast branch network is advantageous for institutions in reaching a more extensive customer base, including individuals from the low- and middle-income segments. A more expansive reach increases the accessibility of housing finance options for a broader population, enabling more individuals to consider borrowing for housing-related purposes.

In contrast, smaller institutions may have limitations regarding their capital and asset bases, loan portfolio diversity, and branch network. They may have a lower risk appetite and capacity to offer extensive housing finance products, which can restrict access to housing finance for specific population segments.

In December 2022, 83% of lending to the mortgage market was conducted by eight institutions. Out of these eight institutions, seven were large banks from the peer group, accounting for 75% of the lending, while one institution was a medium-sized bank, contributing 8.3% to the lending58. Six of the eight banks partnering with **Kenya Mortgage Refinance Company (KMRC)** belong to a large peer group.

3.2.1.2 BUSINESS MODEL

The business model refers to the framework that outlines how a financial service provider operates and delivers services to generate revenue. It encompasses product features, geographical focus, and hybridization of delivery methods. These factors can positively or negatively impact the borrowing decisions of consumers.

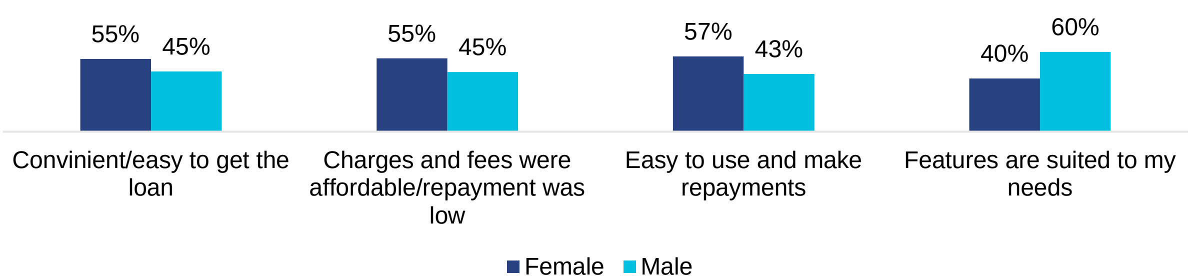
Product features refer to the specific characteristics and terms of housing finance products. These characteristics include loan size, repayment terms, interest rates, and loan requirements. If the product is easy to use and tailored to the needs of consumers, they will be encouraged to uptake and use the solution.

The loan products are categorized based on income levels and location, with credit ratings and income levels determining the amount of loan an individual can access. The property's location also influences its valuation, affecting the loan amount an individual can access. More extended repayment periods and grace periods positively impact borrowing decisions.

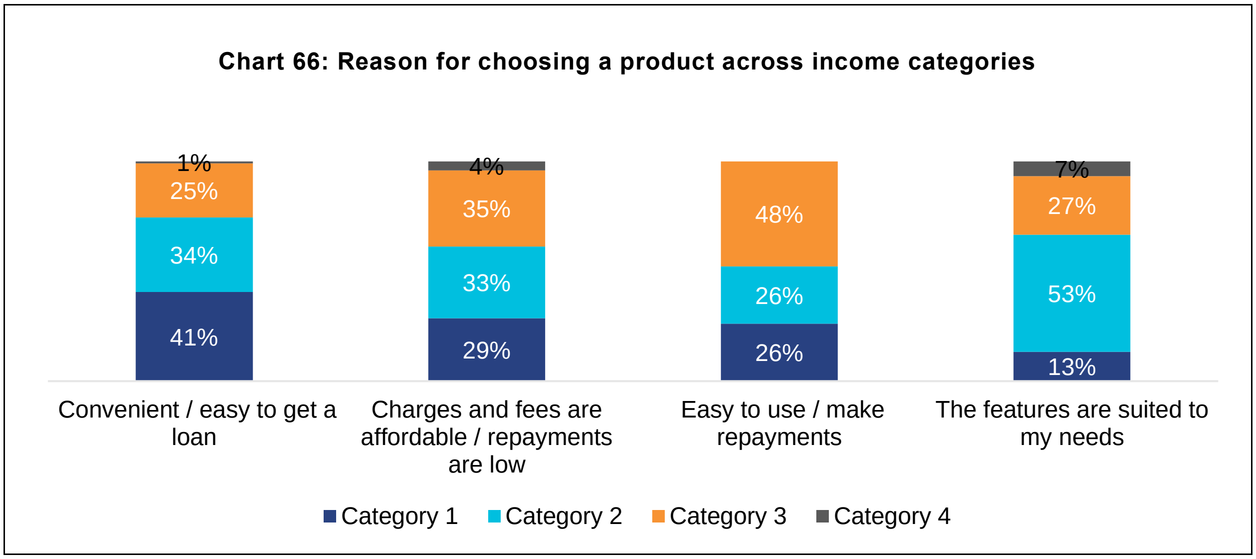
Interest rates are structured based on the amount of loan requested, and higher loan amounts attract lower interest rates. However, this affects the accessibility of lower- and middle-income segments as they require lower loan amounts at low-interest rates.

Loan requirements, such as KYC procedures, bank statements, and level of savings, can be challenging to meet for individuals with low income and savings, further discouraging borrowing. Loan turnaround time is another critical factor, with shorter turnaround times positively influencing borrowing decisions. Collateral requirements, such as a title deed requirement, can also affect borrowing decisions, potentially locking out low and middle-income individuals with land but no title.

Chart 65: Reason for choosing a product



58 CBK Bank Supervision Annual Report, 2022



Source: Survey data

According to the survey results in Chart 65, on average, 55% of female and 45% of male respondents chose a housing finance solution due to its convenience, affordability, low repayment amounts, ease of use, and suitability to their needs. The survey also revealed that respondents in different categories have different reasons for choosing a product. Those in the category preferred a loan that was easy to use, while those in category 4 preferred a loan suited to their needs (chart 66). These findings suggest that product features play a crucial role in the borrowing decisions of consumers.

The convenience factor appears to be a significant driver of borrowing decisions, indicating that individuals prefer solutions that are easily accessible and user-friendly. Affordability is another critical factor, with borrowers opting for solutions that offer low repayment amounts tailored to their financial capacity.

Overall, the survey results suggest that product features are essential in influencing the borrowing decisions of consumers. Financial service providers should focus on developing solutions that are easy to use, convenient, affordable, and tailored to the needs of their target customers. By doing so, they can increase the uptake and usage of their housing finance products and services and better serve the housing needs of their customers.

The geographical focus of financial service providers plays a significant role in determining access and usage of housing finance, particularly concerning underserved or marginalized areas. Financial service providers that specifically target and prioritize rural areas significantly improve access to housing finance for low and middle-income earners in those regions.

Microfinance institutions (MFBs) such as Kenya Women Microfinance Bank (KWFT) are notable examples with a strong geographical focus on rural areas. These institutions recognize the unique challenges faced by individuals in rural communities when accessing financial services, including housing finance. By focusing on rural areas, MFBs, and MFIs increase access to and usage of housing finance among rural dwellers.

The delivery methods of financial service providers significantly impact access and usage of housing finance. How housing finance services are delivered to customers can determine the level of accessibility, convenience, and affordability for borrowers. Common delivery channels include physical branches, digital channels, and agent banking.

According to our survey, 34% of the respondents preferred using mobile banking as an access channel, while 22% preferred physical branches. This highlights the importance of offering a variety of delivery methods to cater to customer preferences. Hybridizing delivery channels is necessary to ensure greater reach and accessibility. This means combining traditional physical branches with digital platforms. By adopting a hybrid approach, financial service providers can meet the diverse needs of customers and provide multiple avenues for accessing housing finance

3.2.1.3 MARKETING STRATEGY

The marketing strategy of financial service providers plays a crucial role in shaping access to and usage of housing finance and influencing borrowing decisions. A well-designed and targeted marketing strategy significantly impacts housing finance products' awareness, perception, and utilization.

Insights from stakeholders revealed that banks, SACCOs, and Microfinance institutions (MFIs) apply a mixture of marketing strategies to increase the awareness of their housing finance products. Financial service providers targeting rural and peri-urban areas employed physical marketing campaigns such as door-to-door, sponsoring exhibitions, and organizing community gatherings to create awareness. Those targeting urban and peri-urban capitalized on digital marketing campaigns and mass media.

The effects of marketing strategy on borrowing decisions are increased uptake of housing finance products, improved customer engagement, and informed decision-making. An effective marketing strategy can address potential barriers, such as misconceptions about housing finance, lack of awareness, or fear of the borrowing process, thereby encouraging individuals to apply for and utilize housing finance. It can also create a positive perception of the provider, leading to long-term customer relationships and repeat business.

3.2.1.4 FUNDING STRUCTURE

The funding structure of financial service providers determines the availability, affordability, and lending terms of housing finance. Fund sources include customer deposits, capital injections, and wholesale lending. The cost and tenure of funding significantly impact access to and usage of housing finance. The cost of funding refers to the interest rates or borrowing costs that financial service providers incur when securing funds to lend to borrowers. The tenure of funding refers to the time funds are available to the providers.

High funding costs are transferred to consumers, making it difficult for low and middle-income individuals to access housing finance. Limited access to long-term funding sources results in a low supply of housing finance products.

3.2.2 INSTITUTIONAL FACTORS

Institutional factors, although external, can affect the decision of financial service providers to offer housing finance products. Factors that positively affect borrowing decisions and enable access to enable financial service providers to offer housing finance products. The table below summarizes institutional factors and their effect on borrowing decisions.

Institutional factors	Description	Effect on access and usage of housing
Government policies	• This includes government initiatives to improve access to and usage of housing finance. • Examples include the Kenya Affordable Housing Program, National Housing Policy, Kenya Vision 2030, and the Big Four Agenda.	• Favourable policies enable financial service providers to offer housing finance, which positively affects borrowing decisions. • The establishment of **KMRC** has enabled financial service providers to offer affordable housing finance. • Tax incentives encourage people to purchase their own homes, which creates demand for housing finance.
Industry regulations	• Regulations are implemented to ensure stability, integrity, and fair practice within the sector. • They include customer protection, risk management, prudential lending practices, compliance, and accountability.	• Stringent regulations limit the access to and usage of housing finance. • They lengthen the loan application process and increase the cost of borrowing. Examples are such as; • High capital requirements • The legal requirements for construction, property transfer, and property registration • Valuation fees

3.2.1 SUPPLY-SIDE SELECTED CONTEXTUAL CASE STUDIES

The case studies presented below outline some financial service providers' business case models comprising one microfinance bank, two microfinance institutions, and a FinTech that provides housing finance solutions to the low- and middle-income segment.

KWFT MFI at a glance

Overview of institution

KWFT is a microfinance bank founded in 1981 and aims to increase women's financial inclusion. With a presence in 45 counties nationwide, KWFT's primary customer base is women who live in rural areas and belong to low and middle-income segments. To achieve its goal, KWFT employs both group and individual lending models. KWFT has partnered with iBuild to track the usage of housing finance products to ensure that funds are used for the intended purpose.

Products

- **Nyumba Smart loan:** This product was developed in 2014 to address rural women's need for decent shelter. With technical assistance from **Habitat for Humanity International**, KWFT has disbursed an average of KES 7 billion (USD 53 million) with a reach of 1,000 individuals as of 2023. 90% of the portfolio is based in rural areas. The Nyumba Smart loan is group based and is meant to cater to new constructions incrementally, house improvements, and additions. The interest rate is charged at a 24% flat rate with a maximum repayment period of five years. This loan is 100% financed, and the average loan size is KES 60,000-80,000 (USD 462-615). The requirements for the loan are a copy of a national identification card, passport photo, and quotation of building materials.
- **WASH housing finance and Clean Renewable Energy:** The WASH housing finance product caters to building, repairing, and improving sanitation at the household level. The Clean and Renewable Energy product caters to solar lighting, heating, and electricity.

Lesson learned

KWFT recognized the specific needs of their rural female customers for affordable housing and designed a tailored product to meet those needs. By developing the Nyumba Smart loan product, KWFT is helping women in rural areas to uphold their dignity by building or improving their homes incrementally and affordably.

The lending model of KWFT is incompatible with the **KMRC** model because KWFT issues loans with short tenures and without the need for land collateral. As a result, they cannot obtain funds for housing finance from **KMRC**.

BIMAs MFI at a glance

Overview of institution

BIMAS is an MFI that operates in 19 counties and serves around 41,000 clients as of March 2023. The institution has a portfolio of KES 1 billion (USD 7,692,308) and primarily uses group lending methodology, although it recently introduced individual lending. BIMA's clientele comes from rural communities, with 68% of clients being women.

Products offered

- **Maendeleo product:** This product is designed to improve houses, such as painting, roofing, and furnishing. The loan is repayable within a month and ranges from KES 10,000-200,000 (USD 77-1,538), with a repayment period of six months. It is more expensive than the other housing finance loans due to processing or insurance fees, with a 24% interest rate. The Maendeleo product has been in the market for 12 years and has a portfolio of KES 8.9 million (USD 68,462) with a Portfolio at Risk (PAR) of 10%.
- **WASH housing finance products:** This loan includes borrowing for items such as tiles, painting, construction of better toilets, water tanks, utensils, wardrobes, and sofa sets. The product is more inclusive and allows for borrowing items used within the house for the low-and-middle-income segment. It can be borrowed individually or within the group at a 20% interest rate on a flat rate, with repayments of three years for clients who want to purchase many tanks and dig wells. The product has been performing well, with a PAR of 4%, and has a portfolio of KES 1.8 million (USD 13,846) since its launch in August 2022.

Loan requirements
BIMAS requires household items and guarantors for loans below KES 400,000 (USD 3,077), while any loan above KES 400,000 (USD 3,077) requires a logbook or title deed and guarantors.

Digitization
BIMAS uses an e-Document management system (e-DMS) for staff to receive, track, manage, and store documents. This enables quick submission of loan applications and a swift turnaround time. BIMAS Wallet app is used for disbursement (95%) through M-PESA, and payments and deposits can also be made through USSD and Paybill.

JIWEZE MFI at a glance

Overview of institution
Since its inception in 2003, Jiweze established itself as a table banking institution to empower women to access finance. Jiweze formalizes Village Savings and Loan Associations (VSLA) groups and supports table banking. Their primary focus is low-and-middle-income customers in rural areas, with 99% of their clients being women of all ages. As of March 2023, Jiweze had registered approximately 400 active groups and 12,000 active clients.

Requirements
Unlike traditional banks, Jiweze doesn't require bank statements for loans as long as a client is 18 years old and a registered group member under Jiweze. The membership also draws guarantors, using 40% of their savings to guarantee other members.

Products offered

- **Mradi loan:** Jiweze offers this loan at an 18% interest rate on a reducing balance. New clients can access up to KES 20,000 (USD 154) while existing clients can access up to KES 1 million (USD 7,692), payable in 12 months. Clients can also access up to 35% of their savings and graduate depending on how well they make payments. People mainly use the Mradi loan for plot purchases, paying school fees, electricity, buying furniture, cooking gas, and home improvement.
- **Mali Poa and Papo Hapo (Table banking):** Jiweze offers emergency loans at a 10% interest rate. One can access up to three times their savings and make payments within three months when using this loan. They share the 10% interest contribution in the group as a bonus at the end of the year, and the PAR is less than 2%. People use this loan for various reasons, including house improvement.
- **Maji product:** This product requires the client to deposit at least 30% of the cost of the tank to get the product loan.
- **Other products**: Jiweze Renewable Energy (JRE) is also available, which helps clients purchase cooking gas, *jiko* coal, solar lamps, and solar panel torch that connects to three rooms (the client can get up to five times their savings).

Jiweze does real estate, buying land in rural areas, subdividing it, and selling it to clients. Cash land payments are made within 90 days. For instance, Jiweze organized a group of women (FREEHOLD GROUP) and bought five acres of land (39 plot units (1/8)) in a rural area. The group made deposits, savings, and extra deposits toward land purchases. Every member should have contributed KES 50,000 (USD 385) to get a plot. Of the 40 members in the group, only 26 were able to contribute towards the land purchase, with some members purchasing up to six plot units.

Future aspiration and lessons learned
Jiweze also plans to venture into WASH sanitation products for improved toilets. Jiweze's approach leverages the power of group dynamics by requiring members to guarantee each other's loans, reducing risk, and enabling more customers to access financing without traditional collateral. Leveraging group dynamics can help improve financial access for individuals who may not have access to conventional collateral or credit history forms.
Jiweze requires support with product development or redesigning and staff technical assistance to scale up the product rollout to rural clients.

Overview of iBuild FinTech business model

Overview of institution

iBuild is an end-to-end digital platform and construction ecosystem that supports the housing finance value chain. The Fintech connects dynamic ecosystem actors by providing competitive housing construction services and ensures transparency of transactions across all stakeholders involved throughout a project. iBuild offers a secure method to connect homeowners with contractors, lenders, construction workers, and suppliers to facilitate housing (re)construction, home renovation, and improvement processes. The platform digitizes construction projects, programs, processes, and payments, helping homeowners and contractors run and manage their housing projects.

End-to-end solution

The end-to-end solution looks at the customer's pain points and provides specific solutions based on their unique needs to address the affordable housing shortage. iBuild, therefore, coordinates business-to-business (B2B) and business-to-consumer (B2C) direct engagements and development processes with homeowners, certified contractors, banks/lenders, construction workers (artisans, fundis(builders), painters, architects), and material suppliers.

Requirements

iBuild coordinates B2B and B2C operations so all users must be registered on iBuild's platform. Before contractors can create their profiles and post job listings on the service, they must undergo verification by the National Construction Authority (NCA). Homeowners must commit funds before work is commenced, and payments for rendered services are not released until the contractor completes the job. Construction workers (fundis, artisans, painters) must register to get access to job posts and participate in construction projects created on the platform. Before contractors could create their profiles and post job listings on the service, they had to undergo verification by the National Construction Authority (NCA). Construction workers (fundis, artisans, painters) were given access to job posts and could participate in construction projects created on the platform. Homeowners had to commit funds before work commenced, and payments for rendered services were not released until the contractor completed the job.

iBuild digital wallet

The iBuild app uses the iBuild digital wallet (Escrow account) to deliver secure payments for contractors and homeowners. This speeds up housing completions and ensures seamless payments. The Escrow account within the App helps overcome payment risks by releasing amounts on time only after completing project milestones or delivering materials. Funds are supplied to the wallet through lender disbursements, bank deposits, or the M-PESA platform.

Partnerships with ecosystem players

- **Homeowners**: make financial arrangements and commitments and can get quotes for and receive bids from contractors and hire them. They can also locate material suppliers, compare pricing and verify the onsite delivery of materials.
- **Suppliers:** can sell their supplies directly to consumers and contractors by connecting with them through the platform.
- **Contractors:** can search for projects, submit and manage bids and post jobs, and hire and pay workers. They can also locate material suppliers, compare pricing and verify the onsite materials delivery.
- **Construction workers:** can search and apply for jobs and get ratings on job performance and skills from contractors. iBuild has partnered with Britam Insurance to cover *fundis* from accidents and provide tool financing for them (an opportunity that can be explored further).
- **Banks:** can pair up the customer with iBuild to manage and oversee the housing project to avoid funds diversion. Similarly, iBuild can connect the customer to the bank for financing. Once homeowners are

connected to banks and clients commit money to the Digital wallet/Escrow account, the lender can finance up to 50% of the amount the user saves.

Other support services provided

iBuild helps banks develop innovative products on B2B financial solutions for contractors. Equally, a contractor can be advanced by the bank as an iBuild customer. FinTech has previously supported partner organizations to conduct impact assessments on home improvement projects targeting the low- and middle-income segments. Lastly, iBuild also registered success by helping the Ministry of ICT rebrand the AJIRA Centers quickly. Through collaborations with partners such as **KMRC**, **HFHI**, and others, iBuild can help development partners track housing finance home projects and manage contractors nationwide. The incremental building is an area that has yet to be well-tapped; therefore, support can be offered to develop digital solutions to support self-build programs that can help the low- and middle-income segment to build incrementally.

Harambee SACCO at a glance

Overview of institution

Harambee SACCO was established in 1970 to provide financial services to its members. The SACCO has its headquarters in Nairobi and has a network of branches across the country. Harambee SACCO is one of the SACCOs that has partnered with **KMRC** to provide affordable mortgages to its members. The partnership allows Harambee SACCO to access long-term financing from **KMRC**, which it can use to provide to members through mortgage financing.

Products offered under KMRC

- **Harambee Home loan:** To purchase a home outright, you must meet specific qualifications, including that the property must have a title deed or certificate of lease and be located within a municipality. The loan-to-value ratio is up to 90% of the purchase price or the open market value, whichever is lower. A personal contribution is required, and it must be at least 10% of the purchase price. For loans of 10 years or less, the proposed interest rate is 8% per annum, while for loans above 10 years, it is 9% per annum. The loan period varies depending on the borrower's employment status. Employed individuals subject to retirement age have a maximum loan period of 25 years, while self-employed individuals subject to insurable age have a maximum loan period of 15 years. The refinancing minimum loan amount is KES 500,000 (USD 3,846). In contrast, the maximum loan amount is KES 8 million (USD 61,538) for properties in Nairobi, Mombasa, and Kisumu cities and KES 3 million (USD 23,077) for other areas. The Mortgage Protection Policy (MPP) and Domestic Package (DP) are applicable insurance covers.
- **Harambee Jenga loan:** Harambee SACCO provides financing for fresh home construction or home completion. To qualify for the loan, the property must be located within a municipality and have a title deed or certificate of lease. The loan-to-value ratio is up to 90% of the construction cost or projected open market value, whichever is lower. The borrower must contribute at least 10% of the construction cost as a personal contribution. The proposed interest rate is 8% per annum for loans with a term of 10 years or less and 9% per annum for loans above 10 years. The maximum loan period is 25 years for employed borrowers, subject to retirement age, and 15 years for self-employed borrowers, subject to insurable age. The minimum loan amount is KES 500,000 (USD 3,846), while the maximum is KES 8 million (USD 61,538) for properties in Nairobi, Mombasa, and Kisumu, and KES 3 million (USD 23,077) for other locations. Applicable insurance covers include Contractor's All Risk Cover (CARIC), Workers' Injury Benefit Cover (WIBA), Mortgage Protection Policy (MPP), and Domestic Package (DP).

Basic requirements for both Home and Jenga loans: To apply for a mortgage, you must provide a completed and signed mortgage application, identification card, and KRA pin. If the mortgage is joint with your spouse, you must also provide a marriage certificate or affidavit. Additionally, you will need to provide a letter of offer or draft sale agreement and a copy of the title or lease for the property. You must also include your profile or CV, a letter of

introduction from your employer, and your latest three months of certified pay slips. Furthermore, you must provide your latest six months of certified bank statements and ensure your salary passes through the FOSA.
Additional requirements for Harambee Jenga loan: To proceed with a construction project, you must meet several essential needs. Firstly, a certified architect must approve the architectural plans, and a certified structural engineer must approve the structural drawings. Additionally, a quantity surveyor must prepare a priced bill of quantities. For ongoing projects, you must submit a bill of completion, while for stalled projects, a structural engineer must provide a draw-down schedule and integrity report. A fixed-term contract with the contractor is also necessary. In addition, approval from NEEMA and the National Construction Authority is required, along with professional profiles and certification for the project consultants, such as the architect, structural engineer, quantity surveyor, and contractor. Finally, proof of WIBA or CARIC insurance covers must be provided by Harambee Insurance Agency.

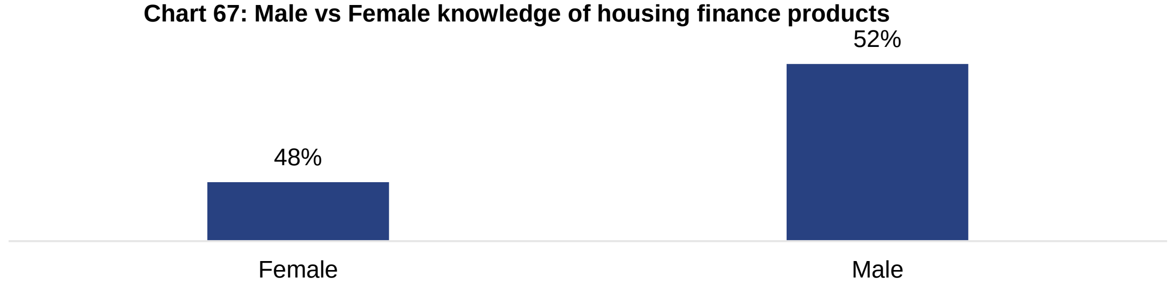
Unique Selling Propositions: The mortgage loan program offers competitive interest rates with the proposed rate of 8% per annum (0.67% per month) for loans up to 10 years and 9% per annum (0.75% per month) for loans exceeding 10 years. Compared to other loan options, such as those offered by SACCOs, which have an interest rate of 12% per annum (1% per month), the mortgage program provides a more affordable option. The loan offers a long repayment period of up to 25 years, allowing for manageable monthly installments. For instance, a loan of KES 4 million (USD 30,769) over 25 years at 9% p.a. translates to 300 monthly installments of KES 33,500 (USD 258) monthly. The mortgage is on a reducing balance, enabling principal prepayments and early loan redemption, which gives members more control over the amount of interest they pay for their mortgage. The loan allows for immediate or definite home occupation, which helps members avoid building homes over an extended period with multiple loans while still under the pressure of paying rent. Moreover, a mortgage is a loan where collateral or security appreciates. In contrast, the loan principal balance reduces, enabling the member to gain value (asset appreciation) or income (if the property is eventually rented out) while the debt decreases; this creates room for top-up loans.

3.3 Synthesis of factors hindering access and usage of housing finances for low- and middle-income segments in Kenya

3.3.1 KNOWLEDGE, ATTITUDES, SOCIAL NORMS, AND PERCEPTIONS OF LOW- AND MIDDLE-INCOME EARNERS TOWARDS ACCESS AND USAGE OF HOUSING FINANCE

The Charts below present the responses on awareness of housing finance products offered by financial institutions such as SACCOs, banks, microfinance banks, and microfinance institutions. The research explored the sources of information respondents rely on to decide and the role social norm plays in shaping attitudes towards housing finance.

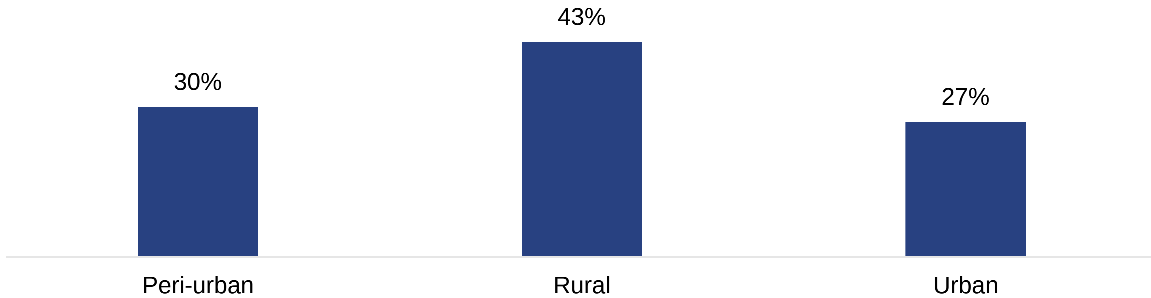
Chart 67: Male vs Female knowledge of housing finance products



Source: Survey data

The research findings in Chart 67 show that male respondents (52%) have slightly higher knowledge of products than female respondents. The difference in product knowledge between males and females is slight. Male respondents were more aware of products and services meant to help them build or improve their houses, which financial institutions offered. However, still, there is a need for targeted efforts to ensure all individuals have access to adequate information about housing products.

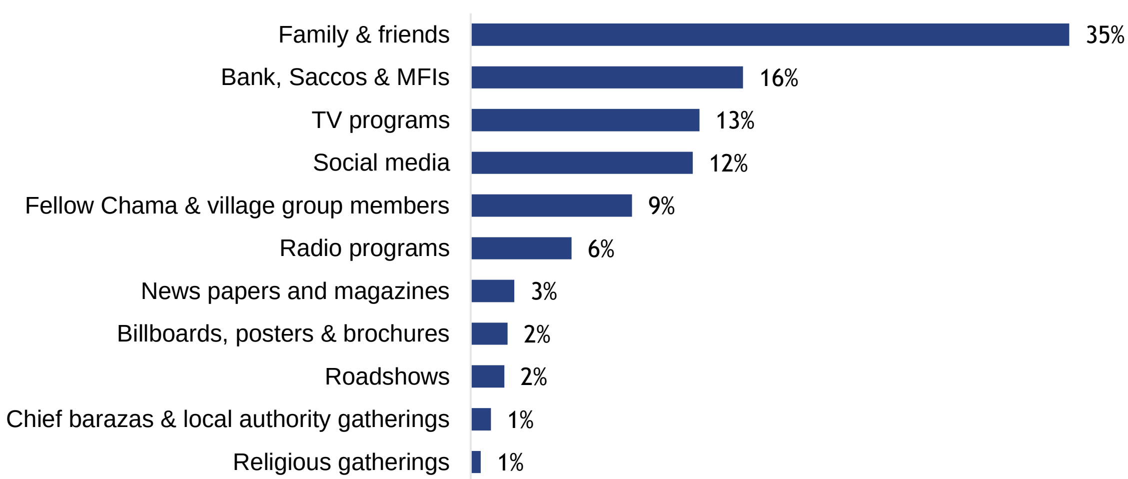
Chart 68: Knowledge of housing finance products by location



Source: Survey data

Regarding geographical differences, Chart 68 indicates that individuals in rural areas have higher knowledge of housing products than those in peri-urban or urban areas. This could mean that there might be a lack of access to information and resources for these individuals. Financial service providers have an opportunity to increase awareness of housing finance products through targeted marketing and educational campaigns. By tailoring the marketing of housing finance products and services to different demographic groups, financial institutions can better meet the specific needs of each population segment.

Chart 69: Sources of information on housing finance



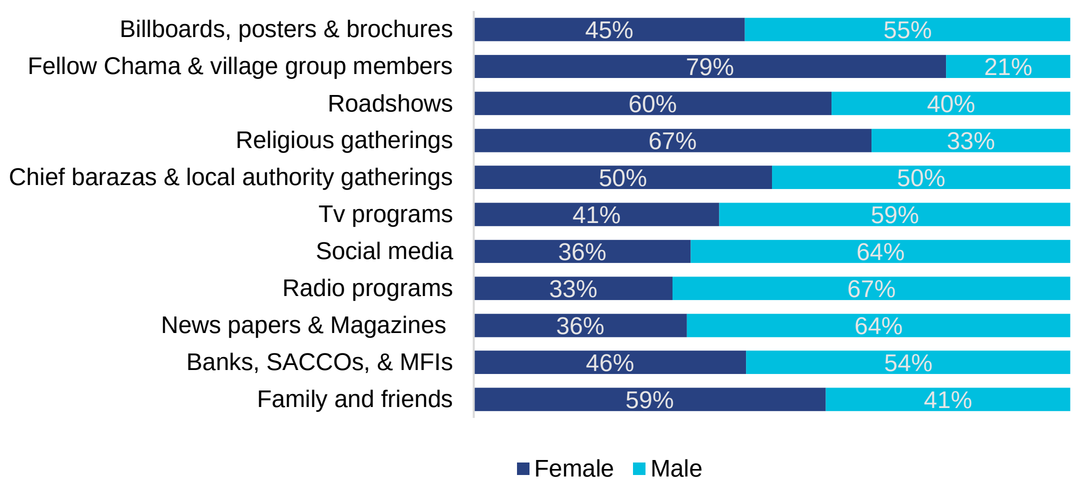
Source: Survey data

The findings in Chart 69 reveal that family and friends are the primary and most influential sources of information, accounting for 35% of all sources. These findings strongly indicate that people within the community trust word-of-mouth recommendations and advice from their loved ones. Financial institutions such as banks, SACCOs, and MFIs are the second most significant sources of information, making up 16% of all sources. This implies that individuals in rural, urban, and peri-urban areas are well-versed in housing financial services and products and are likely to seek information from these institutions.

Social media and TV programs are also prominent sources of information, contributing 12% and 13%, respectively. This highlights the impact of digital media in shaping people's perceptions and decisions about housing products and services. On the other hand, traditional marketing channels such as newspapers, magazines, billboards, posters, and brochures account for only a meager percentage of information sources, indicating their diminishing effectiveness.

The key insights reveal that recommendations from family and friends, financial institutions, and digital media platforms such as social media and TV programs are the most potent channels for disseminating information about housing products and services. These findings highlight the importance of trust and credibility in disseminating information and suggest that traditional marketing channels should be revisited to align with the changing trends in consumer behavior. By understanding the preferred sources of information, financial service providers can tailor their communication strategies to reach their targeted audience and increase their outreach effectively.

Chart 70: Sources of information on housing finance by gender



Source: Survey data

Chart 70 presents the percentages of female and male respondents on the sources of information on housing finance. The findings show that female respondents relied more on fellow *chama* and village group members (79%), religious gatherings (67%), roadshows (60%), and family and friends (59%) compared to male respondents. Male respondents relied more on radio programs (67%), newspapers and social media (64%), Tv programs (59%), billboards, posters, and brochures (55%), and banks, SACCOs, and MFIs (54%).

In addition, both male and female respondents relied equally on chief *barazas* and local authority gatherings as sources of information on housing finance—different sources of information on housing finance appeal to different genders. While male respondents rely more on mainstream media and digital sources, female respondents rely more on community-based and interpersonal sources of information.

Chart 71: Financial literacy by gender

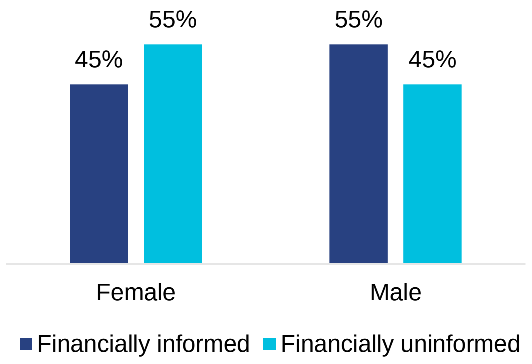
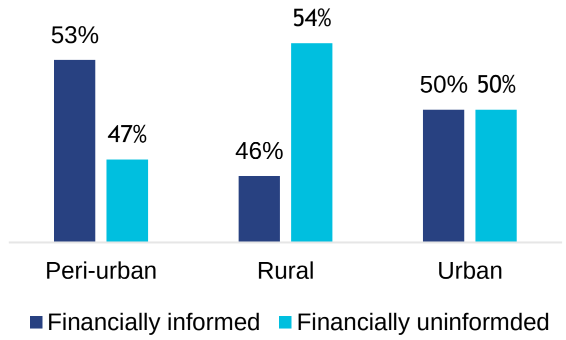


Chart 72: Financial literacy by location

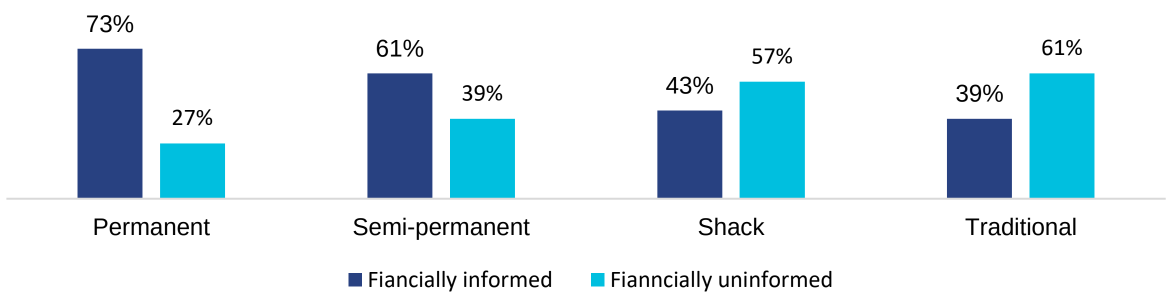


Source: Survey data

Chart 71 illustrates the level of financial literacy among different demographic groups, including gender and location. The results indicate notable differences in financial literacy levels across other groups. The study used the calculation of interest to inform financial literacy. A higher percentage of male respondents (55%) answered the interest calculation correctly than female respondents. Additionally, a higher percentage of female respondents (55%) did not answer the question correctly compared to male respondents. These findings suggest that there may be a gender gap in financial literacy, which could be attributed to factors such as education, cultural norms, or access to information.

Further analysis of financial literacy by location (Chart 72) reveals that respondents from peri-urban areas (53%) answered the question correctly, whereas rural respondents (54%) answered it incorrectly. These results demonstrate a significant lack of financial literacy among respondents in rural areas, highlighting the need for targeted financial education and awareness initiatives tailored to this demographic group's specific needs. Providing targeted financial education and awareness initiatives tailored to this demographic group's needs can help individuals build the skills and knowledge to make informed financial decisions.

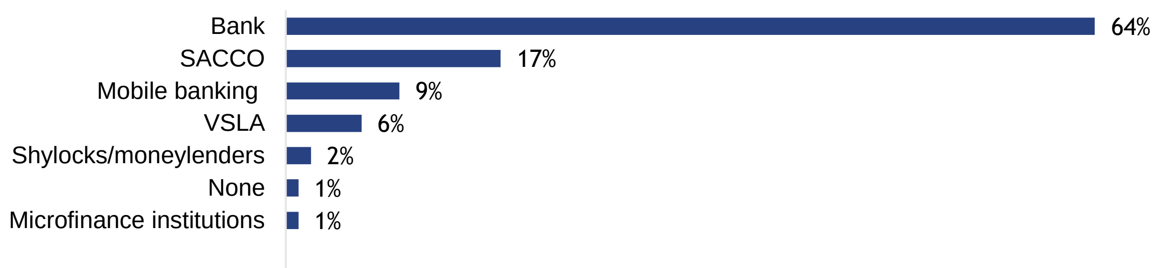
Chart 73: Financial literacy by kind of house



Source: Survey data

Chart 73 presents the percentage of financially informed and uninformed respondents based on their house type. The highest percentage (73%) of financially informed individuals is found among those living in permanent houses. This shows that individuals living in permanent houses tend to have a higher level of financial literacy. The highest percentage of financially uninformed individuals is found among those living in traditional houses (61%) and shacks (57%).

Chart 74: Level of trust to beneficiaries

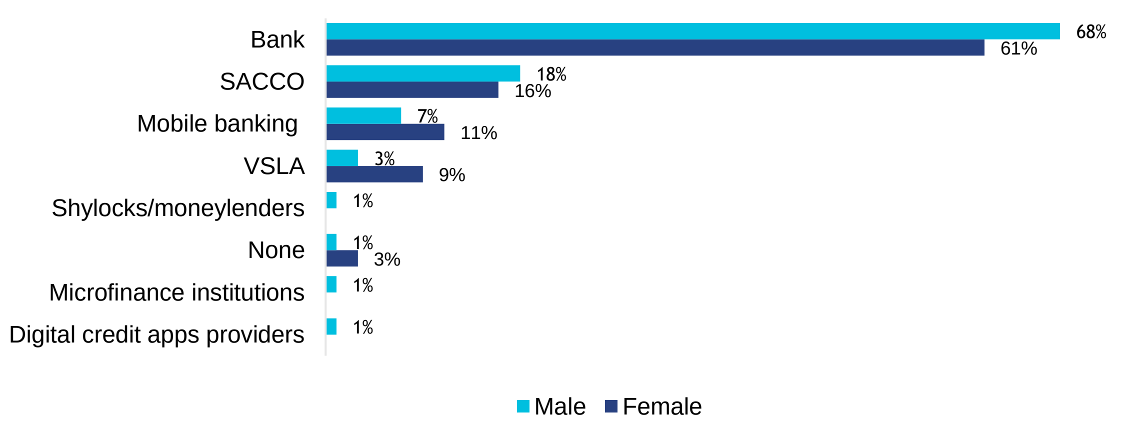


Source: Survey data

Chart 74 shows the level of trust of different financial service providers among the population. Banks have the highest level of trust, with 64% of respondents indicating that they trust banks. SACCOs and mobile banking follow closely with 17% and 9%, respectively. Banks' relatively high level of trust could be due to their perceived stability and reliability. Banks are generally considered more secure and trustworthy than other financial service providers due to their strict regulation and supervision. Additionally, banks offer a wide range of financial products and services, making them a one-stop shop for customers' financial needs. A significant number of respondents also trust SACCOs because they are often community-based and member-driven, which allows them to understand the financial needs of their members better and offer more personalized financial solutions.

Mobile banking has also gained a significant level of trust among respondents. This may be due to the convenience and accessibility that mobile banking provides. Mobile banking services are easily accessible through mobile phones, making it possible for customers to conduct financial transactions from anywhere at any time. VSLAs, microfinance institutions, shylocks or moneylenders, and digital credit app providers have the lowest levels of trust among respondents. This may be due to their perceived lack of regulation, transparency, and reliability. According to focus discussion groups, the participants reported poor customer service experiences during their interactions with MFIs. They expressed dissatisfaction with the level of service provided by some MFIs and unfair lending practices. The participants recounted experiences of being subjected to exploitative terms of hidden charges. These financial service providers need to work on building trust with potential customers by improving their services and being transparent and reliable.

Chart 75: Level of trust by gender



Source: Survey data

Chart 75 provides an overview of the level of trust in various financial service providers by gender. The survey indicates that banks and SACCOs are the most trusted financial service providers among both males and females.

Banks have gained the highest trust levels among male respondents, with 68% indicating their trust in them, followed by SACCOs. On the other hand, female respondents trusted banks (61%) and SACCOs the most, followed by mobile banking providers. Based on the feedback received during the focus discussion groups, women expressed that they trust mobile banking due to the convenience and accessibility it offers, as well as the added sense of privacy it provides.

SACCOs gaining trust among respondents may be due to their focus on serving low-income earners and their close relationship with members. VSLAs have a higher level of trust among female respondents (9%) than male respondents (3%). This may be because VSLAs are often targeted at women and are associated with women's empowerment.

However, the survey results also highlight that digital credit App providers, microfinance institutions, and shylocks or moneylenders were the least trusted financial service providers among both sexes, with only 1% of male respondents indicating their trust in them and no female respondents trusting digital App providers. Digital credit is responsible for 90% of all blacklisting incidents, partially due to the higher default rates in the digital credit market. As a result, many borrowers may have trust issues with this channel.

This suggests a significant lack of awareness and understanding of these financial services among potential customers in emerging markets. The results highlight the importance of trust in financial service providers. Financial service providers must prioritize building trust with potential customers by improving their services and being transparent and reliable to attract and retain customers.

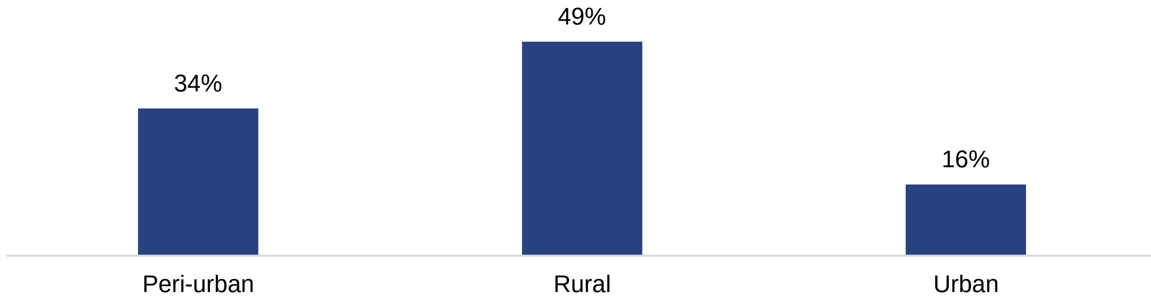
Social and cultural norms significantly impact access to and usage of housing finance. In many communities, people rely on endorsements from respected leaders to determine their attitudes toward housing finance products and services. This is important in building trust and credibility with community leaders to increase the uptake of housing finance products.

According to FDG responses, specific social factors, such as the prevalence of myths and misconceptions around debt, impacted housing finance decisions. These beliefs can discourage individuals from taking on debt, even if it could help them achieve their housing goals. The majority of the respondents revealed that men alone build the houses and make the final decision on what kind of house to have, despite everyone providing their opinion. While women are often considered better financial managers than men, their role is generally limited to making decisions on interior design.

In some communities, men are traditionally considered the household and primary financial decision-makers. However, women are becoming more empowered and involved in financial decision-making, challenging these traditional norms.

Spousal consent requirements for joint accounts and ownership of title deeds also play a critical role in access to housing finance services and products. However, spousal consent requirements can reinforce gender inequalities, as women may face barriers to accessing financial information or negotiating with their partners. It is also common for men to hold title deeds to property, but in reality, the titles may not have been transferred, and women may have a claim to the property. Additionally, ownership of title deeds is a requirement for financing, which can be a barrier for many low and middle-income earners.

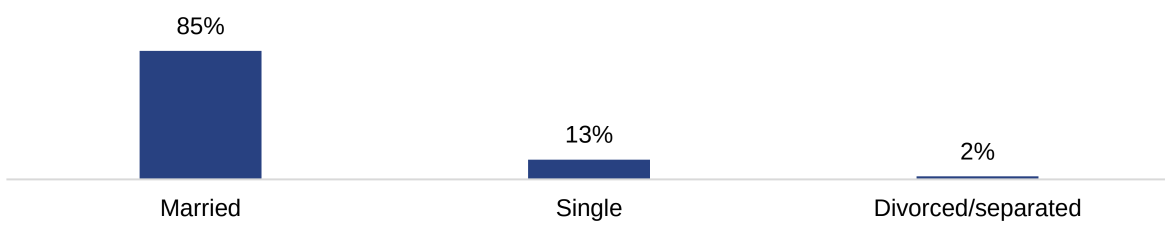
Chart 76: Ownership of land by residence



Source: Survey data

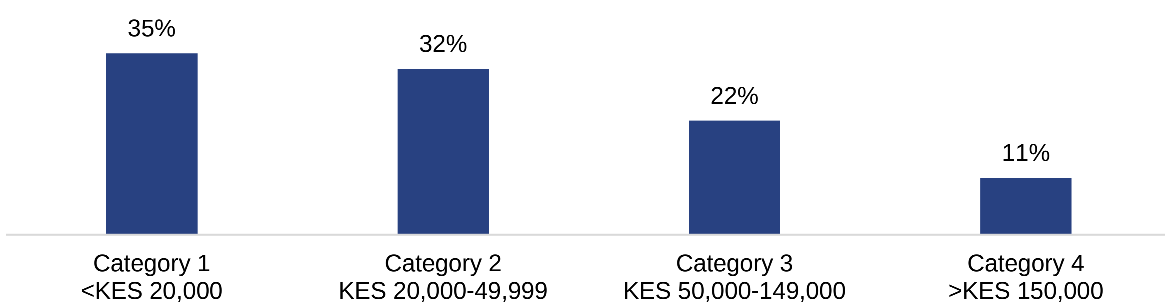
Chart 76 above shows the percentage of people who own land in peri-urban, urban, and rural areas. The results show that ownership of land is highest in rural areas (49%), followed by peri-urban (34%) then finally in urban areas (16%). The higher percentage of land ownership in rural areas may reflect that land is often inherited or passed down from previous generations, and owning land is an essential component of people's livelihoods. Land is typically used for agriculture and income-generating activities in rural areas. In urban areas, the low land ownership may reflect that urbanization is often accompanied by high housing costs, making it difficult for many people to afford to own land or property.

Chart 77: Land ownership by marital status



The findings in Chart 77 show disparities in land ownership among different marital status groups. Married individuals (85%) have the highest rate of land ownership, which could be attributed to various factors such as combined resources, shared investments, or financial stability within a marital partnership. On the other hand, divorced or separated individuals (2%) had the lowest land ownership rate, potentially due to the division of assets during the dissolution of marriage or financial challenges that arise from separation. Single individuals (13%) own land, although at a low rate compared to married individuals.

Chart 78: Land ownership by income bands



The Chart above (78) represents the distribution of land ownership based on different income bands. Notably, a higher percentage of respondents were from rural and peri-urban areas, with few urban regions. A significant proportion of categories one (35%) and two (32%) with income below 50% managed to acquire land. This is attributed to the availability of affordable land, traditional practices of land inheritance, or communal land ownership prevalent in rural communities. Categories three (22%) and four (11%) have lower percentages of land ownership, and this could be because these individuals might have different preferences for investing in other assets or business ventures. This is an indication that land ownership is not solely dependent on income levels, and factors such as socioeconomic structures and cultural practices may influence land ownership.

Local leaders' endorsement can significantly influence people's decision-making regarding buying a financial product or service. Leaders with a strong reputation and respect in the community can have a powerful impact on people's decisions to use a bank's financial products. Therefore, building strong relationships with community leaders is essential to increase access to housing finance products.

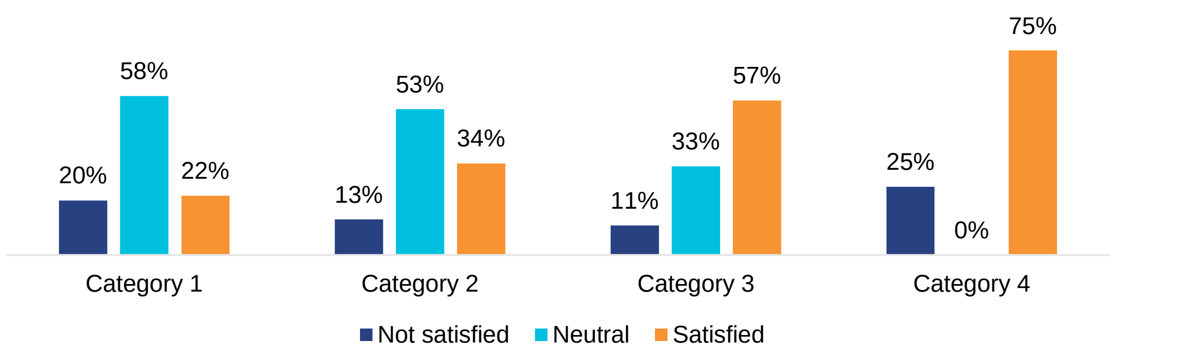
Knowledge, attitudes, social norms, and perceptions are all critical factors that affect low- and middle-income earners' access to and usage of housing finance.

Addressing these factors can increase access to housing finance for these groups. Providing education and information about housing finance options and the application process can increase knowledge and reduce barriers to accessing housing finance. Encouraging positive attitudes towards homeownership and addressing cultural norms that discourage it can also improve the uptake of housing finance products. By addressing these factors, we can work towards increasing access to housing finance for low and middle-income earners.

3.3.2 NEEDS, EXPERIENCES, CHALLENGES, AND OPPORTUNITIES DEMAND SIDE PLAYERS: LOW- AND MIDDLE-INCOME AND INCREMENTAL BUILDERS FACE IN ACCESS AND USAGE OF HOUSING FINANCE

The access and usage of housing finance can be a critical issue for low and middle-income households and incremental builders. Low- and middle-income households typically have limited financial resources and may not have access to traditional forms of credit, making it challenging to secure funding for housing. On the other hand, incremental builders build homes gradually over time, depending on how they can access funds.

Chart 79: Satisfaction with loan by income category



Source: Survey data

As illustrated in Chart 79, the proportion of respondents who are satisfied with the amount offered increases as income increases, suggesting that financial service providers should consider offering more tailored products and services to customers in different income groups. For example, they could provide higher loan amounts and more extended repayment periods to customers in higher income groups while offering smaller loan amounts and shorter repayment periods to customers in lower income groups. There is a high percentage of neutral respondents across the first three categories. This suggests that financial service providers need to better communicate their products' value proposition to customers and ensure they understand the benefits of their products.

Table 17: Average borrowing amount, ideal house cost, and monthly payment

Location	Peri-urban			Rural			Urban		
	Mean	N	SD	Mean	N	SD	Mean	N	SD
Amount to borrow for HF	1,513,273	165	2,800,762	976,194	180	1,596,042	2,391,681	119	5,934,745
Approx. cost of ideal house	1,225,017	60	1,470,395	1,111,449	69	2,348,419	1,534,902	41	1,960,562
Amount one is willing to pay per month	25,110	165	119,799	12,109	180	18,384	23,221	119	54,629

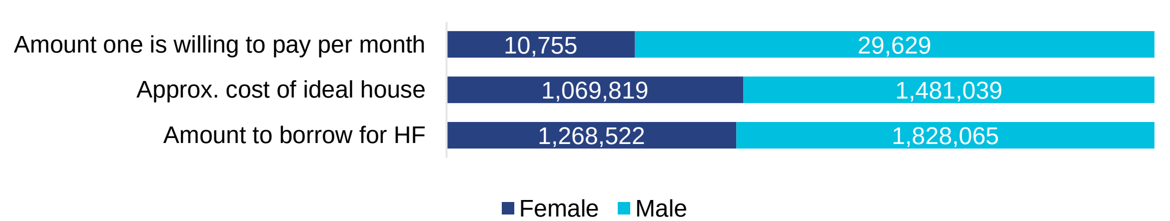
Source: Survey primary data

The findings in Table 17 (above) provide insights into the average amounts for housing-related expenses across different locations (peri-urban, rural, and urban areas). The average amount an individual is willing to borrow for housing finance is highest in urban areas, with an average of approximately KES 2.39 million (USD 18,398), followed by peri-urban areas, with an average of approximately KES 1.53 million (USD 11,641), and then rural areas, with an average of approximately KES 976,194 (USD 7,509). This suggests that the cost of living and housing in urban areas is generally higher than in rural areas, and people in urban areas may require more funds to improve or construct their homes. Urban areas are typically more densely populated and have a higher demand for housing, which can drive up the cost of housing. In addition, urban areas have stringent building codes and regulations, which can increase the cost of construction and home improvement.

Furthermore, the average cost of an ideal house is highest in urban areas, with an average of approximately KES 1.53 million (USD 11,807), followed by peri-urban areas, with an average of approximately KES 1.22 million (USD 9,423), and then rural areas, with an average of approximately KES 1.11 million (USD 8,550). This indicates that housing prices are higher in urban areas, possibly due to higher construction materials and labor costs. The higher amounts borrowed for home construction and improvement in urban areas may also contribute to the higher average price of an ideal house.

Finally, the average amount one is willing to pay per month for the loan instalment is highest in peri-urban areas, with an average of approximately KES 25,110 (USD 193), followed by urban areas, with an average of approximately KES 23,221 (USD 179), and then rural areas, with an average of approximately KES 12,109 (USD 93). This may suggest that people in peri-urban and urban areas are more willing to pay more for their housing needs than those in rural areas. These findings provide important insights for FSPs and policymakers to develop appropriate housing finance products and policies that cater to the context-specific needs of different locations and demographic groups.

Chart 80: Borrowing needs by gender



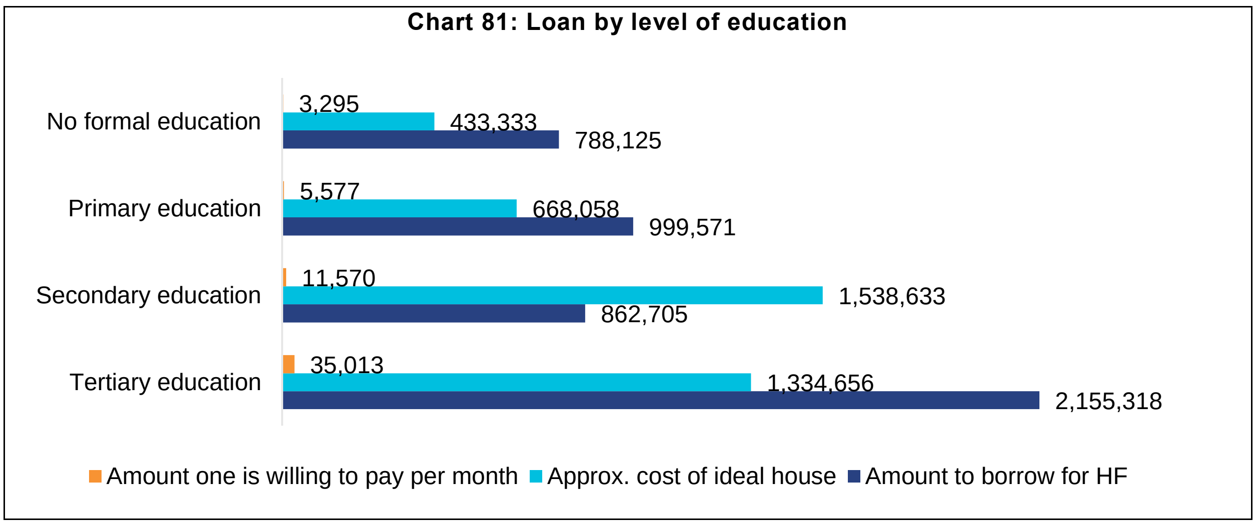
Source: Survey primary data from demand side analysis

The findings in Chart 80 compare the average amount of money male and female respondents are willing to borrow for home improvement and construction, the average cost of an ideal house, and the average amount they are willing to pay per month. The analysis reveals that, on average, male respondents are willing to borrow more money for home construction and improvement (approximately KES 1.8 million (USD 14,062)) compared to female respondents (approximately KES 1.3 million (USD 9,758)). This difference may indicate that male respondents have higher income levels or may be more comfortable taking on higher debt levels than female respondents.

Furthermore, the average approximate cost of an ideal house is also higher among male respondents (approximately KES 1.5 million (USD 11,393)) than among female respondents (approximately KES 1.1 million (USD 8,229)). This may suggest that male respondents have higher housing aspirations or may be more willing to invest more in their housing needs. In addition, men are typically considered the household heads, and therefore, housing remains part of their responsibility rather than a priority.

In addition, the average amount that male respondents are willing to pay monthly for the loan instalment is significantly higher (approximately KES 29,629 (USD 225)) than female respondents (approximately KES 10,755 (USD 83)). This suggests that male respondents may have a higher capacity to pay for housing loans or may value homeownership more than their female counterparts.

These results highlight the need to address gender-based disparities in financial literacy and access to affordable housing. Financial institutions and developers should develop gender-sensitive products and solutions that address male and female borrowers' specific needs and preferences to ensure everyone has equal opportunities to achieve their housing goals.



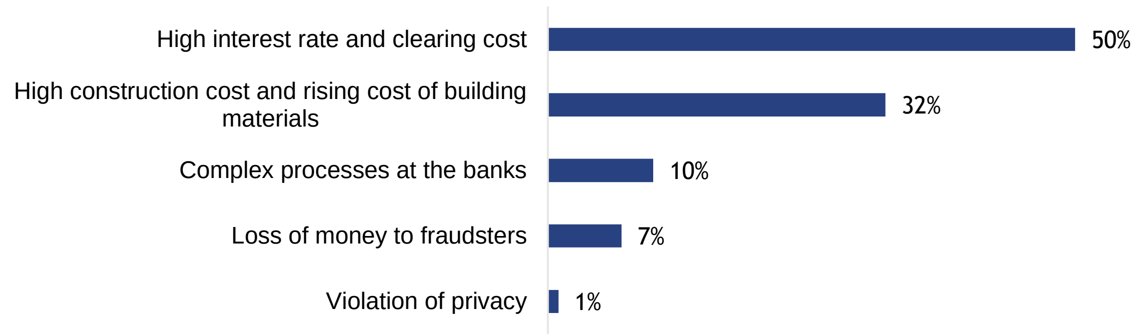
Source: Survey data

The findings in Chart 81 depict the relationship between literacy levels and the amount of money individuals are willing to borrow for house construction and home improvement, the approximate cost of an ideal house, and the amount they are willing to pay monthly. The data reveals a clear trend: as education level increases, so does the willingness to invest in housing. Those with tertiary education are willing to borrow the highest amount (approximately KES 2.1 million (USD 16,579), followed by those with primary education (approximately KES 999,571 (USD 7,689)). Those with secondary and tertiary education have the highest aspirations for an ideal house, with an average cost of approximately KES 1.5 million (USD 11,836) and KES 1.3 million (USD 10,267), respectively. The individuals express a readiness to borrow significant sums of money. However, they seem less inclined to offer corresponding levels of repayment.

These findings underscore the need for FSPs to design products that cater to individuals' varying needs and financial capabilities at different literacy levels. By doing so, housing finance providers can ensure that access to housing finance is not limited to those with higher education levels but is accessible to all.

The needs of the demand side for home improvement and construction are diverse, ranging from minor renovations to new home construction. However, unmet needs in this area can lead to poor living conditions, contributing to poverty and health disparities. To address these needs, policies and programs must provide financial and technical support to homeowners, strengthen the construction and home improvement industries, and ensure that all individuals have access to safe and adequate housing.

Chart 82: Challenges in using housing finance products and services for construction and home improvement



Source: Survey data from demand side analysis

Chart 82 depicts individuals' challenges in using financial products and services for home improvement or construction. The results show that the most significant challenge encountered by respondents was high-interest rates and clearing costs (50%). This suggests that many people may be discouraged from using financial products and services due to the high cost associated with borrowing. The second most significant challenge is the high construction cost and the rising cost of building materials, which accounts for 32% of the challenges. This implies that the cost of building or renovating a home may be prohibitive, making it difficult for many people to undertake these projects.

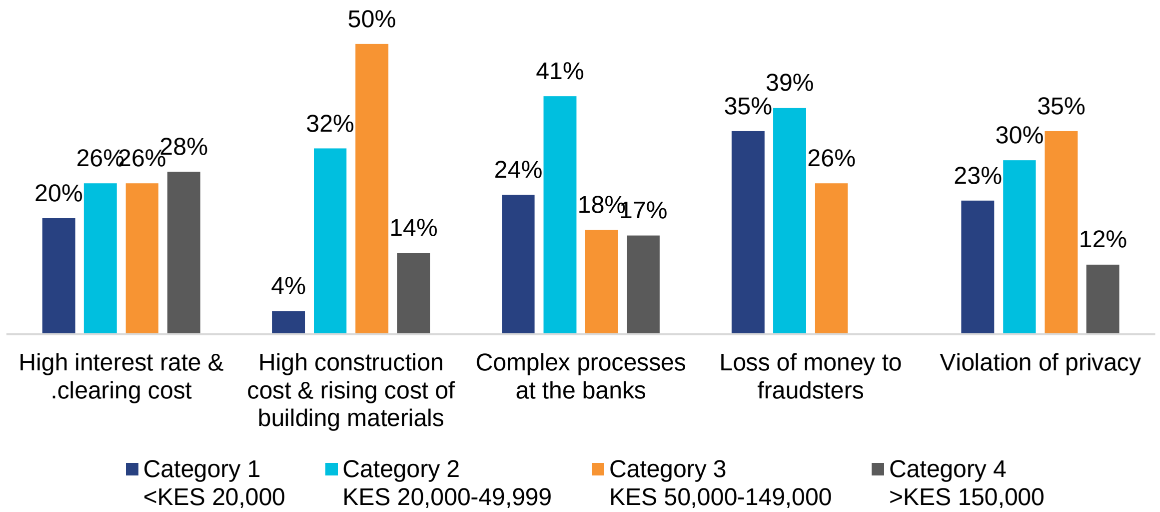
Another challenge is the complex processes at the banks, involving several steps and requirements such as credit checks, income verification, collateral assessment, and loan disbursement. The process can be time-consuming and requires applicants to provide extensive financial information and documentation, which can be intimidating for some people.

The fourth most significant challenge mentioned by the respondents was the loss of money to fraudsters, accounting for 7%. This could be because people may be vulnerable to fraud when using financial products and services, leading to financial losses and discouraging them from using them. Lastly, violation of privacy accounts for 1% of the challenges. While this is a relatively small percentage, it is still a concern for some people, and financial institutions must take steps to ensure that their customers' privacy is protected.

The findings suggest that addressing high-interest rates, high construction and building costs, and complex processes should be a priority in improving access to financial services for home improvement and construction. One of the strategies that can be used to increase access to affordable and sustainable housing finance is to leverage **KMRC** products that offer single-digit fixed rates for a longer tenure. This can help to make mortgage loans more affordable and accessible to borrowers who might not be able to afford them at the prevailing market rates. The long tenure can help spread the cost of homeownership over a more extended period, making it more manageable for borrowers to repay the loans without defaulting.

It is essential to enhance housing finance access for low and moderate-income earners while countering fraud and increasing awareness of privacy protection. Crucial actions encompass targeted educational campaigns, robust consumer protection regulations, credit counselling programs, secure online platforms, advanced anti-fraud technologies, streamlined applications, community outreach, due diligence, whistleblower incentives, collaboration with law enforcement, transparent disclosure mandates, regular audits, and adaptive monitoring. These measures collectively empower individuals, ensure privacy, and prevent fraudulent practices.

Chart 83: Challenges in using housing finance products by income bands



Findings from Chart 83 highlight the challenges faced by individuals in different income bands when using housing finance products for construction and home improvement. The survey respondents mentioned high interest rates across all the income bands. High interest rates can deter individuals from accessing housing finance due to the increased financial burden. High construction cost and the rising cost of building materials was a significant challenge for category three (50%). This can make it financially challenging for them to embark on construction or home improvement projects, as the expenses can exceed their budgetary constraints.

Complex processes at the bank were challenging across all the income categories, with mostly category two (41%) mentioning it as a barrier. Financial institutions often have stringent eligibility criteria for housing finance products, including specific income requirements, creditworthiness assessment, and collateral conditions. Meeting these criteria could be challenging for individuals in categories one and two as they may have limited income or lack substantial assets to offer as collateral. This can further complete the process and hinder their access to housing finance.

Loss of money to fraudsters and violation of privacy were challenges that cut across the income category bands. These findings indicate legitimate concerns regarding these challenges when using housing finance products. Individuals must be vigilant, exercise caution when sharing personal information, and choose reputable financial institutions to minimize these risks. Financial service providers should prioritize security measures and privacy protection to address these concerns and provide their customers with a safe and trustworthy environment.

3.3.3 DEMAND-SIDE CHALLENGES LIMITING ACCESS TO AND USAGE OF HOUSING FINANCE BY THE LOW- AND MIDDLE-INCOME SEGMENTS

The low- and middle-income populations remain one of Kenya's largest but underserved segments. It lags on access to affordable housing finance solutions as a percentage of the overall financially included population. This is due to a myriad of challenges the segment faces, which demand attention from financial service providers, government, regulators, donors, and investors. The significant systemic barriers that contribute to end users' exclusion from accessing housing finance solutions are as follows:

- **Cost of housing loans**
  - **High mortgage lending rates:** The low-income segment has a gap in access to affordable housing and housing finance due to the high cost of mortgages. Only 11% of Kenyans can afford mortgages, as

commercial institutions mainly offer mainstream loans.[59] The current average mortgage size is KES 9.2 million (USD 70,769), with a monthly repayment of KES 96,847 (USD 745) and a 20-year repayment period at an annual interest rate of 11.3%.

- **Participants from the FDG mentioned the challenges they face in accessing affordable housing finance due to high mortgage lending rates**. They expressed their inability to afford the high monthly repayments required by financial service providers and the limited options available for low-income individuals seeking housing finance. The participants shared their experiences of being turned down by financial institutions due to low income and lack of collateral.
- **Low supply of affordable housing and affordability issues:** Despite the country's efforts to increase access to housing finance, many low- and middle-income populations still need help to secure affordable housing. The affordability issue combines low-income levels, high housing costs, and high financing costs. Only a few can afford mortgages and houses constructed by official developers regarding the loan amount they qualify for.[60] Further, even with loan offers from lenders that fit the low-income segment's ability to pay, borrowers are still looking for houses that match the loan offers from lenders. The demand-supply gap makes it challenging for low- and middle-income customers to get houses within the range of their loans offer.
- **Cost of finance by microfinance institutions (MFIs):** The insights gathered from FDG confirm that MFIs in Kenya are vital in providing housing finance options to the low-income segment. Participants shared their experiences, emphasizing that microfinance loans serve as affordable housing finance solutions for this group. However, it was also acknowledged that microfinance loans typically have higher interest rates. The average interest rate ranges from 15% to 30% per annum.[61] MFIs charge high-interest rates on housing microloans to maintain credit discipline (minimize loan default) and to increase outreach; they offer smaller loans.[62] This shows a trade-off between affordability and higher interest rates associated with microfinance housing loans.

- High construction costs and rising building material prices: have been identified as the leading causes of housing affordability issues[63]. In 2021, the average construction cost was KES 44,754 (USD 344) per square meter, while the average cost of a whole unit was KES 1.7 million (USD 13,077).64 This is unaffordable for most low-income earners. Moreover, financing housing alone may not provide the required benefit as additional costs such as water, sanitation, sewage, and electricity infrastructure must also be funded. This aligns with findings from the FDGs, where participants highlighted the high cost of housing as a significant barrier to homeownership for low- and middle-income earners. They mentioned that construction materials and labor costs have significantly increased, making it difficult for them to build or buy affordable houses. The participants also noted that the additional costs, such as water, sanitation, sewage, and electricity required for a home, are not factored into the financing.
- **High collateral requirements and complex application processes exclude** most potential borrowers, particularly people with low incomes, from obtaining housing finance loans. In most cases, the low- and middle-income population does not meet the eligibility requirements for collateral. Women are disproportionally affected compared to men. The lack of collateral and property rights (ownership) restricts women's access to credit from formal financial institutions.[65] Findings from the FDG also reveal that most low- and middle-income earners are excluded from obtaining housing finance loans due to their inability to meet the eligibility requirements for collateral. Women also expressed that they are disproportionally affected compared to men due to a lack of property rights and collateral.
- **Low-inconsistent income and lack of credit history:** During the FDG, it was noted that many low-income earners work in the informal sector, which means that they lack regular and stable income sources. Financial

[59] KMRC 2022, Monthly Research Report: Research Insights report on housing – June 2022
[60] FSD 2021, Feasibility Study on a Proposed Credit Guarantee Model for Affordable Housing in Kenya
[61] Kathomi, A., Kimani, E. M. & Kariuki, S. (2017). Interest rate regulation and sustainability of microfinance institutions in Nairobi County, Kenya.
[62] CBK 2021, 2020 Survey Report on MSME Access to Bank Credit June 2021
[63] Kenya Bankers Association 2015, Innovative Financing for Housing in Sustainable Growth Modeling. Incremental Financing Strategies in Housing, Working paper series
[64] Cytonn Investments 2022, Affordable Housing in the Nairobi Metropolitan Area (NMA)
[65] CAHF 2022, Housing Finance in Africa: A Review of Africa's Housing Finance Markets 2022 YEARBOOK

institutions often require proof of consistent income and good credit history before providing loans. This requirement excluded many low-income earners who could not demonstrate their repayment capacity.

- **Low levels of financial literacy**: Lack of information, awareness, and understanding of housing finance solutions and processes limit the ability of individuals and households to access housing finance. Customers' negative perceptions and fear of mortgages have also contributed to the low uptake. The associated fear of consequences in case of default stems from the poor understanding of different products offered by financial institutions.
- **Negative perception towards lending to the low- and middle-income segment:** lending to the low- and middle-income segment is considered a high-risk market category. Often, financial institutions overlook borrowers with low and irregular incomes, missing out on significant market potential. Due to the negative perception towards lending to the low- and middle-income segment, most financial institutions lack appropriate and customized housing credit products dedicated to this segment. This limits the low- and middle-income ability to access housing finance solutions, further exacerbating the housing and affordable housing finance challenge.
- **Land ownership:** The FDG revealed that lack of title deeds poses a significant barrier to accessing high housing loan amounts and achieving homeownership, particularly for the low- and middle-income segment. Participants emphasized that the majority of land in Kenya is inherited ancestral land but lacks proper documentation in the form of title deeds. This absence of title deeds prevents individuals from using their land as collateral for housing loans. Most female participants highlighted that land ownership patterns in rural areas are predominantly patriarchal, disproportionately affecting women.
- **Bureaucratic process in the registry:** Land titling and management structures are problematic due to bureaucratic transfer processes and stamp duties, making it challenging for low-income earners to take advantage of available opportunities. The long process of approvals from the government for acquiring documentation, registering, and transferring property makes it difficult to access land, which is a requirement to own a home.

3.3.3.1 PERSONA PROFILES: HOUSING FINANCE ACCESS JOURNEY AND EXPERIENCE

The study presents two personas of respondents who were; i) denied access to housing finance for house construction in rural Kenya and ii) able to access housing finance for incremental building.

Persona 1: Denied housing finance solution for house construction in rural Kenya

Background: A rural farmer in Kenya wanted to construct a house for her family. She heard about housing finance products from a certain FSP from a friend and went to the nearest branch, 10km away from her residence, to apply for a loan. She needed KES 500,000 (USD 3,846) to cover the construction costs.

The FSP asked for the following loan requirements:

- Proof of income: The farmer provided her bank statement for the past six months to show her average monthly income of KES 20,000 (USD 154). However, her income was too low and inconsistent to qualify for the loan.
- Title deed: The FSP required a title deed as collateral, but the farmer only had family land and did not have a title deed.
- Approved plan and bill of quantities: The farmer had an approved plan and bill of quantities for the house construction.
- National identification: The farmer presented her national identification card as part of the loan application.

She did not qualify for the loan because:

- Her income was low and seasonal, and she could not prove that she could repay the loan
- Lack of collateral. She did not have a title deed which the FSP could charge
- As a result, the farmer could not access the loan from the FSP to finance her house construction.

Alternative option:

- Instead, the farmer used her savings and got a loan from her Village Savings and Loan Association (VSLA) group.
- She could borrow three times her savings and was given a grace period of three months to start repaying the loan.
- Although the farmer could get financing from her VSLA group, she still needed house improvement and water, sanitation, and hygiene (WASH) facilities.
- She would prefer a microfinance institution (MFI) loan to cover these costs, but MFIs have higher interest rates with shorter repayment periods.

Insights: The farmer could not access the housing finance solution due to her low and inconsistent income and lack of collateral. She was forced to look for alternative financing options, used her savings, and got a loan from his VSLA group. While this option worked for her in the short term, she still has another house improvement and WASH needs she would like to finance with a loan from an MFI. However, she knows the higher interest rates and shorter repayment periods associated with such loans.

Persona 2: Accessed housing finance in Kenya

A 45-year-old small-scale miner in the rural part of Kenya with his family. His main economic activity is mining, earning an average monthly KES 52,000 (USD 400). Over time, his family had grown, and they needed more rooms in their house, and he did not have enough savings to construct additional rooms.

One day, while at the local market, the respondent came across a housing advertisement. He was intrigued by the idea and decided to visit the office of the housing finance provider, which was 6 Km, to learn more. He was informed that he could access a loan to construct additional rooms for his family.

He was given information on the following:

- The loan charges an interest rate of 24% for a loan size below KES 100,000 (USD 769) and 22% for a loan size above KES 100,000 (USD 769).
- A guarantor was required.
- One was not to be listed in the CRB.
- Proof of business and steady income-generating activity for the past six months
- Must be an adult above 18 years and a Kenyan citizen.
- No other loan charges or transaction costs

The respondent was pleased with the terms and conditions of the loan and decided to apply for it. The loan was approved within two weeks, and he received the funds in his bank account. He used the funds to construct two additional rooms for his family. The housing finance was sufficient to cover all the costs of construction.

The challenge he faced was getting a guarantor since everyone was afraid of the consequences once he defaulted. Finally, he got a guarantor who is a friend and had previously accessed the loan with the same financial institution.

In conclusion, the housing finance provided by the financial provider benefited Walter and his family. He was able to construct additional rooms for his family, which improved their living condition. The loan terms and conditions were favorable, and the loan process was efficient. The only challenge he faced was getting a guarantor.

3.3.4 NEEDS AND OPPORTUNITIES FOR SUPPLY-SIDE PLAYERS' CURRENT AND FUTURE NEEDS (MSMES AND FSPS)

- **Need for affordable housing**: According to the findings from key informant interviews, there was a clear consensus on the high demand for affordable housing in Kenya. Many Kenyans face challenges in affording a house due to limited financial resources, making outright purchases unattainable for most individuals.
  The key informants emphasized the need for the supply side of housing finance to develop innovative financing solutions that can address the diverse needs of potential homebuyers. This includes exploring alternative financing models beyond mortgages to make housing more accessible to a broader range of individuals. These innovative solutions can range from microfinance loans tailored to the incremental building approach to client-specific products designed to accommodate the unique financial situations of different segments.
  Findings from the key informants highlighted the importance of responsible practices within the housing finance sector. This includes measures such as conducting thorough borrower assessments, ensuring affordability of loan repayments, and promoting financial literacy among potential homeowners. These practices contribute to the government's goal of providing affordable housing by ensuring that individuals can access financing options that suit their financial capabilities.
- **Opportunity for technology-driven solutions**: The Kenyan housing finance sector can leverage technology to improve efficiency and reduce costs. Using digital platforms and mobile banking can help lenders reach underserved populations and reduce the time and cost associated with loan origination. According to the findings from the key informant interviews, working with developers who use green building techniques and alternative materials to reduce costs has been identified as a potential solution for addressing the issue of affordable housing. Digitization and system upgrades have been identified to improve processes and provide automated applications and online lending systems for affordable housing.
  Standardizing mortgage origination practices and processes can also help promote transparency and fairness in mortgage lending. By establishing clear guidelines and procedures, borrowers can better understand what to expect when applying for a mortgage. They can be more confident that they are treated fairly by applying for a mortgage.
  The government's initiative for affordable housing can be leveraged, targeting youth between 20-40 years since they have fewer responsibilities. To unlock the demand for housing finance, demystifying it is necessary, especially for the low- and middle-income segment. **KMRC** and **Shelter Afrique** are two enablers that can de-risk measures and improve capital adequacy to provide subsidized rates for affordable housing. Supporting the rural economy by training local artisans and masons and funding MFIs can help curb rural-urban migration.

3.3.5 SUPPLY-SIDE EXPERIENCES CHALLENGES TO HOUSING FINANCE DELIVERY

The housing finance sector in Kenya faces several supply-side challenges in providing affordable housing finance. Some of the systemic barriers and challenges faced by financial institutions include:

- **Lack of funding and liquidity issues**: Through the KII interviews, SACCOs, MFIs, and MFBs faced difficulties in securing sufficient funding to cater to the housing finance needs of the low and middle-income populations. Representatives from these institutions highlighted their challenges in sourcing affordable and long-term funding options that align with their objective of providing affordable and accessible housing finance options. They mentioned their limitations in accessing capital from various sources, including government initiatives, international funding, and private investors. Financial institutions struggle to secure adequate funding to provide housing finance, particularly for low and middle-income segments of the population. This limits their ability to provide affordable and accessible housing finance options. The problem of insufficient funding for the private sector, developers, and MSMEs persists as their primary funding source is from banks which account for 99% of the financing.[66]

[66] Cytonn Investments 2022, Affordable Housing in the Nairobi Metropolitan Area (NMA)

- **High lending costs to the low- and middle-income segment**: The high operational cost of providing housing finance, particularly to the low- and middle-income segment residing in rural areas, regarding the outreach and lending costs to this segment. Banks perceive a higher credit default risk when lending to low-income people, as their financial circumstances are more likely to fluctuate than other population segments. The amount of credit they borrow is typically small, loan durations are short, and transaction costs are high, making the formal banking sector hesitant to enter this market. Many lenders in this market tend to 'manage' customer repayments rather than depending on customers to pay on time. This often involves agents collecting repayments from customers' homes, increasing lending costs. Therefore, financial institutions need more incentives for lending to low and middle-income segments. These loans are perceived as higher risk and lower profit, limiting housing finance availability for these population segments.
- **Bureaucratic process in the registry**: It takes a long time to get approvals from the government for acquiring documentation, registering, and transferring property. The high cost of registering and transferring property in Kenya makes it difficult for low- and middle-income earners to access housing finance. This is particularly challenging for those purchasing affordable homes, as the transaction costs can be a significant percentage of the home's value. The lengthy and complex process of registering and transferring property discourages individuals and private developers from investing in affordable housing. Land titling and management structures are problematic due to bureaucratic transfer processes and stamp duties, making it challenging for low-income earners to take advantage of available opportunities.
- **The informality of the low- and middle-income segment**: The informal nature of the low- and middle-income market makes it difficult for commercial lenders to take a credit view. The market operates informally, making it difficult for commercial lenders to assess the creditworthiness of low-income earners as their incomes are not accurately measured.
- **Information asymmetry**: Most low and middle-income customers lack information on housing finance products and solutions. On the other hand, financial institutions do not have adequate allocations to support training and awareness-creation activities. There are also gaps and limited understanding of the low- and middle-income customer needs and a lack of proper structures to engage with them. This concurs with the findings from the interviews with the KII that expressed a limited understanding of the specific needs and preferences of low and middle-income customers. This can lead to a mismatch between the products offered and the requirements of the target customer segment.
- **Housing finance capacity building constraints and changing staff skills requirements**: A limited number of financial institutions and microfinance institutions specifically lend for housing finance and incremental housing in Kenya. There have been limited housing finance sector-wide learning initiatives in the housing finance industry. When organizations that previously focused on providing savings and credit shift to housing finance, they face an even greater learning curve as they adapt to their new mission. Some of the capacity-building challenges facing financial institutions in offering housing finance include:
  - **Limited capacity for product development**: The lack of expertise in product design and marketing for housing finance products makes it challenging for financial institutions and MFIs to design products that meet the needs of low-income households. Most of the representatives from the financial institutions mentioned that they did not have a marketing strategy for housing loans.
  - **Limited outreach**: Financial institutions often have limited outreach to low-income households, particularly those in rural areas, making it challenging to reach a large population needing housing finance solutions.
  - **Lack of proper risk management practices**: The absence of good risk management practices and tools makes it difficult for financial institutions to manage risks associated with housing finance.
  - **Shortage** of qualified personnel and poor management of MFIs: MFIs need help finding skilled human resources to manage their business and operations, which results in poor strategies and planning. Also, it leads to limited innovation in products and services and a lack of replicable and scalable models.
- **Insufficient or lack of data on the housing finance market**: There is a need for updated data on the current status as the available data does not represent the present market situation. Low and middle-income

segments often exist at the lower end of the economic pyramid where data gaps exist. Due to the informal nature of the low- and middle-income market, commercial lenders find it challenging to assess creditworthiness. Additionally, the inability to quantify the low- and middle-income segment revenues, cash flow patterns, spending habits, and payment history further complicates the situation.

- There is inadequate demand side data such as market size, market segmentation, housing loan appetite, and user distribution by location. The available data is mainly on the supply side, indicating the outstanding balances, especially for banks and MFBs. This data is not useful for other financial institutions primarily seeking to customize products to meet demand side needs. This means they have to invest in their data collection, which may be costly. The lack of adequate information on the size of the market and the potential that can be exploited limits the ability of key players and financial institutions to make informed decisions.
- **Existence of unregulated housing developers**: Similar to conventional real estate developers, there are small-scale community-based developers and individuals who unilaterally develop dwellings without mainstream financial support. These are known as Dweller-Initiated Transformations (DITs) in housing. Due to a lack of recognition, these undocumented housing developments receive minimal financial support from mainstream banking institutions, leading to poor physical environments and illegality. Despite this, DITs can offer a more affordable housing option as residents can change their units without relying on costly professional services. However, safety and quality control issues may arise, especially if structural changes are made to the housing unit.
- **Attitudes**: In Kenya, attitudes towards homeownership may result in many individuals favoring consumer loans for financing their homes rather than banks owning their properties. Many prefer incremental construction as funds become available and the use of financing from Savings and Credit Cooperatives (SACCOs).

These challenges call for a collaborative effort between the government, financial institutions, and other stakeholders to increase access to affordable housing finance for Kenya's low- and middle-income populations.

3.3.6 INFERENTIAL ANALYSIS OF FACTORS INFLUENCING ACCESS AND USAGE OF HOUSING FINANCE SPECIFICATION

We have used multinomial logistic regression to establish a relationship between our dependent variable and some predictors. Our dependent variable is “Access to and usage of Housing Finance,” which is a composite indicator of “whether the respondent has applied for housing finance” and “whether the respondent has received housing finance.” Below are the three levels of our dependent variable.

Table 18: Summary of sample

Dependent variable	Number of respondents
Borrowed	164
Denied	4
Did not apply	296

A likely reason for the large number of respondents who did not apply for loans may be because of existing perceptions based on past experiences of themselves or others in their network. As per the survey, we are limited to information on loan rejection (“denied”) up to the previous 24 months. Respondents in the third category may have been rejected much earlier and did not apply for loans. Another reason for the high number of respondents who did not apply is a lack of knowledge of housing finance products. From the survey, about 51.3% of the respondents reported not knowing of any financial products or services meant to help them build or improve their homes. The predictor variables are summarized below:

Table 19: Summary of the predictor variables

Variable	Description
Location	Location of respondent's residence
Age	Age of the respondent
Gender	Gender of the respondent
Marital status	Marital status of the respondent
Household head	Whether the respondent is the main decision-maker in the household
Mobile-phone	Whether the respondent owns a mobile phone
SACCO account	Whether the respondent has a SACCO account
Bank account	Whether the respondent has a bank account
Distance	Distance between the respondent's house and the nearest financial institution
Employment	Whether the respondent is formally employed
Education	Total number of years in school
Financial literacy	A composite score based on questions on the interest rate and transaction advice
House ownership	Whether the respondent owns or rents the house they reside in
Monthly income	Total monthly income of respondent (all formal and informal sources)

"Age" and "Monthly income" were insignificant at a 95% confidence level. Apart from these, all the parameters for both the categories, "Borrowed" and "Denied," were statistically significant.

Results

Results from the regression analysis have been provided below.

Table 20: Results from the regression analysis

Predictors	Dependent Variable – Access to and usage of housing finance			
	Borrowed - odds ratio	Denied - odds ratio	Borrowed - % increase or decrease	Denied - % increase or decrease
\`Location\` Rural	1.485	0.930	49%	7%
\`Location\` Urban	1.252	1.613	25%	61%
\`Gender\` Male	0.594	0.306	41%	69%
\`Marital status\` Married	1.284	2.3546E+17	28%	NaN
\`Marital status\` Single	1.076	2.7571E-15	8%	100%
\`Marital status\` Widowed	0.635	8.7448E-05	36%	100%
\`Household head\` Yes	1.332	3.587	33%	NaN
\`Mobile phone\` Yes	0.541	4.47222E-12	46%	100%
\`Bank account\` Yes	2.731	1.0206E+13	NaN	NaN
\`SACCO account\` Yes	2.874	1.031	NaN	3%
\`Distance\`	1.038	0.876	4%	12%
\`Employment\` Yes	1.610	1.134	61%	13%
\`Education\`	1.164	385.491	16%	NaN
\`Financial literacy\` Yes	1.523	2.2057E+19	52%	NaN
\`House ownership\` Yes	6.235	2.081	NaN	NaN

Highlighted results indicate a percent decrease in the likelihood, i.e., an odds ratio of less than 1.

Interpretations

The results from the above table can be interpreted in the following way. Only significant values have been interpreted.

Table 21: Interpretation of the results from the regression analysis

Predictors	Dependent Variable – Access to housing finance	
	Borrowed - interpretation	**Denied - interpretation**
`Location` Rural	People in rural areas are 49% more likely to borrow than those in peri-urban areas	People in rural areas are 7% less likely to get their loan requests denied than those in peri-urban areas.
`Location` Urban	People in urban areas are 25% more likely to borrow than people in peri-urban areas	People in urban areas are 61% more likely to get their loan requests denied than people in peri-urban areas.
`Gender` Male	Men are 41% less likely to borrow than women	Men are 69% less likely to get their loan request denied than women.
`Marital status` Married	Married individuals are 28% more likely to borrow than divorced/separated.	(In this case, all of the respondents are married)
`Marital status` Single	Unmarried individuals are 8% more likely to borrow than divorced/separated.	(In this case, all of the respondents are married)
`Marital status` Widowed	A widow is 36% less likely to borrow than a divorced/separated woman.	(In this case, all of the respondents are married)
`Household head` Yes	Head of households are 33% more likely to borrow.	-
`Mobile phone` Yes	People who own mobile phones are 46% less likely to borrow from mainstream financial institutions than people with no phones.	(In this case, all of the respondents have phones)
`SACCO account` Yes	-	People with SACCO accounts are 3% more likely to get their loan requests denied than those without
`Distance`	With one-kilometer increase in distance, chances of borrowing increase by 4%	With one unit increase in distance, chances of getting their loan request denied decreases by 12%
`Employment` Yes	A formally employed person is 61% more likely to borrow than an informally employed or unemployed.	A formally employed person is 13% more likely to get their loan request denied than an informally employed or unemployed.
`Education`	With one-year additional increase in education years, chances of borrowing increase by 16%	-
`Financial literacy` Yes	A financially literate person is 52% more likely to borrow.	-

Detailed methodology and the outputs of the regression analysis have been provided in Annex 3.

4.0 Addressing the housing finance challenge in Kenya: Way forward, opportunities, and entry points for housing finance interventions

4.1 Emerging lessons and opportunities

The Kenyan government has prioritized affordable housing in its Big 4 agenda, establishing the Affordable Housing Program (AHP) and Boma Yangu initiatives. This policy environment has created opportunities for innovation along the value chain of affordable housing, including in home construction, construction financing, and digital platforms such as FinTech and mobile network operators (MNOs). For example, iBuild FinTech's digital platform connects banks, homeowners, contractors, and construction workers, facilitating greater financial and economic inclusion for low and middle-income individuals.

While Banks and Savings and Credit Cooperatives (SACCOs) are the most trusted financing options for most customers, many low-income individuals do not meet the necessary criteria. Microfinance banks (MFBs) and microfinance institutions (MFIs) have extensive outreach in rural areas, but the level of trust from the demand side is low. Additionally, high-interest rates and short repayment periods hinder their ability to serve the low-income segment effectively. MFBs and MFIs also face challenges in obtaining funding, especially from **KMRC,** due to their lending models not aligning with the **KMRC**'s model.

One critical issue that hinders the functioning of efficient housing markets is the lack of available data on the housing investment landscape. Insufficient data on housing-related financial market activities limits market players' ability to plan, budget, and implement projects effectively. This challenge is particularly problematic for affordable housing finance, which operates on narrow profit margins. Access to reliable housing finance data is essential for private sector involvement and effective policy engagement in affordable housing markets, encouraging risk-taking and decision-making processes that can foster large-scale interventions. We provide critical insights from emerging lessons with corresponding recommendations.

Key insights and emerging lessons

Housing finance

The demand for affordable housing and housing finance solutions remains high in Kenya, partly due to the growing population and increased urbanization rates. Access to affordable housing finance solutions for low and middle-income people is a significant challenge due to the considerable gap between costs and affordability.

The larger banks and SACCOs cater their housing finance services to upscale customers, salaried/employed ones, and those self-employed with consistent income.

The government of Kenya has made major steps in providing affordable housing through the affordable housing strategy. Categorized as follows:

Middle to high income	Income range: KES 150,000+ (USD 1,154+) Share of formally employed: <3%
Mortgage gap	Income range: KES 50,000 (USD 385)—149, 999 (USD 1,154) Share of formally employed: >22%
Low cost	Income range: KES 20,000 (USD 154)—49,999 (USD 385) Share of formally employed: >71%
Social	Income range: KES 0—19,999 ((USD 154) Share of formally employed: >2%

Key insights and emerging lessons	Recommendations
Housing finance policies and programs • The Kenyan policy environment is increasingly positive toward affordable housing. The Kenyan government has prioritized the provision of affordable housing as one of its pillar projects to ensure that low and middle-income households have access to decent and affordable housing units. • Kenya has a National Housing Policy and has established programs that facilitate the design of housing finance products for middle-income borrowers (e.g., the Affordable Housing Program (AHP) and Boma Yangu). • The programs aid in financing home improvements, subsidizing urban plots and construction materials, and providing long-term low-interest loans for housing construction.	• Although a National Housing Policy guides the housing sector, the country does not have a Housing Finance Policy or Strategy specific to the sector. There is a need to develop a housing finance policy/strategy that prioritizes; affordable housing, innovative housing financing mechanisms, infrastructure development in supporting the housing finance sector, and prioritizing housing microfinance to reach underserved populations. Ensure mortgage accessibility by addressing barriers such as high-interest rates, lengthy approval processes, and limited mortgage products for the LMI category, and expand the range of mortgage providers. • Stakeholder collaboration is crucial for the success of the policy/strategy. It is essential to involve relevant government entities, regulators, financial institutions, housing developers, consumer groups, and community representatives. Consultative forums, public-private partnerships, and task forces can facilitate effective collaboration. • Financial institutions should introduce and develop Housing Finance Lending Strategies to guide serving low-income customers. • The HF sector can be supported through dialogues and knowledge transfer of best practices to continue tapping into Kenya's housing market's myriad of opportunities and full potential.
KMRC lending Kenya has made significant steps in advancing the housing finance sector. Through the **KMRC**, the government responded to the growing mortgage market needs, especially that of low- and middle-income earners.	Recommendations on **KMRC** • Customized financing models: **KMRC** should explore developing customized financing models that align with the lending practices of MFBs and MFIs. These institutions often serve the low-income segment and employ different lending methodologies, such as group lending or non-traditional collateral requirements. Customized financing models may involve flexibility in loan structures, collateral conditions, and repayment terms to accommodate these institutions' unique characteristics and borrower profiles. By tailoring the financing models, **KMRC** can foster inclusivity and encourage participation from a broader range of lenders. • Capacity building and technical assistance: **KMRC** can provide targeted capacity-building programs and technical assistance to MFBs and MFIs to help them align their lending practices with **KMRC**'s requirements. This can include training on mortgage financing, risk management, credit appraisal, loan administration, and reporting standards. By enhancing the capacity of these institutions, **KMRC** can create a more conducive environment for them to access funding. • Collaboration with intermediary organizations: **KMRC** can establish partnerships with intermediary organizations, such as microfinance networks or associations, that work closely with MFBs and MFIs. These intermediary organizations can bridge

	KMRC and the microfinance sector, assisting in disseminating information, facilitating capacity-building initiatives, and streamlining the application process. Collaborative efforts can help address the challenges faced in accessing funding from **KMRC**.
Collateral requirements • Most low- and middle-income segment customers operate informally. Their limited financial literacy and inability to provide collateral constrain their ability to access formal finance. • Jiweze MFI, KWFT MFB, and BIMAS Kenya MFI offer specialized HF-related group loans utilizing a group guarantee approach without collateral. • Most SACCOs, however, lack dedicated HF products designed for low- and middle-income customers as they primarily target salaried customers. • However, the business models across all SACCOs show the presence of product categorization depending on SACCO members' income levels and ability to meet loan requirements. • Banks and SACCOs shy away from serving the low- and middle-income group, primarily if they are informally employed with inconsistent income. The institutions consider them high-risk clients.	• MFIs serve the lower-income segment largely through the group lending model and individual lending for some products. Therefore, they could be offered technical and financial support in developing and providing client-specific specialized HF products that allow the low- and middle-income segments to access loans without collateral. • MFIs need to address the issue of low trust on the demand side. To increase consumers' trust MFIs can; • Strengthen consumer protection and enhance transparency: Implementing robust consumer protection measures to ensure fair treatment of clients. This can include clear disclosure of terms and conditions, transparent pricing, interest rate fees, repayment schedules, and effective mechanisms for handling grievances. • Customer education and conducting financial literacy programs to increase customers' knowledge of financial products and services, budgeting, and responsible borrowing. This will ensure that customers are well-informed and make informed decisions, strengthening their trust in the institution. • Encourage responsible lending practices among MFIs and better loan recovery methods. This involves assessing borrowers' repayment capacity and offering appropriate loan sizes to avoid over-indebtedness. MFIs should conduct thorough due diligence and ensure clients are provided with loans they can reasonably repay without facing financial distress. • MFIs serving the low and middle-income segment should incorporate housing finance strategic plans to serve this segment better. • Financial institutions could benefit from a housing loan guarantee fund from development partners, donors, and private-public partnerships such as the African Guarantee Fund. To support low -and middle-income customers and provide technical assistance, including skilling and business development services, to strengthen clients' capacity to manage and repay their loans.
Market research for a deeper grasp of the client's needs • FIs have a limited understanding, particularly regarding serving low-income clients. • There is a need for financial institutions, and especially MFIs, to adopt a client-centric approach to understand the end	• SACCOs, MFBs, MFIs, banks, and digital financial services providers should deepen research on HF market prospects for these underserved communities to satisfy the needs of low-income people better. • Conducting comprehensive market studies will be necessary to identify and understand their customers' needs, challenges, and associated risks to design relevant products for each segment. Financial institutions can build on the current **HFHI**

user dynamic needs to design new and continue modifying the already existing HF products. • Before launching new housing finance solutions, banks, SACCOs, MFBs, and MFIs should conduct a market demand assessment to gauge the customers' varied/diverse needs.	study to address these needs and conduct their research while developing specific solutions targeting the LMI segment. Collaborations between financial institutions, regulators, government entities, private investors, housing developers, and development partners are critical in developing sustainable solutions and business models.
Housing products that cater to the needs of **the low- and middle-income category** • Generally, the housing finance sector in Kenya, especially banks and SACCOs, primarily targets the salaried population and self-employed with consistent income. • The government's affordable housing strategy targets salaried citizens, including the low-income salaried earning between KES 0- 19,999 and KES 20,000- 49,999. • The qualifying criteria do not enable populations with irregular income to participate, such as those in the informal sector. • The standard bank loans do not suit the low- and middle-income segment. The interest is high, the process is burdensome, repayment terms are short, and most collateral requirements pose a challenge.	• **Customized financial products for low- and middle-income segments**: Lenders/FIs should consider designing differentiated housing microfinance products and solutions for the low-income segment as there is a limit. • **Financial institutions should also tap into the DFS opportunities** to connect with MNOs and FinTechs and develop digital technology services that enable payments and seamless disbursement of housing finance services. • **DFS providers such as FinTechs can partner with FIs and development partners to develop solutions**—an example of a solution such as one provided by iBuild Fintech.
Product innovation suggests new opportunities to overcome the housing finance systemic barriers: • There are points of innovation along the value chain that are worth attention, also contributing to broader sector gains. These include home construction, construction financing, housing microfinance, and incremental building. The private sector is increasingly expressing interest in the affordable housing sector • New players are entering the market, addressing niche opportunities, and improving the investment environment. These include FinTech and developers with solutions linking HF value chain players.	• Key areas of attention should be enhancing housing finance solutions, scaling up the quality of household-led home improvement projects, and housing delivery. • Considering the significance of non-mortgage finance options for low-income individuals is essential in this context. • Delivering digital solutions, including partnerships with mobile money networks, FinTech, and FSPs, could catalyze low- and middle-income financial and economic inclusion. • Digitizing alternative data sources related to informal incomes will allow lenders to evaluate low- and middle-income borrowers' creditworthiness more comprehensively than traditional methods that depend on paychecks and formal credit records.

• For example, iBuild's digital platform brings together an ecosystem of players, including banks, homeowners, contractors, and construction workers.	
Housing microfinance • Findings show that MFIs provide microloans to improve housing conditions. These include house improvement loans for flooring, roofing, room additions, incremental building, painting, and WASH. • Banks and SACCOs mainly provide housing finance to purchase houses (home loans, construction mortgages, and plot purchases). • There is still untapped potential for incremental building to address the housing finance needs of a significant portion of the low-income population.	• Microfinance institutions offer microloans specially designed to meet the housing needs of the low- and middle-income segment. Microfinance institutions have a considerable opportunity to use this massive demand for housing needs by low-and middle-income segments. • **HFHI** can collaborate with FIs that offer housing finance products to the LMI segment to; i) provide technical assistance to develop housing microfinance products and services that serve this segment and ii) provide lending and advisory support for customers.
Financial literacy: • The low- and middle-income groups have low levels of financial literacy and lack an understanding of housing finance solutions and processes. • Financial institutions should provide financial digital literacy training and capacity-building programs to their beneficiaries to enhance technical and personal skills. • **AMFI-K** and **HFHI** collaborated to create training materials for MFIs clients on HF. The pilot phase was highly successful with some MFIs. However, when rolling out the program to other MFIs already offered HF, none showed interest in financing the training.	• Awareness and training: Need to invest in consumer education for improved financial literacy, improved knowledge about DFS benefits, increased awareness and technology skills for underserved populations, and built demand for housing financial services. • This can be done through financial literacy and skill-building campaigns, courses, and programs to understand the financing process better and boost customers' confidence. • Through these training programs, potential borrowers will understand the options available, the costs and benefits of borrowing, and the importance of responsible borrowing and repayment. • There is a need to financially support institutions that serve underserved populations to enable them to develop and roll out training programs.
The data landscape for housing investment is scant • Despite some progress, there is still a significant lack of available data on the housing investment landscape, which continues to pose barriers to the functioning of efficient housing markets. • The lack of adequate information on the size of the market and the potential that can be exploited limits the ability of key players to make informed decisions. • The inability to quantify the low- and middle-income segment revenues, cash flow patterns, spending habits, and	• The availability of market data is a crucial infrastructure for the HF market. Providing housing finance data makes a case for investment in underserved markets. Housing finance data should include housing finance lending, lending terms, interest rates, loan-to-value ratios, repayment terms, and affordability indicators. The data would help provide insights into the availability, accessibility, and affordability of HF options, therefore identifying the underserved areas and making an investment case. • **HFHI** can focus on enhancing the availability of reliable data to enable all key players (governments, the private sector, and households themselves) to make informed decisions toward investment in affordable housing.

payment history further exacerbates the situation. • Inadequate data on the financial market's housing-related activities limit financial institutions' ability to plan, budget, and implement projects effectively. This is especially problematic for low-cost and affordable housing financing due to the narrow profit margins that offer little room for error/risk-taking.	• This will foster a more conducive policy environment and encourage greater private sector participation in affordable housing markets. • This can be done through developing tools such as advocacy platforms, housing data working groups, research data, and updating housing finance databases, dashboards, methodologies, and frameworks.
Business models for serving the low- and middle-income segment • Customers trust banks and SACCOs and would wish to get financing from them. However, in most cases, low-income customers do not meet the criteria for funding, therefore, opt for other options. • MFBs and MFIs are well positioned to serve this segment better as they have extensive outreach to rural populations. However, interest rates are high and have shorter repayment periods, primarily because of liquidity issues/lack of funding. • While MFBs and MFIs have proved a business case in serving the low-income segment, they face challenges securing funding due to a mismatch between their lending approach and **KMRC**'s lending model. The **KMRC**'s model requires all its recipients to possess land title deeds as a prerequisite for receiving funds, which is not in line with the lending practices of MFBs and MFIs that serve the poor segment.	• **HFHI** can explore the potential for developing new housing finance products by partnering with FSPs on housing microfinance and financing options for incremental building. • A significant emphasis should be placed on working closely with Banks, SACCOs, MFBs, and MFIs that cater to low- and middle-income groups to ensure that **HFHI**'s efforts to promote financial inclusion are directed toward serving the needs of the underserved. • There is a need to invest in a credit risk-sharing facility. The core feature of this instrument is its incorporation of an alternative credit assessment platform into a housing finance guarantee fund. • By leveraging this approach, the housing finance guarantee fund can spread the risk of housing finance credit among local financial institutions that serve the LMI segment while keeping fees affordable.

4.2 Recommendations for strategic interventions for addressing barriers to housing finance for low- and middle-income segments

Providing affordable housing finance to low and middle-income individuals is a complex goal that requires practical solutions. Here are some ways to address the increasing demand for housing from growing rural and urban populations:

- **Address the need for incremental building**: Explore housing finance solutions that promote incremental housing development, such as supporting self-built housing. This approach can mobilize formal and informal resources to spur savings, and support incremental and self-built housing, renting, and reinvestment in housing. Also, leverage existing sources of savings and borrowing, such as savings groups and cooperatives.

  Key actors: the government, regulators, financial institutions, development partners, non-governmental organizations (NGOs), and community-based organizations (CBOs).
- **Reform the national housing policy**: Establish a comprehensive national housing policy that includes strategies for increasing access to housing finance, promoting affordable housing development, and supporting the sector's

growth. The government could play a pivotal role in expanding the availability of housing finance by implementing initiatives to incentivize financial institutions to lend to the housing sector or provide guarantees to lenders to mitigate the perceived risks associated with lending to informal sector workers.

Key actors: policymakers, government, financial institutions, housing finance companies, private sector actors, NGOs, CBOs, and consumers.

Findings from this study show that the low-income segment lives in houses that need improvement. The low-income population lives inadequate housing conditions, temporary shelters, or low-quality housing, which affects their overall well-being. There is a need to develop supportive infrastructure, utilities, and social amenities in rural and urban areas to enhance the livability and attractiveness of affordable housing options, encouraging private sector investments and long-term sustainability. In informal settlements, the priority should be repairing and upgrading existing homes, which is less costly and quicker than building new ones. This will further help increase the demand for affordable housing.

- **Increase funding for housing finance**: Development financial partners can increase funding for housing finance initiatives in Kenya, such as providing grants or low-interest loans to financial institutions that provide housing finance. This can help to increase the availability of housing finance and reduce the cost of borrowing for home buyers. Green financing initiatives present a unique opportunity to support sustainable housing development and energy-efficient technologies. The unique opportunity for the LMI group (from FDGs and KIIs) was the emerging need for financing WASH products and solutions such as water tanks, improved toilets, and energy-saving cookers and lamps. In this regard, there are two opportunities identified for green financing:
    - **Water conservation and waste management**: green financing options can be extended for housing projects that include efficient water harvesting systems and waste management by recycling within housing complexes.
    - **There is also an opportunity for green financing for renewable energy installations** such as solar panels and solar lamps.
- **Promote innovation in housing finance**: Development partners and financial institutions can explore innovative housing finance models, such as mortgage-backed securities and housing microfinance, and leverage the existing informal avenues to increase the availability of housing finance for low-and middle-income individuals. Housing microfinance can be innovative regarding a targeted approach, designing innovative, flexible loan products, developing innovative collateral and risk mitigation strategies, alternative credit scoring, and combining loan products with capacity-building support that aligns with low-income borrowers' income and repayment capacity. This addresses challenges faced by the low-income segment in accessing traditional mortgage loans. Mortgage-backed securities can pool individual mortgages into tradable investment instruments, increasing liquidity in the market and attracting institutional investors, enabling more competitive mortgage rates. This can lead to lower mortgage interest rates and expanded access to mortgage financing for borrowers.

    Key actors: Regulators (Capital Markets Authority, Central Bank of Kenya), financial institutions, wholesale lenders, institutional investors, trustees, and the government.
- **Increase public-private partnerships**: Collaboration between the government, private sector, development partners, wholesale lenders, financial institutions, and investors could help to increase the availability of housing finance. For example, the government could partner with developers to offer subsidized mortgages and pre-financing options for developers or work with private sector actors to establish a housing finance guarantee fund to provide housing finance to low-income households. Partnerships with technology-enabled property valuation services can also improve efficiency and accuracy in assessing property values, reducing risks for lenders.

    Key actors: government, private sector actors (developers, construction companies, and real estate firms), development partners, wholesale lenders, investors, and FinTech.
- **Strengthen research and partnerships**: to address data gaps through surveys and databases. In Kenya, housing finance data gaps exist in terms of comprehensive information on housing needs and preferences across various population segments. This includes lacking data on; household size and composition, income levels, payment histories, affordability thresholds, and housing aspirations. Additionally, there is a shortage of data on

housing demand dynamics, including the number of households actively seeking housing, the reasons behind their housing choices, and the barriers they face in accessing adequate and affordable housing.

   - **Development of an open data portal** where users can access data, extract information on nationally representative housing finance surveys, and browse links to datasets and reports available on the housing finance market. The data will contain information critical to understanding the demand and supply side of housing finance issues. The data will target financial service providers and policymakers to make informed decisions. **HFHI** can team up with relevant partners to develop a Housing Finance Market Information Portal as a repository for housing finance market information in Kenya.
   - **Research and partnerships:** to unlock more problems facing access to affordable housing, **HFHI** can conduct regular national surveys every 2-3 years to provide accurate, up-to-date data on access and usage of housing finance in Kenya. This can be achieved through collaboration with Fin Access to gather information on various aspects of inclusive housing finance, such as access to housing finance services, usage patterns, and the impact on LMI segments. This will play a crucial role in informing policymakers, financial service providers, and other stakeholders about the state of the housing finance market in Kenya and guide the development of strategies to promote financial access and usage.
- **Innovative finance**: Develop blended housing finance solutions encouraging early-stage innovation and long-term sectoral growth. Exploring financing options that can generate interest in affordable housing and motivate other underlying reforms is essential. FIs can explore alternative credit scoring models that consider non-traditional data to assess creditworthiness and expand access to housing finance for those with limited formal credit histories. Partnerships with developers can enable bundled housing solutions, home construction packages, and homebuyer education to facilitate affordable housing acquisition. FIs can develop specialized products such as incremental home construction loans, enabling borrowers to build homes in stages and access financing progressively as construction progresses. Exploring digital platforms and FinTech solutions can streamline loan application processes and enhance accessibility. These innovative approaches can help FIs improve access, affordability, and usage of housing finance, contributing to increased homeownership and improved housing conditions in Kenya.
- **Product development**: Banks, SACCOs, MFBs, and MFIs should develop and offer housing finance solutions uniquely tailored to match the needs of most low-income earners, who build homes incrementally as financing becomes available. The first step should be conducting market research and engaging with target customers to understand their unique needs and preferences. Based on these insights, FIs can develop and tailor housing finance products designed explicitly for incremental house construction, renovation, land purchase, or site improvement. These products should feature flexible repayment terms, low-interest rates, and simplified application processes to accommodate low-income earners' financial capabilities and cash flows.

  Key actors: Financial institutions, technology providers, and development partners.
- **Technical assistance and capacity building**: To address the capacity constraints on the supply side, financial institutions, developers, housing support organizations, government agencies, building contractors, and construction workers require focused training to ensure quality within the scope of end-user affordability. On the demand side, there is a need to invest in consumer education for improved financial literacy, improved knowledge about DFS benefits, and increased awareness and technology skills for underserved populations. This can be done through financial literacy and skill-building campaigns, courses, and programs to understand the financing process better and boost customers' confidence. Key actors: financial institutions, developers, housing support organizations, government agencies, development partners, building contractors, construction workers, consumer education organizations, and technology providers.
- **Implement technology-driven solutions**: Kenya can leverage technology to improve access to housing finance and overcome critical challenges in the housing sector by;
   - **Expanding the adoption of blockchain technology** to streamline property transactions and registration processes to enhance transparency and reduce fraud. In Kenya, for example, Bitland and Ardhi sasa are blockchain-based platforms that enable people to register and transfer property titles.

  - **Implementing data-driven credit scoring models** using automated underwriting systems and advanced analytics can enable more efficient credit assessments, facilitate faster loan approvals and broaden access to housing finance.
  - **Promoting and exploring new digital platforms and FinTechs like Pezesha** can facilitate peer-to-peer lending, and connect borrowers with investors, expanding access to housing finance, particularly benefitting MSMEs. Pezesha helps MSMEs build their credit scores and promotes embedded finance.
  - **Enhancing data availability and sharing** through data-sharing agreements and collaborations between institutions can bridge existing data gaps and support evidence-based decision-making.
- **Cost reduction strategies for improved access to housing finance**: to address the issue of cost as a significant determinant of access to housing finance in Kenya, it is essential to prioritize customer education and awareness regarding associated costs. By providing clear information on interest rates, fees, and repayment terms, potential borrowers can make informed decisions and choose the most cost-effective options. Additionally, leveraging technology for streamlined processes to reduce administrative procedures and exploring innovative financing models are potential avenues to achieve this objective.
- **Housing finance credit guarantee fund**: Establish a Housing Finance Credit Guarantee Fund that de-risks end-user borrowers and makes credit more accessible. This will allow for the mobilization of end-user finance and lead to the delivery of affordable housing units at a larger scale. By protecting lenders from losses due to loan defaults, the scheme will encourage more financial institutions to establish portfolios targeting housing for low-income borrowers.
  Key actors: the government, financial institutions, development partners (international organizations and institutions), affordable housing developers, end-user borrowers, regulators (Central Bank of Kenya, Capital Markets Authority), and credit guarantee fund managers.
- **Leveraging the role of mortgage brokers to enhance housing finance uptake**: Given the information asymmetries in the housing finance market in Kenya, leveraging mortgage brokers can be valuable to deepen mortgage and housing finance uptake. Mortgage brokers can serve as intermediaries between lenders and borrowers, helping to bridge the information gap by providing expert guidance and support during the mortgage application process. They can assist borrowers in understanding their financing options, comparing different products, and navigating the complexities of the mortgage market. Additionally, mortgage brokers can facilitate connections between lenders and potential borrowers, increasing access to mortgage financing for a wider range of individuals and improving market efficiency.
- **Onboarding more Primary Mortgage Lenders (PMLs)**: **KMRC** could consider onboarding more PMLs to facilitate access to concessional housing finance and unlock liquidity. **KMRC** can achieve this by conducting targeted outreach and engagement with potential PMLs, streamlining the application process, providing capacity-building programs to enhance lenders' understanding, establishing risk mitigation mechanisms, collaborating with regulatory bodies, and continuously evaluating and improving the program. By expanding its panel of PMLs, **KMRC** will contribute to increased liquidity and promote affordable housing to low-income earners.

The recommended interventions have been categorized into short-, medium-, and long-term strategies based on their ease of implementation. The strategies and their potential impact are represented in Figure 6, and the guiding criteria are in Annex 4.

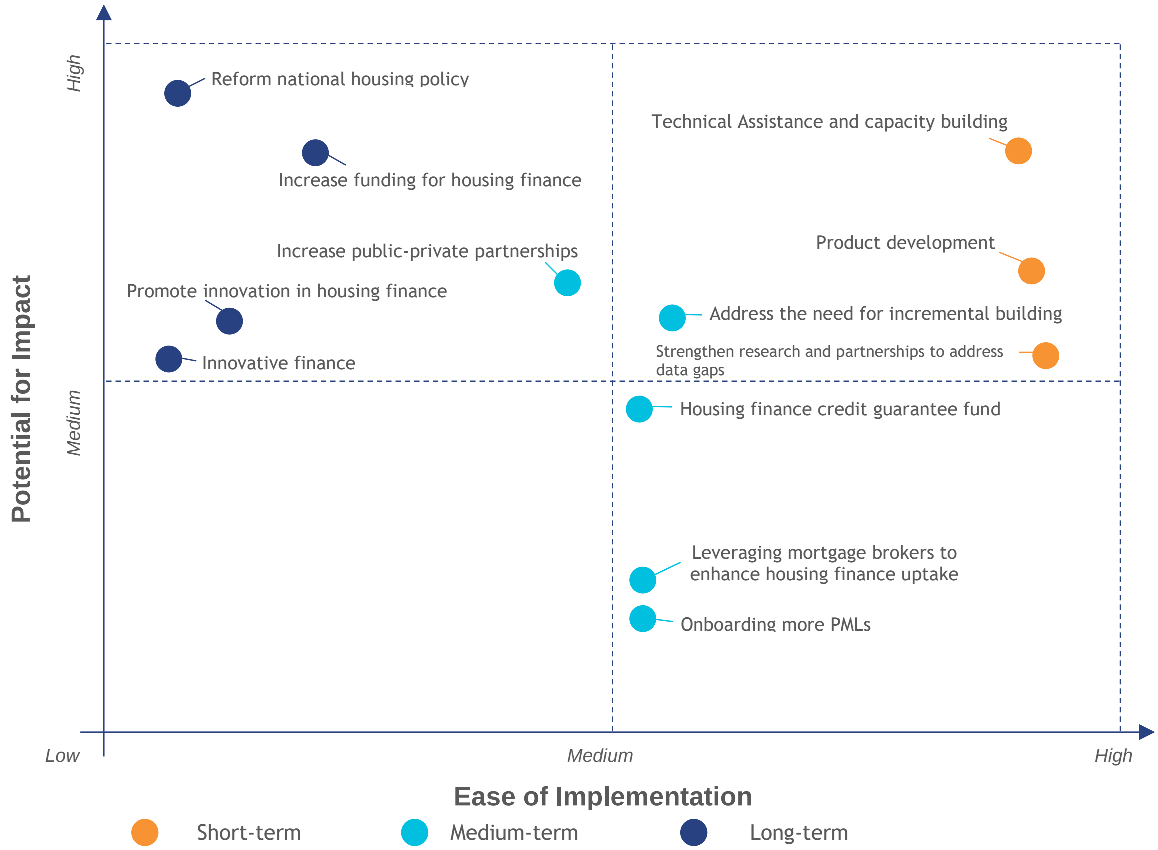


Figure 6: Recommended interventions categorized into short-, medium- and long-term strategies

4.3 Interventions roadmap

The proposed theory of change below presents the pathways and entry points to systematically formulate and pursue solutions that serve the low- and middle-income segments. It also acknowledges the significance of data, information, and ecosystem development in facilitating market players to identify the issues in the housing finance market.

4.3.1 THEORY OF CHANGE

GOAL

AN EFFECTIVE AND INCLUSIVE HOUSING FINANCE ECOSYSTEM FOR SUPPORTING THE LOW- AND MIDDLE-INCOME SEGMENT

IMPACT

Increased house ownership among the low- and middle-income segment

OUTCOMES

INCREASED ACCESS TO AFFORDABLE HOUSING FINANCE
The low and middle-income group are integrated into formal financial institutions

(A) Supply side: Inclusive housing finance delivery mechanisms, reducing organizational barriers that limit access to housing finance, and customized financial products and services to meet the diverse needs of the low- and middle-income population

(B) Demand side: Increased awareness and education about housing finance options and benefits among the low- and middle-income population.

(C) Partnerships: Improved partnerships between housing finance providers and community-based organizations, credit unions, and microfinance institutions, leveraging technology to expand outreach and improve service delivery.

(D) Regulation: Better policies and regulations reducing systemic barriers limiting low- and middle-income access to housing finance implemented by strong institutions

(E) Data and information: More robust and relevant data and information on the housing finance market available to all actors in the ecosystem

ACCESS TO AFFORDABLE HOUSING Construction of affordable (low-cost) housing units for the low- and middle-income population **[Excluded from scope]**

OUTPUTS

- A1. New, innovative HF products and services
- A2. Dissemination of knowledge to key HF value chain actors
- A3: Increased funding

- B1. Dissemination of knowledge on HF products among low- and middle-income households
- B2. Improved trust and demand

- C1. Strengthened platforms for collaborations and partnerships in the HF sector
- C2. Innovative risk-sharing models

- D1. Strengthened capacity of regulators, policy makers and private sector players to participate and invest in HF market

- E1. Supply and demand-side data systems and dashboard to drive decision-making, investments, and policy interventions
- E2. Data analysis capacity among stakeholders

INTERVENTIONS

- Address the need for incremental building (A1)
- Reform the national housing policy (A3, B2, C2, D1)
- Increase funding for housing finance (A3, C1)
- Promote innovation in housing finance (A1, A3, B1, C2, E1)
- Increase public-private partnerships (A1, C1, C2,
- Improve data collection and analysis (D1, E1,
- Innovative finance (A1, C2, E1)
- Technical Assistance and capacity building (A2, B1, C1, D1)
- Product development (A1, B1, C2)
- Onboarding more PMLs (A2, A3, C2,
- Housing finance credit guarantee fund (A3, C2)
- Leveraging mortgage brokers to enhance housing finance uptake (B1, B2, C1, E1)

FINANCING INSTRUMENTS

Financial institutions deploy finance across the housing value chain to support inclusive home construction, home improvements, and incremental building

Housing Supply side
1. Construction and developers financing
2. Land and infrastructure financing
3. Private sector financing

Housing Demand side
1. Risk sharing facilities (Housing financing guarantees)
2. End user financing for low- and middle-income (HMF, personal

4.3.2 POSSIBLE CHANGE PATHWAYS

HOUSING FINANCE POSSIBLE CHANGE PATHWAYS
Pathway 1: Supporting the Kenya housing finance market development through technical assistance and capacity building • Build capacity of institutions (Banks, MFBs, MFIs, and SACCOs): Skills development; professional technical assistance. • Household training; promote financial education programs to households to enhance financial literacy and awareness
Pathway 2: Exploring Innovation in housing finance • Product development tailored to specific customer needs • Blended finance models, housing finance credit guarantee fund, green financing for housing • Innovative focus areas include construction finance, incremental self-build finance • Increase public-private partnerships
Pathway 3: Closing housing finance data gaps • Strengthen research and partnerships to solve housing finance challenges • Improve data collection and analysis to close housing finance data information gaps • Information dissemination and communication • Data tracking, monitoring, and support provision of up-to-date data

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6.0 Annexes

Annex 1 Mapping of players in the housing finance sector

Banks							
Institution	**Share of the mortgage market**	**Products**	**Interest rate**	**Tenure Years**	**Loan Min amount KES**	**Loan Max amount**	**Loan to Value**
KCB Bank Kenya Ltd	31.10%	Home Loan	13.50%	25	500,000		90%
		Home Loan (Construction loan)	13.50%	25	500,000		70%
Stanbic Bank Kenya Limited	12.80%	Straight Purchase	13.6% - 14.2%	25	1,000,000		105%
		KMRC loan (straight purchase and construction)	9.00%	20	1,000,000	8,000,000	105%
		Vacant Land Financing	13.6% - 14.2%	25	1,000,000		105%
		Construction loan	13.6% - 14.2%	25	1,000,000		105%
HFC Ltd	9.80%	Construction loan		20	100,000		90%
		Buy and build		20	100,000		90%
		Vuna hela		20	100,000		90%
		Straight Purchase		20	100,000		90%
		KMRC loan	9.50%	20	100,000	6,000,000	90%
		Nyumba yangu savings account					
Standard Chartered Bank Kenya Limited	8.20%	Home mortgage		25		100,000,000	100%
		Construction mortgage		25		100,000,000	100%
Absa Bank Kenya Limited	6.40%	Buy a home	14.00%	25			90%
		Build a home	14.00%	25			90%
		KMRC product	9.50%			8,000,000	
The Co-operative Bank of Kenya Limited	5.60%	Good home affordable home	15.00%	20			
		Good home construction	15.00%	25			
		Good home buy a plot and build	15.00%	25			
Equity Bank Ltd	5.10%	Plot loan		10	Based on ability to pay	Based on ability to pay	100%
		House/Home loans		15	Based on ability to pay	Based on ability to pay	100%
NCBA Bank Ltd	4.50%	Home loan		25			105%
		Easy build		15			
		Buy and build		15			
		Plot loans		15			

Family Bank Ltd	2.40%	Brick by Brick					
		Construction loans					
		Owner-occupier		25			
		Construction loans					
First Community Bank Ltd	2.30%	Plot purchase loan		5			
		Mortgage		20			90%
		Construction loans		10			80%
DIB Bank Kenya Ltd	1.80%	DIB mortgage finance					
		Plot purchase loan					
		construction					
I&M Bank Ltd	1.60%	Home loan		20	2,000,000	2,000,000	
Gulf African Bank Ltd	0.90%	Personal home finance		20			
		Personal construction finance		20			
		Plot finance		10			70%
Bank of Baroda Ltd	0.90%	Baroda mortgage loan	13.50%				
		Baroda home loan	13.50%				
National Bank of Kenya Ltd	0.90%	Residential mortgage	13.50%	25			90%
		Residential plot purchase	13.50%	10			70%
		Residential construction mortgage	13.50%	25			90%
		Residential Plot and Construction mortgage	13.50%	25			90%
		Special scheme residential mortgage	Negotiated rate	25			100%
SBM Bank Kenya Limited	0.70%	Buy a home		20	2,000,000		90%
		Build a home		20	2,000,000		90%
Bank of Africa Ltd	0.50%	Home improvement					
		property acquisition					
		construction					
Diamond Trust Bank of Kenya Ltd	0.50%	Mortgage		20	1,000,000	100,000,000	90%
Consolidated Bank of Kenya Limited	0.40%	Mortgage loans		15			
Bank of India	0.20%	Star home loan scheme		20		25,000,000	
	0.20%	Star home loan scheme		20	25,000,000	100,000,000	
		For renovation/repair/alteration/addition		10	5,000,000	50,000,000	

SACCOs							
Institution	**Exposure to HF (As % share of the total portfolio/amount)**	**Products**	**Interest rate**	**Tenure Years**	**Loan Min amount KES**	**Loan Max amount**	**Loan to Value**
Imarisha	24 million	KMRC	9.50%	15		8,000,000	100%
		Building loan					

		Home purchase					
Unaitas	26%	**KMRC**	9.50%	15		8,000,000	90%
		Jenga loan					
		Nunua keja loan					
Mwalimu National	1%	KMRC	9.00%	25		8,000,000	90%
		Makao loan					
		ujenzi loan					
National police	167 million	**KMRC**	9.00%	20		8,000,000	
		Makao home loan					
		Wezesha individual housing					
		Staff scheme	4.00%	20		8,000,000	
		Makao Home loan					
		Wezesha individual housing					
Harambee Sacco	228 million	Employed	8.00%	25		10,000,000	90%
		Harambee home loan					
		Jenga Loan					
		Employed	9.00%	25	10,000,001		90%
		Harambee home loan					
		Jenga Loan					
		Self-employed	8.00%	15		10,000,000	90%
		Harambee home loan					
		Jenga Loan					
		Self-employed	9.00%	15	10,000,001		90%
		Harambee home loan					
		Jenga Loan					
Safaricom SACCO	28 million	**KMRC**	8.00%	25		8,000,000	100%
		Faraja loan					
		Ustawi loan	12.00%	15		20,000,000	100%
		Land loan	12.00%	4		10,000,000	100%
Ukulima	2%	Employed	8.00%	20		Nairobi 4000000	100%
		Makao Halisi loan				Outside Nairobi 3000000	
		Income <150,000					
		Employed	9.00%	20		Nairobi 4000000	100%
		Makao Bora loan				Outside Nairobi 3000000	
		Income > KES 150,000					
		Self-employed		15		8,000,000	100%
		Makao Halisi loan					
		Self-employed		15		8,000,000	100%
		Makao Bora loan					

MFBs							
Institution	**Exposure to HF (As % share of the total portfolio/amount)**	**Products**	**Interest rate**	**Tenure Years**	**Loan Min amount KES**	**Loan Max amount**	**Loan to Value**
KWFT Bank		Nyumba smart loan	24.00%	5	5,500		
Rafiki MFB	30%	Mradi savings	9.00%	5			
		Rent Faida	18.00%	5		15,000,000	70%
		Rafiki home loans	18.00%	5		15,000,000	70%
Maisha MFB		Maisha development loan		3		3,000,000	
		Maisha plot purchase loan		3		3,000,000	
Caritas MFB	13%	Plot purchase (bare land)	14%	5		5,000,000	
			18%	5	5,000,001		
		Plot purchase (with property)	14%	8		5,000,000	
			18%		5,000,001		
		Mustard seed	14.00%	5		5,000,000	
		Mustard seed	18.00%	5	5,000,001		
		rent milele (unsecured)	18.00%	5		500,000	
		rent milele (secured)	14.00%	5		15,000,000	

MFIs							
Institution	**Exposure to HF (As % share of the total portfolio/amount)**	**Products**	**Interest rate**	**Tenure Years**	**Loan Min amount KES**	**Loan Max amount**	**Loan to Value**
Vision Fund	5.10%	construction loan	36.00%	3		1,500,000	
		home improvement loan	36.00%	3		500,000	
Yehu	80%	Mabati loan	21.00%			2,000,000	
		construction loan	21.00%			2,000,000	
		construction loan	26.00%		2,000,001	10,000,000	
Bimas		Maendeleo product	24.00%	0.5	10,000	200,000	
		Maendeleo product	20.00%	3	500,000	1,500,000	
Jiweze Improved Productivity		Housing finance					
Longitude finance		Civil servants	36.00%	4	50,000	2,000,000	
		Non civil servants	48%	1	50,000	2,000,000	

Annex 2 List of the stakeholders

These stakeholders played a significant role. They shared their views on the status of the housing finance market in the country and the approaches the government and organizations follow in serving the low- and middle-income groups.

Name	Organization	Email id
Zachary Munene	Shelter Afrique	zmunene@shelterafrique.org
Geoffrey Mwaura	**KMRC**	gmwaura@kmrc.co.ke
Peter Owira	SASRA	powira@sasra.go.ke 0722446760
Elikanah Ng'ang'a	Oiko Credit -wholesale lender	enganga@oikocredit.org
Cressy Musasiizi	Soluti Finance E.A. Ltd.	c.musasiizi@solutifinance.org
Nelly Waithaka Beatrice Otiato	Stanbic Bank	waithakan@stanbic.com otiatob@stanbic.com
Kibet Kitur Vivian Maina	HFC Bank	kibet.kitur@hfgroup.co.ke vivian.maina@hfgroup.co.ke
Chris Chege	Mortgage Finance Cooperative Bank	0722321413
Denis Ochenge	Caritas MFB	denis.ochenge@caritas-mfb.co.ke
Ken Watitu	Rafiki MFB	kwatitu@rafiki.co.ke
Edwin Ocharo	KWFT	eocharo@kwftbank.com
Oscar Sakania	Yehu Microfinance Trust	oscar.sakania@yehu.org
Esther Moyi	ECLOF MFI	emoyi@eclof-kenya.org
David Ngigi	Longitude Finance MFI	dngigi@longitudefinance.co.ke
Zayyad A. Said	Hazina Trust MFI	zayyad.said@hazinagroup.co.ke
Philip Ochola – CEO Caroline Kariuki	Vision Fund Kenya MFI	philip_ochola@wvi.org caroline_kariuki@visionfund.org
Mugendi	BIMAS MFI	mugendi@bimaskenya.com
Philomena Mwaniki	JIWEZE MFI	Pmwaniki@jiwezelimited.com
Joseph Njoroge	Safaricom Sacco	jknjoroge@safaricom.co.ke
Kipkemeoi Kelong	Imarisha Sacco	kipkemoikelong@gmail.com
Racheal Maina	Ukulima Sacco	rwmaina@ukulimasacco.coop 0721973681
Joshua Itonga Joseph Riro	Mwalimu National Sacco	jitonga@mwalimunational.coop ewaitara@mwalimunational.coop
S Etale	Stima Sacco	setale@stima-sacco.com
David Allan Samuel Mutua Isabella Oduor	Kenya National Police Sacco	0722877243
Peter Munyange	Unaitas Sacco	0721434632
Paul Tanui	Harambee Sacco	0709943407
Aggrey Marisia	iBuild Global	aggrey.marisia@ibuild.global

Annex 3 Detailed methodology and results from the inferential analysis

METHODOLOGY

Multinomial Logistic Regression has been chosen as it is a reliable method when the dependent variable is nominal with more than two levels, as is the case here. We have used R software to run the logistic regression on our data. In order to get rid of the multicollinearity in our predictors, we used vif() function available in R. We did not find any potential concerns in this step.

To fit the multinomial logistic regression, "multinom ()" function from "nnet" package in R was used. It gives the estimated values of coefficients and their standard errors for both the categories "Borrowed" and "Denied", keeping the third category "Did not apply" as a reference. Further, we used a t-test to find out the statistically significant estimators at 5% significance level. Only "Age" and "Monthly income" had a p-value greater than 5%. Apart from these two, all the parameters for both the categories, "Borrowed" and "Denied", were statistically significant.

It should be flagged that there were only four respondents in the "Denied" category, due to which the standard errors (SE) for the coefficients are very small. This leads to underpowered (unreliable) outcomes for the specific category. Therefore, we have not interpreted the coefficient associated with very low SE.

Results

```
Call:
multinom(formula = Dependent_variable ~ ., data = data)

Coefficients:
         (Intercept) `Residence/Location`Rural `Residence/Location`Urban `Age of the respondent` `Sex of respondent`Male
Borrowed    -5.62486                0.39573315                 0.2244489             0.005606094              -0.5205227
Denied    -185.31203               -0.07206559                 0.4779089             0.004565743              -1.1827881
         `Marital status of the respondent`Married `Marital status of the respondent`Single `Marital status of the respondent`Widowed
Borrowed                                 0.2498085                               0.07288506                                -0.4535502
Denied                                  40.0003262                             -33.52459630                                -9.3444618
         `Are you the main decision maker in the house or homestead? (Household head)`Yes `Do you own a mobile phone?`Yes `Do you have a SACCO account?`Yes
Borrowed                                                                        0.2867446                      -0.6141354                         1.0556009
Denied                                                                          1.2771925                     -26.1331363                         0.0301155
         `Do you have a bank account?`Yes `How far is the nearest financial institution (bank, MFIs) from your residence`
Borrowed                         1.004537                                                                      0.03770709
Denied                          29.954055                                                                     -0.13205945
         `Respondent is formally employed`Yes `Education number of years in school`
Borrowed                            0.4761392                             0.1522054
Denied                              0.1258991                             5.9545190
         `Financial literacy measured by understanding interest rates and transaction advice`Yes `Do you own the house you live in?`Yes
Borrowed                                                                               0.4207903                              1.8302428
Denied                                                                                44.5401730                              0.7328816
         `Including all your sources of income, how much money would you say you get on average in a  MONTH?`
Borrowed                                                                                          4.648277e-06
Denied                                                                                           -2.873631e-05
```

Figure 7: Regression output - 1

```
Std. Errors:
         (Intercept) `Residence/Location`Rural `Residence/Location`Urban `Age of the respondent` `Sex of respondent`Male
Borrowed 0.0000713743             5.709661e-05              2.341523e-05              0.00347445            2.795702e-05
Denied   0.0003395483             8.662017e-05              3.937770e-05              0.01722147            1.140006e-04
         `Marital status of the respondent`Married `Marital status of the respondent`Single `Marital status of the respondent`Widowed
Borrowed                              0.0000644714                             1.219576e-05                              3.699953e-05
Denied                                0.0003395483                             6.214249e-36                              7.318017e-26
         `Are you the main decision maker in the house or homestead? (Household head)`Yes `Do you own a mobile phone?`Yes `Do you have a SACCO account?`Yes
Borrowed                                                                     5.999325e-05                    7.048388e-05                      1.997270e-05
Denied                                                                       2.883474e-04                    3.395483e-04                      3.523829e-05
         `Do you have a bank account?`Yes `How far is the nearest financial institution (bank, MFIs) from your residence`
Borrowed                     9.138359e-05                                                                    0.0005586161
Denied                       3.395483e-04                                                                    0.0013551765
         `Respondent is formally employed`Yes `Education number of years in school`
Borrowed                         1.625226e-05                           0.001665400
Denied                           1.326537e-05                           0.005432773
         `Financial literacy measured by understanding interest rates and transaction advice`Yes `Do you own the house you live in?`Yes
Borrowed                                                                            7.506711e-05                           5.990749e-05
Denied                                                                              3.395483e-04                           2.868783e-04
         `Including all your sources of income, how much money would you say you get on average in a  MONTH?`
Borrowed                                                                                         3.234920e-06
Denied                                                                                           2.485648e-05

Residual Deviance: 451.383
AIC: 523.383
```

Figure 8: Regression output - 2

```
> confusionMatrix(pred,data$Dependent_variable)
Confusion Matrix and Statistics

                              Reference
Prediction                     Did not apply and borrow Borrowed Got denied and did not borrow
  Did not apply and borrow                          259       58                             1
  Borrowed                                           37      106                             3
  Got denied and did not borrow                       0        0                             0

Overall Statistics

               Accuracy : 0.7866
                 95% CI : (0.7465, 0.8231)
    No Information Rate : 0.6379
    P-Value [Acc > NIR] : 2.844e-12

                  Kappa : 0.5275

 Mcnemar's Test P-Value : 0.03445

Statistics by Class:

                     Class: Did not apply and borrow Class: Borrowed Class: Got denied and did not borrow
Sensitivity                                   0.8750          0.6463                             0.000000
Specificity                                   0.6488          0.8667                             1.000000
Pos Pred Value                                0.8145          0.7260                                  NaN
Neg Pred Value                                0.7466          0.8176                             0.991379
Prevalence                                    0.6379          0.3534                             0.008621
Detection Rate                                0.5582          0.2284                             0.000000
Detection Prevalence                          0.6853          0.3147                             0.000000
Balanced Accuracy                             0.7619          0.7565                             0.500000
>
```

Figure 9: Evaluation metrics to assess the accuracy of model

Annex 4 Scoring Criteria for the Intervention Priority Matrix

PRIORITY MATRIX

The following scoring criteria were used to develop the intervention priority matrix, as shown below. The assessment was based on secondary research and expert opinions from internal and external experts. The following criteria guided the scoring:

- Ease of implementation is estimated based on the existing stakeholder interest and the degree of complexity
- The impact is estimated based on the key issue(s) being addressed and the systemic nature of the interventions (multi-pronged approaches tend to create greater impact)
- The color coding is based on the ease of implementation, while the position in quantiles is based on both impact and ease of implementation.

We have used our discretion to resolve overlapping points into discretely presented solutions. For example, while "incremental building," "public-private partnerships," and "HF credit guarantee fund" are all scored similarly, they have been resolved into three distinct positions on the matrix based on their relative ease of implementation and potential impact. Standard MS Excel graphing features do not allow replicating the Eisenhower matrix (priority matrix) in the desired format. As a result, we manually created the pictorial representation of the matrix.

Recommendation	Ease of implementation	Impact	Total
Address the need for incremental building	2	2	4
Reform the national housing policy	1	3	4
Increase funding for housing finance	1	3	4
Promote innovation in housing finance	1	2	3
Increase public-private partnerships	2	2	4
Strengthen research and partnerships to address data gaps	3	2	5
Innovative finance	1	2	3
Product development	3	2	5
Onboarding more Primary Mortgage Lenders (PMLs)	2	1	3
Technical Assistance and capacity building	3	3	6
Housing finance credit guarantee fund	2	2	4
Leveraging mortgage brokers to enhance housing finance uptake	2	1	3

* 1,2,3 represents Low, Medium, and High, respectively