

# **FACTORS INFLUENCING THE PROVISION OF AFFORDABLE HOUSING IN NAKURU CITY, KENYA**

**Lameck Onyango Okeyo.**

Master of Public Administration and Management, Mount Kenya University, Kenya.

**Dr. Ruthwinnie Munene.**

Lecturer, Mount Kenya University, Kenya.

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## **ABSTRACT**

The primary driver of urbanization is housing, and access to decent, reasonably priced housing is crucial in all cultures. In Nakuru, as in most developing countries, there is a significant gap between supply and demand for housing. Similar to the majority of developing-nation cities, Nakuru has a housing shortage due to a high demand for houses. The purpose of this study was to investigate factors influencing the provision of affordable housing in Nakuru City, Kenya. The study objective was to examine how the cost of land influences the provision of affordable housing in Nakuru city, Kenya. The survey design used in the study was descriptive. The study's target population consisted of Nakuru City, Kenya's property development entities. Simple random sampling was used to select a sample size of 112 from the target population. The principal tool for gathering data was a questionnaire. At Narok Town, a pilot test was conducted to evaluate the reliability and validity of the

findings. The replies were processed and tabulated using the Statistical Package for Social Science (SPSS) to enable grouping into different categories. The data were analyzed using descriptive statistics like means, standard deviation, and frequency distribution. Regression analysis and inferential statistics were used to determine the degree to which the factors affect the availability of cheap housing solutions in Nakuru City, Kenya ( $r = 0.487$ ;  $p < 0.05$ ). The study indicated a moderate positive and statistically significant correlation between land cost and affordable housing provision in Nakuru City, Kenya ( $r = 0.507$ ;  $p < 0.05$ ). The study recommends that land pricing should be regulated to ensure more land is acquired; moreover, there is a need to study green building technology to overcome the problem of land cost and availability, considering the high population in need of affordable housing in Nakuru and other cities in Kenya.

## **INTRODUCTION**

### **Background to the Study**

In its forty-third session, the United Nations General Assembly adopted the Global Shelter Strategy in 2000. The strategy's main objective was to facilitate adequate shelter for all by the year 2020, focusing on improving the situation of the disadvantaged and poor. Governments were responsible for developing appropriate institutional frameworks for strategy implementation, developing administrative, institutional, and legislative tasks (dealing with land legislation and construction), developing and implementing measures for national shelter policies, and creating an enabling environment for other sector players. Governments were also required to establish arrangements for continuously monitoring, reviewing, and revising the strategy. Governments in Third World countries need more resources to meet the urban population's housing demands, leading to serious housing gaps (Erguden, 2021).

### **Regional perspective on housing**

Africa has experienced unprecedented urban growth, with the most pronounced growth occurring in Sub-Saharan Africa. The metropolitan population is currently estimated at 40% of the total population and is poised to rise and surpass 50% by 2030. The sizeable migration flows from rural areas present daunting challenges for development regarding access to housing, infrastructure, and essential services. Due to the rapidly rising population, Africa faces enormous development challenges in urban areas manifested in the proliferation of unplanned housing, low access to basic services, rising insecurity, and growing poverty. Housing policies have focused on slum upgrading and the provision of serviced plots for the urban poor. (Erguden, 2021).

### **Local Perspective on Affordable Housing**

Three pillars support Kenya's Vision 2030: political, social, and economic. Within its social pillar, the government provides programs for citizens to live in suitable and inexpensive housing. One of the most important necessities for humans, housing is ranked in the top three. In every nation, having enough housing is essential since it boosts the economy (Erguden, 2021).

A significant amount of a nation's wealth is comprised of permanent assets, such as housing, on which households spend a large percentage of their earnings. Since the beginning of urban civilization, housing has been a problem for people, families, organizations, and governments.

This issue has frequently been connected to issues with land acquisition, low personal income, high building material costs, statutory restrictions, and the underutilization of readily available, reasonably priced alternative building materials in the area. Shelter provision is one of the biggest issues facing the globe today (Golland, 2016). Kenya is seeing a rapid increase in its urban population as a result of constrained land supply and slow economic growth. More people are

renting since fewer people can afford to own their own homes. In Kenyan towns, rental housing has historically been linked to lower-class households, but it is now also the primary source of housing for middle-class people (Ichangai, 2018). Like the majority of developing-nation cities, Nakuru has a housing shortage due to a high demand for housing.

In Nakuru, middle-class and lower-class residents have not been able to get inexpensive housing thanks to the low-house market providers. Nowadays, 150,000 additional housing units are needed annually in metropolitan areas; only 23% of this demand is being satisfied. Since they make up 48% of the needed new housing stock, low- and middle-class households are particularly affected by the supply and demand imbalance. As a result of inadequate housing, informal settlements like slums have grown in number. Many are compelled to live in cramped spaces or are abandoned completely. More than 60% of people in Nakuru City, according to some studies, live in slums.

Many Kenyans' existing living conditions have led to inadequate infrastructure, low health standards, and a lack of facilities and deterioration of the ecosystem. When one lacks the security of a safe home, it is challenging to maintain employment, go to school, take care of a family, and ensure mental and physical health. An outstanding and affordable place to live has a significant impact on the social, economic, and physical well-being of a household and community. Ichangai (2018) .

Kenya still has to address the appalling housing circumstances of its people, despite some initiatives to provide suitable housing for Kenyans. In the past, governments have tended to focus on providing a small number of living quarters for its deserving officials, leaving this crucial sector nearly exclusively to private sector work. Due in large part to the efforts of private sector home developers—who have been an essential source of housing, especially in (Hassanali, 2019). Nonetheless, the market for low-cost, accessible housing is small, and it doesn't appear that other private sector home builders would be very interested in entering it. In the middle-class and upper-class home markets, these private developers have found success. This suggests that they possess the ability and knowledge necessary to provide the low-income housing needed to lessen the nation's housing shortage (Hassanali, 2019). But mostly because the profit margins are smaller than in other home developments, they have avoided the low-income sector

### **Affordable Housing Market Players**

Affordable housing is being built by a number of developers for lower- and middle-class workers in the larger Nakuru Metropolitan Area. The private sector started building homes in 2017 for a total of Kshs 11.9 billion, an increase of 6.9% from the year before (Statistical Abstract, 2018). Nevertheless, these private developers have mostly focused on the medium and upper portions of the market, paying very little attention to the low-income market, despite the intense private sector activity. Less than 30% of private construction projects are low-income housing units, however this is the market sector with the greatest need (Otiso, 2019).

Planning, land distribution, development, and upkeep of housing estates were all under government control in the past thanks to the National Housing Corporation (NHC). Through tenant purchase, mortgages, rentals, and rural housing loan programs, the NHC offers subsidized housing and carries out government housing policies and programs (NHC, 2019). Although this should have been possible in theory, there is currently a serious issue because central government spending on housing has been steadily declining due to parastatal activities, price controls, inappropriate building codes and regulations, and a lack of critical planning and service provision (Otiso, 2019).

In order to bridge the gap caused by the housing crisis, particularly for low-income households, NGOs have had to step in. The Humanitarian Habitat Low-income families with less than 500 housing units have received minimal project-based housing assistance from Kenya and the K-Rep Development Agency. A few other development organizations have also surfaced in an effort to solve the issue of impoverished city people. The deposit-taking microfinance firm Jamii Bora Bank offers a variety of services to those who are struggling with poverty. It is currently working on a project to construct low-cost, affordable housing for its members, offering the participating families housing microfinance loans. Hassanali (2019). Housing is a process as well as a product. As a product, it gives the housing fabric security, privacy, and dignity. The Kenya National Housing Policy (2004) states that it also keeps societal dissatisfaction and instability at bay.

In order to develop sustainable human settlements, it is also a procedure that provides all socioeconomic classes with enough housing and a wholesome, supporting atmosphere. A decent place to live and housing are recognized as human rights in the 1948 Universal Declaration of Human Rights. Merely 2% of the global populace lived in cities in 1800. By 1950, this had increased to 30%, by 2000 to 47%, and by 2008 to above 50%. 60% of people on the planet will reside in cities by 2030. Habitat (UNCHS), 2016. One estimate puts the daily rise in urban population at 180,000. According to UN-Habitat (2000), over 750 million of the approximately one billion impoverished people on the planet are thought to reside in metropolitan areas without access to sufficient housing and basic amenities.

According to the 2010 Kenyan Constitution, the government of Kenya formally acknowledges housing as a fundamental human right. In an effort to improve the housing situation in the nation, the government created Sessional Paper No. 5 in 1966–1967 and Sessional Paper No. 3 of 2004 on National Housing Policy for Kenya. When Sessional Paper No. 5 was created, there were around nine million people living in Kenya and 7,600 units of housing were needed annually in metropolitan areas. According to the policy, the government had to give the greatest number of people access to a healthy environment and suitable housing at the lowest feasible cost. Habitat (UNCHS) (2016).

Up to 2014, the National Housing Policy (Sessional Paper No. 3 of 2004) served as a roadmap for housing sector development. The goal of the strategy was to stop the worsening housing conditions and fill the gap in the housing stock caused by demand, which was much higher than supply. In the time of policy development, the nation's yearly requirement for urban housing was 150,000 units. By contrast, the market could only produce 30,000 units, resulting in a 120,000 unit shortfall. Both in absolute terms and as a percentage of the country's total population, Kenya's urban population has been growing. UN-Habitat (2019). In 2010, the United Nations Population Division calculated that 9.1 million people lived in urban areas, out of an estimated 40.9 million people overall. 22.24 percent of the nation's total population lived in urban areas, up from 20.2% in 2005 (UN-Habitat, 2019). The same source projects that by 2015, Kenya's urban population will have grown by 24.1%, and by 2020, it will have increased by 26.6%. The population of the town increased from 307,990 in 2009 to 517,780 in 2019, based on the Kenya National Bureau of Statistics data abstract of 2012 and the Nakuru District Development Plan (2008-2012). By 2012, it was expected to increase to 395,291. This shows a 71% increase in population over the previous 23 years. As per UN-Habitat (2019), Nakuru's population is increasing at a pace of 13% per year, making it the fastest-growing town in Africa. These statistics are based on the 2019 census. To date, the housing provision in Nakuru remains minimal and sporadic, with demand outstripping supply. The problem of high urbanization rates has been compounded by increasing poverty and escalating housing provision costs.

### **Statement of the Problem**

Beginning as a railroad outpost along the Mombasa, Nairobi, and Kisumu Railway line, Nakuru City was founded in 1904. The 1929 zoning plan for Nakuru was designed based on the then-applicable "principle of functional zoning," which included an industrial zone, residential areas for different social categories, a handy location for a hospital and cemetery, recreational centers, an airport, etc. Since most of Nakuru's urban population is made up of low- and middle-class income earners, suitable, affordable, and quality housing has become increasingly rare due to the city's rapid urbanization. Kenya's fast urbanization has outpaced the availability of housing, and urban planning has not been able to keep up. Currently, 180,000 additional housing units are needed annually in metropolitan areas; only 28% of this demand is being satisfied. Since they make up 48% of the needed new housing stock, low- and middle-class households are particularly affected by the supply and demand imbalance. In an ideal world, more people living in cities would present developers with a wealth of opportunities due to rising housing demand; in reality, things are not so simple. Less than 35% of private construction projects are low-income housing units, however this is the market segment with the greatest need (Otiso, 2019).

Based on statistical summaries from 2000 to 2012, the Kenya National Bureau of Statistics found that the country's population was changing at a faster rate than the number of residences. In Nakuru, the following number of new residential housing units was built. Three thousand eighty-nine units were obtained in the following years: 1999 (90 units), 2000 (389 units), 2001 (63 units),

2002 (61 units), 2003 (65 units), 2004 (311 units), 2005 (27 units), 2006 (458 units), 2007 (487 units, derived from extrapolation), 2008 (516 units), 2009 (426 units), 2010 (435 units), and 2011, 435 units. Between 1999 and 2009, the population increased by 76,728 while the number of dwelling units increased by 2,893.

The expanded housing stock could only accommodate 11,572 people at the rate of 4 people per home (Nakuru et al. Plan, 2019), meaning that 65,156 people, or 16,289 households, would remain without official accommodation. (Nabutola 2018). The need for basic infrastructure and services, such as roads, water, sanitation, and housing, has increased due to the expanding population. The county council now finds it more challenging to meet the needs of the city's citizens as a result of the strain this has placed on already limited resources. Studies are still needed to determine the factors impacting the availability of inexpensive housing options from the perspective of current and potential home developers in this market sector, despite the constantly growing urban population.

### **Purpose of the Study**

This study investigated the factors influencing the provision of affordable housing in Nakuru City, Kenya.

### **Objectives of the study**

- i. To examine the influence of the cost of land on the provision of affordable housing in Nakuru City, Kenya.

### **Research Question**

- i. To what extent does the land cost influence the provision of affordable housing in Nakuru City, Kenya?

## **LITERATURE REVIEW**

### **Introduction**

This chapter reviews the literature on affordable housing. The chapter discusses theoretical and empirical review. A conceptual framework is demonstrated and recap of literature review.

### **Empirical Review**

#### **Land Cost on Affordable Housing**

When it comes to production, land is essential. Having access to land is essential for building affordable housing (UN, 2018). Land is extremely rare since it is minimally available and necessary for the construction of cheap dwellings. As a result, there is an expanding group of landless people, and it is getting harder for them to get land and shelter on a daily basis. This is a

noteworthy statistic because, in most situations, land was no longer properly supplied or allocated for low-income housing in the past. According to Nabutola (2018), the state and municipalities are the primary owners of land in metropolitan areas, which is highly valued. Landowners other than speculators seeking rapid profits are nonexistent. Because of this, most people who need land the most are unable to obtain it or cannot afford it. The location, closeness to commercial, academic, and health facilities, as well as the availability of public transportation, all have an impact on land prices. The price of land is expected to decrease with distance from the city center. Land costs in metropolitan peripheries might be low enough for impoverished populations to afford. Unfortunately, many locations lack or offer insufficient amenities and services. When comparing the land market's performance in Colombia with the country's agrarian reform, (Renaud, 2017) discovered that the land market's rental and sales sector distributed land more efficiently to productive farmers than it did to low-income producers.

There may be opportunity to enhance the way the land market operates and to provide better access to land, given that the land purchases were all short-term and that not much land was moved from major landowners to small landowners or landless individuals. under the least favorable circumstance. This made it easier to examine the variables that contributed to a sample of large land users' land transfers to smaller users. Renaud (2017) noted that this approach helped identify the important political components of both interactions in a knowledgeable manner. One of the biggest barriers to resolving housing issues in emerging nations is the absence of a reliable credit market. The majority of families view their home as their most significant financial investment, and they require financing to make this purchase.

But the majority of people in developing nations struggle to obtain financing, which puts an end to their hopes of owning good homes. While the urban poor live in unstable or temporary housing, traditional mortgages frequently need complete legal title as collateral (UN-HABITAT, 2019). Incentives for financial institutions to lend to the impoverished are needed. Innovations that would benefit the urban poor are impeded by small loan amounts, high transaction costs, and additional credit checks. Furthermore, there aren't enough resources available to the government to finance homes. This made it extremely difficult to build decent homes, particularly in underdeveloped nations. The majority of developing nations lack public sector financial institutions that can provide the necessary capital as essential building materials.

The growth of the financial institutions that finance housing purchases and construction is intimately tied to the overall intricacy of the nation's financial system. The latter is likewise very dependent on how the global economy develops. Government regulations, like those that restrict lending to specific industries, impede the expansion of housing finance companies. All socioeconomic classes should have access to land for the construction of homes. Making ensuring impoverished households have access to land in appropriate areas is the first step in finding solutions to housing issues. According to Greene and Rojas (2020), land acquisition enables low-



income families to construct homes in metropolitan areas and gain access to other essential services and employment prospects. It speaks to the placement, kind, and dispersion of transportation hubs as well as other public infrastructure services (Payne, 2020). According to Payne, extremely impoverished urban households prioritize obtaining land where they can make the most of their incomes. These regions are typically urban, where there is intense competition for land and high land costs. Payne goes on to say that established impoverished households choose to build their homes in less central urban places because they can afford the transportation costs, and housing that makes this possible has a significant role in service availability and acknowledgment. Land use control regulates development in metropolitan areas. The majority of nations have given local governments the power to control how land is used.

The latter employ their regulatory authority to stop the development of housing for the impoverished. Fiscal zoning and zoning laws are the most significant land use regulations in terms of their exclusionary effect. Policies that control land use, population density, and land use intensity are known as zoning ordinances. They establish minimal requirements for each region and divide the property into areas according to different land use types, such as residential, commercial, or industrial. Multiple houses and minimal lot sizes control population density (Morris, 2018). Local governments typically control development in ways that result in remote places because they make decisions about land use policy without the oversight or involvement of other governing bodies.

A system of zoning laws and policies known as "exclusionary zoning" keeps affordable homes out of the reach of the underprivileged. Land that can be used for housing is restricted by zoning laws (Gichunge, 2021). Local governments employ the fiscal zoning scheme to increase property taxes. "The rules of the tax eligibility game state that participants, such as qualifying jurisdictions, must draw in uses that increase local taxes or property taxes to cover the cost of expensive public services and weed out uses that don't provide something back.," stated the US National Commission on Urban Problems in their description of the procedure. Local governments oppose uses like low-income housing in favor of commercial and industrial applications, including luxury homes. This is because low-income housing has a smaller share of property taxes collected because of their low assessed value. Thus, we discover that low-cost housing—both official and informal—is frequently located on a city's periphery. Low-income developments can be more affordably situated in the suburbs. The subsidy falls short of covering the cost of land in underdeveloped nations. Usually single-use communities, these buildings are located distant from places of employment, commerce, housing, and transit. The repercussions for this region include time spent traveling to and from opportunities, time spent away from home, and the associated financial consequences (Hancock, 2018).

The disproportionate expenses that authorities bear when delivering mass services to remote areas, the onerous travel costs and lengthy travel durations that impoverish low-income households must

bear, and the substantial environmental expenses linked to excessive transportation and inefficient land use practices (Hassanali, 2019). For those who are underprivileged, location often matters more than housing quality since it directly impacts their access to metropolitan opportunities and fosters social networks that are necessary for survival.

(Nabutola, 2020). Low-income housing is encouraged on the outskirts of cities since residential zones are still segregated based on social class or position. Aside from that, the acquisition of land in the Western Cape of South Africa has presented obstacles to the creation of low-income housing and the realization of physically and functionally integrated human settlements, where the poor and vulnerable are situated on land that improves access to opportunities.

In addition to having an impact on housing affordability, the unstoppable trends of urbanization and the concentration of poverty in some places have left a significant land scarcity for reasonably priced homes (Nabutola, 2019). While the market provides the majority of the land for housing, many high-growth zones need coordinated planning by all levels of government in conjunction with civil society and long-term urban planning projects in order to provide a 20–25 year supply of land for new dwellings. Land trusts, inclusionary zoning, density bonusing, and land lease agreements are some of the strategies that a number of regional and local governments have tried to increase the quantity of land available for affordable (social) housing.

Local governments in South Africa were only allowed to provide housing land acquisition, in part due to a disconnect between housing policies and spatial plans, thus they lacked uniform methods for acquiring land for low-income housing. (Local Government and Housing Department, 2018). Acquiring public land can be challenging due to several factors, including the fact that state land at the federal and provincial levels is assigned to specific government departments, market forces influence state land disposal, Additionally, parastatals like Transnet currently possess a sizable chunk of public land (Department of Local Government and Housing, 2018). The core of housing is real estate and land management. The laws pertaining to land and property in Kenya are a holdover from the colonial era and comprise a multifaceted, intricate administration mechanism. Customary law managed property ownership in general and could differ according on cultural practices, prevalent land usage, or ethnicity (Maailmapank, 2021).

## **Theoretical Framework:**

### **Housing Tenure Choice Economic Theory**

Three methods can be widely distinguished within the theory of housing markets, which align with the historical history of the discipline. When it comes to localization, heterogeneity, durability, and housing taxation, the first one sticks to the premise of an ideal, frictionless, competitive market mechanism (Smith, 2016). In the mid-1980s, this field of study acquired a significant level of maturity. Our knowledge of metropolitan spatial structure, housing supply and demand factors,

and the estimation of prices for diverse items have all significantly improved as a result. But with the premise of an ideal home distribution process, the welfare consequences remain banal. Housing markets seem efficient as long as all participants are rational and forward-thinking, perhaps with the exception of local externalities (NHC, 2019). On both sides of the market, despite the vast number of agents, competition might be improved due to search and movement expenses. Subtle turnover externalities are produced by incomplete contracts, and search externalities lead to vacancy rates that diverge from first-best. The policy ramifications are usually more interesting, which is not surprising. Although practically the same characteristics that prohibit the market from achieving first-best efficiency render the desirability of government involvement irrelevant, in theory efficiency can frequently be increased with suitable state action.

More affordable housing is required by many households in developing nations. In emerging nations, the focus of urban housing reform has switched from a planned economy to more market-oriented housing initiatives that are managed by local governments. However, housing reform has made houses more expensive, and a strong demand for affordable housing exists at the lower end of the market. According to Ichangai (2018), the population's affordability has significantly decreased as a result of the main housing reform program.

### Conceptual Framework

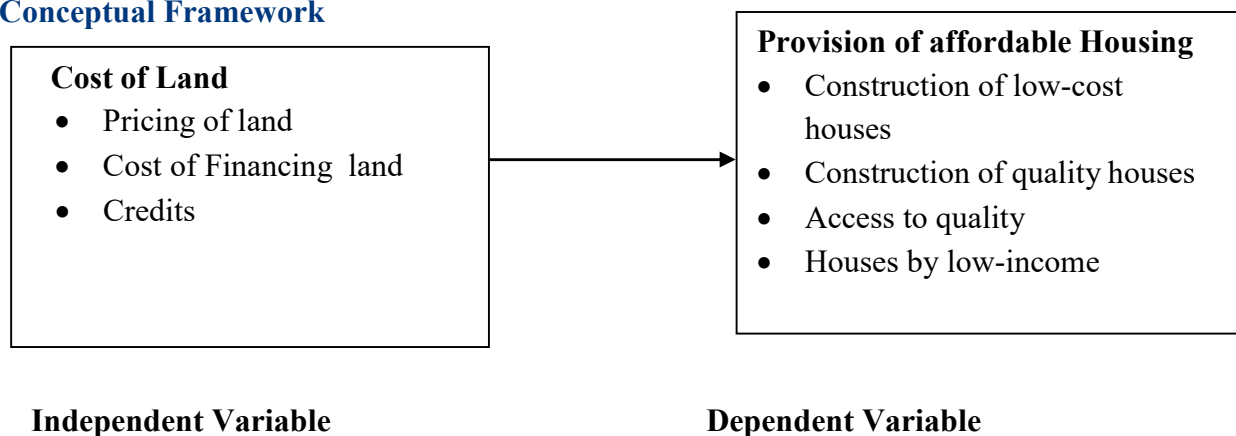


Figure 1: Conceptual Framework (Source researcher, 2023)

## RESEARCH METHODOLOGY

This chapter presents the procedures used to conduct the research, including research design, focus group, sampling and sampling procedures, data collection methods, and data analysis.

### Research design

The study employed a descriptive survey approach with the aim of obtaining respondents' thoughts or experiences on a certain subject in a pre-planned, structured manner. Kothari (2018) states that in order to gather the needed information, descriptive design entails planning, organizing, collecting, and analyzing data. Since the primary goal of the study was to evaluate the factors influencing affordable housing in Nakuru, Kenya, the design seemed acceptable.

## **Target Population**

According to Bryman (2016), a population is a collection of human components, occasions, and problem groups under study. The 120 property development units specified by the Kenya Property Developers Association (KPSDA) were the study's target population. There was uniformity in the study population.

## **Sampling technique and sample size**

Using basic random sampling, a sample of 25% of the target population was obtained. Thirty managers of the property building units in Nakuru Township were among them, and four managers were chosen from each property developer. A representative sample, as defined by Mugenda & Mugenda (2018), should comprise at least 10% or 30% of the population; hence, 25% was deemed representative of the research. A total of 120 project managers from real estate development companies participated in the study, providing information. Because they were involved in ongoing choices about housing building, project managers were deemed respondents because they could better supply the information required to address the research questions.

## **Data Collection instrument**

The primary instrument for gathering data was a closed questionnaire. The survey's objective was to provide a quick overview of the variables affecting the availability of reasonably priced housing in Nakuru, Kenya. The drop and choose approach was used to distribute the questions to the responders. 3.6 A preliminary analysis. To evaluate the instrument's reliability and validity, a pilot study was carried out. To help the researcher become acquainted with the study and its administrative processes and to pinpoint areas that needed improvement, a pilot study was carried out in Narok, Narok County.

## **Data Analysis Techniques**

Both qualitative and quantitative approaches were used to analyze the data. The completed surveys were edited and sorted for consistency and completeness before being subjected to analysis. Data was coded and tabulated using the Statistical Package for Social Sciences (SPSS edition 26), which resulted in the classification of responses into many categories (Kumar, R. (2023). Tanui (2021) states that inferential statistics, regression analysis, and correlation were employed to ascertain the extent of factors influencing the availability of affordable housing options in Nakuru. The linear equation below was used to illustrate the relationship equation for a multivariate regression model:

$$Y = \alpha + \beta_1 X_1 + \mu$$

Y= Provision of Affordable housing; X<sub>1</sub>= Cost of land

μ=Error, β= Coefficient of the independent variables

## **Ethical Considerations**

In all phases of the research process, the researcher was sensitive to ethical aspects. Before conducting the study, permission was requested from the National Commission for Scientific Technology and Innovation (NACOSTI). In addition, relevant letters of authorization and approval were sought from the ERC and Mount Kenya University Graduate School. Consent was sought from the selected participants, who were informed of the objectives of the study before submitting

their request to participate. Participants were assured of a high level of confidentiality and their true identity remains anonymous. The researcher was committed to unbiased reporting of **quantitative and qualitative research findings.**

## **RESEARCH FINDINGS AND DISCUSSIONS**

### **Introduction**

Data analysis, results presentation, and discussion of the findings are the main topics of this chapter. The main goal of the study was to look at the variables affecting the availability of affordable housing in Nakuru City, Kenya.

### **Response Rate**

One hundred and twenty questionnaires were collected throughout the survey. On the other hand, 112 forms were accurately completed and returned. This signified a response rate of 93% that was successful. It was also verified that the information provided to the respondents was confidential. According to Trex (2012), a response rate of 50% is sufficient, 60% is favorable, and 70% or above is the best for analysis. This indicates that 93% of the responses were sufficient for data analysis.

*Table 1: Response Rate*

Sampled respondents	No. of No. Returned	of Questionnaires	Response Rate (%)
120	112		90

*(Source field data,2024)*

### **Background Information**

#### **Gender of the Respondents**

The gender of the respondents who took part in the study was a goal for the researcher. Table 2 presents the findings.

*Table 2: Gender of the Respondents*

Gender	Frequency	Percentage (%)
Male	49	44
Female	63	56
<b>Total</b>	<b>112</b>	<b>100</b>

*(Source field data,2024)*

The data shows that forty-nine respondents (44%) were men, and 63 (56%) were women. This implies that men made up the majority of respondents. However, it was found that most people in Nakuru City were female due to gender diversity in inexpensive housing.

#### **Category of the Company**

The investigator attempted to ascertain the type of business that was a part of the investigation. The results are presented in Table 3.

**Table3 : Category of the company**

<b>Category of the company</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Private company	53	47
Non-governmental	12	11
Government agency	47	42
<b>Total</b>	<b>112</b>	<b>100.0</b>

*(Source field data,2024)*

The findings show that 47% of the companies were private. This was followed by government agencies, at 42 %, and the minority were Non-governmental companies, at 11%. This implies that most of the respondents who participated in the study were in private companies, suggesting that most private companies are involved in affordable housing in Nakuru City, Kenya.

### **Type of housing properties provided by the organization**

The researcher intended to determine the types of housing properties the organizations included in the study gave. The findings are indicated in Table 4.

**Table 4: Type of housing properties provided by the organization**

<b>Type of property</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Low-cost housing	38	34
housing for middle-class people	61	54
High-end residence	13	12
<b>Total</b>	<b>112</b>	<b>100.0</b>

*(Source field data,2024)*

The findings show that the majority of the housing organizations provided middle-income residential properties, comprising n=61(54%). This was followed by low-cost residential properties, n=38 (34 %), and the minority provided high-end residential properties, n=13 (12%). This implies that most housing organizations in Nakuru City, Kenya, provide affordable housing to middle-income residents. This could be attributed to the increasing population and the fast growth of the city, leading to a high demand for housing facilities.

### **Number of housing units provided by the organization in a single year**

The researcher intended to determine how many housing units had been built in Nakuru within a year. Table 5 presents the findings.

**Table 5: Number of housing units during the year by the organization**

<b>Number of housing units</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1-100	55	49
100-500	46	41
500-1000	7	6
More than 1000	4	4
<b>Total</b>	<b>112</b>	<b>100.0</b>

*Source field data,2024)*

## Descriptive statistics

### Land price for affordable housing in Nakuru city

The purpose of the study was to estimate the current land prices in Nakuru city for affordable housing in Nakuru town. The results are shown in Table 6.

Table 6: *Rate of current land prices in Nakuru city on affordable housing*

Rate	Frequency	Percentage (%)
Reasonably priced	62	55
Expensive	32	29
Very expensive	18	16
<b>Total</b>	<b>112</b>	<b>100.0</b>

(Source field data,2024)

Most respondents, or n = 62 (55%) of the research participants, agreed to a considerable extent that the price was appropriate when it came to the rate of current land prices for affordable housing in Nakuru City. After this, there were others who thought the rate of payment was high. n=32(29%), influencing affordable housing. Those who agreed that the land price rate was costly were n =18 (16%). These results implied that the land cost in Nakuru City was reasonably priced, influencing affordable housing in Nakuru City, Kenya. This could increase the number of affordable housing units the companies provide in Nakuru City, Kenya.

### Land prices on provision of affordable housing projects in Nakuru City, Kenya

The goal of the study was to determine how land prices in Nakuru City affected initiatives for affordable housing. The outcomes are displayed in Table 7.

Table 7: *Land prices on the provision of affordable housing in Nakuru City, Kenya*

	Frequency	Percentage (%)
Yes	88	79
No	24	21
<b>Total</b>	<b>112</b>	<b>100</b>

(Source field data,2024)

The results of the study showed that the majority of respondents, n=88 (79%), reported that land prices influence affordable housing. A minority of the respondents, n=24 (21%), reported that the land cost does not influence affordable housing. This implies that land cost influences affordable housing in Nakuru City, Kenya.

### An analysis of how land costs affect the availability of reasonably priced housing in Nakuru City, Kenya

The aim of the research was to determine the degree to which land prices impact the availability of reasonably priced housing. Statements about land availability and its impact on the provision

of affordable housing in Nakuru were rated as follows (1 = no extent, 2 = less, 3 = moderate extent, 4 = large amount, and 5 = very large amount). The results are shown in Table 8.

**Table 8: Influence of cost of land on the provision of affordable housing in Nakuru City**

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
High demand for growth that is appropriate A piece of land influences its cost.	2	6	24	32	36
The price of land in Nakuru City is impacted by the lack of adequate development land.	8	12	20	31	29
Nakuru city's bureaucratic acquisition procedures affect the price of land	6	19	21	25	29
High land costs affect land prices in Nakuru	13	17	21	23	26
Cultural ties to land affect land prices	9	15	24	35	17
unregulated market in Nakuru affects land price	5	10	23	32	30
High land fees and charges affect land prices in Nakuru	3	8	19	33	37

*(Source field data,2024)*

According to the poll, the state's expense of building affordable homes is impacted by the strong demand for suitable construction site., with a majority agreeing significantly, at 36 percent, and deciding mostly at 32 percent. A moderate portion of 24% agreed to a lesser extent with 6%, while a minority of 2% strongly disagreed. The price of reasonably priced residential land in Nakuru, Kenya is influenced by the high demand for suitable development site, according to these findings. Survey findings on the scarcity of suitable development land in Nakuru City will affect land prices. Providing affordable housing showed that a majority of 29% agreed and 29% strongly decided. Of those who moderately agreed with 20%, 12% agreed to a lesser extent and a minority of 8%. These results indicated that the scarcity of suitable development land in Nakuru City affects the price of land in providing affordable housing in Nakuru City, Kenya. Results of a survey on Nakuru City's bureaucratic land acquisition procedures, which affect the cost of land in providing affordable housing, showed a majority of 29% agreed and a majority decided 25%. Of those who moderately agreed, 21% agreed to a lesser extent 19% and a minority disagreed 6%. These results indicated that bureaucratic land purchase procedures in Nakuru City affect the price of land for affordable housing in Nakuru City, Kenya. A poll on the high cost of land transfer affecting land prices to provide affordable housing in Nakuru town showed a majority of 26% and a majority decided at 23%. Among those who made a moderate choice, 21% agreed with the minority, 17% and the minority did not choose at all, 13%. These results indicated that high land transfer costs affect land prices in Nakuru City, providing affordable housing in Nakuru City, Kenya.



Poll results on cultural ties to the state affecting the state's cost of providing affordable housing showed a majority of 35% agreed and 17% strongly decided. 24% moderately agreed and 15% to a lesser extent, the minority disagreed 9%. These results showed that cultural ties to the country affect the country's cost of providing affordable housing in Nakuru, Kenya. The deregulated real estate survey results of Nakuru City, which affected the country's prices in providing affordable housing, showed a majority of 30% and 32% strongly agreed. Among those who moderately agreed, 23% and 10% agreed to a lesser extent, while a minority disagreed at 5%. These results indicated that the unregulated real estate market in Nakuru City affects land prices and the supply of affordable and affordable housing solutions in Nakuru City, Kenya. Research findings have shown that high land fees and charges affect land prices in Nakuru town; the majority strongly agreed at 37% and those who were mostly decided were 33%. Of those who moderately agreed, 19% agreed to a lesser extent 8% and a minority disagreed 3%. These results indicated that high land fees and charges affect the price of land in Nakuru City and the provision of affordable and affordable housing solutions in Nakuru City, Kenya.

## Inferential statistics

### Linearity test

*Table 9 : Linearity between cost of land and provision of affordable housing*

			Sum of Squares	df	Mean Square	F	Sig.
(Combined)			3.647	67	.327	3.321	.021
Provision of affordable housing * cost of land	Between Groups	Linearity	2.012	7	2.212	19.232	.001
		Deviation from Linearity	1.515	61	.187	1.721	.157
	Within Groups		1.545	67	.109		
Total			5.130	112			

*(Source, field 2024)*

The results showed that the p-value for the deviation from linearity was 0.157. For there to be a linear relationship, the divergence from linearity must be greater than 0.05. The fact that  $0.157 > 0.05$  suggests a linear link between land prices and the supply of affordable homes. This linear relationship will be useful for inferential statistical analysis, particularly in determining the cause-and-effect relationship between land prices and the supply of reasonably priced homes in Nakuru City, Kenya.

## Correlation Analysis

### Land cost and the supply of affordable housing

The study's objective was to ascertain how land prices and the availability of reasonably priced homes in Nakuru, Kenya, relate to one another. Table 10 presents the findings of the investigation.

**Table 10 : land cost and supply of affordable housing**

		<b>Provision of affordable housing</b>
Cost of land	Pearson Correlation	.507**
	Sig. (2-tailed)	.000
	N	112

\*\* . Correlation is significant at the 0.05 level (2-tailed).

The study demonstrates a somewhat positive and statistically significant association ( $r = 0.507$ ;  $p < 0.05$ ) between land price and the availability of affordable housing in Nakuru, Kenya, as indicated in Table 10. This indicates that there would be more reasonably priced housing available in Nakuru, Kenya, as a result of low land prices.

**Table 11: Regression Coefficients.**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	.087	.173		
1 Cost of land Provision of affordable housing	.263	.055	.233	2.867	.005

Table 11 shows the total labelled test results for the hypothesized research model. The interpretations of the presented results follow the following regression model.

$$Y = \beta_0 + \beta_1 X_1 +$$

$$\text{Therefore } Y = 0.087 + 0.239 X_1$$

When the variables are independent (intercepts, affordable) the housing. was 0.087. Furthermore, holding other independent variables constant, an increase in unit price of land would lead to an improvement in the supply of affordable housing in Nakuru City by 0.239..

## **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **Introduction**

This chapter presents the summary, conclusions and recommendations of the study. It also provides recommendations for further research.

### **The cost of land and the supply of affordable housing in Nakuru city, Kenya**

The study's objective was to determine the degree to which the availability of affordable housing is impacted by land prices. These study results demonstrated that land in Nakuru town, Kenya,

was reasonably priced, which aided in the development of affordable homes in the community. These findings suggested that the price of reasonably priced residential land in Nakuru, Kenya, is influenced by the strong demand for suitable development site. According to the research findings, land prices in Nakuru City, Kenya, are impacted by the lack of suitable development land. This has an impact on the availability of affordable housing in the city. The findings demonstrated how Nakuru City's bureaucratic land acquisition processes impact the cost of land for reasonably priced homes in Nakuru City, Kenya. These research results indicated that high land transfer costs affect the price of land in Nakuru City, providing affordable housing in Nakuru City, Kenya. It also found that cultural ties to the country affect the cost of land in providing affordable housing in Nakuru, Kenya. The results showed that the unregulated real estate market in Nakuru City affects land prices and the supply of affordable and affordable housing solutions in Nakuru City, Kenya. The results also showed that high land fees and charges affect the price of land in Nakuru City and the provision of affordable and affordable housing solutions in Nakuru City, Kenya. The overall results showed that all statements about the cost of affordable housing were affected in Nakuru, Kenya.

### **Conclusions of the Study**

According to the study, there is a statistically significant and somewhat favorable association ( $r = 0.507$ ;  $p < 0.05$ ) between the cost of land and affordable housing in Nakuru, Kenya. This implies that there will be more reasonably priced land available in Nakuru, Kenya, for housing. In Nakuru, Kenya,

### **Recommendations of the Study**

The study also recommended that land pricing should be made affordable through regulated house prices and affordable land prices to ensure that more land is acquired thereby increasing the number of affordable housing in Nakuru, Kenya. The report also recommended facilitating land availability by digitizing land acquisition procedures, which makes it difficult for affordable and low-cost housing developers to access land

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