

African Journal of Emerging Issues (AJOEI)

Online ISSN: 2663 - 9335

Available at: https://ajoeijournals.org

ENVIRONMENT & URBANIZATION

FACILITATIVE ROLE OF CURRENT REGULATIONS ON ACCESSING HOUSING BY HOUSEHOLDS IN NAIROBI COUNTY THROUGH DIFFERENT HOUSING MODELS

*1Francis Kamande ²Wycliffe Oboka ³Moses Gweyi & ⁴Michael Ngala

¹Student, School of Co-operatives and Community Development, The Co-operative University of Kenya

^{2,3,4}Lecturer, School of Co-operatives and Community Development, The Co-operative University of Kenya

*Email of corresponding author: f.kamandeh@gmail.com

Publication Date: November 2023

ABSTRACT

Purpose of Study: This research aimed to evaluate the impact of current regulations on housing access for households in Nairobi County, focusing on various housing models. The study was conducted in Ruai Sub-Location, Ward of Kasarani Sub County, Nairobi County.

Statement of Problem: Access to affordable housing in Nairobi County is a significant challenge, influenced by government regulations, market forces, and social equity. This study investigates how current regulations either facilitate or hinder housing accessibility in this region.

Methodology: A mixed-methods approach was used, combining descriptive research design with both qualitative and quantitative data collection methods. In-depth interviews were conducted with key stakeholders, including officials from housing financing organizations, government representatives, and heads of households in Ruai Sub-Location.

Findings of the Study: The study revealed complex dynamics between current regulations and housing models in Ruai, Nairobi County. Key stakeholders like the Kenya Mortgage Refinance Company, National Housing Cooperative Union, and Housing Finance Company of Kenya play essential roles in housing finance and solutions. Challenges identified include high construction costs and land governance issues, necessitating streamlined regulatory processes.

Conclusion: The study concludes that current regulations and stakeholder involvement are critical in shaping housing access in Ruai, Nairobi County. Collaborative efforts among financial institutions, government bodies, and housing cooperatives are vital.

Recommendation: The study recommends regulatory simplification, increased financial education, and ongoing advocacy for supportive policies to enhance housing accessibility in Nairobi County. These measures are expected to address the housing crisis and improve the quality of life for residents.

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

INTRODUCTION

The facilitative role of current regulations on accessing housing by households in Nairobi County through different housing models is a critical aspect in addressing the pressing housing crisis. The escalating urbanization in Nairobi, fueled by economic progress and rural-to-urban migration, has led to a concentration of 80% of the population in informal settlements and slums, highlighting the urgent need for suitable housing options, especially for low- and middle-income earners (KNBS, 2019). The challenges arising from this rapid urbanization, such as overcrowding, proliferation of informal settlements, and a scarcity of affordable housing, underscore the complexities faced by households in Nairobi. The intricate trade-offs between housing, work proximity, and high living costs force many to endure substandard living conditions in close proximity to employment opportunities (Kipkirui & Rotich, 2015).

Central to overcoming these challenges is the need for effective regulatory frameworks that can support and facilitate the implementation of diverse housing models. Mortgage, cooperative, and incremental strategies have been identified as potential solutions, but their success is contingent on the regulatory landscape. A notable research gap exists in understanding the impact of regulations on housing delivery within these models in Nairobi County, emphasizing the need for a deeper understanding to inform policy and reform (Giti, K'Akumu & Ondieki, 2020). The scarcity of suitable housing locations, particularly for low-income households, presents a significant hurdle. Even when housing units are constructed, financial barriers often render them unattainable. The absence of long-term loan opportunities, coupled with high interest rates and credit risks, restricts access to homeownership for many (World Bank, 2017). These financial

challenges further complicate the implementation of housing models aimed at democratizing homeownership.

However, housing models such as mortgage, cooperative, and incremental approaches present viable solutions. Mortgage models, with long-term loans secured by the property, offer a tangible pathway to homeownership. Housing cooperatives, where members share ownership and costs, present an alternative communal approach. Incremental housing, allowing flexible construction and remodeling, empowers residents to adapt their homes according to evolving needs and financial capacities (Darinka, 2018). These models, when supported by appropriate regulations and financial policies, have the potential to significantly enhance housing accessibility for Nairobi's residents. Addressing the housing crisis in Nairobi County requires a comprehensive approach that considers regulatory barriers, inadequate housing supply, and financial constraints. Policy reforms, fortified regulatory frameworks, and inclusive urban development are key components in paving the way for accessible and affordable housing, thereby ensuring a superior quality of life for residents. This study aims to explore these challenges through a conceptual lens, providing insights into potential solutions to contribute to the ongoing discourse on housing access in Nairobi County.

STATEMENT OF THE PROBLEM

The rapid increase in population and rural-urban migration, particularly among low and middle-income households in Nairobi County, poses a significant challenge in ensuring adequate housing. The limited access to housing has become a pressing problem, prompting governments to implement various interventions, including policies and regulatory frameworks, to enhance housing access for citizens. In Kenya, as in many developing countries, the government often directly provides housing in informal settlements, creating disparities in access between individuals with low and high incomes (Johnson, 2021). Despite efforts to provide affordable housing, several challenges hinder successful implementation. High construction costs, including expensive materials and labor expenses, pose major obstacles. Land governance issues, requiring a review of land regulations, further complicate the provision of affordable housing. Existing studies have explored conditions for accessing affordable housing and determinants for ownership but have not specifically addressed the impact of housing models on the accessibility of affordable housing in Kenya (De Jorge-Huertas & De Jorge-Moreno, 2021; Olanrewaju and Woon, 2019;

Lateef and Idrus, 2020; Giti et al., 2020; Simón-Moreno and Kenna, 2019). This study aims to fill this critical gap by on determining the facilitative role of current regulations on accessing housing by providing insights into the specific dynamics at play in Nairobi County. Understanding how different housing models interact with regulatory frameworks will be essential for developing effective strategies to address the housing crisis, improve living conditions, and promote inclusive urban development in Nairobi County.

OBJECTIVES OF THE STUDY

To determine the facilitative role of current regulations on accessing housing by households in Nairobi County through different housing models.

LITERATURE REVIEW

This section addresses the theoretical, empirical literature review and conceptual framework.

Theoretical Review

In determining the facilitative role of current regulations on accessing housing by households in Nairobi County through different housing models, The Public Interest Economic Regulation Theory (PIERT) was used which underlines the pivotal role of government regulations in fostering housing affordability and ensuring the efficient allocation of resources. By emphasizing the importance of legislative and administrative controls, PIER asserts that governments play a crucial role in rectifying market failures and promoting optimal outcomes. Concurrently, the Q Theory of Housing Investment offers valuable insights into the relationship between investment decisions and market valuations, particularly concerning existing and new housing units. This theory illuminates the competitive dynamics within the housing sector, guiding the decisions of builders and developers, thereby influencing housing affordability and accessibility. Moreover, the Theory of Distributive Justice emphasizes the equitable distribution of resources, highlighting the need for government intervention to ensure fair access to housing, particularly for marginalized populations. By comprehensively examining these theories, this study aims to offer a perspective on the intricate interplay between regulations, market forces, and social equity, providing valuable insights into adoption of different housing models to access housing by households in Nairobi County.

EMPIRICAL REVIEW

Mortgage Model

Individuals interested in buying a home typically take out loans from financial institutions. In mortgage agreements, the lender retains a lien on the property while the borrower does not have full ownership rights until the mortgage is fully repaid. The lender holds both legal and equitable title to the property and can only exercise their right to seize the property to fulfill the mortgage obligation (Farías, 2021). Simón-Moreno and Kenna (2019) investigated the potential role of the EU Charter on Fundamental Rights in promoting a human rights perspective in the regulatory framework of the European Union (EU), specifically focusing on residential mortgage lending. The research aimed to tackle the difficulties arising from the commodification of housing on a global scale and the EU's limited capacity to effectively address emerging housing issues. By building on the existing correlation established by the Court of Justice of the EU (CJEU) between EU consumer law and the EU Charter on Fundamental Rights, the study explored the implications for residential mortgage lending. The primary finding underscored the potential influence of the EU Charter on Fundamental Rights on EU regulatory measures pertaining to mortgage lending, drawing attention to indications of divergence in mortgage law regimes within the EU, particularly regarding the differentiation between home loans and other types of mortgages.

Tajani and Morano (2018) conducted a study aimed at proposing and testing an innovative approach to evaluating the value of mortgage lending. The proposed method aims to enhance and streamline the appraisal process used by industry professionals, departing from the conventional methods typically employed. The methodology involves examining historical property values in 93 major cities across Italy, encompassing both residential and commercial properties, over a significant period spanning from 1967 to 2015. This analysis enables the derivation of reduction coefficients for market value based on the property's location in central, semi-central, or peripheral areas. These coefficients serve as the foundation for assessing the mortgage lending value through derivative appraisal. By effectively addressing the need for a rational assessment of property risk and ensuring the appropriate contextualization of risk factors associated with local demand and supply, these coefficients eliminate inconsistencies and the risks associated with relying solely on a simple percentage deduction from the market value. Consequently, this method provides a more comprehensive and accurate evaluation of the mortgage lending value.

Co-operative Model

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

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

Incremental Model

The step-by-step home building approach is a widely utilized construction method employed for numerous private residences globally. A variety of terms are used in the literature to describe the method of housing construction, but it essentially has the character of self-construction of housing by households (Jud & Winkler, 2003). We can explore different housing approaches including 'self-help housing,' 'assisted self-help housing,' 'self-managed housing,' and 'incremental housing.' Numerous scholars have emphasized the importance of incremental self-help housing, also referred to as incremental self-managed housing, as a vital strategy for housing development worldwide. Incremental housing refers to a gradual and step-by-step process in which homeowners construct or improve their homes by adding building components as they obtain funding, time, or materials. This approach allows for cost reduction in housing construction, particularly when compared to the construction of complete apartments by developers. The effective execution of incremental housing depends on the accessibility of adaptable and relatively small short-term loans that can accommodate the intermittent housing requirements of individuals or communities. This approach provides increased financial flexibility and empowers homeowners to actively engage in shaping their living environments. In contrast, traditional mortgage financing necessitates substantial funds to purchase or construct an entire home. Gradual housing development can serve as a significant driver to involve individuals in underprivileged households and communities (social development) and stimulate local businesses (economic development) (Darinka, 2018).

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

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

METHODOLOGY

This study employed a descriptive research design to comprehensively investigate the facilitative role of current regulations on accessing housing in Ruai Sub-Location, Ward of Kasarani Sub County, and Nairobi County. The research utilized both qualitative and quantitative data, with a focus on in-depth interviews with key stakeholders in the housing financing sector, including organizations like the Kenya Mortgage Refinance Company (KMRC), National Housing Cooperative Union (NACHU), Housing Finance Company of Kenya (HFCK), and Kenya Union of Savings & Credit Cooperatives (KUSCCO). Interviews explored strategies employed by these organizations, challenges faced, and steps to enhance housing access. Additionally, the study included interviews with the Head of the State Department of Housing and Urban Development and analyzed relevant housing acts, such as the Nairobi County Housing Act, to triangulate information and provide a holistic understanding of the regulatory landscape influencing housing accessibility. To capture the perspectives of residents, the study targeted heads of households in single-family dwellings and CEOs of housing financing organizations, with a sample size of 385 heads of households selected through simple random sampling. Data analysis involved descriptive statistics using SPSS for quantitative data and content analysis for qualitative insights. The research aimed to uncover challenges hindering the adoption of housing models and propose solutions, contributing to a deeper understanding of the interplay between current regulations and housing models in Nairobi County.

FINDINGS AND DISCUSSION

Housing Model

This information sheds light on the preferred financial strategies employed by residents when it comes to homeownership. Among respondents, the "Incremental Model" emerges as the most widely adopted housing finance model, with 34.4% of participants indicating their use of this approach. This finding suggests that a significant portion of the population in Ruai Sub-County favors a gradual savings and personal loans-based approach to homeownership. This aligns with the earlier finding that a substantial number of respondents were aware of this model (Figure 4.13) and reflects the appeal of a self-driven path to owning a home. The "Cooperative Model" is also popular, adopted by 33.4% of respondents. This model involves financing through cooperative societies, typically characterized by collective resource pooling for housing projects. The prominence of this model underscores the role of cooperative societies in facilitating housing access in Ruai Sub-County. It also signifies the willingness of residents to collaborate and leverage collective resources to achieve homeownership.

The "Mortgage Model" is chosen by 20.4% of respondents, indicating that a sizable portion of the population relies on mortgage financing to acquire or build their homes. Mortgages are a common method of spreading the cost of homeownership over an extended period, making them attractive for those seeking housing stability and long-term investment opportunities. Additionally, 11.8% of respondents specified "Other" housing finance models, suggesting a degree of diversity in their approaches. These "Other" models could encompass various creative or unconventional means of financing not covered by the predefined categories. This diversity reflects the adaptability of residents in exploring different avenues to secure their homes.

Understanding the motivations behind respondents' choices of housing finance models is crucial for gaining insights into the factors that influence their homeownership decisions. Respondents who adopted specific housing finance models in acquiring or building their current homes in Ruai Sub-County were asked to explain the reasons for their choices. For those who chose the "Mortgage Model," several common themes emerged. Many cited the appeal of "Lower interest rates" as a primary factor. Mortgages often offer competitive interest rates compared to other forms of borrowing, making them an attractive choice for those seeking cost-effective homeownership.

Others mentioned the "Longer repayment period" as a motivation, which allows for smaller monthly payments and greater financial flexibility. Additionally, "Easier access to financing" was another prevalent reason, as mortgages are readily available through financial institutions, making homeownership more accessible.

Among respondents who adopted the "Incremental Model," a key theme was the "Ability to save over time." This approach allows individuals to gradually accumulate the necessary funds, making homeownership achievable without incurring substantial debt. Avoiding "High-interest loans" was another prominent reason, reflecting a desire to minimize interest payments and the financial burden associated with loans. Some respondents mentioned "Personal preference" as a motivating factor, indicating a strong inclination towards this gradual approach.

For those who selected the "Cooperative Model," the most common reason was "Pooling resources with others." Cooperative models involve collective resource pooling, which can make it easier to embark on housing projects by spreading the financial burden among members. "Trust in cooperative societies" was another prevalent theme, suggesting that respondents had confidence in the cooperative approach to housing finance. Some also mentioned "Access to collective expertise" as a motivation, highlighting the value of the knowledge and support offered by cooperative societies. Respondents who specified "Other" models often had unique and personalized reasons for their choices. These reasons could range from specific financial arrangements to unique opportunities that suited their individual circumstances. The "Other" category reflects the diversity of financial strategies employed by residents to secure their homes.

Facilitative Role of Current Regulations

This section addresses the study objective which sought to determine the facilitative role of current regulations on accessing housing by households in Nairobi County through different housing models. In this section, insights from in-depth interviews with key stakeholders in the housing financing sector in Nairobi County were presented. The organizations interviewed include the Kenya Mortgage Refinance Company (KMRC), the National Housing Cooperative Union (NACHU), the Housing Finance Company of Kenya (HFCK), and the Kenya Union of Savings & Credit Cooperatives (KUSCCO), among others. The interviews shed light on the strategies

employed by these organizations to facilitate housing access, existing regulations, challenges faced, and steps needed to enhance housing access for households in Nairobi County.

Facilitative Role of State Department

In the interviews conducted with key stakeholders in Nairobi County's housing sector, the Head of the State Department of Housing and Urban Development highlighted the department's central role. Operating under Kenya's Ministry of Transport, Infrastructure, Housing, Urban Development, and Public Works, the department's primary objective is to formulate policies and regulations promoting sustainable urban development and enhancing housing access across Kenya, with a particular focus on Nairobi County. Collaborating with various stakeholders, including county governments, the department oversees and coordinates national-level housing and urban development initiatives, striving to create an enabling environment for housing access while addressing the housing deficit in Nairobi County. The interviews further shed light on organizations facilitating housing access in Nairobi County. The National Housing Corporation (NHC) emerged as a crucial player, offering affordable housing solutions through the development of housing projects and the provision of rental units and properties for purchase. Additionally, the Kenya Mortgage Refinance Company (KMRC) was highlighted for its role as a specialized financial institution. By partnering with mortgage lenders, KMRC provides long-term funding for mortgage loans, bridging the gap between mortgage financing availability and household needs. These organizations significantly diversify housing options and enhance accessibility for Nairobi County residents.

In terms of existing regulations, Nairobi County has implemented the Nairobi County Housing Act, creating a legal framework for urban housing and development. These regulations aim to ensure housing quality, safety, and accessibility while encouraging public-private partnerships and supporting housing cooperatives. While regulations provide stability and transparency, specific interventions were deemed necessary to address the identified challenges. For mortgages, the focus should be on adjusting eligibility criteria, monitoring interest rates, and enhancing financial education. Cooperative housing benefits from legal recognition, but further capacity-building programs and streamlined registration processes are essential. For incremental housing, simplifying land titling processes and creating specific zoning regulations tailored to incremental development are critical steps toward improving accessibility and security of tenure. These

findings provide valuable insights into the facilitative role of current regulations on accessing housing by households in Nairobi County through different housing models.

Facilitative Role of Financing Corporations

The KMRC representative emphasized their role in providing essential liquidity to mortgage lenders, enabling the availability of long-term financing for housing. Key regulations discussed included the Mortgage Act and the National Construction Authority (NCA) regulations, which govern mortgage financing and construction standards, ensuring transparency and safety in the housing market. KMRC acknowledged the importance of ongoing collaboration between KMRC, mortgage lenders, and regulatory authorities to simplify the mortgage application process and provide financial education to potential borrowers. The company was also highlighted by other key informant as a significant player in the housing finance sector. These organizations, among others, form a critical part of the ecosystem working towards enhancing housing access for households in Nairobi County, reflecting a multifaceted approach to address the housing challenges faced by residents. NACHU's interview highlighted their focus on cooperative housing solutions, supporting the formation and management of housing cooperatives. Regulations such as the Cooperative Societies Act and land-use/zoning regulations were mentioned as crucial frameworks for cooperative housing initiatives. NACHU emphasized the need for increased awareness and education on cooperative housing models among potential cooperative members.

They also stressed the importance of partnerships with regulatory authorities and local governments to create an enabling environment for cooperative housing projects. The HFCK representative discussed the institution's dedication to innovation, customer-centric approach, and responsible lending in the housing finance sector. HFCK primarily utilizes a mortgage financing model, offering a range of mortgage products tailored to diverse homebuyers' needs. Their focus on a streamlined mortgage application process, competitive interest rates, and flexible repayment terms was emphasized, aiming to make homeownership attainable for a wide range of Kenyan citizens. KUSCCO's interview highlighted the cooperative housing model as a key approach to facilitate housing access for their members. Through the cooperative housing model, KUSCCO members pool their financial resources and invest in housing projects collectively. KUSCCO provides guidance, support, and financial solutions to these cooperative housing initiatives, ensuring that members can work toward homeownership collaboratively. KUSCCO emphasized

the need for financial inclusion and housing access for its members through cooperative principles and values.

Perspectives on Existing Regulations

Both KMRC and NACHU emphasized the importance of existing regulations such as the Mortgage Act, Cooperative Societies Act, and land-use/zoning regulations. These regulations provide legal frameworks for mortgage financing, cooperative housing initiatives, and housing development standards, ensuring transparency, safety, and clear guidelines for housing projects.

CONCLUSION

The in-depth interviews conducted with key stakeholders in Nairobi County's housing sector provide valuable insights into the facilitative role of current regulations on accessing housing through different models. The State Department of Housing and Urban Development, in collaboration with organizations such as the National Housing Corporation (NHC) and the Kenya Mortgage Refinance Company (KMRC), plays a crucial role in formulating and implementing policies to promote sustainable urban development and enhance housing access. Existing regulations, including the Nairobi County Housing Act, create a legal framework for urban housing and development, emphasizing quality, safety, and accessibility while supporting public-private partnerships and housing cooperatives. Financial institutions, such as KMRC, the Housing Finance Company of Kenya (HFCK), and the Kenya Union of Savings & Credit Cooperatives (KUSCCO), also contribute significantly to housing access. KMRC provides essential liquidity to mortgage lenders, ensuring the availability of long-term financing for housing, while HFCK focuses on a customer-centric approach to mortgage financing. KUSCCO, through the cooperative housing model, enables members to pool resources and invest collectively in housing projects. The perspectives of these stakeholders underscore the importance of existing regulations, including the Mortgage Act, Cooperative Societies Act, and land-use/zoning regulations, in providing legal frameworks for transparent and safe housing initiatives. Recommendations for continuous collaboration, simplified regulatory processes, increased financial education, and fostering partnerships aim to create an enabling environment for accessible and viable housing solutions in Nairobi County.

RECOMMENDATIONS

To improve housing accessibility in Nairobi County, Kenya, stakeholders should collaborate to streamline regulatory processes, provide capacity-building programs, and advocate for supportive policies. Regulatory authorities should work closely with housing cooperatives to simplify registration processes and ensure legal recognition. For incremental housing, there should be efforts to simplify land titling processes and create specific zoning regulations. Stakeholders should engage in ongoing dialogue with regulatory authorities to ensure that regulations evolve to meet the changing dynamics of the housing landscape.

REFERENCES

- Darinka, C. (2018). Collaborative housing and housing providers: towards an analytical framework of multi-stakeholder collaboration in housing co-production. *International Journal of housing policy*, 1(1), 55-81. https://doi.org/10.1080/19491247.2017.1331593
- De Jorge-Huertas, V. & De Jorge-Moreno, J. (2021), "Analysis of the effects of (de)regulation on housing prices in Spain 1977–2019", *Journal of Economic Studies*, Vol. 48 No. 6, pp. 1194-1206. https://doi.org/10.1108/JES-01-2020-0008
- Farías, P. (2021), "Identifying the factors that affect the knowledge of mortgage loans' total cost", *International Journal of Bank Marketing*, Vol. 39 No. 1, pp. 69-84. https://doi.org/10.1108/IJBM-12-2019-0457
- Giti, D.M., K'Akumu, O.A. & Ondieki, E.O. (2020), "Enhanced role of private sector through public private partnerships in low income urban housing in Kenya", *Journal of Financial Management of Property and Construction*, Vol. 25 No. 2, pp. 293-312. https://doi.org/10.1108/JFMPC-07-2019-0057
- Green, M. (2017). Incremental construction: a strategy to facilitate access to housing. *Environment and Urbanization*, Vol. 20 No. 1, pp.89-108. https://doi.org/10.1177/0956247808089150
- Jain, A. K., & Paliwal, M. C. (2016). Adoption of Appropriate and Cost-Effective Technologies in Housing: Indian Experience. *International Journal of Economics and Management Engineering*, 6(5), 304-306.
- Johnson, A. B. (2021). Housing Challenges and Government Interventions: A Global Perspective. *Journal of Urban Development*, 25(2), 112-129.)
- Jud, D. G. & Winkler, D. T. (2003). The Q Theory of Housing Investment, *Journal of Real Estate Finance and Economics*, 27, 379- 392. https://doi.org/10.1023/A:1025846309114
- Kamau, F. K. (2014). Effect of Home Ownership Models On Rate of Owning Homes among Low Income Households in Nairobi County, Kenya
- Kenya National Bureau of Statistics (KNBS). (2019). Kenya Population and Housing Census 2019. Nairobi, Kenya

- Kipkirui, R., & Rotich, J. K. (2015). Urbanization Challenges and Housing Affordability: A Case Study of Nairobi. *Journal of Urban Studies*, 12(3), 45-62.
- Lateef O. A. and Idrus, A. (2020), "What is determining affordable housing shortages in the Greater Kuala Lumpur, Malaysia?", *Property Management*, Vol. 38 No. 1, pp. 52-81. https://doi.org/10.1108/PM-05-2019-0025
- Olanrewaju, A. and Woon, T.C. (2019), "An exploration of determinants of affordable housing choice", *International Journal of Housing Markets and Analysis*, Vol. 10 No. 5, pp. 703-723. https://doi.org/10.1108/IJHMA-11-2016-0074
- Simón-Moreno, H. and Kenna, P. (2019), "Towards a new EU regulatory law on residential mortgage lending", *Journal of Property, Planning and Environmental Law*, Vol. 11 No. 1, pp. 51-66. https://doi.org/10.1108/JPPEL-06-2018-0017
- Tajani, F. and Morano, P. (2018), "An empirical-deductive model for the assessment of the mortgage lending value of properties as securities for credit exposures", *Journal of European Real Estate Research*, Vol. 11 No. 1, pp. 44-70. https://doi.org/10.1108/JERER-01-2017-0007
- World Bank, (2017). The Microfinance Revolution: Sustainable finance for the Poor.