Affordable Housing in Kenya

Investment cases for developers building affordable homes in Nairobi

Industry Report

June 26, 2018

About the Report

This report describes the affordable housing real estate sector in Nairobi. It examines the sector growth dynamics, trends, prices, development strategies, and finally presents two viable investment cases for private developers.

The team conducted extensive desk research, collected primary data, consulted experts on the task force, and reviewed findings and assumptions with over 30 industry practitioners in the report's development.

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Technical Input

World Bank Group

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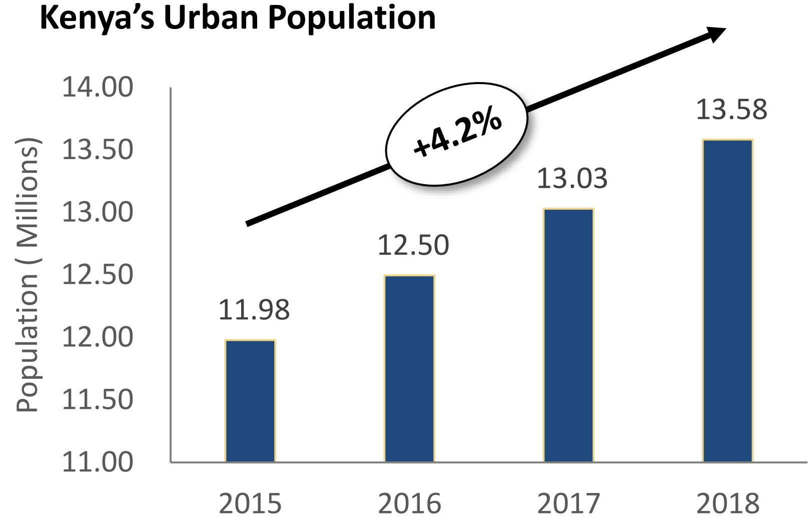
Annual housing deficit of 150k units across Kenya, fueled by increased urbanization and the lack of affordability housing units on the market

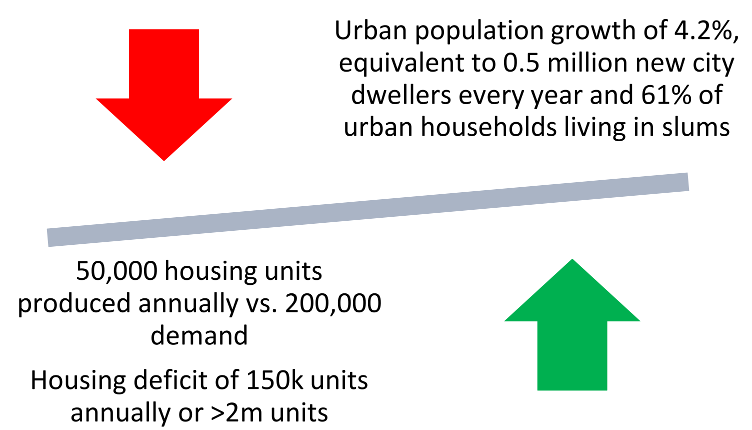
- 22% of Kenyans live in cities, and the urban population is growing at a rate of 4.2% every year.
- It is estimated that the current housing deficit stands at 2 million houses with nearly 61% of urban households living in slums. This deficit continues to rise due to fundamental constraints on both the demand and supply side and is exacerbated by an urbanization rate of 4.2%, equivalent to 0.5 million new city dwellers every year.
- With this level of growth, Kenya requires approximately 200,000 new housing units annually to meet demand, yet only 50,000 homes are built, leaving the housing deficit growing by 150,000 units per year. As a result of this mismatched supply and demand, housing prices have increased by 100% since 2004.

Estimated housing requirement	2 million units
Estimated annual supply	50,000 units
Estimated annual demand	200,000 units
Estimated annual shortfall	**150,000 units**

Kenya's Urban Population



Kenya Housing Demand vs Supply



Source: KNBS - Economic Survey 2017, World Bank Publication 2017: Kenya Needs 2 Million More Low-income Homes: Building Them Would Boost Its Economic Growth

The Affordable Housing sector experiences several challenges that has reduced the supply of housing and buyer uptake of units

Urban Planning	**Detailed urban development plans & infrastructure services:** Few urban centres have implementable urban development plans and a large number of land parcels are unserviced, forcing developers to incur an additional infrastructure cost when constructing. Average land and infrastructure cost in Kenya makes up 10% to 35% of the total cost of development.
Cost of Construction	**Low supply of quality affordable units:** The sector has historically developed high priced units targeted at the upper income segment of the market, given the high cost of construction. According to recent research, Kenya has one of the highest cost of construction in Africa.
Construction Finance	**Adverse construction finance terms:** Construction finance loans are challenging for developers to obtain, particularly since the interest rate cap and the bank's investment in government securities. Developers incur high financing costs during the period and consequently price this cost in when selling property.
Mortgage Finance	**Unaffordable and inaccessible mortgages:** Mortgages are difficult to obtain for the average Kenyan household, given mortgages are short term in duration, making them expensive, and that they require formal employment. In addition, the process to obtain a mortgage can take significant time and funds are not release until the titling process is complete.
Inefficient processes	**Inefficient Titling Process:** According to the 2017 Doing Business Survey, Kenya has a ranking of 121 out of 190 with respect to property registration. It takes 9 procedures and an average of 61 days to register property in Kenya. The registration process is further complicated by devolution with different counties showing different levels of efficiency.
Incidental costs	**High incidental costs:** There are hidden cost in real estate development, including an additional 6% needs to be added to the unit cost for incidentals, including stamp duty, legal fees and valuation fees, or facilitation fees.

Source: iJenga Research, CBK, World Bank, CAHF

Changing macro economic, government and real estate sector dynamics will result in a greater focus on affordable housing in Kenya

Past

Public Sector

- Construction of the pre-fabricated housing factory in Mavoko
- Slum upgrading project in Kibera
- Building of affordable houses through NHC
- Tax incentives to developers

Private Sector

- Densification of key neighborhoods and sprawl of city
- Focus by private developers on the upper income segments
- Rapid increase in the price of land

Current Dynamics

- Over supply of high-end housing
- Focus on housing for the next 5 years under the government's *Big Four Agenda*
- The young, raising middle class has greater disposable income for home ownership

Future

Public Sector

- Development of county spatial plans and urban masterplans
- Proposed incentives on stamp duty, tax rebates and infrastructure
- Joint venture & PPPs on public land
- Formation of a housing fund
- Implementation of a mortgage refinance company

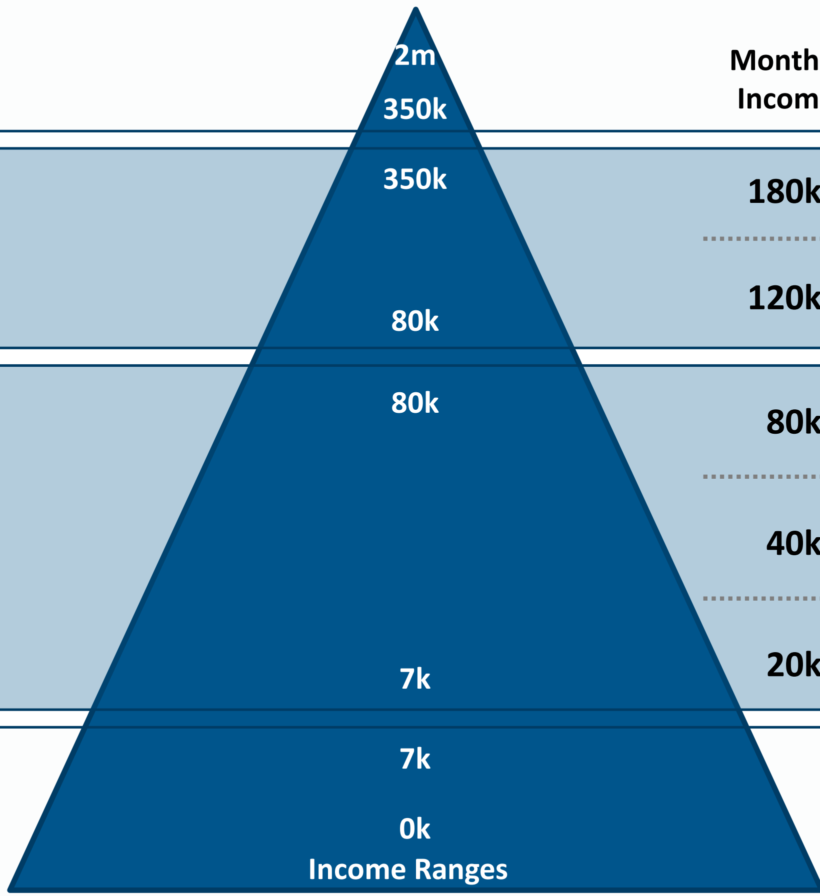
Private Sector

- Real estate development in secondary and tertiary cities
- New building and unit design and incremental home purchase strategies
- Increased innovation in housing finance products through banks, SACCOs, and rent-to-buy schemes

Low income households, the majority of Nairobi households, can afford units below KES 4m, while middle income households can afford units above KES 4m

Economics of Home Ownership in Nairobi

Focus of report



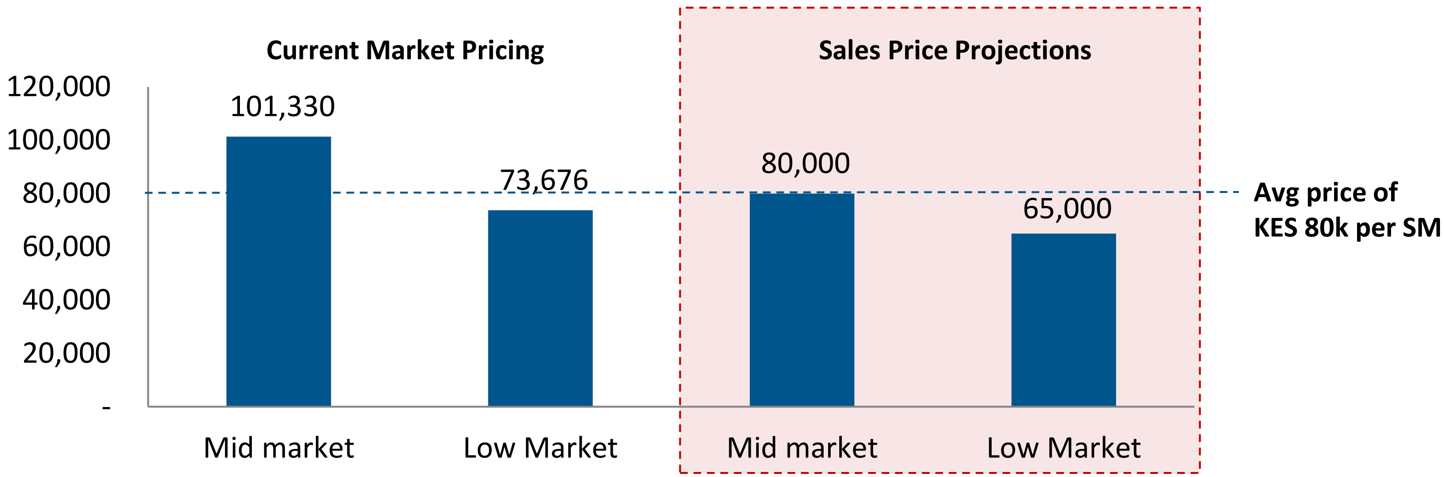
Segment	Monthly Income	Avg Household Monthly Income	Monthly Mortgage Payment	Avg Unit Price
Upper Income				
Middle Income	180k	270k	90k	8.4m
Middle Income	120k	180k	60k	5.6m
Low Income	80k	120k	40k	3.8m
Low Income	40k	60k	20k	1.9m
Low Income	20k	30k	10k	0.9m
Social Housing				

Notes: Assumes household size of 1.5 people, 15 year mortgage, 14% interest rate and 20% down payment

The average sale price for a 2 bed and 3 bed across varies by neighborhood, building quality, size and unit finishes

Current Price & Future Price Projections per Square Meter

Currency in KES per square meter



<u>Assumptions</u>

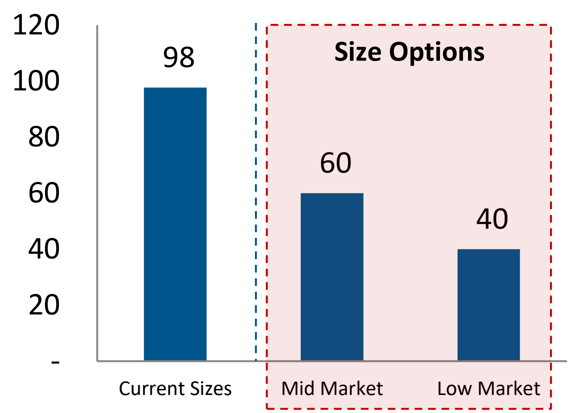
- Over **70** market price data points analysed, approximately **5 data points for each unit type in each target** market neighbourhoods.
- **Mid market** areas include Ridgeways, South B & C, Pangani and Langata.
- **Low market** locations include Dagoretti, Imara Daima, Kinoo, Syokimau, Ruaka and Rongai.

Reducing unit sizes can reduce the per unit price, while maintaining developer margins

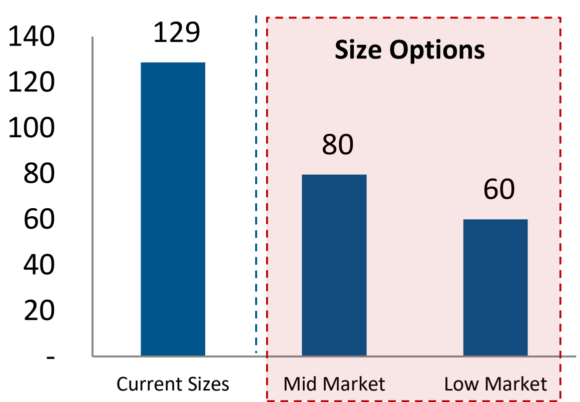
Future Unit Sizes Options

Areas in square meter

2 Bed Unit Sizes



3 Bed Unit Sizes



Observations

- Building smaller units helps reduce unit cost while maintaining per square meter margins
- Project viability is increased by varying the unit mix depending on the market dynamics

Unit Prices

Unit value in KES millions & areas in square meter

Mid market option	
Mid market rate	80 K
Unit size	60 SM
Unit Price	**4.8 M**
Low market option	
Low market rate	65 K
Unit size	40 SM
Unit price	**2.6 M**

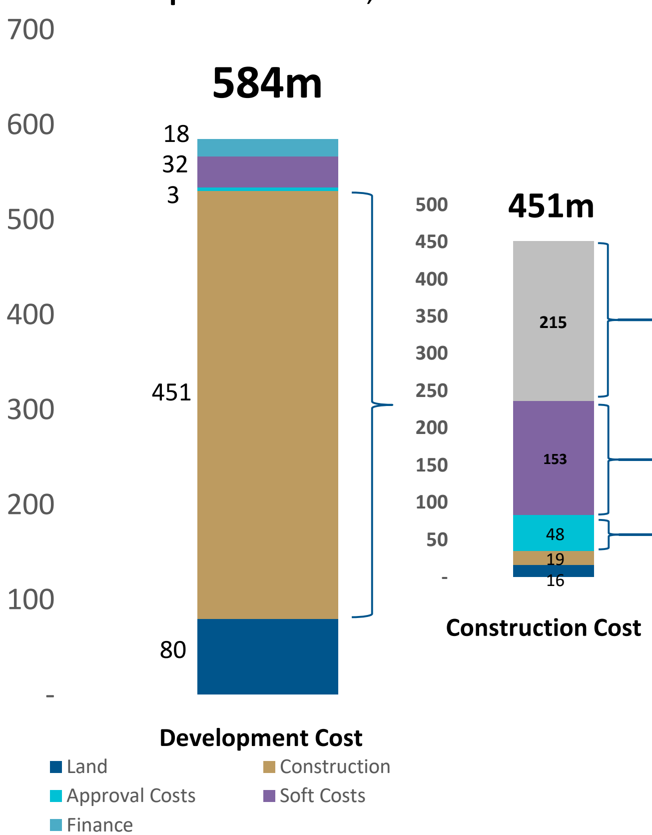
Mid market option	
Mid market rate	80 K
Unit size	80 SM
Unit price	**6.4 M**
Low market option	
Low market rate	65 K
Unit size	60 SM
Unit price	**3.9 M**

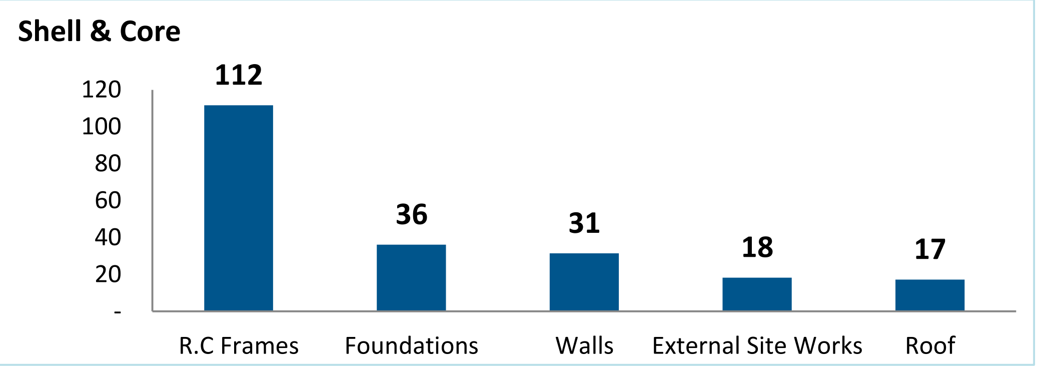
Developers can create options for buyers by selling units with incremental finishes, reducing the unit cost and giving buyers more options

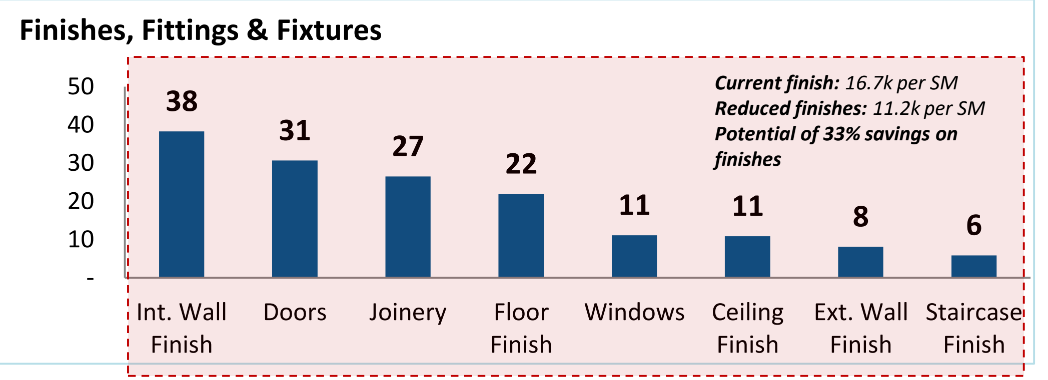
Development Cost Breakdown

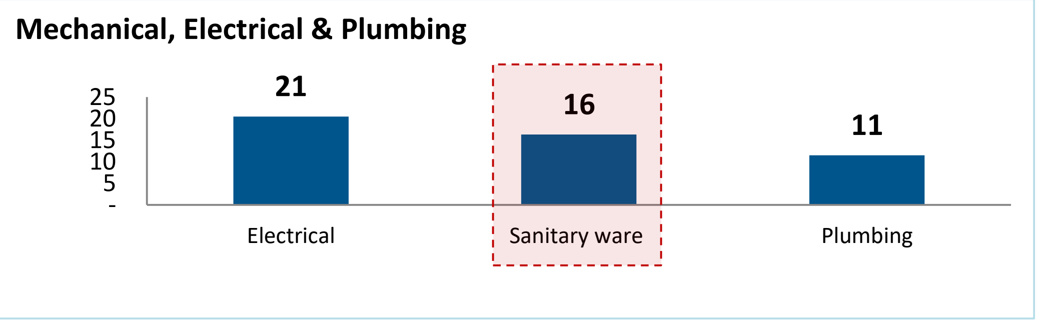
Figures in KES millions

Total Area: 10,115 SM
Cost per SM: KES 68,256









Land joint ventures can increase a developer's returns and help land owners monetize their assets

	Purchase	Land JV with Profit Split	Land JV with Units
Description	Developer makes an outright purchase from the land owner	Developer and land owner enter a JV. Land owner receives a proportionate share of the profits upon completion	Developer and land owner enter a JV. Land owner receives units at project end with a value equals to the agreed land value
Valuation	Project IRR remains the same. Return on Equity (ROE) for the developer is low given high equity draws	Project IRR remains the same. Developer earns the highest Return on Equity (ROE)	Project IRR remains the same. Return on Equity (ROE) increases relative to an outright purchase
Due diligence	Land due diligence	Land due diligence SPV Company due diligence	Land due diligence SPV Company due diligence
Legal agreements	Land Sale Agreement Transfer	Land Sale Agreement Share Subscription Agreement Shareholders Agreement	Land Sale Agreement Share Subscription Agreement Shareholders Agreement
Minority rights	N/A	Board representation Reserved matters Veto right	Board representation Reserved matters Veto right
Condition Precedents	Completion of Due Diligence	Completion of Due Diligence Transfer of land to SPV	Completion of Due Diligence Transfer of land to SPV
Risks	Drives up the cash requirements at the beginning of the project	Profit share dilution given the land owners proportionate equity stake	Reduced sales revenue from units given in kind resulting to a lower return on equity for the developer

Source: Africa Legal Network

We found two dominant investment cases for the Nairobi mid market – Medium Density and High Density

Assumptions

Pricing	Mid market
Plot size:	1 Acre
Location:	Nairobi & environs
Parking:	0.7x, sale of parking included
Av. Unit Price:	Below 3.5m

Unit Mix

Studio:	15 – 30%
1 Bedroom:	30 – 35%
2 Bedroom:	15– 30%
3 Bedroom:	20 – 30%

Unit Sizes

Studio:	20 SQM
1 Bedroom:	30 SQM
2 Bedroom:	40 SQM
3 Bedroom:	60 SQM

Medium Density Model

Plot ratio:	2.5x
Ground Coverage:	50%
Building height:	5 floors
Parking ratio:	0.7x
% of parking sold:	75%
IRR:	17%
Average # of units:	260
Average price per unit:	KES 2.7m
Average cost per unit:	KES 2.2m
Average price per SQM:	KES 80,380

High Density Model

Plot ratio:	4.0x
Ground Coverage:	50%
Building height:	8 floors
Parking ratio:	0.7x
% of parking sold:	100%
IRR:	16%
Average # of units:	382
Average price per unit:	KES 3.1m
Average cost per unit:	KES 2.6m
Average price per SQM:	KES 81,806

Note: Price per unit does not include parking

Developers can peruse some development strategies to reduce the cost of development, while increasing the likelihood of success

1. **Unit Sizing:** Building smaller units can help reduce the price of units, while allowing developers to retain their margins. Reducing unit sizes can increase the per unit cost of a development, given the finishes and internal walls required.
2. **Incremental Housing:** The affordability of housing may also be increased by making use of basic materials with the provision that home owners can make improvements on the house over time through an incremental housing model.
3. **Land JVs:** Land is a big upfront expense. Land JVs can help reduce the cost of land, but also reduce the speculation of land prices. Clear objectives and assumptions should be agreed at the outset and codified into robust legal agreements.
4. **Parking Ratios:** Buildings with smaller unit sizes and more units may need to provide a smaller parking ratio per unit than buildings with larger units. Developers need to either selling parking or limiting the number of parking available by building along public transport routes.
5. **Sales & Cash Flow:** Managing a developers cashflow is paramount. It’s important to have a robust financial model at the outset of a development and to monitor expenditures against the budget. Timely collection of cash is imperative for a developer to manage his interest expense.