



Original Article

Constraints Facing the Effective Implementation of Affordable Housing Programme in Kiambu County

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Affordable housing remains a major problem for National and County Governments as the increase in population, particularly low-income earners, rises significantly annually. It is evident that despite efforts from both the national and county governments, Kiambu County still lags in the provision of affordable housing. The housing development agenda seems not to be getting the required traction at the county level with little participation by the private developers. This paper therefore, aims to establish the constraints experienced in the effective implementation of affordable housing in Kiambu County. The research design adopted in this study was survey research whereby questionnaires were used. The target population is comprised of 60 real estate developers who have an intention or have ongoing projects in Kiambu County and 100 housing officers and sub-county planners from the department of lands involved in the policy-making of affordable housing in the Kiambu County government. A sample size of 67 was adopted and a response rate of 83 per cent was achieved. The study established that the provision of affordable housing in Kiambu County is faced with various challenges such as inadequate incentives by the government, limited building technology, ineffective housing policies, inadequate supporting infrastructure, lack of access to project finance, high cost of building materials, high cost of land, and lengthy approval process. These have led to the inadequate provision of affordable housing in the county. The key recommendations of this study include; shortening the process of approving building plans and acquiring the necessary permits, making efforts towards reducing the cost of local building materials such as building stones by reducing or scraping cess fees collected from trucks transporting building materials, and the provision of adequate incentives to developers of affordable housing in the county.

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INTRODUCTION

Affordable housing generally refers to housing units that are affordable by that section of society whose income is below the median household income (Economic Times, 2022). In the Kenyan context, going by this definition and Kenya National Bureau of Statistics (KNBS) data on the distribution of income in the formal sector, affordable housing comprises units that can be afforded by persons who earn Kshs 50,000 and below every month, which comprises of a total of 74.4% of individuals employed in the formal sector (KNBS, 2016).

Affordable housing remains a major problem for National and County Governments as the development of the population, particularly low-income earners, rises significantly annually. The Ministry of Housing, Kenya, indicates that 83.0% of the existing housing supply is for the high-income and upper-middle-income segments, with only 15.0% for the lower-middle and 2.0% for the low-income population. Kiplagat et al. (2016) point out that while 74.4% of Kenya's working population requires affordable housing, only 17.0% of the housing supply goes into serving this low to lower-middle-income segment. This amplifies the accommodation inequalities between middle-and high-income earners on the one side and low-income earners on the other. The government's participation in providing affordable housing has also been minimal. The role of the government in providing housing is limited to just a few projects in the informal

settlements as a direct provider as opposed to the facilitator role that would be ideal in the presence of a legal and regulatory framework (Kakumu, 2016). As such, government involvement in housing provision has been inadequate and ineffective in achieving low-income households.

In the financial year 2019/2020, the allocation for the housing department in Kiambu County was Kshs. 34 million, but due to the delayed transfer of funds from the treasury, this was not implemented (County Government of Kiambu, 2020). In the financial year 2020/2021, the approved budget was KShs. 38 million, the amount has been spent on the renovation of offices and the old dilapidated county houses (Cyttonn, 2022a). It is evident that despite numerous incentives from both the National and County Governments, Kiambu County still lags in the development of affordable houses as the number of delivered units in the year 2021/2022 is 250 out of an annual deficit of 6000 units (Department of Lands and Housing) while the current stock is in a deplorable state as seen in the continued growth of slums such as Kiandutu. The housing development agenda seems not to be getting the required traction at the county level with little participation by the private developers. This paper therefore, aims to establish the constraints experienced in the effective implementation of affordable housing in Kiambu County.

CHALLENGES FACING AFFORDABLE HOUSING AGENDA

Theories have been fronted to support affordable housing decisions by both buyers and sellers. To begin with the free market ideology, the neoclassical approach considers the demand and supply conditions of housing in an economy. The consumption decisions are therefore, based on preferences of houses with certain attributes given the supply constraints and resources available to make purchases (Taruvunga et al., 2016). However, as noted by Rolnik (2013), demand for low-income housing is undisputedly high as evidenced by housing backlog figures, pointing to market failure in the provision of the low-income housing segment.

The supportive approach to housing recommends the integration of state empowerment and the self-help obligation of the urban poor, with a view that housing is not just a shelter to live in but also a means to move upward on the social ladder (Kiplagat, 2018). In this case, the state plays merely a supportive role, providing public utilities and initial funding, and therefore, depends heavily on political goodwill from the state as well as institutional and structural support. The World Bank approach was founded to address the bottlenecks of housing delivery by offering loans to developing countries to invest in low-income housing schemes, delivering the units to housing dwellers, and converting occupiers to debtors of commercial banks, thus liquidating funds for reinvestment by the government. However, this approach faced criticisms for focusing on market mechanisms while paying little attention to issues of land tenure and infrastructure (World Bank, 2003).

Finally, the collaborative approach to housing emphasises collaboration between the state, the market, non-governmental organisations, and the community in a set-up that would enhance the capability of the community (Selina, 2012). It therefore not only considers the limitations of the institutions and the imperfect market but brings together all the stakeholders to find solutions to the low supply of low-cost housing to the

population that would otherwise not afford the houses.

Empirically, various authors have studied the constraints to affordable housing in Kenya and beyond. Key among the constraints are the rising costs of building materials (Ayanni, 2013; Kieti et al., 2020;). In fact, Kieti et al. (2020) argue that the cost of construction (design/materials/ labour) is high, accounting for nearly 50–70% of housing development cost and this becomes a major hindrance to affordable housing delivery in Kenya.

The use of alternative building technologies and techniques, locally available resources and labour has the potential to lower housing costs and could reduce costs of housing (Rewel, 2014; CAHF, 2020; Kieti et al., 2020). Other authors note the importance of infrastructural developments of facilities like roads, schools, communication systems, water, electricity, sewage treatment power lines, and post offices, among others. Reduction in budgetary allocation to infrastructure results in low investment in affordable housing projects (Erguden, 2001; Chirchir, 2006; Kieti et al., 2020).

The continued rise in the urban population continues to put pressure on the housing situation (Turner, 1972; Nzau, 2018). Income levels determine housing affordability. According to the CIA World Factbook (2021), about 36.1% of the Kenyan population lives below the poverty line. In addition, the Centre for Affordable Housing Finance in Africa (CAHF) (2022) shows that only about 11% of Kenyans earn enough to support a mortgage. Central Bank of Kenya's Bank Supervision Annual Report (2020) shows only six% of urban Kenyans have access to housing finance, and the reason is a nascent mortgage market of about 2.5% of GDP (compared to 70% in the United States). This means that most households cannot afford the average mortgage necessary to buy an entry-level house. Gichunge (2001) notes that private financial institutions would rather finance middle- or high-income housing projects which have lower risks.

Muthigani et al. 1 (2022) in a survey to develop a suitable financing approach for Kenya's low and middle-income housing markets, found that due to elevated interest rates and collateral requirements, the present housing funding alternatives were not suitable for low- and middle-income earners. The World Bank (2021) noted that 40% of Kenyans live in extreme poverty with the pandemic having pushed two million more Kenyans into poverty.

Various incentives have been proposed by the government to boost private sector investment in affordable housing. These include tax deductibility for housing loans, incentives under stamp duty, and lower taxation on housing bonds, among others (Cytton, 2022). More recently, the government proposed exemptions for first-time home buyers. However, the main barrier to the effective implementation of Government incentives is the general bureaucracy and ineffective policy actions, and the risk of changing policies with the entry of new governments (Cytton, 2022). Further, despite the incentives for investments in the lower-end market, investors at the upper end of the market reap higher profits, high enough to justify forfeiting the incentives

(Kenya Urbanization Review, 2016). Second, the proper use of the incentives is unclear and sometimes contradictory, and the bureaucracy dissuades well-meaning developers from using them.

The review of the study indicates that the problem of affordable housing is essentially a problem of income where access to adequate finance becomes a limitation to the middle-income bracket. The housing process in legislation, planning, design, financing, construction, and maintenance is unnecessarily too lengthy, complicated and has lots of unnecessary bureaucratic bottlenecks.

CASE STUDY AREA

The study was carried out in urban centres of Kiambu County that is Ruiru, Kiambu and Thika Municipalities. The pilot results indicated that a good% age of the targeted population of developers engage in projects within the Nairobi Metropolis. The other reason is that Kiambu as a dormitory city is a good candidate due to its proximity to Nairobi city and hosting most of the people who work in Nairobi

Figure 1: County Government of Kiambu



Source: (<https://kiambu.go.ke/>)

METHODOLOGY

The research design adopted in this study was survey research. A questionnaire based on a 5-point Likert scale was used to gather information concerning the affordable housing situation, challenges, and possible interventions to enhance the low-cost housing supply in the county. The target population comprised 60 real estate developers who had ongoing projects in Kiambu County and 100 housing officers from the department of lands involved in the policy-making of affordable housing in the Kiambu County government. The study adopted a stratified sampling method. This was based on the target population of the study being heterogenous, which can be categorised into strata with each stratum being studied without interfering with other categories.

Based on the target population, the sample size was calculated by use of Fischer's formula quoted from Czaja and Blair (1996) and comprised 67 respondents, inclusive of both real estate developers and county government officials. The sample was drawn using simple random from each category to give each individual from the populace an equal possibility of being chosen. According to Mugenda and Mugenda (2013), when the study population is less than 10,000, a sample size of between 10% and 30% is a good representation of the target population, and hence this surpasses the 30% mark.

Data was collected using questionnaires. The investigator sent a link through google forms which also eased her work. The respondents were asked to rank the constraints encountered during the implementation of the affordable housing programme. The respondents were asked to rate various statements by choosing between "very small extent (1)", "Small extent (2)", "moderate extent (3)", "great extent (4)", and "very great

extent (5)". A section with an open-ended question on how to tackle the identified challenges was also included.

The researcher administered 67 questionnaires to the management and supervisory staff of the County Government of Kiambu as well as different real estate developers within the county. From these, 55 respondents were able to return filled questionnaires which represented a response rate of 83%. This response rate was a good representation and conformed to the threshold of 50 per cent stipulated in Mugenda and Mugenda (2003) as adequate for analysis. The data collected was edited for accuracy, consistency, and completeness. Quantitative data was summarised, categorised, interpreted, analysed and presented using Tables and charts. The study adopted descriptive statistics in analysing data.

RESULTS AND DISCUSSION

This section presents the analysis and discussion of the results of the survey. The response rate of the study was 83% which conformed to Lacobucci's (2010) stipulation that a response rate of above 50% is adequate for analysis.

Challenges Facing the Implementation of Affordable Housing

To understand the challenges facing the implementation of the affordable housing programme in Kiambu County, several questions were asked. The results are presented in *Table 1*. Based on the t-test, all the studied factors were found to be significant ($p=0.00$) constraints facing the implementation of the affordable housing programme. All the means were found to be above 3.50, while the low values of standard deviation indicated that there was not much variation in the responses.

Table 1: Challenges facing the implementation of Affordable Housing

Constraint	N	Mean	Std. Dev.	P- value	Rank
Inadequate incentives	51	3.80	.980	0.00	3
Limited building technology	55	3.51	.998	0.00	8
Conflicting housing policies	53	3.62	.965	0.00	7
Inadequate supporting infrastructure	51	3.65	1.074	0.00	5
Lack of access to project finance	51	3.65	1.180	0.00	5
High cost of building materials	50	3.98	1.078	0.00	2
High cost of land	53	3.70	.972	0.00	4
Lengthy approval process	52	4.19	1.049	0.00	1

Source (Author, 2022)

Ineffective Government Incentives

Among the eight challenges explored in this research, ineffective government incentives ranked position three with a mean of 3.80. This was considered to be relatively high based on the values assigned to the Likert scale adopted. A study by Kieti et al. (2020) on affordable housing in Kenya highlighted some of the housing incentives proposed by the Ministry of Housing in 2017 to woo housing developers to invest in low-cost housing. This includes tax deductibility for housing loans, incentives under stamp duty, and lower taxation on housing bonds, among others. More recently, the government proposed exemptions for first-time home buyers. However, Cytonn (2018) observed that one main barrier to the effective implementation of government incentives is that there is general bureaucracy and ineffective policy actions. Policy actions, such as the reduction of income tax for developers producing 100 affordable units annually from 30.0% to 15.0%, need to be clear and directed towards the intended recipients. The report also points out that projects with lengthy time frames of beyond 5 years have a risk of changing policies with the entry of new governments. Further, Kenya Urbanization Review 2016 cites that there are unveiled incentives for developers to build at the lower end of the market, but developers have not taken them up. According to Cytonn (2018), however, developers cite two reasons for the lack of uptake. First, construction at the upper end of the market reaps profits high enough to justify forfeiting the incentives. Second, the proper use of

the incentives is unclear and sometimes contradictory, and the bureaucracy dissuades well-meaning developers from using them.

Limited Building Technology

Limited building technology ranked last with a mean of 3.51. Though the factor ranked last, its mean was found to be moderately high, indicating inadequate or unavailability of the latest building technology locally. Innovative materials in the housing sector can reduce the cost of building by a greater percentage. However, most developers in this sector are currently facing capacity and resource limitations in consort with a lack of incentives (Muthigani et al., 2022). Inadequate capitalisation of technology results in weak strategies in terms of making housing more affordable.

Ineffective Housing Policies

Ineffective policies due to inadequacy or conflicts were found to be a significant constraint towards the implementation of the affordable housing programme in Kiambu county with a mean of 3.62. Previous researchers have also reported inconsistencies in town planning strategies and decentralisation (Kiplagat et al., 2016). The county government has little to no control over the implementation of urban planning strategies. This results in an escalation of costs and delays in government projects that could favour affordable housing.

Inadequate Supporting Infrastructure

With a mean of 3.65, inadequate supporting infrastructure was found to be a major challenge in the provision of affordable housing in Kiambu county. In most cases, affordable housing is most needed within informal settlements and other areas where infrastructure such as reliable water supply, electricity, sanitation services, and efficient transport systems are not fully provided. This forces landowners to pump in more money for drilling boreholes, installing renewable energy sources and so on. This ends up discouraging private developers due to reduced profits.

Lack of access to project finance

Project finance is a key component in property development. Lack of access to finance was found to be a significant factor with a mean of 3.65 as shown in table 1 above. While short-term loans from micro-credit organisations have traditionally been for business purposes, some organisations have recently begun to provide housing loans and extend the terms to between three and five years (Cytonn, 2022a). Such loans are usually not adequate for the purchase of new houses but allow families to improve their existing housing incrementally as their financial circumstances permit. While micro-credit institutions are an increasingly important source of housing finance for lower-income groups, most are unable to access long-term funds, which would allow them to achieve significant success (Van Noppen, 2012).

High Cost of Building Materials

The majority of the respondents felt that inflation in the cost of building materials was a great hindrance to the realisation of affordable housing. This was demonstrated by the mean of 3.98 reported in table 1 above. Construction materials can take up to 70% of the total cost of a unit (Nzau, 2018). In the recent past, material prices have been on the increase due to a wide range of factors. Due to the high-cost component of materials in a construction project, it therefore, becomes difficult to provide housing at a low cost.

High Cost of Land

The high cost of land was found to be a major constraint with a reported mean of 3.70. With the high estimated annual population growth rate of 4% in the county, there is a lot of pressure on land for various uses ranging from residential, agricultural, commercial, industrial, and educational, amongst many others (County government of Kiambu CIDP, 2018). This has resulted in an annual increase in the price of land as dictated by the market forces of demand and supply. In the early 2000s, an acre of land in Kiambu town was going for about KShs. 10 million. In 2020, the same parcel of land was estimated to cost about Kshs. 100 Million (Knight & Frank, 2021). The high cost of land results in an increased cost of development; therefore, investors prefer to invest in high-income units rather than affordable units for middle-income earners.

Lengthy Approval Process

Out of the eight constraints investigated in this research, the lengthy approval process was found to be the most critical with a mean of 4.19. Developers have cited a rigorous procedure when it comes to having their building plans approved (Nabutola, 2004). Most have decried the high costs in the approval processes such as land rates and penalties charged to defaulters, as well as the time it takes before one can get full approval for construction purposes. Approvals are usually premised at the county government level while the others are at the national government level making it hard for developers to obtain them at a one-stop-shop which makes it more convenient.

Suggestions for Achieving the AHP in the County

The respondents were asked to give their suggestions on what should be done to increase the stock of affordable housing in Kiambu County. The results were analysed thematically and presented in *Table 2*.

Table 2: Thematic Analysis of Suggestions on Enhancing the Provision of Affordable Housing in Kiambu county.

Solution	Frequency
Improve County Infrastructure	10
Avail Proper Housing Finance	10
Sensitise locals on alternative materials and technologies	10
Avail land for housing development	15
Seek Public Private Partnerships	5

Source (Author, 2022)

A majority (n=15) of the respondents believe that putting measures in place that control the cost of land in Kiambu County will significantly increase the stock of low-cost, decent, and affordable housing. Improvement of the infrastructure in the county is another suggestion that featured prominently in the responses. Kiambu County is highly developed owing to its strategic position and proximity to Nairobi, the capital city of Kenya. Increased investment in infrastructure development in terms of roads, waste management, water, energy, and communication is required to spur the development of decent housing.

A notable number (n=10) of respondents are also keen on the improvement of access to housing finance. Although the majority of respondents of this study believe that the most suitable housing finance for this county is donor funding, they are receptive to tailor-made financing suitable for this environment with its unique challenges. Other suggestions that came out included the need to sensitise the locals on available alternative building materials and technologies so that they explore options they can afford, involving public-private partnerships in housing development and designating serviced land for housing development.

CONCLUSIONS AND POLICY RECOMMENDATIONS

The study established that the factors identified in the literature review were indeed significant constraints towards the implementation of the affordable housing programme in Kiambu county. These were; inadequate incentives by the

government, limited building technology, ineffective housing policies, inadequate supporting infrastructure, lack of access to project finance, high cost of building materials, high cost of land, and lengthy approval process. These challenges have led to the inadequate provision of affordable housing in the county. Some of the strategies suggested by respondents as ways of enhancing the provision of affordable housing include; improvement in county infrastructure, provision of cheap housing finance, sensitisation of locals on alternative materials and technologies, provision of land for housing development, and seeking public-private partnerships.

There is a need to provide adequate incentives to developers of affordable housing in the county. Since affordable housing is less profitable to developers in most cases, it is important to provide incentives such as tax cuts and penalty waivers to developers investing in low-cost housing. The county government needs to sensitise developers and locals on available technologies which can be able to reduce the cost of construction. To be able to achieve this, the county government needs to benchmark both locally and globally on cost-effective technologies being employed elsewhere. There is a need to address inadequacies and conflicts reported in various policies. For this to happen, the Kiambu county government needs to collaborate with the national and other county governments to implement policies that have the common goal of enhancing the provision of affordable housing.

The county government must provide adequate supporting infrastructure such as water services,

roads, sewerage systems, and electricity supply, among other services. This will not only invite commercial developers but also entice individuals into purchasing and developing the land as well. The county government needs to ensure increased access to project finance. This could be achieved by negotiating cheaper loan facilities from financial institutions operating within and outside the county, including foreign institutions. While the county government may have less influence on the cost of most building materials, it can still be able to play a role towards reducing the prices of locally sourced materials such as building stones. One way of achieving this is by scrapping or lowering toll fees. There is also a need to shorten the process of approving building plans and acquiring the necessary permits.

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